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VI Международной студенческой научно-практической конференции
Potent Policies for a Successful Normalization of Global Economic Environment

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МЕЖДУНАРОДНАЯ СТУДЕНЧЕСКАЯ НАУЧНО-ПРАКТИЧЕСКАЯ КОНФЕРЕНЦИЯ МГУ
POTENT POLICIES FOR A SUCCESSFUL NORMALIZATION OF GLOBAL ECONOMIC ENVIRONMENT

31 марта 2017г. на экономическом факультете МГУ под эгидой кафедры иностранных языков была проведена VI Международная студенческая научно-практическая конференция «Potent Policies for a Successful Normalization of Global Economic Environment». Более 80 участников, бакалавров, магистров и аспирантов различных ВУЗов экономического профиля России, СНГ и Европы имели возможность представить и обсудить темы своей специальности с российскими и зарубежными коллегами-студентами на языке международного общения — английском.

Обширная тематика конференции была представлена на пленарном заседании и в шести секциях:
1. Successful strategies in global economy
2. Russia’s development strategies in a new context
3. Finance: prospects in unbalanced global economy
4. Management and marketing today: new paradigms or traditional approaches?
5. Future of work: socioeconomic and educational aspects
6. Present day of economic science — issues to resolve

В докладах, подготовленных на высоком уровне, были представлены различные аспекты анализа: макроэкономического, регионального, секторального, диахронического, аксиологического, кросс-культурного и т. д. Актуальные вопросы современности (от буддизма в экономике, фискальной политике в периоды кризиса, экономики здравоохранения и высоких технологий до анализа экономических проблем России, Испании, Ирана, стран Персидского залива, Китая, Индии и всего земного шара) вызвали живой интерес слушателей и способствовали активному обсуждению.

Наиболее интересные результаты исследований нашли отражение в сборнике статей на английском языке, что не только дает студентам воз-
можность практики написания научной статьи в соответствии с международными стандартами, но и является начальной ступенью их научной деятельности в академическом сообществе.

В сборнике представлены доклады, рекомендованные к публикации Экспертным советом VI-й Международной студенческой научно-практической конференции «Potent Policies for a Successful Normalization of Global Economic Environment».

Экономический факультет МГУ имени М. В. Ломоносова благодарит всех участников конференции и преподавателей. Надеемся, что большой интерес, который вызвала эта конференция, сохранится и в дальнейшем.

Кулик Л. В., к.ф.н., доцент, заведующая кафедрой иностранных языков ЭФ МГУ имени М. В. Ломоносова
IMPROVING RUSSIAN COMPETIVENESS
IN MANUFACTURE OF WINTER CLOTHES
AND FOOTWEAR

Abstract
Russian manufacture of winter clothes and footwear is considered and some factors are revealed which can improve the competitiveness as well as hamper it for these goods. General principles for gaining high competitiveness are presented. This production has all the necessary conditions for achieving a high level of development and can become one of the leading sectors of the Russian economy. To identify problems existing in Russia, the level of competition in our country was studied and compared with that in other countries. Based on the data, the obstacles were indentified which Russian manufacturers face. According to the Global Competitiveness Index Russia ranks much lower than it could. There are reasons counteracting Russian competitiveness, such as high speed of price advance, limitation of consumer choice as well as complicated relations with the Western countries and the extension of mutual sanctions that limit trade flows between countries. These also impact to some extent the manufacture of winter clothes and shoes.

Key words: Russian production, competition, sanctions, solution, clusters.
JEL codes: F010, O110.

There are problems of developing and protecting competition in the modern Russian market. High prices, low quality of provided services and limited consumer choice are the reasons of the low competition rate.

In the World Economic Forum report “Worldwide competitive 2014–2015”, Russia ranks 53-d among 144 countries of Global Competitiveness Index. Our country is between Philippines and Bulgaria. Russian situation has become better in comparison with the last years exponents. The index fluctuated, because there are changes of developing innovative capacity, finance market, government control [2, 72].
Table 1

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After analyzing dynamics variations of Russian competitiveness index it is possible to confirm that the advantages of our country are the following: the low rate of government debt, the surplus of budget profit and the large market size. Nevertheless, some disadvantages in management, shortage of innovative capacity, lack of investors belief, as well as underdevelopment of finance market don’t allow our country give top marks on Global Competitiveness Index.

Let us look at today’s Russian situation in manufacture of winter clothes and footwear. In fact Russian style in the world fashion may be quite competitive to foreign producers in clothes, footwear, and associated goods. The goods of local garment and shoe manufacturers are widely presented on the markets of north villages, towns, and such cities as Murmansk, Petrozavodsk, Arkhangelsk, Yakutsk and others.

Nowadays Russian market of clothes and footwear is merged by expatriates, pre-revolutionary and soviet-era shoe and clothes factories are re-engineered into business service centers, and goods manufactures are located in China for the optimization of expenses. These results in decreasing cost price based on cheap labor force, and increasing competitive advantage. Native manufactures have managed to keep production of paramilitary clothes and work clothes, but their names are placed on secret list and the information is restricted [1].

Such foreign companies from America, Finland, Denmark, Germany as “The North Face”, “Finnflare”, “JackWolfskin” replace Russian manufactures, for example, “Bolshevikka”, “Udarnitsa”, “Krasnye Zory”, “Rassvet” and others in our market. There are no famous brand names of Russian goods. The more or less famous makers are “Mir Kozhy y Meha”, “Snezhnaya Koroleva”, “TOTOGROUP”. The fact is that winter clothes, which are made by native producers, are sold at high prices due to fine quality as they are made for survival in extreme situations. That is why Russian producers have huge risks in the market.

I’d like to emphasize that Russians makers have tools, good equipment, workspaces, but they are dependent on foreigners in the delivery of fibers and relevant materials. Yet, this does not prevent our producers from making decent clothes. For example, “RedFox” company produces clothes for mountain climbers only from imported expensive materials but it has already managed to enter a world market.
On the 1st of September 2014 the regulation on the introduction of retaliatory sanctions in the light industry came into force. The sanction is not applicable by governments circulating order. Additionally, the ban will not cancel (effect) if there is the absence of production in the countries of the Customs Union and necessary to obtain the opinion of the Ministry of industry and trade. It was forbidden to use in the production of European fabric, textile, fur, leather, but there are no analogues in the countries of the Customs Union and Russians producers can offer such product, the ruling has not had a significant impact on domestic production of clothing. What is the influence of sanctions? The sanctions have changed the situation on the domestic market. The import of clothes has decreased according to Reinhard Dapper, who is President ES of export of fashion clothes, in 2015 export from ES to Russia has declined by 23 percent. Additionally, the number deliverable clothes from China has drop by 20 percent in 2015. Perhaps, in time the enterprise will gradually move to the use of the necessary Russian products, as the situation promotes the developing of fabrics and other garments on the territory of our country.

As for solving the problem the following is necessary:

1. Government supporting aimed at reducing tariffs for essential production resources (fabrics, threads, the necessary tools for production), compensating production costs, reducing tax payments, which will contribute to reduced costs of clothes and footwear enterprises.

2. Considering clothing and footwear production as a part of the whole light industry system, which depends on some parts of the same system, such as changes in fabric manufacturing (quality and range improvement, lower costs) which will result in the improvement in the production of clothes and shoes.

3. Developing the model for effective enterprise management, implementing motivation of employees, using the received funds for the development of enterprises and products, implementing innovative technologies.

4. Making clusters, specializing in production of clothes and shoes, that can reduce the cost of production and compete on a global scale.

A cluster is a set of interrelated industries functioning on the basis of cooperation, i.e., associations of producers, scientists, processors, services and trading networks, supported by regional and state authorities. Last two decades clusters have already been widely used in almost all countries of the world, including Eastern Europe, South America, Africa, Oceania, the countries of the European Union and the United States. However, they have the most important value in Russia and CIS countries (Commonwealth of Independent States) [3, 620]. Clusters enhance competitiveness of not only some particular region, but the country as a whole.

Today, there is only one textile cluster in our country located in the Ryazan Region. It was established in 2014. To my mind, clusters whose specialize in
production of clothes and shoes would be in the Ivanovo Region (the Central Federal District), which has many textile factories, the regions of the Urals and Siberia, the Moscow and Lipetsk regions, which have much labor force. Also, the Rostov Region and the Krasnodar Territory have a lot of manufactures and workers with high labor capacity.

The development of clusters in Russia is faced with large problems [3, 619]. Firstly, the cluster is limited by the boundaries of an existing Federal entity, that is, in the situation we can say that the merger of companies takes place according to the existing machinery of production without market analysis.

Secondly, the “communicative” nature a cluster is ignored. Competition between enterprises and suppliers needs to evolve, but clustering involves interaction between suppliers and customers on mutual conditions and that certainly affects the technological value chain of values.

Thirdly, it is not accurately determine the specialization of the cluster and the challenges facing them.

Fourthly, great efforts are being made for the formation of clusters, both from the state and from investors, but as soon as a cluster is formed, all the activities contributing to its further development immediately stop. All of the above mentioned problems can be solved in Russia. The functioning of clusters will have its own specificity based on peculiar features of the Russian market.

In conclusion, it is necessary to say that besides fuel-energy, banking, financial sectors, Russia needs to pay attention to the development of the production of clothes, footwear and associated industries. This may result in manufacturers’ releasing from the dependence on foreign supplies and achieving new stage of production development.

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OLIGOPSONY IN RUSSIAN ANTITRUST LEGISLATION

Abstract

Oligopsony is a form of market organization where the production is demanded by several buyers. At least one of the buyers can influence the market price. The supply is formed by many producers. All producers individually are price-takers, but they can unite and thus obtain a possibility to influence the market price.

The situation of oligopsony is not regulated by Russian antitrust legislation. There are no legal mechanisms to measure a market share of a purchaser; the definition of a dominating position of a firm as a buyer is absence. Establishing too low acquiring price (monopsonistically low price) for the production is not a violation of the law. So it is impossible to identify if the oligopsonist has enough market power to lower purchasing price; it’s also impossible to decide if the price in the market is monopsonistically low price. The recommendations are made to fill the identified gaps in Russian antitrust legislation.

Key words: competition, antitrust legislation, monopsony, oligopsony, monopsonistically low price

JEL codes: K21, L11, L13, L41, L42

Introduction

Oligopsony is a market structure in which there are a lot of suppliers in the market and only a few buyers (oligopsonists). Each supplier doesn’t have a significant market share (the share that is enough to influence the market price). Nevertheless, the suppliers have a theoretical ability to create a union and to bargain with the few buyers collectively.

Oligopsonists are usually intermediaries, not final users. They buy raw materials in the oligopsonized market, rework them and sell to consumers. The most important point in the situation is that oligopsonists can influence both the purchasing price in raw material market and the selling price in finished commodities market. That differs oligopsony from a situation of oligopoly when
firms can influence the price only in a single market. Moreover, several firms are competing in two markets at the same time, and that makes the models of oligopsony more complicated because each firm must take into consideration the behavior of the rival in two markets.

There are a lot of models of oligopoly in economics. As to oligopsony, it is explored not so good: usually the authors just measure the market power of buyers or explore particular oligopsonized markets. There are no theoretical models that describe the mechanism how the oligopsonists interact with each other.

Despite the apparent lack of papers studying oligopsony, a lot of markets in a real sector of the economy can be described using oligopsony models. One of the most common examples are agricultural markets. Many farmers are facing with several processing plants, for example the plants that preserve tomatoes, corn, enterprises that process tobacco. The farmers can sell their production only to these buyers. Another example of oligopsony is the relationship between retailing corporations and their suppliers. It often exists the situation when producers can’t sell their production directly to the final consumers and so they have to turn to retailers. Each producer is facing only with a few customers and oligopsony appears.

**Antitrust aspects**

In order to understand the problem better, let’s make a comparative analysis of antitrust regulation of oligopoly and antitrust regulation of oligopsony. In a situation of monopoly (or oligopoly) the only firm in the market (or several firms in the market) obtains a market power as the seller. A monopolist (or oligopolist) has an opportunity to increase its profit by raising a price and decreasing a consumer surplus.

The opposite price distortions happen in oligopsony. The only buyers are obtaining a market power as buyers, so they can decrease a purchasing price and therefore increase their own profits. The problem is that the first situation, the behavior of monopolists and oligopolists, is regulated by Russian antitrust laws. But the situation of oligopsony is not regulated.

In order to identify such kinds of price distortions, a special method is used by Russian antitrust authorities (it is presented in Russian Federal law “About the protection of competition”). Firstly, we have to decide if the firm has the ability to manipulate the purchasing price. In terms of antitrust legislation, it means that we have to check if the firm has a dominating position in the market. Secondly, if we have proved that the firm has the ability to manipulate the price, we have to check if the firm has really done that.

**The ability to influence the price**

In terms of economics, monopolists and oligopolists are the only sellers in the market, so they have a market power as sellers and they are able to influence the price in the market. In terms of legislation, monopolists and oligopolists
are firms that have dominating position in a market as sellers. The Federal law “About the protection of competition” contains a formal definition of a dominating position of a seller firm. But the analysis has shown that there is no term of a dominating position as a buyer, so monopsonists and oligopsonists are not regulated by Russian antitrust.

The question is not only about the formal presence or absence of the definition. The criteria of these two terms should be different. The most important criterion of a market power is a market share. For oligopolist a market share of about one third of a market (as a seller) can cause too high market power. But for a buyer firm only 15% of the market (as a buyer) is enough to get a market power as a buyer and to be able to manipulate purchasing price.

In order to fix the problem, it’s necessary to make some changes in Russian antitrust legislation. Firstly, to distinguish between a market share of buyer firm and a market share of seller firm (nowadays there is no difference; all methods of analysis presented in laws are supposed to be applied to sellers, not buyers). Secondly, to distinguish between a dominating position of a seller and a dominating position of a buyer (nowadays there is a single definition of a dominating position that is supposed to be applied to sellers).

**Monopsonistically low price**

If we’ve found that the firm theoretically can bring the price down, the next step of antitrust investigation is to decide if the firm has really done that. Legally, we should decide if the firm has established monopsonistically low price. In Russian antitrust a definition of monopolistically low price is presented. It economics, it means predatory pricing when a bigger firm lowers the price in order to put the smaller rivals out of the business. But establishing monopsonistically low price has completely different purposes and it is not regulated by Russian legislation.

The gap can be filled by adding the definition of monopsonistically low price to the Federal law “About the protection of competition”. A possible way to identify this kind of price distortions is to compare the dynamic of intermediate production price and the dynamic of finished commodity price. If the price of raw materials hasn’t grown up but the price of finished commodity has increased — the price of raw material is monopsonistically low price. The same way, if the price of intermediate production decreased but the price for finished commodity has not reduced — the price of raw material is also monopsonistically low price.

The comparative analysis of price dynamic is the most important indicator of monopsonistically low price, but it is not the only way to find this price distortion. Another criteria are:

- The monopsonistically low price strategy should be profitable for oligopsonists. So the decrease of the raw material price should be accompanied by the increase of oligopsonists’ profit.
— Setting monopsonistically low price is causing damage for producers of resources. So the reduction of the resource’s price should cause the decline of profit of the resource’s producers.
— Another possible result of monopsonistically low price strategy is enormously high level of profit of oligopsonist. Its financial results should be much better than financial results of the resource’s suppliers.
— In the extreme case of monopsonistically low price strategy raw material producers are forced to be unprofitable. The purchasing price is so low that they can’t cover their costs.

Foreign experience of antitrust regulation of oligopsonized markets

Do we really need to regulate oligopsonized markets by monopsonistically low price concept? To answer the question, let’s turn to foreign experience. When researches compare antitrust legislation, usually they use American and European antitrust as a benchmark. It’s based on historical reasons: American antitrust is the oldest in the world, it history begins in the year 1890 with enacting Sherman Act. Thus, American and European authorities have the biggest experience in the affairs.

In the USA and in Europe, establishing monopsonistically low price isn’t a matter of antitrust regulation. When oligopsonist establishes too low purchasing price, its profit will increase. This enormously high profit will attract more firms, the industry will become more competitive and the buyers will be forced to bring the purchasing price back to its normal level. But it’s generally accepted that in Russia entry barriers are too high, so that mechanism doesn’t work. Moreover, transport infrastructure in Russia is not developed as good as in the USA and in Europe. As the result, in our country transportation costs are high, and instead of one global market we have several local ones.

Conclusion

The analysis has shown that the Federal law “About the protection of competition” should be expanded with the definition of a dominating position of a firm as a buyer and with the definition of monopsonistically low price. The basic principles of these definitions are presented. The analysis of foreign experience of antitrust regulation has proved that the monopsonistically low price concept should be applied in Russia nowadays. But when we will have developed markets, this concept will be out of date.

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CURRENT TRENDS OF REGIONAL INTEGRATION DEVELOPMENT IN WORLD ECONOMY

Abstract
The research provides assessments of current trends of regional integration development in world economy. On the basis of modelling approach, which is complemented by macroeconomic, retrospective, factor ones along with regional analyses the author tries to present a detailed new vision on the factors and elements, which demonstrate integration development. The aim of the report is to clarify the fact that nowadays integration processes are heterogeneous but despite this each country gets the benefits from the integration process such as a freedom of movement of goods, capital, technologies and services that leads to development of countries. Also the article shows the comparative analysis of convergence between EAEU and EU and modern trend of convergence of EAEU member states.

Key words: regional integration, world economy, convergence, modern trends, the results of integration

Introduction
Nowadays, there are not isolated, disparate forms of interstate relations. There is a whole system of interconnected relationships that intertwine, enhance and stimulate each other. Countries are becoming more open, and at the same time, interconnected and interdependent. Today, in the world economy there are two directions: globalization and integration.

Both directions of development, which have mutual influence, are considered as two sides of a single dynamic process. The results of their development are the reduction of all possible barriers, the simplification of the movement of people, goods, services and capitals, the interweaving of reproductive processes, the expansion of international economic ties, the growth of interconnectedness and interdependence. Thus, as a whole the logic of the development of regional and globalization coincides, and the difference is only in the scale of the processes.
Economic thought evolution

In order to understand this process we have to address the issue of economic thought evolution. Nowadays there is no general theory of integration, which is able to explain the complex phenomenon of integration. However, representatives of different economic schools, directions, describing the phenomenon, arrange the idea of integration and development.

Economists of early neo-liberalism, W. Röpke and M. Allais, understood integration as a single economic space, where market forces and free competition operate independently of economic policy. They believed that government intervention causes negative trends, such as inflation, trade imbalance and others [2].

A representative of late neoliberalism, Balassa Bela, the idea of B. Balassa was that the role of the state is becoming to play vitally important role, since the unification of the economies of the member countries leads to the integration of both political, social and other spheres [4].

Representatives of corporationalism revealed a new core of integration — transnational corporations (TNCs).

The Dutch economist, J. Tinbergen (Jan Tinbergen) representative of the dirigisme, denied the dominant role of the market mechanism in the integration processes and assumed that the functioning of integrated structures occurs in the development of general economic policy, social legislation and coordination of credit policy [2].

Theorists of structuralism, whose prominent representative is the Swedish economist, G. Myrdal, believed that integration is a process of structural transformation, where the development centers were entire industries and large firms [2].

In Russian science there are a lot of concepts, which are represented by Shishkov, Kerashev and others.

Shishkov considered that integration is based on the action of market mechanisms, which regulate direct international economic relations at the level of the economic agents. This follows to mutual adaptation of national, legal, fiscal and other systems [1].

According to A.A. Kerashev, integration is an economic process, in the narrow sense, which represents a form of internationalization of economic life, leads to intertwining national economies and implies a coordinated interstate economic policy. Integration, in a broad sense, is considered as process of convergence, functional and structural weave of separate institutions [1].

Professor V.A. Shlyamin presented the economic integration as a form of interaction between government and businesses, implying a high degree of interpenetration and interdependence [1].

Having analyzed different concepts of integration, it is possible to identify the key elements that characterize this phenomenon. As a result regional economic integration is a union of national economies, in which the reproductive
processes of the partner countries beyond the national borders and interwoven with reproductive processes in other countries in the integration of different forms of activity.

**Eurasian Economic Union (EAEU)**

The modern Eurasian Economic Union (EAEU) is a product of regionalization trend. Economic potential of the EAEU is determined by the competitive advantages of integration as a whole, then by competitive advantages of each member states of EAEU individually.

The Union unites together approximately 200 mln. people, also it covers 15% of space, which equals more than 20 mln. km² [5].

According to some indicators (GDP in current prices, GDP per capita, GDP by PPP), the situation in EAEU compared to other countries and integrations looks worse. However, the EAEU has good positions in oil and gas production, demonstrates low unemployment and a high level of human capital development, and finally covers a vast territory equal to 20% of the space. The importance of EAEU is also indicated by the fact that about 60 countries have already expressed a desire to conclude an agreement on a free trade zone with EAEU.

Also speaking about the scale of regional integration of the EAEU, it should be evaluated in a broader set of factors, not unilaterally.

![Real GDP of EAEU ($ mln.)](chart.png)

*Source: prepared by the author based on the data of statistical information of EAEC*

If we consider real GDP, we can notice that from 2000 to 2014 there was growth, but from 2014 to 2015 we can consider a decrease in the value of GDP in response to falling oil prices and this means, unfortunately, oil oriented economic model.

However, in period (2013–2014) the price of oil declined, but GDP maintained a positive trend. It happened because of the growing of physical volume of sale.

Comparing 2015 with 2014, the decline of EAEU GDP in 2015 was 2.3%, and in 2016 decline has continued and GDP in constant prices fell by 0.7% in EAEU in 2016. Thus, in Kazakhstan, Kyrgyzstan and Armenia in 01–09.2016 were small increase by 0.4 to 1.5%, while in Russia and Belarus were decline by 0.7% and 2.9 % respectively [6].
Freight transportation volume is also good measure of relationship among the members. The upward trend was in Russia, Armenia and Kyrgyzstan in 2016, but Kazakhstan and Belarus had a decline. As a whole in 2016 year the quantity of freight transportation volume didn’t decrease, on the contrary it had upward trend and it increased by 1% [6].

One of the most important tasks of EAEU development is to achieve real convergence of important macroeconomic indicators that represent not only the sustainability of economic development today, but will help to reduce imbalances in the future. We can trace that countries want to achieve convergence because it is important for the implementation of a unified or coordinated economic policy it is necessary to achieve convergence of economic development indicators. The value of GDP per capita at purchasing power parity PPP demonstrates the trend of convergence. A lower ratio of variation means greater convergence.

The graph shows comparative analysis of the convergence trend of EAEU and EU in the period within 1992-2012. And beginning from 1992 to nowadays the EAEU has a comparative advantage in this indicator.

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>8149</td>
<td>8598</td>
<td>8970</td>
</tr>
<tr>
<td>Belarus</td>
<td>17641</td>
<td>18230</td>
<td>17652</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>24608</td>
<td>25647</td>
<td>25838</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>3222</td>
<td>3339</td>
<td>3418</td>
</tr>
<tr>
<td>Russia</td>
<td>25966</td>
<td>26106</td>
<td>25326</td>
</tr>
<tr>
<td>EAEU</td>
<td>24367</td>
<td>24630</td>
<td>23991</td>
</tr>
</tbody>
</table>

If we look at modern trend of this occurrence, we can see that Russia and Kazakhstan had the similar values, which mean a high level of convergence; also Belarus had a trend to converge. New participants of the EAEU, Armenia and Kyrgyzstan, should follow the example of Kazakhstan, Russia and Belarus [6].
Conclusion

Coming to a logical conclusion, we can highlight the basic results of research. Nowadays integration processes are heterogeneous, because integration gives positive and negative effects to the economy of the participating countries. The results of integration are the equal conditions, freedom of movement of goods, capital, technologies and services which leads to an expansion of countries. Also there are the improvement of the investment climate, overcoming a lack of national factors of production, in addition overcoming the narrow export specialization and creating a competitive environment.

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THE CONCEPT OF POPULATION GROWTH AS A MAJOR FACTOR FOR ECONOMIC DEVELOPMENT

Abstract
The paper deals with the concept of population growth as a possible success factor for economic development. There is also considered its dependence on the economic growth. China and India are often compared, as their large population is a key factor for an increase in production and rapid economic development. This paper aims to identify the tools that helped China and India to reach economic success in the world and provide the ways to introduce them in Russia.

Key words: population growth, economic development, China, Russia, India

Nowadays, because of economic crisis all countries are looking for the ways to boost economic development. The main issue for the economies is working out the strategy that will maintain economic growth. There are many factors that make a positive impact on the economy and encourage successful economic development. They include natural resources, capital formation, favorable conditions for foreign trade, technological development as well as social and political factors. It is also believed that one of the possible success factors is a large population. In the last few decades, the countries that have failed to resolve this issue have to adapt the experience and policies of those countries that managed to benefit from accelerated economic development driven by the demographic growth.

Thomas Malthus was the first to formulate the fundamentals of the population theory. He argued that too fast reproduction of the population is the major cause of working class poverty [3, 471–573], [6, 141]. The population theory concludes that population seeks permanent reproduction that exceeds the available resources. This theory also considers the reproduction barriers both destructive and preventive. The former include poverty, poor child nutrition,
wars, epidemics and hunger, the latter refers to moral education [3, 471–573]. But in 1934 the Swedish economist Gustav Cassel published the article about the relationship between the population number and employment opportunities. He stated that Malthus was wrong. G. Cassel believed that each additional person increases the aggregate demand and thereby improves the employment rate. He illustrated his theory with the experience of the USA where there was a clear correlation between the economic growth and a rapid increase in population due to immigration [5, 139, 141]. Later S. Kuznets and D. Simon argued that the population growth leads to an increase in human inventions and thereby has the impact on economy. Yet, it was found out that despite positive effects a large population growth has a number of negative consequences.

Table 1

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Boost in economy: searching new ways to improve resources and goods</td>
<td>• Increasing pressure on the biosphere of the planet, due to an increase in food and energy production, mineral resources consumption</td>
</tr>
<tr>
<td>• Decrease in mortality rate: creating conditions that enable people to prolong their life</td>
<td>• Depletion of the natural resources</td>
</tr>
<tr>
<td>• Increase in the birth rate: increasing the birth rate due to social activities or direct influence on the physiology</td>
<td>• Restructuring of the hierarchy of values due to changes in the age structure, huge pressure on the health care, social welfare and education systems</td>
</tr>
<tr>
<td>• Distribution of manufactured products on a scale beyond the family or the household.</td>
<td>• Loss of sustainable growth due to the uneven development that can lead to the armed conflicts.</td>
</tr>
</tbody>
</table>

Historically, there are several periods of rapid growth, alternating with the periods when the growth slowed down. Thereby, the demographic cycle consists of several stages:

1. Internal Colonization (recovery period)
2. Period of compression
3. Ecosocial crisis [8, 47–50]

Table 2

<table>
<thead>
<tr>
<th>Stage</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internal Colonization (recovery period)</td>
<td>Free lands, construction or restoration of communities, the growth of cultivated areas, low food prices, high consumption, limited development of cities and crafts, insignificant development of rent and loans, low land rent, high labor costs and population growth.</td>
</tr>
<tr>
<td>2. Period of compression</td>
<td>The high land prices, peasant land hunger, the growth in large landholding, low consumption rate among population, high bread prices, food riots and rebellions, foreign wars in order to expand the territory and reduce demographic pressure.</td>
</tr>
</tbody>
</table>
Historical evidence proves that long-term population fluctuations have been observed in many parts of the world and in different historical periods. Economic development in Europe, China, India and the United States supports the concept that population growth exercises the effect on the country’s economic growth and visa versa.

**Table 3**

The impact of demographic cycles on Europe and the US economic development [7, 13–15], [9, 3], [12, 27–28], [13]

<table>
<thead>
<tr>
<th>Region/country</th>
<th>The examples of demographic cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>XIII–XV centuries — Population growth, “an upward trend”, land development, increase in the areas of major cities XV–XVII centuries — The first plague epidemic, high mortality rate, deceleration in economic development XVIII–XIX centuries — The industrial revolution, population growth, economic growth in the countries such as United Kingdom, France, Germany</td>
</tr>
<tr>
<td>United States</td>
<td>Until 1910 — rapid population growth 1914–1918 — the First World War, slowdown in population growth 1929 — a greater reduction in the birth rate (21.2% in the 1920s.), a decline in industrial activity 1950–1970 — the birth rate growth accelerated the pace of economic development, the employment rate grew by 3.7 million people</td>
</tr>
</tbody>
</table>

Currently there is a rapid growth in the number of people on the planet. At the beginning of 2015 the world population totaled at 7.3 billion people [14]. To figure out the impact of the population growth on economic development, experts tend to compare population growth rate and Gross Domestic Product (GDP).

**Table 4**

The comparison of the dynamic of GDP growth in the first 10 countries by GDP production and population growth in 2000 and 2014 [16]

<table>
<thead>
<tr>
<th>Country</th>
<th>Gross Domestic Product, current billion US$</th>
<th>% growth</th>
<th>Total population, million</th>
<th>% growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>10,3</td>
<td>17,4</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>1,2</td>
<td>10,4</td>
<td>767</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Gross Domestic Product, current billion US$</td>
<td>% growth</td>
<td>Total population, million</td>
<td>% growth</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------------------</td>
<td>----------</td>
<td>---------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Japan</td>
<td>4.7</td>
<td>4.6</td>
<td>-2</td>
<td>126</td>
</tr>
<tr>
<td>Germany</td>
<td>1.9</td>
<td>3.9</td>
<td>105</td>
<td>82</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.5</td>
<td>3</td>
<td>100</td>
<td>58</td>
</tr>
<tr>
<td>France</td>
<td>1.3</td>
<td>2.8</td>
<td>115</td>
<td>60.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.645</td>
<td>2.3</td>
<td>257</td>
<td>175</td>
</tr>
<tr>
<td>Italy</td>
<td>1.1</td>
<td>2.1</td>
<td>91</td>
<td>56</td>
</tr>
<tr>
<td>India</td>
<td>0.477</td>
<td>2</td>
<td>319</td>
<td>1042</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>0.260</td>
<td>1.9</td>
<td>631</td>
<td>146</td>
</tr>
</tbody>
</table>

The table shows that in the most economically developed countries the population growth correlates with the positive dynamic of economic development — GDP growth. In countries with the highest GDP growth (China, India, Brazil, France) there is a largest increase in population. The exception is Russia, where there was a natural population decrease over the years, but it did not affect the economic growth, by contrast: GDP in Russia increased by 631% due to the social-economic reforms from the beginning of 2000 that affected the country’s development dramatically.

It must be admitted that there are a lot of factors that make influence on the population growth and economic development correlation. For example, economic crisis in 2008 had much more serious impact on economic growth in comparison to the population growth; the size of the country and education allowed the US to reach economic success; sanctions imposed against Russia in 2014 led to an economic slowdown and so on.

However, in some countries the population growth tends to be the major economic driver. The textbook examples of such countries are China and India as there economic performance is often compared by experts. These countries are not only similar in terms of their population, but in both countries a large population is a powerful resource for the production development, and a key factor in their rapid economic development [1, 2].

The Chinese model is an East Asian model of economic development. It provides high economic growth due to China’s export policy and cheap labor force. China is a traditional agricultural country with a low level of urbanization. Cheap labor force is the main source of wealth. The state determines the overall economic policy by rational distribution, GDP consumption and targeted foreign investment.

For example, any working Chinese family can obtain a bank loan for urgent needs with a maturity of 20—30 years at 4—6% per year. New housing is constructed under the slogan: “For every family — a two-bedroom apartment with
the area of not less than 100 m²”. Moreover, to relieve the growth of surplus population in the country, there are created small towns in China [2, 1–6].

The Indian model combines the important features of advanced capitalist, socialist and developing countries — the tools of the three worlds (the first, second and third), represented on the modern world map. The state plays a significant role in the economy regulation.

Third world: poverty, population pressure, which generate agrarian overpopulation, poverty and high unemployment, illiteracy (especially among women), and Indian ethnic and civilizational specificities.

Second world: state economic activities in infrastructure and economic development based on five-year plans and the regulation of economic activities and social life.

First world: well-established democracy, the institution of private property, large domestic non-state corporations, developed securities market, high-skilled professionals involved in private business, the achievements in innovation and fundamental science [1, 4].

The urbanization rate in India is low and accounts for 32% (2013) and most population lives in the countryside. The government plays a significant role in all spheres of the state. All citizens have the right to go to school and enter a university or college in the future, where instruction is delivered in English. As a result, the country has highly skilled labor force and is developing successfully [17].

Over the years the experts have been worried about the population growth in Russia. In recent years, the mortality rate in Russia exceeded birth rate — there has been a negative natural increase. In 2013, the trend reversed and the number of births exceeded the number of deaths by 24 thousand people. Given this trend catches on, the Russian population will increase gradually, and it will have a favorable impact on the country’s economy.

| Table 5 |

**Population rates in Russia in 2006–2014 [18]**

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>including:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the number of births (mln. people)</td>
<td>1.48</td>
<td>1.61</td>
<td>1.71</td>
<td>1.76</td>
<td>1.79</td>
<td>1.8</td>
<td>1.902</td>
<td>1.9</td>
<td>1.942</td>
</tr>
<tr>
<td>the number of deaths (mln. people)</td>
<td>2.2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1.9</td>
<td>1.906</td>
<td>1.878</td>
<td>1.912</td>
</tr>
</tbody>
</table>

However, there are several issues that prevent the reproduction processes:

— Decrease in the importance of the family and marriage institution;
— Migration of population from small towns and villages to big cities (the urbanization rate — 74%);
— Life support systems such as health, pensions, insurance are underdeveloped;
— The quantitative discrepancy between men and women (46% and 54% respectively) [10, 55–56]

To conclude, the population growth does encourage economic development. In spite of that tendency, the economists should pay attention to other factors such as the size of the country, education, foreign policy, economic cycles, resource endowment and technological progress. Because of the differences in the structure and economic models in India, China and Russia, it is quite complicated to adopt the experience of China and India in Russia. No doubt that a large population can become an important factor for economic development in the Russian Federation, if there are introduced the tools designed to stimulate the birth rate. It is also necessary to implement the state policy that has to: ensure employment for the young generation; provide loans to young families; reduce infant mortality through the healthcare programs and boost business development.

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THE FORMATION OF KNOWLEDGE ECONOMY IN RUSSIA IN THE PROCESS OF EDUCATIONAL SYSTEM INNOVATION

Abstract

Nowadays education is recognized as a socially significant good that determines the development of society and has an impact on the country’s economic growth. Education is the basis of knowledge economy. The study reveals the need of formation of knowledge economy caused by active innovation development. The author defines crucial innovative requirements to develop Russian education. The paper considers the main constraining factors of the formation of knowledge economy and describes the prospects of development of knowledge economy in Russia.

Key words: role of education, knowledge, knowledge economy.

In the modern world, education plays an important role in the development of society and the country’s economic growth, since the guarantee of the state’s competitiveness in the world market is determined by the level of education, scientific and professional capability of the nation.

Since education is an integral part and a product of socialization, the phenomenon of education can be presented as a socially significant benefit that determines the development of society and has an impact on the country’s economic growth. The role of education in the life of society depends on the degree of significance of people’s knowledge in social development.

As at the present stage social and technical complications of the world around occur as a result of the processes of modernization and innovation, as well as competition in the labor market for jobs increases, the demand for knowledge is substantially increasing.

With the increase in demand for knowledge, the demand for education increases.
However, today we see that educational structures do not meet the needs of society. In this situation, education needs to be modernized. The modernization of education is a complex renewal of the mechanisms of the education system in accordance with the requirements of modern life.

When modernizing the education system, the key issues are the introduction of innovations in the education system, the formation of innovative mechanisms for the development of education and the management of innovative processes in the education system.

At the present stage, innovations should be the norm of the entire education system. Innovative education is based on new knowledge. So, the goal of educational innovations is to achieve new results overcoming the traditional education system.

Innovations in education should be directed to the formation of individuals who are determined to succeed in each industry, where they can realize themselves and show their capabilities. The introduction of education innovations occurs both in the organization of the educational process, and in the methods and programs. Innovative changes in the education system can be directed to the activities of teachers, the funding system, as well as to assess the quality of education.

At the present time, in connection with the active innovative development of the education system, there is an acute need for the formation of a knowledge economy in Russia.

So, at the present time Russia faces the problem of transition of the economy to a qualitatively new stage of development based on knowledge, innovations, in which the non-material sphere turns into the most important factor of the economy’s competitiveness. The country’s leadership set the task of radically changing the economic model of the development of the Russian Federation and the country’s transition from an export-raw material to an innovative economy based on the use of knowledge. Thus, the accelerated development of a knowledge-based economy in the Russian Federation is becoming one of the main conditions for the competitive, sustainable development of our country as a full-fledged subject of the world economy.

The knowledge economy is an economy in which economic growth and competitiveness are ensured by the creation, dissemination and use of knowledge. The knowledge economy is an economy in which knowledge enriches all sectors, and all participants in economic processes. It is an economy that uses knowledge not only in a variety of forms, but also creates it in the form of scientific and diverse high-tech products, innovations, highly qualified services, education and competencies.

The term “knowledge economy” as a term was introduced by the Austro-American economists, F. Machlup, and was described in his work “Production and distribution of knowledge in the USA” (1962).

The knowledge-based economy, as a new system for the development of society, includes the following components: [9]
1. Priority development of human capital and education. Employment in the knowledge economy is characterized by an increase in the value of skilled labor, and the political course of many countries is increasingly focused on the development of human capital.

2. Scientific activity, research and development work are the main activities focused on information production. The result of scientific activity is the acquisition of new knowledge that can be used for practical purposes or form the basis for subsequent fundamental and applied research.

3. Institutes of the knowledge economy. Institutions should be understood as “rules of the game” that determine the behavior of an individual. The knowledge economy presupposes the availability of both special legal institutions — rules for disclosure of information, protection of copyright, and state “development institutions”. The role of the latter is to “subsidize innovation, create infrastructure (office premises, centers for the collective use of complex equipment, Internet sites), as well as direct financing of innovative developments.”

Today, knowledge acquires the character of the commodity. However, they distinguish the properties of knowledge that distinguish them from the goods: non-competitive and exclusion.

Non-competitiveness is a characteristic of public goods, when the consumption of the good by one person does not interfere with the consumption of this good by other people. The incomprehensibility of the public good means that the producer does not have a real choice — to provide benefits only to those who pay for it, or to all comers.

These characteristics of knowledge give some grounds for relating knowledge to public goods. This, in turn, means that, from the point of view of society, it is optimal to minimize the marginal costs in the dissemination of knowledge.

The formation and development of the knowledge economy directly depends on the level of dynamism in the introduction of innovations in education, the purpose of which is to achieve new results. The term “knowledge economy” is sometimes equated with the innovation economy. Yet, it is important to understand that an innovative economy is a concept of a wider significance; The knowledge economy, in its turn, can be considered as the highest stage of development of the innovation economy.

Russia has significant opportunities for developing the knowledge economy, which are due to the high educational potential, significant opportunities of the innovation process and a sufficiently developed material and technical base. The brake on the country’s advance towards the knowledge economy remains the unresolved problems of the development of the institutional environment. The most significant institutional problems in the introduction of a knowledge-based economy model in modern Russian conditions include: [9]

1) in the field of creation of knowledge — the lag in the level of wages of workers in science and education from the average in the economy;
Deformed motivation of the faculty (shortage of time for scientific research due to “overemployment” in combination); language barrier and underdevelopment of international research projects, etc.;

2) in the field of commercialization — a lack of infrastructure for venture financing and the transfer of innovation; Low level of legal literacy of researchers and inventors in the field of protection and transfer of intellectual property rights, underdeveloped competences in business planning, marketing and industrial design

3) in the field of implementation — the inertia of low demand for innovative developments from large business and the ineffectiveness of tax incentives; The uncertainty of the legal status of innovatively active enterprises and the incomplete nature of their support; Fierce competition in the markets for high-tech products and a lack of marketing support for high-tech businesses at the federal and regional levels.

The low level of economic and institutional regimes, including unfavorable conditions for the development of innovative business and ineffective methods of state regulation of innovation activity, should be singled out as the factor most negatively influencing the formation of the knowledge economy.

To solve the problem of Russia’s transition to the knowledge economy, it is necessary to solve the following problems:

— development of human potential of Russia, increase of competitiveness of human capital;
— creation of a highly competitive institutional environment that stimulates innovation activity;
— structural diversification of the economy on the basis of innovative technological development;
— transition to a new model of spatial development of the Russian economy.

Since the knowledge economy determines this type of economic development, where knowledge occupies a dominant role, and their production becomes a source of progress, the problem of developing innovation policy in the Russian Federation is becoming more urgent.

As the knowledge economy is formed, the education sector changes in the following directions: the value of the market for educational services in the economy increases; There is an increase in the costs of education; The volume and types of educational services provided are increasing; Competition between educational organizations is increasing. In addition, under the conditions of dynamically developing market conditions, there is a need to continuously obtain new knowledge, which entails the need to form a fundamentally different model for the organization of the educational sphere, in which the concept of continuing education will dominate.

Since the formation of the knowledge economy is greatly influenced by the level of development of education, a number of requirements are specifically
defined for education, especially important for the development of personal education strategies:

— continuity (the evolution of the accumulated knowledge required in the implementation of innovation activities in the company);
— effectiveness (the possibility of creating an effective “system” to stimulate education, increasing the responsibility and interest of the trainee);
— practical orientation (stimulates the investment of firms in the education of their personnel).

In the knowledge economy, education becomes a tool that facilitates the production, expansion and use of knowledge. This establishes the position of education as an advanced branch of the knowledge economy, which makes it possible to determine the advantage of the education sector in the knowledge economy.

Since the mass education in the knowledge economy is considered to be a priority, which should not contradict the requirements listed above, it determines the tendencies of the development of the education system in the conditions of a knowledge-based economy: [9]

— forcing the individualization of higher education;
— the combination of corporate and industrial training with a fundamental education.

To develop the presented trends, it is necessary to create financial and institutional foundations for the formation of individual educational strategies on the basis of universities, as well as the development and implementation of various forms of interaction between the higher education system and enterprises that enable the introduction of corporate and industrial training experience in the educational process of higher education institutions at any stage of staff training. [5]

One can single out a number of positive factors in the formation of the knowledge economy in Russia:

— high level of information and telecommunication system;
— a high level of education of the population and the availability of capabilities for the implementation of innovative activities;
— a sufficiently high level of development of the national innovation system.

**Conclusion**

Thus, despite the fact that in Russia there are many unresolved institutional problems hindering the development of the knowledge economy, the country has a high potential of economic development based on knowledge.

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THE IMPACT OF MACROECONOMIC INSTABILITY FACTORS ON THE ATTRACTION OF DEBT FINANCING BY RUSSIAN OIL AND GAS COMPANIES

Abstract
The article investigates the influence of the macroeconomic instability factors on the debt attraction in the form of eurobonds by Russian oil and gas companies using quantitative methods Value-at-Risk and Expected Shortfall. These methods are among the most advanced and widely used in contemporary risk-management to value market risks. Besides the estimation of these risks, the author proposes structural recommendations on reducing the cost of attracting eurobonds by our domestic companies in terms of the macroeconomic instability.

Key words: debt financing, risk management, market risks, eurobonds, Value-at-Risk
JEL codes: G 15, G 17, G 32

Introduction
Nowadays foreign sanctions and overall macroeconomic instability in Russia lead to severely restricted access to the external debt market, as a source of relatively cheap and long-term funds and to related problems — difficulties with refinancing of previously taken external loans and its repayment in dollars (for example, the external debt payment schedule according to the Central Bank is as follows: 2017 — 7%, 2018 — 7%, 2019 — 3%, after 2019 — 38%). The share of the external debt in the structure of the debt obligations of the 25 largest domestic oil and gas companies is about 85%. And it should be noted that the three largest companies (Gazprom, Rosneft and Lukoil) account for about 3 trillion rubles or about 20% of the total external debt of the domestic non-financial sector [6].

In this regard, it’s extremely important to domestic issuers of eurobonds to identify, value and manage market risks that can seriously affect investors’
moods, refinancing opportunities and the total value of the company’s debt. Since most of the eurobonds are denominated in foreign currency, the redemption of the par value and the annual repayment of the coupon depend on the volatility of the exchange rate (currency risk), market fluctuations in eurobond prices affect yield to maturity (interest rate risk) and so on.

Therefore, we develop a statistical model that allow to value the impact of these market risks on the eurobonds of selected Russian companies and offer recommendations to the companies on the relevant structuring of subsequent issues and hedging its risks.

**Eurobonds as a relevant instrument of the debt financing for the largest Russian companies of the real production sector**

It’s well known that the largest Russian companies of the real production sector are carrying out large-scale investments in the capital construction, exploration, extraction and production, capacity upgrading and reconstruction. So, according to investment strategies and programs of our domestic companies, the total volume of investment by Rosneft in 2016 amounted to 1 trln. rub., Gazprom — 842 bln. rub., Lukoil — about 600 bln. rub., Transneft — 340 bln. rub. Such large investments are often difficult to finance at their own expense, small bank loans or domestic bonds, that’s why companies prefer to enter international capital markets. In addition to the limitedness and obvious failures of the financial market in Russia (high domestic rates, poorly developed market of syndicated loans, a small number of domestic banks with experience in floatation eurobond issues of Russian prime rated companies, etc.), ruble loans and bonds carry increased currency risks due to a strong correlation between national currency and oil prices. The average volume of the ruble issue is less than the eurobond one by approximately 7-10 times. Also, the loan cost in the form of the interest rate on eurobonds is lower than for ruble loans, and such difference is not even covered by tangible listing costs, underwriter commissions and other associated costs when floating a eurobond issue.

Strictly speaking, not only eurobonds, but also syndicated loans are the most popular at the international capital markets. These two instruments are basically complementary and the choice of a specific source of debt is determined by its individual advantages. Thus, syndicated loans are better suited for the financing mergers and acquisitions, because in such transactions the speed of attracting debt is important; have tighter and more formalized transparency requirements). Eurobonds, in turn, operate with longer terms of financing, which is especially necessary when investing in the capital construction in the oil and gas sector. Eurobonds often involve the large amounts of financing and soft restrictions. It should be noted about the covenants that eurobonds also have more flexible redemption schemes (built-in call- and put-options) as opposed to syndicated loans. Thereby in this article the author will highlight eurobonds from numerous
sources of the debt financing attracted by domestic oil and gas companies for the more detailed investigation, including valuation the impact of the macroeconomic instability factors in the form of market risks on the debt attraction.

**Market risks as the macroeconomic instability factors**

For the purposes of further research we have clarified the concept of “macroeconomic instability” in terms of four market risks: interest rate risk, currency risk, inflation risk and commodity price risk, which is particularly relevant for oil and gas companies [4]. Commodity price risk is manifested in the form of negative changes in prices of oil, natural gas and other sold products (gasoline, fuel oil, etc.) and equipment, which is 60–95% shipped from abroad.

Inflation risk consists of unpredictable price increases, changes in the purchasing power of money over time. This risk is particularly dangerous for fixed-income sources of the debt, for example bonds, because the situation in which inflation will exceed bond yield will lead to the unwillingness of external investors to buy such bonds. In addition, the real yield on fixed-income sources of the debt, which is equal to the difference between a fixed rate of return and inflation, reduce with an increase in the price level. Also, inflation greatly influences the rise in prices of raw materials and equipment, i.e. for the above-mentioned commodity price risk.

The exchange rate can vary under the influence of many factors — economic, political, legal — but it should be noted that it’s less affected by changes in current prices and therefore more stable than inflation. But this doesn’t abolish the close relationship between these two risks, because the higher inflation in the country receiving the investments the higher currency risk due to the fact that the depreciation of the national currency rate, as a rule, occurs simultaneously both in relation to consumer goods and to the exchange rates of foreign currencies. Currency, or it is also called the exchange rate risk directly affects the total value of the debt, manifested in foreign currency and payable to foreign investors. Because of this valuation of the employed capital volume also changes. In order to minimize the exchange rate risk companies use various hedging instruments — this is a structural or balance hedging (“leads and lags” technique, netting of cash flows) and hedging by contracts (forwards, futures, options, swaps).

The risk associated with the change in the interest rates is understand as a risk of bonds’ coupon rates fluctuations. The interest rate for certain eurobonds (FRNs) is floating (depends on LIBOR/EURIBOR\(^1\) + fixed premium), which produces a high interest rate risk for the borrowing company. An important characteristic for such kinds of eurobonds is a frequency of setting new values of the interest rate. A less frequent periodicity makes it possible to smooth fluctuations in the costs of servicing these sources of the debt. However, it should be noted that instruments with a floating rate reduce the rollover risk.

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\(^1\) LIBOR (London Interbank Offered Rate), EURIBOR (Euro Interbank Offered Rate)
Thus, in the review we included only macroeconomic risks, without taking into account the microeconomic or intrafirm risks of each company.

**Prerequisites and assumptions of the modeling**

Based on the analysis of the rating of the largest Russian companies RBK-500, the following pool of domestic oil and gas companies was selected for the research (table 1). As can be seen from this table, companies were selected by their revenue, as for the remaining financial indicators (EBITDA, net income and assets) they have quite serious discrepancies.

### Table 1

**The main financial indicators of the analyzed companies, 2015, bln. rub.**

<table>
<thead>
<tr>
<th>№</th>
<th>Company</th>
<th>Revenue</th>
<th>EBITDA</th>
<th>Net income (losses)</th>
<th>Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gazprom</td>
<td>5 985</td>
<td>1 875</td>
<td>805</td>
<td>17 052</td>
</tr>
<tr>
<td>2</td>
<td>Lukoil</td>
<td>5 174</td>
<td>769</td>
<td>293</td>
<td>5 021</td>
</tr>
<tr>
<td>3</td>
<td>Rosneft</td>
<td>4 120</td>
<td>1 245</td>
<td>356</td>
<td>9 638</td>
</tr>
<tr>
<td>4</td>
<td>Surgutneftegaz</td>
<td>993</td>
<td>-</td>
<td>762</td>
<td>4 052</td>
</tr>
<tr>
<td>5</td>
<td>Tatneft</td>
<td>553</td>
<td>156</td>
<td>106</td>
<td>799</td>
</tr>
<tr>
<td>6</td>
<td>Bashneft</td>
<td>508</td>
<td>127</td>
<td>60</td>
<td>520</td>
</tr>
<tr>
<td>7</td>
<td>Novatek</td>
<td>475</td>
<td>215</td>
<td>74</td>
<td>880</td>
</tr>
<tr>
<td>8</td>
<td>Sakhalin Energy</td>
<td>381</td>
<td>-</td>
<td>123</td>
<td>1 309</td>
</tr>
<tr>
<td>9</td>
<td>Novii potok</td>
<td>244</td>
<td>(8)</td>
<td>(32)</td>
<td>187</td>
</tr>
<tr>
<td>10</td>
<td>Slavneft</td>
<td>224</td>
<td>-</td>
<td>20</td>
<td>312</td>
</tr>
</tbody>
</table>

Source: [7]

Let us turn to the consideration of outstanding eurobonds’ share in the debt portfolio of these companies.

As it can be seen from table 2 eurobonds occupy a significant place in the debt structure of those companies that borrow on this market: in 3 out of 4 of these companies the eurobonds’ share in the total debt (long-term, short-term liabilities and the current part of long-term liabilities were taken into account under IFRS reporting) fluctuates between 46% and 52%, only Rosneft’s share is about 11%.

### Table 2

**Eurobonds in the aggregate debt portfolio of analyzed companies, 2016, mln. dollars**

<table>
<thead>
<tr>
<th>№</th>
<th>Company</th>
<th>Volume of outstanding issues</th>
<th>Total debt</th>
<th>Eurobonds’ share in the debt portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gazprom</td>
<td>21 895</td>
<td>46 995</td>
<td>46,6%</td>
</tr>
<tr>
<td>2</td>
<td>Lukoil</td>
<td>6600</td>
<td>13 292</td>
<td>49,7%</td>
</tr>
<tr>
<td>3</td>
<td>Rosneft</td>
<td>5400</td>
<td>46 344</td>
<td>11,7%</td>
</tr>
</tbody>
</table>
It should be noted that other companies (Surgutneftegaz, Tatneft, Bashneft, Sakhalin Energy, Novii potok and Slavneft) don’t have outstanding eurobonds’ issues, so they were excluded from further consideration. Surgutneftegaz, Sakhalin Energy, Novii potok and Slavneft have never used such source of the debt financing as eurobonds; Tatneft redeemed its first and only eurobond issue for 300 mln. dollars in 2002; Bashneft early extinguished one issue for 250 mln. dollars 4 months after the floatation and another issue for 15 bln. rub. — 6,5 months [5].

Thus, all selected companies have the following number of outstanding eurobonds’ issues as of February 1, 2017: Gazprom — 23, Lukoil — 7, Rosneft — 5 and Novatek — 3. Out of these 38 issues, non-dollar (EUR, CHF, RUB and GBP) issues were excluded.

Let’s analyze in more detail the eurobond portfolio of each company (see table 3).

### Table 3

<table>
<thead>
<tr>
<th>Company</th>
<th>Total number of issues</th>
<th>Total amount of issues</th>
<th>Outstanding number of issues</th>
<th>Outstanding amount of issues</th>
<th>Outstanding by currency type, total amount (number of issues)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gazprom</td>
<td>50</td>
<td>44 712</td>
<td>23</td>
<td>21 895</td>
<td>RUB: 10 400 (9), USD: 9364 (10), EUR: 2130 (4)</td>
</tr>
<tr>
<td>Lukoil</td>
<td>12</td>
<td>9605</td>
<td>7</td>
<td>6600</td>
<td>RUB: 6600 (7), USD: —, EUR: —, others: —</td>
</tr>
<tr>
<td>Rosneft</td>
<td>8</td>
<td>7050</td>
<td>5</td>
<td>5400</td>
<td>RUB: 5400 (5), USD: —, EUR: —, others: —</td>
</tr>
<tr>
<td>Novatek</td>
<td>4</td>
<td>2486</td>
<td>3</td>
<td>1886</td>
<td>RUB: 236,51 (1), USD: 1650 (2), others: —</td>
</tr>
</tbody>
</table>

Source: author’s calculations based on [5]

Thus, four largest domestic oil and gas companies were selected for the purposes of the investigation and the eurobonds’ portfolios of these companies were analyzed. Then there were identified both its similar characteristics (fixed
rates, an absence of convertibility option and early extinguishment of bonds in the form of call- and put-options, listing on the world’s major stock exchanges) and significant differences (small or absent currency diversification of issues, large-scale differences in the amounts of the emissions, a wide scatter of issues with identical maturities according to the criteria of effective yield and modified duration).

**Modeling of Value-at-Risk\(^1\) and Expected Shortfall\(^2\) of the eurobonds**

In general, the algorithm of calculating VaR and ES for selected eurobonds individually and for the whole portfolio can be presented in a step-by-step manner as follows.

*At the first step*, daily last bid quotes of all eurobonds were taken according to the Cbonds Valuation methodology, in order to avoid a large number of non-tradable days when using quotes from various stock exchanges. Quotes were taken for the one year (according to the recommendations of the world’s largest financial institutions, such as the Bank for International Settlements and the Basel Committee) from February 1, 2016 to February 1, 2017, in total 263 observations [5].

*The second step* was to set the following prerequisites for a portfolio consisting of 22 eurobonds: initial capital — 1 mln. dollars, the confidence interval is 99% (the strictest interval was taken according to the recommendations of the BIS Market Risk Guidelines and the Basel Committee, since it’s better to take into account the larger losses than to underestimate it). As a result, the share of Gazprom in the total portfolio was approximately 40,9%, Lukoil — 27,3%, Rosneft — 22,7% and Novatek — 9,1% [1].

*At the third step* auxiliary calculations were performed in Excel using the SRCToolKit special add-on library. They included the calculation of the covariance and correlation matrices of the daily and annual changes and daily volatility of the eurobond quotes. Then, with help of simulation modeling of possible scenarios of changing the bond market prices on the basis of previous covariance and correlation analysis, scenarios of the changing market value of assets were calculated (i.e., taking into account the number of each bond in the total portfolio). In this example, the number of simulated scenarios was 10 000 for each of 22 eurobonds [1].

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1. Value-at-Risk (VaR) is used by investment and commercial banks and companies to determine the ratio of potential losses in its institutional portfolios. VaR is a method of quantifying the financial risk of an asset, portfolio or exposure over some specified “time horizon”

2. Conditional Value-at-Risk (CVaR) or Expected Shortfall (ES) is a risk assessment technique often used to reduce the probability that a portfolio will incur large losses. Mathematically speaking, CVaR is derived by taking a weighted average between the Value-at-Risk and losses exceeding the Value-at-Risk
Next, at the last fourth step, the values of VaR and ES metrics were computed for each eurobond and for the whole portfolio. The maximum for the period is the maximum negative value of the change in the market value of the portfolio for the entire period. These metrics were also calculated in the R; minor deviations from the values calculated in Excel, were observed from 6 decimal places, which allows us to speak about the high precision of the calculations presented [2, 3].

Results of the research

Based on the results of the modeling VaR and ES by different methods and calculating RAROC (Risk Adjusted Return on Capital) for each of 22 selected eurobonds of Russian oil and gas companies, we can note in general a significant impact of market risks on the cost of analyzed securities. With steady distribution of the initial capital, high values (above the median) of VaR and ES demonstrate 7 out of the 9 Gazprom issues, half — Lukoil, 2 out of 6 analyzed issues of Rosneft and 1 of 2 issues of Novatek. Upon attempt to move away from the steady distribution of the bonds in the portfolio and to construct a reference portfolio (optimal portfolio in terms of possible and catastrophic losses), focusing on minimizing the most conservative and strict ES Pareto criteria, the following results were obtained: above the median levels VaR and ES showed 5 issues of Gazprom, 4 ones of Lukoil, 3 issues of Rosneft and one emission of Novatek. That is, to eliminate the influence of market risks using this procedure completely impossible and it can be concluded that all five companies have eurobond issues that are highly exposed to market risks (in total, 8 (out of 9) of Gazprom and all eurodollar issues of other three companies). The accuracy of the simulated values of VaR and ES by different methods is very high — close to the chosen 99% confidence interval. But if we look at the attractiveness of these eurobonds for the investors from the point of view of not only the risks, but also taking into account risk adjusted return, the situation changes for the better: all selected companies have attractive issues (Gazprom has 2 issues, Lukoil — 3, Rosneft — 3 and Novatek — 1).

Conclusion

After conducting a detailed analysis of the impact of market risks on the required investors’ return (VaR in this case acts as a risk premium), the author proposed and justified structural solutions and recommendations, thanks to the introduction of which eurobonds issuing companies will be able to encourage investors’ loyalty to its issues and reduce its costs. For instance, due to the built-in put-option, investors can sell bonds to the issuer at a specific moment of time, thus put-option increases the investor’s loyalty to lower coupon rates. Also, the issuer itself may be interested in buying back large volumes of issued securities in the future.

The floating coupon rate allows issuers to vary the coupon rate depending on the economic fluctuations. If eurobonds are traded at a discount, the company
may either increase the coupon rate or take other measures to boost the attractiveness for investors. If bonds are traded with a premium, that is investors value the current coupon as high and company has every reason to reduce the interest rate. **Currency diversified par value helps to reduce currency risks.**

Also, Russian companies can use new types of eurobonds, which actively practiced at the European and American financial markets. For example, such types of eurobonds as traded are quite actively issued (the coupon of these bonds is tied to various macroeconomic indicators, likewise inflation or changes in the exchange rate, which allows the investor to minimize these risks), FRNs with maximum, minimum or both limits of coupons (these bonds allow to protect both the issuer and the investor and minimize strong fluctuations in the coupon rate), synthetic FRNs (a fixed coupon for such eurobonds company can convert to floating by means of interest rate swap).

Thus, the introduction of the above management measures and instruments will allow issuers to reduce the cost of issuing eurobonds, to expand the investor base, to rely on non-standard conditions (for example, borrowing terms), to diversify and hedge their currency and interest risks and provide greater flexibility in managing cash flows on bonds and much more. Unpopularity and/or unwillingness to use these measures and instruments by Russian companies can be explained by the complexities of accounting and tax accounting of derivatives, a false perception of many of the above mentioned instruments as speculative rather than liquidity management tools, and the desire to go the beaten path. While in terms of the current macroeconomic instability conditions, application of these measures and tools will allow both the eurobond issuer and investor be in pocket.

**References**

THE IMPACT OF CATASTROPHIC NATURAL DISASTERS ON THE ECONOMY OF A COUNTRY

Abstract

The paper focuses on the direct and indirect impact of catastrophic natural disasters on economy of a country by combining information from case studies of 8 major catastrophic events in the past 40 years. The paper studies the ability of the economy to reconstruct after the event and focuses on resilience measures have been taken after the catastrophes. The case studies revealed the lessons which countries learnt and helped to define an optimal risk management approach to disaster events for countries in general and for Russia in particular.

Key words: natural disasters, insurance, resilience, economic losses.

JEL codes: G22, Q54

Introduction

Russia’s wild fires in 2010 are considered to be among major disasters in the last 40 years in terms of economic loss which made out 15 billion $ dollars or 1% of the country’s GDP [1]. Catastrophic events influence the economy of a country or a region where it happens significantly. There is no single definition of a catastrophic natural disaster. From an economic perspective, a natural disaster can be defined as a natural event that causes a perturbation to the functioning of the economic system, with a significant negative impact on assets, production factors, output, employment and consumption [2]. The impact can be divided into direct and indirect losses which need to be measured and understood. Thus, direct losses are the immediate consequences of the catastrophic phenomenon: roofs that are destroyed by high winds, cars and roads washed away by floods, and injuries and fatalities from collapsed buildings. Direct losses are often classified into direct market losses (cars and buildings) and direct non-market losses (human lives and ecosystems). Indirect losses
derived from disaster consequences and have a long lasting impact on welfare, human and economic development. The impact includes business interruptions, production losses (because damaged assets cannot produce during a period that is much longer than the event itself), supply-chain disruptions, macroeconomic feedbacks (reduced final demand, reduced tax revenues), long-term adverse consequences on economic growth (reduced investments), poverty and inequality impact or increased production from the measure of resilience and preventive approach to construction. The impact of catastrophic events on economy has been studied by World Bank researchers in 2015 by Stephane Hallegatte in his work “The Indirect Cost of Natural Disasters and an Economic Definition of Macroeconomic Resilience”, by Stephane Hallegatte and Valentin Przyluski in 2010 in paper “The Economics of Natural Disasters Concepts and Methods”, in 2010 by Eduardo Cavallo (Inter-American Development Bank Research Department), Sebastian Galiani and Juan Pantano (Washington University in St. Louis), Ilan Noy (University of Hawaii) in their paper “Catastrophic Natural Disasters and Economic Growth”. Stephane Hallegatte distinguishes the impact of catastrophes into asset losses which is in our terminology equals direct loss and output losses which equals indirect loss and defines the reduction in income flow over time. The above mentioned authors point out that impact of disaster events is difficult to measure as several different models are used to define the direct and indirect losses. Direct market losses can thus be calculated using EM-DAT database or insurance-industry databases and modelled based on property cost in the area of the events. For non-market losses there is no easily observed price that can be used to estimate losses. Thus, we suggest taking case studies from major catastrophic events of the past to see how they influenced the economy of a country.

**Major catastrophes and the economic effects**

In this research to measure direct impact we will take economic loss of a catastrophe to GDP in percentage but there are several issues using economic loss to GDP indicator for direct loss which should be noted. Firstly, for large countries, the scale of the event and the scale of GDP measurement are very different, and a large shock for local populations can hardly be visible on national GDP. Hurricane Katrina has still the major economic loss (140 000 million dollars [1]) among other events which is 1.1% of US GDP [1]. Secondly, economic loss to GDP cannot capture a significant share of indirect losses. While resilience measures are taking place, we cannot measure how long it will take for ecosystem to restore, for companies to establish production cycle, for people to start to consume as before, for companies to start investing in the region. Thus, moral impact should be measured via indirect losses. Thirdly, GDP measure current economic activity but does not account for inequality and distributional effects and gives a restricted view to well-being of the popula-
tion [3]. The last two issues can be resolved via indirect loss assessment and the first issue is clearly seen when we look at major catastrophes impact on small countries. Hurricane Gilbert in 1988 made out 386 % to GDP of the country St. Lucia (the economic loss made out 1000 million dollars which is 0.7% of Hurricane Katrina loss). Hurricane Ivan in 2004 was 204% of Grenada’s GDP, Cyclones Val and Wasa in 1991 caused the loss that equals 248% of Samoa’ GDP. Cyclones Eric and Nigelin Vanuatu in 1985 cost 143% of country’s GDP [1]. The insured losses in small countries are almost zero or unidentified according to the statistics and resilience measures are fully held by the governments. While earthquake in China in 2008 caused the loss of 124 578 million dollars which equals 2,8% of GDP with 87 449 number of victims and almost zero insured loss [1].

**Case Studies**

Since Japan has a history of severe earthquakes, its citizens and companies have made considerable preparations and have recovered from previous disasters. In 1995 Kobe earthquake hit a region that was heavily industrialized and densely populated and caused about $100 billion [4] in damage. The immediate effect was a contraction in Japan’s economy of 2.6% but a recovery that began the following month. The Kobe quake, however, did not trigger a tsunami, a nuclear crisis, or severe shortages of electricity. The economic impact was 2% of GDP [4]. After the earthquake, Kobe has become the center of disaster prevention and management of Japan through establishing national and international organizations for disaster risk reduction and management. Kobe has been playing an important role in enhancing the national disaster prevention and management system based on its earthquake experience.

In 2011 Japan earthquake and tsunami followed by the nuclear crisis at the Fukushima Nuclear Complex, evacuations, and shortage of electricity had a large negative economic impact on the country: physical damage has been estimated to be $122 to 235 billion (2.5 to 4 percent of GDP) [5]. After the earthquake risk awareness has increased even more. Property insurance premiums in Japan returned to a strong growth of 6% per annum for the years between 2011 and 2015. The penetration rate of property insurance rose to 0.31% of GDP in 2014–2015 from 0.26% in 2010–2011 [6].

If we take a devastating example of Haiti earthquake in 2010, we will see the economic output (GDP) shrank 5.1% in the year of the catastrophe, total debt service increased up to 13%, FDI increased to 178 billion US dollar, official aid received increased up to 3036 million US dollars and the cost of the earthquake calculated by author made out 131% of GDP, population growth decreased from 2 to 1% [7]. The earthquake damaged the main airport, most of the ports, the capital of the country and nearly all the paved roads. This restricted government efforts to restore order.
Table 1

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, total (mln)</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Population growth (annual %)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>GNI per capita, (US$)</td>
<td>550</td>
<td>610</td>
<td>680</td>
<td>700</td>
<td>750</td>
<td>800</td>
<td>820</td>
<td>810</td>
<td>810</td>
</tr>
<tr>
<td>GNI per capita, PPP (US$)</td>
<td>1510</td>
<td>1530</td>
<td>1560</td>
<td>1480</td>
<td>1570</td>
<td>1630</td>
<td>1690</td>
<td>1740</td>
<td>1760</td>
</tr>
<tr>
<td>GDP growth (annual %)</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>−5.1</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Total debt service (%)</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>FDI (Foreign direct investment) (US$ mln)</td>
<td>75</td>
<td>30</td>
<td>55</td>
<td>178</td>
<td>119</td>
<td>156</td>
<td>160</td>
<td>99</td>
<td>109</td>
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<tr>
<td>Official aid received (US$ mln)</td>
<td>702</td>
<td>912</td>
<td>1120</td>
<td>3036</td>
<td>1690</td>
<td>1272</td>
<td>1152</td>
<td>1084</td>
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<tr>
<td>Earthquake loss $ mln</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>8650</td>
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<td>% of damage</td>
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<td></td>
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<td>131%</td>
</tr>
</tbody>
</table>


The disaster was huge to the country and the USD 8 million payout was made from the insurance coverage provided by the Caribbean Catastrophe Risk Insurance facility (CCRIF) to the government of Haiti [8]. Haitian catastrophe has highlighted the potential of parametric insurance to help countries plan for and pre-finance natural disasters as part of a comprehensive disaster risk management strategy. The disaster impact was short-term and the economic figures say that GDP started to grow in the next years after the catastrophe as the resilience measures and CCRIF funding were made in time. Starting from 2011 Haiti’s GDP is growing. If not the aid from international organization and Caribbean Catastrophe Risk Insurance facility, the country would have defaulted and the catastrophe loss is higher that country’s GDP. The Caribbean Catastrophe Risk Insurance Facilit (CCRIF) allows participating in the pool governments to purchase insurance coverage to finance immediate post-disaster recovery needs. In case of pooling claims payments will depend on parametric triggers based on the occurrence of a pre-defined event rather than an assessment of actual losses on the ground. Insured countries will pay an annual premium commensurate with their own specific risk exposure. Parametric insurance products are priced for each country based on their individual risk profile. Annual premiums typically vary from US $200,000 to US $4 million, for coverage ranging from US $10 million to US $50 million [9].

Grenada was hit by hurricane Ivan in 2004. The World Bank data shows that GDP contracted by 1% in 2004 but the hurricane was 148% of country’s GDP as of 2004. The resilience measures were provided by international loans by World Bank ($ 10 million), IMF, IBRD, IDA and US aid ($ 130 million) [10]. Grenada’s GDP growth was growing before the event. Based on projec-
tions prior to the impact of hurricane Ivan, the economy was estimated to
grow by 4.7% [11] in 2004. This growth was expected to be fuelled mainly by
developments in agriculture, tourism, and banking and insurance. Agriculture
was estimated to grow by 3.6% [11] resulting from an improved performance
of the traditional crops as well as the continued increase in the non-traditional
crops. The hotel and restaurant sector was projected to increase by 8.0%. But
as a result of the disaster we see that GDP reduction was -1% and in further
years didn’t reach pre-event growth (see Graph 1) (except the following year
2005 when the GDP growth was +13% due to resilience measure that increased
productivity) while net official development assistance and official aid received
(in current million US dollars) grew up significantly starting from 2004 (see
Graph 2).

Many papers have been written to assess direct and indirect loss impact on
Grenada, as well as papers on personal sufferings which people used to experi-
ence while they had to shelter with other people or lost the feeling of personal
space: “I sheltered nine people. Managing supplies was difficult. Having to
feed nine. We were nutritionally challenged. I sent my son overseas. Some are
elderly, some are sick, and some are teenagers. This was stressful and challeng-
ing emotionally. We survived.” [12] Some of people experience physiological
problems and suffered from them. There is a paper that emphasized the impact
on women’s health and the safety feeling. “Much of the discomfort caused by relocation and reconstruction is being carried by women. For many, their workload and responsibilities have multiplied and have become a greater burden because they are dislocated from their homes and communities. This has implications for women’s health” [12].

If we take examples of the most devastating catastrophe — Katrina hurricane, we will see that US is one of the most proficient countries in insurance industry and has developed approach to risk management. Even though, Katrina caused huge economic loss due to business interruption in addition to property damage loss. Many experts consider that Katrina was as much a man-made disaster as it was a natural disaster, and it helped to initiate the discussion of community resilience, demonstrated gaps in emergency management and response, highlighted weaknesses of the National Flood Insurance Program, and brought about changes in the insurance industry. The lessons learned from Katrina will ensure that the next storm will be less catastrophic. This disaster was costliest disaster in the history of insurance, with almost $80 billion (2015 USD) in insured losses [13]. The percentage of uninsured loss varies from 50 to 60% [1] (depending on the source) and mainly in compensated from the budget. Beyond the losses, Katrina left an imprint on our industry. It forever changed the way both insurers and the insureds view risk management, property, liability claims, as well as emergency preparedness efforts. In Katrina’s case people were timely informed about the evacuation and still the devastation was huge. Searching in the internet for the memories of people who witnessed the event there should be noted that many were prepared but didn’t expect such a devastation “After the storm passed, I was heartbroken when it became clear how widespread the devastation was” [14].

Another case study is the earthquake in China in 2008. The disaster was mainly uninsured and economic loss equaled 2.8% [1] of China’s GDP and was the second largest disaster in terms of economic loss in the past 40 years. The number of victims was more than 87 thousand people [1]. As earthquake insurance is generally not included in standard homeowners insurance policies and China’s insurance market was at a low development stage in 2008. Most of the losses were not insured but the reconstruction and shelter support program was in place immediately. Red Cross provided cash grants to over 62,000 households. The government played a strong directive role, leading much of the project scope and activities. Cash distributions transferred directly into homeowners’ bank accounts. This is different from most earthquake reconstruction funds in China which flowed through government managed accounts [15]. An estimated 15 million people were made homeless and displaced by the earthquake. After 10-month period some families were still building their houses. It proves that the reconstruction process is a long one and should be supported by government and international efforts. The reconstruction project was completed only after 2 years and this is a long time for people. Certainly the devastation is measured
not only by economic losses, but also by time, victims, the feeling of loss and the time which is needed for people to recover.

If we take an example of Russian wild fires in 2010, we will see the insured loss statistics cannot be found in official data such as Swiss Re reports. This can be due to the lack of claims related to fires and low insurance culture in spite of the fact insurance density in 2010 was 296.8$[16]$ and Russia’s insurance market was ranked as 19$^{th}$ in the world insurance. Still economic loss was $15 billion [1] which in this case was fully compensated by government of Russia. The economic loss equaled 1% of GDP [1]. The mortality rate was highest in 2010 compared to further years till 2015 (see graph 3.) for the Central Region of Russia where the fires took place.

The fires were at their maximum from July to September 2010 and most of the Moscow citizens experienced the smoke in the air and in some days it was hard to move as one could see no more than 1 meter in front. It was hard to breathe and people preferred to stay in offices or air-conditioned premises. For elderly people who lived in old houses in Moscow city it was hard to protect from the smoke and as statistics shows many people suffered from illness. The statistics showed that 2 500 houses were destroyed by fires and 50 people died. In social media the fires gave way to the criticism to the government as safety measures were not taken on time.

All papers work out recommendations which can be valuable for the countries that carry the risks of disasters. The author studied the recommendations which were given to the suffered countries and marked out the ones which can be applied generally to all countries at risk.

- Increased usage of building codes in the reconstruction efforts and in building in general;
- Establishment of an agency to exclusively handle the execution of rehabilitation and reconstruction projects;
- Development of a Disaster Management Plan of Action;
- Implement and revise where necessary, the existing Building Code;
- Enact a Building Act to boost construction standards for health care institutions;

Graph 3. The number of deaths per 1000 people 2009–2015 in the Central Region and Russia as a whole

Source: official statistics of the Russian federation.
Non traditional forms of insurance for low income home owners, particularly poor female heads of households, need to be devised as part of the social protection efforts.

The preparedness of the country for the disaster sufficiently contributes to ability to overcome negative impact of the catastrophe. Thus, the readiness of the country immediately react on the event and start the resilience measures is important for proper risk management approach. After studying the actions which were taken by governments after the disasters to reactivate the process of economic and social development we can mark out 2 stages: rehabilitation and reconstruction. Rehabilitation stage includes normalization of people lives, provision of food and water, disease prevention, housing repair, financial support and soft loans. Reconstruction stage includes implementation of specific projects (such as rebuilding roads, communication networks, social infrastructure) establishment of productive jobs and reduction of social vulnerability.

Conclusions

To sum up, disaster events and impact they cause to the society we can say that in developed countries such as US insurance coverage and proper approach to risk management can minimize the catastrophic loss, but there always be a gap between insured loss and the total loss and there cannot be any tool to compensate for people’s lives. Having studied the disaster events in different countries and the papers which measure the catastrophic impact, the following was derived:

― Regions or countries at risk should have an optimal risk management approach to manage the event;
― Insurance techniques, pooling of financial assets for the regions at risk can solve the problem of financing the resilience and reconstruction stage;
― Countries which are small cannot finance the devastating events from their own budgets and as a result use international loans which makes their country budgets indebted;
― Bigger countries suffer from catastrophes in a less extent in economic terms, but in social terms people face the same problems as well as in small countries such as people’s suffering, losses of lives, the feeling of losing the property and homes and the need to relocate or start from the very beginning;
― Gender studies reveal that women’s vulnerability to the disaster stemmed mainly from pre-existing genderinequalities in the society;
― Understanding the risks faced by cities is a necessary first step to better prepare them for future catastrophes.

Russian system of insurance from catastrophic risks consists of Ministry of Foreign Affairs which informs people about disaster events’ forecasts and pro-
vides precautionary and resilience measures, weather forecasting bodies that
timely inform about weather swings, insurance company that compensate the
loss in case of insured property, the government that take the burden of financing
and rebuilding the damaged area. Thus, the systems itself is in place. Certainly
in Russia there is a problem of risk financing as so far the burden of disastrous
events is mainly carried by the government as insurance industry is underde-
veloped and the instruments such as insurance pools, parametric insurance or
derivatives that can transfer the risks are not being used. One of the alternatives is
to establish private-governmental partnership in Russia to pool the risks. In case
of emergency certain risky regions which include southern regions from drought
and floods and Sakhalin and Khabarovsk regions from earthquakes can use the
pooled funds for resilience but this initiative requires legislative framework.

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PAUL KRUGMAN’S VIEW ON THE CAUSES AND CONSEQUENCES OF THE 2008 GLOBAL FINANCIAL CRISIS

Abstract
Paul Krugman, winner of the Nobel Prize in economics, analyses the roots of the financial crisis of 2008, which marked the beginning of the slump. He compares present economic situation with the Great Depression of the 1930s and draws a conclusion that they are different. According to Krugman, the causes of debt increase are rooted in mistakes made by politicians, who prefer to believe in the merits of self-regulating free markets. Krugman offers the plan to “stop this depression now!”

Key words: global financial crisis, economic slump, deregulation policy, the collapse of financial markets, the liquidity trap, leverage level

Before embarking on a more detailed analysis, I’d like to devote some time to several facts of Mr. Krugman’s biography. Paul Robin Krugman (born February 28, 1953) is an American economist, Distinguished Professor of Economics at the Graduate Center of the City University of New York, and a columnist for The New York Times. In 2008, Paul Krugman was awarded the Nobel Memorial Prize in Economic Sciences for his contributions to New Trade Theory and New Economic Geography. He is known for his research in many spheres. Macroeconomics, income distribution, trade theory, taxation, economic geography, and international finance are among them. He is the author of more than 20 books, 200 articles and 750 columns on economic and political issues to such famous and authoritative newspapers and magazines as The New York Times, Fortune and Slate. “The Return of Depression Economics and the Crisis of 2008” (December 2008), “End This Depression Now!” (April 2012) are the most famous of his books for general audience.
To get an adequate understanding of his conception, it is important for us to remember that Krugman has essentially Keynesian view of the way that economies operate. [2, 2012, 164]

Needless to say, the 2008 financial crisis is global. This crisis, which started as a mortgage crisis in the United States, soon spread to the financial sector, then turned into a general economic, triggering a recession in the USA, Western Europe and Japan. The crisis also caused a reduction of some industries and sectors of the economy in many other countries, including the developing world. The economic crisis has turned into a social, causing unemployment increase, the decline in real income of the majority of the population, a radical reduction in the volume of housing construction. The crisis has proved to be painful for the banking system and investment companies. It has caused an unprecedented the stock market’s collapse and an unusual drop in oil prices and prices of other raw materials.

What are the causes of the global financial crisis, according to the winner of the Nobel Prize in economics, Paul Krugman?

In the late 20th century ¾ early 21st century, the U.S. economy was powered by two important factors: lots of housing construction and strong consumer spending. Both of these things were, in turn, driven by high and rising housing prices, which led both to a building boom and to spending by consumers who felt rich. But the housing price rise was, it turns out, a bubble, based on unrealistic expectations. And when that bubble burst, it brought both construction and consumer spending down with it. The Federal Reserve System responded by rapidly increasing the monetary base. Usually, this measure increases the liquidity.

It is understandable that the interest rate may be reduced only to a certain level. When rates get close to zero investment becomes nonsensical. Krugman even stresses that “just sitting on cash is a better option than lending money to other people”. In the current slump the interest rate had hit zero by the end of the 2008. Unfortunately, a zero rate turned out not to be low enough, because the bursting of the housing bubble had done so much damage. So, Krugman enumerates its consequences:

— consumer spending remained weak;
— housing stayed flat on its back;
— business investment was low
— unemployment remained disastrously high.

This situation is called the liquidity trap: it’s what happens when zero rates isn’t low enough. In Keynesian economics, the liquidity trap is a situation, in which injections of cash into the private banking system by a central bank fail to decrease interest rates and hence make monetary policy ineffective. A liquidity trap is caused when people hoard cash because they expect an adverse event such as deflation, insufficient aggregate demand, or even war. Common characteristics of a liquidity trap are interest rates that are close to zero and fluctuations in the money supply that fail to translate into fluctuations in price levels. [1, 2012, 42]
According to Krugman, we could have avoided the crisis. He addresses to leverage level increase and cites Hyman Minsky, whose big idea was to focus on leverage—on the buildup of debt relative to assets or income. Periods of economic stability, he argued, lead to rising leverage, because everyone becomes complacent about the risk that borrowers might not be able to repay. But this rise in leverage eventually leads to economic instability. Indeed, it prepares the ground for financial and economic crisis. [1, 2012, 56]

Krugman considers that the causes of debt increase are rooted in mistakes made by politicians, who prefer to believe in the merits of self-regulating free markets. After 1980 finance became also a subject to deregulation and the effect of deregulation was not so much to encourage efficiency as to encourage risk taking.

By 2007, however, shadow banking was bigger than old-fashioned banking. So as shadow banking rose in importance, it should have been subjected to regulations similar to those covering traditional banks. And Krugman draws a conclusion that the result was an increasingly unregulated system in which banks were free to give in fully to the overconfidence that the quiet period had created. Debt soared, risks multiplied, and the foundations for crisis were laid.

Moreover,” loose regulation also created a permissive environment for outright theft, in which loans were made to friends and relatives, who disappeared with the money”, and “so many of the fruits of economic growth went to a handful of people at the top”. Paul Krugman adds that “so the elite did very, very well under deregulation, while the super-elite and the super-duper-elite—the top 0.1 percent and the top 0.01 percent—did even better”. [1, 2012, 82–85]
Krugman quotes Robert Frank of Cornell University who has argued that rising incomes at the top lead to “expenditure cascades” that end up reducing savings and increasing debt.

Paul Krugman guesses that the biggest contribution of rising inequality to the depression we’re in was and is political. And he strongly believes that with big money we can buy big influence.

Krugman reveals that “the problem isn’t with the economic engine, which is as powerful as ever. Instead, we’re talking about a problem of organization and coordination — a “colossal muddle,” as Keynes put it. Solve this technical problem, and the economy will roar back to life”. [1, 2012, 22]

Krugman suggests a plan to “stop this depression now!” So we can describe Paul Krugman’s prescription as follows:

- Using newly printed money to buy “unconventional” assets like long-term bonds and private debts
- Using newly printed money to pay for temporary tax cuts
- Setting targets for long-term interest rates — for example, pledging to keep the interest rate on ten-year bonds below 2.5 percent for four or five years, if necessary by having the Fed buy these bonds
- Intervening in the foreign exchange market to push the value of your currency down, strengthening the export sector
- Setting a higher target for inflation, say 3 or 4 percent, for the next five or even ten years [1, 2012, 228]

Be that as it may, Paul Krugman thinks that the current crisis is a result of the incorrect policy. “It took decades of bad policies and bad ideas to get us into this depression, flourished because for a long time they worked very well, not for the nation as a whole but for a handful of very wealthy, very influential people. And those bad policies and bad ideas have a powerful grip on our political culture, making it very hard to change course even in the face of economic catastrophe. As a purely economic matter, however, this crisis isn’t hard to solve; we could have a quick, powerful recovery if only we could find the intellectual clarity and political will to act”. [1, 2012, 33]

The author ends by pointing out that the politicians should remember that the economic strategy that works best politically isn’t the strategy that finds the press approval, it’s the strategy that actually delivers results. Even if expansionary fiscal and monetary policies coupled with debt relief are the way to get this economy moving then those policies will be politically smart as well as in the national interest.

References
THE IMPACT OF EXCHANGE RATE REGIME ON INFLATION PROCESSES IN RUSSIA’S ECONOMY

Abstract
This study focuses on the effect of exchange rate regime on inflation processes in Russian economy and it is a very crucial issue for Russian monetary authorities. In modern economic and geopolitical conditions a lot of researchers in Russia pay attention to it. The main challenges which Bank of Russia should solve connected with optimization the process of transition to flexible exchange rate regime and inflation targeting policy. Moreover Central bank should control the negative impact of inflation targeting to pace of economic growth in Russia. All these subjects require prudential approach to conducting monetary policy and should be combined with scientific researches and econometric forecasts.

Keywords: macroeconomics, monetary policy, inflation, exchange rate, inflation targeting, exchange rate policy.

JEL codes: C 23, E 52, E 58

Introduction

Subject. The problem of prudential monetary policy is crucial in a globalized world and in unfavorable economic conditions [1]. One of the mitigating and prudential methods of monetary policy regulation is inflation targeting, which deserves special attention nowadays. Analysis of empirical and theoretical researches about inflation targeting and deep qualitative analysis of the possibility of implementing inflation targeting regime is useful for assessing the relevance and opportunities for application of this regime of monetary policy regime in each country. In the transition to a floating exchange rate and an inflation targeting regime in Russia this subject is particularly important [2]. To optimize the process of transition to inflation targeting in Russia and to avoid hasty steps
it is necessary for monetary authorities to analyze other countries’ experience of the transition to an inflation targeting.

**Goals.** Comprehensive analysis of short-term and medium-term results of transition to a floating exchange rate regime as a requirement of inflation targeting policy in Russia, verification of the specifics transition to inflation targeting in developed and developing countries and especially in Russia.

**Results.** Specific of the transition to inflation targeting in developed and developing countries are found, these specific is useful for Russian experience [3]. The results of empirical studies of foreign authors in the field of evaluating the effectiveness of inflation targeting policy are analyzed. Application of foreign experience in inflation targeting to Russian economic model and estimation short-term results of transition to inflation targeting in Russia are connected [4].

**Findings.** It is concluded that the process of transition to inflation targeting in developing countries is very different from the developed countries. Significant specificity of emerging economies requires prudent approach (taking into account macroeconomic and geopolitical conditions) in preparation for the transition to inflation targeting regime, as well as the combination of this regime of monetary policy and other economic instruments and measures. The process of transition to inflation targeting has not been finished yet and to watch medium-term results it is necessary to work on analysis and monitoring modern economic events. I am going to summarise full-dress results of this subject in my thesis, now I can only indicate the urgency of the problem, explain specifics of short-term results and anticipate future results.

**Short-term results of transition to inflation targeting in Russia (2014–2016)**

Now we can see short-term results of moving toward floating exchange rate regime as a requirement for inflation targeting policy. And these results are not positive: inflation increased rapidly, pace of the economic growth dropped down, geopolitical tensions did not stop public confidence in the monetary policy decreased, oil prices were too low and macroeconomic conditions have remained unfavorable.

All these negative consequences were caused by unfavorable economic and geopolitical conditions. The Bank of Russia moved to a floating exchange rate regime in November 2014, when the exchange rate was an extremely volatile and the ruble was weak. There were speculations on the currency market and economic growth stopped [5–8]. Unthinkable step of the Bank of Russia further weakened the ruble and ultimately undermined the confidence of economic agents in monetary policy.

In 2015–2016 pace of the economic growth in Russia was too low, inflation was more than 12% per year, household’s real income decreased and geopo-
Critical tensions (military actions in Syria, relations with Ukraine, anti-Russian sanctions and other) did not stop.

**Medium-term results of transition to inflation targeting in Russia (2017–2020)**

In modern stage (the nearest 2–3 years) we will see medium-term results of moving to floating exchange rate regime and inflation targeting policy and this subject is interesting from scientific view. After negative currency shocks in the short-term, economic conditions started to improve: speed of inflation growth in the economy has slowed down, Russian economic system got accustomed to anti-Russian sanctions and the low level of the ruble, the development of non-oil industries has increased. Moreover all economic agents started to adapt to the new economic and geopolitical environment — it is one of the most important step for economic recovery. Economic results of recent 2–3 years may affect future economic and monetary policy in Russia in the long-term and improve development of the Russian economic system as a whole [9–11]. There are different additional monetary measures and instruments (which researches and monetary authorities have developed not long ago) to achieve higher economic performance and to raise the role of our country on the world arena. And the work on additional improvements by the Government and the Bank of Russia should contribute to the development of our country toward this goal. The common policy of the Bank of Russia and the Government should not contradict each other.

**Conclusion and possible development of research**

Key results of this short article are connected with the importance of deep researches of key tendencies in monetary process, analysis of foreign experience in moving to inflation targeting, building of econometric models and monitoring the latest economic events. All these directions of researches can be useful for monetary authorities in conducting healthy and prudential monetary policy. Deep studies of Russian economic scientific members should pay high attention to issues of Russian monetary policy and promote healthy development of monetary system in our country.

Inflation targeting is a very effective monetary regime (as the alternative to money supply targeting and interest rate targeting) and movement to this regime can optimize economic environment in Russia as a whole [12]. We estimated that in the short term, this policy led to negative consequences. However on the modern stage the Bank of Russia promote the recovery of monetary system and in nearest 2–3 years this monetary performance can improve rapidly [13–14].

This study makes a little summary of a big analytical work and shows prospects of future researches. I hope that after a several years we will see additional research of medium-term results of inflation targeting.
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THE ANALYSIS OF THE MAIN FORMS OF INVESTMENT IN THE REPRODUCTION OF HUMAN POTENTIAL

Abstract
At the present time in world history when the world is moving to knowledge economy, is becoming generally recognized the fact that human potential is the dominant factor of economic growth and social development, as it sets the pace and level of development of the national economy. Today the human potential is the main wealth and the most valuable resource of any society, but the main criterion of socio-economic progress are the achievements in the field of human development and meet their needs. Exploring the process of formation of human potential through education at the micro level, i.e. at the individual level, it is possible to calculate the cost of the individual to education. It appears that the price formation of personality should consist of costs of education and training, social costs, and lost wages.

Keywords: Human potential, human capital, investment in education, GDP, research and development activities (R&D).

JEL code: F21

The potential knowledge and abilities of the employee can be realized only in his work. On the other hand, the increase in the cost of capacity does not requires any effort. Differing in content, the formation of physical and human capital has some similarities: each requires the diversion of significant funds to the detriment of current consumption, depends on both the level of economic development in the future, both types of investments provide long-term in nature productive effect. Throughout a person’s life that capital wears out and ages it faster. Investments in health care, have significantly slowed the pace of this process. Thus, the service output potential health are “disease-free time”. Most Western researchers believe that those with better educational preparation more efficient in the production and use of their “health capital”: lead a healthier lifestyle, elect, on average, are not as harmful and dangerous profession, it is wiser users of health services etc. [1].
For example, in the U.S. there is a strong correlation between education and health. For people who have attained higher education, tend to have lower mortality rates, fewer symptoms of various diseases (e.g. high blood pressure, high cholesterol in the blood and bad x-rays) and good health (according to them) [2].

At the same time, good education and health may be independent consequences of a common cause for them. For example, the smaller the number of so-called “subjective rate of time preference”, the more carefully he prepares for tomorrow.

In practice, this translates to a greater propensity to savings, willingness to invest more in education and health, and to a lesser propensity to purchase goods on credit and other things.

Human potential, created by the education system is an integral driver of economic growth, so at all levels it receives state support in almost all countries. The state owns a developed network of educational institutions (elementary, secondary, professional, including higher, institutions of advanced training and retraining). Recent years, due to the stabilization of the economy and government awareness of the importance of education in the reproduction of human potential, funding is increasing every year. As stated by President Nursultan-Nazarbayev, at the solemn meeting devoted to the 20th anniversary of Independence of the Republic of Kazakhstan: “Kazakhstan Today international standards included in the group of countries with a developed educational system. Only in the last 10 years expenditure on education in the country has increased 9 times — from 100 billion to 900 billion tenge” [3].

The modern wealth of our country, accumulated knowledge and skills, comes currently to degradation, is obsolete. So there was an urgent need to ensure suspension of negative dynamics in the development of human potential, despite a slight increase in spending on science in recent years (Table 1).

| The funding of science from the national budget, million tenge |
|-----------------|--------|--------|--------|--------|
| **Name**         | **2012** | **2013** | **2014** | **2015** |
| Expenditures for research of scientific programs       | 19 252,5 | 52,835 | 66 347,6 | 69 410,83 |
| Expenditure on scientific research by Ministry of education and science of the Republic of Kazakhstan | 9239,0 | 12 049,0 | 14 197,1 | 15586,6 |
| Fundamental research | 11 253,9 | 18 197,0 | 15 260,7 | 1681,7 |
| Applied research | 24 327,9 | 33 369,4 | 38 394,8 | 40 482,2 |
| Capital transfers | 988,8 | 1143,4 | 3273,1 | 4456,7 |

*Note: compiled by the author based on [4].*

Very low share of development organizations: on average by 9 scientific institutions accounted for 1 project. The number of specialists in these orga-
nizations is about 10% of the total number of employees performing R&D, or 1.1% of its total workforce of the industrial complex.

According to the data of 2014, the share of public sector organizations of science amounted to 30.6% of the total number of organizations engaged in research and development. However, since 2003 there is a declining trend in the share of public organizations in science [5].

![Figure 1. Distribution Structure of organizations engaged in research and development][6]

The structure of sources of financing R&D in Kazakhstan in recent years has remained virtually unchanged, with a high proportion of budgetary allocations, indicating a lack of commercialization of scientific research and development.

<table>
<thead>
<tr>
<th>Sources</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>Governmental sector</td>
<td>61,6</td>
<td>48,9</td>
<td>62,0</td>
<td>78,5</td>
</tr>
<tr>
<td>The higher education sector</td>
<td>22,1</td>
<td>25,5</td>
<td>29,0</td>
<td>32,2</td>
</tr>
<tr>
<td>The non-profit sector</td>
<td>5,1</td>
<td>6,1</td>
<td>7,0</td>
<td>17,6</td>
</tr>
</tbody>
</table>

*Note: compiled by the author based on [6].*

These figures suggest that Kazakhstan has not yet created the conditions for the transformation of intellectual production in a system-managed, consistently profitable process for profitable development of the business sector.

A huge problem for Russian science remains the lack of an innovation system, i.e., research and development is still not getting production applications. Industry of Kazakhstan, staying still on the industrial stage, according to experts and statistics, almost sends impulses to science.

For example, in advanced economies, industrial enterprises conduct R&D on the terms of self-sufficiency and self-financing master and up to 70% of all national R&D expenditure, whereas the share of public expenditure accounted for an average of 30%.

Conducted macroeconomic analysis scientific and technological development in Kazakhstan showed that the proportion of new scientific production in GDP in recent years does not exceed 2.3%, the activity of enterprises for the production
of scientific output is 5.3% [6]. This indicates that the scientific and technical work has not yet become the basis for economic development of the country.

To determine the magnitude of the necessary investment in human potential should take into account the expected rate of net profit on invested capital, which should be higher than the sum of the material costs. Since the main motive for investment is the desire of net income, investment in formation of human potential through education based on the principles of rational economic behavior, applicable to all types of investments. The man almost always chooses between the various forms of human activity with the aim of obtaining immediate additional income and between the desire to getting a high level education that would provide him with increased income in the future. Therefore, actions must lead a conscious and reasoned calculation, and not short-term profit. At the same time, the formation of the most of human potential takes place throughout working life.

Many Western economists write about the need for highly qualified labor force, which must comply with all the rising demands increasingly complex technology, automation and computerization of production. So, L. Thurow believes that the main investors in human capital should be entrepreneurs. However, as we know, the market economy does not react to moral norms, is individualistic in nature and allows a high inequality in income, not to mention such more specific factors that affect it, such as education, differences in abilities and talents, the possession of some property, income, communication, the ability to take risks, etc. Paying attention to it, K. R. McConnell and S. Brue has concluded that, in accordance with human capital theory, the wage differentiation exists to a certain extent due to the different investment in it. In their view, investment in human potential is any activity that increases the skills and abilities or, in other words, labor productivity of workers [7, p. 171].

The authors also state that additional spending on education and retraining of workers with low income to be considered an effective means of reducing poverty and reducing income inequality. Therefore, investment in human capital takes the form of spending on education and training, improving health and the environment.

Exploring changes in the contemporary worker, a German scientist X. Glaser believes that “technological advances of the last decades, providing high standards of consumption and high demands involved in the production process people, also caused the modification of the incentives and motives of activity. On the one hand, employees now prefer to work for a lower wage if they are able to self-actualize in the workplace, not to perform routine operations, to take decisions and, ultimately, to rely on cultural and professional growth. This gives many sociologists talk about the possible replacement of labor activity typical of a kind of post-industrial civilization a new type of activity that contains many elements of creativity” [8, p. 116]. Increasing public investments in priority social sectors that are crucial for human capital formation — a key contributor to economic growth and society development, will allow to solve a number of problems, most important for sustainable social development. First of all, the
growth of social investment will ensure the accumulation and further improve the quality of human potential of the society. Equally important are the improvement of employment conditions and increase salaries in the budget sector where there are labor resources with high qualifications [9].

At the present stage clearly shows the superiority of technological advantages over the resource, so competitive can be considered the country that has the opportunity to develop technological and scientific infrastructure of the national economy while improving the lives of its citizens. In this regard, the main emphasis in the formation of a competitive economy should be on initiatives to coordinate investment, assistance in introduction of new technologies, training of qualified personnel, particularly in the area of innovation management. This direction should be conducted on the principles of transparency, co-funding and risk sharing with the private sector. Also special measures aimed at creating an innovation economy in the Republic of Kazakhstan, it is necessary to complete the implementation of a common program of structural reform: to ensure the protection of property rights, a consistent policy in the field of competition and reduce administrative barriers for business and so forth. Prospects of development of innovative economy depend primarily on these tasks.

References

PARTNERSHIP BETWEEN RUSSIA AND FRANCE IN CONDITIONS OF SANCTIONS

Abstract

In the changing economical and geopolitical situation Russia is in difficulty. However, it is important to have partners in European Union in order to protect the borders of the country. Nevertheless, France and Russia has very strong economical and cultural relations, European Union sanctions badly influenced on both countries. It was a surprise, that Russia imposed embargo on some French products. France was the first, who made restrictions against Russian products and some Russian citizens. In these conditions Russian home market tries to recover from crisis. Russian agricultural sector is struggling to adapt agricultural sector to new realities. However, these two countries attempt to cooperate in different spheres, such as: dairy production, chain supermarkets expansion etc. Without knowledge of work principles in various spheres that need modernization the Russian home market might fall into the recession.

Key words: sanctions, embargo, France and Russia partnership.

JEL codes: F01, F23, F51

It is well known fact that France–Russia relations have a long-term period. Since 1702, when France had an ambassador Jean-Casimir Baluze in Moscow and lasted till present days. Such strong relations couldn’t be broken only by an instantaneous decision.

However, political dialogue between France and Russia has been limited due to the situation with Crimea and following European Union. Getting back to problems basics it is essential to notice, that during Euromaidan the US government and the European Union which supported the opposition, claimed about the possibility of imposing sanctions against Ukraine authorities in power. Later, special extraordinary meeting of the European Council was taken place on 6th March 2014 in terms of situation in Ukraine, where was decided to consider a referendum on joining the Crimea to Russia illegally, due to Ukraine Consti-
tution contradiction. In opposition to EU and US warnings Russia confess the Crimea referendum in mid-March 2014. Moreover Russia supported unilateral independence the Republic of Crimea’s declaration and adopted its proposal for entry into Russia, the United States and the European Union impose first package of sanctions.

**France sanctions pressure**

Being as a part of European Union, France support the sanctions, agreed with travel bans and setting freezes against decision makers in Russia, bans on provision of certain services, restriction on natural recourses export and bans on individuals in the Crimea who are considered to be involved in threatening Ukrainian sovereignty. France is leading moves to impose modest sanctions. It was the first country in EU that suspended most military cooperation with Russia and joint exercises on 22 March 2014. The same day France put the visa issue on hold. This was not the only restriction that “quondam Russian Friend” made [3].

Everyone remembered the case with class helicopter “Mistral” delay. In fact, there were UK, German and USA, who insisted on transference suspension, due to EU and US sanctions. It should be mentioned that sanctions is valid until 31 July 2016. On 3 September 2014 France has warned Russia about a possible suspension of “Mistral” supply. Later president François Hollande stated, in the case of further complications with helicopter supply will be delayed, but France would consolidate the contract. Such gesture form F. Hollande was only a mere name. After a year, on 5 August 2015 France terminated the contract for the “Mistral” to Russia. F. Hollande explained that the supply of helicopter carriers suspended due to lack of the necessary progress in the implementation of the Minsk agreements from Moscow.

**Russian response**

With the provision and others sources bans Russia imposed food embargo on EU and on 6 august 2014. France also fell under it. The total banned annual output of import according to ITAR TASS estimated with 9 $ bn. as, sputniknews wrote in summer 2015, that it was the worst moments for the French economy that lead to aggravation of internal crisis in the country. The ban caused the overproduction of food within European markets that led to a decline in food prices. As a result, low food prices in turn caused a crisis in the agricultural sector.

Due to the Russian embargo on the fruit, vegetables, meat and dairy products French agricultural sector incur losses, according to Liberation newspaper. Russian embargo on the products supply from France — is a response to sanctions. As a result, only the first five months of 2015 exports of dairy products fell by 78% and meat — by 73% year on year. From the product of the embargo and the farmers suffer — according to the president of the French Federation of breeders Fields Ofre, on every kilogram of pork farmers lose 20 eurocents [8].
According to RIA news as referred by Sud Radio broadcast in July 2015 MEP and former French Minister Nadine Morano said in an interview, that the crisis in the agro-industrial sector in France is directly related to the Russian embargo. 

“I would like to emphasize a very important point: the problems linked with the Russian embargo”

“For the agricultural sector. This embargo is tragic significance. We can see that the international policy of the state has a direct impact on our producers.”

Nadine Morano urged French President Francois Hollande to “remove the blinders from the eyes” to succeed in resolving the crisis.

French politician noted that the EU has already lost 21 billion euros from the beginning of the introduction of the Russian embargo, she is confident that in due course the loss could reach 81 billion euros.

Earlier Nadine Morano established in the European inter-ethnic working group “For a new dialogue with Russia.” [6]

In that summer the French farmers began mass protests in France. The protesters blocked the highway around the city of Caen in northern France and blocked the entrances to the town of Evreux, located halfway from Caen to Paris. Livestock farmers are demanding higher purchase prices and financial help from the state.

This was not an only example of mass protests. More than a thousand of tractors and other agricultural equipment in September 2015 virtually paralyzed the movement in Paris [1].

Because of the low purchase prices, farmers bear huge losses. The unions stated that they are tired of waiting and are dissatisfied with the government, which cannot cope with the crisis in agriculture.

According to a report of the first channel in some regions on the brink of ruin was every fifth farm, exorbitant taxes and the lack of serious government support did not affect positively on their performance. Revenue for their products fell back to the level of the beginning of the 90th, the market is saturated with competitors from Germany, Spain and Italy actually had stopped shopping cheap production countries displacing native French.

Following EU sanctions and retaliatory measures Russia suffered beef and pork market. But worse of all fruit and vegetable producers have suffered in France. Brittany and Avignon region felt itself particularly acute because they exported a huge amount of fruits to Russia.

**Turning to the impact of sanctions on business with Russia in industrial sector**

The French company Renault Trucks Defense, owned by the Swedish concern Volvo, has suspended development of a joint project with the Russian infantry fighting vehicle “Atom”.

The French company “EDF Trading” refused to Russian thermal coal company “Zarechnaya”.
Russia ranks third among the biggest energy exporters to France, accounting respectively for 17.9%, 12.9% and 17.2% of France’s total imports of natural gas, crude oil and coal in 2013. Crude and mineral fuel imports amounted to EUR 8.77 billion or 85.1% of total French imports from the Russian Federation in 2014, declining by 3% from 2013. [3]

France has closely cooperated with Russia in several major energy projects. EU sanctions on Russian energy companies put a break on this cooperation but still haven’t brought it to a full stop.

**Russian home market progress**

Nevertheless Russian home marked tried to recover after EU sanction and it is going well. Import substitution is one of the most Russia’s important factors for economic development in 2015. And if in times past crises, this phenomenon has been the exclusive economic content, with August 2014 it acquired more political significance.

Currently, according to government estimates, the share of imports in different sectors of the economy is extremely high. For example, Russian imports of civil aircraft of more than 80% of the components in the heavy engineering — 70%, oil and gas equipment — 60%, in the energy equipment — about 50% in the agricultural machine depending on the product category — from 50% to 90% parts [4].

More statistics gives Sergey Tsukhlo, Head of the Laboratory of surveys of Gaidar Institute, who stated, that food industry to 20% does not depend on imported equipment, light industry — by 30%. As a result, the balance of import rise from minus 32 to minus 21 points in the food and from minus 20 to minus 11 points — in the light industry. That is the predominance of enterprises has declined, the share of imports in their investments in these sectors will continue in the third quarter, but not as much as in the second quarter of 2015. Food industry and light industry were the only sectors so significantly alter the share of investment imports in their plans [10].

It should be mentioned that, according to the newspaper “Kommersant” report Russian producers have managed to increase the production of goods such as beef and potatoes (increase of 25%), pork (18%), cheese and cottage cheese (15%), poultry meat (11%), butter (6%), vegetables (3%). On the other hand, the production of fish and sausages decreased by 5% and 4% respectively [7].

However, despite the increase in domestic production, internal market declined. Thus, the report of the Central Bank shows that the offer of domestic and imported beef decreased by 42%, butter — by 15%, fresh and chilled fish — by 14%, vegetables — by 10%. Positive results have been achieved only by the potato (proposal on the market increased by 19%), pork (+7%) and poultry (+6%) [9].

But it is interesting to note, that the most attractive sphere for Russian businessmen is cheese-making. Taras Kozhanov the Director of local maker Lukoz
Saba notices, that there are lots of ways to do business, but sending workers to French dairies is the best way to understand the process. Later, Lukoz wants to invite French specialists to Russia. The cooperation between the countries is facilitated by Business France, a French agency for export promotion. However, the Kremlin’s policy to make and buy Russian has made French exporters change the way they do business in Russia.

According to the head of its Moscow food and agriculture department Natalya Shtykaloko, the government agency is now exporting technology to Russia instead of food.

**Strong relations cannot be broken**

Such “interesting rings” are not only in cheese-making sphere. Then we have large food industry companies such as Danone. Russia is the No. 1 worldwide market for Danone, ahead of France. Same thing for the pharmaceutical industry: Sanofi is the No. 1 pharmaceutical company in Russia. Oil and gas provider Total is another very important company here. We should not forget about large hypermarket chains such as — Auchan, Leroy Merlin and Decathlon.

It is hard not to notice that French businesses are very strong in Russia. France is the No. 2 investor in Russia after Germany in terms of direct investments. So this was not a surprise that France was the first country who decided to lift sanctions against Russia.

In January 2016 French Minister of Economy Emmanuel Macron during the session of the Russian-French Council on Economic, Financial, Industrial and Trade Council (CEFIC), held in Moscow for the first time in two years, said that France hopes to continue economic contacts with Russia, regardless of the political situation.

“France-Russia relations are alive”, — he said, noting that his visit to Moscow, “is aimed at strengthening economic ties with Russia.”[5].

Such statement indicates the French partners desire to continue the cooperation with Russia in more positive mood. Moreover Russia and France have agreed to hold in 2016 and 2017 years of cross-cultural tourism. According to Tass, the two sides signed a joint declaration [2].

Russia was represented by President’s Special Representative for International Cultural Cooperation Mikhail Shvydkoi, France — managing director of the Foreign Ministry on globalization, development and partnerships Anne-Marie Dekot.

The statement is signed by the results of the fourth session of the Russian-French cultural commission, which was held on April 4 for the first time after eight years.

Another positive moment is that the business community of France is interested in strengthening economic relations with the Russian Federation. This was stated by vice-president of the Association of Entrepreneurs, Yves-Thibault
de Silguy at the conference “Regions of Russia”, which took place in Paris in April 2016.

2016 may be the year of lifting France sanctions against Russia and it is easy to imagine such situation due to thaw in political relations between two countries.

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YOUTH UNEMPLOYMENT IN KAZAKHSTAN: SITUATION AT THE MOMENT

Abstract
Current essay aims to observe the unemployment of youth in Kazakhstan as one of the crucial factors of the poverty. Author tried to describe the already applied steps in solving the problem and also suggested the other ways of improvement of the situation.

Key words: unemployment, poverty, indicators, government programs.

JEL codes: G 15, G 17, G 32.

Introduction
The modern economy of Kazakhstan is a qualitatively new stage of its development, however, this does not lessen the severity of social problems, especially important is the problem of poverty. Poverty is multidimensional phenomenon in this connection; there are many different approaches to estimating. Poverty is usually measured by income or expenses, based on the assumption that the material standard of living largely determines their well-being. The process of transition to a market economy in the country accompanied by events such as cardinal and closure of a number of public companies and as a result of this — serious scale unemployment. Lack of work places was one of the main causes of poverty in Kazakhstan. Particularly acute problem of unemployment exists in rural areas. Many socio-economic indicators that show the level of life of Kazakhstan have undergone major changes, despite the fact that the government pursued stabilization policy to mitigate the impact of the transition to the well-being of people. Significantly increased unemployment and reduced real incomes, reduced life expectancy, etc. In these circumstances, the problem of poverty in the country has become as urgent and relevant, as well as in Russia and other developing countries[1].
Literature review

In Kazakhstan, the poverty index is proposed to calculate on the basis of indicators such as the proportion of the population not surviving to age 60 not covered by training 16-year-old young people, people with consumption below the poverty line and officially registered unemployed in the total number of economically active population. Absolute approach to the definition of poverty is used by the Ministry of Labor of the Republic of Kazakhstan since 1993, carrying out assessment of cost of living and the amount of people in need [2]. Cost of Living in Kazakhstan is equal to the cost of the consumer basket consisting of 70% food and 30% of other goods and services. Given the economic conditions of the poverty line is usually determined as a percentage of the minimum subsistence level. The government defines the poverty line, in general, and in the in each region.

The unemployment rate among young people aged 15–28 years in the republic is 5.9 percent with a total unemployment rate of 5.2 percent. This is achieved thanks to the fact that the Head of State N. A. Nazarbayev, the Government pay very serious attention to the problems of youth employment. Mostly young people are choosing to stay in education because of this downturn[3]. The state develops various methods for preparation of the young population for employment. These methods include social programs of employment, service of higher educational institutions after receiving the higher education and other social programs. Over one million young people are unemployed; long-term youth unemployment is above 250,000 for the first time since 1994 and the number of young people not in full-time education or employment has passed 1.4 million. One of the effective tools, which can be used to decrease rate of unemployment among youth, is apprenticeship. From the economic point of view expenses on professional practice are unprofitable for some countries (in particular the countries of the third world) as are expensive and cannot pay off in the future. According to Mustafayev N. I. (2011), overly sharp, very strong differentiation of the population according to various criteria, primarily by income level, becomes an obstacle to the emerging middle class, because blurs its social base, creating a situation where there is a lot of poor little rich and quite a bit of “average”[4]. This situation is

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obvious — Kazakhstani society is extremely polarized, posing a threat to its political stability [3].

The ex-minister of Labor Zhumagulov B. T., representing the Government in May 2013 said that “The overall employment program has a positive impact on the labor market. As a result, eighteen-month program provided employment to more than 150,000 people employed women has increased by 80,000 people, the number of self-employed decreased by 52,000 people”. According to him, for the half year increased by 6.2% the income of rural residents, the number of recipients of social assistance decreased from 139.3 thousand to 97.3 thousand people, the level of poverty in rural areas decreased by 3.4%. Still one of the most vulnerable groups is the rural population, which do not have the equal chances for the employment and social guarantees from the government, comparing to the urban population.

The social development of young people is one of key factors of economic progress. However, current global unemployment problem creates difficult labor market situation for young people. According to article “Youth Unemployment and Joblessness” (Sánchez-Castañeda, Serrani and Sperotti, 2012), 40% of unemployed people in labor force are young. The issue of youth unemployment has been widely discussed as one of the most critical economic problem. After graduation, not all students find job, due to high competition on labor market. In addition, young people are at disadvantage in finding employment, because they lack skills and work experience [4]. Youth unemployment’s effects on the country’s GDP and social welfare are topic for number of research works. However, no proper research was made to explain causes of youth unemployment in Kazakhstan, its effects on the economic progress and possible solutions such as governmental programs and projects.

The youth policy is one of the major in which a lot of countries all over the world are trying to progress nowadays. Kazakhstani government today also has this priority situation. The attitude of government to young generation is regulated according to the law of The Republic of Kazakhstan “About governmental youth policy” #581 from 7th of July 2004. Although it is a fact that usually young people are in a more vulnerable spot than workers with experience, the recent economic crisis has demonstrated that youth incorporation into the market is difficult in most of the countries2. Moreover, according to Interfax (2013) the unemployment rate in Kazakhstan remains flat, meaning that it is not decreasing and the problem is not being tackled. It was reported that 8.6 million people were employed, considering the fact that there are 17 million

1 Mataev G. M. Economic and social context of the rise of the middle class in Kazakhstan // Kazakhstan-Spectrum. № 2. 2011.
people in Kazakhstan out of which 12 million are considered to be workable [5]. Approximately 25% of people between 16 and 24 ages (whether they have higher education or not) do not have a job and only 14% belongs to the category of young people who has work (Eshpanova & Nysanbaev, 2006). Taking this into account, it can be said that the unemployment rate is high and that this problem exists in Kazakhstan. The possible reasons of unemployment especially among youth are first of all, the lack of working areas for graduates. Almost, all of the companies want to hire experienced workers, rather than teaching graduates. Another reason would be that most managers in Kazakhstan hire the people they know. In fact, this issue exists in most of the CIS countries. The third problem would be that graduates are very ambitious. Usually, they dream about a very prestigious job and do not agree or even apply to companies, which they think are not good enough. Being selective is good for many reasons, but it is also important to understand that at the very beginning gaining experience is priceless [6,7]. All in all, by identifying the main reasons of unemployment we become one step closer to solving the existing problem that affects every citizen of the country. We took several governmental programs that were developed to decrease the level of unemployment among the youth in the country, some of them are still in process, but others already showed the results.

The program “Dorozhnaya karta zanyatosti 2020” applied in 2013 implemented in 3 directions. Every citizen of the country can take part in one of the directions: take a course, find jobs in their field or open and expand their business [8]. The priority categories of participants are: young people under the age of 29 years; orphanages, orphans and children left without parental care under the age of eighteen to 29 years; women living in rural areas;

The program “Molodezhnaya praktika” applied in 2015 for graduates to gain work experience after graduation, the state offers to graduates of a six-month youth practice [9]. For this graduate (29 years) goes to the employment center at the Governor’s office of the city (district). After that job center makes data on graduates in the unified data base of specialists and distributes diploma direction among the companies-employers.

The program ”Sdiplomom- v selo” applied also in 2015 — the state offers to work in rural areas with appropriate social support. Social support of young professionals includes: a) providing a one-time payment of installation grant; b) granting the budgetary credit for the purchase and construction of housing for 15 years; c) increase in salary to those skilled social institutions located in rural areas.

These figures testify to the low efficiency of measures aimed at the employment of young people with a basic profession. Today, the labor market demand for workers represented 3/4 professions. According to the results of studies of particular shortage of skilled workers is represented in construction — 9.9 thousand people in agriculture — 9.6 thousand people, machines and technology equipment — 7.6 thousand people in the service sector — 6.8 thousand people.
The uniform information base on the state of supply and demand in the labor market is missing.

The development of the labor market in the country is still developing process as the labor unions still do not have the proper legislative base, and the existing laws are not known not only by the employees, but also by the employers. Also, the labor in our country is paid not so high, especially for those people who work in the governmental organizations, schools, public universities, etc. So, the need for the proper development of the labor conditions is crucial in the developing economy as Kazakhstan economy, and government had already developed some programs and policies. One of them is the National Program for Decent Work in the Republic of Kazakhstan (hereinafter — program). This program aims to promote decent work as the main component of the strategy development, as well as the goal of public policy, government and social partners. The program was developed as part of a broader approach, formulated in a number of international development projects, such as the Millennium Development Goals and the Framework program on the provision of development assistance (UNDAF). The program is also based on the provisions and principles of the national development strategy. The main goal of social and economic policy at this time is to create favorable institutional and economic conditions for the accession of Kazakhstan in the next ten years in the top fifty most competitive countries in the world and improve the quality of life of citizens of Kazakhstan.

**Conclusion**

The key factors of improvement of current situation in the country, taking into account the continuing economic crisis have to include the stabilizing and improving the living standards of the population, based on economic growth, through successive reforms in the social sphere, address poverty alleviation through social adaptation, economic rehabilitation and social support, especially for socially vulnerable segments of the population. More systematical and competent approach to solve the problems of poverty, the creation of social and economic development programs to the cash distribution for the developed programs is needed. Development of programs should be carefully designed in collaboration with a number of specialists from different areas; we should take into account, first and foremost, the interests of ordinary citizens.

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SPECIFIC ASPECTS OF RUSSIA’S INSURANCE COMPANIES’ INTERACTION WITH SMALL AND MEDIUM SIZED BUSINESSES

Abstract

A proper insurance and risk management scheme developed by insurance companies for small and med-sized businesses may significantly influence profitability, stability and growth of a small business. At the same time, small businesses do not necessarily generate a large bonus revenue, causing them to neglect specific risk management work for small business. The main goal of this paper is an attempt to achieve more detailed information on the specific aspects of insurance companies’ work with small and medium sized businesses.

Key words: insurance, risk management, small and medium sized businesses.

JEL codes: G22, D 81.

Introduction

Risk management is particularly vital for ensuring the stable and successful long-term operation of a small business. [1] Risk management and insurance are two sides of the same coin. Often large companies have their own risk management departments, hire specialists and vigorously use them for company management. However, small and medium sized businesses usually cannot afford neither creating a risk management department of their own nor hire a specialist due to both material and human resources absence. Therefore, small and med-sized businesses generally rely on the aid of insurance companies.

Interaction of Russian insurance companies with small and medium sized businesses

In order to get a detailed picture of the circumstances of this area in the RF between the 20th 2013 of September and the 20th 2013 of October we held a questioning of experts “Risk management and small and medium sized business insurance in the RF”. The following insurance companies responded and
were asked questions: Rosgosstrakh, Renaissance Insurance, Alpha Insurance, Sogaz, Allianz, Reso-garantiya, VTB-Insurance. The share of these companies on the Russian insurance market is approximately 40%. Primarily, we attempted to establish the share of insured small and medium-sized companies in the total number of insured businesses. All questioned companies counted certain quantities of small and medium-sized companies among their number (Table 1). The only company, which does not differentiate company size as small, medium-sized and large, was Sogaz.

<table>
<thead>
<tr>
<th>Company</th>
<th>Quantity Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renaissance</td>
<td>1000 to 5000</td>
</tr>
<tr>
<td>Rosgosstrakh</td>
<td>Over 5000</td>
</tr>
<tr>
<td>VTB-Insurance</td>
<td>Alpha Insurance</td>
</tr>
<tr>
<td>Allianz</td>
<td>Reso-garantiya</td>
</tr>
</tbody>
</table>

Source: author’s inquiry

The data from table 1 is evidence that most companies insure a significant absolute number of small and medium-sized, though the share of insured small and medium-sized companies as a percentage of insured companies is insignificant. In five among seven companies, the share of insured small and mid-sized companies as a percentage of insured businesses does not exceed 30% and only two companies (Alpha Insurance and Renaissance Insurance) exceeded 50%.

[6] The indices of insurance premium, raised from small and mid-sized companies, are even smaller, in particular Allianz — 0.5%, at Alpha Insurance, the share among insurant companies is high — less than 30%.[5]

<table>
<thead>
<tr>
<th>Insurance company</th>
<th>Share of insured small companies, as a percentage of insured businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sogaz</td>
<td>Less than 5%</td>
</tr>
<tr>
<td>Allianz</td>
<td>Less than 15%</td>
</tr>
<tr>
<td>Reso-garantiya</td>
<td>Less than 15%</td>
</tr>
<tr>
<td>VTB-Insurance</td>
<td>Less than 24%</td>
</tr>
<tr>
<td>Rosgosstrakh</td>
<td>Less than 30%</td>
</tr>
</tbody>
</table>

1 From an interview with Nikolay Vladimirovich Galushin, OJSC Sogaz deputy governance chairman. He noted that it is difficult to estimate the number of insured small and mid-sized companies, because at application they often do not specify whether the company is small, mid-sized or large.
A high percentage of insurance penetration is observable in compulsory types. A more precise indicator of insurance market development is primarily voluntary insurance development. Therefore, we have attempted to estimate the level of voluntary insurance penetration among small and mid-sized companies in Russia. The inquiry results give a priority and demand ranking of insurance for small and mid-sized business: compulsory insurance (motor third party liability insurance); insurance based on demand contracts, including credit; property insurance, including automobiles and cargo; group insurance schemes (accident insurance, voluntary pension insurance, travel insurance); last in the priority list are products like directors’ liability insurance, employee liability insurance etc.

The inquiry revealed that voluntary insurance demand is often determined by the small and mid-sized business owners’ negative experience. An interview with Sergey Vladimirovich Hudyakov, deputy general director of Allianz, revealed that small businesses acquire insurance policy when a need based on negative experience occurs, i.e. occurrence of a loss, which could have been compensated by the insurance company but had not been insured at the time. Approximately 20% of insured companies acquired insurance due to negative experience. The questioned insurance companies stated that the share of small and mid-sized companies who voluntarily acquired insurance is small, five of seven companies responded that the share does not exceed 25%. Another motive is credit organization demands. According to Hudyakov S. V., the main motive for small business owners to acquire insurance policy is drawing upon credit (Table 3).

<table>
<thead>
<tr>
<th>Insurance company</th>
<th>Share of small and mid-sized companies, as a percentage of total insured small and mid-sized companies, that acquired insurance due to necessity of bank credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosgosstrakh</td>
<td>25% to 50%</td>
</tr>
<tr>
<td>Reso-garantiya</td>
<td>25% to 50%</td>
</tr>
</tbody>
</table>

1 For comparison: the share of small and mid-sized companies in Länsförsäkringar insurance company insurance premium is 75%, relative to the total amount of insures — 95–99%.
The data from table 3 makes clear that small and mid-sized business insurance is determined by the necessity to obtain bank credit and is developed via banking channels while voluntary types of small and mid-sized business are underdeveloped. At five of seven insurance companies over half the requests were caused by the necessity to obtain credit. In addition, at four insurance companies the share is 2/3 (70%). Two companies, Allianz and Sogaz reported the precise number — 80% of requests are caused by the necessity to obtain credit. Therefore, only a small part of small and mid-sized business request insurance voluntarily, understanding the necessity of certain widespread risk coverage.

On Russia’s insurance market, products intended for small and mid-sized businesses which take into account the specific aspects of their work and corresponding risks appeared only in the recent years. The facing of small and mid-sized business needs by several insurance companies allow expecting growth of the number and share of insured companies of this type. On the Russian small business insurance market various complex products that include property insurance, liability insurance and business interruption insurance for trade and service companies exist. Within the small business insurance inquiry respondents evaluated the share of small and mid-sized companies, which acquired complex “boxed” insurance products among the total quantity of insured small and mid-sized businesses.

The share of small and mid-sized companies that acquired complex insurance schemes

<table>
<thead>
<tr>
<th>Insurance company</th>
<th>Share of small and mid-sized businesses insured by complex schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allianz</td>
<td>10%</td>
</tr>
<tr>
<td>Alphainsurance</td>
<td>Less than 14%</td>
</tr>
<tr>
<td>RenaissanceInsurance*</td>
<td>Less than 24%</td>
</tr>
<tr>
<td>Rosgosstrakh</td>
<td>Less than 50%</td>
</tr>
<tr>
<td>Reso-garantiya*</td>
<td>—</td>
</tr>
</tbody>
</table>

*Remark*: Renaissance Insurance (partial, not complete coverage), Reso-garantiya (The complex scheme was launched less than 4 months ago, making judgments of such policies share untimely).
According to questioned experts, small business owners are reluctant to acquire complex insurance products. As mentioned earlier, the owner of a small business should at least acquire the following coverage: property, liability insurance and business interruption insurance. Therefore we attempted to establish the share of small and mid-business companies, which acquired business interruption insurance, liability insurance, and key person insurance. Experts from four companies out of seven noted that the share of small and mid-sized companies, which acquired business interruption coverage among the total number of insured businesses, does not exceed 9%, in the other three companies that share was less than 4%. A specialist from Inselia company noted during an interview, that business interruption insurance is practically exotic as well as employee insurance. The share of companies which acquired liability insurance relating to other types is much higher. Six insurance companies out of seven responded that the share of small and mid-sized businesses insured by the company which acquired liability insurance coverage was less than 24%. And only in Reso-garantiya that share was less than 50%.

Small and mid-sized business activity depends on one or several employee contribution. Probably key employee insurance, covering the main risks is simply necessary. Our research has revealed that small and mid-sized business owners also underestimate key employee insurance as evidenced by a low share of small and mid-sized businesses which has acquired key person insurance. At 5 out of 7 companies this share did not exceed 5%, at Rosgosstrakh — less than 9%, at Allianz — less than 14%. Pension insurance, which provides fluctuation movement of personnel reduction and staff recruitment, is also underestimated by small and mid-sized business owners. The share of small and mid-sized businesses at questioned insurance companies, that acquired pension insurance, does not exceed 24%. Therefore, this type of insurance is also underestimated. Our research has shown that the following risks belong to those, which small companies primarily insure: property risk (related with collateral insurance) and liability risk. On the Russian market only a small number of small and mid-sized companies have real insurance protection. A typical minimum European entrepreneur insurance package usually includes: property and business interruption insurance, liability insurance, life and voluntary medical insurance and also employee accident insurance.

In our inquiry, we attempted to find out which sales channels are involved by insurance companies in working with small and mid-sized business. The main marketing channel for most Russian insurance companies is direct sales. A survey revealed that small and mid-sized business insurance is mainly performed via banking and leasing channels. A similar study performed by us in Sweden revealed that European insurance companies usually use at least three sales channels when working with small and mid-sized business: direct sales, insurance brokers and agents, insurance franchising. As for insurance brokers, our inquiry revealed that this channel is barely used.
Many insurance companies in developed countries do not limit their activity to insurance services, but offer small and mid-sized business owners risk management services. Insurance companies identify possible risks on all production process stages, analyze them, develop risk treatment recommendations and prevention measures for small and mid-sized companies. [2] We attempted to establish how this approach by Russian insurance companies is executed when working with small and mid-sized companies. Responding to our question whether the insurance company provides risk identification to small and mid-sized business experts from two insurance companies out of seven answered positively, the rest negatively, meaning that they identify only large business’s risks. An important matter is inspection of premises. According to executive vice-president of Renaissance Insurance Group, Natalia Vasilyevna Karpova, they inspect small and mid-sized companies only in “million-cities” (Moscow, St. Petersburg e.t.c.). Responding to the same question Sergey Vladimirovich Hudyakov said that they sell policy without inspecting premises and do not assist small businesses in identifying risks. Another factor of working with small and mid-sized business is their audit while estimating risk. [3,208] Two insurance companies out of seven gave a positive response to the question whether they perform small and mid-sized company audit prior to signing an insurance contract. We conclude that insurance companies usually do not assist small business in risk identification. Preventive measures improve safety decreases risks. [7,360] Unfortunately prevention measure development depends directly on company size, so these measures are often not developed for small and mid-sized businesses. An Inselia company specialist stated the following: “Risk management services are very hard to offer to small and mid-sized companies. When we offer risk management measures, we bump into a blank wall. It will be possible if small businesses become more open”.

A similar survey held in Sweden\(^1\) gave slightly different results. The survey revealed that 90% of small and mid-sized companies accomplish the prevention measures suggested by insurance companies and if these measures accomplishment is refused, the insurance companies do not sell insurance policy. In a case of violation detection or disregard of rules following insurance contract set up, the owners of a small business might lose 20–30% of the insurance payment. Besides, the implementation of risk management systems at small and mid-sized companies gives benefits to the insurance company and decreases losses. All questioned insurance company experts agree at one point: small businesses are not interested in risks and their management, but as the inquiry reveals, insurance companies do not rush to offer small and mid-sized companies risk management services. Insurance companies limit their services to insurance; despite the reasonability of offering potential clients, a world set of

\(^1\) The survey was held by the author in between November and December 2013. The following insurance companies were questioned: Länsförsäkringar, IF.
both insurance and risk management services. In the whole world insurers position themselves as risk management specialists, but, unfortunately, in Russia this approach is barely used.

Problems that impede European insurance experience and risk management implementation in Russia

We attempted to find out what impedes European insurance experience and risk management implementation in Russia, given that risk management system implementation by clients, namely small and mid-sized businesses, gives benefits to the insurance company and decreases losses. Firstly, most insurance market participants are much more willing to work with large clients, considering small and mid-sized business insurance more labour intensive and delivering an incomparably smaller risk premium. A significant problem is lack of trust between insurance companies and small and mid-sized business. Problems that impede small and mid-sized business insurance also include small business intransparency. Thus, the survey revealed that when insuring property small and mid-sized business owners do not have documents certifying their property rights. Besides, estimating the true financial position of a company by official reports while identifying risks is complicated due to financial report unreliability (mistakes and inaccuracy explained by low accounting qualification, entrepreneurs’ ambition to decrease the tax burden e.t.c.). One of the problems is insurance product sales channel (insurance brokers and agents) underdevelopment and insufficient advertising of insurance products developed for small and mid-sized companies.

Recommendations for risk management and insurance for small and mid-sized businesses

The issues mentioned above impede developed country insurance and risk management experience implementation for small businesses in Russia. There is a variety of solutions for these problems, including: insurance organization via brokers, risk management tool development for small and mid-sized companies, provision of taxation benefits for small and mid-sized company owners, advertising insurance products developed for small and mid-sized companies. From our point of view, insurance via brokers system will promote European insurance and risk-management experience implementation. Secondly, in order to implement developed counties experience the development of risk management tools for small and mid-sized companies is necessary. Insurance brokers, agents and insurance companies’ specialists can help small and mid-sized companies identify risks, develop risk management plans etc. In Western countries risk identification checklists are developed for this purpose, a large number of

1 Author’s inquiry in Sweden.
booklets with risk-prevention recommendations, including fire, theft and accident prevention are issued. [4,273] These recommendations may be detailed; they describe door lock, fire safety system, automobile driver, equipment and alarm system requirements etc. Besides developing risk management tools, insurance companies, agents and brokers should develop prevention measures for companies regardless of their size and take these measures accomplishment into account in the insurance tariff and offer discounts when additional forms of protection are present at the company. Thirdly, the provision of taxation benefits to small and mid-sized company owners. Thus, in developed companies, the more owners spend on insurance, the less taxes they pay. Fourthly, for small and mid-sized business insurance product promotion insurers should contribute to advertising (TV, SMS, and insurance company website advertising).

Conclusion

To sum it up, the implementation of the proposed measures will positively influence risk control quality improvement at small and mid-sized companies, company awareness of insurance products, the decision to purchase more insurance products by companies and consequently, insurance market growth.

References

THE RULES TO SELECT STRATEGIES OF COMMERCIALIZATION OF NEW TECHNOLOGIES

Abstract
The Russian economy would lose much of its competitive advantages if it does not overcome the technological backwardness in a short time. The main problem of Russian enterprises is that they cannot efficiently implement the accumulated innovative potential. One of the reasons is the undeveloped tools for the commercialization of technologies and the rules for their application. The article substantiates the rules and criteria for selecting a strategy and business model of commercialization.

Keywords: commercialization, business model, technology transfer, expert methods, innovation process, economic growth.

JEL codes: C380, M 210, O 320

Introduction
Increasing the technological backwardness of Russia on the world market can be a critical factor in the loss of competitiveness in the global economy [1]. Today, the accumulated industrial innovation potential of Russian companies is much higher than the demand for products and services in which innovation (intellectual property) is implemented. This demonstrates insufficiently effective tools of technology commercialization and the lack of ability of innovators to effectively promote the development into production and the market. The concept of “technology commercialization” implies obligatory commercial use of the technology, i.e. benefiting from the use [3].

Commercialization of results of innovations (CRI) embodied in the form of intellectual property (IP) is to be understood as the totality of all the actions of management of innovative companies (activity, process) to transform knowledge into intellectual capital, to turn intangible assets into tangible assets, to transform intellectual property into a competitive product, making profit to owner of IP rights through the establishment of an efficient business model allowing to attract risky investments to bring to market and successful sales of innovative products and services [2, p.75].
Key business models for implementing the technology commercialization strategy

The process of technology transfer is the heart of commercialization is, i.e. the transfer of the results of each stage of innovation to economic agents for their implementation and introduction in economic circulation [4].

Strategy for the commercialization of new technologies is formed depending on the targets and competitive strategy of the company. The key aim of the commercialization strategy is to generate maximum cash flow, return investments and allow innovative businesses to grow. Implementation of the strategy is carried out through business models, which are defined as ways to retain competitive advantage and ways to generate income. From this perspective, the business model is an important tool to attract investors to finance innovation projects [5]. There are business models known as integration, orchestration and licensing in theory and practice [3].

Integration is — a model in which the company — integrator owns and manages the innovation process as a whole, manages all stages of the innovation life cycle and displays it on the market.

Orchestration is — a model, when the orchestrator controls and manages all aspects of innovation, but independently carries out only part of the process, focusing on core competencies.

Licensing involves the development and sale of innovation for its further commercialization by a third party. Participation in management is carried out either through the transfer of the authorized capital of intellectual property rights, or through the transfer of the technology on the basis of license agreement.

New rules and criteria for selection a business model

In order to determine the rules for selection a business model of commercialization it is necessary to understand the objectives of the company, implementing new technologies.

Analysis of the practice of innovative companies, selecting a business model has shown that the head is interested in the following possibilities of technology transfer:

— the possibility of restricting and banning of unauthorized access to information and intellectual property (IP), implemented in the new technologies and their unlawful use in order to enrich unscrupulous market participants;
— ensuring the attractiveness for investors and partners;
— the possibility of ensuring a minimum level of costs for the implementation of the business model and organizational adjustments;
— the possibility to save competitive position, based on the use of the intellectual property for a long time. The key here is the time factor.
life cycle innovation requires a revision of the business model and ongoing organizational restructuring, which leads to uncompetitive high cost level.

The innovative company is interested in selected model that helps to solve the following tasks, the totality of which can be called a “6C system”:

1C — Control. Maintaining control over the process
The company is interested in maintaining full control over the process of implementation of technologies that provides a high probability of obtaining the desired result in accordance with the strategic goals.

2C — Copyright. Preservation of scientific priority
For the company it is important to preserve scientific priority in the high-tech area in which it specializes, to secure long-term competitive position in its segment.

3C — Class. Secure competitive quality
The company must have the intellectual capital, a high level of competence, including organizational, allowing to produce a unique competitive product.

4C — Capital. Secure the investment attractiveness and the preservation of financial stability
The company must have substantial financial resources for the implementation of innovative projects. In the absence of its own sources, the company should be able to attract investors on mutually beneficial terms.

5C — Cooperation. Ability to use the resources of partners
This problem is solved by industrial and business cooperation. For effective cooperation the company should have the sources and mechanisms to encourage all participants in the chain of cooperation.

6C — Competitiveness. Preserve competitive positions
Business model of technology commercialization should be agreed on the strategic goals of the company and its competitive strategy and assess its impact on the functional and organizational strategies. These tasks define the criteria for selecting business models.

An important methodological task is the quantitative and qualitative assessment of these criteria. The variety and diversity of different scales of criteria determine the need to use expert assessments using rating scales.

As an example, it is proposed to consider assessment of the following criteria “Maintaining control over the process” (1C) and “Preservation of scientific priority” (2C).

According to the criterion of “Maintaining control over the process(1C)” a strategy is characterized by the following contents. Model “Integration” (INTEGR) is characterized by the full control over all process stages. The advantage is the high probability of the implementation on time and receive a competitive product. The drawback is the high cost of control. In “Orchestration” model (ORC) only key processes are controlled by the company — the orchestrator.
As a rule, these are processes in which the company has a core competence, enabling it to maintain a competitive advantage. For example, the company has an outstanding discovery in any research. In “Licensing” model (LIC) control is limited by the sphere of observance of intellectual property rights and distribution of income from their use. The company does not control the innovation process and is not able to adjust it.

Flat scale of assessment of this criterion (Table 1) is proposed to determine the degree of completeness of monitoring and assessment of the company’s ability to provide a given level.

Table 1

<table>
<thead>
<tr>
<th>Control coverage degree</th>
<th>10–25%</th>
<th>25–50% Access to uncontrolled stages is limited</th>
<th>25–50% Access to uncontrolled stages is not limited. Partial adjustments are available</th>
<th>50–75% Access to uncontrolled stages is not limited. Partial adjustments are available</th>
<th>100% Full control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment (point)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Business model</td>
<td>LIC</td>
<td>ORC</td>
<td>ORC</td>
<td>INTGR</td>
<td>INTGR</td>
</tr>
</tbody>
</table>

It is clear from the scale that in assessing the possibility of control of 1 point, licensing model is recommended, when assessing 2–3 points — orchestration model, from 4 to 5—model integration. When selecting a model it is necessary to find a compromise between the control efficiency (the higher the level of completeness, the better the result of achieving the goal, the higher the quality of the process) and the cost of control. It must be the introduction of reduction ratios associated with the costs of control. The higher the cost, the higher the ratio.

To assess the criterion of “Preservation of scientific priority”, the following statements need to be known. Model of “Integration” (INTGR) implies the concentration of all IP rights to the company-integrator. At the same time in the company all kinds of IC are reserved. In “Orchestration” model (ORC) the company-orchestrator is the holder of the rights to key technologies and license for IP partners. In “Licensing” model (LIC) the company owns the rights to the technology, transmitting to use by third party. This technology can be a key as well, and ordinary.

Criterion of “Preservation of scientific priority” (2C) refers to the degree of concentration of rights in the company-innovator, as well as the degree of IP protection (Table 2).

It is clear from the scale that in assessing the possibility of control of 1 point, licensing model is recommended, of 2–3 points — orchestration model, from 4 to 5 — integration model.
The fragment of the assessment scale of possibility of preservation of scientific priority

<table>
<thead>
<tr>
<th>Control coverage degree</th>
<th>The company has a patent for the IP (in any jurisdiction)</th>
<th>The company has the right to the key IP. No licenses for IP of partners</th>
<th>The company has the right to the key IP. The company has a part of the licenses for IP of partners</th>
<th>All IP rights are concentrated in the company. The company has a part of the licenses for IP of partners</th>
<th>All IP rights and licenses are concentrated in the company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment (point)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Business model</td>
<td>LIC</td>
<td>ORC</td>
<td>ORC</td>
<td>INTGR</td>
<td>INTGR</td>
</tr>
</tbody>
</table>

Additionally, it must be the introduction of reduction ratios associated with the level of IP protection. The lower the level of protection cost, then the higher must be the reduction ratio.

The same scales are encouraged to develop for each criterion. Based on the totality ratings for each scale integral assessment is formed in the range from 5 to 30.”Integration” model is recommended when the total score is from 24 to 30, the “orchestration” model is recommended when the amount of points from is 12 to 24 and the “licensing” model is for 12 and below points.

Conclusion

Thus, the proposed tool for selection a business model is an acceptable, fairly transparent and simple for managing the commercialization of new technologies. Its use will increase the efficiency of technology transfer and motivate entrepreneurs to actively implement innovative capacity.

References

THE ROLE OF TERRITORIAL MARKETING IN SHAPING THE IMAGE OF A COUNTRY AT INTERNATIONAL LEVEL

Abstract

Powerful brands are those that create a strong, permanent and positive association in people’s minds. The image of Russia on the international arena is far from the best. The purpose of this article is to show how the tools of territorial marketing can be used in the formation of Russia’s image. While creating a new image of Russia we must proceed not from established and well-known stereotypes, but building this image on basis of the Russian cities brands. Another important aspect is to attract tourists from the oriental countries which have recently developed close economic and political relations with Russia. In today’s political situation the need for Russia is to engage in soft power through effective global communications.

Key words: territorial marketing, nation brands, city brand

JEL codes: M31, R58

In the last century the Russian economist Igor Vernadsky said: “Each country has its own ideal, each country has its own forms of perfection that are alien to another one because of different conditions of the area. It is the reason that differs economic, social and political situations in countries. “The study of human needs and resources in order to satisfy them is considered by I. Vernadsky as the main task of economics. The problem is whether the state will be able to use available resources reasonably to fill in its niche on the international arena and to become attractive for residents, tourists and businessmen.

Nowadays successful economic development of the country greatly depends on the position that it occupies on the international arena, its status, rating and image. The right choice of any economic activity implementation is an important trump card in competition for customers. In modern conditions we can
note increasing importance of territorial policy in activating innovation, improving the quality of human capital, supporting entrepreneurship, promoting the process of creating business networks and alliances, improving the attractiveness of territorial environment and accommodation. It is aimed at attracting labor force with high incomes, capable of innovations, taking financial risks if it is necessary.

Territorial marketing becomes a common tool for increasing competitiveness of the territory. This term appeared in the European literature in the 1980s and now territorial marketing is increasingly more important in the modern economies and societies, considering the globalization, the increased connections and interdependencies between regions, the growing tourism activities as well as the developing economic needs.

Territorial marketing includes activities realized in the interests of regional development. It results in creating, supporting and changing the attitude to the territory on the part of target markets and a wide range of consumers. The target areas of this activity are: attractiveness and prestige of the territory (place) in general; attractiveness of natural, material and technical, financial, human, organizational, social and other resources concentrated on the territory, as well as the opportunities of utilization and reproduction of such resources.

For the area investment attractiveness, as well as residence attractiveness the image of the territory is considered very important; one of the key components of the image is the brand. The brand is defined as “the image distinguishing a particular product, its manufacturer or seller from the competitors.”

Unfortunately, the image of Russia is far from the best. In 2005, when the rating of “national brands” was first published, including 25 countries, Russia occupied the 24th place, left behind only by Turkey. While being rated, countries are evaluated by six factors: tourist attraction, human capital, quality of exported goods, justice of government, appeal of culture and sports and the place attractiveness for residence and investment.

Fortunately, Russia has made some progress lately. In 2014, Russia occupied the 12th place in brand ranking. But in 2015 Russia is down 31% to US$810 billion. The first place belongs to the United States. Its brand value is estimated at US$19.7 trillion. The next places are occupied by China (US$6.314 trillion) and Germany (US$4.166 trillion) [4].

Respondents from different countries were invited to give associations which arise when hearing the word “Russia”. First association of more than half of the responders (53%) was “vodka”, the second association was “corruption” (35%). The association of Russia with the Soviet era is still alive: 30% of respondents named the word “communism”. “Cold Winter” came to mind to 25% of respondents, “mafia” and “Putin” scored the same number — 15%, followed by the answer “KGB” (10%) and “oil” (10%) [2].

In view of the above it can be concluded that Russia has to make greater efforts to overcome stereotypes established for decades and create a new, com-
petitive image of the country. But to create such an image of the country, it is necessary to formulate the distinctive features that would distinguish the country both in the historically established image and the one in the system of global competition at the present moment. The country’s image should reflect the combination of emotional and rational conceptions drawn from comparison of all peculiarities of the country, its own experience and rumors that affect the creation of a specific image. All the above factors enable us to create a chain of associations related to this country right away when the name of the country is mentioned.

For example, India is identified as a country of spiritual seeking, self-improvement, traditions, and in the system of global competition — as a source of high-quality intellectual resources. If someone mentions England the following images appear — the Queen, the parliament, “English breakfast”, left-side traffic. The symbols of the image of some countries are the maple leaf (Canada), Shamrock (Ireland), Kangaroo (Australia), the Great Wall (China) etc.

In general, the components making up Russia’s image by foreigners are the following [5]:

- Mentalty: hospitality and incomprehensibility of the soul;
- Culture: The Bolshoi Theatre, Feodor Dostoevsky, Leo Tolstoy;
- Food: vodka, caviar;
- Negative aspects: long distances (bad roads and public transport), cold climate (cold, snow), bad service, criminality, corruption;
- Symbols: the bear, the matryoshka, the balalaika.

It can be noticed that modern Russia is a blank space for the world; this ignorance is basically derived from the distorted information. The problem is that foreigners do not know Russian culture. Opinion surveys show that Europeans, for example, are in the dark about Russian pop musicians or contemporary writers. However, even if a German has never been to Ireland or Sweden, he still knows enough about their popular culture. It goes without saying, that many Europeans have heard of the great Russian writers, but, as a rule, only due to good American films, based on the works of these authors [2].

It is necessary to cultivate an interest to a country, and we can do it, using the same mass media. What should be shown to fill information gaps? Russia is not known outside Moscow. Science, social aspects, history, architecture, nature are worth paying attention to and, as a result, we will no longer be perceived as aliens, there will appear a real chance to draw more investments. Foreigners ought to see with their own eyes that it is possible to deal with Russia.

From my point of view, while creating a new image of Russia we must proceed not from established and well-known stereotypes, but building this image on basis of the Russian cities brands. A city is the most stable of all kinds of brands, it is susceptible very little to political and economic risks. The country’s image is associated with the image of the government, so it can be easily changed because of the political situation. Corporate brands usually quickly
become outdated, they are more expensive and, what is more importantly, it is very difficult for them to gain national status.

The concept of city-brands can be the basis of the regional policy of the country and strategic planning of urban development. And also it can increase competitiveness of local goods and services on domestic and international markets. The promotion strategy of a city can often become the core of the country’s image. One can recall the famous slogans: I love New York, Sydney Freedom Capital, London Olympic. As for Russia, a positive experience of creating acity image is associated with the creation of the brand “Sochi — 2014” in connection with the Olympic Games. Basically, all the methods of promotion are directed to Western society to attract investments and tourists, to maintain stereotypes about Russia and at the same time to develop progress. It worked effectively while creating the image of Sochi as a unique region. Russian experts in the field of image faced two tasks that had to be solved immediately:

— to correct the present day image of Sochi as a purely summer resort in the opinion of the majority of Russians;
— to increase general awareness of Sochi in the West. Russia had to literally print the name of Sochi on the map of the world. The question “Do you know that Sochi is on the same latitude as the French Nice?” was and still is one of the most relevant for the target audience in Europe.

Another important aspect is to attract tourists from the oriental countries which have recently developed close economic and political relations with Russia. For example, a special package tour designed for Chinese tourists to visit Sochi at reasonable prices has been worked out. Russian travel agencies also say they have seen a dramatic increase in Chinese tourists this year, with some claiming that the number has tripled in 2015. [6]

In order to form an attractive external image, positive self-identification of people with their country is also an important thing. If the residents of the territory do not love their territory, it will never be attractive to the outside world. It should be noted that modern man evaluates the attractiveness of the country in terms of not only material but also spiritual comfort. Therefore, if we want people to love their country, it is important to create conditions to enable them not only to satisfy their material needs, but also to realize their creative potential in any of the spheres: social, artistic, economic or technical. In the meantime, although Russia ranked second after the US in the world in absolute numbers of members of the “creative class”, but Russia lags far behind the developed world at creativity level and effectiveness of their activities.

In conclusion, the image of the country should be based on characteristic features of the country. The brand will influence not only “outside”, but “inside” perception of the country, in other words, form a national identity and help to ensure that life in the country is striving to the ideals embodied in the brand. And territorial marketing serves as a powerful tool of competition in this process. It should be reflected in strategic documents of spatial planning.
as one of the key spheres of public territorial policies. Nowadays the tools of territorial marketing in the formation of Russia’s image are used slightly. The development of marketing techniques in promoting the territory, for sure, will play a significant role in promoting the brand “Russia” on the international arena. A seeming consensus does exist on the need for Russia to engage in soft power, through effective global communications.

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MARKETING OF EDUCATIONAL PROJECTS
IN THE DIGITAL AGE

Abstract
The fourth industrial revolution has completely changed all spheres of our life. Today, when a niche of educational medium has become a part of the mainstream, according to statistics, more than 7.2 mln. of Russians have studied online at least once in a lifetime. In this article, I have identified five main segments among online-students (Believers, Rejecters, Experience Seekers, Money Mavens, Open Minds) and, in accordance with it, I have developed a marketing strategy for the educational startup in Russia.

Key words: marketing strategy, online education, digital marketing.

JEL codes: I 200, L 860, M 130, M 310, M 370.

Introduction
The “digital revolution” and the boom of educational technologies did not miss Russia [5]. Today, when a niche of the educational medium has become a part of the mainstream, according to statistics, more than 7.2 mln. of Russians have studied online at least once in a lifetime [6].

The development of Internet technologies, high-quality access to the Internet, and the growing popularity of online education make this method of education attractive for schoolchildren and students, as well as for professionals, thus increasing their professional level.

Digital education is one of the fastest growing segments of the world education market (+ 23% per year during 2012–2017), but it still occupies a small share (<3%) in the general market of educational services [3].

Analysis of the Russian market of online-education:
According to experts, the online learning market in Russia shows an annual growth rate of 25%. At the same time, the volume of the Russian market in 2016 is only 10.5 billion rubles, while the world market is estimated at 107 billion dollars [6].

Nowadays there are more than 50 active Russian educational websites, devoted to a huge variety of topics.
1. Leaders in the **segment of paid applied courses** — «Нетология-Групп», ELC, Eduson, Teachbase. There is also one new successful site Courson, the Russian equivalent of Udemy, which was launched in 2015.

2. Leaders in the **segment of mass free courses** — «Универсариум» and «Лекториум».

3. Leaders in **school education** — «ИнтернетУрок», «ЯКласс», «Фоксфорд».

4. Leaders in **language learning** — LinguaLeo with 13 million users.

5. The leader in **child education** is BabyStep, which attracted $ 3 million in 2015 and is growing rapidly in the Chinese market.

6. The leader in **programming** — GeekBrains with more than 1 million users.

There are already courses at international venues in Russian language — Coursera cooperates with most popular universities. Thus, we can point out the increase of competition from world leaders.

### Segmentation of the market

According to the data from the BCG survey of more than 2,500 online-students and my research with more than 100 respondents, all users of online-education can be divided into five categories [4].

1. **True Believers.** These students take the majority or all of their extracurricular classes online. They are vocal advocate for the benefits of the asynchronous, learn-at-your-own-pace convenience of conventionally delivered online education. This segment sees online as a great alternative to traditional, in-person education, rather than as an integral part of the full menu of educational offerings. The segment is the most open to online education and sees very few inherent barriers to future adoption.

2. **Online Rejecters.** These students have tried online courses, but they have decided not to take more in the future. Members of this group tend to be skeptical about the outcomes and quality of the online experience.

3. **Experience Seekers.** These students place a unique emphasis on the experiential, social, and emotional benefits of education. They share traditional beliefs about offline-education, such as that professional schools or courses is the best place to make lifelong friends and that college is critical to emotional and character development.

4. **Money Mavens.** Members of this segment are motivated primarily by the financial outcomes of an education. They want to achieve an acceptable return on their investment, get a better job, and make more money.

5. **Open Minds.** Members of this segment will become True Believers if the online experience meets their high standards and offers benefits beyond those of traditional classrooms, such as greater interactivity with professors and
peers. This group represents the largest potential for growth in online education over the near term. As its members increasingly get what they want from online education, they will become the primary source of supply for existing and emerging segments of online enthusiasts.

**Company analysis and recommendations**

Today I would like to talk about the promotion of the start-up in the form of MOOC courses. This is a completely distance education, which has spread in America, like Massive Open Online Courses. The essence of these courses is the independent study of video lectures and the performance of various homework, as the main form of reporting. Upon completion of the course, if there are positive results of the final test that confirms the mastering of the material, the listener receives a certificate.

So, the company I am researching is 4Brain. This is an open educational portal that based on the freemium business-model and contains both paid and free courses and materials for improving various useful intellectual skills, such as speed reading, rhetoric, verbal account, memory development, creativity, leadership, logic, healthy lifestyle, NLP, TRIZ, Acting skills, human psychology, logical thinking, time management, writing skills and so on.

First of all, I would like to show the results of a research of the company’s activity in the form of an SWOT-analysis.

### SWOT-analysis

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>External</strong></td>
<td><strong>Opportunities (O)</strong></td>
</tr>
<tr>
<td>1. growth of the trend for online education</td>
<td>1. high competitive activity</td>
</tr>
<tr>
<td>2. attraction of popular experts</td>
<td>2. limited economic opportunities for consumers</td>
</tr>
<tr>
<td>3. cooperation with media projects that already have their own audience</td>
<td>3. State support of other projects</td>
</tr>
<tr>
<td>4. development of relations with companies-employers</td>
<td>4. lack of high demand for online education</td>
</tr>
<tr>
<td>5. expansion of the audience of the project at the expense of residents of regions</td>
<td>5. poor internet quality in the regions</td>
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<table>
<thead>
<tr>
<th><strong>Internal</strong></th>
<th><strong>Strengths (S)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. high level of SEO</td>
<td>1. technical failures (especially in the game part)</td>
</tr>
<tr>
<td>2. modern web design</td>
<td>2. lack of feedback on the forums</td>
</tr>
<tr>
<td>3. wide range of subjects</td>
<td>3. absence of pronounced competitive advantage</td>
</tr>
<tr>
<td>4. regular appearance of new courses</td>
<td>4. absence of segmentation of courses with a complexity level</td>
</tr>
<tr>
<td>5. active community in social networks (vk, FB)</td>
<td>5. lack of promotion through Google Adwords, Yandex Direct</td>
</tr>
<tr>
<td>6. blogging</td>
<td>6. absence of email distribution on the client base</td>
</tr>
<tr>
<td>7. strong content marketing</td>
<td>7. absence of mobile application</td>
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<tr>
<td>8. gamification in learning</td>
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</table>
Recommendations

Based on SWOT analysis and segmentation of the audience, I am going to formulate practical recommendations for the “4Brain” platform regarding the strategy for promoting online education in general and individual mechanics aimed at attracting audiences.

The competitive advantage of “4Brain” should be to focus users on what they can get from training on online courses. This idea can be implemented in the format of segmenting the audience and look like this: when entering the start page of the site, the user will see not the line of courses as now, but variants of possible learning objectives: broaden their horizons, tighten their knowledge, get additional education, improve their qualifications, and use leisure leisurely. Choosing the purpose, the user will be able to view the courses corresponding to the goal. The implementation of this tool will demonstrate the versatility of the platform (that on 4Brain it is possible not only to seriously study, but also, for example, simply to usefully spend free time), and also help the user to set his own priorities in further training.

To implement this idea, I developed ways of dealing with each segment of the audience described above.

True Believers

“True Believers” is the most progressive part of the audience, which finds such projects as “4Brain” independently. Therefore, company does not need to spend additional efforts to attract this segment of the audience. Instead, platforms need to focus on turning “true believers” into so-called “brand advocates”, that is, loyal clients who will help attract new users, as well as increase the recognition of the project.

In order to turn “true believers” into “advocates”, it is necessary:
— to join this type of users in personal communication (e-mail correspondence) and try to keep communication on a regular basis;
— to take in-depth interviews in which people will tell why they believe in online education and, in particular, how it helps them in their daily lives;
— to give gifts in the form of free access to extended content.

In addition, the employees of the company who will conduct a story about the latest news from the life of the project on their personal page in the social network can be also “true believers”. Thus, they will be able to create a community of “innovators of education” around themselves, that will attract attention not only to the general public, but to potential investors and customers, as it will demonstrate the online education market from a professional point of view.

Experience Seekers

This segment of users is the most active and involved audience. These people subscribe in social networks to the company page and regularly monitor the lat-
est updates. “Experience Seekers” are not attractive from the point of view of profitability of the project, however, the value of this group is that representatives of this group are the most frequent visitors of the website; they are the “core” of the audience. For attraction of “Experience Seekers”, it would be great to:

— Carry out competitions for drawing books or paid part of courses;
— suggest them to offer their own topics for training, thereby influencing the future range of courses;
— Creation of a “social network”, which will provide for more detailed filling of a personal profile, search for participants with similar interests and the opportunity to communicate with them;
— Provide details of intracorporate life (reports from the locations of the shooting, a story about the members of the team of the “4Brain”);
— Introduction of a system of bonuses and awards for academic success;
— Holding intellectual competitions between the participants in an interactive form.

MoneyMavens

“Money Mavens” is the most demanding in terms of content group. To attract them, it is necessary not to reduce prices, but, on the contrary, to leave it at the current level and emphasize their uniqueness, to focus on the quality of materials from professors of top universities. Their involvement and retention can be facilitated by the following measures:

— guarantee of Money back if the listener does not meet the expectations;
— Publication of feedback from other participants about the gained experience;
— Publication of interviews in the blog with experts about the details of a particular case that is affected in the course;
— Possibility of individual consultation with an expert in a webinar format (for a fee);
— Introduction of a flexible system of discounts and bonuses for the acquisition of additional services and courses.

Open Minds

It is extremely advisable to pay attention to this segment of users, because “Open Minds” can potentially turn into “True Believers” or “Experience Seekers” — company just need to show them the value of getting an education. Possible means of their involvement can be interactive methods, aimed at entertainment rather than at education goals. For example, one of the methods can become the so-called “Course definer”, that will ask the user to pass a comic test to determine his interests, and then offer a course that best matches the client’s answers. Such a method will help to involve not only this type of users, but also draw attention to a wide audience in connection with the potential viral effect.
Conclusion

To draw a conclusion, it is worth noting that, for most effective marketing strategy, “4Brain”, first of all, needs to determine the priority audiences. After selecting target groups, the project needs to focus on maximizing the satisfaction of their needs. It is important to understand that the introduction of new marketing tools contributes to improving perceptions not only among the target segment, but also among the entire audience as a whole. In addition, in my opinion, the most perspective groups to start with are “True Believers” and “Experience Seekers”.

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MERGERS AND ACQUISITION IN THE SPHERE OF MASS COMMUNICATION

Abstract
The article focuses on the mergers and acquisitions in the sphere of mass media in Russia, which is crucial for ensuring the country’s competitiveness, infrastructure and social development. The theories of the processes of evolution in mass communications highlights the importance of establishing a full-fledged competitive environment to meet the society’s demands. This publication proves positive correlation between mergers and acquisitions with small specialized mass media firms and country’s economic performance.

Key words: mass media, mergers and acquisitions, business model.

JEL codes: G 34, L 82

Introduction
From the 20th century modern world is in the process of building the information society, a prerequisite of which is a socio-economic revolution. The development of post-industrial society is influenced by information technology, improving systems, developing high-tech and innovative technology. The result of the current socio-economic revolution is the emergence of the innovation economy.

Media is a fundamental concept for the definition of mass media, which includes information connections, with the special attributes and functions. The media industry is a modern area of humans’ activity, embodying the latest technical and scientific achievements in the field of information technology. Currently, information is a crucial resource, providing a powerful impact on the future development of the state. There is an urgent need for the exchange of information between territories remoted from each other, security, accuracy of information, the ability to search information from the global data space of the modern world.

Modern information technologies, which are based on the latest media, affect the quality of the country’s economic development. The rapid development
of technology leads to increasing competition in the media market, and thus the actual issue of enhancing and maintaining the competitiveness of media companies.

**Major tendencies in Russian media market**

For Russian companies one of the barriers to the development of competitive advantage is the low level of innovation. It can be considered that competitiveness is an indicator of the status of the company as it determines the position of the companies on the market. Competitiveness is influenced by many factors, including innovation activity.

The table 1 below shows the media consumption of the main parts of mass communications in Russia over the 2012–2016 years. The printing market has lost about half of its income over the past five years, but in the table 1, you notice that the printed editions consistently win significant market share.

Table 1

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<td>TV</td>
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<td>238</td>
<td>239</td>
<td>244</td>
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<tr>
<td>Internet</td>
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<td>60</td>
<td>68</td>
<td>74</td>
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<tr>
<td>Radio</td>
<td>169</td>
<td>165</td>
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<tr>
<td>Press</td>
<td>15</td>
<td>15</td>
<td>14</td>
<td>12</td>
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<tr>
<td>Newspapers</td>
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<tr>
<td>magazines</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
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<tr>
<td>total</td>
<td>451</td>
<td>477</td>
<td>476</td>
<td>487</td>
<td>493</td>
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</table>

According to the analysis provided by the Agency AK&M [5], information on mergers and acquisitions in Russia is presented in the following diagrams. Figure 1 shows the value of transactions over the last seven years, and figure 2 shows the total value of transactions during the same period. To the presented data, it can be concluded that despite a slight increase in the number of transactions in 2016, their total cost falls.

![Figure 1. The dynamics of Russian M&A media market by the cost of transactions ($ mln)](image-url)
Growing number of mergers and acquisitions in January-February 2017: there had been 78 transactions, the average cost was $89.6 million and the total cost is $6,988 billion transactions in the media sector, their total value increased three times compared to the previous year and amounts to $313.3 million is 4.5% of the total number of transactions in Russia for 2017 [4].

One of the five largest deals of 2017 was the purchase of the company A&NN Investments of the Group of companies Rambler & Co, valued at $295 million.

According to research forecasts, the number of mergers of printed media in the coming year may exceed the previous year indicators. It also confirmed the general trend of growth in the number of mergers and acquisitions in the media market. The main problem of the fearful attitude of investors and market participants to the printing business is the large amount of risk and the probability of non-repayment in the nearest future [4].

**Analysis of M&A transactions**

There are 3 main objectives for conducting mergers and acquisitions: 1) the establishment and strengthening of market power; 2) accelerating response to the financial, managerial and strategic restrictions; 3) obtaining efficiency gains.

Today, the traditional media, primarily print and radio, are losing their positions in terms of audience, behind TV and the Internet, and lose it media time consumption. Moreover, the number of minutes that the audience spends online continues to grow. In this regard, there is a growing trend to merge traditional media with digital — web-resources transformed in independent media, publishing as content from traditional media, and unique content tailored to the specifics of the Internet audience.

The ways of information consumption are changing, readers are drowning in the information flow. It is important to have access to the necessary information quickly and easily. The popularity of digital media is increasingly gaining momentum because of their flexibility, accessibility, ability to continuous updating of information, filtering, rapid information flow. It is impossible not to consider the high demand for “real-time communications” — the urgent, almost immediate. All these possibilities give the Internet media.
Even though the most popular media remains offline TV, 60% of the audience prefer to learn news from the Internet, and 18% take their social media and blogs. This young audience more confidence in information online, while older traditional television. Among the most popular news topics that cause the greatest interest among users of Russian Internet — world events, politics in Russia, Russian authorities and international relations.

Figure 3 shows the dynamics of mergers in the Russian media from the post-Soviet period [3]. Because of the instability of course there are significant jumps in price, also we can make a conclusion about how far behind is the media market in Russia.

The following are examples reflecting the effectiveness of some recent mergers. The first example is the purchase by the company “NMG” publications “Vedomosty”. Prior to the merger, the newspaper occupied a leading position, was 2 in the popularity of daily newspapers. Currently “Vedomosty” is losing its position, occupying the 3rd place. The same happened to channel TV3 bought by holding “Gazprom-Media”. The channel lost 2 positions in the rating of Federal channels, occupying today only 10th place [3]. Thus, we can conclude that not always the desired goal is to achieve economies of scale realized.

However, the holding “Gazprom-Media” bought the channel “Piatniza”, that before holding a low position in the rankings, but has exclusive content and a specific audience. The result was the rapidly growing popularity of the channel, for 3 years of existence, it is increased its positions from 17 place and took 13th in the ranking of 2017. Another similar success transaction was the merger between the company NMG and the TV channel “Fifth channel” which rose from 11th place to 4th in the popularity rating of Federal channels [3]. Thus, it reflects the main idea of the article about that, how much effective can be a merger with a small specialist media companies.
Conclusion

To sum it up, despite the view of many analysts and managers that say that the main economic efficiency of mergers produced economies of scale, inefficiency from deals can arise unexpectedly. Of course, it is difficult to draw conclusions about the quality of recent transactions, but there are several striking examples of the fact that the merger with the smaller, more specific companies have a positive outcome in more promptly. Therefore, we can assume that the tendency to produce unique content by acquiring specialized companies will continue their development. Perhaps this trend is inherent only in the media sphere. Due to the instability and constant changes of the boundaries of the market through the development of information technologies is difficult to predict future trends and limited to one General trend, every merger and special needs qualitative development. Ultimately, we must not forget that media today are not only transmits information, but also creates it, because the media is the message.

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THE ROLE OF FOREIGN CAPITAL IN RUSSIA’S NATIONAL ECONOMY

Abstract

The foreign capital dynamics is of intense interest for economic planners; it characterizes clearly a state and development of the domestic economic system, reflects an interoperability of national and foreign capital; evaluates the ability of a country’s industry to use and accumulate advanced technological achievements. The paper considers the problem of the optimal ratio between domestic and foreign investments in Russia. It focuses on three main issues, namely the volume of foreign capital and foreign resources, as well as how they, in turn, may affect domestic economic situation.

Key words: foreign capital, investment climate, foreign direct investment, domestic investments.

JEL codes: F21, F63, O11, O16

The intensive expansion of technological and geographical boundaries have led to the formation of the new business environment. It is characterized by the use of foreign countries as a base for the production and marketing of goods and a rapid spread of new products and new processes on an international scale. And Russia, as part of the global economy, can’t avoid all these processes. No doubt, the active development of the Russian economy is not possible without intensive external economic activity and attraction of foreign investment.

However, I should underline, that investments are accompanied by supervision of foreign enterprises. Companies often prefer to control overseas production. And sometimes domestic interests can’t be provided the best way because of relatively high power of a foreign company (which shall decide from afar, on the basis of its own global or national targets). That is why the state should regulate the process of foreign investment: to limit the rate of foreign capital, not to allow it to enter in some strategic industries.
As for Russia, the Federal Law establishes significant restrictions on the participation of foreign investors in the authorized capital of business entities data [2].

Anyway, the statistics show that the share of investments of foreign companies in the Russian Federation is many times less than investment of domestic enterprises. Even companies with joint ownership, as seen in the diagram below, are not engaged in large investments.

*Diagram 1*

But, as mentioned above, the development of the Russian economy is not possible without the involvement of foreign capital, mainly because of the lack of internal financial resources. Moreover, superfluous protectionist policies contradict the view adopted in international practice that equal treatment of investors, as well as free competition between them, are the best conditions for the creation of a favorable investment climate. In addition, many CEOs of Russian companies imply foreign investment as a kind of foreign intervention, which is certainly wrong, because the involvement of foreign capital in the Russian economy is justified and necessary, and possible negative consequences are not inevitable under professional guidance [4].

It is not a secret that factors such as the global economic crisis and its repercussions, the unstable political and economic situation in Russia and abroad, seasonal waveings determine the scope and dynamics of foreign investments in Russian enterprises. Thus, foreign capital, flowed into the Russian economy, and its short-term sectoral allocation is extremely uneven. Let’s analyze the data of the Federal State Statistics Service [1].
The ratio does not change much over the recent years. Portfolio investments still account for the smallest part, and the share of direct investments (which play an important role today, as they give the right to receive part of the profits, not just dividends) does not exceed 20%. It’s connected with the influence of many socio-political and macroeconomic factors, which in recent years have led to a remarkable interest weakening of international investors. Those, in turn, shifted to developed countries’ assets, paying more attention to speculative funds in the stock markets.

More than half of all foreign investments (85% for five years on average) are so-called “other investments”, which, in fact, are commercial and bank loans, or the purchase of the national currency by non-residents [3]. How is this situation reflected in the Russian economy? First, the growing dependence of the debt of domestic companies on foreign capital affect the domestic economy. In any case, it shows the failure of the Russian banking system, its inability to convert the temporarily free funds and savings into productive investments [3]. Second, — the urgent need of fundamental industrialization and modernization of the economy. Third, — the unavailability of long-term investments because of high interest rates, rising in crisis.

In conclusion, Russia, as part of the global financial system, needs foreign capital, which contributes to the development of the domestic economic situation. But in current situation, almost 90% of foreign capital are external borrowings, which are not sent to any socio — economic programs, innovative projects, technological know-how. They are not directed at the modernization of the national economy and the basic foundations of Russia. All they do is increase the debt dependence of domestic enterprises. Moreover, inconsistent government policies, legislation, the unfavorable investment climate, the economic crisis don’t contribute to the inflow of capital from abroad. Fortunately, foreign investors have not lost interest in investment in Russia, whose capabilities and potential in this regard may be more and more developed. Of course, it will take time, but nothing is impossible for Russia.

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RENEWABLE ENERGY PROSPECTS IN GULF MONARCHIES

Abstract
The countries of the Gulf Cooperation Council hold almost a third of the world’s proven crude-oil reserves and about a fifth of natural gas reserves. Exports of these fossil fuels have underpinned impressive economic growth, which has brought widespread prosperity and rapid development in the region. However, industrialisation, population growth and increasing water desalination have led to high energy demand growth, affecting the ability of some GCC countries to maintain export levels over the long term. The resulting market dynamics have forced governments to launch a new diversification program. Monarchies have been initiating renewable energy strategies for more than 30 years. But today a trend for increasingly ambitious projects is being witnessed across the region.

This research focuses on the efforts undertaken by Gulf monarchies in developing renewable energy, considers the barriers for renewable energy deployment and appraises the opportunities of further alternative energy development in the GCC economies.

Key words: renewable energy, Gulf monarchies

Introduction
This paper analyses Renewable energy prospects in Gulf monarchies. Drawing particular focus on a brief overview of economic situation in the region, next it analyzes main reasons for growing interest in developing renewable energy projects in the region, then goes through the main socio-economic benefits of a renewable energy transition in Gulf monarchies and in the end explores what the future holds for all that projects are.

The Gulf countries share several homogeneous aspects. They have the same language, culture and history. The GCC countries face similar economic challenges. So the GCC countries — Bahrain, Kuwait, Oman, Qatar, Saudi Arabia,
and the United Arab Emirates—account for less than 15 percent of the population of Arabic-speaking countries, but (with oil prices at current high levels) for some 70 percent of the area’s GDP and around 90 percent of the region’s stock market capitalization (though only 30 percent of the number of listed companies). While there are wide variations in GDP per capita in the GCC region, even the lowest is still twice the level of the next-wealthiest Arabic-speaking country. The relative wealth of the GCC region is in large part a product of its petroleum. But it would be unfair simply to dismiss these countries as rentier economies with no significant diversification or scope for economic development outside that supported by the petroleum sector.

The economies in the GCC have grown substantially in the last decade, with the countries boasting some of the highest per capita (GDP) in the world. This growth has been mostly fueled by the hydrocarbon sector. In 2016, Saudi Arabia, represented 53% of the region’s GDP, followed by the UAE at 20% and Kuwait and Qatar at around 10% each. This breakdown reflects the respective position of the GCC countries as hydrocarbon producers and exporters. Saudi Arabia, the UAE and Kuwait, are the second, sixth and ninth-largest oil producers globally, while Qatar is the fifth largest producer of gas worldwide.

The economic growth in the region is primarily driven by government spending and large state-owned enterprises. The high economic growth witnessed in the region has been accompanied by a high annual population growth rate of almost 7%. With a growing population entering the labor force, there is a risk of unemployment and underemployment among young nationals which raises concerns. This, among other factors, provides further justification for diversification into economic sectors, other than oil and gas.

That brings us to the next point. Let’s just look to the main reasons for growing interest in developing renewable energy projects in the Gulf monarchies. What makes GCC countries so interested in development of that energetic sector?

firstly
— **The Gulf has abundant renewable resources:** Gulf countries are as richly endowed with renewable resources as they are with hydrocarbons. They benefit from strong regular sunshine, and the space to develop large solar power plants. The region also has significant wind resources, geothermal and biomass from urban waste.

secondly
— **Gulf countries have rising energy demand:** Gulf countries have seen rapid economic growth and have become major energy consumers in their own right. Regional electricity consumption is growing at almost 8% a year — meaning generating capacity has to be doubled every decade. Gulf countries will require 100 GW of additional power over the next 10 years to meet demand. Electricity produced from renewables means less oil and gas has to be consumed domestically, freeing them for export.
thirdly
— Renewable energy offers Gulf countries a proven, home-grown path to reducing CO2 emissions: The six GCC countries are in the top 14 per capita emitters of carbon dioxide in the world; renewables offer a financially viable way to change that. There is also growing pressure to protect the Gulf’s fragile environment.

no less important is
— Renewable energy power generation is becoming more cost effective: improving technology and growing competition have seen the cost of renewable energy drop dramatically. In some parts of the world, especially when compared to diesel generation, it is already the cheapest option. Furthermore, solar power generation fits very well with demand patterns where air conditioning dominates the electricity demand curve particularly in GCC countries.

Therefore, I suppose, you are considering WHAT are those main socio-economic benefits of a renewable energy transition in Gulf monarchies?

Scaling-up renewable energy in the GCC countries would reap multiple benefits across the region.

As global economies continue to struggle with economic boom-bust cycles, unemployment and its associated social and economic impacts remain a key concern and an instrumental driver of public policy. The GCC economies have been relatively more resilient in the aftermath of the most-recent financial crisis. The recent collapse in oil and gas prices, however, has fuelled the debate around future growth strategies. With an uncertain economic outlook and rising populations, a failure to adequately absorb the large domestic population entering the labour force could pose certain challenges. Therefore, job creation is a key priority for the GCC governments. Renewable energy offers a considerable potential for large-scale job creation. Countries in the GCC can expect significant job creation through renewable energy employment.

Achieving the renewable energy plans for the electricity sector in the region can result in cumulative savings of 2.5 billion barrels of oil equivalent (2015–2030). This reduction may lead to an overall savings of USD 55 billion to USD 87 billion, depending on oil and gas prices. As more renewable power plants are brought online every year, fossil fuel savings in the power and water sectors will reach a peak in 2030 at around 400 millions of barrels of oil equivalent, representing a 25% decrease. Similarly, renewable energy could also help mitigate the natural gas shortages GCC economies could experience over the coming decades. In Kuwait, Oman, Saudi Arabia and the UAE, local production has already been outstripped by domestic market consumption. Gas consumption in the power sector in the UAE, for example, could be reduced by around 50%, resulting in a savings of 20 million tonnes of oil equivalent (Mtoe) in 2030 and significant reduction in natural gas imports. Similarly, Kuwait and Oman could save 21% and 9% of their natural gas consumption in the power sector.
The region has among the world’s lowest levels of renewable water supply, and the demand for water is expected to increase fivefold by 2050. Extraction of fossil fuels and cooling during power generation requires withdrawal and consumption of water that is slow to naturally replenish. Furthermore, treated water is needed for oil and gas extraction, resulting in even higher demand for desalination. Realizing the renewable energy plans in the GCC could result in an estimated overall reduction of 16% and 14% in water withdrawal and consumption, respectively, in the power sector. This is equivalent to an annual reduction of 11 trillion liters of water withdrawn and 200 billion liters of water consumed. A large share of the reduction would come from Saudi Arabia and Kuwait, due to their heavy reliance on electricity generation from crude oil (which requires a high volume of water for extraction) and their plans to add significant shares of renewable energy in the power sector. Most power plants in the region rely on seawater cooling, whereas crude-oil extraction uses treated water. Depending on technology choices, plant location and other factors, renewables often require substantially less water. It should be noted, however, that the water may be procured from other water sources than those used for conventional generation. Therefore, a shift towards renewable energy needs to be guided by a careful examination of the opportunities and risks for the sustainability of water sources in specific contexts.

Renewable energy can clearly provide remarkable benefits in terms of fossil-fuel savings, emission reductions, job creation and water saving. However, achieving renewable energy targets and maximizing their socio-economic impact requires the appropriate institutional and policy frameworks to encourage deployment, and to strengthen local industries through technology transfer, investment promotion mechanisms and education and training. As the analysis in this chapter has shown, policy and regulatory frameworks are in their early stages of development, but the promising initiatives already implemented could be replicated around the region. Along with scaling-up renewable power supply, renewable-based desalination presents a promising avenue, where solar energy and other renewables can help address the strains on regional water resources in a sustainable way.

**The road ahead for renewables in the GCC**

The introduction of alternative sources of energy into an existing energy market is never an easy task, as has been shown variously by the many different approaches found in European and North American markets for renewable energy. In the GCC states, the debate around renewables has furthermore been led in parallel to plans for nuclear power in Saudi Arabia and the UAE, with other member states — Kuwait, Qatar, and Bahrain — having entertained their own plans in the past.

Despite the frequently invoked claims of competition between nuclear and renewable energy, the two technologies appear to be largely complementary, but would require similar domestic market adjustments.
While progress in the deployment of renewables markedly differs across the Gulf states, renewables face largely similar barriers to their systematic deployment in the region — beyond government-led initiatives and popular prestige projects, which include Abu Dhabi’s highly symbolic projects: Masdar City and Shams-1, the world’s largest CSP power plant.

**Rationalizing domestic energy pricing**

Energy pricing remains one of the most important factors influencing the deployment of different energy technologies over the short and long term. In the GCC states, domestic energy prices have been subject to decades of price controls under un-liberalized markets in which the state utility has been the sole provider of water and electricity. In the Gulf states, the inflow of oil revenues, primarily since the 1960s, has since been coupled to what some see as an informal ‘social contract’ between citizens and their governments: the government collects oil revenues and re-channels the revenues back to its citizens in ways which include indirect transfers in the form of low-cost fuel, electricity, and water. In countries such as Qatar, up until recently, every citizen enjoyed an allowance of free water and of electricity up to a certain volume of consumption. Even in the absence of benevolent state subsidies for electricity, utility provision in the GCC states has been cheap: domestically produced oil has been provided at a historical cost range of a few dollars per barrel, natural gas at a range of $0.75–1.50/MMBtu. These prices reflected historical production costs that made GCC energy provision some of the lowest-priced energy in the world.

This also means that the adoption of renewable energy into the fuel mix of the country, and of the wider region, could turn into a major money drain, or economic sink, if not coupled to an overhaul of prices aimed at setting the right incentives for utilities to make investment choices based on clear economic benefit.

**Fiscal support mechanisms**

Both as an alternative to more fundamental price reform, and in combination with other pricing reform steps, the GCC states have the option of using specific fiscal incentive schemes as another policy option to incentivize private investors to invest specifically in renewable energy projects. Fiscal support mechanisms have been widely used in developed markets such as Europe and North America, and also in some emerging economies such as India and China, to support renewables-based electricity generation. Important financial support mechanisms include what may be termed ‘soft’ policy instruments: soft loans and loan guarantees by governments can be a critical tool to help reduce financial investment risk. Used in addition to other financial mechanisms, loan guarantees can significantly increase the attractiveness of an investment to the private investor.
Other than soft policy instruments such as loan guarantees and others, the GCC economies are, however, constrained in the variety of fiscal incentives they can offer practically. Typical forms of active support for renewable energy projects in Europe and North America include tax incentives and carbon credit-based systems, such as the European Union’s emissions trading certificates. GCC citizens and their corporations are not taxed, however, which leaves the option of tax incentives to foreign private companies investing in the sector. The imposition of a carbon tax, or of a carbon-based credit system, appears similarly unlikely in the context of the GCC states, where the reform of tariffs to reflect costs would arguably need to precede such steps.

Indeed, all fiscal incentives effectively introduce an economic distortion into the market in favour of renewable energy. In practice, this introduces a new public cost item, whose cost level can rise enormously depending on the ‘success’ of the incentive scheme.

In the presence of the GCC states’ existing cost-unreflective domestic energy price environment, fiscal support mechanisms would introduce a further distortion into an already distorted market, and also create significant potential for dependencies, liabilities, and allegations of corruption, a subject not alien to Kuwait’s already overstretched energy sector.

**Quotas and Renewables Targets**

Most policy options which offer an alternative to fiscal incentives are a type of quantity-based support mechanism that aims to affect markets more indirectly than is the case with direct fiscal incentives. The problem with any quantity-based policy option in the GCC context remains the fact that such mechanisms were developed in their original format under liberalized markets such as those in Europe, where utilities could achieve regulatory requirements — such as renewables quota production — by passing on investment costs to final customers. This cannot be applied in the GCC context. Since utility prices across the GCC are state-administered and not set by utilities under a competitive market, utilities would be unable to pass on costs to customers; indeed, the most likely option would need to be the creation of new subsidies (to both state-owned utilities and potential future investors) to even allow these utility companies to run. In the case of the region’s infant private utility sector, rigid quotas with levels of company compensation which are too low for costs related to renewables programmes, might indeed hamper rather than help foster private sector participation; while inflexible support mechanisms would likely reduce incentives for utilities to reduce costs under renewable energy schemes over time.

In both cases, which are realistic scenarios for poorly implemented renewables programmes in the GCC, renewables could become a formidable money-drain. Quota-based systems are a prime mechanism for illustrating this potential dilemma. Renewables quotas are prescriptive policy instruments for increasing
the share of renewable energy in the power sector; they stipulate a compulsory
share of renewables to power generators, and this needs to be achieved by a cer-
tain point in time. A quota differ from a target, which is a vaguer policy objec-
tive with little direct relevance to utilities. The benefit of quota systems, in the
context of other countries, comes from the more limited interference in market
structures than is the case in fiscal incentive schemes; under quotas, producers
themselves choose what technology to invest in and (most importantly in the
European and North American context) the level of pricing.

Targets for renewable energy may be seen as an even less successful means
of raising the share of renewables in the GCC context. An objective rather than
a policy per se, a target may be important in devising a government’s policy
direction — a roadmap in its most basic form but not a replacement for more
active policies of promotion such as fiscal incentives or the restructuring of
domestic utility markets. All GCC states have, in the past, issued renewables
targets, although with inconsistencies (see Table). Kuwait, which lags behind
most of its GCC neighbours in announcing a clearly defined policy vision for
renewable energy, has seen various targets circulating. These typically range
from 1 per cent (undefined) renewables-based power generation by 2015 (a share
which can safely be assumed to be utterly unrealistic) to 10 per cent (around
7.7 GW) by 2030, and 15 per cent by 2030.

It remains unclear how some of this capacity is intended to be achieved,
given the marked absence of any known investment projects, or indeed of sup-
porting policies to promote renewable energy in countries such as Kuwait, Bah-
rain, and even Saudi Arabia.

Generally, the difficulty of moving from targets to actual renewables deploy-
ment at commercial scale reflects weaknesses in domestic planning which have
been witnessed in other parts of the GCC, for instance in Abu Dhabi during
the late 2000’s.

Targeting alone will thus not be enough; renewable energy in the wider
region, will need to be promoted by effective policies that address, primarily,
the cost — the economic disadvantage that is faced by renewables projects, and
not only in the GCC.

Conclusions

Renewable energy still has a long way to go in the GCC. Today, however,
more than at any other time in the history of the GCC states, the focus on
energy alternatives may indeed begin to shift away from the sole reliance on oil
and natural gas, towards a portfolio of energy options which includes renewable
energy. Renewable energy, primarily solar power owing to plentiful resources on
the Arabian Peninsula, will likely play a part in this new energy future, despite
the possibility of sharp differences between the pace and extent of deployment
between different countries within the region. Saudi Arabia and the UAE have
moved ahead with some of the Middle East’s most ambitious renewable energy plans, whose eventual manifestation has yet to be seen as the two countries need to re-focus away from prestige projects towards marketable long-term solutions, to encourage a more systematic take-up of alternative energy sources.

It is also important for the GCC economies to reconsider their historical path; rising energy consumption, the growing opportunity cost of burning exportable oil domestically, and the prospect of diverting increasing shares of their oil production to their domestic markets holds a whole set of different challenges which await the GCC economies in the case of business-as-usual. The choice is more obvious in the short-term in the case of countries that still rely on oil-fired power generation (that is Saudi Arabia, Kuwait, and the UAE) since the cost-effectiveness of solar power to oil is most obvious in the current international pricing climate and is likely to remain so in the foreseeable future.

In the case of the region’s growing natural gas importers rising gas imports may render renewable energy increasingly cost-competitive.

But there is also a long-term scenario, which provides ample reason for the GCC states to consider investment in alternative energy options now, whether or not they find the economic argument overwhelmingly convincing. The recent case of Egypt (while allowing for some important differences between Egypt and the GCC economies in terms of economic decision-making and the time horizon for existing known hydrocarbon reserves) illustrates the enormous economic difficulties associated with decade-long business-as-usual policies in the domestic energy sector. Egypt has already experienced the plight of being an oil and gas exporter that has become a net importer of energy within less than a decade — and against the expectations of a mere ten years ago. While similar scenarios may yet be remote from the planning horizon of many Gulf policymakers today, a prudent look at the allocation of domestic resources suggests that the GCC economies can, over the long term, gain from the deployment of alternative energy technologies.

None of these considerations includes the potential additional benefits that renewables would entail for the region, most importantly in the areas of environmental mitigation of the GCC states’ high per capita fossil fuel use, and through new industrial diversification options into new energy industries.

We have argued above that among the most significant challenges facing the GCC states in deploying renewables systematically will likely be the creation of market-based mechanisms that allow utility providers to pick up renewables as a cost-effective fuel choice over the long term. Most importantly, this will involve a restructuring of energy and utility pricing, which forms a critical part of providing visible economic incentives for the use of renewables over domestically produced fossil fuels. In the absence of more market-based mechanisms, renewables could, however, turn into an expensive investment for the GCC nations, moving economic distortions and deadweight loss from one energy source to another. For this reason, it is necessary for policymakers to combine
supply-side energy solutions with demand-side schemes to create policies that
not only help the GCC economies manage their domestic demand, but that
also facilitate the market-based take-up of supply-sided solutions beyond gov-
ernment take.

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MARKETING TODAY: COMBINATION OF NEW METHODS WITH TRADITIONAL APPROACHES

Abstract
Nowadays, there are many varieties of new and traditional marketing methods and approaches. It seems to be more effective to use them in combination than separately from each other. As traditional and new digital methods are aimed at different groups of people, it is impossible to completely replace traditional methods with new ones. By combining them there is a possibility of expanding targeted audience and maximizing marketing actions. Several ways of using combined approaches will be considered in the article.

Key words: marketing, strategies, new approaches, digital marketing, audience, traditional methods, targeted audience, marketing actions

JEL codes: M 310, M 390

“You can’t just ask customers what they want and then try to give that to them. By the time you get it built, they’ll want something new.”

Steve Jobs
CEO, Apple

Introduction
Nowadays the meaning of the “marketing” has changed so traditional marketing means to do something and then make people love it, while new marketing is doing something that people will love.

The world has transitioned into a digital environment. Not only are magazines going digital, we perform many of daily tasks such as banking online and much of our reading is done on e-readers. However, what has fundamentally changed in marketing approaches and which approach is most applicable and
effective in our time. To do this, first of all, we will consider the advantages and disadvantages of both traditional and new marketing.

In connection with traditional marketing’s longevity it should be mentioned that people are accustomed to it. Finding advertisements in magazines and newspapers, or reading billboards are still familiar activities and people still do them all the time. On the one hand, traditional marketing represents a real world communication and people can touch, feel, hear and interact with this form of marketing. Moreover, companies cannot throw parties or host events to promote a product online like in the real world. Unlike social marketing, people have the opportunity to meet their salesman face-to-face.

On the other hand, traditional marketing is usually forced on the viewer, as they come across it in their daily lives. This means that this old school marketing has a very low response rate. In addition, people do not share a community with the brand, and as a result, they do not care about its promotions. Advertisers spend millions trying to reach people that just do not care enough to act [4]. Moreover, traditional marketing is destined only for a local audience even though it is not limited to one. One of the primary disadvantages of traditional marketing is that the results are not easily measured, and in many cases cannot be measured at all. In most cases, traditional marketing is also more costly than digital marketing. In addition, the biggest disadvantage today is that traditional marketing is static which means there is no way to interact with the audience [8].

One of the benefits of using digital marketing is that the results are much easier to measure, and another one is that a digital campaign can reach an infinite audience. It is also possible to tailor a digital campaign to reach a local audience but it can also be used on the web and reach the entire globe when appropriate. Digital marketing is also a very interactive way of reaching an audience since it makes use of social outlets. There can be plenty of direct contact between the audience and the business which means that the business can get some very valuable consumer feedback. One of the disadvantages of using digital media marketing strategies is that it can take some time to realize measurable success. Social marketing relies on customers being highly interactive on the internet. If a customer does not use the internet often, company can lose this type of audience as a client. That is why a certain balance must be achieved [4].

An important point is that because of the rise of the digital age, it seems like common sense to invest in a digital campaign. Even though traditional marketing still has a place, it is diminishing in our digitally based world. For today’s businesses, it is imperative to have a website and use the web as a means to interact with their consumer base. There are some successful traditional marketing strategies, particularly if company are reaching a largely local audience, but it is important to take advantage of digital marketing so as to keep up in today’s world [8].

Based on the above written it can be concluded that it is much more profitable to combine traditional and digital marketing, reducing their disadvantages...
and increasing advantages. By combining traditional and digital marketing techniques, companies are saving money and improving the ROI of their campaigns. They can combine these techniques in many different ways, including:

1) **Active and passive marketing strategies should complement each other.**

   Traditional marketing methods are much less engaging. One of the best things about digital marketing is that companies and marketers can have instant feedback from their consumer group by following and communicating with them on social networks [2].

   The idea of combining active and passive methods and adding them to the marketing mix, is developed so companies can get instant feedback about their campaigns. One of the best examples of this mix is Coca-Cola’s “Share a Coke” campaign. The idea of the campaign was to personalize one of the most universal products on the market. This idea is as old and traditional as the market itself, but Coca-Cola decided to execute it in a completely different way. They organized a huge online campaign in order to get instant feedback from customers and use their personal social media accounts as an efficient marketing channel. Coca-Cola customers massively shared the bottles with their names, and the campaign turned out to be an instant success.

2) **Event marketing goes digital.**

   Event marketing is a very important component of the marketing mix because it allows marketers to come in direct contact with potential customers. Event organization has been constantly changing since the introduction of social networks. Facebook and other social platforms can be very useful for advertising various promotional events and they also allow organizers to follow the attendance list and track and engage the attendees. These are some of the ways companies can increase their event attendance and their following on social media [2]:
   
   — Programing the conference by measuring feedback and using crowdfunding through apps like: Periscope, Instagram, YouTube;
   
   — Creating separate event pages on: Facebook Event, LinkedIn, Vkontakte;
   
   — Organizing social media contests for event attendees, where promotional products will be shared as rewards. This form of contest can produce a great ROI, especially since printing services and promotional merchandise in general are so widespread and affordable;
   
   — Creating a hashtag for the event and motivating attendees to share their experiences from the event on their social media timelines;
   
   — Sharing event videos, audio and photos on social media and motivating attendees to do the same.

3) **Social Media Marketing and Billboards.**

   Social media marketing and billboard advertising were made to work together flawlessly. A hashtag campaign is the perfect example of this. By encouraging passersby to use a certain hashtag on social media, a company can build excitement about their brand online while still growing a strong brand identity
offline. Even simply stating, “Follow us on Twitter” can encourage people to locate a company online and begin a personal relationship with them [5].

4) **YouTube and Television Commercials.**

YouTube is a dominating domain on Google, so YouTube videos should be a part of any company’s digital marketing strategy. However, that does not mean the videos only need to be used online. In fact, YouTube can be an excellent place to test television commercials to see which ones receive the best response before rolling one out nationwide. Alternatively, a television commercial can also earn a company clicks on YouTube [5].

5) **Make Use of Technology.**

The QR code is one of the best tools for driving traffic to digital content from a traditional marketing resource. If Company put a QR code in an advertisement, on a poster, or in company’s booth at a trade show, organization have the ability to send potential customers to a wealth of content. For example, company can insert a QR code that links customers to the blog or website, gives exclusive content, or provides special coupons or deals. However, the best way to see who is engaged with your content is to insert a teaser in a traditional channel that encourages an audience to get the rest of the story through the QR code. Adopting this tactic also provides data-driven insight as to how combining both traditional and digital marketing bolsters company content reach [6].

**Which Type of Marketing Is Best?**

Currently, more and more people rely on digital marketing, moving away from traditional methods of attracting the audience. It is impossible not to agree with the fact that e-marketing is our future. However, we should not forget about the effectiveness of traditional marketing. Depending on the company’s activities, traditional and new approaches may vary.

The size and demographics of your target audience are the biggest reasons to use, or not use, traditional marketing. Audience age has a lot to do with it. If company are looking to reach the 40 plus audience with strong spending power, traditional marketing will still be a worthwhile way to reach them, since traditional marketing is the way they are accustomed to obtaining information. It is still important to drive traffic to company’s website and to obtain more detailed information for potential customers. If organization are trying to reach the millennials, then traditional marketing will not have much impact on their awareness of sales messages [7].

If company are trying to reach the masses, with a broad spectrum of ages, likes, and interests, then traditional marketing is still a great way to go. Venues such as radio and television reach a wide range of potential clients and can reach the fringe audiences that may not even be on your radar. This is in contrast to the digital marketing world that sometimes may be too focused, missing those on the perimeter that are not necessarily part of main target market but may
still purchase product or services. This is where a combination of traditional and digital marketing methods come into play for the best results [7].

In conclusion, it should be mentioned that the question is not really what type of marketing is best, but instead, it’s what type offers the best way to reach a market. There are different strategies in both traditional and Internet marketing that will work.

In order to increase of marketing activities effectiveness, experts have suggested applying the 80/20 Rule to the marketing mix. For example, Company can invest 80% of marketing time and financial resources into Internet marketing and 20% into traditional marketing [9].

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MEGA-REGULATOR OF FINANCIAL MARKET: NATURE, HISTORICAL BACKGROUND.

Abstract
The problem of financial regulation and supervision is an important issue both for economy and law. Competition for “the best supervisory method” is still going on. This article highlights the main principles of financial regulation — integrated financial regulation and supervision. The article explores their nature and definition. In connection with it, the article examines the background of a mega-regulation emergence and historic experience of its implementation and development.

Key words: mega-regulator, financial supervision, financial markets, integrated financial regulation, banking regulation and supervision.

JEL code: G 180, K 230

The provision of financial services now is an essential part of our life and one of the biggest parts of our economy. Without banks, insurers, brokers and securities we could not imagine our life anymore: we use a credit and debit card transactions every day, we get insurance while traveling, invest our money, safe them by using a deposit institution’s services etc. Financial services in our century have become even more attractive for business than a sphere of real production. It could offer good profitability and require less skills, materials and, first of all, time. Industrial revolution and an increasing importance of computers in our life gave a great boost to improvement of financial services system in way to become the most efficient and progressive way to gain profits both for a business and people. But as usual, every system needs to be protected from glut and self-destruction.

Last decade had changed really a lot in the sphere of financial services and banking services as a part of them. Since banking sector had become the biggest
part of financial markets worldwide and its influence had begun to go through borders, importance of an efficiency of its regulation increased significantly. Banks in the modern economy are becoming to play more vital role then only saving deposits and lending money, now this institutions are affecting all spheres of economy. Fail of one depository institution could ruin thousands of companies and could cause economic recession and moreover global financial crisis.

Role of a government and legislation in process of obtaining control over financial institutions has increased significantly. Government could perform both as a supervisor and as a service provider, state banks and financial institutions are dominating in markets of developing countries — a good example is Sberbank in Russia. Controlling stake of Sberbank is owned by The Central Bank of the Russian Federation. But some scientists notice that situations like this could cause a conflict of interests between supervisory functions of Bank of Russia and its ownership interest. But it is necessary to mention that Sberbank has to comply with the same requirements and standards and it is under even more strict control of banking authority because of its status of systemically important financial institution. It could only mean that any financial institution, even if it is under governmental management, should be well-controlled by authorities because of their importance for whole financial environment.

For years authorities of different countries were looking for uniform tools of banking regulation and supervision activities in order to reduce risks of financial crisis and risks of “chain-reaction” or systematic risks. One of the most popular ways to obtain this result is to apply the best practices and standards of regulation and supervision, which are used in other spheres of financial regulation, such as insurance or stock-market regulations, to another sector of financial market and to work out uniform requirements for all participants of financial market with some specific measures depending on their business [2, 172]. And certainly it is easier to adapt standards and recommendations when authority regulates both spheres of financial market and could react immediately at all changes by accepting new overhauls. Since 1984 there has been a clear trend in many countries toward integrating the prudential regulation and supervision of banks, nonbank financial institutions, and securities markets in a single national agency. This type of regulation structure is called integrated regulator or “mega-regulator”.

Nature of integrated regulation originates from its title. Integrated regulation means a foundation or an empowerment of one authority, which would perform as a sole supervisory authority on the whole financial sector. First of all mega-regulator’s functions include standard-settlement functions, oversight over compliance of these standards and application of coercive measures, but they could differ depending on legislation of particular country. Mega-regulation could give opportunities to prevent illegal arbitrage, could reduce the shadow banking activity and declare and protect a relatively fair market conditions.
The first authority to reach this status was Monetary authority of Singapore (MAS) which controls and regulates all spheres of financial market of Singapore. Also it is the first mega-regulator founded on the basis of the central banking institute of the country and still one of the most productive. There were both successful and unsuccessful examples of implementation of integrated regulating authority in different countries. Financial crisis of 2008 year showed that in some countries this system could be efficient and useful and in some countries it could cause even worse results for economy. A recent example of integrated regulator’s fail is the abolition of British Financial Services Authority (FSA) in 2013 [3]. The mega-regulator in Great Britain was founded in 1998, but had shown its disability to regulate financial markets during crisis. That’s why in 2013 its functions were distributed between the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA).

But there is also experience of well functioning integrated regulators, such as The Federal Financial Supervisory Authority (BaFin) in Germany, which brings together under one roof the supervision of banks and financial services providers, insurance undertakings and securities trading [4]. This is an illustration of mega-regulator founded as a separate agency, as well as The Financial Services Authority of Great Britain used to be.

But following the experience of Singapore some countries prefer to build their system of integrated regulation and supervision on the basis of central bank. Before 2013 year only one country in twenty-five largest financial markets stabilized its integrated regulator on the basis of central bank. This country, as already has been mentioned, was Singapore. But in 2013 The Russian Federation also made a decision to reform its system of financial supervision and to create a mega-regulator, despite a similar overhauling in 2011 in order to widen functions of abolished agency — the Federal Financial Markets Service (FFMS). As everybody noticed it was a first step to cooperate supervision functions in hands of this agency, but State Duma of The Russian Federation preferred Bank of Russia as potential mega-regulator because of its specific constitutional status and its direct connection with State Duma without any influence of The Russian Government. The idea of an integrated financial regulation in Russia has been discussed for last 7 years, and the reform of insurance supervision of 2011, which was mentioned above, only strengthened this rumors. Even so, these overhauls shocked the experts and were greeted with dread and concerns. Anyway, now Russian mega-regulator is working and has already revoked more than 150 licenses of deposit institutions since its foundation.

Of course the potential of supervision reforms substantially depends on market situation, quantity of financial institutions, capitalization of financial sector, political and legislative environment and etc. But prevalence of a positive experience of integrated regulator is undoubtful and shows its advantages. Nevertheless, perfect systems of supervision of financial markets could not exist in imperfect market economy [5]. Sometimes cyclic crises or political problems
are imminent and would necessarily lead to economic hardships. But if the system of financial regulation and supervision is stable enough and financial supervisory authority is working in efficient and reasonable way, it would be possible to minimize harm to financial markets by applying new standards, authorization of transactions, temporarily banning some types of operations and etc. And it’s obvious that in this kind of emergency situations a mega-regulator could be much more effective then pool of financial authorities with different mandates, conflicts of interests and disorganization.

But at the same time much depends on the situation and definite authority. Disproportion of financial markets and dominance of any sphere of financial activity sometimes could lead one of supervisory authorities to widen its influence and to obtain its control. That’s why in a lot of countries without integrated regulation of financial market there is a backroom ruling connected with domination of a banking supervisory authority, because of the dominance of banking business. Same situation used to be in the Russian Federation before it reorganized its system of supervisory authorities. This phenomena makes easier to understand why some countries, including the Russian Federation, started consolidation of supervisory functions in the hands of the banking authority. Moreover, banking institutes has widened a lot the structure and strategy of “making business” by cooperating with other financial institutions or creating a compound financial holding. The consolidation of a wide array of financial activities within large and complex organizations that include banking units not only blurs the traditional lines of demarcation among service providers but increases the potential for contagion effects from the non-bank to the commercial bank components of the same organization [1]. All of the above are the reasons of difficulties in a financial regulation activity and caused these tendencies to integrated regulation.

One of the ways to reduce a potential danger for financial markets, which is not connected with creation of a mega-regulator, is an establishment and development of macro-prudential supervision. Macro-prudential supervision gives an opportunity to an authority to produce a cross-sectoral regulation of financial institutes and to reduce systemic risk. And of course it is much easier to perform supervisory functions in macro-level when the authority is powerful enough to apply some measures to any participant of the whole financial market.

Anyway, the phenomenon of an integrated regulation or “mega-regulation” has its own place in whole history of financial regulation and financial supervision. Since its creation in Singapore in 1984 it has improved a lot, and now there is a clear trend to consolidation of financial regulation and supervision, despite some negative experience at the end of the last decade. Mega-regulators could be build on different basis, but it mostly depends on history or particular features of specific financial market. Mega-regulators have already taken their place in the system of financial regulation worldwide. There are some recent examples of the mega-regulator establishment, such as The Central Bank of the Russian
Federation, and some samples of longstanding authorities, including Monetary authority of Singapore and BAFin in Germany. All of it proves a significant role of an integrated regulation of financial market in the whole system of financial regulation and shows the importance of overhauls in the sphere of financial supervision in order to reach the most efficient structure and mechanism of regulation and supervision.

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ATTRACTING FOREIGN DIRECT INVESTMENTS (FDI) TO RUSSIA’S ECONOMY

Abstract
The research considers a beneficial effect of FDI on the economic growth in Russia. It provides the detailed coverage of sanction consequences on the FDI flows in the Russian Federation. Geopolitical tensions between Russia, Ukraine and the Western countries, slackening in the rate of economic growth in Russia have sent particularly negative signals to investors; as a result, FDI fell sharply by 10 times in 2014. The survey proposes a solution of raising FDI and deals with the attractive economic sectors in the conditions of sanctions.

Key words: foreign direct investment, economic growth, FDI flows, sanction consequences, attractive economic sectors.
JEL code: F21

Modern development of economy is impossible without the attraction of foreign investments. On the 17 of March in 2014, after the introduction of sanctions by the Western countries against the Russian Federation, a few events rendered considerable influence on the investment climate in Russia. The most crucial of these was a sharp decline in oil prices.

The consequences of sanctions
It resulted in worsening of macroeconomic situation in Russia: increasing inflation, unstable exchange rate of the ruble, difficulties with funding, high interest rates, trade curbing practices and complications in sectoral markets. These economic problems have resulted in the lowest since 2006 level of inflow of foreign investment which accounted for only $21 billion. [11,p.3]
Under these circumstances, a significant role in FDI inflow regulations should be given to the Russian Direct Investment Fund (RDIF). It is one of the main institutional bodies coordinating the flows of FDI in the Russian Federation, which was established in 2011 at the discretion of the President and of the Prime Minister of Russia. Its primary objective is to ensure the inflow of foreign investments in the Russian Federation, facilitating the modernization of the Russian economy. The total sum of FDI attracted by the RDIF is estimated at $15 billion. [1]

The dynamics of the FDI flows in the Russian Federation and worldwide

In 2014, 2015 the dynamics of the FDI inflow has worsened in the Russian economy. Indeed, the whole volume of the foreign direct investments rose worldwide by 36% in 2015 compared with the previous year and amounted to $1700 billion. The USA, with an estimated US$384 billion in inflows, excelled China and Hong Kong in terms of the FDI volume last year.

According to the materials of World Investment Report 2015: Global Investment Trends [12]
Flows to transition economies in 2015 continued to fall (−54%) as receding international commodities prices and regional conflicts undercut FDI. Investment in two largest regional economies, the Russian Federation and Kazakhstan, fell sharply. According to the World Investment Report of the conference of the United Nations for trade and development (UNCTAD), the investment volume in Russia shrank by 92%. [6, p. 6]

**Investment climate in Russia**

According to the EY-research “Investment climate in Russia: opinion of foreign investors — 2015”, 90% of the respondents who are still investing to the Russian Federation consider the current economic situation in the country unfavourable and expect a fall of attractiveness of Russia for foreign investors. Notwithstanding such a critical situation, half of participants of the survey expect the growth of activity in particular branches and are going to expand business presence in Russia. Foreign companies often face with the refusal of executive authorities to execute business contacts, low efficiency of the solution of questions, the excess number of documents. [8] However evaluating business climate in the Russian Federation in 2016, it must be noted that the dynamics of improvement of an ease of doing business indicator has accelerated — Russia has risen from the 114th to the 51 place. Moreover, the Russian Federation amended its tax code, providing more favourable tax treatment in priority territories for social and economic development. 5 new projects were designed to improve business in Russia in 2015, which should contribute to an increase in FDI flows to the Russian Federation. [4]

**The sectoral and geographical distribution**

The sectoral and geographical distribution of FDI structure in Russia varies from year to year. On a large scale in 2014–2015 FDI were directed to the Central and Far Eastern regions. [7] The industrial sectors to which the FDI were addressed in 2014, were: construction, building materials; cars and car components; chemical industry; wood industry; retail industry.

![Graph 3. The FDI share by industry (2014)](image-url)
In 2015 the sectoral structure changed in favor of agriculture and chemical industry.

![Graph 4. The FDI share by industry (2015)](image)

The countries which invested actively in the Russian economy in 2014 despite the western sanctions were: Sweden, China and Switzerland. In 2015 the greatest inflow of FDI was observed from China, Turkey, Italy and Germany. For instance, the State-owned China National Petroleum Corp acquired a 20 per cent stake in (OAO) Yamal SPG, for $1.1 billion. In car industry, Great Wall Motor (China) started to build a car plant in Tula region with an estimated value of $500 million. In early 2016, Japan has accounted for 27% of FDI. The branches where the investors direct their investments in 2016 are: agriculture; construction, construction materials; mechanical engineering, equipment.

Russia is now in the process of transforming its investment strategy. At least several shifts are taking place: refocusing from attracting European investment on attracting FDI from the Eastern countries, primarily China; attracting FDI to the rapid development of the Eastern territories; implementing new measures to extend the opportunity to conduct business in Russia. In the opinion of investors, the mostly attractive Russian industries in the nearest two years will be the following industries: electrical energy industry (44%), pharmaceutical industry (39%) and telecommunication services (28%). So, it would be expedient to attract such investors as Germany, Italy, Switzerland, Sweden and the countries of BRICS that persist their cooperation with Russia in spite of the sanctions. [9]

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REMITTANCES AS A SUPPORTING FACTOR FOR THE ECONOMIES OF INTERNATIONAL MIGRATION IN DONOR-COUNTRIES

Abstract
The article investigates the influence of money transfers on the development of recipient-countries. Today, the economic role of remittances is significant for various countries. The focus of the article is on the benefits obtained from incoming remittances by recipient countries. Besides, the author shows positive and negative consequences of official and unofficial money transfers. He proposes recommendations on increasing the transparency of money transfers.

Key words: remittances, international migration, donor-countries, economic development, money transferring transparency.


Introduction
At the present stage of the global economy’s development, cross-border remittances make an enormous contribution to the progress of individual states. Both high and low-income countries considerably benefit from remittances. Remittances are quite testable instruments of economic policy that are not very susceptible to the negative effects of global economic crises. This encourages governments to use remittances to achieve macroeconomic objectives.

Cross-border transfers of individuals consist of remittances, compensations and transfers related to migration [9]. International organization statistics take into account only official remittances. However, in reality there are various unofficial channels used by people to get around high tariffs of transferring money from one country to another. Therefore, we can assume that the amount of money coming into countries is much higher than official statistics claim.
Connection between migrants and remittances

One of the factors of cross-border money transfers’ growth is the increasing number of international migrants. During the period from 2000 to 2015, the number of international migrants has risen from 175 to 251 million people [4, v]. As projected by the UN Economic and Social Development Department this number will exceed 415 million people by 2050[8, 4]. This will lead to an increase in cross-border remittances amounting to more than $601 billion in 2015, having increased by more than 80% over the last 10 years [4, 38].

It is important to note that among the accumulated remittances of $601 billion, up to $441 billion were received by developing countries[4, 38]. The largest developing-country recipients of cross-border remittances in 2015 were India, China, the Philippines, Mexico, Nigeria, Egypt, Pakistan, and Bangladesh. Almost all these countries were the largest donor countries of international migration in 2013 [4, 38]. It proves that migration flows are closely linked to the flow of cross-border remittances.

There are various reasons why people go to other countries. However, the main reason for labour migration is to obtain greater incomes overseas than they are potentially able in their native countries. Besides, the inequality between the richest and the poorest countries is continuously increasing. In 1820, these countries’ ratio of GDP per capita was 3:1, and in 2011 — 384:1 [3]. For this reason, labour migration attracts more and more people.

Benefits for remittance-recipient countries

Some governments are interested in stimulating inflows of cross-border remittances. There are several reasons for that.

Firstly, in some countries cash receipts in the form of cross-border transfers are an important source of foreign exchange, which exceeds export earnings and covers most of the import spending. For example, in Nepal and Uganda, remittances are twice as large as the earnings from the major export of goods and services, in Sri Lanka and the Philippines, they comprise 50% and 38% of export revenues, respectively [5].

Secondly, cross-border money transfers are relatively stable and do not fluctuate due to economic crises, comparing to the FDIs. In 2008, at the height of the global economic crisis, FDIs to developing countries fell by almost 30%, while remittances by only 7% [4, 34]. World Bank experts say that remittances are a stable and acyclic tool to maintain a country’s economy, in contrast to capital flows which react sharply to changing global market conditions [1, 179].

Thirdly, the consideration of remittance inflows from the point of view of the “Keynesian Cross” model shows that most countries at least do not suffer losses due to exchange inflows: other things being equal, there is a growth in household consumption and gross savings, the level of public spending does not change, and net exports decline. In most cases, the growth of actual con-
sumption and savings exceeds the decrease in net exports due to exchange rate changes. Hence, countries, receiving remittances, benefit from it.

Consider the “Keynesian Cross” model in more detail. One of the indicators of economic growth is gross domestic product (GDP). According to the UN SNA 2008, GDP calculated by the final use method is defined as “the sum of final consumption expenditure, plus gross national savings, plus exports, minus imports” [6, 712]. If we consider the impact of incoming remittances on every component of GDP, it is possible to determine the cumulative effect of the inflow on economic growth.

Final consumption consists of two parameters: household consumption and government spending. Cash inflows from abroad provide an increase in disposable incomes, which leads to an increase in household consumption. According to the “Global Economic Prospects” report published by the World Bank in January 2015, remittances are associated with a more stable growth of domestic consumption. Experts claim that in countries with significant cash inflows, the growth of output is less correlated with consumption during the production cycle. More than that, such consumer behavior has a positive effect on the countries [1].

It is rather difficult to estimate the impact of remittances, coming into the country, on government spending, as there is no direct relationship between these two indicators. Government expenditures consist of government consumption, public investment, and transfer payments. Incoming remittances do not directly affect any of these indices, so let us keep public expenditures unchanged when remittance inflows increase, ceteris paribus.

**Gross national savings**, or private investment, have a positive correlation with cash inflows. One of the main conclusions of the Keynesian macroeconomic model is that private investments of population are equal to aggregate savings [2, 47]. The inflow of funds primarily stimulate consumption. However, the money, that was not consumed, goes to savings.

It is worth mentioning that countries differ in their standards of living and mentalities of their inhabitants. In some countries, cash inflows can provide a higher investment growth than in others, where money is used mainly for current consumption. In other countries, because of the restrictive investment policy and high interest rates, population forwards savings to bank deposits instead of investing them. Each case is particular. However, in accordance with the above theory that unifies different national approaches with the regulation of the economy, savings have a positive impact on investments. Therefore, cash inflows from abroad boost investments in the economy as soon as certain economic conditions allow it.

Net exports, in most cases, oppose inflows from abroad. Remittances are taken into account in the capital account of the balance of payments. An inflow is written with a “plus” sign, an outflow—with a “minus” sign. Correspondingly, cash inflows contribute to the creation of the balance of payments surplus and
the outflow of its deficit. According to the macroeconomic theory, promoting the balance of payments surplus by the influx of foreign currency into the country, leads to national currency strengthening.

The theory of international trade argues that because of strengthening national currency, trade with foreign partners becomes “cheaper” than in the situation that precedes exchange rate changes. Economic agents who purchase imported goods and services win in this situation. Those, focused on the export of national goods and services, are losers. That is why, imports of goods and services increase and exports decline, which leads to the decrease in net exports.

Thus, considering the GDP calculated by the final use method, we see that the inflow of funds from abroad results in the increase of household consumption and gross savings, in the reduction of net exports, and in unchanged level of government spending, ceteris paribus. To determine the effectiveness of the impact of incoming remittances on economic growth, it is necessary to define which effect is greater: the increase of consumption and gross savings or the reduction of net exports. Depending on the results, each country should determine its own immigration policy and the policy toward incoming funds.

**Informal remittances**

The world system of cross-border money transfers has certain drawbacks. Despite the fact that logistics companies like “DHL” have offices in more than 220 countries around the world [10], not all remittances go through official agencies. The reason is high tariffs. Executive Secretary of the UN Capital Development Fund Judith Karl states that high prices for cross-border remittances reduce their effectiveness and transparency so it needs to be worked out [11]. It encourages people to use informal money transfer channels such as “Hawala”, “Hundi”, “Padala”, and others. It is worth noting that unofficial remittances stimulate the development of recipient countries’ economies. They are, finally, sent on a relatively larger scale due to the absence of high tariffs.

In 2010, the World Bank and the IMF estimated that if the official sources of data collection had taken into account informal remittances to developing countries, their volume would have increased more than twice. At that time, the official remittances amounted to $339 billion [7, 124].

The spread of informal remittance channels has both negative and positive consequences.

On the one hand, the expansion of informal ways of money transfer causes a shortfall in potential revenues of the companies involved in money transfers on a formal basis, and therefore, a shortfall in potential output of donor-states tax payments. This adversely affects financial institutions of the donor-countries.

On the other hand, informal transfers are made in larger quantities than through official channels due to the absence of high tariffs. It leads to the gains of recipient-countries. Individuals send potentially more money than they could
do through official channels, so the money inflow to donor-countries of international migration is larger than the potentially possible through official transfers. For this reason, we can say that informal remittances can stimulate economic growth of recipient-countries.

Proper regulation of cash flows can bring benefits to both donor and recipient countries. The relatively low fee for money transferring stimulate the use of formal channels, which is beneficial for donor-countries. In contrast, remittances, functioning as transfer payments, are profitable for recipient-countries. In general, recipient-countries are developing countries: India, China, the Philippines, Mexico, Nigeria, Egypt, Pakistan, Bangladesh, etc. However, among the largest remittance recipient countries there are also such developed countries as France, Germany and Belgium. Key donor countries are the developed countries and OPEC-countries: the United States of America, Saudi Arabia, the United Arab Emirates, Great Britain, Germany, Canada, France, Russia, Italy and Spain.

Conclusion

Thus, cross-border remittances play a significant role in the development of many countries of the world, because the clever use of remittances by the donor-countries of international migration can contribute to their effective economic growth.

It should also be pointed out that, at the present stage, it is important to ensure greater transparency of remittances in order to estimate them more accurately and to increase the efficiency of their use in each country. This arrangement will contribute to measuring official remittances’ volumes more accurately, identifying informal transfers, and determining reasons for using informal channels.

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ELECTRONIC MONEY AS A PHENOMENON
OF VIRTUAL ECONOMY

Abstract
The goal of the article is to provide a satisfactory theoretical foundation of the concept of electronic money and provide its latest research perspectives.

The e-money is analyzed as a potential instrument for the optimization of payments. The place of e-money, its technological advantages and disadvantages were investigated. The question is whether e-money can be used as an effective tool for the gradual growth of cashless payments that can lead to full replacement of paper money or not.

Key words: electronic money, cryptocurrency, digital cash, Bitcoin, PayPal, electronic money association.

JEL code: O33

The modern world is developing dynamically. It evolves as rapidly as the pace of our lives. Due to the informatization and the computerization of society, the cyberspace provides via the Internet more and more influence on our lives. In this regard, the payments system has also undergone a serious change, proposing such new phenomenon as electronic money. In this regard it is necessary to study and note its influence on the world economy.

The fact that this phenomenon and the consequences of its growth are not absolutely studied creates a dilemma. On the one hand, many scientists consider this phenomenon as a breakthrough which will allow passing the society to a new step of development; on the other hand there is a big risk of a collapse of all financial system of the state, using this technology.

Paul Vigna and Michael Casey, two journalists at the Wall Street Journal in their new book “The Age of Cryptocurrency” predict that “bitcoin’s main call-
ing will indeed be as a disruptive payment system”, which can mean a negative impact on the national payment system [1].

Others believe that the e-currency by itself is not a threat to a state. However, they acknowledge that the recognition of e-money as a national currency may result in financial instability. In Quarterly Bulletin for 3 quarter 2014 of the Bank of England it was noticed that “Digital currencies do not currently pose a material risk to monetary or financial stability in the United Kingdom... A variety of potential risks to financial stability could emerge if a digital currency attained systemic status as a payment system” [2, 8].

**The essence of the concept of e-money**

At the moment there is no single definition of electronic money, but they all resemble each other. According to the European commission e-money is defined as “electronically, including magnetically, stored monetary value for the purpose of making payment transactions” [3, 11]. The purchasing ability of e-money is kept on plastic cards with the help of microprocessors or via the Internet which is more actual in recent years.

Bank deposits, direct deposits and digital currencies can be given as illustrative examples of e-money. Despite that premises of its appearance were laid as far as the middle of 19 century this technology has evolved only since 1993, when the Central Banks of European Union began to study the phenomenon of e-money. First this idea was proposed by Doctor of Computer Science David Chaum in his work “Untraceable Electronic Mail, Return Addresses, and Digital Pseudonyms” in 1983. Later in 1990 he created the company DigiCash to put this technology into live. The invention of digital asset by Satoshi Nakamoto known to the world as the Bitcoin is also of great importance.

**The classification of e-money**

The phenomenon of e-money means various types of it, which have their own characteristics.

There are the two main groups of e-money. One of them is card based. Examples of card-based e-money are Visa cash, Mondex. The second group of e-money is network — based, for example, a PayPal.

One more classification of e-money should also be mentioned — the fiat and non-fiat e-money. As fiat money is expressed in one of the national currencies it is subjected to national legislation and other rules of state agencies. Non-fiat e-money conversely is a unit of nongovernment payment system and depending on the country and the creator of this currency is processed according to certain rules. Examples of non-fiat e-money are QIWI, Bitcoin

There is also anonymous e-money which does not require the user’s authentication and has its special name — digital cash — and not anonymous e-money where customers have to register.
Advantages and disadvantages of e-money

Electronic money is very convenient to pay for a number of small payments, such as payments for utilities, the Internet, fines, transport, movie tickets, restaurants, theaters, etc. There are many benefits of e-money:

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- there is no need to change it thanks to its excellent divisibility;
- it is easily portable as the overall weight of money is not associated with its value;
- there is no need to use metals, paper or paint and special equipment for the emission of electronic money, so the cost of emission is very low;
- electronic money is perfectly during the centuries;
- it is much more anonymous than paper currency;
- it gives the opportunity to a possible internationalization of money.

Unfortunately, there are also some drawbacks of e-money:

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- there is a lack of established legal regulation as different states have different approaches to the use of electronic money;
- in spite of the excellent portability, electronic money should have special electronic equipment to be handled with;
- the security (protection against theft, forgery, etc.) — must be constantly upgraded;
- as e-money is very difficult to track the risk of money laundering is obvious;
- the question of a risk of loss can also occur if e-money is stored in a crashed hard drive.

The well-known representatives of e-money

In order to understand how this is relevant today, it is necessary to consider the most famous examples of virtual currency. Firstly, it is Visa Cash. This smart card combines the convenience of payment cards with built-in security and functionality of a chip. The Visa card allows to pay pocket expenses quickly and easily.

Another example is PayPal. It is a world-renowned operator of electronic cash. It enables customers to pay bills and purchase goods, to send and receive remittances. The principle of functioning is rather simple — customers link their credit cards to the wallet on PayPal.

As a part of the world’s largest auction eBay in 2014 PayPal’s total revenue composed $7.9 billion that represented 44% of eBay’s total profits [4]. Nowadays it is an independent company which revenue is $9.24 billion, so it has increased by 17%.

There is some more statistics to prove that this payment system is developing and is having a success at the moment (all the results of the 1st quarter 2016 are presented for comparison with the data of the beginning of the independent existence of PayPal) [5].
Bitcoin also should be noted as a widely-known system using a virtual currency. It gives an opportunity to exchange real money through specialized platforms and thus can be used to pay for goods and services. One of interesting features of Bitcoin is the emission of new bitcoins.

As you can see on the graph, the market capitalization of bitcoin increased on more than 6 billion dollars from 2011 to 2015 that promises very good prospects for the development of this cryptocurrency [6].

**The emission of e-money**

The movement of e-money goes through computer networks, the Internet, payment cards, electronic wallets and other devices (asynchronous transfer
mode or ATM, point of sale or POS-terminals, etc.) Accordingly the question of who and how should regulate it has different approaches in various countries.

According to European Union legislation only the Institute of Electronic Money (ELMI) can issue electronic money. However different countries set their own rules about who can act as such institutions. For instance, the electronic money issue can be realized only by banks in some countries such as Nigeria, Mexico, Singapore, Ukraine and Taiwan. But in Hong Kong this right belongs to licensed deposit companies.

One of the most important organizations, representing electronic money issuers is the Electronic Money Association or EMA. It was founded as a result of the implementation of E-money Directive. The association works in the field of legislation, regulation and development of e-money in customer service.

As it can be seen from table, the EMA includes a great number of the largest e-money issuers in the world [7]. It indicates the existence of the need for the technology of electronic money at present.

Table 1

<table>
<thead>
<tr>
<th>List of member organizations</th>
<th>One Money Mail Ltd</th>
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<tr>
<td>Advanced Payment Solutions Ltd</td>
<td>One Money Mail Ltd</td>
</tr>
<tr>
<td>Airbnb Inc</td>
<td>Optimal Payments</td>
</tr>
<tr>
<td>Citadel Commerce UK Ltd</td>
<td>Google Payment Ltd</td>
</tr>
<tr>
<td>Facebook Payments International Ltd</td>
<td>One Money Mail Ltd</td>
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<tr>
<td>PayPal Europe Ltd</td>
<td>Q Money</td>
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<tr>
<td>Skrill Limited</td>
<td>Yandex.Money</td>
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<tr>
<td>Worldpay UK Limited</td>
<td>R. Raphael &amp; Sons plc</td>
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<tr>
<td>Stripe</td>
<td>Ekuantia EDE, S.L.</td>
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<tr>
<td>American Express</td>
<td>IDT Financial Services Limited</td>
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<tr>
<td>Optimal Payments</td>
<td>Payleven Ltd</td>
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<tr>
<td>Boku Inc</td>
<td>Flex-e-card</td>
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<tr>
<td>Kalixa Pay Ltd</td>
<td>Ixaris Systems Ltd</td>
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<td>iCheque Network Limited</td>
<td>EMP Systems</td>
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<tr>
<td>Syspay Ltd</td>
<td>Corner Banca SA</td>
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<td>Clydesdale Bank</td>
<td>Allegro Group</td>
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The most well-known of them are: American Express, Google Payment Limited, Yandex.Money, PayPal Europe Ltd and etc.

The Russian experience in e-money circulation field

As for the development of e-money in Russia it should be emphasized that there is a certain rise. According to the report by management consultancy J’son & Partners, e-money share of total electronic payments increase was 570
billion rubles that is a rise to 29% in 2014 compared with 2013. Moreover they suppose that the market turnover of e-money will amount to a little less than 1 trillion rubles by 2018 [8].

According to the investigations of the same company, in the first half-year of 2014 the share of payments via e-money for mobile communication has slightly decreased and the share of transfers between individuals increased and this trend can possibly remain till 2018 that is shown on the chart.

Among the Russian scientific and legislative environments the opinion on the development of electronic money is ambiguous. However, in fact the Bank of Russia has set a special working group to study the blockchain technology, used in calculating cryptocurrency bitcoin in September 2015.

**E-money in the world**

After reviewing the data on the use of virtual currency in the world, it is necessary to note a very rapid pace of its development.

For example, in December 2015 the total issuance of electronic money by Monetary Financial Institutions amounted to 7 billion euro [9].
Prospects of paper money replacement

Nowadays, with the increasing use of the Internet and a variety of devices the question of replacing the paper money has been repeatedly discussed.

According to the forecast of A.T. Kearney, the leading global management consulting firm, “one-third of the world’s roughly 121 billion annual non-cash payments occur in Europe—and this number is growing. Going forward, non-cash payments could grow at 8 percent per year to exceed 177 billion transactions by 2020” [10].

Perhaps, e-money can dramatically change the balance toward cashless payments. In countries such as the USA and Germany it occurs with more than a quarter of non-cash payments, including e-money and in Singapore and the Netherlands more than half of transactions is cashless (see chart) [11].
Moreover, in Singapore in 2013, about 81% of such payments were already made up with e-money [12].

In conclusion it should be noted that since the emergence of the Internet and e-commerce the process of formation and development of a new kind of payment system seems to be logical and consistent.

The technology of e-money appeared due to occurrence of the need of modern society in the implementation of fast electronic payments.

The perspectives of using of e-money as an alternative to paper money seem rather ambiguous. However, it is a fact that further progress in information technologies and the extension of their use in economic processes will accelerate the replacement of conventional money for electronic one. Actions and decisions of states and international organizations greatly influence the possible variants of solving this issue.

References
QUANTITATIVE EASING IN RUSSIA: SHOULD WE ADOPT WESTERN EXPERIENCE?

Abstract
After the 2008 crisis banks began to use new methods that had not previously been used and one of them — quantitative easing (QE). In Russia, despite the authorities’ denial of this policy’s effectiveness, the Stolypin club offers a Russian version of QE — stimulating monetary-industrial policy with outstripping supply, long-term loan at a low rate. It is suggested a targeted QE when the emission of rubles will be sent directly to investment projects.

Key words: quantitative easing, the Stolypin club, project-financing
JEL codes: E 310, E 410, F 490

Monetary policy is one of the stabilization policies (along with fiscal, foreign trade, structural, monetary, etc.), aimed at flattening economic fluctuations. Until the Great Recession of 2008 banks had used the standard monetary policy — they changed interest rates and bought bonds on the open market, if there was excess liquidity. It was believed that if the government wants to raise interest rates — to slow down the economic growth — it can sell government bonds on the open market and, thus, attract free money from the population.

After the crisis banks began to use new methods that had not previously been used and one of them — quantitative easing (QE). This tool consists in printing money that is used to purchase paper assets. QE aims are to reduce paper asset profitability and, pumping money into the economy, stimulate investments, development, consumption, as well as eliminate deflation. This tool was pioneered by the American government and later adopted by the Japanese authorities. In 2015, the QE was used in the euro zone, followed by Sweden and Denmark. Meanwhile, the US have already cut down a program and set a course for the dollar strengthening. Yet, they are thinking now whether to continue to
strengthen the currency while their competitors are engaged in weakening their currencies to boost the economy and exports.

The period from the bankruptcy of Lehman Brothers (US) in mid-September 2008 to the change in market trends in the spring of 2009 was characterized by a sharp decrease in economic forecasts, falling markets, an avalanche stream of writing-offs assets from bank balance sheets and acute crisis of confidence in the banking sector. The spread of the crisis tendencies in the economy required a transition to a “cheap money” policy expressed in an aggressive reduction in interest rates and the implementation of non-standard programs. The increased threat of deflation and the lack of interest rate effectiveness led to a transition to a QE policy.

Japan is considered to be the greatest social experiment in the world. Japan had to borrow a lot of money to finance the social security (medical care, education, pensions). The amount of money that Japan owed (a substantial part of it is to its own residents, pension funds, insurance companies) is 3.4 times higher than the volume of all goods and services produced in the country. To cope with the problems Shinzo Abe launched in 2012 a financial experiment called “Three Arrows”. The first arrow — the yen devaluation by the method of quantitative easing until the inflation reaches 2%. Deflation is dangerous for the economy because if people know that something will be cheaper tomorrow, they postpone the purchase, and if no one buys anything, the economy experiences a downturn [8].

The second arrow — massive funding of state programs by the method of quantitative easing (Japanese bank purchases government bonds). The third arrow — structural changes that facilitate investment and consumption growth. Structural reforms also meant exporting Japanese infrastructure, increasing the country’s share in international trade, reducing the number of women among the economically active population. We can say that the first two arrows do not solve the global economic problems because as soon as the measures stop influencing the economy, the same issues can arise. It is too early to talk about the results of the third arrow, as the effects will be visible only in the long term.

In Europe, the main feature of the quantitative easing program launched by European Central Bank (ECB) is its scope and attempt to share the risks. Within the framework of this program, ECB was purchasing securities until September 2016 in a total amount of 1.14 trillion euros. The European national CB bought government bonds (rather than private papers) within certain proportions to share risks. Also with the help of their interventions the ECB make commercial banks and other private investors finance not the safe government securities (for which the yield is very low), but lend money to the real sector of the economy designed to stimulate economic growth in the euro area [8].

European Central Bank actions appeared to be insufficient to overcome deflation and a decreasing demand in the euro area (index of deflation in the euro area in mid-June 2016 amounted to 0.1). Lacking currency devaluation
because of membership in the euro area, many countries of the monetary union experience problems with their own competitiveness [7].

Dollar is rising in value while the euro is becoming cheaper — it is a blame of the extension in monetary policy on both sides of the Atlantic. While the Federal Reserve protects the probable tightening, European Central Bank supports the ultra-low interest rates and runs a program of quantitative easing (essentially begins to “print money”). If Europe is on the verge of recession and low growth — in 2012–2013 real GDP in the euro area fell and in 2014 grew by less than 1% — then US economy has been growing for the past five years with the average rate of more than 2–3% per year. The inflation in Europe has slowed down in the last two years, and on the periphery — from Latvia and Slovakia to Ireland and Greece moved into deflation. In the US, prices are going up steadily. This implies a gradual strengthening of the US dollar against the euro. The reason for the fall of the euro with quantitative easing is quiet simple — easing increases the demand for bonds and banks sell more and more bonds pumping up the banking system with additional money. The increase in the volume of euros in circulation should reduce the rate — in the same way as the dollar became cheaper against key currencies of its trading partners during the US quantitative easing program [1].

With regard to the QE program in Russia, the experts of the Stolypin club proposed to implement this policy in Russia. Experts argued that Central Bank should finance projects and refinance loan programs for small and medium-sized businesses, mortgages and large infrastructure projects. They believe that economic development cannot be built only based on macroeconomic stabilization policy, inflation “targeting” and a balanced budget [5].

To increase investments the Stolypin club proposes a stimulating monetary and industrial policy. It involves outstripping supply of affordable, long-term low rate loans. Yet, the Central Bank can face a danger of inflation risk. Therefore, the supporters of the program propose to exclude this risk by investing money in new investment projects. The idea is that Central Bank should refinance commercial banks at least for 1.5 trillion rubles a year for a row of five consecutive years to fund high-tech projects as well as refinance securitized loan portfolios granted by commercial banks to small and medium-sized businesses. Expansion of the money supply is still accompanied a decrease rather than increase in inflation due to the absorption of the money by “hungry” real economy [4].

The Stolypin club supporters state that the unavailability of loans and the volatility of the ruble are essential characteristics of poor investment climate. In the current situation, these factors are much more important than institutions and inflation. In support of these words, Sergei Nedoroslev, the President of Stan, said that the central bank’s policy should be adjusted to domestic realities and it is necessary to find ways to finance quite competitive industries, for example, the machine-building industry. If it becomes possible to obtain loans at reasonable interest rates for the development as well as for working capital
for a raw of seven consecutive years, it will be possible to develop and produce series of machines, which will be bought and delivered to their customers upon request. The company authorities that Russian companies can win up to 30–40% of tenders on the domestic market [6].

In conclusion, Russia cannot use the experience of developed countries in the management of the money supply as it cannot print a reserve currency, and the financial market is small and monopolized by a few state banks. Therefore, it is suggested that the Central Bank should use targeted “quantitative easing” by the Central Bank and the emission of rubles should be put down into to investment projects [3]. Banks de facto will become a settlement center between the Central Bank and manufacturing businesses.

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TAX EVASION VS. TAX AVOIDANCE: FIRMS’ STRATEGY DEVELOPMENT IN A COMPETITIVE ENVIRONMENT

Abstract
The paper studies reputation and morality as the determinants of tax avoidance and evasion by firms, household and individuals. There are several directions of research in the literature of tax avoidance and evasion drivers: agency problems, corporate governance, tax rates, the probability of detection and punishment, penalties, risk-aversion and intrinsic motivations of economic agents. The latter approach investigates moral and reputational factors in decisions of agents. The aim of the author is to offer guidelines for policy-makers and tax authorities for improving tax collection systems as well as strategic directions for firms by unification of moral and reputational costs approaches in the context of tax evasion and avoidance. Based on extensive historical review and theoretical modelling approach, the author fills in a recent gap in the literature on tax collection and develops a general model of tax avoidance and evasion moral trade-offs by economic agents. The model is then used to check the behavior of economic agents to administrative policy-measures, implemented by tax and financial authorities. Overall results will be of interest to scholars of institutional and behavioral economics and taxation, and tax and financial administrations.

Key words: tax evasion, tax avoidance, moral costs, reputational losses, under-sheltering puzzle, over-compliance puzzle

JEL codes: D11, D21, H21, H26

1. Introduction
The paper investigates the true sources of tax collection success. The problem of determinants of tax collection is studied in the literature since Adam Smiths’ times. However, the question of key drivers of tax avoidance and evasion is still discussed in the literature [8]. According to a set of most recent tax gap estimates for tax year 2006 released by the Internal Revenue Service [12], the gross tax gap in the US is estimated to be 83.1%, meaning that about 17%
of tax revenues or $450 billion was not paid on a timely basis or never paid. The same share of taxes is underpaid in Russia and the EU. Understanding of and managing the key determinants of tax collection efficiency is crucial for the government to pursue the most optimal tax collection policy. In turn, corporations should realize the outcomes of different tax evasion and avoidance schemes. The same idea is relevant for the households.

The aim of the author is to offer guidelines for policy-makers and tax authorities for improving tax collection systems as well as strategic directions for firms by unification of moral and reputational costs approaches in the context of tax evasion and avoidance.

The above-mentioned figures on tax gap suggest by itself that the tax and financial authorities should implement some policy-measures to improve tax collection systems. In the same time, corporates should not evade and avoid taxes too much because of negative impact of such activities on their reputation and brand equity. The same argument is relevant to households, which can incur moral costs due to illegal or socially unfavorable. The basic idea is that the government can affect reputation losses and moral costs in the economy by using the set of different parameters.

The rest of the paper will be organized as follows. Section 2 provides a historical overview of the tax avoidance & evasion theoretical modelling research. Section 3, in turn, presents the description of model and key results derived from it. Section 4 briefly sums up the paper and outlines the directions for further research.

2. Literature Overview

The loss of tax revenues makes it difficult for the government to provide public goods for citizens. For these reasons, tax evasion modelling has been extensively studied by scholars since the original tax-evasion model of M. Allingham and A. Sandmo (1972) [1], and has received much attention from policymakers (see Figure 1). In the standard models of tax evasion (M. Allingham and A. Sandmo (1972); S. Yitzhaki (1974) [10]), moral costs of evasion are absent, and evasion is viewed as a risky asset in the sense that a taxpayer has to pay the penalty when evasion is caught. The morality was introduced to tax evasion theoretical research by Y. Benjamini and S. Maital (1985) [3] and J. Gordon (1989) [7]. Morality makes evaders feel guilty about evasion, discouraging evasion. With morality, some individuals thus never evade even if evasion is financially profitable, explaining the over-compliance puzzle that most taxpayers do not evade even if the probability of detection is very low and hence evasion is a profitable gamble (J. Andreoni et al., 1998 [2]; J. Slemrod and S. Yitzhaki (2007) [10]).

Unlike tax evasion, tax avoidance and particularly the problem of under-sheltering puzzle due to reputation sensitivity are not theoretically modelled in the literature yet [8]. There are only some empirical approaches to study this
The rising interest of researchers and policy-makers to the reputational and moral effects of tax evasion and avoidance was mentioned by B.Frey and B.Torgler (2007) [6].

Figure 1. Evolution in theoretical modelling of tax evasion & avoidance

The bibliometric analysis of the papers on the topic of tax avoidance and tax evasion demonstrates the boom in the publication activity on tax avoidance and evasion. The upward trend is clear for the last twenty years (Figure 2).

Figure 2. The publication activity on tax evasion & avoidance

Source: prepared by the author on the basis of Web of Science
The latest papers look at morality as costly activity that inhibits too large-scale tax evasion and avoidance. However, there is a gap in the literature that was mentioned by some authors. There are no general theoretical modelling attempts to explain under-sheltering puzzle, which means that firms and households purposefully avoid less taxes than they can.

3. Theoretical Modelling

The general idea of modelling tax avoidance and evasion is to develop the cascade of specific models for each type of the economic agent. There are no one complex model in the literature uniting tax avoidance and evasion decisions by firms and households. However, such an approach may have positive impact on the quality and depth of government tax and financial policy due to including interrelationship driver of tax avoidance and evasion. The morality is the problem of households. Whereas the reputational costs (or losses) are the challenge for firms.

In this paper the author make a hypothesis that tax avoidance is not preferred by firms and households as much as tax evasion because of moral and reputational factors.

3.1. Model Framework

Consider a general model of tax avoidance and evasion moral trade-offs by economic agents. Assume that there are three groups of economic agents in the economy: representative (or aggregated) households, representative (or aggregated) firms and the government. The set of underlying assumptions of the model contains the next points:

— There are two tax phenomenon in the economy: illegal tax evasion and legal tax avoidance. Firms and households can both avoid and evade taxes. The government has direct tools to affect tax evasion \( (p - \text{the probability of being caught and penalized for both households and firms, } m - \text{the total amount of fines and penalties per dollar of illegally underpaid taxes, } m > 1 \text{ due to the necessity to recover a principal tax debt}) \);

— There are two types of tax in the economy — corporate income tax \( (v - \text{the corporate tax rate}) \) and payroll tax \( (t - \text{the payroll tax rate}) \);

— The owners of firms are households. They gain all the after-tax profit of firms perceiving it as their revenue;

— Households incur moral costs in case of avoiding \( (\psi \text{ per dollar of underreported income, } \psi > 0) \) and evading taxes \( (\theta \text{ per dollar of underreported income, } \theta > 0) \);

— Firms incur reputational losses in case of avoiding \( (\phi \text{ per dollar of underreported income}) \) and evading taxes \( (\delta \text{ per dollar of underreported income}) \);

— There is no effect of investment decision of firms on the parameters of the model;
There is no effect of the consumption-savings ratio on the parameters of the model.

The representative household maximizes its expected utility function (1) by choosing optimal values of tax evasion (e in dollars) and avoidance (a in dollars) (K. Lee (2016) [9]):

\[
E(U) = (1 – p)U(y_n) + pU(y_e) – \theta e – \psi a, \quad (1)
\]

where \(y_n\) denotes the household’s income when it is not caught evading, \(y_n = y – ty + te + ta\), and \(y_e\) denotes the household’s income when it is caught evading and penalized, \(y_e = y – ty + te + ta – mte\). It is worth to remind that \(U’(\cdot) > 0\) and \(U''(\cdot) < 0\).

The representative firm, in turn, maximizes its expected after-tax profit (2) by choosing optimal values of tax evasion (s in dollars) and avoidance (w in dollars). The after-tax profit is assumed to be equal to household’s income y. Assume that there is continuum of equal sized competitive firms in the economy (price-takers or followers), perceiving the market price \(Pr\) as fixed value (it is worth to note that there can be investigated the case of monopoly, monopolistic competition or another non-pure competitive market structure):

\[
y = (1 – p)[(1 – v)(Pr – n)q(Pr, rc) + vs + vw] + \]
\[
+ p[(1 – v)(Pr – n)q(Pr, rc) + vs + vw – msv], \quad (2)
\]

where \(n\) denotes the marginal (and average) costs of firm (that’s why total variable costs are linear, fixed costs are equal to zero), \((Pr – n)\) is market markup or premium; \(rc\) is the total amount of reputational costs, \(rc = f(s, w) = \delta s + \phi w\). The demand for goods produced by the firm \(q(Pr, rc)\) negatively depends on market price and reputational losses due to suspicion of evasion or avoidance.

The government collects taxes in order to finance fixed budget expenditure \(G\). It’s target is assumed to be minimizing fiscal deficit \(h = G – T\), which is equal to maximization of total tax revenues \(T\). There are no fiscal transfers in the economy. The optimization problem for the government is thus to choose the optimal probability rate \(p\) of catching and penalizing evaders to maximize total tax revenues (3):

\[
T = t(y – e – a) + ptem + v[(Pr – n)q^* – s – w] + pmsv – pl, \quad (3)
\]

where \([t(y – e – a) + ptem]\) is the total tax revenues due to households, \([v[(Pr – n)q^* – s – w] + pmsv]\) is the total tax revenues due to firms, and \(pl\) are total costs of tax administration (\(l\) is the cost of improving administration per one percentage point of probability rate).

3.2. Results and Discussions

Assume there is no corner solution in the model and the first order condition is necessary and sufficient condition for optimum. Consider the first-order conditions for an interior maximum of the expected utility of household:
Derive the sensitivity of household’s utility to moral costs of evasion ($\theta$) and avoidance ($\psi$):

$\frac{\partial E(U)}{\partial e} = (1 - p) \frac{\partial U}{\partial y_n} t + p \frac{\partial U}{\partial y_c} (t - mt) - \theta = 0$ (4)

$\frac{\partial E(U)}{\partial a} = (1 - p) \frac{\partial U}{\partial y_n} t + p \frac{\partial U}{\partial y_c} t - \psi = 0$ (5)

Extracting (5.1) from (4.1), it is possible to identify the relationship (6) between the sensitivity to moral costs of evasion and avoidance:

$\psi = (1 - p) \frac{\partial U}{\partial y_n} t + p \frac{\partial U}{\partial y_c} t$ (5.1)

$\theta = (1 - p) \frac{\partial U}{\partial y_n} t + p \frac{\partial U}{\partial y_c} (t - mt)$ (4.1)

With constant sensitivity to moral costs of evasion, the sensitivity of household’s utility to moral costs of avoidance is slightly higher than to moral costs of evasion. One of the possible explanations of this fact is that reflects the degree of informal additional morality or social responsibility of the household. Alternative explanation is that the term reflects the degree of household’s greediness. In both cases $\theta$ can be understood as intrinsic propensity of households to commit a tax crime (illegal evasion) or fear of punishment, which is influenced by the culture features, social norms, the level of education and so on. In this formulation, the government can affect mostly the sensitivity to tax avoidance by setting the probability rate of punishment $p$, penalty rate $m$ or payroll tax rate $t$. The reverse interpretation of the equation (6) can also take place.

Looking at the households optimum (6), it is not clear what optimal tax policy values the government should share. That is why, consider the first-order condition for an interior maximum of the expected tax revenue of the government:

$\frac{\partial T}{\partial p} = tem + msv - l = 0$ (7)

Derive the optimal amount of fines and penalties per dollar of illegally underpaid taxes $m$:

$m^* = \frac{i}{ie + vs}$ (7.1)
Remind that $m^* > 1$ by assumption. That means, $l > te + \text{vs}$. The basic idea is thus that the government will never cover the costs of tax administration only by recovering the amount of underpaid taxes. That is why, the optimal rate of fines and penalties per dollar of illegally underpaid taxes is set to cover the costs of tax administration. This conclusion is consistent with the general theory (Hanlon et al., 2010). This also implies that the government should not affect the economic decisions by setting too high penalty rates.

The optimal behavior of firms is derived from the first-order conditions for an interior maximum of the after-tax profit:

\[
\frac{\partial y}{\partial s} = (1 - p)[(1 - v)(Pr - n) \frac{\partial p}{\partial rc} \delta + v] + \\
+ p[(1 - v)(Pr - n) \frac{\partial p}{\partial rc} \delta + v - mv] = 0
\]

\[
\frac{\partial y}{\partial w} = (1 - p)[(1 - v)(Pr - n) \frac{\partial q}{\partial rc} \varphi + v] + \\
+ p[(1 - v)(Pr - n) \frac{\partial q}{\partial rc} \varphi + v] = 0
\]

Conduct simple conversions with (8) and (9):

\[
(1 - v)(Pr - n) \frac{\partial q}{\partial rc} \delta = v(pm - 1)
\]

\[
(1 - v)(Pr - n) \frac{\partial q}{\partial rc} \varphi = -v
\]

The government can affect the sensitivity of firm’s reputational costs to tax avoidance and evasion by changing the corporate tax rate (both), the probability and rate of penalty (only evasion). It is also possible to affect the elasticity of demand for firm’s goods and services to reputational factors of tax avoidance and evasion. The effect will be completely different for B2C (high) and B2B (low) industries.

Divide (8.1) by (9.1):

\[
\frac{\delta}{\varphi} = 1 - pm > 0 \text{ (by the meaning of indicators)}
\]

From (10) it is clear that firms (B2C or B2B) prefer evasion to avoidance ($\frac{\delta}{\varphi} = 1 - pm < 1$ by the meaning) due to sensitivity of brand equity and reputation. There is also a new optimal policy rule for the government how not to affect the economy too much: the expected penalty rate for tax evasion should not be more that 100 per cent. If it is higher than this threshold level, evasion becomes uncontrolled. That means the tax and financial authorities should not make tax administration and regulation as the tools for extracting extra revenues for the
budget due to the hypersensitivity of the objective functions of the taxpayers to socially unfavorable but legal tax activities.

4. Conclusion

In this research there was considered a theoretical modelling approach to tax evasion and avoidance. The general model utilizing the decisions of firms, households and government was linked with the morality and reputation factors of such tax collection phenomenon. The results suggest that hypothesis that tax avoidance is not preferred by firms and households as much as tax evasion because of moral and reputational factors is confirmed: the sensitivity of household’s utility to moral costs of avoidance is slightly higher than to moral costs of evasion. Firms (B2C or B2B) also prefer evasion to avoidance due to sensitivity of brand equity and reputation. In that context the government can affect the sensitivity of households and firms to tax avoidance and evasion by setting corporate tax rate, the probability and rate of penalty. However, it should not affect the economy too much and distort the signals of illegality of evasion by setting too high penalties or improving tax monitoring too much.

In the same time, the companies with sensitive brand equity, or B2C companies, should not avoid taxes too much: the optimal strategy is to pay more.

There are five possible directions for future theoretical modelling of tax avoidance and evasion research. The first is to consider the influence of different market structures on tax avoidance and evasion with the presence of morality and reputation. The second is to apply some more complex functional forms in the model (total costs, utility, reputational costs, demand). The third direction is to consider more complex tax structure (direct and indirect taxes, different rates of penalty and probability for different groups of economic agents). The fourth is to introduce in the model the probability of being caught avoidant by public. The fifth direction is to introduce the time factor in the model (multi-period decisions of firms, households and the government with different time lags).

References
THE BENEFITS OF FERRIES OPERATION: 
THE CRIMEA AND THE BALTIC SEA AREA

Abstract
This report is dedicated to the analysis of the situation of the ferries operation as compared in the Crimea and the Baltic Sea. This report is concerned with such questions as usage of ferries for relaxation and cargo transportation. Also considering the transport is quite expensive the benefits of using ferries as a cheap means of transportation are shown. On the basis of the research different stages of making ferry more profitable are offered with the statistics given and compared with situation abroad.

Key words: transport logistic systems, ferry, multimodal transport systems, transport, transport corridor, waterways
JEL codes: L90, L91, L92

As a result of the Crimea’s reunification with Russia many people choose this peninsula as the place of their holiday destination. But as there is no cheap kind of transportation there (for example, railway), ferry transportation from the continent to this peninsula is becoming more and more popular. Ferry transportation can be economically beneficial.

Analyzing this topic, I looked through the information about ferries abroad and in our country.

Comparing ferry transportation in the Baltic Sea and the Crimea, I come to the conclusion that most operators realize their main income in cargo/trailer transport, especially all the year around, and convert their ferries in this direction.

By the year 2004, within the Baltic Sea region close to 187 million passengers, just over 65 million cars, around 382,000 buses and more than 6.6 million trailers were counted on a little bit more than 3.7 million trips.
As a cargo transportation improvement ferry companies attract passengers by making their ships more and more luxurious, for example, they offer a completely new category, combining attractive offers of high passenger comfort of a cruise ship with a transport capacity for cars, buses and even trailers.

The upper car deck also qualifies as an exhibition area [4, 1].

And what is the situation in the Crimea? Let’s analyze it.

As we know, ferry crossing in Kerch is the sea crossing connecting the Crimea with Krasnodar region. It deals with passenger, car and railway transportation through the Kerch Channel. Moreover, there is even an A290 road. This ferry crossing is used all day long for a whole year.

One of the benefits of using this crossing is that there is an opportunity to reduce 270 km of the transportation distance from Ukraine and Moldova to Krasnodar region and the Caucasus and 1000 km from the Crimea and the southern part of Ukraine.

Modern conditions of economic sanctions against Russia and import substitution make the importance of multilevel logistic transport system development in the Russian Federation and especially in the Crimea most challenging.

The priorities in forming logistic transport systems in the Crimea must be as follows:

- the organization of an effective logistic ferry and passenger transportation service on the basis of the interaction of all 4 transport types (air, car, sea and rail);
- the organization of multimodal schemes of transportation in such transport junctions as Sevastopol, Yevpatoria, Yalta, Feodosia and Simferopol;
- the implementation of modern informative technologies in the transportation process;
- the incorporation in international transit traffic by using the Crimea as a transit junction through the territory of Russia in such directions as: Asia-Russia-Europe-Mediterranean and Asia-Russia-South Africa.

In 2015 the traffic capacity through Kerch ferry transport junction was about 50,000 people and 10,000 cars per day [3, 1].

The process of forming multilevel logistic transport systems in the Crimea has a lot of stages:

- at the first stage a low level of terminal and cargo complexes interaction is formed;
- at the second stage the second level is formed: local, regional and international transport logistic centers;
- at the third stage regional transport logistic systems are formed;
- at the fourth stage comes the formation of a transport logistic cluster (TLC) of the Crimea (a form of integration of all the participants who are interested in a maximal result);
— at the fifth stage an integration of the Crimea in one integral national transport logistic system of the Russian Federation takes place [1, 2–3].

The formation of TLC in the Crimea is becoming one of the most effective tools in solving the tasks of modernizing transport and an old transport structure in the Crimea. For example, 90% of roads in the Crimea are in a bad state. 1755 km of roads are going to be modernized [5, 1]. Thus, the creation of a multilevel logistic transport system in the Crimea will promote the integration of the peninsula both into the state territory of Russia and into the international transport corridor.

The Crimea has a vast transport infrastructure which allows an incorporation of this republic into leading transport corridors of the world and into the market of transit transportation. The transport complex in the Crimea is a system of communication which includes 6266 km of roads, 4 sea ports, 2 ferry crossings, 3 airports and 650 km of rail.

Sea transport in the Crimea provides car-passenger transportation from the continent of Russia to the peninsula. The perspective direction of cargo transportation is a multimodal transportation combining transportation via sea ways in the Black and Azov Seas with inner waterways in the Azov-Don, Volga-Don, Volga and Moscow basin. This transportation must be provided by using special ferries of river-sea RORO type. The calculation proved that if we assume car transportation for 100% of expenses, then sea and river transportation in different cases will be equal to 65–85%.

In this case car transport organizations don’t waste money on fuel consumption and tire wear, planned speeds of cargo delivery are kept due to the operation of ships with high speeds and quick rate of cargo processing [2, 37–38].

Unfortunately, in comparison with the ferry transportation in the Baltic Sea, we can witness that the field of cruise ferries in the Crimea is not developed yet.

Another advantage of the ferry transportation is the price. It is relatively cheap in comparison with the air transport as well as that in the Baltic Sea.

Nowadays the roads in Russia as well as all over Europe are overloaded. At the same time 100,000 km of waterways are practically empty. One of the ways of solving this problem is the creation of logistic ferry-transport systems in inner water transportation which should help to make road transportation less loaded and economically more profitable.

The conducted analysis shows that it is necessary to design ships of a sea-river RORO type and create an infrastructure of a new generation for the formation and development of multimodal transport systems.

The basis for the development of sea and river transportation in the 21st century must be formed by new technologies as a factor of the innovative variant in the implementation of the transport strategy of the Russian Federation for the period of up to 2030 [2, 39].
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RUSSIA AND GLOBAL FINANCE: CHALLENGES AND PROSPECTS

Abstract
The article is devoted to the issue of interconnection between globalization and performance of Russian banking sector during the recent years. Under the circumstances of intensive economic development the state of the Russian financial sector has been enhanced impressively. The financial expansion of Russian banks promotes integration processes in the region, raises level of competitiveness, forms the background for Russia to become another global financial center. However, local microeconomic implementation of international financial stability standards is worth to place importance on.

Key words: cross-border banking, financial stability standards, Russian banking sector tendencies.

JEL codes: F 39, G 21, O 19

Introduction
The globalization of the world financial sphere and transnationalisation of global banks that has been taking place during the last years, have become significant drivers of performance of the Russian financial sector. In view of this, the modernisation of the Russian banking sector is taking place in the context of intensive development of globalisation processes of world financial sphere. International standard setters regularly publish recommendation bundles, that are in reality binding for systematically important financial institutions all over the world. Therefore, a new innovative institutional structure is being formed, quantitative and qualitative indices of national financial system are improving. And this all forms the sound grounds for real economic development and technological boost in Russia.

However, the global problems in any sphere are really hard to research and solve. There are no limits or borders, the content spills over the borders to the other sectors and has to be regarded as a whole. These thoughts have been reflected in many contemporary scientific works.

Russian external macroeconomic conditions nowadays
To begin with, it is of great importance to understand the external and internal macroeconomic conditions Russia is performing in.
The external conditions in December 2016 — March 2017 [1, 14] were formed against the background of favourable situation on the commodities markets due to the reduction agreement of crude-oil output between countries-crude suppliers. Along with the intensive development of recovery process in world economy, the rise of investors’ mood supported the VIX and macro risk indexes. Some deviations were caused by the uncertainty around measures of economic policy of newly inaugurated Mr. D. Trump and the perspective of relief of sanctions on Russia.

![Graphs showing MSCI (January 2013 = 100%) and Macro risk index and VIX (points).](image)

*In December 2016–March 2017 external economic conditions were forming against the background of favorable commodity market situation.*

The compliance of reduction agreement of crude oil output, dated December 10, 2016, has influenced the prices on energy carriers, pushing them upwards in the first few months of 2017. As a result, Urals oil price was around $53 in January–February 2017, and this situation along with the investors’ mood rise contributed to the renewal of bubbling investment flows to the emerging economies. However, the drop of country risk premium has been more significant than in other emerging economies, as well as review of Russian international rating.

![Graphs showing Development of foreign portfolio investments in BRICS countries (in $) and Rate of GDP growth in key mature and emerging economies (% to the respective period of the previous year).](image)

*The increase of oil prices and investors’ mood improvement has promoted the interest of foreign investors to the emerging economies.*
As in global economy as a whole, the buoyancies are to be observed in the development of countries — trade partners in the end of 2016 — beginning of 2017. However, as it was before one can see discrepancies in economic growth rates of developing countries.

**Russian internal macroeconomic conditions nowadays**

Internal financial conditions in Russian economy in December 2016 — March 2017 [1, 16] were formed under the pressure of medium astringent monetary policy of Bank of Russia, directed at the reduction of inflation along with reservation of opportunities for economic and financial sustainable growth. March 27, 2017 was the banner day as Bank of Russia lowered the key rate to 9.75%. In the near future it will have its consequences in all segments of financial markets. Structural surplus of liquidity did not influence greatly the conditions of monetary policy. Bank of Russia managed it by introducing absorbing operations, letting short-term money market rates stay near the key rate level.

This being said, the situation with currency liquidity has improved due to exchange flows at current account on the back of rise in prices in commodities market. By the beginning of 2017 market rates of interest nearly stopped their fall, that took place during the process of postponing the awaited decision of the Central Bank in June and September [1, 19]. One can state that banks adhered to the buttoned-up policy, choosing low-risk assets and high requirements to the borrowers. The easing of non-price terms was taking place very slowly and affected reliable borrowers in first place.

**Russian banking sector: perspectives and challenges**

This part of the article is aimed at the description and analysis of current actions of the Central Bank and its strategy as mega regulator of financial markets.
There is no doubt, that current situation in the banking sector can be described as oligopoly of several banks (also with state sharing). Bank of Russia uses formative work approach and eliminates the weak players of the banking sector, improving the Russian investment force of attraction [4, 2–3]. The core element of the banking sector is presented by 10 big players. These private and partly state financial institutions are identified as “SIFIs” — systematically important financial institutions. Basel accords and international financial stability standards are aimed to support internal financial infrastructure stability and its sustainable development. Here you will find some recently introduced changes by Bank of Russia:

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Today Bank of Russia realizes supervision after the credit organizations and bank groups but has little power in relation to bank corporates and groups that have the same owners (so called “parallel banks”) [2, 3]. These powers lie in the receipt of reporting from bank groups and other information about their activities. Up to now, there is no such a right, that Bank of Russia possesses, CBR can’t set limits or requirements for banks groups in terms of risk or capital management, requirements to the professional track of members of board of directors. To solve this problem, the amendments to the federal legislation are crucial.

However, the importance of Basel accords can’t be undervalued. Their step-by-step implementation in Russia has already brought some results, but there is a long way to the ideal, that they proclaim [3, 2].

Principles of corporate management for banks, designed by the Basel committee on banking supervision are published on CBR official website and therefore are concerned as strongly recommended guidelines for corporate management. This is a sign of mega regulator’s big attention to the problem of regulation of the banking sector. The fact is, that international financial stability standards are not fully implemented in Russia, its step-by-step integration into the banking regulation has a big way ahead. The formal adherence to the principles of
Basel accords is a reason for the lack of stability, bankruptcy and illegal actions within a financial group or a bank. In order to see this process in action, it is reasonable to make a review of a real case that has recently occurred.

**Case study: international financial standards and the state of a bank**

To begin with, it is necessary to pose a question in order to make the aim of this case study clear.

*How can a thorough implementation of international financial stability standards enhance (support) Russian bank’s position?*

The bank, that is in our focus is characterized as following:

- it is one of prominent Russian banks, that was performing well during the last 7 years and its activities were characterized by stable increase of assets volume and resource base (60% was represented by corporate funds);
- corporate funds and securities were the main investment objects;
- the banking institution climbed from the 88th to 45th place in asset rating (source — website banki.ru).

The yearly check of its internal corporate management documents showed that everything was in order, the guidelines and main principles were formally reflected on paper. But the fact is that Board of Directors hasn’t really controlled the real activities of the CEO of the bank. And that led to frustrating results:

- bank credit policy was planned to launder the money from the bank;
- assets were non-transparent for the board of directors;
- investments into different securities were of no interest for board of directors, therefore the portfolio was uncontrolled.

Thus, as one can see the formal adherence to the international standards is not the cure for the disease, one should pay much more attention to the process part of the implementation.

**Conclusion**

To sum up, the following conclusions are highlighted in the article:

- economic external conditions are favorable for Russia, that forms a friendly environment for in-house economic development;
- Russian banking sector is under construction, the changes can have controversial influence;
- international standards do not bear only formal and quantitative character for statistics, but can be of great use for internal communication and bank management;
- solution of the problem of achieving financial stability is executed at both the macroeconomic level and the bank microeconomic level.
References

Abstract
One of the most important tools for effective communication is social networks. They are convenient way for making communication. In addition, they are becoming a popular tool of internet marketing at the sphere of higher education.

This study is focused to explore the scope of the effective communication via social networks at universities. Current research uses benchmarking as a way to observe International and Russian experience in using social networks for connecting with target audiences.

As a result, recommendations will be introduced for improving communication systems of the university in social network

Key words: social networks, facebook, social media marketing, marketing
JEL code: M310

Social networks are growing dynamically and have become an indispensable part of the human life. Social networks are unique social phenomenon in the last 20th and the beginning of the 21st century, which is developing rapidly today. Nowadays they are actively used in the sphere of marketing [2,228].

The social networks hold their ground in the higher education. As a rule, they are used as a communication channel with target audiences of universities.

The results of the research called “Students Online: Global trends”, conducted by QS World University Rankings, claim that internet resources and especially social networks are being actively used in that sphere. Fourteen percent of respondents use social networks for researching universities and courses and 39% for getting inspiration and new ideas. More than half of respondents (55%) used university ranking websites and only 19% used the social networks [5].
Certainly, the social networks are the most important tools for effective communication, which Yuppies use during academic year and after the graduation. The Yuppies are young, may be just out of college, who has high-paying job and affluent lifestyle. [1, 204–205]

In the same research it was found, that Facebook took the leader position for finding information about universities in comparison with Twitter, LinkedIn, YouTube, and Google Plus.

Half of the respondents aged 18–21 used Facebook for searching information about university and courses, YouTube used only 15%, LinkedIn 14%, Google Plus — 11%, Twitter — 10%. Thus, we can conclude that it is more rational to use Facebook for posting information about universities, because it is demanded by youth [5].

Facebook is one of the most rapidly emerging social network. Daily active users were 1.04 billion on average for December 2015 an increase of 17% year-over-year and mobile daily active users were 934 million on average the month an increase of 25% year-over-year [3]. So Facebook is important tool for interaction with the target audiences of the universities.

However, the situation in Russia is a long way from the foreign experience. According to TNS Web Index the most used Social network in Russia was Vkontakte in November 2015, the second is Odnoklassniki, Facebook takes the third place [6]. The audience of Vkontakte is twice more than Facebook’s one. It should be noted that Vkontakte and Odnoklassniki are used mostly for entertaining, and Facebook is more orientated for the young professionals.

The aim of this article is to make a comparative analysis of the official communities of foreign and Russian universities and implement recommendations for building a system of effective communication in the sphere of higher education.

The comparative analysis is conducted based on the official communities in Facebook of the 10 best foreign and Russian universities. According to the QS World University Rankings, which is based on six performance indicators — employer reputation, academic reputation, student-to-faculty ratio, citations per faculty, international faculty ratio, international student ratio, it was chosen five international and five Russian universities, that take leading positions in the ranking. The universities’ Facebook communities were monitored during February 2016.

The evaluation of the communities was made according to the following criteria: the community popularity, the frequency of post sharing, subscriber’s activity, and the topics of published materials.

The most popular community is the official page of Harvard university with the four million subscribers, the least popular foreign university’s community is Caltech (270 000 likes), and this is even more than the most popular community of the Russian university — MSU’s, whose subscribers number is 24 000, the least the page of MSTU number of likes has got 180. This is a low figure for the
one best technical universities [4]. The popularity of Facebook in Russia may influence this indicator, or we can say that the students of technical universities are not interested in university life in Social networks.

The growth of likes in foreign universities’ communities increased by 0.9% — 4.2 and Russian by 0.2% — 1.8% in February 2016. It can be connected with the popularity of Facebook in Russia and it is caused by the subject and type of published materials.

For that reason we have conducted a content-analysis of the popular materials, that was published in universities official communities. The analysis was carried out based on the number of Likes, Shares and Comments. It was found that the most popular topics are scientific research, experiments, video interviews (38%) in the international universities’ profiles on Facebook. 20% of materials published were announcements and reports of the university events, and 15% were the materials about the famous celebrities (Table 1). Thus we can say, that the students of international universities are more interested in the scientific materials.

In Russia, the situation is different. Almost half of the most popular materials are announcements and reposts of the events (46%), the scientific materials are not widespread, consisting only 3% of the popular publications.

According to these results we can conclude, that Russian students were not interested in scientific work, they are more focusing on chatting with friends and for having fun in social network. In addition, the opposite situation is noted in Western countries, because the students are more interested in scientific materials and more motivated in getting a good job and have perspective career.

<table>
<thead>
<tr>
<th>The subjects of published materials</th>
<th>Foreign</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical posts</td>
<td>38%</td>
<td>4%</td>
</tr>
<tr>
<td>Photos of universities</td>
<td>21%</td>
<td>46%</td>
</tr>
<tr>
<td>Important dates and holidays</td>
<td>15%</td>
<td>11%</td>
</tr>
<tr>
<td>Promo materials</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td>Famous people</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Announcements</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>Scientific materials</td>
<td>6%</td>
<td>13%</td>
</tr>
</tbody>
</table>

International community has posted on the average two publications per day, whereas MSU and Moscow State Institute of International Relation’s posts 4 or 5. Posting many materials affected badly on the promotion of the communities.

More than 60% of the posts of international universities are links with other resources, 27% are photos and 13% is video materials. Photo posts are the most
common and popular type, because they are more practical, the visualization helps to understand the message, and we need not spend time, as it needs for watching video posts. Only 3% of publications consist of video materials. The Russian ones use more photo materials, representing 50%. Links are used a little bit more than foreign communities — 45%.

The foreign experience proves that using links increases the percentage of interactions (likes, comments and shares). Based on the Facebook communities monitoring in February 2015, it was found that the most interaction was in the posts with links. Despite the fact that video was too few, the interaction with the video posts was higher than with the photo materials.

Therefore, the video materials can be one of the most popular type of posts and it is recommended to use more video publications. It can be influenced well on the growth of the subscribers of the communities.

As a result, we evaluate the pages by the implemented criteria. Each of universities are marked by criteria from one to five. The foreign universities average grade is 3.84 from five and the Russian one 3.35 (Figure 1). The most effective foreign university’s community is the MIT with the mark 4.2, and Russian — MSU page — 3.8.

![Figure 1. The results of evaluation by criteria](image)

Analyzing the results of researches in the sphere of higher education and social media it was found, that Facebook is being actively used as a tool for building communication between university and the target audiences.

Based on the result of content-analysis we found that scientific materials are not in great demand for Russian students, which can evident that the students are not interested in scientific work. The audience of the Russian universities communities is more interested in events conducting in university.

The main reason for the small number of subscribers is in the Russian communities is discrepancies the type of the content and needs of subscribers.
The data showed that video materials are more popular than others, so it is recommended to use it for increasing the popularity of community. It is recommended to do the amount of published materials per day.

Analyzing the foreign experience the main recommendations were implemented for building communication in social network in the sphere of higher education:

— to increase the number of video materials, because we was found, that video materials increase the interaction percent
— to use more links with different resources, they make the information more reliable
— to use visual materials photos and pictures, it a practice way to help target audience to understand the message
— to post two materials per day, because it is the most effective frequency for university audiences

The purpose of the study has been achieved and recommendations have been developed. In future, we plan to monitor and take deeper analysis in that sphere and to do research of the other social networks.

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IMPACT OF ACTIVE ASSET MANAGEMENT ON PRIVATE PENSION FUNDS’ PERFORMANCE

Abstract
Many conclude that the significant value added by active asset management is zero or even negative. Moreover, according to efficient market theory, active asset management cannot add great value. On the other hand, the underlying assumptions of the efficient market theory are broadly criticized and there are also results that show that active management adds significant value in specific situations. The biggest institutional investors in the world, such as pension funds, still favor active asset management. This paper examines the impact of active asset management on cost corrected total return for private pension funds.

Key words: private pension funds, active asset management, passive asset management, pension system, panel data.
JEL code: G230

Year by year the discussion around effectiveness of active asset management is getting more and more heated. While most of the current literature shows that active asset management does not add value when extra costs and extra returns are weighted, the biggest institutional investors in the world, such as pension funds, still favor active asset management, paradoxical enough.

The goal of this research it to make a conclusion about impact of active asset management on cost corrected return for Dutch and Russian private pension funds, based on unique data set of 74 Dutch and 50 Russian pension funds.

The Dutch private pension funds were chosen for comparison with Russian pension funds due to fast that the Dutch pension system is recognized as one of the best pension systems in the world for the last eight years by the Melbourne Mercer Global Pension Index [4].
Dutch and Russian pension systems structure

To big with, I would like to make clear the differences and similarities of Russian and Dutch pension system.

As I have mentioned above, the Dutch pension system is recognized as one of the best pension systems in the world in accordance to the Melbourne Mercer Global Pension Index. Many are inclined to believe that this success is reached by constructing pension system of three pillars:

— the state pension, which guaranties a basic income which is linked to the minimum wage depending on both marital status and living situation;
— the collective pension schemes, broadly used in all the economic sectors;
— the private individual pension products, such as private saving, extra annuities and old age insurance ant e.g. [4].

Depending on a person’s personal situation, a retiree receives a benefit from the first pillar, the first and third pillars or from all pillars.

This research will focus on the collective pension schemes, which are administrated by (a few) insurance companies, but especially pension funds. While participation in the pension schemes in general is not mandatory, over 90% of the employees have a pension scheme with their employer [3]. Employees, together with their employer contribute to these pension schemes. The second pillar is financed from these contributions and from the returns generated on the investment of the contributions paid in the past.

Russian pension system has recently got through some changes. The new method for the formation of pension rights of citizens and the calculation of pensions was activated on January 1, 2015 [7].

The labor pension was transformed into two types of pensions: insurance pension and funded pension. An insurance pension is a monthly payment compensating for the wage or another type of income citizens were receiving in the period of their work. In turn, a funded pension presents a lifelong monthly payment of pension savings formed with insurance contributions of employers and return on their investment [8].

Active versus passive asset management

Assets can be managed in a passive or in an active way. In practice a combination of both is often observed.

Active asset management means that based on certain predictions about the future risks and returns, a portfolio is constructed and actively managed throughout time. Passive management means investing all the assets once and see what the return will be on the agreed horizons.

Often passive managers invest in indexes that track the world economy or country economy. With active asset management, managers hope to outperform the benchmark. An active manager can attempt to outperform the benchmark by investing in a position that differs from the benchmark. In general, this can be achieved in two ways; either stock selection or factor timing (or a combination of both). The
returns of passive management will be close to the benchmark while the returns of active management will vary in a positive or negative way from the benchmark.

Moreover, active asset managers try to use the mispricing in the markets in their favor, what pushes managers to trade quite frequently. Trading frequently also means more costs like transaction costs and labor costs. This means that active management generates more costs than passive management, by spending resources in developing strategy, locating profitable investments and adjusting the portfolios to everyday changes in the world. When extra costs are made, the cost adjusted returns are expected to be higher.

In financial literature there are many researches wherein the relation between active asset management and performance is investigated. The never ending discussion makes it a relevant subject, therefore also nowadays. Next paragraphs provide an overview of the most relevant conclusions concerning the active- versus passive asset management discussion.

Eugene Fama states in the Efficient Market hypothesis that all relevant information is presented in the price at all times and markets are fully efficient [5]. This means that no arbitrage opportunities exist and hence, no extra earnings can be realized by active asset management. However, later researches proved that investors are not fully rational. And that arbitrage opportunities are not riskless [6]. This allow active asset managers to benefit from mispricing in the market.

Secondly, Sharpe states that before cost correction the average actively managed returns are equal to the average passively managed returns [1]. Moreover, after cost correct actively generated returns are lower than passively generated returns. However, other researches prove that active asset management can add significant value in specific cases. One of the cases is when the investing firm is able to identify outstanding asset managers.

Thirdly, active asset management is more successful on the short term (one-year horizon), what was proved by Hendricks and his team, who were conducting a research for more than six years in 1990s [2].

Moreover, Standard and Poor’s year-end report shows that active managers add value in times when the market has high volatility (e.g. global financial crisis of 2008).

**Methodology of the research**

This research examines the impact of active asset management on cost corrected total returns for Dutch and Russian private pension funds, using a unique data set of 74 Dutch pension funds for three different years.

The database used in this research consist of 20 performance measurements, cost measurements and covariates which you can see on the slide.

In order to compare pension funds with different size some gained data was transformed and the following variables were added:

- the fraction of active assets management costs in total assets
- the fraction of transaction costs in total assets
— tracking error, which measures the difference in fund’s return in comparison to its benchmark (high tracking error volatility indicates a high degree of active asset management)
— active share, which indicates the percentage of investments hold that differ from the benchmark

Moreover, three control variables were added, which measure size, type of the pension fund and risk.

Size. The bigger the pension fund, the lower the investment costs, what is reached by increased economies of scale and lower unit operating cost. On another side, some researches show that the larger pension funds would have done better if they invested more in passive mandates.

Type. Analyzed in the research Dutch pension funds divided in three different types. Researchers show that differences in pension plans (defined benefit versus defined contribution) results in different accruals and differences in pension wealth for each pension fund.

Risk. To measure risk, the z-score was used, which is mandatory to publish for the majority of pension funds. This scores measures the returns and the risks compared to a beforehand agreed benchmark.

Intermediate results of the research

Taking in the account that panel data has been analyzed, 3 regressions for each set of independent variables were run: pooled OLS, fixed effects and random effects models.

Table 1

| Fraction of asset management in total assets regression |
|---------------------------------|---------|---------|
|                                  | (1) FE  | (2) RE  | (3) OLS |
|---------------------------------|---------|---------|
| Fraction of asset management costs in total assets | 2.485 (0.778) | 3.891 (0.307) | 3.891 (0.310) |
| Logarithm of total assets | −0.0534 (0.589) | −0.00214 (0.381) | −0.00214 (0.383) |
| Z-score | 0.00499 (0.334) | 0.00340 (0.440) | 0.00340 (0.443) |
| Year 2012 | 0.0479* (0.019) | 0.0412** (0.001) | 0.0412** (0.002) |
| Year 2013 | −0.0778*** (0.001) | −0.0859*** (0.000) | −0.0859*** (0.000) |
| Constant | 1.204 (0.561) | 0.124* (0.012) | 0.124* (0.014) |
| Observations | 84 | 84 | 84 |
| \(R^2\) | 0.657 | 0.586 | 0.587 |
| Adjusted \(R^2\) | 0.431 | 0.561 |

\(p\) — values in parentheses.
* \(p < 0.05\); ** \(p < 0.01\); *** \(p < 0.001\).
Table 2

| Fraction of transaction costs in total assets regression |
|---------------------------------|-----------------|-----------------|
|                                  | (1) FE          | (2) RE          | (3) OLS         |
| Fraction of asset management costs in total assets | 10.59 (0.192)  | 8.927* (0.035) | 8.927* (0.038) |
| Logarithm of total assets       | −0.0354 (0.718) | 0.000341 (0.888)| 0.000341 (0.888)|
| Z-score                         | 0.000748 (0.901)| 0.000292 (0.949)| 0.000292 (0.950)|
| Year 2012                       | 0.0447* (0.026) | 0.0411*** (0.001)| 0.0411*** (0.001)|
| Year 2013                       | −0.0751*** (0.001)| −0.0807*** (0.000)| −0.0807*** (0.000)|
| Constant                        | 0.820 (0.690)   | 0.0720 (0.178)  | 0.0720 (0.182)  |
| Observations                    | 84              | 84              | 84              |
| $R^2$                           | 0.668           | 0.603           | 0.604           |
| Adjusted $R^2$                  | 0.449           | 0.579           |                 |

$p$ — values in parentheses.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

As can be seen in the left part of table 1, 2, the fraction of asset management costs in total assets does not seem to have a significant effect on the total returns for Dutch Pension funds in the period of 2011–2013. Neither total assets or the z-score seem to be significant. The highly significant year dummies show that the returns greatly depend on the individual years. It looks like it is the case that macro-economic effects have a strong influence on the total returns.

As the right part of table 1 shows, the fraction of transaction costs in total assets has a significant effect on the total return generated by pension funds for the random effect model and the Pooled OLS model. As seen before, the yearly dummies are still highly significant. Variables like size and risk do not bear any explanatory power in these regressions.

Table 3

| Tracking error regression |
|---------------------------|-----------------|-----------------|
|                           | (1) FE          | (2) RE          | (3) OLS         |
| Tracking error            | −0.117 (0.820)  | 0.108 (0.749)   | 0.108 (0.750)   |
| Logarithm of total assets | −0.0547 (0.580) | −0.00150 (0.528)| −0.00150 (0.530)|
| Z-score                   | 0.00487 (0.355) | 0.00396 (0.378) | 0.00396 (0.380) |
| Year 2012                 | 0.0481* (0.019) | 0.0431*** (0.001)| 0.0431** (0.002)|

$p$ — values in parentheses.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. 
Information presented in table 3 shows that the tracking error does not bear explanatory power. This measure of active asset management is not significant in any of the three regression types. The year dummies are again highly significant, while none of the covariates seem to have effect on the total returns of pension funds. Therefore, none of the control variables used in the model are significant. This means that none of the control variables have any significant influence on the returns generated by Dutch pension funds in the period of 2011–2013. On the other hand, it turns out that the fraction of transaction costs in total assets seem to capture some explanatory power, it however depends on which model is used.

The most outstanding are the always highly significant year dummies. The year dummies seem to capture most of the explanatory power and are solely alone responsible for around 90% of the $R^2$. As also can be seen in table 1, 2.

As expected and in line with the literature, it seems that active asset management does not add value for Dutch pension funds in the period of 2011–2013, but can have a positive effect in some specific situations (transaction costs). Both the cost of assets under management in total assets or tracking error differentiating from the benchmarks turns out to unable to explain pension fund performance in the Netherlands in the period of 2011–2013. Moreover, none of the covariates discussed in literature show significant explanatory power. It turns out that majorly the macro-economic fluctuation causes the differences in the returns of the pension funds, and slightly by the fraction of transaction costs in total assets.

However, all the results should always be interpreted with precaution, because the research conducted on active versus passive asset management in the last decades seem to be strongly depending on database selection and research methods. So more research is required before drawing final conclusions. Nevertheless, the current research is not finished yet and the results for Russian private pension funds may very from the obtained results for Dutch.
References


Abstract
The aim of this research is to identify the determinants of tax avoidance and evasion for develop appropriate policy for public authorities in a challenging environment. In particular, the researcher creates the empirical model to check the relationship between the institutional quality and the level of tax evasion. In addition, the researcher makes a comparative analysis of the determinants of tax avoidance and evasion across the EU countries that can help Russian government creates new economic strategies in the Eurozone.

Key words: tax evasion, tax avoidance, institutional quality, corporate responsibility, effective tax rate, book-tax difference

JEL codes: D11, D21, H21, H26

1. Introduction
All over the world, income tax evasion and tax avoidance are one of the most widespread economic problems. The economic costs of evasion are numerous; two of the most important costs are the lost government revenues, which must be recovered through less efficient tax programs, and the inequity between evaders and honest filers. Effective control of income tax evasion requires answering a number of empirical questions: How much total evasion exists? Which socio-economic groups evade most? How might be diverse tax avoidance and tax evasion? In addition, how tax authorities can influence on reducing the sum of tax avoidance?

Answering these questions requires addressing a fundamental statistical problem of nondetection, which arises because not all evasion is detected and recorded in data. In this connection, it is actual to distinguish the key determi-
nants of tax evasion and tax avoidance that help auditors and law enforcement authorities decide the causes of these problems, and affect evaders (legal or illegal) indirectly, creating the conditions of tax compliance.

In this paper, we try to investigate the empirical determinants of tax avoidance & evasion. Our intention is to find the factors, which can influence on tax evasion and compare them with main determinants of tax avoidance.

The rest of the paper will be organized as follows. Section 2 provides a literature overview of the tax avoidance & evasion empirical modelling research. Section 3, in turn, divides into 2 parts: empirical modelling of tax evasion and empirical modelling of tax avoidance. Section 4 briefly sums up the paper and outlines the directions for further research.

2. Literature overview

The existing empirical literature on the determinants of tax evasion and avoidance consists of several direction. The first one is the influence of the specific firm characteristics on the total level of corporate tax avoidance and evasion [10] or the level of the certain tax (value-added tax, corporate income tax, etc.) non-compliance [8].

The second direction incorporates agency predictions into an analysis of corporate tax avoidance and evasion. For example, there is an evidence of negative association between equity-based compensation and tax avoidance, which is provided by modeling the effect of incentive compensation and governance structures on tax avoidance at the firm level [4].

The third level of research combines all the separate papers on the first time introduced behavioral and institutional drivers of tax avoidance and evasion. For example, this direction studies cultural effects [1], managers and incentives effects [7], corporate social responsibility [9], ownership structure [5], corporate governance features [2].

In addition, there is a rising interest of researchers and policy-makers to the moral effects of tax evasion and avoidance [6].

Finally, there are some differences in the drivers of tax avoidance and evasion, mentioned in the literature. For example, legality has a significant influence on the individual decisions on tax avoidance, whereas tax evasion is not affected by this moral appeal [3]. Overall, this field of research is not studied very extensively and purposefully by now.

Provided an extensive literature review on the key topics of the research, it is possible to switch to main part of the study. This brings us to the empirical modelling of tax avoidance and evasion.

3. Empirical model framework

In this part, we try to investigate the empirical determinants of tax avoidance & evasion. Firstly, we make a cross-section analysis of individuals across...
different countries using the World Values Survey Data (WVS) and World Bank Data (WB). Then we build two econometric models, which allow figuring out the relevant factors of tax avoidance & evasion.

3.1. Tax evasion

In our first model, we analyze the sample of 33 countries from 2010 to 2014 years for the factors of tax evasion [11,12].

For our purposes, we use the survey about cheating on tax in points. We use the weighted average of points according to percentage distribution across respondents.

We also distinguish the demographic factors (education, age), the economic environment (percentage distribution of earnings across respondents, the size of shadow economy), the institutional variables (voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality and rule of law and control of corruption), the political situation and the social factors (marital and employment status, religiosity degree, culture differences) that influence perceived tax evasion.

The quality of public institutions is another key factor of tax evasion. In particular, the efficient application of the tax regulations by the government plays a crucial role in the decision to evade taxes. Evasion behavior, developing because of the failure of political institutions to efficiently administrate taxation, may be smoothed if fiscal policy moves closer to the median voter’s preferences.

In addition, we decided to include financial factors, such as size of shadow economy. Many researchers consider that the distortion of the overall tax burden affects labor-leisure choices and may stimulate labor supply in the shadow economy [3].

We build OLS estimation with robust standard errors to distinguish the effect of these factors to availability of tax evasion (Table 1).

The variable of most interest is Institutional Quality. In our estimation, the coefficient of the institutional quality has a statistically significant negative effect on tax evasion.

The estimated coefficient on culture differences is positive and highly significant and indicates that tax evasion is significantly higher in developed countries.

The effects of income on tax evasion have a multidirectional effect tax evasion, depending on such factors as risk preferences, income tax rate progression, and opportunity costs of time. In general, our estimation results indicate that the middle economic class has the lowest tax evasion. However, for upper class tax evasion is more if respondent has more income.

The estimation results are partly consistent with our hypothesis about impact of the size of shadow economy to tax evasion indicated that the rise in the level of shadow economy on 1 point increases the probability of tax evasion on 0.5 p.p.
### Table 1

#### Determinants of tax evasion across 33 countries

<table>
<thead>
<tr>
<th>Indep. Variable</th>
<th>Coeff.</th>
<th>Robust standard errors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax evasion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONTROL VARIABLES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Demographic Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE 30–49</td>
<td>0.01***</td>
<td>(3.09)</td>
</tr>
<tr>
<td>UPPER EDUCATION</td>
<td>-0.11</td>
<td>(-1.57)</td>
</tr>
<tr>
<td><strong>(2) Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MARRIED</td>
<td>-0.17**</td>
<td>(-2.48)</td>
</tr>
<tr>
<td>DIVORCED</td>
<td>0.174***</td>
<td>(6.2)</td>
</tr>
<tr>
<td>SEPARATED</td>
<td>0.187***</td>
<td>(3.43)</td>
</tr>
<tr>
<td><strong>(3) Employment Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PART TIME</td>
<td>-0.083***</td>
<td>(-2.94)</td>
</tr>
<tr>
<td>SELF EMPLOYED</td>
<td>-0.106***</td>
<td>(-3.29)</td>
</tr>
<tr>
<td>RETIRED</td>
<td>-0.091***</td>
<td>(-3.14)</td>
</tr>
<tr>
<td>STUDENTS</td>
<td>-0.055</td>
<td>(-1.51)</td>
</tr>
<tr>
<td>UNEMPLOYED</td>
<td>-0.131***</td>
<td>(4.32)</td>
</tr>
<tr>
<td>OTHER</td>
<td>0.478***</td>
<td>(2.57)</td>
</tr>
<tr>
<td><strong>(4) Religiosity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHURCH ATTENDANCE</td>
<td>-0.041***</td>
<td>(-13.59)</td>
</tr>
<tr>
<td><strong>(5) Culture</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEVELOPED COUNTRIES</td>
<td>0.089***</td>
<td>(6.00)</td>
</tr>
<tr>
<td><strong>(6) Institutional Quality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.16***</td>
<td>(-14.97)</td>
</tr>
<tr>
<td><strong>(6) Financial factors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHADOW ECONOMY</td>
<td>0.005*</td>
<td>(0.007)</td>
</tr>
<tr>
<td>UPPER MIDDLE CLASS</td>
<td>-0.204*</td>
<td>(-0.482)</td>
</tr>
<tr>
<td>UPPER CLASS</td>
<td>0.533*</td>
<td>(0.275)</td>
</tr>
<tr>
<td>N</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>R-square</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>F-stat</td>
<td>18.13*</td>
<td></td>
</tr>
</tbody>
</table>

Source: author’s research
### 3.2. Tax avoidance

For empirical modelling of tax avoidance, we analyze the sample of 51 countries from 2006 to 2009 years.

As a dependent variable, we use the difference between total tax rate and effective tax rate. This data are available from the report of PWC “Global Effective Tax Rates” from 2006 to 2009 years [13].

A crucial determinant of the incentives to engage in tax avoidance is the availability of tax shields. Thus, commonly are used two variables that can influence on tax avoidance: net operating loss carryforwards and two different measures of debt. As for country at all, we decided to use the annual growth rate (%) — it will have contrary effect on tax avoidance that NOL — and government debt (% to GDP). This data are available from the WB [12].

We also decided to use CSR index as an indicator of corporate social responsibility in the countries that can influence tax avoidance. This data are available from the EU CSR report 2006-2009 [14].

Our central hypothesis concerns the interaction of governance institutions and tax avoidance.

We build OLS estimation with robust standard errors to distinguish the effect of these factors to availability of tax avoidance (Table 2).

<table>
<thead>
<tr>
<th>Determinants of tax avoidance across 51 countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coeff.</strong></td>
</tr>
<tr>
<td><strong>Indep. Variable</strong></td>
</tr>
<tr>
<td><strong>Robuststandarderrors</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTROL VARIABLES</th>
<th>Coeff.</th>
<th>Robuststandarderrors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax avoidance</td>
<td>-0.05*</td>
<td>(-0.03)</td>
</tr>
<tr>
<td><strong>(1) Debt</strong></td>
<td>0.03**</td>
<td>(0.01)</td>
</tr>
<tr>
<td><strong>(2) Annual growth rate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(3) Corporate social responsibility</strong></td>
<td>-1.03**</td>
<td>(-2.17)</td>
</tr>
<tr>
<td><strong>(4) Institutional quality</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| N  | 51 |
| R-square | 0.093 |
| F-stat | 22.82** |

Source: author’s research

We find a negative relation between debt and tax shelter usage. In addition, tax shelter firms are significantly less likely than non-shelter firms to report a net operating loss carryforward. Thus, the relation between annual growth rate and tax avoidance is positive. Furthermore, we find a strong association between higher institutional ownership and lower tax rates. Higher institutional
ownership is usually associated with increased monitoring over managerial performance to ensure that management is focusing on an increase in shareholder wealth via a reduction in costs, which may include a reduction of taxes. The variable CSR is significantly negative for TAX AVOIDANCE. Thus, strong community firms do not appear to use tax fees to reduce income tax expense.

4. Conclusion

Much work has concentrated on traditional topics, such as the impact of audit, penalty, and tax rates on compliance and avoidance. However, there is overwhelming evidence that observed tax compliance behavior cannot be explained entirely with the traditional economic analysis. Instead, we include demographic, economic and other factors help explain why many people are compliant.

We examine the many social and institutional factors in tax evasion across a wide range of countries. In particular, we use data sets from the WVS that contains information on individuals in multiple countries.

We find some empirical support for the hypothesis that institutional quality is significant negatively influence on stimulus to tax evasion. Furthermore, we find a strong association between higher institutional ownership and lower tax avoidance. Thus, we investigate that institutional quality helps decrease both the availability of tax evasion and tax avoidance.

This study also investigates the role of CSR in the relationship between tax management and tax avoidance. Our results provide evidence that firms that reduce tax expense may have strong governance.

In sum, the results in this paper underscore the relevance of social interactions and the importance of political institutions. Both aspects are essential for understanding citizen’s willingness to pay taxes. The government also should take into account that religiosity degree and income group of individuals have a solid impact on the level of tax evasion. In the same time, tax avoidance is strongly depended on government debt.

Future research can examine the concept of conditional cooperation and institutions, underlying tax payment. Future research also can measure the possible relation between tax avoidance and tax evasion.

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MARKETING MIX IN TOURISM: THE GOLDEN RING EXPERIENCE

Abstract
The enduring economic challenges in Russia drew attention to the promising segments within the domestic economy. One of the most misjudged yet budding is tourism. The aim of this work is to demonstrate that implementation of the particular marketing-mix can greatly benefit to cultivation of new tourist attractions across Russia. The innovated marketing strategy embraces the prosperous experience of “The Golden Ring” as well as suggests peculiar methods for achieving success in fundamentally new areas of the national tourism.

Key words: tourism, marketing, marketing mix, 4Ps, national economy.
JEL codes: L83, M31

The sector of tourism in Russia has shown significant improvements during the recent decades and is still demonstrating gradual growth till this day. This growth is reflected in the increasing number of hotels, travel agencies and foreign tourists in the country [3]. Due to recent events, related to the anti-Russian economic sanctions and the significant depreciation of the national currency, have only proved the significance of the domestic tourism promotion. Undoubtedly, Russia possesses rich cultural heritage which embraces both Imperial Russia and Soviet Union historic attractions. Officially there are 23 UNESCO World Heritage Sites in the country however there are many more yet to be acknowledged by the international community.

The Golden Ring experience
The Golden Ring of Moscow today is one of the most popular touristic destinations in Russia both for natives and foreigners [2]. The analysis of establishment and gradual development of this route as a popular tourist attraction
allows distinguishing specific factors that contributed to nowadays success of this destination.

Yuri Bychkov is an art historian and a journalist, who was the first to mention the term “Golden Ring of Moscow” and suggested it as a touristic route in the newspaper “Soviet culture” in 1967. “Soviet Culture” was a well-known and respectable newspaper with a rather large audience, so the series of articles written by Bychkov resulted into the rise in the flow of inner tourism in this direction. In some years the Golden Ring also became extremely attractive for foreign tourists as it reveals the very “Russian soul”.

The classical Golden Ring route consists of the eight principal cities:
— Vladimir;
— Suzdal;
— Ivanovo;
— Kostroma;
— Yaroslavl;
— Rostov Velikiy (Rostov the Great);
— Pereslavl-Zalesskiy;
— Sergiyev Posad.

Also nearby there are other smaller towns that can be included in the trip.

The analysis of appearance and developing of the Golden Ring route indicates a group of factors that contributed to the success of this direction in inner and international tourism of Russia. These vital factors can be divided for clarity into three categories:
1) Geography and logistics;
2) Historical value;
3) Marketing.

**Geography and logistics**
1. Proximity to Moscow.
2. Elaborated route.
3. Convenient transportation.
4. Developed infrastructure.

The first three aforementioned factors demonstrate the general availability of the Golden Ring route. Proximity to Moscow is measured according to the number of kilometers from one stop of the route to another one starting and finishing in Moscow. Also, this factor takes into consideration time required for a travel by bus or by train.

The farthest town from Moscow is Kostroma — 340 km or 8 hours away. However, sightseeing in Kostroma within the whole route demands smaller time and money expenditures. In other words, that is one of the key advantages of the Golden Ring as it enables visiting great amount of places in one trip.

In addition, the forth factor covers the developed infrastructure that includes different types of accommodation available and also cafes and restaurants on
every stop of the journey through the Golden Ring. The good level of infrastruc-
ture is substantial for attracting both local and foreign tourists in the current
competitive global tourist market.

**Historical Value**

1. Unique historic monuments.
2. The Role in the history of Russia.

The Golden Ring towns are famous for their ancient history i.e. for a signifi-
cant role that they played for Russian Orthodox Church and history of Russia.
Till this day these towns remain the open-air museums that keep the memory
of the most influential events of the 12th—18th centuries in Russian history in
the form of the various architectural monuments.

**Marketing**

1. Advertising.
2. Traditional Shopping.
3. Russian tradition itself.

Several marketing factors have greatly influenced the success of the Golden
Ring route. First of all, the initial promotion in the popular newspaper and later
advertisement by diverse agencies that understood the potential profitability.
Secondly, the Golden Ring towns are known for their traditional crafts that
are attractive for all kind of tourists. And lastly, these towns are the bearers of
the unique Russian culture.

**Tula Tour**

Taking into consideration the experience of the Golden Ring route, it would
be particularly interesting to study touristic opportunities concerning other
towns within the rather fast trip from Moscow. Short distance from the capital
of Russia and the row of the other similar factors combined with the marketing
mix strategy insure the success of the new direction.

This research concerns the Tula region and the Moscow region towns that
are yet not well-known as touristic attractions. The designed tour consists of
6 towns nearby Moscow:

- Serpukhov;
- Kaluga;
- Tula;
- Venev;
- Bogoroditsk;
- Kolomna.

The analysis of this direction according to the previously mentioned factors
which contributed to the high level of tourist flow for the Golden Ring allows
demonstrating the present development opportunities for the area.
Geographical and logistics

The proximity to Moscow is displayed in the demonstrative table which shows the distance and time needed to arrive to the given town from Moscow and from one another.

The distance and time between Tula Tour waypoints [4]

<table>
<thead>
<tr>
<th></th>
<th>Serpukhov</th>
<th>Kaluga</th>
<th>Tula</th>
<th>Venev</th>
<th>Bogoroditsk</th>
<th>Kolomna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moscow</td>
<td>105 km T: 1 h 50 m B: 3 h 20 m</td>
<td>164 km T: 3 h 20 m B: 3 h 20 m</td>
<td>174 km T: 3 h 40 m B: 2 h 45 m</td>
<td>162 km B: 3 h</td>
<td>248 km B: 4 h</td>
<td>114 km T: 2 h 20 m B: 1 h 40 m</td>
</tr>
<tr>
<td>Serpukhov</td>
<td>0 km</td>
<td>104 km B: 2 h 30 m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kaluga</td>
<td></td>
<td>0 km B: 2 h 25 m</td>
<td>108 km B: 2 h 25 m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tula</td>
<td></td>
<td></td>
<td>0 km B: 1 h 20 m</td>
<td>53 km B: 1 h 20 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venev</td>
<td></td>
<td></td>
<td></td>
<td>0 km B: 1 h</td>
<td>77 km B: 1 h</td>
<td></td>
</tr>
<tr>
<td>Bogoroditsk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 km B: 3 h</td>
<td>198 km B: 3 h</td>
</tr>
<tr>
<td>Kolomna</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 km</td>
</tr>
</tbody>
</table>

Note: T — travelling by local trains; B — travelling by bus.

The table provides the data which make it obvious to notice that time required for the movement between waypoints is minimized through the creation
of the efficient route. In general, the Tula route is less time-consuming than the Golden Ring one which can be considered an advantage.

But, according to the Internet recourses, infrastructure is not in the best shape so far. There is not a big choice of hotels or many options for a meal (except Tula which is already quite popular among tourists).

**Historical Value**

The sites of the Tula Tour are underestimated to this day. Each of the spots posses an impressive amount of historic monuments, churches and manor houses. Most likely those attractions are not the frequently visited ones because of the costs associated with the movement between the sites. But within the whole trip losses in time and money is minimized. This way, tourists can enjoy not only the spots that played a significant role in the history of Russia but also travel in a direction that is rare which raise its value.

**Marketing**

Traditionally the marketing mix tool is associated with identifying the four Ps of a product [1, 25], in the given case — the projected Tula Tour. The picture 2 demonstrates allocation of the factors according to the 4 Ps: Product, Price, Place and Promotion.

![Picture 2. Tula Tour Marketing mix: 4 Ps](image)

Regarding the advertising, the proposed direction yet so far has not been developed and advertised but for one city — Tula. Despite the fact that Tula is quite popular, still not for many people it is attractive to take a long trip for seeing only one town.

The first step suggested is the promotion of this new direction as a whole. First of all, the successful advertising can be accomplished only by the efficient initial target audience selection. Defining the key audience for this tour greatly influences
the media choices. In order to convey the idea of uniqueness and importance of
the route should be used various touristic newspapers, TV and Internet by includ-
ing the Tula tour in the programs and sites related to tourism. For example, this
tour can be advertised by the well-known event adviser KudaGo.com in Moscow.

Furthermore, for spotlighting the advantages of the Tula tour marketers
should apply the specific advertisement strategy by emphasizing the special
features that will tempt people to visit these towns. The first reason is the desire
to discover something new. The target audience embraces people who most
likely have already been to the Golden Ring of Moscow and would enjoy visiting
more historic monuments. Secondly, the whole tour is in close proximity
to Moscow. Thirdly, prices for organized tours and especially for independent
travels are low as this direction is still unknown for they main tourist flow.
Above all, each of Tula Tour towns played a significant role in the History of
Russia and can splendidly demonstrate it. Additionally, the Tula tour has its
own unique specialty — traditional sweet-stuff. Many people are familiar with
the traditional Tula honey-cake (prynik) but in fact every town in this direction
possesses its peculiar pastry. In Kolomna it is home made paste, in Venev —
traditional buns. Therefore, marketers can underline this feature of the Tula
Tour and make it its distinct strength.

Taking the above-mentioned into account allows creating the marketing
mix recipe which induces the conversion of the Tula Tour into the new touristic
attraction.

To conclude, current economic crisis gives considerable food for thought
because there is a quantity of prospects for developing domestic sectors that
previously were underestimated. The integration of the successful experience
of the Golden Ring and the modern marketing instruments opens up various
touristic opportunities not far away from the capital of Russia that can be con-
verted into the profit makers in the sphere of tourism.

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ADVANCED TECHNOLOGIES WHICH HELP TO REDUCE ENERGY AND OIL CONSUMPTION

Abstract

The situation on the energy market has changed dramatically. It requires prompt and elaborate decisions. They should be based on the results of comprehensive analysis. The former forecasts in the sphere of the energy consumption were constructed on the basis of the characteristics which were relevant at that time. So the task is to identify the indicators and factors which determine the current situation in the energy consumption, analyze these factors and indicators and finally systematize them, in order to be able to predict the new trends. The researched technologies are divided into four groups on the basis of their rendered effect.

Key words: multi-stage hydraulic fracturing of horizontal wells, liquefied gas, renewables, biofuel, electric and hybrid cars, gas hydrates.

JEL codes: F51, Q32, Q42, Q47

The situation on the energy market has changed dramatically. The former forecasts in the sphere of the energy consumption were constructed on the basis of the characteristics which were relevant at that time. So the task is to identify the indicators and factors which determine the current situation in the energy consumption, analyze and finally systematize them, in order to be able to predict the new trends.

Most of the world analysts agreed with the fact that in world energy branch things would remain unchanged, that growing population along with growing income could lead to increase in production and consumption [5]:

1. The population would grow by 1 and a half billion people in 2 decades;
2. The volumes of consumption of energy resources would grow with the share of consumption of oil remaining at the same level;
3. Price differentials would keep stable both between products, and markets.

It’s the real forecast which was made in 2012. These principles were the main bases for the previous five years (2010–2015).

However, considering the current situation and world trends of development of fuel and energy complex, we can note that:

1. The dynamics of the growth of production outrun that of consumption of the key importers. The offer of oil significantly exceeds the demand;
2. The price differential between oil and gas reduced;
3. The same is true about price imbalance on the main markets.

We can say that gas has been strengthening its positions recently.

The direction of the economic policy has negative influence on the Russian economy: reduce global and national energy demand, energy resources devaluate, competition increases and uncertainty in the markets is growing.

Let’s allocate the main technologies which sharply change the consumer direction in order to investigate their action mechanism and effect. They are divided into four groups focusing on the following topics:

1. Technologies which add reserves;
2. Technologies of energy efficiency from alternative sources;
3. Technologies which decrease the consumption of oil and oil products;

**Technologies which add reserves**

Multi-stage hydraulic fracturing of horizontal wells and extended reach vertical wells are technologically sophisticated modern solutions. Indeed the structure of the existing oil fields has become more complex.

This “technological” breakthrough has been financed by the investments into production of shale oil. These have accounted for more than 200 billion dollars for the last 3 years. A large number of participants also searched for different solutions for enhancing production from the most effective reserves.

Specific advantages of extended reach drilling (ERD) are as follows:

1. Extend life of mature fields (producers/injectors);
2. Satellite field developments;
3. Eliminate drilling/production islands;
4. Access reserves in environmentally sensitive areas;
5. Traditional ERD. They are able to operate all year (unlike offshore rigs in the frozen ocean), and more efficiently (but less expensive) environmental and safety compliance.
6. Multiple well ERD, resulting in less environmental & ecological disturbance, as well as the ability to drill under lakes and rivers.

It has doubled the efficiency of drilling of one well and lowered the break-even point (BEP) of shale oil output [6].
Thanks to these technologies we can reduce costs of hard-to-recover reserves, improve the rate of new wells, and thus add “cheap” reserves into the market. They fully deserve their repute of technologies which increase the amount of reserves.

**Technologies of energy efficiency from alternative sources**

The remaining political support and technological innovations make a contribution to fast expansion of alternative energy sources, such as gas liquefaction, renewables and biofuel.

Alternative types of fuel have transformed the North American market of gas. According to the forecasts shale gas and methane from coal mines will have provided 57% of the North American output by 2030, and will have made export of North American liquefied gas economically expedient [3].

Accelerated growth of energy efficiency is very important. This reduces the growth of global consumption of primary energy.

They significantly enhance the availability and the mobility of gas, they reduce generation cost on the basis of renewables comparing to the traditional energy sources and at the same time their power increases.

However, there are serious risks connected with the expenses and the access.

We can indicate following restrictive conditions:

1. Dependence on tax benefits and the overestimated tariffs for purchasing electric energy from renewables;
2. Discontent of the network companies;
3. Need for storage facilities for electric power;
4. Concern of ecologists and local population.

**Technologies which decrease the consumption of oil and oil products**

The third point is technologies which decrease the consumption of oil and oil products. They are development of electric and hybrid cars and also increase of efficiency of internal combustion engines. These technologies reduce the consumption of hydrocarbons of the main energy consuming countries.

It is expected that over the next 20 years oil index will be showing the lowest growth rates among all types of fuel.

The main reason of increasing demand for hybrid and electric cars are regularly and substantially increasing of oil prices and continuous toughening of ecological requirements to cars. Such factors as improvement of technologies and tax benefits for producers of hybrids are significant [12]. Moreover, in some countries owners of hybrids are exempted from road tax and they don’t pay for municipal parkings.

It should be noted that there factors which constrain the development of electric and hybrid cars. They are limited resource of electric batteries, lack of
developed infrastructure of service of electric cars (stations of charging) and the high cost of electric cars. The prices of premium cars are nearly at the same level (e.g. Tesla S costs 87 400 $ [2] — MB S-Klasse 92 350 $ [1]), but, if we consider middle class cars we can see that electric cars are much more expensive than those with traditional motor fuel (e.g. VW Golf Electric 34 900 $ — VW Golf 17 650 $ [4]).

Therefore electric cars are the most perspective, but currently, they are an expensive alternative to conventional cars.

“Blasting” technologies of future

The forth group of technologies is “blasting” technologies of future, so-called “black swans”. They are:
1. Production of gas hydrates;
2. Development of stocks of petromaternal breeds;
3. Synthetic liquid fuel from coal;
4. Controlled thermonuclear synthesis.

Hydrates are the largest source of natural gas in the world and are available to the regions having deficiency of this resource.

Regions that seem to be leaders of production are: USA (Gulf of Mexico, the North Slope of Alaska and Atlantic coast), Canada, Asia-Pacific countries (Japan, India, China, South Korea and Malaysia).

But their potential is insufficiently studied. The emergence of new regions bearing gas hydrates is possible.

Active explorations of gas hydrates are under way in many countries. In the next few years they are planning to implement 7 projects, including 3 pilot production projects. The U.S. Department of Energy (DOE) plans to increase the expenditure on research in the next four years. The Start of commercial output of gas hydrates is expected in 2018 in Japan and in 2019 — in Alaska [8].

The implementation of these projects will help to involve essential additional volumes of hydrocarbonic raw materials into production and thus, to bring new kinds of energy into the market. But this effect is postponed until then the next 15 years.

The expected implications of these technologies

It should be noted that the power policy is stipulated by safety issues on the one hand, and by problems of climate change on the other hand. These bring about various ‘consequences for different types of fuels and regions.

Our basic scenario proceeds from realization of political measures. Specific aspects related to the policy will define energy balance and the role of gas in it.

We can say for certain that the developed countries strive for energy efficiency and innovative development because new energy saving technologies are
stimulated by their national governments. The tendencies to increase volumes of export and to enter into new geographical and product markets are building up. Therefore the growth of the international competition in the world energy markets is expected.

Today businesses work on their efficiency, because the ability to lower expenses promptly and flexibly will play a major role in a new oil paradigm.

The results of the research allow to forecast an essential reduction of global and national energy demand, devaluation of energy resources and increased competition and uncertainty in the markets.

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BASIC PRIORITIES OF RUSSIA’S DEVELOPMENT STRATEGY

Abstract
This report deals with measures for overcoming the crisis, which should be strategic rather than tactical. The plan of economic and social development in our country has been called “Strategy 2030” and it is concentrated on four priorities: investment activity, import substitution, the quality of state governance, and budgetary policy. The complexity of the economic situation in the country is high and the search for effective ways of recovery is very urgent.

Key words: economic growth promotion, economic and social development, elimination of crisis effects.

JEL codes: O10, O40, M48

Introduction
At the present time, after 7 quarters of recession, economists note the minimal annual increase in Russian economy. It doesn’t mean that it will last in the current 2017 or rise significantly in the future, years of targeted reforms are needed for elimination of crisis effects. But experts don’t exclude a small growth. So, how to promote economic growth and what qualities should it have? Russian authorities have realized the complexity of economic situation in the country and started to find ways out of it. During the International Investment Forum “Sochi—2015” the Russian Prime Minister Dmitry Medvedev announced new economic priorities for Russia and set long-term goals for the national economy [4]. Implementing this strategic vision, Russia has begun working in collaboration with the expert community at extended strategy of socio-economic development, the so-called Strategy—2030. This strategy is focused on four priorities: the investment activity, the import substitution, the state governance quality, and the budgetary policy.
Priorities for development

Talking about the first priority, investment activity, I have to note that the government created a number of institutions and mechanisms to attract more private investment into the Russian economy [4]. The examples of such institutions are the following: 1) the newly established Industry Development Fund for providing assistance to the companies which are in need of early stage investments; 2) the corporation for the development of small and medium-size enterprises which may provide financial and credit support for such enterprises. On the regional level, local authorities now are given a right to provide a two-year tax break. Oleg Buklemishev, the director of the Economic Policy Research Center, agrees that these are logical next steps, “The issue of investment in Russia is a key economic problem which has to be solved in the first place” [4]. It is necessary that the government finance and support more small and medium businesses because it is these businesses that are the basis for the strong economy which is planned to be developed in Russia.

Import substitution has become a mantra for the Russian state and its economists. As we know since the early nineties the post-Soviet Russia has become a very import depending country which succeeded only in selling out its great natural resources. Soviet agriculture was known for its inefficiency and an inability to feed its population too. This resulted in destroyed industry, agriculture, low defence capacity, and decay in almost all spheres of our country’s life. The anti-Russian sanctions implemented by the EU countries and the USA triggered the process of restoring national economy, and the government should facilitate it by all means through supporting laws, financial aid, and reasonable administration. The government also decided to increase volume of credits with privileges conditions and in long-term perspective. So, there’s a competition between companies that work in such sectors as agriculture, engineering, construction, manufacturing and chemical industries, energetics and transport.

The two remaining priorities are the governance effectiveness and budgetary policy. They are a precondition for achieving the first two goals [4]. That is why our prime minister declared the necessity to increase governance and budget efficiency through reducing the number of government officials and unreasonable spending.

Possible measures for improving the crisis situation

Firstly, the Russian government should invest more funds in science and make the profession of a scientist attractive for young generations and well paid. The reason is that advances in technology and science are transforming our world at an incredible pace, and our future will surely be filled with leaps in technology we can only imagine. Being “science literate” will be an absolute necessity. We can’t escape from the significance of science in our world. But nowadays we can see a heavy brain drain from Russia to western countries where
there are more appropriate opportunities and ways to develop innovations, this should be changed. Also we have to gain economic independence of the country developing industry and agriculture and improve state governance quality. The government should resolve the problem common to Russian economy and known as corruption and racket. Generally, every small and medium business has to pay a lot of money as bribes in order to work on the market. Very often businessmen have to pay to officials who have the power to impose sanctions or who have influence in some sectors of economy. We cannot ignore the fact that recently Moscow has seen a demonstration of about 8000 people. What will the future of our country be if even some members of the government are accused of illegal personal enrichment?

Conclusion

To sum up, I’d like to say that our country was good in overcoming the imposed sanctions and may be this year will be successful for economic development and future prosperity according to the forecasts for Russian growth rates, the potential for faster growth in Russia, and the role that long-term strategic plans might help in promoting faster growth.

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AN INNOVATIVE FINANCING TOOL FOR FUNDING EDUCATION IN RUSSIA: SOCIAL IMPACT BONDS

Abstract
Nowadays there is a lack of the financing of higher education in Russia. The article explains a new innovative financing vehicle named social impact bonds (SIB) for social programs whereby investors pay for improving a social outcome of the project that is of social and/or financial interest to a government. The state compensates expenses of the investor and will pay a premium, but only if the social program is implemented successfully. Otherwise, the investor loses money, so the SIB is called pay for success. The most important advantage of SIB-programs is the ability to increase responsibility of all program’s participants for achievement of social results. For the application of SIB in Russia, it is necessary to ensure a favorable investment climate, development of the nonprofit sector.

Key words: social impact bonds, insufficient funding of education system, higher education, financial tool.

JEL codes: A 11, A 13, A 22.

Introduction
The lack of higher education funding in Russia is quite evident today. Therefore, it is vital to lay a strong emphasis on a thorough search for new ways of financing Russian universities.

Analysis of higher education expenditures
According to statistics, education expenditures in 2016 decreased by 8.5% compared to the previous year, but according to forecasts in 2018, expenses will be reduced dramatically — by 28.5%. In 2019 this figure will skyrocket, amounting to 35.2%. The most tragic is the fact that the cuts are supposed to hit mostly the system of higher education. Based on the above, it can be concluded that a reduction in the financing of the education sector in the Russian Federation requires new alternative sources of funding [4].
The definition of SIB

It is significant to take into consideration the attraction of additional funds to the social sphere of society besides to state funds. Obviously, it can be realized by one of the modern methods of strategic management of various types of risks caused by the current market conditions [2, p. 174]. One of them is a high-potential financial instrument named social impact bond (SIB). SIB is a new innovative financial tool for social programs whereby investors pay for improving a social outcome of the project that is of social and financial interest to the government [1, p. 59].

At first sight, SIB might resemble a public-private partnership. However, there are distinguishable characteristics of SIB. Firstly, the return depends on the achievement of social results, rather than on the economic performance of the organization. Secondly, social impact bonds aim to improve providing services to the population.

International practices

The first social impact bonds were issued in 2010 by one of the prisons in the UK. This bond raised 5 million pounds from 17 social investors to finance a program for the social adaptation of former prisoners. As a result, the profit of the commercial social enterprise was 7.5% more effective than the results of the state company, which tried to be engaged in the similar project. Moreover, as our literature survey shows, SIB have become a very popular tool of financing in different areas — such as education, social support, criminal justice, employment.

<table>
<thead>
<tr>
<th>Name</th>
<th>Economic sector</th>
<th>Country/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Code Academy</td>
<td>Education</td>
<td>Portugal/2015</td>
</tr>
<tr>
<td>Educate Girls Development Impact Bond</td>
<td>Education</td>
<td>India/2015</td>
</tr>
<tr>
<td>Child-Parent Center Pay for Success Initiative</td>
<td>Education</td>
<td>United States/2014</td>
</tr>
<tr>
<td>Utah High Quality Preschool Program</td>
<td>Education</td>
<td>United States/2014</td>
</tr>
</tbody>
</table>

Table 1

Mechanism for the implementation of SIB by the example of Financial University under the Government of the Russian Federation.

In this connection, it is significant to scrutinize the question concerning the implementation of SIB in the higher education system in Russia. Analyze this quite complex mechanism by the example of the Financial University.

There are seven stakeholder groups involved in SIB: social object (FU), government, nonprofit service providers, investors, investment bank, evaluation advisers and independent assessors.

1. Firstly, the government currently funds costly programs for University
2. Secondly, the government contacts an Investment bank for bonds issue
3. Next, investors direct funds to the University’s social program through the investment bank.
4. Then, the investment bank arranges bond issue aimed at raising charity funds.
5. After that, the funds are transferred directly to the implementation of social programs through a nonprofit organization; a nonprofit organization provides overall SIB project management.
6. At the next stage the evaluation advisers help monitor and refine the social program.
7. Finally, an independent assessor determines if SIB targets are met.

Figure 1. Social impact bond model

The state will compensate investor’s expenses and will pay a premium, but only if the social program is implemented successfully. Otherwise, investors will lose their money so SIB is called pay for success. As a result, there are potential cost savings to the government, non-profits have access to growth capital to scale up operations. Investors strive for achievement of financial returns and social impact. Saved money may be repaid to the investors and investment bank, and the remaining state funds can be effectively used for socio-economic development of the country.

Figure 2. Social impact bond model [3]

**Problems and prospects the implementation of SIB**

Assessing a nascent market is a tricky undertaking. By and large, Russia has no experience of using this financial instruments that have already been used abroad.
For the application of SIB in Russia, it is necessary to ensure a favorable investment climate, development of the nonprofit sector and the willingness of the investment community to similar investment projects. For instance, it is highly recommended to focus on the following aspects: A sufficiently mature non-profit sector, the interest of socially-oriented investors and the support of local authorities.

On top of that, there are some reasons which facilitate the implementation of SIB in Russia. Firstly, there is a lack of an effective financing instrument. Russian educational institutions are allowed to issue bonds for their financing, but in practice, the real issue of such bonded loans has not yet been conducted. In my opinion, this is due to a number of reasons: insufficient transparency, a complicated mechanism for obtaining a credit rating. Secondly, SIB-programs enable to increase the responsibility of the participants. In other words, the most important advantage of SIB-programs is the ability to increase responsibility of all program’s participants for achievement of social results. Finally, In Russia, most higher education institutions are industry-specific. In this connection, it enables to attract organizations as investors which are interested in working with the university on a professional basis so the educational institution receives funding specifically for those programs that are important for the industry as a whole.

For example, in the United States, such loans are often used to build medical centers and sports stadiums, the proceeds of which are directed to additional funding for educational institutions. According to the international experience, Social Impact Bonds (SIB) can be essential source of financing higher education.

**Conclusion**

To sum up, I strongly believe that my investigation can draw the attention of economists tackling a tough challenge of insufficient funding of the Russian system of higher education since SIB is a strong financial instrument in the area of financing. This, in turn, will contribute to the development of education system as a significant part of our economy.

**References**

THEORETICAL APPROACHES TO INVENTORY MANAGEMENT

Abstract
Nowadays in a market economy it’s increasingly important for the company to acquire methods of inventory management optimization. These methods give the possibilities to minimize the cost of warehousing, and completely meet the needs of consumers. The lack of control over the reserves supply and the remains of the inventory will certainly affect the financial well-being of the company. This article examines the existing approaches to inventory management from the point of view of the inventory management theory’s development.

Keywords: inventory management, logistics, costs, approaches.
JEL code: O10

Getting to the study of theoretical approaches to inventory management, first of all, we should determine the content of the category “reserves”. According to Professor Hajinsky A. M. “reserves — are goods for industrial purposes, consumer goods and other products at different stages of production and circulation, which are expected to enter into the process of production or personal use” [3]. The presence of such a good involves significant costs and seriously affects the performance of the enterprise. As noted by Professor D. Bowersox, a significant part of logistics costs (about 20%) are costs for maintenance and inventory control [1]. In this connection, inventory management, i.e the creation, control and regulation of the level of stocks of the organization, is considered as one of the most important logistical functions.

The inventory management problem has two contradictions. On the one hand, an increase in inventory levels will reduce the risk of failure consuming link in the delivery of necessary supplies. However, this may cause the volume of the frozen capital growth, loss of flexibility and braking control system service
quality development [5]. On the other hand, the lack of an adequate supply leads to unsatisfied demand of buyers. On the one hand, the stock is a buffer between the supplier and production, and on the other hand, between the manufacture and end-user. Thus, the fundamental issue of inventory management is to determine the value of the stock, from the point of view of minimizing the costs for its management and to provide the necessary level of service.

Nowadays we can distinguish two points of view on the availability of stocks of the enterprise: positive and negative. In order to understand and assess their implications, we turn to the theoretical inventory control approaches from the point of view of their development history. Historically, there are three existing inventory management concepts:

1. The concept of maximizing stock.
2. The concept of stock optimization.
3. The concept of minimizing stock.

One of the first concepts of inventory management is the concept of maximizing resources. From ancient times to the beginning of the XX century, a high level of available stock was an indicator of the success and security of the organization and the country as a whole. The presence of a high level of stock is an objective necessity in a situation where the level of the products demand is unknown, as well as the organization of production in a situation with high risks. However, we should be aware that this will cause an increase in the cost of storage and the stock maintenance. A striking example of the implementation of this concept in practice is the Soviet economy during the period from 1970 to 1980. At this time, the decisive role in the creation of reserves were factors such as the need to meet customer demand, ensuring uninterrupted production process, insurance risk of supply failure or an increase in purchase prices, the possibility of volume discounts and savings on transportation. Thus, these factors were significant reasons for the formation of a positive attitude to the presence of reserves. However, political and legal conflicts, social and economic upheavals of the early ‘90s led to the need to reduce inventory levels, because maintaining the maximum level of reserve required great capital investment.

Since the end of the XIX century the concept of optimization of stocks began to develop. As part of this concept, the optimal size of a company’s stock is determined by the minimum total cost of its creation and maintenance. There was a positive attitude to the presence of reserves, but at the same time, the focus was on the maintenance of an optimal, economically viable volume of stocks. Published in 1931, F. Raymond monograph was devoted to inventory management theory is considered to be the beginning of the optimization concept stocks. Today this approach is most widely accepted and often used in practice. At the same time, as it was noted by A. N. Sterligova, “the task of optimizing inventory levels in many companies still remains unresolved in our country” [7].

The premise for the formation of the youngest concept of minimizing stocks has been the emergence of logistics as a science and the development of Japa-
nese management. Japanese experts looked at the availability of stock from a dif-
ferent angle, and noted that the stock — it is always a loss. “Reserve — a screen
behind which the lack of work hides” [6]. They said that the stock indicates
a conflict within the company, among which there may be poor quality, lack of
good planning, irregularities of production or supply. Based on the identified
problems and contradictions, we began to develop new logistics systems and
technologies to inventory management, which allow us to reduce inventory
levels to a minimum. These tools include a system MRP (Material Resource
Planning), one of the main advantages of which is to minimize the costs of
stocks of raw materials, intermediates, components. Another tool which is used
to minimize inventory levels — JIT technology (Just In Time). Its main goal
is minimizing inventory levels while maximizing the integration of all logistics
functions of the organization. Thus, the modern inventory management tech-
nologies provide the opportunity to achieve a minimum level of stocks while
ensuring the required level of quality logistic services. The main advantages and
disadvantages of the theoretical approaches to inventory management are sys-
tematized by us in Table 1.

Inventory management is a relatively young but rapidly developing science.
It is believed that the first phase of the development of modern inventory man-
agement theory began in the late 19th century. American author M. Kirkman
in 1887 wrote the book “Managing supplies for the railway — the purchase, the
distribution,” which is considered one of the first books devoted to the problem
of organizing stocks in the field of rail transportation. Later R. Wilson published
his work, which resulted in a formula determining the economic lot size for the
warehouse and inventory management mathematically formulated problem.

Advantages and disadvantages of theoretical approaches

<table>
<thead>
<tr>
<th>The approach</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| Maximizing inventory | • Satisfaction of customers demand  
• Improving the efficiency of the production process  
• Insurance against risk of supply failure or an increase in purchase prices  
• The ability to obtain volume discounts | • Increase in storage costs and the maintenance of a stock  
• The risk of surplus stock  
• The risk of damage, theft  
• The risk of obsolescence of inventories  
• “Immobilization” of capital |
| Optimize inventory | • Minimum total cost of the creation and maintenance of a stock  
• Maintenance of optimum stock levels | • The difficulty in calculation of the optimum volume of stocks |
| Minimizing inventories | • Reduction of maintenance costs, transportation, inventory and other operations  
• Accelerated turn over of goods  
• Getting rid of surplus stock | • Loss of customer confidence  
• The risk of deficiency |

Table 1
The second stage of development of the theory of reserves usually defined as the time interval from the beginning of the Second World War until 1970. The Second World War was a powerful incentive for the development of theory and development of numerical methods for solving problems. Also during this time period to the fore of the significant importance of effective distribution, storage and transportation of material and technical values were appeared. A logistics approach helped to solve problems in these areas. In the postwar period T. Whitin developed a stochastic version of the model size of the order, and later he wrote the first book devoted to the probabilistic model of inventory management. Thus, during this period of time a major breakthrough was made in the development of inventory management theory. Diversified objectives were considered, their solutions were offered, dynamic and stochastic models of inventory management were formulated. Many experts agree that in this period exactly inventory management theory was generated as an independent branch of science. In its formation the other research areas (such as mathematical statistics, queuing theory, game theory, and others) played the important role.

In the second half of the XX century the third stage in the development of inventory management theory began. It is called a logistical approach. The synchronous development of industry and engineering science, computer equipment contributed to the development of ideas on the use of these instruments for the planning of the most successful activities of the enterprise, including its production process. In terms of logistical approach to inventory management toolkit approach remains the same, but the opinion on the stock itself radically changed. Now the stock is regarded as an object of management in terms of integration of units and elements of the supply chain, rather than as an independent member of a separate unit [5]. The need to analyze increasing more in those industries whose activities are directly related to the scheduling of series production and storage. In 1976 J. Lambert published the work “Development of methodology for calculation of inventory management costs: the analysis of the content of inventory costs.” In this book, the author highlights the cost components of one of the biggest items of logistics costs, as well as a methodology for the calculation of the deposit inventory costs was worked out [8]. During this period, there is not only a more thorough study of the analytical models and inventory control methods, but also modern information technology, such as MRP system (Material Requirements Planning), JIT (Just In Time) and others become widespread. Under this approach, inventory management is becoming an essential tool for the development of the organization’s management system.

Thus, the following points can be distinguished in the history of the theory of inventory management in the supply of: a positive (concept of maximum stock), negative (concept of minimum stock) and the neutral position is for the concept of optimization of resources. However, the emergence of largely conflicting concepts of inventory management didn’t lead to the abolition of the previ-
ous concepts. J. Schreibfeder noted that effective inventory management allows organizations to meet or exceed customer expectations, creating such reserves of each product that maximizes net income [4]. And at the moment, more and more organizations start paying attention to inventory management problem, as stocks are “frozen”, diversion of funds, and thus maintain an optimal level of reserves is the primary problem of organization, especially in a competitive environment.

References

THE RELEVANCE OF IMPORT SUBSTITUTION PROCESS IN AGRO-FOOD SECTOR OF THE ECONOMY

Abstract

The paper analyzes the problems connected with providing food independence of Russia, describes the relevance of the import substitution process in the agro-food sector, presents the forecast values of the import substitution potential in the agricultural sector, considers the impact of economic sanctions imposed by the European Union countries, the United States and other countries. In addition, it defines the role of the food embargo, as a response measure to anti-Russian sanctions, analyzes import and export commodity structure of agro-food products in the Russian Federation and presents the export and import dynamics of agro-food products in Russia. In conclusion, there are an assessment of food independence level of our country and forecast level of food independence and export potential of Russia for 2020.

Keywords: Russian economic policy, agro-food sector, food sovereignty, import substitution process.

JEL codes: Q 17, Q18

The implementation of Russian Federation economic policy in the current context of economic globalization should ensure independence of the country and its national security. One of the main aspects of this policy is food sovereignty, which implies a stable domestic production of agro-food products, providing the population of the country with domestic food. The most important factor in achieving this goal is import substitution as the most possible strategy for the economic growth and development of agro-food sector in Russia.

The problem of import substitution in the agro-food sector of the economy has gained particular relevance to our country in 2014, because of the introduction of economic sanctions against Russia by the EU, the USA, Canada, Australia, Japan and other Western countries.
Development of agro-food sector of the Russian economy for the last decade was characterized by the growth of import of agricultural products and limited domestic resources for the production of these products.

The Russian Federation has annually imported agro-food products in the amount from 7 to 43 bln. $. It should be noted that imports of agricultural products during period from 2000 to 2013 has increased by six times (Table 1).

Table 1

Dynamics of exports and imports of agricultural products in the Russian Federation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1,623</td>
<td>7,384</td>
<td>-5,761</td>
</tr>
<tr>
<td>2001</td>
<td>1,887</td>
<td>9,205</td>
<td>-7,318</td>
</tr>
<tr>
<td>2002</td>
<td>2,801</td>
<td>10,380</td>
<td>-7,579</td>
</tr>
<tr>
<td>2003</td>
<td>3,411</td>
<td>12,043</td>
<td>-8,632</td>
</tr>
<tr>
<td>2004</td>
<td>3,292</td>
<td>13,854</td>
<td>-10,562</td>
</tr>
<tr>
<td>2005</td>
<td>4,492</td>
<td>17,430</td>
<td>-12,938</td>
</tr>
<tr>
<td>2006</td>
<td>5,514</td>
<td>21,640</td>
<td>-16,126</td>
</tr>
<tr>
<td>2007</td>
<td>9,090</td>
<td>27,626</td>
<td>-18,536</td>
</tr>
<tr>
<td>2008</td>
<td>9,278</td>
<td>35,189</td>
<td>-25,911</td>
</tr>
<tr>
<td>2009</td>
<td>9,967</td>
<td>30,015</td>
<td>-20,048</td>
</tr>
<tr>
<td>2010</td>
<td>9,365</td>
<td>36,482</td>
<td>-27,117</td>
</tr>
<tr>
<td>2011</td>
<td>11,964</td>
<td>42,476</td>
<td>-30,512</td>
</tr>
<tr>
<td>2012</td>
<td>16,343</td>
<td>40,139</td>
<td>-23,796</td>
</tr>
<tr>
<td>2013</td>
<td>16,223</td>
<td>43,152</td>
<td>-26,929</td>
</tr>
<tr>
<td>Total:</td>
<td>105,25</td>
<td>347,016</td>
<td>-241,766</td>
</tr>
</tbody>
</table>

Thus, during the analyzed period, our country imported agro-food products in the amount of 241,765 mlrd. $.

The paradox that Russia is self-sufficient in all major types of resources — land, water, energy, raw materials and labor. The agricultural potential of Russia is one of the biggest in the world. It has 8.9% of the global agricultural land, 2.6% — pastures, 52% — chernozemic soil, 8.3% — production of mineral fertilizers, 20% — fresh water.

During the analyzed period the level of food sovereignty for certain types of food was less than threshold values (Table 2).

However, it should be emphasized a positive dynamics in the production of meat in 2 times, the grain in 1.5 times, imports of milk and potatoes has increased by 95.7% and 67%.

Currently, the fact that in 2014 compared with 2013 import decreased by 8% gives us optimism and confidence of Russian agro-food market, for some groups of products it looked as follows (Fig. 1)
Table 2

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Years</th>
<th>2014 to 2000, %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meat products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources, mln.t.</td>
<td>7,1</td>
<td>8,7</td>
</tr>
<tr>
<td>Production, mln.t.</td>
<td>4,4</td>
<td>5,0</td>
</tr>
<tr>
<td>Import, mln.t.</td>
<td>2,1</td>
<td>3,1</td>
</tr>
<tr>
<td>Level of food sovereignty, %</td>
<td>62</td>
<td>57</td>
</tr>
<tr>
<td>Threshold, %</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Milk products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources, mln.t.</td>
<td>3,8</td>
<td>4,0</td>
</tr>
<tr>
<td>Production, mln.t.</td>
<td>3,2</td>
<td>3,1</td>
</tr>
<tr>
<td>Import, mln.t.</td>
<td>4,7</td>
<td>7,1</td>
</tr>
<tr>
<td>Level of food sovereignty, %</td>
<td>84</td>
<td>78</td>
</tr>
<tr>
<td>Threshold, %</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grain</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources, mln.t.</td>
<td>101,7</td>
<td>122,9</td>
</tr>
<tr>
<td>Production, mln.t.</td>
<td>65,4</td>
<td>77,8</td>
</tr>
<tr>
<td>Import, mln.t.</td>
<td>4,7</td>
<td>1,5</td>
</tr>
<tr>
<td>Level of food sovereignty, %</td>
<td>64</td>
<td>63</td>
</tr>
<tr>
<td>Threshold, %</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Potatoes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources, mln.t.</td>
<td>45,8</td>
<td>45,8</td>
</tr>
<tr>
<td>Production, mln.t.</td>
<td>29,5</td>
<td>28,1</td>
</tr>
<tr>
<td>Import, mln.t.</td>
<td>0,6</td>
<td>0,5</td>
</tr>
<tr>
<td>Level of food sovereignty, %</td>
<td>64</td>
<td>61</td>
</tr>
<tr>
<td>Threshold, %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The amount of export of agro-food products was 18.906 trillion. $., so it increased by 16.5%.

This fact is primarily connected with the introduction of the food embargo in accordance with the presidential decree from 6th August 2014, a total ban on the supply of beef, pork, poultry, fish, cheese, milk, fruits and vegetables from Australia, Canada, the EU, the United States and Norway.

It should be pointed that the combination of current economic events activate the domestic agricultural sector. The first and significant results of import substitution began to appear in 2014 — 2015. Despite a total fall in 2015 the country’s GDP by 4%, agriculture sector showed a 2% — growth [4].

Academician of the Russian Academy of Sciences Ivan Ushachev considers “If the potential of the agricultural sector in Russia is used maximally, it would be possible not only to implement import substitution, but also to achieve significant volumes of export. It refers to grain, vegetable oil, sugar, meat, pigs and poultry, and eggs “(Table. 3). [3]
Thus, in the current socio-economic conditions, with adequate funding agro-food sector, rational use of agricultural potential and well-placed priorities of the economic policy of the country almost all problems with providing the population with domestic food will be solved. It will bring a positive impact on the profitability of agro-food sector and, consequently, on the country’s economy as a whole.

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RUSSIA’S NEW WAYS OF ECONOMIC DEVELOPMENT IN THE CURRENT CRISIS

Abstract

In 2014 the Republic of Crimea was introduced into Russia. In response to this event the advanced economies imposed a package of sanctions against Russia. Undoubtedly the sanctions influence negatively on its economy. Due to this fact Russia had to revitalize domestic production, to formulate new strategic directions of economic development and new ways of economic behavior in the international trade. Russia has also changed its orientation from the West to the East — the People’s Republic of China became the major geopolitical and economic partner of Russia.

Key words: political and economic sanctions, foreign direct investment, import substitution, the growth of banking activity, new strategic partners.

JEL code: F42

On March 16, 2014 on the territory of the Autonomous Republic of Crimea and Sevastopol a referendum was held. As a result the Republic of Crimea became a part of Russia. However, it is still recognized by only a small number of countries of international community. Many countries considered the referendum as a violation of international law and refused to recognize the results. This explains a sharp change in Russia’s position on the international arena.

After the referendum the developed Western countries immediately introduced such restrictive measures against Russia as political and economic ones.

What are the sanctions? The sanctions are a weapon. So we must elaborate some economic and political measures that could protect Russia and deprive the Western economies to use such a weapon. To achieve this goal it is necessary, firstly, to protect our weaknesses and, secondly, to increase our strength.

It should be noted that the sanctions aimed at undermining the Russian economy have a very adverse consequences [1]:
Firstly, due to the economic sanctions, there was a reduction of the Russian budget, redistribution of budget, a decline of the economy. The volume of foreign investment into Russia fell dramatically, the ruble was devalued;

Secondly, the political sanctions made Russia break old, time-tested relations with its neighbours and look for new strategic partners mainly in Asia, Latin America and Africa;

Thirdly, due to these tensions military cooperation of a number of European countries with the Russian Federation was broken off. Previously signed contracts on arms and ammunition supplies were detained. That can weaken the Russian Arm Forces.

Anyway, the imposed sanctions turned to be beneficial for Russia. Now Russia has a wide choice of new international partners (mainly in Asia). Entrance of the Crimea into the Russian Federation gave Russia also the acquisition of the naval base in Sevastopol. Under the sanctions Russia started developing its own production, and this will give a positive impact on the Russian economy.

According to the director of the European Institute of Russian Academy of Sciences, Andrei Gromyko [2], the sanctions may remain a problem for many years. It should be noted that the anti-Russian sanctions and the retaliatory sanctions of Russia are a double-edged sword. In 2014 the EU suffered tremendous losses which amounted to 40 billion euros, and for 2015 the figure is approximately 50 billion euros. The Russian Federation also bears losses from sanctions: according to some estimates, in 2014 they amounted to 40 billion euros.

Thus, we can say that the consequences of anti-Russian sanctions have a dual character. On the one hand, they cause considerable damage to Russia. On the other hand, they stimulate the development of domestic industries, and thereby bring the Russian economy a considerable advantage.

Now let’s consider new ways of economic development Russia might enjoy in today’s crisis.

How do the sanctions influence the economy? To answer this question, we need to consider the picture of prospective development of the Russian economy in the coming years. Prospective development is usually divided into four basic models of the development of the Russian economy [4]:

1. The evolution of raw materials export model of the economy affected by the global raw materials market transformation.
2. The update of the accumulated public property, fixed assets and core technologies in various industries.
3. Fundamental changes in the resource base of the economy, including human resources.
4. Adverse calls on the part of the outside world: cooperation with different countries, globalization of production, circulation and consumption, critical economic and political situations in the former Soviet Union countries.
Russia’s current situation requires extraordinary measures of economic policy such as the development of its own high-tech production and its derivatives. Therefore, the federal programs of development of production that are financed by the state will be implemented in Russia, public investment in urban and road infrastructure will be increased, import duties on Russian products will be raised, preferential tax periods for new small and medium enterprises will be introduced, government grants for equipment modernization and its acquisition in leasing will be provided and so on.

Economic sanctions have, primarily, hit the food basket of the Russians. Many imported products sold in the Russian market were replaced by domestic substitute commodities. It helps the development of the domestic production and import substitution. It can be affirmed that the retention of food embargo creates favorable conditions for the development of food industry and agricultural sector of Russia.

Due to the imposed anti-Russian sanctions, Russia will complete the transformation of the domestic goods production and promotion of domestic products to the domestic and global markets, according to the potential changes in geography and volumes of commodity flows. The promotion of the fifth, sixth and seventh of the emerging technological order is expected to be the most important. Therefore, the improvement of strategies and tactics of how to organize foreign trade activity is of primary importance for Russian policy-makers.

However, international trade needs particular attention. Since the first day of the sanctions the Russian Federation became the most undesirable trading partner. We can say that the country was forced to retaliate from international trade cooperation. Obviously, we need the import substitution [5], but this will demand the improvement in infrastructure of the commodity market, and this is planned to do.

Instead of importing finished goods from the Western countries it is appropriate to create conditions for attracting foreign investment (capital) to the production of essential goods on the territory of the Russian Federation. For example, today, major Russian business came to the international trading arena. This is directly connected with the promotion of the Russian banking capital to the international trading arena. These measures are aimed at the economic support of the Russian companies and participation in major investment projects. Thanks to this, Russian semi-government banks had an opportunity to form foreign banking assets, which allowed to expand geography of their activities [3]. The examples are: OJSC “Sberbank of Russia”, JSC “Bank VTB” (Vnesh-torgbank), OJSC “Gazprombank”. Thus, the increase in capital of the Russian banking sector allowed Russian firms to become stronger in the international financial market, which in turn provided support to local organizations.

The import substitution policy contributed to the growth of banking activity in the domestic financial market and to the strength of stability of the banking system. As an example, we see a substantial growth in agricultural sector
credits. Despite a profound depression prevailing in industry, the agricultural business developed vigorously. Introduction and development of new technologies must be of high priority. This will allow to reduce costs of production and to make Russian goods competitive. Banks, in their turn, created programs of the Agriculture concessional loans. This measure allows them to improve their positions and to contribute to the solution of import substitution problems in the Russian food market.

It should be underlined that the sanctions imposed against Russia, or Russian retaliatory sanctions will inevitably have an impact on all economies of the world. Therefore, the Russian Federation main direction of development should be the transformation of the model of the national reproduction process to ensure the transition to an innovative path of economic development, avoiding the “fuel needle.” Only if Russia manages to get things done, it will become a true leader in the global economic development.

Of course, due to the sanctions Russia has lost many economic partners. However, there is no reason to despair, it is an opportunity to seek new ones! First of all Russia should strengthen friendly relations with such countries with which Russia had close economic bilateral agreements. They are: Saudi Arabia (there is an agreement between the Russian Federation and Saudi Arabia on infrastructure and agricultural projects worth of $10 billion), Bahrain (it is the co-investor of almost all Russian Direct Investment Fund projects), Korea, Qatar, Kuwait and India. The establishment of friendly relations between the two countries is necessary in such areas as infrastructure, energy, energy efficiency, agriculture, new financial products.

Russia has also changed its orientation from the West to the East — the People’s Republic of China became its major geopolitical and economic partner. Relations between Russia and China have a wide range of areas of cooperation. This economic cooperation, and certain planned projects (Eurasian Economic Community (EAEC) and cooperation on the project “The Silk Road”, the Chinese investment to the Russian economy, a 30-year contract for the supply of gas, etc.), military-technical cooperation, cooperation in the field of education, science and culture, tourism, membership in international organizations.

Who can become a foothold for Russia in the conditions of sanctions? Of course, the Eurasian Economic Community (EAEC), which came into effect in 2015. If the activity of the organization is successful, Russia will be able to create the belt of friendly states around itself and become a new center of a multipolar world.

We must stress that the current crisis may contribute a lot to a complete renewal of the Russian economy and may consolidate its position on the international political and economic arena. The major role in this belongs to the state, which will be particularly attentive to the industries, technologies, small and large businesses, the country’s security. Russian citizens can also make a contribution to the welfare of the state.
So, it is clear what Russia’s new ways of economic development in the current crisis must be. Of course, in this report we have touched only on few main issues of the improvement in economy of the Russian Federation under the Western sanctions. The implementation of all assigned tasks will contribute to the welfare of the Russian economy. In my opinion, the activities of policy-makers and diplomats are much more important to restore the “good name” of the Russian Federation, to lift the sanctions and to normalize oil prices. In such conditionsthe Russian economy will prosper.

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FISCAL POLICIES IN CRISIS MANAGEMENT. 
CROSS-COUNTRY ANALYSIS

Abstract
The paper explains the way how the level of country development influence on fiscal policy and the authorities in general. The research is aimed at investigating a kind of typology and categorizing of the countries considering their level of development and regional aspects. It definitely differs from the typology of the countries which is used as basic in geography. The methodology of a cross-country analysis provides an opportunity to make recommendations for further fiscal adjustments for different group of countries according to the level of their development, region, current cycle-state.

Fiscal policies are supposed to be one of the key determinants considering regulation in terms of crisis management. The findings of the research provide the theoretical base for further adjustments.

Key words: fiscal policy, fiscal adjustment, crisis management.
JEL codes: F64, F68, H30, H87

Introduction
The weakening of the global recovery provides concern about the ability of policymakers to implement an appropriate policy response. As a result, risks to the global economy and financial systems have significantly increased. Fiscal policies must be prepared to respond promptly to instigate growth and reduce vulnerabilities in such a challenging environment. Fiscal policies are supposed to be one of the key determinants considering regulation in terms of crisis management. It is necessary to provide a research on the historic development of the fiscal policy concept to understand the general principles of policy mechanisms. Fiscal authorities have a right to control the stance and change it according to the economic situation changes. Looking through the recent years we can find out some objective laws which define the behavior of policymakers. The broad range of criteria is used in literature, which it was decided to consider deeply.
Comparative crisis analysis

A crisis is a sudden unpredictable change, that results in an urgent problem that must be addressed immediately. Although crises are unpredictable, they are definitely not unexpected. The variety of economic theories (in particular theory of business cycles) taught us that crisis of unpredictable power will once take its place. Crisis management is the process of identifying a potential issue or crisis and coordinating of government policy [7]. The best way to understand the demands of crisis management is to analyse the authorities’ behavior during the crisis through its impact. That is why several crises have been chosen for the retrospective analysis: The Great Depression, the OPEC oil price shock of 1973, the Asian financial crisis (1997), the financial crisis (2008).

Taking everything into consideration, all these crises began in one particular country or region locally and then extended on other ones. The process of globalization should definitely be taken into account as it is presented like an additional threat. Starting locally, every crisis has a chance to turn to a global one easily due to the process of globalization. Based on carried out analysis there was an attempt to define the scale of crisis and classify considered ones. This scale is based on several criteria: duration of the downturn, slump of the GDP growth rate, inflation and unemployment rates. All crises are divided to three groups: mild, medium and severe. Each of them is divided one more time and contains three subgroups: (the are the same) mild crisis, medium crisis, severe crisis. As a result, there is a simple range with nine grades from “1” (double mild crisis) to “9“- double severe crisis. After the analysis, each of the considered crises is assigned to the particular group (Figure 1).

![Figure 1. Source: Author’s estimates](image)

Initial fiscal conditions have a key role in crisis responses. There are some behavioral models (where initial conditions are presented as a basis) when the policymakers decide which fiscal policy to adopt: countercyclical or procyclical or combine them. For example, countries are more likely to adopt countercyclical fiscal policies if sufficient fiscal space existed before the crisis.

The first crucial step is to define the power of crisis. Of course, there are some significant difficulties in estimation process (when the crisis is going on), but there are various methods (theoretical and empirical) which allow the analysts to make precised estimates. It is not enough to choose between countercyclical and
procyclical fiscal policies if we are talking about crisis appearance. The experience of global economy is a good theoretical base for creating particular scenarios for different types of crises according to various aspects (also regional aspects).

**Cross-country analysis**

Fiscal policy can affect monetary policy through different channels. Recently, models of the fiscal theory of the price level have even suggested that fiscal policy can be the main determinant of inflation. Fiscal policy also influences other variables (monetary ones), notably interest rates, exchange rates and interest spreads [10].

The methodology of cross-country analysis is based on several criteria. The first criterion is the level of development of country. The influence of the overall development level cannot be ignored by the authorities. It is actually close to the meaning of initial conditions (which were mentioned before). In general it is presented to be the key criteria in choosing the fiscal policy direction. The scientist of the recent years are united in the opinion that there are two general types of fiscal policy according to the theory of business cycles. Procyclical policy is ordinary chosen by the policymakers of less developed countries, while countercyclical is supposed to be chosen by highly advanced economies. This evidence is proved by various researches of the recent decade [8]. There is quite complicated to define appropriate fiscal policy in a general model, but there are some successful attempts of explaining the role of fiscal space and choices of fiscal authorities [5].

The second criterion is regional aspect. The macroeconomic authorities cannot avoid historic steps which country has already passed. The passed way always has determined peculiarities and traditions of dealing with problems and possible crisis in particular. Some regions have very specific approach to their fiscal policies and it really differs from the basic approach of admitted economic leaders — the USA and European Union countries. The more specific is the region the more exceptional results can be found out.

There are defined externalities which can affect fiscal policy directly no matter if the country is surviving the crisis or not. Deep research of the assumption of some kind of a general model of choosing fiscal policy can provide a possible model of broad-based scenery of negotiation crisis consequences. Such a model can consist of useful recommendations performed like a pack of scenarios for economies of different crisis grade. This can be implemented and provide needed reforms immediately. The methodology of a cross-country analysis is a way to summarize the experience of countries in fiscal regulation on the retrospectively analyzed crisis-management basis.

One of the key trends concerns procyclical and countercyclical choice of policy stance [4]. Countries that are, on average, procyclical in booms and downturns, would tend to exacerbate their business cycle. Those that are countercyclical in both, booms and downturns have a fiscal policy that contributes to stabilize the cycle.
But countries may not always be procyclical or countercyclical. There are some strategies when countries exhibit counter-cyclical fiscal stance in booms, and procyclical stance in downturns, it will likely improve its long-term fiscal sustainability. Those countries that choose procyclical in booms and counter-cyclical policy stance in downturns would deteriorate its fiscal sustainability. But choosing such a stance doesn’t always mean policymakers’ mistakes. Some conditions really require such an illogical (at the first sight) strategy.

Figure 2 shows the value of the fiscal stance proxy in periods of expansion (when the cyclical component of real GDP are positive) versus that registered in downturns [2]. High-income (advanced and emerging) countries are those in red while developing economies are in blue. Four general groups of countries are identified and split into four quadrants. This methodology contains all the criteria which was mentioned before, but it could be used not only for particular recommendations, but for general crisis-management scenarios for different crisis stages (based on the scale of crisis mentioned before).

1. The first group presents the upper right quadrant (Figure 2). These countries exhibit procyclical fiscal policies in both booms and downturns. Such a stance contributes to exacerbating output volatility. This group is presented with resource-rich economies of Middle East, countries of Eastern Europe, Latin America and the minority of Western Europe economies. The majority of these countries has an upper middle-income rank.

Figure 2. Sources: Carneiro and Garrido, 2015
2. The second group presents the upper left quadrant. Those countries exhibit counter-cyclical fiscal policies in booms and procyclical fiscal policies in downturns. Such a fiscal behavior improves a country’s fiscal sustainability profile. This group presents countries with the most “healthy” economies and well-designed policy stance. This quadrant doesn’t include many countries, but it is impossible to ignore the fact that China belongs to this group.

3. The third group presents the lower left quadrant. Those countries exhibit counter-cyclical fiscal policies in both booms and downturns. This strategy contributes to stabilizing output around its long-term trend. This group is presented with a majority of advanced economies with high income (as EU leaders and the USA). It is almost impossible to define more regional groups here. Other countries which belong to this group are exceptional examples of such a fiscal behavior in their regions.

4. The fourth group presents the lower right quadrant. Those countries exhibit procyclical fiscal policies in booms and countercyclical fiscal policies in downturns. This strategy seems illogical at first sight as it definitely deteriorates a country’s fiscal sustainability profile. But policymakers have their own reasons in choosing such a stance. The appearance of the country in this quadrant may show current fiscal adjustments which are still not completed or current crisis state of the country.

Conclusion

Summarizing all mentioned, using the methodologies of cross-country analysis and retrospective analysis could be a deep theoretical base for preparing a list of possible scenarios of fiscal behavior. This is a crucial thing considering crisis management when immediate reaction is required. Such scenarios are not presented as a rule but as a recommendation or basic plan which can be adopted by the fiscal authorities in terms of crisis along with some additional actions. This list could be extremely important for the developing economies (with the lowest income rate). Also, that could be a useful guide for the countries where the problem of staff competence takes place.

References


NORMALIZATION OF COMMODITY PRICES VOLATILITY: EXAMPLES FROM RUSSIAN AGRICULTURE

Abstract
The volatility of commodity prices has traditionally been a concern for the exporters of natural resources (e.g. Russia). The mainstream media tends to attribute this volatility to speculation and political uncertainty. After reviewing the data, I outline the following factors that drive most of commodity prices volatility: monetary policy, and stocks accumulation. In my paper I suggest Russian agricultural exporting companies should hedge their open positions and invest in transport infrastructure to minimize their exposure to price volatility.

Key words: agricultural economics, industrial organization and macroeconomics, brokerage, investment decision

JEL Codes: Q 170, L 160, G 240, G 110

1. Introduction
For countries that export commodities, predictability of prices is often the key factor driving not only trade balance, but also fiscal budgets and long term investment programs. Failure to foresee or normalize the volatility of commodity prices can upset financial health of exporting companies, countries and global economy as a whole. This is why the issue of commodity volatility and its prices normalization is vital.

Media and popular literature tend to attribute commodity prices volatility to two factors: speculation and political instability. Specifically after summer 2008 when oil prices fell nearly 75% in a matter of a few days and co-movement of oil prices with conflict escalations in the Middle East help the widespread belief. However, the data and economic literature fail to support the claim that speculation and political uncertainty are statistically significant.

In this research paper the factors responsible for driving commodity price volatility globally: monetary policy and stocks accumulation are examined.
Taking Russian agricultural commodity exporters and their volatility factors, possible ways to minimize companies’ exposure to commodity price volatility are suggested.

2.1. Monetary policy

Cevik from IMF [1] argued that the liberalization of monetary policy in 1990–2010 largely contributed to the increase in commodity price volatility. The argument is the following: money supply increase depresses the interest rates leading to more liquidity. This additional liquidity is invested in commodities market. The reason is the accessibility of the commodities: most of them can be traded in the open market. Agricultural commodities are traded on CBOT (Chicago Board of Trade), whereas oil is traded on NYMEX (New York Mercantile Exchange), and institutional investors can easily go long or short in commodities by buying or selling futures. Cevik showed the results of regressing Real Oil Prices on Excess Liquidity were statistically significant. Both GMM and Least-Squares regression showed strong positive correlation between excess liquidity and real oil prices for 1990–2010 with high t-scores in both regressions [1, 14].

2.2. Stocks accumulation

Another factor responsible for increase in commodity price volatility is inventory accumulation. Using the data from 1990 to 2010, Frankel [2, 32–33] showed that stocks accumulation in combination with limited inventory capacity significantly affects prices, creating downward pressure on prices and increasing volatility. Arguably, the inventories accumulation will play even bigger role in creating additional volatility, since due to the fact that the biggest consumer for commodities, China, will have slower economic growth and will not be able to increase its inventory capacities, consequently releasing the commodities back to the market and creating downward prices pressure.

2.3. Political instability: specific case

In the beginning of this paper, it was stated that the data failed to prove at that political uncertainty had significant effect on commodities volatility at large. Yet, there were specific historic events when the former was true. In particular, the Russian Grain Embargo that the United States imposed on Soviet Union in 1980, following the occupation of Afghanistan by the Soviet Army [3]. Once the embargo was introduced, the prices plummeted reflecting the decrease in demand, yet in a matter of few months the market stabilized. In fact, it is argued that the Soviet Union found ways to import American grain via its communist allies (East Germany and Poland) which led to normalization of demand and prices [3, 5–7]. Overall, the political uncertainty which resulted in trade em-
bargo led to the temporary disruption of supply chains which in turn resulted in volatility of demand and prices.

3. Factors driving commodity volatility for Russian agricultural exporters

There are several additional factors that are, specifically for Russian agricultural exporters, responsible for creating volatility: currency fluctuation and transportation costs volatility.

The former is of natural concern to exporters since they buy commodities inside Russia in Roubles, and they sell those commodities for export in USD. The recent (2014–2016) advance of Russian grain exports to South East Asian markets was possible due to the Rouble depreciation, making Russian commodities cheaper and more competitive. Yet, in the long term, Russian exporters are interested in exchange rate stability since most of contracts are discussed, and executed during a few months and any currency volatility transforms into price volatility. Additional factor is the magnitude of open position, defined as the difference between the tonnage in contracts for buy and contracts for sell. If a company has an obligation to sell more than it has just bought or vice versa — it is a subject to currency risks.

Transportation costs volatility is also a Russia-specific industry factor. Since most of agricultural cargoes have to cover hundreds of kilometers inland and also be transshipped in ports, the final price depends on two transportation related factors: rail tariffs and transshipment costs. Both factors are volatile due to on and off infrastructure expansion in Russia. In rail tariffs, the state company Russian Railways controls most of the market, hence the majority of exporters are subject to their policies. As for transshipment costs, they depend on whether or not the exporter has its own grain terminals located at the port of export. If they do not, their final price is a function of how well they can negotiate the transshipment costs with other grain terminals and this is a volatile factor, given the limited capacity of current grain terminals.

Finally, Russian agricultural commodity exporters are very sensitive to political risks. Deterioration of relationship with Turkey (November 2015, March 2017) led to restriction on grain trade with its major grain trade partner and led to volatility of grain prices. Likewise, restrictions on agricultural trade with the European Union led to disruption of supply chains and also initially increased price volatility, yet market soon stabilized due to rerouting via non-EU European countries (e.g. Serbia).

4. Potent solutions to decrease volatility exposure of Russian agricultural exporters

After analysis of the global and Russian industry-specific volatility factors, there are several potent measures for Russian agricultural exporters to decrease their exposure to volatility.
4.1. Investment in Infrastructure

One of such measures is investment in infrastructure: both in rail wagons and grain terminals. Such investment will allow companies to minimize their dependence on other market players, specifically port grain terminal and rail wagon owners, and integrate inland transportation costs inside their company. In fact, some of the biggest Russian agricultural exporters have done such infrastructure investments since 2011. In particular, one of top Russian grain and soybean oil exporters Sodrugestvo Group after several incidents with Russian Railways has bought 4,000 grain hoppers, minimizing their exposure to rail tariffs volatility [4]. Other big exporters, specifically RIF, OZK and MZK (Glencore subsidiary) have built their own grain terminals in export ports [5]. The mentioned companies apart from minimizing their transportation risks, also managed to extract additional profit from leasing their wagons or terminal capacities to other market players. The downsides of such infrastructure investment are cost and time. Transportation investments require firms to have extra cash or ability to obtain debt and pay interest, and only the top exporters can afford such investment. In addition, such investments require time to be completely executed, spanning from one to several years, which can also be afforded by firms with large cashflows, able to continuously pay interest rates.

4.2. Hedging

Another potent policy is hedging commodity trade via futures trade. The two types of hedging are physical hedge and foreign exchange hedge. The former is when a company has an open position (the difference between contracts bought and sold is different from zero), it can buy/sell futures on commodity exchange (CBOT in case of agricultural commodities). This way it can hedge the potential loss from physical trade by the gain on futures trade. The latter form of hedge, the foreign exchange hedge is to fix the level the exchange rate via forwards or options, thus minimizing the firm’s exposure to currency risk. Before 2014, hedging was spread only among global subsidiaries and a few Russian companies, yet after 2014–2015 Rouble devaluation, more companies are setting some sort of hedging practices. The main costs associated with hedging are brokerage commission and wages to the hedging personnel. Apart from such costs, firms find it difficult to find hedging specialists with sufficient expertise on Russian labor market.

5. Conclusion

Having analyzed factors driving commodity price volatility globally and locally for Russian agricultural exporters, the three main factors are currency, transportation costs and political risks volatility. The potent solutions for firms are investment in its own infrastructure and hedging on exchange for both
currency and commodity. Yet, due to large capital expenditures and long time required, only large agricultural exporters with substantial and stable cashflows will afford the infrastructural investments. The optimal solution for mid-size exporters is to invest in hedging practices, but the search of experienced professionals in this field is of an issue on Russian labor market

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INVESTMENTS IN AGRICULTURE AS THE MAIN DIRECTION OF THE RUSSIAN ECONOMY IN CONDITIONS OF SANCTIONS

Abstract
This article outlines the features of attracting investments in agriculture. Large-scale investments are the main conditions for the development of Russian agriculture. The study analyses current state and trends in the development of investment activity in agriculture and considers state support of rural commodity producers in the field of attracting investments. The author proposes measures for effective regulation of investment activities in agriculture. The article discusses the implications of Western sanctions and a retaliatory embargo on the Russian economy.

Key words: investments, import substitution, agriculture, Russian economy, sanctions, government support.

Agriculture is included in a group of industries that ensure national security and national interests of the country, reducing dependence on other states. Active investment activities as well as large-scale investments are the main condition for the development of Russian agricultural production. However, agriculture is a branch of long-term investment. Recession processes in the economy, sanctions and a retaliatory embargo complicated the problems of its investment in Russia [2].

In the Russian Federation, the economic situation has considerably deteriorated due to Western sanctions, which reduce the access of Russian leading banks and companies to foreign financial resources and reducing oil prices. In these conditions, a new agrarian policy that will protect domestic commodity producers from the conditions of unequal competition is necessary. One of the important directions of the protectionist policy of the state is the policy of import substitution. In order to develop real import substitution (not to replace
some importers with others) it is necessary to develop a medium-term or long-term integrated program for import substitution, which will require attraction of a significant amount of investment resources. This requires formation of a favorable investment climate in the country. In accordance with the State Program for 2013–2020 investments in the industry should grow by more than a third.

The main sources of investment in agriculture are own revenues of commodity producers and attracted funds.[9] Now the share of own funds is only 43%. As for the producers’ own incomes, they do not provide extended reproduction.

The share of attracted capital in investments has constantly been increasing for the last few years. The main part in the attracted capital accounts for borrowed funds. Therefore, along with increasing the profitability of the industry, it is necessary to expand the volume of investment crediting, as one of the main sources of investment at the present stage. However, due to the deterioration of the overall economic situation in the country, the supply of borrowed resources is substantially shrinking [6].

In the agrarian and industrial complex of the country there was a significant regional differentiation in attraction of investment credit resources [4]. About 65% of all long-term loans and credits entering the industry are concentrated in the Central regions and Volga federal districts. At the same time, in many regions of Russia agro-industrial organizations practically do not use credit resources [3].

In the cattle breeding sub-sector, the main part of the total volume of investment credits and loans, taking into account the carryover stocks of past years, accounts for following regions of the Russian Federation: Belgorod Region, Republic of Tatarstan, Kursk, Lipetsk Regions, Mari El Republic, Bryansk, Tambov, Voronezh and Chelyabinsk regions, i.e. where the most active is the construction, reconstruction and modernization of cattle breeding complexes and farms. The region-leader in this direction is the Belgorod region [10].

Along with the traditional regions-leaders in attracting credit resources to cattle breeding (Belgorod region and the Republic of Tatarstan), in 2014, the Commission for Crediting Agroindustrial Complex of the Ministry of Agriculture of Russia approved significant credits to manufacturers of Tambov, Voronezh, Kursk, Tver regions, the Republic of Mari El, Primorsky Krai for the implementation of mega projects in the field of animal breeding. Thus, the average size of the approved loan for mega projects in pig production, for example, in the Kursk region was about 5.6 billion rubles, in the Tambov region — 5 billion rubles.

The share of producers of animal breeding products accounted for about 94% of the total investment lending sub-sector, the share of processors of animal breeding production — only 6% of investment resources. More than 42% of approved loans in 2016 accounted for shine breeding, the share of poultry farming was 31%, for other shine breeding and dairy cattle accounted for approximately the same share of credit resources (about 13%) [7].
The major volume of approved loans for the development of poultry farming is concentrated in the Volga Federal District (57%), the leaders are the Republic of Mari El and the Republic of Tatarstan. The second place in the volume of approved lending is occupied by the regions of the Central Federal District.

The main purpose of investment lending in poultry farming is the construction, reconstruction and modernization of complexes (farms) (this sector accounts for about 97% of total lending in the sub-sector). The leading regions are the Republic of Mari El, Belgorod, Bryansk regions and the Republic of Tatarstan. The main volume of approved loans for the development of dairy cattle breeding falls on the Central Federal District (59%), the second place is taken by the Volga Federal District.

The main purpose of investment lending in dairy cattle breeding is the construction, reconstruction and modernization of complexes (farms) (this sector accounts for about 75% of total lending in the sub-sector). The leading regions are the Republics of Tatarstan, Bashkiria, Vladimir, Ryazan and Yaroslavl regions. These five regions account for about 37% of all credit resources that are subsidized in the sub-sector.

In dairy cattle breeding, in contrast to poultry and shine breeding, a significant share of investment resources is spent on the acquisition of breeding products (about 15%). The overwhelming volume of approved loans in 2014 for the development of shine breeding accounts for the regions of the Central Federal District. The leading regions are the Voronezh, Kursk, Tambov regions (more than 50% of all approved credits in this direction). The main purpose of investment lending in pig production is the construction, reconstruction and modernization of complexes (farms) (this sector accounts for about 97% of total lending in the sub-sector) [1].

In general, according to the Ministry of Agriculture of Russia, in 2016 the most significant reduction in lending in the agribusiness sector was observed in investment lending in the cattle breeding sub-sector. The volume of attracted investment loans decreased by 24% compared to 2015.

In the conditions of the need for accelerated import substitution and taking into account the prevailing macroeconomic situation, it is necessary to pay special attention to the issues of preserving the volumes and availability of crediting for the agro-industrial complex: [6]

— it is necessary to expand the refinancing channels, reduce interest rates;
— it is advisable to start the process of import substitution from import substitution in the markets of contingent financial resources;
— credit resources should be economically accessible, the conditions of their servicing — are unchanged for the entire period of attraction;
— It is necessary to limit the margin on loans granted to agricultural producers for banks with state participation, up to 2–3% per annum;
— it seems advisable not to abandon the existing mechanism of subsidizing interest rates on investment loans, especially for small and medium-sized
businesses, by improving the form of subsidizing loans, and use it in conjunction with the mechanism of compensation for part of the cost of construction of the facility when it is put into operation;
— to provide budgetary subsidies to lending in such a volume that the final cost of borrowed resources will not exceed the average profitability in the industry [5].

Thus, the agriculture of Russia, needs constant support from the state. Nowadays, the state pays attention to this industry, develops various development programs, which has a positive effect on agriculture. The industry becomes profitable and thus attracts investors.

Investors who invest in quality agricultural assets are likely to find themselves in a better position due to the fundamental trends, namely, population growth and economic development.

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FRANCHISING MODEL EVOLUTION IN THE CHANGING ENVIRONMENT

Abstract
Franchising model is very sensitive to the economic and social challenges. Business-format franchising with its strict rules and regulations is now being transformed to quasifranchising, customized business-format franchising and quasifranchising with brand — hybrid franchising models. Even brand which is recognized as a backbone of a franchising model is not transferred from the franchisor to the franchisee in some hybrid franchising models. The report which is based on factor, sector and timeline analysis would be of interest to potential entrepreneurs as well as students specializing on franchising.

Key words: franchising, quasifranchising, brand, business model.

JEL codes: M 13, M 21.

Introduction
Traditionally franchising is characterized by the transfer of brand, know-how and working business-model from one side called franchisor to the other called franchisee in return for the royalty and a lump-sum payment [9]. Nevertheless the business environment is constantly changing and so is the franchisee profile. A lot of the franchisees are now looking for the opportunities to express their individuality even when purchasing a franchise. That results in the “franchising a-la carte” when the elements of the model are not being transferred as a set but as separate items among which the entrepreneur has the right to choose what really meets his personal needs. As a result new franchising models are emerging which differ from the traditional one in terms of the number of transferred elements.

Those modified franchising versions enable some freedom for the franchisees preserving their right to use the business-model of the franchisor. On the one hand, it creates additional risks for the reputation of the franchisor but,
on the other hand, it boosts knowledge transfer among the parties and makes franchisee an active contributor to the creation of know-how within the franchising network.

Russian franchising market is quite unique in terms of its historical background and legislation which results in the specific background for the new franchising models. Therefore the research was conducted by the author to identify the perspectives of the development of the new franchising models on the Russian market.

**Traditional business-format franchising**

Traditional business-format franchising is associated with the name of Alfred Singer, an entrepreneur, who started distributing the rights to sell the sewing machines under the brand he provided in return for the regular payments. In the US in the XIX century the government granted the rights to provide public utilities to the private companies which practically resembled the franchisor-franchisee relationship.

In its traditional form franchising can be characterized as a “plug-and-play” business. Working business-model significantly increases the chances for the franchisee to succeed if he follows the rules and the procedures prescribed by the franchisor.

The negative thing about it is that it minimizes the filed for freedom for the franchisee. It makes the latter somehow equal to the manager who decides on the operational questions for the shop but has the obligation to meet the expectations of the franchisor and follow the strategy of the franchising network. So, it is somehow a trade-off between risk minimization and the lack of freedom [3, 143].

The pivot elements for the traditional business format franchising are:

- Successful business-model;
- Well-known products or services of high quality;
- Franchisor’s experience in the business field;
- Clear and understandable business-processes.

Among the advantages of franchising as an instrument of business-development businessmen name the following:

- Risk minimization for the entrepreneurs, especially those who lack the business expertise;
- Territory business development for the franchisors as local businessmen are more aware of the national specific features in particular region;
- Knowledge transfer between franchisors and franchisees: the mutual process of innovation within the network brings more benefit to the business development;
- Additional earnings from royalties and the lump-sum for the franchisors that can be used for the further business growth;
— Brand loyalty and loyal customers for the franchisees: the money they pay for the brand usually pay-back due to increased audience who prefer the brand [1, 4];
— Contracts with the suppliers on more convenient conditions.

Based on all these franchising can be considered as an effective instrument for the business development.

**New franchising models**

There are two basic parties that play a vital role in the constant changes in the franchising business-model: customers and entrepreneurs (franchisees). On the one hand, the evolution of the traditional business-model goes hand-by-hand with the changing customer tastes. Unified brands can no longer meet the demand for individualized and customized products or services [5]. For example, in the hotel or restaurant business customers more and more prefer places that reflect local features but not unified multi-national design and services. On the other hand, the new generation of franchisees would like to benefit from the successful franchising business model and at the same time to express their individuality and creativity in the business questions.

As a result, new franchising models are emerging, such as customized business-format franchising, quasi-franchising with brand and quasi-franchising. The classification is based on the split of franchising elements into two big groups: so called “back-of-house” and “front-of-house elements” [7, p. 274]. The first group embraces the elements that are invisible to customers but form the backbone of the franchising model: business-processes, know-how, instructions, etc. If franchisees stick to the franchisor’s rules and follow their instructions they have more chance to succeed and avoid the risks that independent entrepreneurs (not franchisees) usually face. Another group, “front-of-house elements” are those that visualize the brand concept and make it well-known to the customers: logo, design, brand colours, etc.

Even though franchising was previously treated as a set of all the elements obligatory for transfer, now it is more flexible, so called “franchising a-la carte”. That means, that the franchisee can decide for himself which of the elements to take and which not.

Quasifranchising is the model which includes the transfer of the business-model but not that of the brand. In that case the relationship between the franchisor and the franchisee resemble more long-term consulting. The advantages of quasi-franchising for the franchisee is the lower franchise price (as brand is one of the main cost components) and the ability to introduce new ideas into the business (such as design, brand name, etc.) Nevertheless, it is more risky for the franchisor as it is more difficult to control franchisee’s actions and to protect himself against opportunism from the franchisee’s side.
Quasi-franchising with brand as well as customized business-format franchising are more conservative in comparison to the quasi-franchising but still provide some space for the franchisee’s freedom [6, 211]. In these models franchisees take the franchisor’s brand but have the opportunity to add some products to the assortment and to experiment with the design. For example, the bakery Great Harvest Bread Company calls its business model “freedom franchising”. However, the CEO of the company Mike Ferretti states that customers are the only ones who have ultimate freedom but not the entrepreneurs. In theory the businessman has the right to close his shop for several days but it will result in the loss of customers and revenue, as a result, which is not the case. “Freedom” in his understanding means freedom to introduce some items into the assortment, organize local marketing campaigns and to decide on the internal and external design of the bakery. He is proud of the fact that none of his franchisee’s bakeries look the same. The company also supports knowledge transfer among the franchisees with the help of “Sharing community” — the tool for the communication between franchisor and franchisees both online and offline. The elements that cannot be changed by the franchisee is the process of bread preparation, the ingredients and the suppliers as well as the company’s Corporate Social Responsibility strategy. The philosophy of the company is that nowadays people are too much in a hurry that it ruins their health both mentally and physically so food is the way to have a break. So they prepare their bread manually from the natural ingredients.

The existence of the modified franchising models is the indicator of the social and economic changes coming with the new generation — the struggle for individuality and creativity. The item that remains intact even with the model evolution is the business-model itself.

**Russian market as a platform for the new franchising models**

Russian franchising market is quiet unique both in terms of history and the current state. Franchising appeared in Russia only in the 1990s with Buskin Robbins as the pathfinder. It started to develop quickly but with the growing number of franchises the room for fraud and the number of low-quality franchises was also increasing. Even though we are more than 25 years away from the franchising appearance in Russia, the problems with the regulation and legislation in this sphere remain. That makes the analysis of the perspectives of the new forms of franchising extremely interesting. In order to find out in which spheres franchisors are ready to give freedom to their franchisees the research was done by the author. 40 franchisors were questioned during the survey to investigate the opportunities for the development of new franchising forms in Russia. They were asked to name the spheres where they can provide the freedom for the franchisees. The results of the survey are the following:
From the diagram above can be concluded that the every fourth franchisor can guarantee freedom in the design (“front-of-house element”) and every fifth — in pricing and marketing policy and in assortment. The least flexible spheres are the choice of the personnel and the suppliers. It is worth saying that practically all the questioned franchisors underlined that all the novelties should be confirmed by them. Based on this statistics the conclusion can be drawn that new franchising models can be developed in Russia but not similar to pure quasi-franchising (no one named brand as an optional element) but those in-between traditional business-format franchising and quasifranchising (customized business-format franchising and quasifranchising with brand).

**Conclusion**

Franchising is the instrument of business development that is traditionally based on the tandem of elements visible and invisible to the customer, in other words brand and business-model. For a long time it was the dual concept where one group of elements could not be transferred without another. But as the entrepreneurs are looking for ways to express their individuality and customers — to get individualized products or services, new franchising models have emerged. They can be classified as quasifranchising, quasifranchising with brand and customized business-format franchising based on the elements transferred to franchisees. The idea to make franchisor-franchisee relationship somehow similar to the long-term consultancy is one the one hand risky for the franchisor but on the other — attractive to the franchisee.

Franchising in Russia is quiet young in comparison to the rest of the world, so the perspectives of the new franchising forms are of particular interest for the analysis. The analysis conducted by the author shows that there is the back-
ground for the appearance of the new franchising models in Russia. Neverthe-
less, the Russian market is not ready for pure quasifranchising by now, only for
the customized business-format franchising and quasi-franchising with brand.

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ECONOMICS OF HAPPINESS AS A FIELD FOR INTERDISCIPLINARY RESEARCH

Abstract
The article considers the background of happiness economics formed as a result of the interaction of three sciences — economics, psychology and sociology. The aim of this research is to give a definition of happiness economics based on interdisciplinary approach. The undertaken analysis focuses on the relationship between happiness economics and cognitive psychology. It also reveals similarities in happiness economics and behavioral economics. The publication contains a review of prior sociological researches. The regularities that were found out by cognitive psychology help us to explain the results of social surveys. The suggested classification of relevant factors which affect people’s happiness has a message for economic policy decision-makers to increase public welfare and subjective well-being.

Key words: happiness economics, subjective well-being, behavioral economics, cognitive psychology.

JEL codes: A 120, I 310.

Introduction
The scientists and the policy-makers all over the world pay attention to a nation’s emotional prosperity in line with the proposals of the Stiglitz Commission on the Measurement of Economic Performance and Social Progress. The traditional measurement of prosperity such as GDP is imperfect. The new aspect of the report by the Stiglitz Commission in 2009 is its emphasis on the measurement of subjective well-being [6, 3].

Evaluation of emotional prosperity provides key information about people’s quality of life. Economics of happiness is formed as a result of the interaction of three sciences — economics, psychology and sociology. The results of the sociological researches show that the traditional measurement of prosperity
such as GDP is imperfect. While psychologists have long been trying to unravel the phenomenon of human happiness, economists began to analyze this issue only in the late 20th century.

The studies by happiness economists have received renewed attention in many countries, especially in more developed regions, owing to ongoing trends towards decline in levels of mental well-being. One of the reasons for this fact is a washing-out effect of advantages of development. In rich countries pecuniary prosperity is strikingly high now. But we might make a conclusion that not all is well. About 15% of people in Great Britain suffer from psychological disorder. Moreover, there is extreme pressure on people caused by modern work [6, 19].

Happiness economics as a result of the interaction of three sciences

First of all, we need to focus on the definition of happiness economics. Based on the mentioned concept Andrew J. Oswald gave a new definition of economics which differs from the previous one: “a social science concerned with the way to allocate plentiful resources to maximize a society’s mental well-being” [6, 20]. Happiness economics has been developed as a new direction of socio-economic researches. The presence of assessment of the individuals about their own happiness in social surveys makes economists refer to the researches in the field of psychology. A leading role in this union of economics and psychology belongs to the latter, namely cognitive psychology.

Happiness economics is based on the concept of bounded rationality, proposed by an American economist Herbert A. Simon [1, 94], which forms the foundation of behavioral economics.

According to this concept decisions that economic agents make are limited due to cognitive restrictions of their minds and time and information available. Decision-makers from this point of view seek an acceptable solution rather than an optimal one. In this case we focus on influence of not observed psychological states of economic decision-makers despite the presence of word “behavior” in the term of “behavioral economics”. We should note that cognitive psychology studies not observed psychological states, while behavioral psychology is concerned with the observed mental functions [4, 69].

A. Tversky and D. Kahneman suggested expected utility theory. There is a term of a reference point (a comparison set) in this concept. The individual estimates his pay-off in relation to the reference level. The utility function depends on the total amount of his pay-off and its excess over the comparison set. The sensitivity of the utility function decreases as we move away from the reference point. It is steeper for unsuccessful outcomes than for favorable ones. The economic agents overestimate the chances of unlikely outcomes and underestimate the chances of highly probable outcomes. In the framework of conventional economics rational choice theory assumes the integrity of economic agent or the absence of double personality and the uniqueness of utility function. Behavioral economists assume multiple personality and the plurality of preferences and state that irrationalities are predictable. The irrationalities are results of minds’ limitations and self-control failures [4, 75].
The list of irrationalities identified by cognitive psychologists and used by happiness economists in order to explain the results of social surveys is given below.

1. “Cold” and “hot” mental states. Life cycle events affect happiness [2, 8]. For example, marriage or birth of a child increases the level of subjective well-being, as well as loss of a job, the death of a loved one and divorce decrease its level, afterwards it reverts to the base level. In this context we should define a notion of habituation and projection bias. The term “habituation” refers to the fact that subjective well-being returns to the previous value, even after life events such as the winning of the lottery or disabling injury. But these significant changes in people’s circumstances don’t have influence on happiness in the long run. The term “projection bias” means that individuals regularly “mistake current circumstances for permanence. They buy too much food if they shop while hungry” [5, 14], for example. These temporary changes affect happiness in the short run.

2. Errors of pessimism. Errors of pessimism lead to an underestimation of the favorable events and excessive avoidance of risk. Richard Easterlin in his article “Lost in Transition: Life Satisfaction on the Road to Capitalism” considers the striking socio-economic developments and makes a conclusion that life satisfaction decreases following real GDP in transition but the recovery of subjective well-being fails to keep up with income. The main reason for this fact is loss aversion. An increase in real GDP means significantly less to people from the viewpoint of happiness than a loss of equivalent amount. In the former East Germany life satisfaction does not return to a previous value, as index of real GDP reverts to the base level [3, 11].

![Figure 1. Life Satisfaction and Index of Real GDP in the former GDR](image)

*Source: [3, 28]*
3. The framing effect means that making a decision is based on comparison with a certain reference level determined by previous experience of the individual or his environment. Assessment of subjective well-being depends not only on absolute income but also on relative one. Individuals adapt to an increase in income from a given reference level, their material aspirations rise in proportion to income. The positive effect of the income growth on life satisfaction undercuts the negative effect of growth in material aspirations. But material aspirations are less flexible downward. Once people have attained a given reference level of income, they cling to it. If income falls they feel deprived, and their emotional prosperity decreases. But recovery in income that reverts to an initial level increases life satisfaction. It is the well-known “endowment effect” which explains the kink in the broken line at point 1 of Figure 2 [3, 11].

![Figure 2. Subjective Well-being (u) as a Function of Income (y) and Aspiration Level (A)](source: [3, 29])

Thus after we have considered the interaction of three sciences — economics, psychology and sociology, we might give a definition of happiness economics based on interdisciplinary approach. Economics of happiness is a new direction in economics that studies subjective well-being which includes economic (material), psychological (emotional) and social dimensions.

**The classification of determinants affecting people’s happiness**

On the basis of undertaken analysis we might suggest a classification of relevant factors which affect people’s happiness. This classification identifies three groups of determinants each of which corresponds to the formulated component of happiness.
The first group determines the material component of happiness and includes level of economic development in the country (such as medical care, educational, insurance services), the availability of work opportunities, absolute and relative income of the individual, housing conditions, average wages in the residence, social group; inflation rate and unemployment rate, level of business activity.

The second group determines the social component of happiness and comprises age, gender, race, social status (education, profession, marriage status), leisure time (contacts with friends and relatives, hobby, activity), living conditions (climate, pollution, social inequalities, public safety).

The third group determines the psychological (emotional) component of happiness and describes personal characteristic of man (extrovert/ introvert, optimist/ pessimist), individual satisfaction with the current state of affairs, satisfaction with work, family, income, meals, clothes, housing conditions, possibilities of personal fulfilment and leisure time, satisfaction with access to education, status at work, communication with colleagues and friends, satisfaction with ratio “work and free time”, relation to religion (believer, atheist), sociocultural factors.

Afterwards dependence of life satisfaction on different factors which is determined by methods of happiness economics allows us to identify ways to improve subjective well-being and public welfare.

Conclusion

To sum up, the reference to the regularities that were found out by cognitive psychology helps us to explain the results of sociological researches and the changes in subjective well-being. The classification of relevant factors suggested as a result of the interaction of three sciences will allow us afterwards to identify the most important ones and might define the direction of public policy to increase emotional and pecuniary prosperity.

References

ENDOWMENT AS AN ESSENTIAL TOOL OF FINANCIAL SUPPORT TO FINANCIAL UNIVERSITY UNDER THE GOVERNMENT OF THE RUSSIAN FEDERATION

Abstract

Endowment is aimed at generating income through the investment of funds using low-risk investment instruments. Endowment assets form the stabilization university’s fund developing in the long term in order to protect the financial body of the Financial University under the Government of the Russian Federation from inevitable risks resulting from changes in the market conditions.

Keywords: endowment fund; Financial University; investment; stabilization

The development of the nonprofit sector has a great positive impact on the implementation of social, cultural and educational functions of the state, especially in the current Russian context, when the state financing of social goods is limited [3]. In today’s society, there is a certain range of problems, which only nonprofit organizations can solve. In Russia, one can establish a financial endowment since 2007. According to Federal Law No 275, an endowment is “a share of property of a nonprofit organization, formed by donations and transferred to a management company for fiduciary management to generate income to be used to finance statutory activities of nonprofit organizations” [1].

Nowadays, in the Russian Federation, the funds are invested by the management company to generate profit which is then spent to achieve the nonprofits’ statutory goals. Endowment funds operate in many countries of the world, and have recently been on the rise in Russia. Education expenditure is considered an essential key of social development indicators. Investments in education play an important role in increasing the human capital of the country and improving prospects for economic development.

Being a student of the Financial University under the Government of the Russian Federation, I researched into the endowment Fund of my University.
The decision to set up the Financial University Endowment Fund was taken in 2007 on the initiative of the Financial University graduates [2].

The mechanism of the Financial University endowment Fund acts in the following way:
1. Firstly, the creation of a specialized NGO in the form of Fund.
2. Secondly, the formation of an endowment Fund during the year by donations.
3. Thirdly, the target Fund transfers capital to the trust management of the management company.
4. The endowment process itself.
5. The management company on a periodic basis sends the income from the management of the trust capital to the endowment Fund.
6. Finally, the endowment Fund transfers the income from the endowments of the University in accordance with the financial plan.

The endowment Fund of the Financial University is included in the “top 10” largest Russian endowment funds according to the amount of the accumulated funds, which was approximately 4 billion rubles in 2015 [4].
If to analyze the advantages of an Endowment Fund Structure, I would like to mention stable long-term financing of the program; intended use of capital; financial transparence; different forms of donations; tax deduction and individual approach.

To sum up, endowment is aimed at generating income through investment funds using low-risk investment instruments. Creating new endowment Funds and developing new investment policies will undoubtedly make a huge positive impact on the future development of Russia’s education system.

References

INNOVATION DEVELOPMENT CHALLENGES IN INDIA AND INTERNATIONAL TECHNOLOGICAL EXCHANGE

Abstract
Innovations have become one of the key components in the process of a country’s sustainable development. This report provides a review of the current state of innovation development in India. The problem of Indian economy’s dualism is considered and the priority innovation issues like information technologies, pharmaceuticals and biotechnologies are characterized. The important role of international technological exchange is underlined in the report. Special attention is paid to digital divide, heterogeneity of investments and other challenges of innovation development.

Key words: innovation development, technological exchange, research and development (R&D), economic dualism, digital gap

Introduction
In the perspective of the fourth technological wave innovations have become one of the key factors of a country development. Nowadays the most glaring example of such country is India. It increasingly becomes a top global innovator for hi-tech products and services. India today has all the components needed to become a global driver of innovation: it has an excellent talent pool. India has the largest human capital in the world (working-age population), exceeding the value of China (more than 50%), and US (more than 100%). Despite this, a very few of students go to science, a large percentage of students leave the country to work in scientific institutions of the United States and Europe. Moreover, there are high-level market potential and a strong foundation as a continuously evolving national innovation system and government support. India ranks 8th grade in the world for investing in innovations and represent one of the most attractive countries for investment in this sphere¹ [1]. Today Indian economy

illustrates dualism of the innovation process, which is the result of development diversity and social problems in society.

**Current situation in Indian innovation market**

Summarizing the literature raising the subject of innovation development in India we can underline the undeniable role of modern technologies and science. Nevertheless, multiple inner economic and social harassments and the role of international cooperation and technological exchange are not covered thoroughly. Inspite of a great potential and successful R&D projects India shows a backlog in many innovation arias (Table 1).

<table>
<thead>
<tr>
<th>Country</th>
<th>Expenditures for R&amp;D % of GDP 2005–2015</th>
<th>High-technology exports % of manufactured exports 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>0,82</td>
<td>7,5</td>
</tr>
<tr>
<td>China</td>
<td>2,05</td>
<td>25,8</td>
</tr>
<tr>
<td>Russia</td>
<td>1,19</td>
<td>13,8</td>
</tr>
<tr>
<td>Brasil</td>
<td>1,24</td>
<td>12,3</td>
</tr>
<tr>
<td>South Africa</td>
<td>0,73</td>
<td>5,9</td>
</tr>
</tbody>
</table>

The general agenda of Indian innovation strategy is “Science, technology and innovation for the people”. Therefore the government promote Inclusive Innovation model that became the basis of the innovation development policy. This model should involve all sectors of economic and social life and all sections of population. It is even more important because of 69% of the population live below the poverty line [4].

![Picture 1. Government and private sector interests in innovation sphere](image)
Priority issues of innovation development include such spheres as energy (particularly nuclear), pharmaceuticals and biopharmaceuticals, aerospace, telecommunications, information technologies, nanotechnologies. Interests of government and private sector cover mostly different spheres represented in the picture 1.

**International cooperation**

Today more than 100 multinational corporations have research projects in India. Some of them invest in establishing their own research centres, others conclude agreements on joint research with academic institutions, government laboratories and private firms.

India has signed bilateral S&T agreements with 45 countries around the world [2]. Various international cooperation agreements address societal and global challenges. Some notable areas of cooperation are agriculture, energy, nuclear technology, space and material sciences, ICT, biomedical science and health. Two joint research centres and institutes have been established to undertake mutually beneficial basic scientific research under a bilateral mode of cooperation. India and France have established the Indo-French Centre for the Promotion of Advanced Research, and India and Germany have established the Indo-German Science and Technology Centre [3].

Indo-Russian R&D collaboration is performed in nano-and biotechnologies, military industry, telecommunications, nuclear energy. In the picture 2 the destination of such centres are indicated.

*Picture 2. Indo-Russian R&D collaboration centres*
American companies take leading positions among all patent grantees in terms of patents granted to Indian inventors percentage. An often-cited example of a company leveraging global talent is that of General Electric (GE). The centre in Bangalore, the John F. Welch Technology Center (JFWTC), was set up in September 2000. Today the JFWTC is home to over 4,000 researchers and engineers contributing to product development and intellectual property filed and owned by the parent GE. Close to 2,000 of the 30,000 patents awarded between 2011 and 2016 to GE have Indian inventors from the JFWTC and Indian talent in other global centres. Going by awarded patents, other global companies with strong contributions from Indian inventors include IBM, Intel, Qualcomm, and Google (Table 2). An interesting aspect of these data is that US companies, especially GE and IBM, have leveraged Indian inventors more than non-US companies have. This could point to the fact that the Asian companies have only recently started leveraging talent outside their own geographies.1

Table 2

<table>
<thead>
<tr>
<th>Company</th>
<th>Patents granted (total, 1 January 2011 to 31 March 2016)</th>
<th>Patents with at least one Indian inventor (total)</th>
<th>Patents with at least one Indian inventor (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>29,001</td>
<td>1,966</td>
<td>6,8</td>
</tr>
<tr>
<td>IBM</td>
<td>45,527</td>
<td>1,894</td>
<td>4,1</td>
</tr>
<tr>
<td>Intel</td>
<td>16,542</td>
<td>284</td>
<td>1,7</td>
</tr>
<tr>
<td>Amazon</td>
<td>3,631</td>
<td>62</td>
<td>1,7</td>
</tr>
<tr>
<td>Google</td>
<td>12,116</td>
<td>192</td>
<td>1,5</td>
</tr>
<tr>
<td>Microsoft</td>
<td>24,696</td>
<td>365</td>
<td>1,4</td>
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<tr>
<td>Qualcomm</td>
<td>32,218</td>
<td>421</td>
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<tr>
<td>Samsung</td>
<td>95,298</td>
<td>441</td>
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</tr>
<tr>
<td>Apple</td>
<td>14,007</td>
<td>31</td>
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<tr>
<td>LG</td>
<td>71,443</td>
<td>47</td>
<td>0,06</td>
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<td>Sony</td>
<td>47,336</td>
<td>9</td>
<td>0,01</td>
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<tr>
<td>Toshiba</td>
<td>51,703</td>
<td>8</td>
<td>0,01</td>
</tr>
<tr>
<td>Toyota</td>
<td>53,122</td>
<td>6</td>
<td>0,01</td>
</tr>
<tr>
<td>Canon KK</td>
<td>56,987</td>
<td>3</td>
<td>0,005</td>
</tr>
</tbody>
</table>

R&D opportunities in various sub-sectors of India

ICT and wireless technology. Establishment of Software Technology Parks of India (STPI’S). National Policy of IT aims at bringing the power of ICT within

the reach of all its citizens to enable India to emerge as a global hub for IT by 2020. Cloud computing presents endless opportunities in wireless technologies.

**Pharmaceuticals and Health Care.** 3rd largest pharmaceuticals market in the world by 2020. US$ 55 billion in revenues by 2020 and US$ 26,1 billion in genetics by 2016. Create a new Health Policy for 2016—2025 to focus on “healthcare for all” holistically.

**Manufacturing technologies.** Automation and environmental sustainability are the key focus areas for manufacturing companies. The National Manufacturing Policy targets at creating 100 million additional jobs in the sector by 2025.

**Material energy.** Multi-disciplinary research to combine emerging concepts in nanotechnology with fundamental metallurgical chemistry is the way forward.

**Bio-energy.** Bio-energy is emerging as a promising alternative to meet rural energy needs in India.

**Water technologies.** The water demand of industry will account for 8.5 % and 10,1% of the total fresh water abstraction in 2025 and 2050 respectively. R&D efforts should concentrate on developing technologies for treatment, recycling, recovery, reuse and efficient use of water.

### Economic dualism

Indian economy illustrates the phenomenon of innovation process dualism, which is the result of development diversity and social problems in society.

The fastest growing high-tech industries in India are information technologies and development or production of medicines. India is the world’s leading country in IT goods and services export. India is in the group of countries which are technological diffusers\(^1\), absorbing new technologies developed in the endogenous growth countries.

Nevertheless more than 30% of the population live without any electricity. There are a huge digital divide and problems with non-discriminatory nature of technology exchange.

According to analytical reports of 2015, sales of pharmaceutical products estimated as 30 billion USD in the Indian market. India’s share of world pharmaceutical production is about 10%. The country produces more than 60 thousand types of medicine. There are more than 12 thousand pharmaceutical manufacturers in India. The volume of India’s biotech market was about 8.8 billion USD in 2015, including bio-services and bioinformatics with an annual growth of 22%. The global market share of India’s biotechnology is about 5% due to leading national companies. Despite of these achievements India faces the trouble of infectious diseases and the dramatic rise in non-communicable diseases ac-

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counted more than half of all deaths. Apart from causing individual tragedies, these diseases are also a major economic threat. India stands to lose $6.15 trillion due to non-communicable diseases and mental disorders by 2030 [4].

Still, the country is underperforming about its innovation potential with direct implications for long-term industrial competitiveness and economic growth. There could be hidden causes which are challenges themselves. There is a lack of trade and administration transparency in the country: Indian market is only 2% of global trade while it is a home of 23% of the world’s population [4].

**Challenges of Innovation Development**

We can denote a number of challenges that India faces in the process of innovation development. The problem of ineffective implementation of innovative capacity is in the spotlight today. A huge number of start-ups or individual innovative projects reaching investing stage have no outcome in the end.

Education system grows up highly skilled, technically advanced young generation dreaming become an innovator, scientist or top-manager, but they have to apply a back office offers. When they go abroad, they do well in any number of fields. The reasons for the dearth of inventions are complex. At the risk of oversimplifying, I would suggest that culture is largely responsible — one that puts a premium on getting good grades, winning a place at a prestigious university, getting a decent job. There is nothing wrong with that, except that it leaves no space for young Indians to explore.

The most disputed question is NIS functioning weaknesses. National Innovation System of India is rather complicated and involves hundreds and thousands government and private institutions. It has a set structure with the main “headquarters” in some states and focuses on smart cities and research centres. To illustrate the national innovation system adequacy and its possible efficiency we compiled some examples of innovation funding bodies.

Government funding bodies Examples: Department of Science & Technology (DST), Department of Biotechnology (DBT), Technology Development Board (TDB), Technology Information, Forecasting and Assessment Council (TIFAC), National Science & Technology Entrepreneurship Development Board (NSTEDB), Small Industries Development Bank of India (SIDBI), and National Bank of Agriculture and Rural Development (NABARD). Ministries have some upgraded funds.

Technology R&D centres Examples: Central government-funded national laboratories such as Council of Scientific and Industrial Research (CSIR), Indian Council of Agricultural Research (ICAR), Department of Atomic Energy (DAE), Defence Research and Development Organization (DRDO), Indian Space Research Organization (ISRO), Central Power Research Institute (CPRI), Central Manufacturing and Technology Institute (CMTI), and so
on. About 300 such centres exist in India. Industrial R&D centres including in-house R&D units, Scientific and Industrial Research Organization (SIRO)

Certification/standard approval and other formal accreditations Examples: Bureau of Indian Standards, Research Design and Standards Organisation (RDSO), food and drug controllers, national testing laboratories, IPO (for patent, design, and other IP components)¹

Moreover, it’s necessary to note such challenges as:
— Heterogeneity of the government R&D investments in civil sphere;
— Domestic market stabilization and national producer competitiveness ensuring;
— External scientific and technical cooperation and technological exchange problems²;
— R&D ineffective development and implementation;
— Information Security and Protection of Intellectual Property;
— Digital Gap.

**Findings**

Public investments in innovations get better qualitative results. Public investments exceed private ones, but this situation is changing. Moreover, the majority of private capital is foreign investments of international corporations which cause capital outflows. National identity is a qualitative indicator, which is very important in innovation development policy and international exchange but difficult to evaluate and understand. Sometimes business may face “national immunity” meaning a complicated adoption of something new and alien.

India can build upon its cultural bias of frugality and sustainability to capture markets not only within its shores but globally. The enabling environment for innovation, including the centrality of competition and strengthening innovation-friendly sociocultural norms aredefined as the key incentives for innovation.

**Conclusion**

India could become a leading country in innovation development. For this to happen its industries need to have the hunger to be at the top of the value chain, customers have to be more demanding, policies — more transparent, and the talent pool has to get more hands-on experience. To achieve a sustainable growth and alleviate poverty India needs to aggressively harness its innovation potential based on innovation-led, rapid, and inclusive growth.

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QUANTILEMETRICS OF RISK ASSESSMENT

Abstract
In modern days, risk management has become an integral part of any company; it allows not only reducing the uncertainty level of any business but also expanding the measures themselves due to adaptation to various market factors. Let’s focus on one of the most popular and famous methods for risk prediction — VaR, and the peculiarities of its structure; we’ll analyze the main features of the reduced model, by separating the strengths and weaknesses.

Key words: financial risk management, uncertainty, global market, reserves, VaR, quantile, portfolio, probability of loss.

JEL code: G32

After a number of downfalls in the financial market, the amount of speculations with instruments whose risks are very hard to consider has increased. That is why all market players must be familiar with the basics of risk management

Risk management is the process of making and enforcing managerial decisions aimed at the reduction of the potential unfavorable result and the minimization of potential project loss, triggered by its implementation. This economic science is particularly relevant in the financial sphere, because even insignificant risks in a big company can push the market. That is why leading top-managers must have deep knowledge on risk management and risk measures.

The aim of the paper is to study fundamental features of market risks measures using quantile metrics. Different approaches to interpreting VaR are being reviewed; advantages and disadvantages of the methods are brought forward.

Before reviewing models based on quantile metrics of estimation, it is extremely important to systemize the fundamental definitions, which are inseparable part of analyzed models.
Quantile is a value, not exceeded by a random variable with a certain probability $\alpha$. For any $\alpha$ between 0 and 1, a distribution quantile of continuous random values of $X$ is a value $x_\alpha$ which equals to:

$$P(X < x_\alpha) = \alpha. \quad (1)$$

If it is known that $F(x)$ belongs to $X$, then $\alpha$ may be represented by $x_\alpha$:

$$x_\alpha = F^{-1}(\alpha). \quad (2)$$

Let’s take a normal distribution as an example, using $r_t = \ln(P_t/P_{t-1}) \sim N(\mu, \sigma^2)$ as its parameters. In Figure 1 we have a 0.1-quantile which means that $P(X \leq -5\%) = 0.1$.

In this case graphical data may be interpreted in the following manner: with a probability of 90% “x” will not belong to the interval of 5% of the smallest values.

Quantiles can be marked using percentiles, where

$$\alpha = p/100 \quad (3)$$

“p” denotes percentile.
It must be said that some of the quantiles have specific names:
- 0.25-quantile is called the first quartile and is sometimes called lower quantile
- 0.5-quantile is median or the second quartile
- 0.75-quantile is called the third quartile and is sometimes called upper quantile

Usually standard values are used when it is needed to calculate a quantile, where $\alpha$ equals to 0.1%, 1%, 5% or 10%.

When estimating market risk, $X$ reflects instrument’s returns (profit and losses), while minimum values are used to ensure that the quantile corresponds to losses which won’t be exceeded with a certain probability.

If returns are independent, equally distributed random variables, with normal distribution, where the mathematical response is $\mu$ and the standard deviation is $\sigma$, then for any $\alpha \in (0, 1)$ the following transformation may be used:

$$P(X < x_{\alpha}) = P\left(\frac{X - \mu}{\sigma} < \frac{x_{\alpha} - \mu}{\sigma}\right) = P\left(Z < \frac{x_{\alpha} - \mu}{\sigma}\right) = \alpha,$$

where $Z$ is a normal standard deviation.

Example: We have a function distribution with returns $X \sim N(0.01, 0.0009)$ and need to compute $P(X < -0.02)$:

$$P(X < 0.02) = P\left(\frac{X - 0.01}{0.03} < \frac{-0.02 - 0.01}{0.03}\right) = 0.1587$$

Thus, the probability of losses not exceeding 2% equals to 15.87%. Let’s demonstrate the obtained result on the diagram — Fig. 2:

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1. Introduction to Value at Risk

“VaR is a monetary estimation of a variable (in basic currency) which will not be exceeded by expected losses during a given time span with a given probability.” [4,63]
“VaR are losses of a portfolio of assets which are not to be exceeded during a given time span with a given probability.” [6,47]

VaR is essentially a risk indicator, demonstrating a maximum loss, expressed in cash, for an investment portfolio/instrument during a given time span, with a given confident probability level (confidence interval). This indicator allows to quantify potential portfolio expenses in monetary terms under normal market behavior. In other words, VaR method is not very efficient during economic crisis.

With a steady portfolio of positions (both long and short positions, reflected in the assets) and a given confidence level \((1 - \alpha)\), confidence interval \(h\), VaR is defined as a value (expressed in portfolio measurement units) which cover all possible portfolio losses during the time span \(h\) with probability \((1 - \alpha)\).

\[
P(X \leq \text{VaR}) = 1 - \alpha
\]

Considering the above mentioned formula, VaR is the biggest losses value being a consequence of assets returns instability.

The calculation reflects data which takes the following into account:

- Pre-determined time horizon \(h\)
- Significance level \(\alpha\) (or confidence level \(1 - \alpha\))
- Distribution assumptions

Holding period is a period which essentially depends on the portfolio instrument’s liquidity. As a rule, a time span sufficient to realize an asset so that the value won’t become negative (to close a position).

Confidence level is a probability indicator, chosen according to relationship to risks. In particular sector (as in banking) this variable is pre-defined to constitute 99% which is deemed optimal, but some other probabilities are used: 95% in Risk Metric or 99.7% in ratings firms’ approaches.

There are various approaches to interpreting VaR estimation. Let’s give an example of interpreting this indicator for the portfolio of 1 million RUR, time horizon of 1 day and a confidence level of 99%:

- Probability that the portfolio owner loses less than 1 million RUR within next 24 hours is 99%;
- Probability that the losses of the portfolio owner will exceed 1 million RUR within next 24 hours is 1%;
- Probability of expected losses exceeding 1 million RUR per portfolio equals to 1/100, which is once in a hundred days.

The curve depicted in Figure 3 illustrates normal distribution (though we can think of other kinds of distribution as well), which is composed by distribution of portfolio returns in a particular time interval.

The area of the diagram which is not painted represents 95% of the total shape’s area and a confidence level of 95% (or the significance level of 5%). VaR is a maximum amount of potential losses for the confidence level illustrated in the Figure.
In the case of $f_{\Delta P}(x)$ being a returns probabilities distribution function, there can be the following interconnection between VaR and the confidence interval established:

$$S_\alpha = \alpha = \int_{-\infty}^{-\text{VaR}} f(x)dx$$

And, represented graphically — Figure 4:
Where $S_\alpha = \alpha$ is a highlighted area representing 5% of the worst cases in Fig. 3.

Estimation of VaR may be carried out in an absolute and relative sense. If VaR is relative, the estimation is made in relation to the zero value. In case of relative estimation, the average returns level is added to the absolute value.

Furthermore, there are two approaches to VaR estimation:
— Approach which is based on local valuation where a linear or more complex approximation of instrument value function is being used
— Approach which is based on full valuation, where instrument’s value is recalculated and no approximations are employed.

VaR methods are used for:
— Estimation of returns for instruments/operations, taking risk indicators into account
Implementing reasonable limits policy and limits computation on open positions
Calculating/measuring capital sufficiency, as well as its placements in different businesses.

Thus, we can distinguish a number of advantages pertaining to VaR methodology, which enable us to assess metrics’ performance:

- Equals to the sum which can be lost with more or less probability;
- Gauges risk or risk factors on the basis of their sensitivity;
- Can be subject to comparison on particular markets;
- This is a generic method of measurement, applicable to all assets and types of risk;
- Can be measured on any level, be it an individual instrument level or a portfolio level;
- When risk aggregation or risk segmentation is used, there is an opportunity for improved study of assets interdependencies within a portfolio.

2. Market risk estimation models with VaR.

Covariance method of computing VaR value

Variance-covariance method, also referred to as parametric, analytical or delta-normal method of VaR computing, assumes that all primary assets’ prices are normally distributed, therefore shaping value of the whole portfolio.

For assets returns computations \( r_t \), logarithmical increment of prices are generally used

\[
    r_t = \ln \frac{P_t}{P_{t-1}} = \ln(P_t) - \ln P_{t-1} \sim N(\mu, \sigma^2) \tag{7}
\]

Nevertheless, other methods for returns’ computations, covered in Chapter 1, can be equally implied.

Taking the formula for continuous accrual of interest as a basis, we can come up with the following equation:

\[
P_{(t+1)} = P_{(t)} e^{\sigma_t}. \tag{8}
\]

An assumption on normal distribution of risk’s portfolio factors greatly facilitates the process of obtaining VaR value, because instruments’ returns distribution, enclosed in the given portfolio, will also be normal. This feature remains true for any instrument with linear characteristics of the price (currencies, shares).

In case of a random variable’s distribution, corresponding to normal type, the confidence interval \((1 - \alpha)\) is characterized only by a quantile \((k_{1-\alpha})\), which demonstrates random variable’s target position in relation to an average \((r)\) shown among volatilities of the given portfolio \((\sigma)\).
Having an investment position, comprising one instrument, we obtain the asset’s profit/loss in the amount of its daily value change. Thus, the smallest expected price with a probability \(1 - \alpha\) can be formulated as follows:

\[
P_{(t+1,1+\alpha)} = P_t \exp(\mu_i - k_{1-\alpha}\sigma_i), \quad (9)
\]

where \(P_t\) denotes the current price.

Which can also be shown as,

\[
P_{(t+1,1+\alpha)} = P_t e^{\mu_i - k_{1-\alpha}\sigma_i}. \quad (10)
\]

Mathematical expectation of returns (one-day returns) is often taken as zero \([4,212]\) which yields

\[
P_{(t+1,1+\alpha)} = P_t e^{-k_{1-\alpha}\sigma_i}, \quad (11)
\]

\[
\text{VaR}_{(1-\alpha)} = P_{t+1} - P_t = P_t e^{-k_{1-\alpha}\sigma_i} - P_t, \quad (12)
\]

\[
\text{VaR}_{(1-\alpha)} = P_t(e^{-k_{1-\alpha}\sigma_i} - 1). \quad (13)
\]

When computing VaR, in most cases we use linear approximation of value \((e^{-k_{1-\alpha}\sigma_i} - 1)\), which during Taylor expansion roughly equals \((-k_{1-\alpha}\sigma_i)\) when working with small variables\(^1\). Also the negative sign of the value is often omitted, leading thus to the creation of a relative value.

\[
\text{VaR}_{(1-\alpha)} = -k_{1-\alpha}\sigma_i, \quad (14)
\]

where \(\sigma_i\) denotes volatility, \(k_{1-\alpha}\) is a quantile corresponding to the confidence interval \((1 - \alpha)\).

\(N\) — day value for VaR can be computed using the following equation:

\[
\text{VaR}_{N\text{-day}} = \text{VaR}_{1\text{-day}} \cdot \sqrt{N}. \quad (15)
\]

However such an estimation is applicable for relatively short time spans only (10–15 days), and in cases of increasing time frames, the risk of inaccurate calculated data will find itself in direct dependence with the scaling interval.

Delta-normal method has the following advantages:

— Simple estimation method implementation
— High speed of computations
— Possible use of different indicators of volatility and correlation.

Drawbacks of the delta-normal method:

— Inability to obtain efficient data for distributions, other than normal, for the reason of heavy tails of distribution
— Inability to account nonlinear instruments’ risks accurately
— Complexity for understanding by top management
— Probability of significant mistakes in used models

\(^1\) The scaling interval is often considered in terms of trading days.
References

INITIAL CONDITIONS IN THE SUPPORT OF INFLATION TARGETING

Abstract

Over the last decades a number of countries have adopted inflation targeting as a strategy for monetary policy. The understanding of initial conditions required for successful implementation of inflation targeting is of vital importance for any central banker. The aim of this article is to provide a satisfactory theoretical foundation over this matter. It also addresses the question of the prospects of Russia’s transition to this monetary policy framework. Further, the approach demonstrates the key functions served by inflation targeting.

**Key words:** initial conditions, inflation targeting, monetary policy, alternative regimes, monetary authorities

**JEL codes:** E310, E520

Inflation targeting as an alternative strategy for monetary policy emerged in the 1990s in response to challenges countries faced in managing their price stability with existing traditional methods such as monetary aggregates and an exchange rate. The new approach was first applied by New Zealand in 1990 and soon Canada, the United Kingdom, Israel, Sweden, Australia, Spain and other countries followed it [1, p. 880]. Since the practice started, the favourable performance it demonstrated has sparked much interest and debate among central bankers and economists from both developed and developing countries. The question arose. Is inflation targeting the long-awaited modern solution to the problem of monetary policy efficiency? However, there is a widespread view that satisfying the certain set of preconditions prior to passing on this regime is of vital importance for ensuring the success. Moreover, developing countries, in particular Russia, have certain characteristics which cast considerable doubt on the successful implementation of inflation targeting.
By definition, inflation targeting is a regime when a monetary authority announces publicly the numerical inflation target with a strong commitment to achieve it in the medium-term.

The increased focus on controlling inflation has arisen for several reasons. Firstly, the economists come to the conclusion that in the long run the inflation rate is the only macroeconomic variable monetary policy can affect. Secondly, even a moderate rate of inflation promotes serious distortions in the economy and causes troubles for all economic agents: it creates social tensions, undermines investment and credit business opportunities and lowers living standards of the population. Lastly, the control of inflation can help to provide monetary policy with so called “nominal anchor”, which impose some degree of accountability and discipline on both the central bank and the government.

Despite all the application benefits central bankers should be aware of the fact that inflation targeting is not just a mechanic tool that can be switched overnight. This new approach is generally characterized as more demanding than the alternative frameworks, making it not applicable by any volunteer country. It should be bear in mind that adopting inflation targeting with premature initial conditions could do more harm than good, since it could lead to the loss of credibility for both the central bank and the regime itself. The reputational damage would be very costly to remedy.

Therefore, inflation targeting is a monetary policy framework with 10 key-elements, which should be taken into account beforehand [2, p. 3]. These are:

1) a public announcement of a medium-term numerical target for inflation;
2) a commitment to price stability as the primary goal of monetary policy to which others are subordinate;
3) a well-developed capacity to forecast inflation, accordingly highly qualified analysts and reliable statistics;
4) credibility of monetary authorities and confidence of economic agents to their predictable policy;
5) the central bank’s legal autonomy and real independence from fiscal pressures which could create conflicts with the inflation objective;
6) increased accountability and discipline of the central bank for meeting its inflation target;
7) increased transparency of monetary authorities through clear communication with public concerning the way in which they intend to make their policy decisions;
8) a well-developed financial market, sound banking system guaranteeing the effective monetary policy transmission mechanism and monetary policy efficiency;
9) minimal dollarization of the economy and its sensitivity to the global prices and exchange rates;
10) a free-floating exchange rate regime of the domestic currency.
We see the inflation-targeting framework as serving two important functions: improving communication between policy-makers and the public and providing discipline and accountability in the making of monetary policy. If a central bank succeeds in achieving credibility, a good part of the battle to control inflation is already won.

However, historically, the sudden adoption of inflation targeting regime after the failure of previous options did not leave much room for preparations by central bankers. To tell the truth, the number of countries which satisfied the initial requirements can be counted on one hand. And as it turned out in practice, meeting the stringent set of preconditions may be less important to successful implementation of inflation targeting than the sustained pursuit of improvements once the framework has been adopted.

Given the strong performance of developed countries and having exhausted all other possible options in the past, inflation targeting emerged as a natural scenario in developing economies too. Nonetheless, concerning non-industrial countries experts insist that it would be better to adhere to the conventional monetary policy frameworks such as monetary aggregates or an exchange rate targeting due to common challenges such countries face. Exceptional institutional conditions influencing the practice of the monetary policy originally differ from the developed countries in six main points [3, p. 4]. These are:

1) weaker fiscal organizations;
2) data limitations;
3) low monetary policy credibility;
4) less-developed financial sector institutions and markets;
5) uncertainty regarding economic structure and monetary policy transmission mechanism;
6) extensive dollarization and vulnerability to sharp changes in global prices and exchange rates.

Naturally, all these particularities can complicate the conduct of inflation targeting. However, this transition is primary intended to help encourage the necessary economic reforms in developing countries. Besides, inflation targeting countries can develop quite quickly the range of requirements needed to strengthen policy performance. In addition, it is interesting to note, that developing countries, specifically, experience the most advantages from inflation targeting because it forces them to implement necessary reforms initially lacking in such economies.

Thus, we can conclude that the absence of some conditions should not stand in the way of adoption of inflation targeting, especially when policies are being introduced to establish them soon.

When it comes to Russia, the feature of its economy is export-dependence with raw-material orientation. This fact generates a need for maintaining a constant exchange rate, which leads to a rise in inflation. Nevertheless, the world experience shows that inflation targeting can be used successfully even in coun-
tries heavily tied to the prices on mineral resources (as the examples of Chile, Mexico, Norway) [4, p. 26].

The following table reflects the topical conditions necessary for the successful transition to inflation targeting in the context of the extent to which they are met in Russia [5, p. 20].

**Table 1**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Fulfilment of the condition</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound banking system and well-developed financial markets</td>
<td>Partially</td>
<td>The development of the financial system is going rapidly, but in terms of capitalization and range of provided services it falls behind yet</td>
</tr>
<tr>
<td>Public confidence in the monetary policy and central bank</td>
<td>Partially</td>
<td>Owing to more transparent monetary policy of the CBR public confidence is gradually increasing</td>
</tr>
<tr>
<td>Policy of free-floating ruble</td>
<td>Partially</td>
<td>In Russia a flexible exchange rate regime is used in the short run, but in the long run it is difficult to realize due to high proportion of materials sector</td>
</tr>
<tr>
<td>Minimal dollarization of the economy and its sensitivity to the global prices</td>
<td>Partially/Failed</td>
<td>Dollarization of the economy is decreasing but still remains high. Russia’s economic situation depends heavily on the global prices on energy prices</td>
</tr>
<tr>
<td>Price stability as the primary goal of monetary policy</td>
<td>Partially</td>
<td>Along with price stability the central bank sets other goals, for example the ruble stability</td>
</tr>
<tr>
<td>Institutional independence of the monetary authorities</td>
<td>Partially</td>
<td>The CBR has formal signs of political and economic independence. At this time it feels pressure from the government regularly</td>
</tr>
<tr>
<td>Well-developed capacity to forecast inflation</td>
<td>Partially</td>
<td>There are currently no full reliable statistics necessary for forecasting inflation very accurately</td>
</tr>
</tbody>
</table>

Taking into account the specific nature of Russian economy, complexity of external conditions and insufficient development of transmission mechanism, the policy of inflation targeting in the medium-term can hardly be implemented in Russia in pure form. Under these circumstances, it would be wise to adopt implicit inflation targeting as a transition period for full-fledged inflation targeting, during which the required institutional infrastructure would be adjusted gradually. Without enhancing the role of financial markets and underpinning confidence of economic agents in banks you can hardly rely on the fact that the inflation targeting policy would coordinate inflation expectations and contain price pressure efficiently.

It must be emphasized that the transition to inflation targeting regime in Russia is being performed under economic and geopolitical tension. For this reason, its result will directly depend on the consistent actions of the central
bank and the government in conducting a predictable monetary policy with clear and transparent communication [6, p. 4].

So, the current research on inflation targeting tends to conclude that initial conditions do not matter significantly for the success of this regime. Nevertheless, the analysis draws lessons for similar countries considering inflation targeting as a monetary policy regime. Enhancing the understanding of the fundamental prerequisites of inflation targeting — a topic likely to be discussed over and over in the future.

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THE EUROZONE AS A SIGNIFICANT STEP TOWARDS GLOBALIZATION

Abstract
This article is aimed at considering issues connected with present economic challenges. In particular, I will touch upon such problems as globalization. There will be concerned the aspect of Eurozone collaboration, as the example of partial globalization. In particular, the issue of history cooperation and main mistakes that were made, while going through a way to prosperity.

Key words: Eurozone, globalization, Greece crisis, European integration
JEL codes: F02, O52

The topic “The Eurozone as the significant step towards globalization” is now highly discussed in all communities as the current economic situation remains unstable since worldwide wars. There have been numerous attempts to cooperate and struggle together. The year 1992 came into history as a crucial moment for the worldwide economic elaboration. The establishment of The European Union is considered to be the first substantial action aimed at expansion of global processes. This article is concerned with economic challenges of integration such as The Eurozone. According to research, not everyone understands the differences between these two terms. The Eurozone is a territory of euro currency used ubiquitously, while the European Union is an economic and political alliance. One more misconception is that this integration will soon lead all countries inside and outside to the worldwide crisis. A Nobel prize-winning author Joseph E. Stiglitz in one of his monographs answers in such a way “...the problem is not with globalization itself but in the way globalization has been managed” [1].
Let us first remember what steps have already been made in order for globalization to evolve. Then we will discuss what main mistakes were made but could have been prevented.

The development of deep integration can be seen in the changes of economic interaction of the participating countries of the European Union:

- the first stage (1951–1952) is a period of entry;
- the Central event of the second phase (late 50’s-early 70-ies of XX century) — the establishment of a free trade zone;
- the third stage (first half of the 70-ies) is the time of taking responsibilities for regulating currency relations;
- the fourth stage (since the mid 70’s until the early 90-ies) is characterized by the creation of a united economic space based on the principles of “four freedoms” (free circulation of capital, goods, services and workforce);
- in the fifth stage (since the early 90-ies of XX century to the present) the economic, monetary and political Union formation began (the introduction of a single EU citizenship along with national, single currency and banking system, etc.).

Europe is the cradle of modern civilization. The development of the productive forces began there, revealing the enormous possibilities of human labor, the rational organization of production. The establishment of the Institute of private property, market and capitalist enterprises emerged the significant potential of social labor force. European countries were the first to make a mandatory education. Due to the stable growth of professionally skilled workforce Europe has become the largest market of qualified labor. Besides, it was an essential action to accumulate capitals, gained from both domestic and international economy. For many centuries the European States were dominant in the world economic development.

High dependence of Western European economies on external markets, the similarity of their economic structures, territorial and socio-cultural proximity — all of these aspects contributed much to the development of integration trends. The convergence of European economies on the basis of the relations among international companies and the markets was also done to use the effects of integration to strengthen the position of Europe in competition with other centers of the global economy. The most important was the desire of Western European countries to strengthen their positions on the world market on behalf of the most powerful competitor — the United States of America.

The creation of The Maastricht Treaty in 1992 was the main representative of what was expected from this union. Further I am going to consider this. The majority of European Countries were recovering from war consequences. It was clear the idea of ECU was to be developed and spread among other prosperous countries. What was the main argument of Jak Delor, the founder of the EU, to push every country to desire to be the part of this community? Actually, if there were still remaining currency restrictions, then it would be so hard for the gov-
ernment to regulate both the exchange currency rate and anti-inflation policy. In case one single currency is accepted the first external goal will disappear.

All these factors brought euphoria about globalization. Everyone believed in its magic power to reduce the gap between industrial countries and poor ones. Thus, the conception of creating the currency union was already considered. However, its creators have almost forgotten to think over all the details, like how to push all the economies to work efficiently, and how to avoid hidden dangers.

No one wanted to pay attention to the details of the Maastricht Treaty — there was a misbalance between the commonly regulated monetary policy and personally regulated economic policy. Although we can’t strictly criticize this system’s founder Dolor as he was trying to promote a kind of pact about coordination of anti-cycled regulations, harmonization of fiscal policy and unemployment treatment. Unfortunately, no one emphasized the importance of these regulations. Furthermore, this program would require so much time that it would be a lot easier to reject this system at all.

So, the European Union was officially founded in 1992. What were the main factors why the Eurozone union suffered from the prolonged crisis? Now we will try to emphasize some of them: how Greece was included in this list and how the reform of the Pact of stability and growth was held in 2005.

1. Greece issue

To enter the Union there were settled some criteria — they were pretty strict but provided economic safety. There were several figures like the budget deficit, inflation and long-term interest rates. Greece was the only country desiring to enter the Eurozone but wasn’t approved as it couldn’t show the required economic figures in 1998. [2] For two decades prior to the transition of Greece to the Euro, the dynamics of its macroeconomic indicators did not leave any hope that the country would be able on a long term basis to fulfill convergence criteria (Table. 1). During the 1980–1999 an average annual budget deficit was more than 8% of GDP (the standard is 0–3%). The average inflation rate rocked to 19.5% in 1980 — 1989, and fell down to 11.6% in 1990–1999. By the definition, the ECB considered normal inflation rate to be 2% per annum. During the 1990–1999 Greek public debt increased from 60% to 103% of GDP, the Maastricht limit is 60%. However, the governance of the Eurozone understood that to remain attractive to European countries it should prove that one non-efficient country like Greece can’t destroy the whole economy of the Eurozone. So, in 1998 the Eurozone promised Greece to be included in this alliance if Greece showed particular figures. The third stage of ECU system had to be hold in 2001 — it was the implement of cash euro. By this time Greece had made its best to be included in the Eurozone. So, it is now an open secret that the data of economic growth in Greece was a fake. However, at that time there were no assumptions to admit it. The same fake data was after the implement
of euro cash — Greece couldn’t manage to realize the requirements concerning economic development (Table 1).

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<td>State budget balance, % of GDP</td>
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2. The reform of the Pact of stability and growth

In 1997 Germany as one of the most prosperous countries in Europe decided to implement one more agreement called the pact of stability and growth. There were fully described all the aspects concerning budgeting discipline. It was done because Germany felt anxious that the participants of the currency union would unstable the economy. However in 2003 Germany had to break its rules in order to encourage economic development. When the Eurocomission threatened Germany with sanctions there was hold a campaign aimed at increasing this pact’s volatility. As a result, all the conditions were so much facilitated that the main targets of this pact had no way of seeming real. Then Greece understood opportunities but not dangers. When The Eurozone agreed to cut limitations, it was oriented mostly on countries-giants which had low rate of inflation and sufficient savings. Greece was in a worse position (Picture 1). So, Greece is now suffering from non-reliability as well as the European Union on the whole.

Picture 1. The share of gross savings in GDP in selected EU countries in 1980–2011, % [3]
Conclusions

As we can see, the main problem of making globalization work is that human are not ready yet to think global. The organizers of the Union haven’t thought over every aspect that seems simple but can lead to global problems. Supporters of the single currency used a very favorable environment in order to build the public approval around new strategic goals. However, neither a society nor the elite was ready to create a genuine economic government in the EU. The joint of Greece to the Eurozone in 2001 was politically motivated but had no any sufficient economic grounds. Conducted in 2005 the reform of Pact of growth and the stability was the result of voluntarism of the leading countries, first of all Germany and France. Initiating reform in order to improve the economic growth in these countries, they were unable to foresee consequences for other countries with a different model of the market economy. The Maastricht criteria do not reduce the gap of inflation rates among European members. This led to the fact that countries with higher inflation rate lost competitiveness and the base for the growth of their economies was shrinking. Moreover, getting access to euros, they got unreasonably wide access to external credits. It emerged coming into deep debts.

So, is it worth continuing to implement globalization processes in Europe along with other countries? As we see, we can’t absolutely agree that the results of this integration are positive. In the beginning of this talk I mentioned, that the main problems how globalization is managed. For the majority of the nations globalization as it has been implemented seems to be the pact of a devil. Closer integration into the world economy has brought greater volatility, insecurity and inequity. It mustn’t be solved in such a way. There should be a proper collaboration in economics, cultural awareness, environment protection and the desire for everyone to be equal in welfare. These two dogmas are the base for globalization to be implemented taking into account every poor man. Further there will be no doubt that global integration has a lot of benefits. As once Sarah Burrow, the General Secretary of International trade Union Confederation, said: “Globalization could be the answer to many of the world’s seemingly intractable problems. But this requires strong democratic foundations based on a political will to ensure equity and justice”.

References

FORFAITING AS AN INSTRUMENT OF FINANCIAL SERVICES IN THE RUSSIAN FEDERATION

Abstract
In the conditions of instability of the global economy, there are many risks for participants in international trade relations. The objective need to use various tools to reduce risks is becoming increasingly important. According to a number of studies, one of such promising financial instruments is forfaiting. The article discusses the prospects for the use of forfaiting services in Russia’s international trade operations. The key characteristics of forfaiting are presented and analysis of advantages and disadvantages of forfaiting is conducted. The potentiality for Russia as an exporter in connection with the development of forfaiting services is described. There are some activities that are necessary for the development of the forfaiting in the Russian Federation as an effective financial instrument in this article.

Key words: forfaiting, foreign trade, forfaiting market, financial agent, risks

JEL codes: F 30, F 36, F 49

Introduction
Forfaiting appeared in Switzerland in the 1950s as a substitute for an open account for the exporter of capital goods. At the same time forfaiting satisfied the requirements of the buyer (importer) who desired to defer payment until the capital equipment could begin to pay for itself. Today forfaiting services are becoming more and more popular on a global scale and their share in the volume of international trade is increasing. At present, the centers of forfaiting operations are the United Kingdom, Switzerland and Germany.

Key characteristics of forfaiting and its application in Russia and in the world
The essence of forfaiting is that the financial agent (forfeiting company/bank) acquires the commercial obligation of the borrower (importer/purchaser) to the creditor (exporter/seller) [3, 221]. A forfaiteur is a specialized finance firm
or a department in a bank that performs non-recourse export financing through the purchase of medium and long-term trade receivables.

Debentures are presented in the form of securities, usually billsof exchange (forfaiting also works with promissory notes and a letter of credit). The most common form of forfaiting is the financing of foreign trade activities, although it can also be used as a tool of crediting on the domestic market. It should be noted that banks receive income from forfaiting operations — a substantial discount on the purchase of debt obligations [2, 129].

The basic characteristics of the forfaiting as a specific instrument are as follows:
— medium and long-term financing — from 180 days to seven years or more (unlike factoring, dealing with short-term debt);
— 100 % financing without regress (recourse) to the exporter (seller) [4, 64];
— payment obligations are usually supported by a bank guarantee (bill avalization);
— debt instruments are denominated in one of the world’s major currencies;
— forfaiting is mainly used by large business (although in European countries it is widely distributed among small innovative enterprises).

To date, forfaiting is used in foreign trade transactions of European countries because it is an effective tool to increase the attractiveness of trade conditions for foreign purchasers. Forfaiting services are also in demand by importers of developing countries. Enterprises of Asian, African, Latin American countries purchase high-tech equipment and often cannot pay off the whole contract right away. By the way, it is necessary to understand that a developed banking system is a favorable factor for forfaiting. For this reason, bank capital supports
exporters in developed countries whereas the system of state support in developing countries compensates for the weakness of the banking system.

Thus, exporters should carefully discuss supply and financing proposals with forfaiters. It is very important for forfaiters to be aware of the subtleties and specific features of transactions in certain markets. Competitive interest rates and high margin for sale are among the most important aspects.

According to some experts, forfaiting was used in the USSR in the 1960s for the import of a number of goods and technologies. Nevertheless, the country did not have enough currency to maintain such imports. The main participant in such operations was Vneshtorgbank of the USSR, which even participated in the secondary market of forfaiting obligations. The Law on Currency Regulation and Currency Control (1992) complicated operations with payment obligations that perform the function of a means of payment for foreign trade transactions.

At the present stage forfaiting is not widespread in the Russian Federation. In addition, according to many researchers, the secondary market of forfaiting is completely absent in our country. This is due to the unwillingness of domestic banks to accept medium-term risks of developing countries, legal restrictions and the lack of long financial instruments [1, 13]. Furthermore, the interest rates of Russian banks are not as competitive as interest rates in developed countries.

It is also important to pay attention to other factors affecting the development of forfaiting services in Russia:

- imperfect system of insurance in the field of commercial lending;
- economic instability in the country (difficulty of forecasting, planning);
- specific aspects of customs regulation of cross-border circulation of bills;
- more sophisticated scheme of forfaiting in comparison with factoring (factoring operations are preferable in Russia).

There are no clear rules regulating the contract of financing under the assignment of a monetary claim (as well as legislation on a bill of exchange, a letter of credit and other forms of settlement) in the legislation of the Russian Federation. Meanwhile these aspects are fundamental for forfaiting transactions. However, due to the absence of a direct ban in the legislation, forfaiting is recognized and applied in the practice of Russia’s economic activity as a separate banking service.

In contradiction with world practice, in the Russian Federation 100% of the amount of the contract together with the discount is transferred to the account of the Russian exporter. In foreign countries, the supplier receives net proceeds without a discount.

The main players of the forfaiting market in Russia are foreign forfaiters: London Forfaiting Company, which has a representative office in Moscow, the German bank WestLB, which has a subsidiary company and others. At present, VTB and Vnesheconombank are also actively participating in the role of agents.
If Russia acts as an importer, the classical forfeiting scheme is as follows. The Russian importer enters into a contract with a foreign counterparty and justifies creditworthiness. This gives him the right to pay a bill without a prepayment. The bill should be avalized by a Russian bank with a good reputation in the world financial market. The exporter presents the bill to the account in a foreign bank. After confirming the aval, the foreign bank pays the nominal amount of the bill. A foreign bank presents a bill to a Russian bank after the maturity date and receives money. The Russian bank presents this bill to the importer. Finally, the importer pays the bill and the circle is closed. The term of circulation of a bill depends on the type of imported products.

**Perspectives and expediency of using forfeiting in trade operations of Russia**

Actually, Russia has an experience of forfeiting operations in the export of equipment, raw materials. Forfaiting services are simultaneously used in mechanical engineering [2, 132]. Now consider the advantages and disadvantages of forfeiting in order to objectively evaluate the feasibility of its application in foreign trade activities of the Russian Federation.

The main advantages of forfeiting are:

- forfeiter assumes all risks;
- long-term installments for many types of equipment;
- debt can be divided into parts;
- supplier receives the full value of the shipped goods;
- improvement of balance sheet structure and acceleration of the capital turnover;
- speed and simplicity of financial transactions;
- documentation is usually simple, concise, and straightforward.

Furthermore, forfeiting can work on a one-off transaction basis, without requiring an ongoing volume of business.

Among the shortcomings, it is necessary to emphasize the following:

- need for knowledge of the legislation of the partner country (it is rather difficult to obtain a comprehensive information);
- high cost of forfeiting services;
- it can be difficult to find a guarantor.

Obviously, forfeiting has significant benefits as a mechanism for the maintenance of foreign trade operations. Along with the above pros and cons forfeiting helps to gain competitive advantage because the credit makes the products more attractive. The use of forfeiting operations protects against the risk of exchange rate fluctuations, as well as political and commercial risks. For this reason, there is a possibility of development of new markets, expansion of foreign economic relations (strong capabilities in emerging and developing markets).
By the way forfaiting stimulates the increase of cash flow [4, 65]. This is reflected in the elimination of receivables and contingent liabilities from the balance. Forfaiting transactions can increase the profitability of Russian banks and improve their image in Russia and abroad. It is also very important that forfaiting contributes to the increase of profitability of sales. In addition, thanks to a simple registration of documents and individual financial solutions forfaiting is a motivating factor for intensification of business development.

Forfaiting can be considered as a promising direction for strengthening Russia’s positions in the international market, optimization of international trade, promotion of domestic products. Many experts point out that forfaiting is a more targeted and effective mean than state support of exports [4, 65]. It should be noted that China and India — Russia’s strategic partners in international trade and economic relations — have a positive experience of amplification of exports through credit instruments. In particular, India engages foreign forfaiters and develops the national market of forfaiting.

Actually, forfaiting is often more acceptable for exporters than crediting in local banks. This is explained by the fact that local banks can set limits on borrowers and credit procedures are bureaucratized. In this case, the amounts, the cost of borrowed funds and the period of provision of funds by forfaiters are more appropriate.

The following measures are necessary for the development of forfaiting in the Russian Federation:
— improvement of legislation;
— encouragement of the development of the national market of forfaiting services (especially important in terms of extension of interregional relations);
— development of the bill market (Russia currently uses the letters of credit in forfaiting operations);
— providing conditions for the secondary market of forfaiting;
— stabilization of the economic situation in the country.

Conclusion

On the basis of the conducted analysis it can be concluded that forfaiting is a promising tool for crediting of foreign trade, especially in conditions of global instability and multiple risks. At the present stage, there are many institutional and infrastructural constraints that hamper the development of forfaiting services. It is necessary to create favorable conditions for the development of the forfaiting in Russia because it is an effective incentive to increase the competitiveness of exports. Forfaiting is a way to make trade relations more stable and reliable [1, 16].
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