Accession to the WTO Will Force the Industry of Russia to Create Vertically-Integrated Formations

Sergey Vasilievich Kupriyanov, Ekaterina Aleksandrovna Orlova and Elena Anatolievna Stryabkova

Belgorod State Technological University named after V.G. Shukhov, Russia, 308012, Belgorod, Kostyukov Street, 46

Submitted: Aug 18, 2013; Accepted: Sep 20, 2013; Published: Sep 24, 2013

Abstract: The modern Russian economy is going through a complicated period of its existence; it is ineffective, poorly innovational, raw-material oriented and, which is the main point, non-competitive. All this is going on in the face of all the conditions, necessary for successful development. The situation is worsened by Russia's entering the World Trade Organization. One of the directions of overcoming the teething collapse is creating vertically-integrated formations on the base of technocratic approach. The forms of innovational formation can vary from holdings to clusters. But in the conditions of Russia they all have specific peculiarities, which must be taken into account at substantiating their creation.

Key words: World trade organization • Vertically-integrated formation • Competitiveness • Efficiency • State Economical interests

INTRODUCTION

The modern stage of development of Russia is marked by a number of peculiarities. First of all, we must point out its low-efficient, low-competitive economy [1]. It is still raw materials oriented and, except for several branches (armament industry, space research, food industry and some others) falls behind in comparison with developed economies. All this is in spite of the fact, that all the necessary conditions for successful development are available: great amount of natural resources, sufficient financial resources, sufficient human capacity, geographic factors, innovational possibilities, military capabilities. Production relations have also undergone substantial transformations and resemble those of the developed economies. So, the problem is not in the lack of necessary conditions, they are well-known, but in their proper application.

The business practice shows that it is not enough to follow blindly the example of successfully developing countries and try to transfer it automatically to our conditions. But at the same time we live in the integrated world and it is impossible to ignore the main trends in it. If the modern world economy undergoes the processes of globalization and integration, the privatization in Russia in 90s was characterized by dissociation process, which is inconsistent with the existing trends. The benefit was in destroying the old outdated system and forming the basis for new reformations. The subsequent events- world economic crisis, intensification of globalization process demonstrated once more the inefficiency of the existing system of management. A special place in the ongoing changes is held by accession of Russia into the World Trade Organization [2]. Along with new changes there can be seen the ways of solving them. One of them is creating the vertically-integrated formations (VIF) in Russian economy [3].

Main Part: The World Trade Organization, which unites more than 150 countries of the world and which share in the world commerce is 95%, is one of the world's largest associations. The access of Russia into it has taken place, but the real estimation of what has happened is not yet done.

Discussing advantages and disadvantages of entering WTO already has its history. Most of works on this topic contain either recommendations on the terms of access, on the basis of regulations and standards, developed for different branches of economy, or qualitative evaluation of the possible consequences.
On one hand, the advantages and disadvantages seem ascertained enough, but on the other hand, there are adduced persuasive arguments that no country has done the exhaustive analysis of the pros and cons of its membership in WTO yet. Any research in this sphere, especially in view of separate branches of economy, can't be full and objective for series of causes and, first of all, because the terms of Russia's access to WTO, are not yet determined in full. At present we can discuss these problems only a priori, until there is available the statistical base of at least several years of Russian economy's functioning within the framework of WTO.

On the Basis of the Carried out Research We Can Point out the Following:

- Studying benefits and drawbacks of Russia's entering the WTO is antecedent now. The researchers, using the experience of other countries, having entered the WTO and analyzing the opportunities of Russian economy, as well as trends of world economy development, try to foretell theoretically the potential positive and negative consequences, which Russia can face. There are both supporters and detractors of this process. The more accurate assessment of this accession can be done only after several years of Russian economy's functioning within the framework of WTO;
- The main advantages of Russia's entering the WTO, pointed out by most researchers, are: the free access of Russian products to foreign markets, access to the international mechanism of settling commercial disputes, congenial investment climate, participation in developing rules of international trade with account of national interests, improvement of domestic products quality as a result of competition with foreign products;
- The main drawbacks of Russia's entering the WTO at the present stage are: cheap foreign foodstuffs, which can make small Russian farm businesses bankrupt, limited amount of donations to agroindustrial complex, fail in competitive struggle with foreign companies in food and textile industry, car industry, agricultural machines building and aircraft engineering, banks and insurance companies;
- The attractiveness of Russia for WTO is determined by the relatively available and cheap natural resources (Russia's gross in-place reserves only of 50 basic natural resources amounts to 30 bln. US dollars), the special geographical and geopolitical position, qualified and relatively inexpensive workforce, the up-to-date advanced technologies in certain industries and spheres (rocket-and-space, armament, biochemical etc.), the stock of idle excess capacities;
- Determining the impact of Russia's entering the WTO we should have regard not only to evaluating it on the basis of macroeconomic model on a nationwide scale, but take into account the influence of such accession at various levels, analyze the microdata, because most of the probable consequences are of point character and are not reflected in the widely available aggregated data. It implies the more profound separation of workers according to their qualification, concentration of workers with low qualitative characteristics mainly in low-technology spheres and such industries in their turn are usually concentrated in certain regions;
- Russia's entering the WTO is not the fatal necessity. Along with the process of global integration the regional integrations become increasingly important in the world as well. These are NAFTA, a structure, uniting the USA, Canada and Mexico; European Union, uniting 25 countries of Europe. In this connection it seems rather promising to set up such an association as BRICS, which is going to unite such countries as Brazil, Russia, India, China and South Africa. The interests of regional integration are able to obtain higher priority in comparison with global ones;
- The consequences of Russia's entering the WTO have not only economic, but political and social character as well. The problems of food supply security and social strain, which can occur as a result of this accession can have a decisive role in organizing and conducting the process;
- It is necessary to activate the state's economic and political support of its exporters, allocating funds for standardization and certification of products abroad, market promotion of a products, taking part in tenders abroad, production advancing and partial compensation of transport taxes.

Studying integration process at the level of enterprises (firms), we have singled out main features, according to which the following classification of integration processes has been made.

The existing models and concepts of corporations are distinguished by features, basic for their classification, i.e. interpersonal relations, specialization of labor, ethnic and ethnic difference, management hierarchy etc. From our
point of view, taking into account only these features, though they are important, the technocratic approach to the forming of certain corporations is undeservedly overlooked, because technology is an objective and very concise feature, which can be easily formalized. Without depreciating the role of other factors of integration, we think that in certain branches of trade, for example in food industry, where production is aimed directly at final customer, the basis of the corporation should be the full technological cycle from concept formation to bringing products to the final customer. The vertically integrated formation meets this task to the fullest extent. The VIF means uniting of enterprises of various branches, which accomplish the whole technological chain up to bringing products to the final customer.

Analyzing the modern integration process in economy we can single out the following peculiarities:

- The increasingly active role in this process is played by state, which applies its structures, methods, instruments;
- The important role in the integration process is played by transnational corporations, which outmatch the economies of many countries of residence by their economic power. Divergence of their interests can exacerbate the situation;
- The continuum international unions are going to be replaced by network unions, as the innovational form of partnership, which form on the terms of cooperation and mutual guarantees. These are prospective energy and currency unions;
- One of the peculiarities of integration process in Russia is its somewhat of illegal character, which implies the high risk of carrying it out, as in case of proving it is criminally liable;
- The modern integration is usually the reaction to force majeur situations, i.e. crises, military conflicts, upsurge in prices etc.

Russia is on the threshold of the third wave of integration reformations. The first wave was provoked by the crisis of 1998, when demand was switched to the home consumption. The second wave was conditioned by high oil prices and the corresponding capital formation. The third wave is connected with the ongoing crisis, the recovery of which is possible on the whole new basis of integration processes.

Nowadays in Russian economy there are already formed the objective and subjective conditions for creating vertically integrated formations. The main advantages of vertically integrated formations are the access to final consumer market and to the rent as a result, creating conditions of concentration of resources and their flexible exploitation, opportunity of conducting a single policy in the sphere of personnel, finances, cost reduction and improving monitoring [4].

At present there are no special methods to determine the efficiency of creating VIFs. It can be indirectly determined by UNIDO methods, developed in 1978, modernized Altman’s Z-model and its modifications, various conceptual approaches, taking into account special cases, including: transaction cost economics, providing competitive advantages, using the potential of mutually beneficial long-term relations, on the theory of financial management, connected with the specificity of shareholders and managers cooperation etc.

In order to substantiate the efficiency of creating the vertically integrated formation of “BEZRK-Belgrankorm” holding company we have used the rapid analysis method. The advantage of this method is the simplicity of calculations. Besides, the officially published business reports are enough to estimate the efficiency of enterprises, which is important in conditions of strict confidentiality of initial values.

The sum of rating values of the companies, included into the holding (14,25) is much less than the rating value of the holding itself (40,95), which clearly demonstrates the economic efficiency of such a formation.

In our opinion, the above mentioned methodological approaches to VIFs’ efficiency determination should be complemented, along with calculating economic effect, with taking into account the following effects: institutional, investment, ecological and social. So, the final cumulative effect can be calculated by the formula:

\[ E = E_e + E_i + E_m + E_o, \]

and the assessment criterion of a vertically integrated formation is the following condition:

\[ E = E_e + E_i + E_m + E_o + E_s = \sum E_o \]

Where

- \( E_e \) : Cumulative effect of an integrated formation;
- \( E_i \) : Economic effect of an integrated formation from reduction of production cost;
- \( E_m \) : Institutional effect of an integrated formation as a result of achieving various types of safety;
- \( E_o \) : Investment effect of an integrated formation due to the higher innovative attractiveness for domestic and foreign investors;
E\textsubscript{ec}: Ecological effect of an integrated formation due to savings on costs for environmental disasters remedial measures;

E\textsubscript{soc}: Social effect of an integrated formation from improving the social standard of living;

E\textsubscript{cum}: Cumulative effect for each participant of an integrated formation;

n: Number of an integrated formation’s participants.

In the process of research there were singled out the following peculiarities of the modern conditions of VIF creation mechanism, functioning in the system of managing this formation within the framework of its strategic development concept. These peculiarities are:

- The necessity to take into account the modern trends in the world integration process. For this purpose the structure of the mechanism should have a subdivision, responsible for monitoring the world events;
- The accurate determination of one’s niche in the international division of labour and of its value at the given stage of development, both at the national and at the world level;
- Keeping the level of development and self potential application no lower than its acceptable value for the given vertically integrated formation in general;
- Combining the system of VIF’s operational management and the system of its strategic development;
- Having in the mechanism’s structure such subsystems as scientific and research, marketing, financial, organizational and technological ones.

So, in the developed integrated mechanism not only the mechanical elements are singled out, but the stages of strategic management as well. In our opinion, the suggested structure of the mechanism will allow providing its correspondence to the external conditions, complex solution of tasks from carrying out R&D to getting the final product, securing the coordinated actions of all the structural departments of the formation.

Considering VIF as an «open» system, we can come to the conclusion, that the main prerequisites of success are not inside the system, but rather outside it, i.e. the success of the business depends on how quickly it adapts to external conditions. Obtaining the positive result is allowed by marketing mechanism, which functions from the earliest stage of creating the corporate formation, solving the problems of strategic management and continuously at the further, everyday work of the corporation. To form the world-class corporations the permanent active approach to marketing is essential, with centralized forming of the main marketing idea and accurate following it by all structures of the corporate formation [5,6,7].

The peculiarity of technological mechanism in the system of corporate structures and in VIFs in the first place, is determined by the role of technology in creating vertically integrated formation. The technological process, beginning from the stage of research and development and up to selling the product to the final customer, is a vertical axis, on which all the production operations, providing this process, are «threaded». The functioning of the whole VIF depends on its efficiency, optimization, recency and maintainability. At that, the technology must be considered not only in its restricted technological sense, but as a mental element – comprehension of real or supposed relations between phenomena [8].

Nevertheless, the functioning of any corporate formation as a financial system has much in common, which allows singling out the financial mechanism. Finances are the instrument of influencing the production and trade process in a corporate formation and are an element of investment and financial subsystem. The financial mechanism consists of four basic elements: financial methods, financial ways, legislative and information support. At this the financial model of a corporation is a very important aspect of investment-driven development for any type of corporations; it determines the parameters of financial mechanisms functioning and influences the economic potential of a corporation and efficiency of its functioning [9].

The peculiarity of VIF mechanism are research and technological units of the mechanism, which provide the basis for integration and creating the full technological cycle from carrying out research to implementing its results into manufacturing the product and bringing it to the final customer.

The most effective solution to the problem of improving the economic efficiency, providing the food supply security, improving the living standards of people, in our opinion, is in creating the regional food industry clusters [10]. Clusters, as a relatively new form of territorial-sectoral production forces organization, characteristic for market economy, have obtained a number of special features in conditions of our country. It means the possibility for various government institutions to be part of a cluster (regional innovation centers, technology parks, research centers etc.), which
take the infrastructural functions; the more universal purpose designation of clusters, which is reflected not only in solving economic problems, but social, innovational, ecological problems as well.

At the territory of Belgorod region there are major domestic manufacturers of poultry meat such as CJSC “Priokskolye” with output 340 thousand tons, LLC “Belgrankorm” with output 150 thousand tons, CJSC “Belaya ptitsa” with output 105 thousand tons. Each of them is an all-sufficient enterprise, successfully solving its problems at the national market. But their products are non-competitive at the world market. The reason is that these formations are not VIFs in the full sense of the word. They have no initial element of VIF, i.e. no research center, carrying out genetic engineering works in breeding new varieties of poultry.

Creating a cluster will also allow setting up a selective breeding and genetic engineering research center of its own. Its main purpose will be improving the selective technological programs of breeding new lines and crosses of a new selection generation with specific qualitative and quantitative features in the system of meat-type chickens cage housing, meeting the requirements of broiler chicken industry and providing the consumers with the nutritional meat of broiler chickens.

Creating a poultry cluster in Belgorod region will help solving the problem of breeding base. It is still not sufficient to meet the requirements of commercial poultry production. Much breeding material is still imported from abroad: Canada, Great Britain, Germany, Poland, France and other countries. Forming the domestic breeding base becomes especially important in view of unfavorable conditions with serious avian diseases in partner countries.

The main benefits of such a formation are: the innovation-driven growth of companies and, as a result, enlargement of the intangible assets share, cost reduction, increase in productivity due to the efficient use of human resources and capital, attracting a large amount of subsidies, reducing the taxation load. It must be also pointed out that companies will compete with each other, but at the same time cooperate in order to provide the marketability of their products.

Creating such a poultry cluster in Belgorod region with participation of state will make it possible to cover the whole technological chain from scientific idea to the final customer, achieve the annual poultry meat output 800 thousand tons, reduce production costs from 55 roubles to 40 roubles per kg., obtain economic effect of 12 000 000 thousands of roubles, institutional effect of 240 000 thousands of roubles, ecological effect of 745 604 thousands of roubles, investment effect of 1 789 546 thousands of roubles. The cumulative effect of the given VIF is going to amount to 14 775 150 thousands of roubles.

CONCLUSION

The particularity of the current crisis is its international character. It has overgrown the national features of Americans, Europeans, Japanese, Russians etc. So, in conditions of economic globalisation, the recovery from the crisis, from our point of view, must also be of international character, i.e. contain the basic elements, which would be typical for various economic complexes of the world [2].

The ways of recovering from the crisis have different price. The least investment-oriented is the organizational sphere, though it is no less complicated than the others, technical, technological and so on, because it involves the human psychology, which is the most stagnant element of all the changes. It is easier for a human to understand the necessity to replace a machine, than to change the system of relations between colleagues.

The economic crisis, whatever negative features it may have (growth of unemployment, fall of living standards, rise of social tension etc.) should be considered as a signal for fundamental restructuring. The substantial reformations should take place in all spheres of human activities, in all means of production (techniques, technology, information support), in production relations system (proprietary forms, types of relations among them).

Conclusions: On the basis of the carried out research we can make the following conclusions:

- There have been determined the advantages of vertically integrated formations due to uniting all the technological conversions in one structure. This provides the whole technological cycle from carrying out research to selling goods to the final customer with all the benefits which come with it. Besides, there is achieved the capital consolidation of enterprises of various economy sectors in the region, which provides the high economic resilience of VIFs.
- Nowadays there are no special methods to determine the efficiency of creating VIFs. It can be indirectly
determined by UNIDO methods, developed in 1978, modernized Altman’s Z-model and its modifications, including the rapid analysis method which is the most available in terms of data support. With the help of this method we have estimated the efficiency of creating the holding company “BEZRK-Belgrankorm”. The obtained sum of rating values of the companies, included into the holding (14.25) is much less than the rating value of the holding itself (40.95), which clearly demonstrates the economic efficiency of such a formation.

- The above mentioned methodological approaches to VIFs’ efficiency determination should be complemented with taking into account the following effects: political effect, investment effect, ecological effect and social effect. We have suggested methodological approaches to determining them and performed the estimation for a meat industry cluster in Belgorod region as a vertically integrated formation.

- In order to form the new vertically integrated formations successfully and to improve the existing ones there must be an adequate mechanism of there functioning. The existing mechanism must be complemented by elements, making it possible to provide taking into account the modern trends in world integration process, to determine one’s place in the international division of labour, to have the level of production forces development no less than the acceptable value, to provide the combination of strategic and tactical management, to have financial, marketing, organizational, research and technological units in one’s structure.

- The existing level of meat industry development can’t solve the problems of achieving the necessary competitive ability of its product and of providing the food supply security of the country. In our opinion, these problems can be solved by creating a meat industry cluster, as a type of VIF. At the territory of Belgorod region there are major domestic manufacturers of poultry meat such as CJSC “Priokskolye” with output 340 thousand tons, LLC “Belgrankorm” with output 150 thousand tons, CJSC “Belaya ptitsa” with output 105 thousand tons. Forming the cluster will also allow creating a genetic engineering research center of its own and in this way complete the technological chain: from research to selling the product.

- Clusters, as a relatively new form of territorial-sectoral production forces organization, characteristic for market economy, have a number of special features in conditions of our country, including the possibility of involving government institutions, due to existence of administrative resources, mentality of people, corrupt practices of administration and their more universal purpose designation, which is reflected not only in solving economic problems, but also in solving social, institutional, ecological problems.

- Creating such meat industry cluster in Belgorod region with participation of state will allow covering the whole technological chain and obtaining economic effect of 12 000 000 thousand roubles, institutional effect of 240 000 thousand roubles, ecological effect of 745 604 thousand roubles, investment effect of 1 789 546 thousand roubles. The cumulative effect of the given formation is going to amount to 14 775 150 thousand roubles.

REFERENCES


