JOURNAL
OF EUROPEAN ECONOMY
Vol. 18. № 1 (68). January–March 2019
Publication of Ternopil National Economic University

Financial and Banking Services Market

Tatyana SITASH

PRAGMATIC ROLE OF FINANCIAL MECHANISMS IN THE PARADIGM OF INNOVATIVE DEVELOPMENT: DOMESTIC AND WORLD TRENDS

Abstract

The pragmatic role of financial mechanisms in the paradigm of innovation development on the basis of fundamental principles of national science and practice is explored. It is proved, that the key parameters of modern innovation development show steady tendencies of decreasing entropy of financial mechanisms of the state. It was clarified that the transfer of emphasis on the use of advanced technologies, the transition to the release of high-tech products, the adoption of progressive organizational and managerial decisions in innovation activities should be based on the principles of innovation imperative and autocratic mechanisms in the country's economic policy. It was stated that the intensification of innovation processes in the state should be based on the principles of interaction between subjects of scientific and technical and entrepreneurial activity, in particular, to minimize the consequences of changes in the structure of economic activities. It has been established that the paradigm of innovation development requires the formation of an effective financial policy of the state, the main tasks of which are activation of innovation activity of economic entities and the creation of a coherent system of their financial support, taking into account an

Sitash Tatyana, PhD in Economics, Vinnytsia Technical College, Vinnytsia, Ukraine. https://orcid.org/0000-0002-0690-1534.

effective financial mechanism. This will be facilitated by systematization of state financing and stimulation of innovative development of the national economy.

Key words:

Innovation processes, financial and economic levers, financial support.

JEL: G1.

Introduction

Under the conditions of a market economy, the strengthening of the innovation paradigm of development is a powerful component of the dynamic growth and competitiveness of the domestic economy. This direction will allow the state to provide more efficient use of available scientific and technical potential in the implementation of structural and technological changes. An in-depth course of market reform on an innovative basis and systemic transformations will contribute to the progressive upsurge of the country and the successful resolution of socio-economic problems. The realities indicate that the state's financial policy in relation to innovation does not fully reflect the interdependence of its financial support processes, as the mechanism of market competition does not function, which would stimulate entrepreneurs to finance innovation processes.

Problem statement (relevance)

A key aspect of economic development on an innovative basis is the creation of an effective financial mechanism. Implementation of the state's investment policy is connected with the search for optimal mechanisms for the formation of sources of financing of investments, directions of increasing the efficiency of their use. Managing financial resources using innovative processes through institutes and tools of a financial mechanism will allow to stimulate innovative development.

In this context, there is a need for theoretical substantiation and the formation of a holistic view of the financial mechanism in the paradigm of innovation development, serving as the basis for building an effective financial policy of the state.

Taking into account the value of scientific results, it should be noted that many issues of organizational, legal, financial, information support, economic stimulation of innovation activities, as well as financial mechanism in the paradigm of innovation development are not resolved, which determines the choice of this study. The problem of methodical approaches to a financial mechanism, an integrated assessment of the efficiency of innovation development is insufficiently highlighted.

Review of the literature with contributions from the authors

Domestic science and practice highlights research on innovation development related to the search for optimal sources of financial resources and the effectiveness of using financial leverage, which is accentuated in the writings of V. Alexandrova, O. Amosha, Y. Bajal, O. Baranovsky, O. Bilotserkivtsya, O. Vasilik , A. Galchinsky, V. Gejets, A. Gritsenko, A. Danilenko, V. Demyanyshin, V. Denisyuk, B. Kvasnyuk, M. Krupki, V. Lagutina, A. Lapko, V. Melnyk, P. Melnyk , L. Neykova, V. Oparina, J. Park, A. Peresady, S. Sokolenko, V. Fedosov, M. Chumachenko, N. Chukhrai, V. Shevchuk, L. Shablysta, S. Yurii and others. Among the foreign scholars, the work of M. Arefiev, V. Baburin, V. Inozemtsev, V. Mayevsky, V. Mau, Y. Morozov, R. Nelson, R. Nureev, E. Peters, M. Romanovsky, J. Stiglits deserves attention, D. Tidd, A. Fonotov, J. Schumpeter, Y. Yakovtsy, E. Yasin. However, we consider that insufficiently developed questions of the ability of financial policy to ensure the innovative development of the state, taking into account its immanent properties in the new conditions of the organization of socio-economic present. Accordingly, the need for a theoretical understanding and pragmatic role of financial mechanisms in the paradigm of innovation development, as stipulated by the choice of work, is actualized.

The aim of the study

The purpose of the study is to substantiate theoretical and methodological principles and to develop practical recommendations for the formation of an effective financial mechanism in the paradigm of Ukraine's innovation development, to highlight the main issues and outline directions for its improvement aimed at strengthening the innovative model of sustainable economic growth.

In the process of work using the methodology of system analysis, financial mechanisms in the paradigm of innovation development are investigated in the relationship and interdependence. Cognition of the problem is accomplished with the use of a multi-level concept, which includes a range of different methods. The versatility of the content of innovative development that determines the effectiveness of its financial mechanism is disclosed using the methodology of theories of self-organization, macroeconomic regulation and evolutionary theory of economic change. Conceptual justification of innovation changes on the dynamics of economic growth, estimation of the realities of financial provision of the innovative stage of state development was investigated using methods of economic analysis, such as structural-functional, mathematical modeling and statistical descriptions.

Presentation of research results

The formation of the intellectual-type economy is accompanied by a number of trends in line with the innovative development of the countries of the world. In the case of Ukraine, the problem of transition to an innovative model of development, which is rather complex, is multifaceted and is seen in intellectualization of production activity, application of high technologies, dissemination of innovations in all spheres of management, development of human potential, becomes relevant.

In practice, the term «innovation» is often used, for example, for the newly-developed product type, which is manufactured using traditional technology, but was not included in the range of the enterprise. In the scientific literature, discussions are held on the concepts of «innovation», «innovation», «innovation», «invention», «discovery». The term «innovation» is interpreted as a process, system, result, change, etc.

In modern economic literature, the following approaches to definitions of «innovation» are given:

- static, when innovation is considered as «innovation-product», acting as a result of the innovation process, takes the form of new technology (products), technology, new method introduced on the market;
- dynamic, where innovation acts as an «innovation-process» that includes research, design, development, production organization, commercialization and the spread of new products, technologies, and principles for replacing existing ones.

Recall, that the main founder of innovative theories of economic development is the Austrian scientist-economist J. Schumpeter (1883-1950), which synthesized theoretical studies, in particular, the economic dynamics was distinguished directly from the processes of creation and introduction into the production of new technologies and new products. The Ukrainian scholar, world class economist M. Tugan-Baranovsky, is trapped in sources of innovative theory of economic development.

The scientist has investigated conceptual approaches to the cyclicality of economic growth. J. Chumpeter, who completed the search by M. Tugan-Baranovsky, has formed an integrated innovation theory (Schumpeter, 2007, p. 32-33), internal mechanisms of influence of technological changes on economic development.

Patriotic authors such as L. Antonyuk, A. Poruchnik and V. Savchuk, depending on the object and subject of the research of innovation, have been solved:

- as changes (J. Schumpeter, Y. Yakovets and others);
- as a process (D. Bessant, K. Pavitte, B. Santo, B. Twice, D. Tidd, Ukrainian economists I. Budnikievich, O. Lapko, L. Neykova, D. Chervanov, I. Schola, etc.);
- as a result (H. Riggs, V. Hippel, R. Fatkhutdinov, S. Pokropyvny) (Danylkiv, Retrived from: http://soskin.info/ea/2017/7–8/20170712.html.; Koval, p.66).

The innovation system is very wide and is used in any area of the national economy. Summarizing the views of scientists, the author believes that innovation is a new factor in production in the form of scientific, technical, organizational, social and technical innovations, intended for use in the operating, investment or financial activities of the enterprise that generates revenue and provides qualitative changes in the economic and social effects.

The modification of the economic nature of innovation has determined the evolution of foreign research in this field undertaken by a number of reputable international organizations (for example, the Oslo (Koval, 11) or UNCTAD, which analyze the impact of innovation development and innovation on economic growth, for example, the Conference The United Nations Trade and Develop-

ment Organization has developed the Innovation Capability Index, which refers to a combination of different resources needed for effective innovation development. This index, in turn, includes the Technological Activity Index (TAI) and the Human Capital Index (HCI). The first takes into account such components as the number of research personnel, patents and scientific publications issued per one million inhabitants of the country; in the second – the level of literacy, the level of coverage of the population with secondary and higher education (Koval).

Innovation model of development is due to alternatives to the use of advanced technologies, the modernization of the production of high-tech products, innovations in organizational and managerial decisions in innovation activities, in relation to micro-and macroeconomic development processes – the creation of technopolises, technoparks, implementation of resource conservation policies, intellectualization of production activity, software and service provision of the economy. Obviously, innovation development is invariably associated with the search for optimal sources of financial resources and increased efficiency in the use of financial and credit instruments. The issue of innovation development was also explored by the World Economic Forum (WEF), whose experts confirmed the influence of innovation development on the growth of the country's competitiveness on the world market, driven by domestic demand.

In economic science there is also a series of studies that confirm the hypothesis of a close correlation between socio-economic and innovative development. In particular, for this purpose, a statistical analysis of paired ordinal variables is conducted to detect the correlation between per capita income, calculated on purchasing power parity (PPP) and index of innovation capacity (IIC). This correlation is high (Schedule Chaddock). Of course, it is important that the index of scientific and technical potential of the WEF (technology index) in addition to traditional indicators of innovation development (for example, research and development costs) reflects the impact of foreign investment on investment activities of local firms (Picard, Retrieved from: http://www.ibtimes.com/articles/ senate–small–business–banks.htm; Public-Private Partnerships for research and innovation. An evaluation of Austrian Experience. OECD. Electronic resource: http://www.oecd.org/dataoecd/49/17/ 25717078.pdf).

The International Business School INSEAD and the World Intellectual Property Organization have also developed the Global Innovation Index (Global Innovation Index), calculated as a weighted sum of estimates for the two groups:

1) conditions and resources for innovative business development;

2) the results of innovative activity in the form of technology development and the formation of knowledge economy.

We believe, that for the economic growth of the integration-based association based on innovation, and for greater economic convergence of countries, a high level of institutionalization of innovation processes in the union, the availabil-

ity of an effective innovation infrastructure, as well as developed market mechanisms of innovation cooperation between the state and business.

In foreign countries, innovation is a key factor in socio-economic development. According to experts, from 50 to 95% of GDP growth in the state received from innovations, and innovation activities employ about 25% of the able-bodied population (Public-Private Partnerships for research and innovation. An evaluation of Austrian Experience. OECD. Electronic resource: http://www.oecd.org/dataoecd/49/17/ 25717078.pdf; Danylkiv, Electronic resource: http://soskin.info/ea/2017/7–8/20170712.html). International practice indicates that if the share of innovation in the country's GDP is less than 20%, then national products are losing competitiveness. For example, the average European average is 25-35%, and in China it has reached 40%. The share of industrial enterprises implementing technological innovations is: in Austria – 60%, in Germany – 66%, in Norway – 39%, in Finland – 49%, in France – 46%. The number of domestic enterprises that introduced innovations in 2016 amounted to about 1400 units, and the share of such enterprises in the total number of industrial enterprises exceeded 10%, which is lower (3-5 times) for the level of developed countries (Danylkiv, Electronic resource: http://soskin.info/ea/2017/7–8/20170712.html; Yepifanova, Electronic resource: http://ena.lp.edu.ua/bitstream/ntb/12433/1/13_65-70_Vis_722_menegment.pdf).

A review of the ways of innovation shows that 16.5% of Ukrainian enterprises implemented research, 9.3% – purchased scientific and technical developments, 53.8% – purchased machinery, equipment, software, 5.8% – purchased other external knowledge, 18.2% – for training and training of personnel, 8.4% – introduced innovations in the market (Electronic resource: http://www.ukrstat.gov.ua). For comparison, in economically developed countries, the research and development, performed by own forces reaching more than 50%, and the purchase of machinery and equipment – less than 30%, therefore, we notice that strategic guidelines for state-owned active enterprises are aimed at the purchase of finished innovative products, and not on developing your own.

Today, one of the key obstacles to the implementation of many modernization programs of the main sectors of the economy remains the problem of financial provision of innovation activity in Ukraine. From the creation of an effective financial mechanism, development of high-tech industries, production of competitive products, balancing of social and economic development of regions, and raising the national economy in general is one of the key factors.

Financial support is the activity of attracting, distributing and using financial resources (Luciev, p.18). In practice, it is implemented through a financial mechanism as a set of forms and methods for the formation and use of financial resources in order to meet the needs of the state, business entities and the population.

In the domestic scientific literature, the term «financial mechanism» is often mentioned, but the interpretation of its economic essence varies.

Scientist G.G. Kiiretsev claims that the financial mechanism – a set of methods for the implementation of economic interests through the financial impact on the socio-economic development of enterprises (Yafinovich, p. 62). The components of the financial mechanism include: financial security; financial regulation; a system of financial indicators and financial instruments that allow an assessment of this impact.

Essentially discloses «financial mechanism» by a scientist V.M. Oparin, who points out that the financial mechanism – a set of financial methods and forms, tools and levers of influence on the socio-economic development of society (Luciev, p. 19). Here, let us note that the substantive interpretation of the financial mechanism is provided by scientists V.I. Osciphcheva and O.P. Twin.

In studies V.D. Bazilevich and L.O. Balatarik proposed the following definition: «Financial mechanism – a set of economic-organizational and legal forms and methods of managing the financial activity of the state in the process of creation and use of funds of financial resources in order to provide various needs of government structures, economic entities and the population.»

According to O.M. Kovalyuk «financial mechanism – is a system of financial forms, methods, levers and instruments used in the financial activities of the state and enterprises for the corresponding normative, legal and informational support, under the conditions of financial policy at the microeconomic and macroeconomic levels» (Luciev, p. 20).

From the considered definitions of the financial mechanism, we are convinced of the complexity of the concept, we believe that the state or enterprise must develop financial policies, and for its implementation, a financial mechanism is created in the form of methods, levers, instruments that provide the formation of the necessary flows of funds. Incoming flows accrue the revenue side of the funds, while the outflows provide target costs, thus implementing the goals of financial policy.

In this context, the mechanism of financial support for innovation activities acts as a means of financial management based on regulatory, informational, methodological and organizational support that arises in connection with the search, attraction and effective use of financial resources for the development and implementation of innovative products and services.

In 2017, 812 enterprises, or 16.2% (in 2013 – 1.675, or 15.3%) were engaged in innovation activity in industry. Industrial enterprises implemented 3 147 innovative types of products, including 565 – new for the market, 2 582 – new for the enterprise. It should be noted that the largest number of innovative products is presented at the enterprises of Ternopil (27.2% of the total number of introduced types of innovative products), Zaporizhzhya (13.5%), Lviv (8.2%),

Kharkiv (6.4%) regions and m Kyiv (14.5%); by types of economic activity – in enterprises producing machinery and equipment not included in other groups (21.7%), paper and paper products (17.2%), food products (12.8%), metallurgical production (5.3%).

In terms of innovative technological processes (new or improved methods of processing and production), their number reached 1 214, most of them implemented by enterprises of Kharkiv (17.5%), Sumy (15.3%), Zaporizhzhya (9.6%), Dnipro (6.4%) regions and Kyiv (11.8%); by types of economic activity – in enterprises producing machinery and equipment not attributed to other groups (25.2%), other vehicles (12.1%), food products (7.8%). The total number of introduced innovative technological processes 457 – low-waste, resource-saving.

In 2013, of innovative products were introduced 3 237 items, involving 728 enterprises, which is by 34.3% more than in 2012. Of these, new types of devices, apparatus, equipment, machines, etc. – 895 items. In addition, 676 enterprises applied innovation processes, of which 604 – implemented 2 520 new or improved methods of processing and production, including low-waste and resource-saving – 514 processes; 130 – new or improved activities to support certain processes of enterprises (procurement, accounting, calculations). In the same year in business, organizational methods were modernized by 187 enterprises. In 2017, innovation products were sold by 540 enterprises to UAH 21.8 billion, of which 37.3% were in the amount of 10.5 billion UAH. products for export. Also, a significant number of enterprises (85.2%) sold new products in the amount of UAH 15.7 billion, while implementing innovations, 180 enterprises acquired 1 130 new technologies, of which 63 were abroad. In the same year 1,042 enterprises implemented innovative products in the amount of 41.3 billion UAH. (3.7% of the total industrial output). For export of innovations 375 enterprises were put up in the amount of 12.1 billion UAH, 64.5% of which was sold to CIS countries.

The number of works performed by domestic scientific organizations during 2017 amounted to 40.1 thousand, of which two thirds were introduced into production. Of the total number of works, 9.8% is aimed at the development of new types of products, 41.7% of which are new types of equipment; 7.3% – new technologies; 2.1% – new types of materials; 5.7% – new varieties of plants, animal breeds, as well as 16.4% – new methods and theories, more than half of which are used in subsequent work. Taking into account the above analyzed data on innovation activity in the state, we will outline the main factors that hinder its development, namely:

- insufficient financial support of the state (53.6%);
- economic risks (42%);
- lack of funds from customers (33.2%);
- imperfection of the legislative base (40.1%);

- lack of information on sales markets and new technologies (34.8%);
- significant expenses for innovations (55.4%);
- lack of own funds (80.2% of investigated enterprises);
- long payback period (37.8%);
- shortage of skilled personnel (22%);
- lack of demand for products (15% of investigated enterprises) [6; 7; 8].

Research shows that the main source of funding for innovation in Ukraine is the company's own funds, although the attraction of financial resources to provide innovation in the financial and credit market looks theoretically attractive, but in reality, the situation is complicated. This can be explained by the fact that banks are not interested in providing risky loans on long-term terms, because in the state it is much more profitable to lend consumer and mortgage needs of individuals, as the risk of non-return in this area is lower, and incomes are high. It is worth noting that foreign investors are not interested in the technological development of a competitor, so it is profitable to redeem the idea or its carrier.

The experience of economically developed countries indicates that the relevant determinant of financial incentives for innovation is appropriate depreciation and tax policies. For example, in the UK, Canada, the USA, France, Sweden and Japan, the cost of research and development works is deducted from the taxable income (Drucker, p. 58-63.). The company's motivation for innovation is accelerated depreciation. Thus, in Great Britain, the full cost of innovative equipment is written off in the first year of operation (Hippel, p. 19). Special investment funds are also popular, in particular, in the USA they are called «alternative US banking system».

Implementation of the innovation-investment model of the economy should be based on the state's use of a set of incentives, in particular fiscal, since investment in innovation is associated with additional risk, and expected returns must compensate for it. It should be noted that some forms of state support are designed to «cheapen» the value of investment in innovation, and this is an additional incentive for investors in making decisions.

Tax instruments are an integral part of tax systems in many countries, such as Brazil, China, India, the Russian Federation, Singapore, South Africa, etc. Tax incentives, such as investment tax rebate, investment tax credit, research tax credit, are often used to stimulate innovation, due to their attractiveness for the state and for enterprises, but in domestic practice, the use of such effective fiscal instruments is not carried out due to the deficit of the state budget, complex administration of tax privileges, non-transparency of their use, corruption abuses.

The reality is that the innovation boom in Ukraine is carried out in contradictory conditions between the objective law of social development (in the case of the need for scientific and technological achievements) and the conditions for their obtaining and implementation, and the factors which support the opinion are the following:

- unsystematic and inconsistent innovation process;
- insufficiency of awareness of the importance of the development of innovations, in particular their multiplicative effect;
- low level of economic conditions for the implementation of innovations;
- non-consideration of the laws of innovation development;
- insolvency of financial security strategies;
- non-optimality of components of innovative development systems and their financing;
- lack of regulation of financial support.

With regard to the financing of scientific and scientific and technical activities in the state, they are characterized by insufficient volumes, volatile and significant fluctuations in the structure of sources.

The financial policy should provide favorable conditions for the national economy for the development of the necessary innovation climate and the relevant environment, which determines the creation of a financial mechanism for the implementation of innovative investments. It is appropriate here to talk about the introduction of a unified financial and credit policy, which should be aimed at supporting economic entities, and its implementation to predict the following factors:

- improvement of financial and credit policy;
- formation of a favorable tax climate for business entities;
- at the expense of budget funds, financing of state, sectoral programs of support of entrepreneurship;
- attracting funds from local budgets to finance regional development programs, targeted projects;
- creation of conditions for the activity of non-state entrepreneurship funds;
- support for the development of entrepreneurship in priority areas with the encouragement of public associations, financial organizations, etc.

The course on innovative development in Ukraine will facilitate the reorganization of the economy based on the growth of high-tech industries, the intro-

duction of advanced high-tech processes, the development and production of new competitive products.

The starting point in the study of the paradigm of innovation development is the consideration of the processes of accumulation of financial resources as the basis of economic growth, it is about the possibility of innovation through internal and external sources. Taking into account the experience of foreign countries, it is expedient to introduce financial and credit levers in the implementation of financial and credit regulation.

The universal levers for innovation development are as follows:

- distribution of venture tools for applying innovations;
- ensuring favorable conditions for private investment in research and development (R&D) and development of new technologies;
- strengthening the innovative potential of regions by increasing the use of available scientific and technical resources;
- application of world experience in development and financing of innovation sphere on the basis of strategy of building, borrowing and transfer, as well as technological transfers on national and international scales.

The experience of developed countries shows that it is possible to introduce methods for direct and indirect stimulation of innovation entrepreneurship. Direct incentives include subsidized funding and targeted programs, indirect innovation and innovation incentives, such as tax and credit privileges, innovation risk insurance, etc. However, we should note that in no country, these methods are not applied in its pure form. The sources of funding for innovation in Ukraine include the following components:

- budget funds;
- foreign investments;
- own funds of enterprises;
- credit resources.

It should be noted that for this stage of the development of the innovation system in the structure of financing innovative enterprises predominate own funds of enterprises, and the following are other sources not prohibited by the legislation of Ukraine. In 2017, the share of own funds of enterprises in the total amount of financing innovative activity amounted to 71.5%, and in 2012 – 82.1%, there is an unfavorable investment climate. The share of funds allocated by the state budget for the analyzed period did not exceed 3% (Koval, p. 423; Retrived from: URL: http://www.ukrstat.gov.ua). The tendencies of innovation in recent years indicate significant problems and the low level of innovation activity in the

country, which negatively affects the competitiveness of domestic products and the development of the economy as a whole. Taking into account these facts, the most important financial and lending provision is to improve the mechanism and increase the volume of budget financing of innovations. Innovative activity of enterprises is indicated by indicators of volumes of realized innovative products. In 2012-2017, this figure fell to 3.2% (for comparison – in the European Union – 75%). In addition, there is a decline in the level of science-intensive products in the country, and the main problem hampering innovation activity is the imperfection of the system of normative and methodological support and state support, as the fragmentation and inconsistency of innovation legislation in the country have been observed for a long time.

In order to improve the situation, the author highlights the following factors that determine unevenness and promote innovation:

- factors of innovation characterizing the level of financing of innovation activities in the country, especially the NIS, regulatory framework for innovation regulation) and factors of general economic impact (level of education in the country, level and dynamics of gross domestic product (GDP) per capita), ie use of resources foreign countries, to reduce the cost of high-tech products and to enhance the competitiveness of the NIS.

To increase the volume of attracted credit resources, it is necessary to carry out the following measures:

- to create an effective system of innovative lending (with the use of lending for innovative entrepreneurship under the guarantee of large enterprises, reduction of the interest rate on innovative loans);
- to provide interest-free loans or loans on preferential terms to small enterprises engaged in scientific development;
- take into account the experience of developed economies, where lending and investment of enterprises that are in danger of having a small share of capital are spreading, hoping for a multiplier increase in investment, since small sums will allow for the deployment of activities, and in the case of success (in terms of innovation), be connected to financial support enterprises and other funds (Danylkiv, Retrieved from: URL: http://soskin.info/ea/2017/7–8/20170712.html; Electronic resource: http://kno.rada.gov.ua/komosviti/control/uk/publish/article?Art.):
- to expand the resource base for the banking system, which will allow the use of credit resources for replenishment of working capital and for the implementation of innovative projects, etc.

It is expedient to attract funds from the venture capital funds to the structure of credit, as do advanced economies. Venture financing allows companies to

receive funds without compulsory economic guarantees or collateral, as provided by bank lending.

The financial support of innovation development requires the activity of non-bank financial intermediaries, in particular institutional investors such as insurance companies, pension funds, investment companies (funds). There is an objective need to improve the state policy of improving the financing of the development of innovative enterprises at the expense of financial resources of the institutions of the financial and credit sector by:

- improving the structure of loans through the use of preferential terms by commercial banks that lend innovative and investment projects to enterprises in the real sector of the economy;
- ensuring availability of financial resources for enterprises in the region through alternative financing schemes (leasing, factoring, forfaiting).

Thus, the pragmatic role of financial mechanisms in the paradigm of innovation development requires implementation of the financial policy of the state, with the activation of the innovation activity of business entities and the creation of a coherent system of their financial support. This will be facilitated by the systematization of state funding and stimulating the development of innovations in the national economy.

Conclusions

As a result of the complex substantiation, generalization and analysis of theoretical aspects and pragmatic approaches in the context of domestic realities and world tendencies in relation to financial mechanisms in the paradigm of innovation development, one can state:

1. On the basis of systematization of methodological approaches to the essence of innovation through the prism of socio-economic trends, it is proved that the prospects for the development of the financial system of the state are possible by means of economic growth models that take into account innovative processes. Nowadays there is a rethinking of the role of innovations, which become not only a source of economic growth and welfare of individual citizens, but also contribute to solving global problems; secondly, the implementation of a large-scale program for the reform of the Ukrainian economy in the short term requires significant funds, but domestic sources of financing for development are very limited and are used mainly to support the vital economic spheres of society. Among the sources of funding are important investment and credit resources of developed countries, international financial institutions and private investment. The need to attract foreign investment in the domestic economy is due to a crisis,

for which a radical restructuring of the economy and significant investments are required.

2. It is argued that the main principles for creating a system for financing innovations are: interconnectedness of the system with productive scientific and technical achievements; legal protection of methods and mechanisms; plurality of funding sources; the flexibility of the financing system to change the environment to maximize efficiency.

3. The main directions of financing of innovative activity are outlined, namely: ensuring the implementation of scientific research; Preservation of the scientific base and personnel potential in the state; development and development of high-tech competitive products, which will increase the export or decrease the import of similar products.

4. It is specified that sources of financial support for innovation activities are: state budget funds and funds of local budgets; own funds of specialized state and communal innovative financial and credit institutions; own or borrowed funds of the subjects of innovation activity; funds of individuals and legal entities; as well as other sources are not prohibited by law.

5. It is established that alternative tools of access of business entities to financial and credit resources for their financial support are: use of funds at the expense of interest rates for bank loans; funds of credit unions; Finances of innovative projects of business entities through investment funds and international funds; leasing and forfeiting operations; micro lending; franchising network; budget financing.

6. It is proved that the country, as an institutional base for the development of the domestic economy, should choose an active position to create appropriate conditions for the development of schemes and institutions, and to broadly use the methods of indirect financial support. To this end, the formation of a favorable tax environment, introduction of additional preferences (growing and cumulative tax breaks) and improvement of the main directions of financial and credit support of business structures by the state are proposed.

7. It is substantiated that the system of state financial support for innovation promotion in the leading countries was formed taking into account the state structure, the model of economic development, the traditions of regulation and self-organization of entrepreneurial activity, the state of the financial and credit system, public consciousness. It is established that in foreign countries the search and testing of effective tools for stimulating innovative business development, where attention is focused on financial and credit instruments, is carried out.

8. Taking into account the state of the national economy and the experience of economically developed countries of the world, the practical recommen-

dations for improving the use of financial and credit regulation tools for innovation growth in the conditions of European integration are outlined.

9. It is confirmed that the implementation of these changes will contribute to the growth of innovation activities, the formation of a business environment for innovation development, strengthen competitiveness, provide efficient functioning, create a solid foundation for modernization and integration of Ukraine into the world market.

References

1. Hippel, V. S. (2016, March 31). High technology trade and competitiveness. Staff report.*Department of Commerce,* P. 19.
2. Picard, J. Small business aid bill stalls in Senate. *International business Times.* Retrieved from: URL: http://www.ibtimes.com/articles/ senate–small–business–banks.htm.
3. Public-Private Partnerships for research and innovation. *An evaluation of Austrian Experience. OECD.* REtrURL: http://www.oecd.org/dataoecd/49/17/ 25717078.pdf
4. Danylkiv, K. Theoretical and Methodological Aspects of the Essence of Innovation in the Context of Modern Approaches. *International Association of Organizational Innovation.* Retrieved from: http://soskin.info/ea/2017/7–8/20170712.html.
5. Drucker, P. (2007). Business and Innovation. *Williams ID.* M., P. 58-63.
6. Yepifanova, I. Y. (2016).. Analysis of financial support of innovation activity of domestic enterprises in modern conditions. *Lviv Polytechnic National University Institutional Repository.* pp. 65-70. Retrieved from: http://ena.lp.edu.ua/ bitstream/ntb/12433/1/13_65-70_Vis_722_menegment.pdf
7. Koval, S. (2003).Modern economic growth: results of research and reflection. *Nobel lecture. Nobel laureates in economics.* ed. Y. V. Yakovtsy. Petersburg: Humanities, 423 p.
8. Science and Innovation. Scientific and innovative activities. *State Statistics Service of Ukraine.* Retrieved from: http://www.ukrstat.gov.ua/
9. Luciev, B. L. (Ternopil, 2014). Theoretical Aspects of the Financial-Credit Mechanism. *Bulletin of the Ternopil National Economic University*. pp. 17-26.
10. Ukraine's Innovation Development Strategy for 2010-2020 in the context of globalization challenges. *Draft Resolution on Recommendations for Parliamentary Hearings.* Retrieved from: http://kno.rada.gov.ua/komosviti/ control/uk/ publish / article? Art.

11. Udovychenko, V. P. (Ternopil, 2016). Foreign experience of venture investment of investment-innovation model of economic development. *Ukrainian Journal of Applied Economics. Economic Sciences.* 2, P. 115-123.

12. Schumpeter, J. (2007). Theory of Economic Development. Capitalism, Socialism, Democracy. *Exmo,* N., P. 32-47.

13. Yafinovich, O. B. (Kyiv, 2017). Theories of Economic Growth as a Methodological Framework for the Policy of Innovation Development in Ukraine. *Bulletin of the Taras Shevchenko National University of Kyiv*, 70, P. 60-64.

The article was received on 27 November, 2018.