Innovative Activity of Financial and Industrial Groups

Marina N. Rudenko¹, Ludmila V. Goloshchapova², Oksana V. Savvina³, Andrey A. Zamkovoy⁴*, Natalia V. Chernikova⁵, Olga G. Andryushchenko⁶

¹Perm State National Research University, Perm, Russian Federation, ²Plekhanov Russian University of Economics, Moscow, Russian Federation, ³Plekhanov Russian University of Economics, Moscow, Russian Federation, ⁴Moscow Aviation Institute (National Research University), Moscow, Russian Federation, ⁵Polytechnic Institute (Branch) of the Don State Technical University, Rostov-on-Don, Russian Federation, ⁶Don State Agricultural University, Rostov-on-Don, Russian Federation. *Email: mai@mai.ru

ABSTRACT

The creation of financial-industrial groups (FIG) is one of the most promising ways of overcoming the investment crisis in the country. FIG-like structure which can combine financial and industrial capital is established in order to ensure efficient (due to more efficient administration of financial resources) and accelerated development of science and industrial production. This is achieved by diversification into new industrial products and services to guarantee higher and sustainable profit. FIG acts as a tool for comprehensive and cost-effective capacity utilization of enterprises that have not received sufficient orders for the state needs, and targeted financial support. In modern Russia the urgency is the problem of creating in the economy competitive organizational structures. FIG are to become a key link in the institutional framework of the reformed economy, increase its competitiveness in both the global and domestic markets, to become promoters of the structural adjustment of the economy. The process of creation FIG requires significant assistance from the state. This poses the following challenges for public authorities: To remove all artificial obstacles to the unification of capital, to develop measures for the operational support of the process, to ensure its uniform distribution in various fields.

Keywords: Financial-industrial Groups, Innovation, Enterprise Economy, Innovative Activity
JEL Classifications: G23, O14, O25

1. INTRODUCTION

Innovation processes in industry are carried out in accordance with the state strategy in scientific, scientific-technical and innovation activities. It is known that the vast majority of industrial and scientific-technical organizations have a single-product production structure prevailing during the active industrialization, providing in time high rate of growth of national income and strengthen the country’s defense (Agarkov et al., 2012).

Methodological basis of research is the system analysis. While working on the study in the article used scientific literature of domestic and foreign authors on the problems of innovation and financial-industrial groups (FIG), periodical materials, relevant legal documents, these statistical committees.

2. THE CREATION OF FIG AS A WAY OF ATTRACTING INVESTMENTS INTO THE ECONOMY

Transfer of Russian economy to market economic conditions and increased competition from foreign producers is acutely identified the need for a profound reorganization of the current organizational structures in the industry in the direction of diversification, de-monopolization. Method of attracting investments for these purposes is found in the creation of FIG to ensure the preservation of scientific and technical potential, defense and jobs. The main principles of creation FIG applies focused their formation on the basis of the technologically connected and cooperative industrial organizations, which improve handling, reduce production costs, joint and several liability on contracts and stability of supply (Makarov, 2012).
The key success factors of organizational-economic interaction of participants of FIG with financial institutions was the establishment and development of holding and trust (trust) relations, as well as prevention of negative monopolistic tendencies in connection with the concentration of capital.

One of the main activities of the FIG is to ensure conditions for single-product industrial organizations for in-depth diversification through investment in innovation (Gershman, 2011).

Integration of scientific, industrial, financial and commercial sales organizations as subjects of the main activity of FIG is provided a system approach to their functioning in market conditions. The system approach allows to preserve the integrity of such organizational structures, to counteract the influence of external and internal destabilizing factors. Economic justification of projects of creation FIG is based on the examination of the potential effectiveness of future joint activities of the merged organizations, evaluation of market products, employment, and environmental security. The performance of FIG is directly dependent on the level of risk in the creation of science intensive and competitive products. Therefore, in FIG the structure and even included insurance companies, which enables us to expertly manage your risk in innovation activities in a fairly large organizational groups (Balabanov, 2013).

### 3. THE ROLE OF FIG IN THE INVESTMENT PROCESS

An economic point of view, the concept of “FIG” can be consumed in two related but not completely overlapping meanings. In a broad sense, they refer to any form of relatively stable cooperation and interpenetration of industrial and financial capital. In a narrower sense, the FIG means the preferred form of integration of industrial and financial structures, which satisfies the criteria laid down in relevant legislation and accompanied by the official recognition and inclusion in the register of the PPG of the Russian Federation.

Thus, the FIG is the most organized Association of diverse enterprises and organizations, successfully combining their interests, allowing fuller use of the capabilities of each participant in achieving societal goals that are more relevant to the conditions of modern market economy.

In FIG is the union of these two forms of capital in the financial and industrial capital, which has a specific movement and a specific form of the circuit. Its application can significantly increase the return and get added income as a result of their combined operation. Temporarily released money on one enterprise - the participant of FIG - can be sent to cover the cash needs of other companies - group members, because the movement of their capital and speed are different. It saves funds, as not held from the outside borrowed capital. In addition, temporarily free funds of enterprises in the capacity of bank capital can be used for the issue of securities, speculative transactions, foreign currency transactions, complex and innovative commercial schemes and combinations, placement of loans and other assets, anywhere, etc. Therefore, in the process of circulation of industrial capital in FIG, the conditions for release of funds that might be carried as banking capital due to the lack of clear boundaries between them (Gureva et al., 2016). At the same time bank capital gets the opportunity to more efficiently, with less risk to carry out its circuit. The effect of combined use of capital (banking and industrial) is much higher than the sum of the results of their separate functioning (Zakharov et al., 2016). And this is only one aspect of the emergence and functioning of financial and industrial capital, the emergence of new organizational and economic structures, which provide a combination of interests, and the pursuit of profit maximization of all participants of FIG.

The distinctive features of FIG are:
- The obligatory presence of banks, other financial institutions and industrial organizations;
- There is an overarching central campaign;
- The state (federal or regional) examination of the organizational project;
- State registration as a FIG;
- The identity of the participants of FIG to those fields of activity which determine the scientific, industrial and export potential of the Russian Federation.

The specifics of Russian reality define the types of FIG, which, despite the general rules and principles of organizational structuring, is extremely diverse. They can be classified according to the following criteria presented in Table 1.

Formation of FIG has many positive effects on the development of the domestic economy, the strengthening of the Russian state. It is possible, in particular, to note the following points.

- Stabilization of production: FIG, create favorable conditions for enterprises and cooperative of technologically-related businesses.
- Improving the investment climate: FIG intensify the integration of banking and industrial capital.
- Financial stabilization of enterprises: The concentration of FIG in the bank of settlements interacting enterprises - group members to stabilize the payments between them, reduces the load on the interbank infrastructure.
- The structural transformation: FIG contributes to the development of the mechanism of inter-industry and intra-industry reallocation of resources to priority directions of development of our economy.
- The acceleration of scientific and technical progress. FIG contributes to a more precise strategic orientation of development of participants of FIG.
- Membership in FIG, financial institutions facilitates the introduction of production and market conditions and its changes. Establishing competitive production, FIG helps eliminate the monopoly associated with the concentration of production of
particular products in one company. In the FIG find the reliable business partners of small and medium businesses. The emergence of powerful domestic FIG reduces the country’s dependence on imports, contributes to the liberalization of foreign economic relations.

FIGS help to put up economic barriers against the dominance of providers over consumers, and more effective than administrative barriers.

To improve the effectiveness of the PPG it is advisable to solve the following problem:

- Actively included in the FIG is not only large but also medium and even small businesses, turning them into major satellites and tying close cooperative relationships;
- To expand the creation mechanism in the framework of the FIG subsidiaries, affiliated companies and joint ventures, including with attraction of foreign capital;
- To diversify the types and forms of activities of financial institutions within the group, including their composition is not only universal, but also specialized banks, investment funds and financial companies that allow more flexibility to attract and use of temporarily free financial resources with the reduction in the risk of losses.

Legislation involves the provision of conditions for the organization and development of FIG, as well as the development of methods of state stimulation, leading to the formation mechanism of the contractual relationship between the government and the FIG. Full-scale regulation of FIG from the state includes the regulation of the following parameters FIG: Price, quality, quantity of services, terms of service, product availability (Silnov and Tarakanov, 2015; Androsova et al., 2016).

The mechanism of state regulation is as follows: Regulated entity (the state) assessing the specificity of FIG and its role in...
the national economic system determines the objectives of the 
regulation, to prescribe the manner, means to achieve objectives, 
forms of use of these funds, the application of which leads to a 
certain result of exposure to the object of regulation (FIG), and 
then monitored and evaluated the resulting state of the object of 
regulation.

Based on the study of nature FIG can offer the following areas of 
adjustment of the Russian system of state regulation. First of all, 
necessary to clearly define the state’s long-term and short-term 
goals and objectives of FIG with respect to each industry.

Controlling FIG includes the control over observance of rules of 
registration and control over the activities of the grouping. The 
next type of control is carried out by examining official reports, 
through audits, through the introduction in the composition of the 
governing boards of the executive branch, etc.

Factor in improving the integration activity was provided by 
the decree of the President of the Russian Federation from 
05.12.1993 year No. 2096 “About creation FIG in the Russian 
Federation” the possibility of providing FIG three types of state 
support:

1. Transmission group (party) in trust temporarily assigned to 
the state packages of shares of enterprises-participants FIG;
2. Set-off the debt of the company, whose shares are implemented 
at the investment competitions (auctions), in the amount of 
investment stipulated by the investment conditions of 
competition (auction) for FIG-buyer;
3. The provision of state guarantees for attracting different 
investment resources, including with the use of collateral.

The law “On FIG” expanded the list of possible forms of state 
support of FIG. This:
1. Setoff debt participant FIG, whose shares are implemented 
at an investment tender, to the extent provided by the terms 
of the investment competitions investment for a buyer in the 
face of the central company FIG of the same;
2. Providing participants with FIG the right to determine the 
timing equipment depreciation and the accumulation of 
depreciation with the direction of the funds received for the 
activities of the PPG;
3. Transfer in trust management of the Central company 
FIG temporarily assigned to the state blocks of shares of 
participants of the FIG;
4. The provision of state guarantees to attract different kinds of 
investments;
5. Provision of investment credits and other financial support 
for projects of FIG;
6. The possibility of granting to banks-participants FIG engaged 
in investment activities, benefits, including a reduction in the 
norms of compulsory redundancy, changing other regulations 
in order to increase their investment activity (Malyshkov, and 
Ragulina, 2014);
7. To conduct consolidated:

Of all these forms of support can be considered “working” until 
only the third paragraph.

Thus, the volume of state support of FIG is minimal. It is obvious 
that it cannot serve as the main incentive for pushing the status 
of FIG.

However, until now there was no precedent for the official 
liquidation of the FIG.

The main thing when creating the FIG is contributing to the growth 
of production efficiency and promotion of competition, but that 
the achievement of these objectives is very difficult due to the 
mismatch of the products of several sectors of the market. One 
way of solving this problem is the harmonization of inter-state 
industrial policy, using civilized forms of industrial integration 
and is built on a new system integration. An important element 
of this system could be inter-state FIG.

4. FOREIGN EXPERIENCE OF REGULATION 
OF INNOVATIVE ACTIVITY IN RELATION 
TO FIG

The mechanism of formation and realization of scientific-technical 
and innovation policy in the countries of the world community is 
different because countries vary in the ratio of functions of state 
and market, different organizational structures of management 
science. However, in countries with a market economy similar 
patterns of development of production and similar approaches to 
innovation activities, in particular to take into account its long-
term trends and consequences (Gusarova, 2012).

The peculiarities of the implementation of research and innovation 
policies in different countries include various expenditures on 
research and development (R&D) in gross national product. The 
leader here is Switzerland, followed by Germany, then Japan, 
Sweden, South Korea and the United States. In terms of funding 
of R&D among the leading countries in the world are Japan, 
Germany, Sweden, Switzerland, South Korea and the United 
States. The second group of “high technology” includes the UK, 
France, Netherlands, Italy and some other European countries 
and Taiwan (Smith, 2011; Pronin, 2014; Ragulina et al., 2015).

The level and forms of support in the world practice it is accepted 
to allocate:
1. The state strategy of active intervention;
2. The strategy of decentralized regulation;

In implementing the strategy of active intervention, the 
government recognizes that scientific, technical and innovation 
activities and the main determinants of economic growth of the 
national economy. Typically, selection of this strategy implies 
esential changes in legislation and in the foreign policy of the 
state (Svirina, 2013; Bogoviz et al., 2016).

The strategy of active intervention, along with funding high school 
and significant benefits to commercial organizations, carrying 
out their own R&D, stimulates innovation in Japan, France, the 
Netherlands and other countries.
The strategy of decentralized regulation, a more complex mechanism of participation of the state in scientific and innovative sphere. The state is using this strategy retains the main leadership role, but there is no hard decision when characteristic of the strategy of active intervention.

For example, the state offers in the economic sphere established in the public sector scientific and technical innovations and an infrastructure of innovative sphere; creates the conditions conducive to increase of innovative activity of all participants of innovative sphere; allocates state resources to create the initial demand for innovation. In implementing this strategy, used tax breaks and other incentives for innovative activity. This strategy is implemented in the US, the UK and several other countries (Davydova and Ilminsky, 2014; Mindlin et al., 2016).

In contrast to the strategy of active intervention, in which “the leading role in the choice of priorities for scientific and technological development is the government strategy of decentralized regulation in the first place scientific-technical and innovation activities are entities, and the government aims to create favorable legal, economic and other conditions for these activities.”

Mixed strategy is used in countries where the economy is a significant part of the public sector, and the government is interested in maintaining high export potential industries of this sector. In this case in relation to state enterprises, the state uses a strategy of active intervention, and to the rest of a strategy of decentralized regulation. This practice became widespread in Sweden.

The increasing role of the state in the field of innovative activities of one of the most important factors when the firm is profitable and affordable continuous innovation, and the market is not always able to provide it to her.

Function additional stimulus to the state through economic policy instruments (credit, taxes, antitrust laws, regulation of international exchange of technology, etc.) that can significantly reduce the cost of it resources and improve their availability and quality (Chuprov, 2012; Filippova et al., 2016).

Another reason for the increase of the role of the state in the field of innovative activities is the rapid growth of expenses necessary for its implementation. This is due primarily to an increase in the cost of research equipment, devices and tools, and salary increases for qualified scientific, technical and engineering personnel.

Active state involvement in innovative activities due to the need of long-term forecasting of scientific and technical and innovation activities. Efficiency of innovation largely depends on the correct choice of region and type of innovation and the time of their introduction.

Development of innovative activity and the increase in resources involved in the innovation process, determine the necessity of collaboration and cooperation of both private and public actors (firms, universities, government laboratories, etc.) Through cooperation of all activities involved in the innovation process actors implemented the organizational function of the state (Shevchenko and Alexandrova, 2014).

Currently, there are three main types of models of scientific and innovative development of industrialized countries:

1. The Countries focused on scientific leadership, implementing large-scale targeted projects, covering all stages of the scientific production cycle, usually with a significant share of scientific and innovative potential (USA);
2. Of the Country, stimulating innovation through the development of innovation infrastructure, ensuring receptivity to the achievements of world scientific and technical progress, coordinate actions of different sectors in the field of science and technology (Japan, South Korea);
3. Countries, focused on the spread of innovations, creating a favorable innovation environment, streamlining the entire structure of the economy (Germany, Sweden, Switzerland).

Innovation policy of Western European countries based on the promotion of “National Champions” - A small number of large corporations that can compete with the leading firms of USA and Japan. It gets the major part of public funds for industrial R&D in microelectronics accounted for by five firms. However, the concentration of financial resources for R&D and “Bank of ideas” in the hands of a small group of major corporations, according to Woods led to a weakening of the competitive struggle within industries and inhibited the proliferation of advanced technologies and developments in other sectors of the economy. The result of this policy was to clear the backlog of Western European manufacturers from the leading corporations in the U.S. and Japan (Schurina, 2013).

One of the main features of Western European science and technology policy, since the 80-ies of XX century, became the state regulation of large-scale programs at the international (mainly European) level. The Council of the EU began to play an increasingly prominent role in coordinating scientific and technological development of the countries in the EU, especially in the newest branches.

There are three main causes of migration Western European innovation policy at the European level:

1. By the early 80-ies of the national scientific and financial potential has largely been exhausted. To mobilize additional resources and know-how needed to develop international cooperation;
2. Programs adopted at the national level proved to be ineffective due to the small size of the market;
3. The competitive position of European industry (especially in microelectronics) have worsened.

The main directions of the innovative policy carried out by the member States of the European Union are:

- The promotion of small science-intensive business;
- A single anti-monopoly legislation;
The acquisition of the latest technology;
• The system of accelerated depreciation of equipment;
• Preferential taxation of R&D;
• Direct financing of enterprises engaged in innovative projects in the field of advanced technologies;
• Cooperation of a University and enterprises producing high-tech products.

Agreed on the level of member states of the EU innovation policy is the logical conclusion in the development of coordination of measures to stimulate business innovation at the community level in General. Among them can be attributed to the adoption in 1985 by the EU council regulation on “European unification on economic interests” (EOAI). The regulation exempts member companies of EOAI from the impact of national laws, subjecting them to the same rules of the community and thus creating favorable conditions for strengthening economic and scientific-technical relations between them (Krokhmal, 2013).

The adoption of the plan “development of the international infrastructure of innovation and technology transfer,” in force since the end of 1985 - Another example of coordination in the field of innovation policy in the EU countries. The main purpose of this document is to simplify and expedite the process of translating research findings into finished products at national and supranational level, and promoting the dissemination of innovations in the community. One section of the plan is cooperation between the two countries in the field of innovation that involves the creation of a “consultation services on technology transfer and innovation management” - specific infrastructure for innovation at the regional level. The second section of the document on the coordination of national innovation efforts to improve their effectiveness and avoid duplication of work across the EU. Questions of creation in the EU system of information transfer in terms of innovations and technology developed in the third section of the plan for improving the patent system, harmonization of technical standards. The fourth section covers the activities to increase the innovative potential of less developed countries community (Ireland, Greece).

For the development of R&D created by the European information center. In the 90 years began to be the target of the program: To disseminate the EU R&D “Value;” European strategic program of research in the field of technology information systems (“ESPRIT”), the program for research on advanced communication in Europe (RACE). The purpose of these programs is to increase the competitiveness of European companies on markets of high technologies. Awareness in the Community of the importance of coordination of activities in the innovation sphere is largely due to the opening in connection with the establishment in 1995 of the single internal EU market of new features. This increased competition, easier access to national markets and the cooperation of firms in scientific and technical field.

Implementation of scientific-technical policy of the United States is based on a well-developed institutional structure. The main levers of the Federal government in stimulating R&D are the two major interagency bodies:

In Japan, innovation policy issues States are the highest state authorities. The Prime Minister of Japan chairs the council for science. It is composed of the heads of several ministries and representatives of biggest private industrial corporations. The council for science formulates the strategic line of scientific and technological development of the country and determines the size of R&D expenditure from the state budget, office of science and technology carries out the development and implementation of major national programs (space research, development of equipment for nuclear reactors, etc.). In the framework of functioning in the Japanese corporation for the promotion of research, support new high-tech firms.

5. CONCLUSION

Today, the role of FIG is particularly noticeable in the downturn of economic development, when the necessary mobilization of resources, their concentration and effective redistribution in key areas of science, technology and production.

Summing up, the following should be underlined: The creation of FIG in our country is a natural phenomenon, caused by the necessity of concentration and integration of financial and industrial capital. It should be one of the strategic elements of state policy, and in the future FIG are seen as a powerful multidisciplinary interregional association.

To implement effective policies is required:
• The revitalization of public enterprises, various departments, AO and other agencies to use available scientific and technical potential of the country for effective implementation in the state’s economy inventions and other innovations and achievements through the development and implementation of the legislative framework for stimulating innovative activities.
• The establishment of a national centre working on issues of technology transfer (similar to the National Institute of standards U.S. Department of Commerce);
• Develop programs using advanced technologies, which should direct the appropriate Agency, is closely linked with the problems of conversion. Due to shortcomings in the regulatory framework and the lack of necessary funding program for the development and implementation of advanced technologies very often and the programs that do not put into life (with the exception of particularly important state programmes - secret development, defence, etc.);
• The formation of innovation infrastructure, which may include joint-stock companies, enterprises, universities, academic institutes, scientific laboratories. For the solution of certain scientific problems in these consortia are delegated to the scientists and engineers of parties represented in the consortium;
• The issue of special publications, regularly publish information about existing inventions, innovations and achievements of interest to the economy.
REFERENCES


