

DOI: 10.26794/2587-5671-2021-25-3-53-65
UDC 336.647.648(045)
JEL G24, G32

The Influence of the Corporate Venture Capital on the Innovative Development of the Russian Economy

L.G. Pashtova

Financial University, Moscow, Russia
<https://orcid.org/0000-0002-5618-5978>

Thinking is easy, acting is difficult,
and to put one's thoughts into action
is the most difficult thing in the world.

Johann Wolfgang von Goethe

ABSTRACT

The author examines the place and role of corporate venture funds, the state of the venture capital market in Russia, and the impact of venture financing on the innovative activity of corporations, in particular, on the innovative development of the economy as a whole. The **purpose** of the study is to provide an economic assessment of the importance of using corporate venture capital for the innovative economy of the Russian Federation. The author applies methods of statistical, financial, and logical analysis. The study covers the period 2013–2020 and is based on the analysis of data from international organizations, analytical centers, mass media, official data sources of the Government of Russia, and the Central Bank of the Russian Federation. The author reviewed the literature and analyzed the practice of corporate venture capital funds to understand investment in innovation in Russia and around the world. The article analyses the history of the emergence and development of corporate venture funds in Russia and other countries and provides an assessment of the innovation activity of corporations and the Russian state. The theoretical aspects of corporate venture funds, the dynamics of the development of the innovative activity, and the venture market in Russia are considered. The author makes a **conclusion** about the need for state regulation of the processes of financing scientific and technological development and the effective use of market instruments, such as corporate venture funds.

Keywords: corporate venture fund; venture market; investment; innovation; financing innovation; Russian economy

For citation: Pashtova L.G. The influence of the corporate venture capital on the innovative development of the Russian economy. *Finance: Theory and Practice*. 2021;25(3):53-65. (In Russ.). DOI: 10.26794/2587-5671-2021-25-3-53-65

INTRODUCTION

The innovative activity of companies is the basis of industrial development, which is aimed at constantly updating all aspects of the business, looking for new ways to invent, promote, produce, trade, etc. 2020 has provided new challenges for society and business. In these conditions, the creation, production, and management of innovation become vital to a successful business. But at the same time, in the context of a high level of digitalization, research devoted to corporate venture funds, the choice of investment projects, and the conditions for financing innovations are gaining special relevance. Today, capital acts not so much as a set of means of production, but as a new vision of the world and a process of creating value, in which the ability to be an innovator is important. However, innovative products are for the most part unique and, therefore, very risky in terms of the investment efficiency of their development and market promotion. In this regard, there is an objective need for such an economic category as the institution of venture financing, which acts as a catalyst for the emergence and development of innovative projects. The intensity of innovation activity characterizes the innovation activity of the corporation.

The share of innovatively active enterprises in Russia is only 9–10% (for comparison, in Germany — about 80%, in Finland — more than 50%, in Lithuania — more than 30%). The share of private funding for research and development is extremely small. The share of Russian civilian products in world high-tech exports is scanty — 0.5%, the same share of the USA — 36%, Japan — 30%, Germany — 16%, China — 6%. Small volumes of funding for technological innovations in the industry are incommensurate with the real needs of the economy in a fundamentally new economic and political situation [1].

First of all, the innovation activity is aimed at the practical implementation of research and development results and consists in the

ability to commercialize new or improving technologies, choose directions for innovative development and create an effective business.

CORPORATE VENTURE FUND

Transformations of integration processes, global changes in all human activities, and, above all, completely new approaches to the total digitalization of all aspects of life, on the one hand, intensify the innovative activities of both companies and states, and on the other hand, become the driver or cause of the search for new, more profitable ways of financing them.

For example, through open exchange and expanding their own capabilities, parent companies and startups are able to significantly accelerate the promotion of specific technologies. A prime example is Microsoft, which has increased its revenues since March 2020. Analysts at Bank of America named Microsoft the best software investment for 2020, and Microsoft shares have already risen 56% year-to-date and remain upside.

The COVID-19 crisis has affected innovation and required particular actions from leaders as they move from isolation to economic recovery and a new wave. The technological transformation processes of the 21st century and the unprecedented recession in the global economy have only strengthened the role of financing disruptive technologies and innovation.

At the same time, the knowledge economy or innovative economy becomes the key to future progressive development and presupposes the dominance of high-tech goods and services in the total volume of world production. In fact, the pandemic has changed nothing in that disruptive technology and innovation remain at their greatest potential. Obviously, leading companies and R&D investors will recklessly abandon R&D and innovation if they want to remain competitive in the future. The creation of new technology or improvement of a certain process, prototype, or model is always

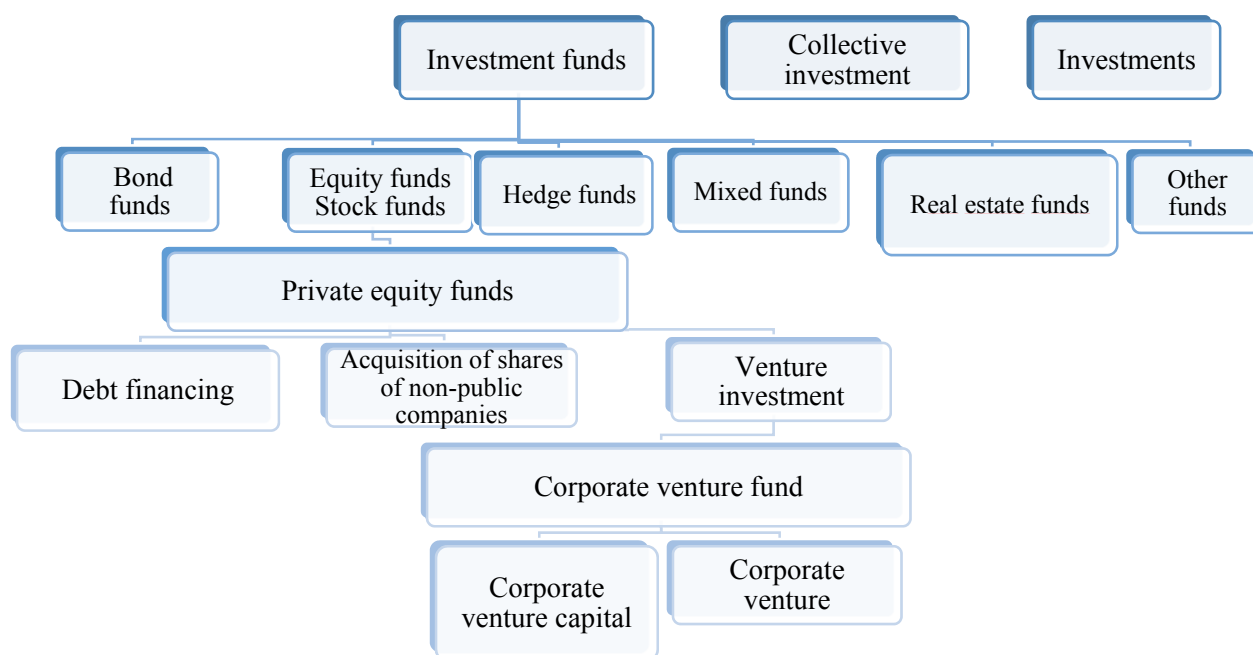


Fig. 1. Classification of funds

Source: compiled by the author.

associated with financial costs, the investment of which in world practice is carried out by venture capital. Thus, the total volume of investments in the Russian venture capital market in 2019 became a record one and amounted to USD\$ 868.7 million. Compared to 2018, the growth was 13% – and this is in the context of very weak economic growth.¹

The most popular source of funding for the creation and promotion of innovative products and technologies for corporations today is **corporate venture capital**, a tool for diversifying and hedging innovation-related risks.

The concept of “**corporate venture capital**” is young. It has become widespread since the end of the last century when the processes of globalization and business consolidation began to accelerate. Back in 1997, D. Teece, G. Pisano and A. Shuen wrote that the creation of private capital in the context of rapid technological development largely depends on the improvement of internal technological, organizational, and management

processes within the company, whereas the identification of new opportunities for their effective use in the organization tend to be more important to private capital than strategy [2].

In the modern world which is expanding exponentially, large companies need to use new knowledge, not only internal research and development of the corporation but also external [3]. In recent years, corporate investment in capital in the form of corporate venture capital has been recognized as the most effective strategy for operating firms aimed at developing new opportunities [4]. Corporate venture capital (hereinafter CVC) is a form of collective investment of a large company aimed at the innovative development of the corporation through financial investments in external firms, most often startups, through a corporate fund (Fig. 1) [5].

In other words, CVC investments are made by operating corporations that finance or invest in startups with high technological potential for their strategic goals (Fig. 2).

CVCs can only be provided by large companies with stable cash flow as they

¹ Venture Russia: results of the first half of 2020. URL: https://www.ey.com/ru_ru/news/2020/10/ey-dsight-2020 (accessed on 20.12.2020).

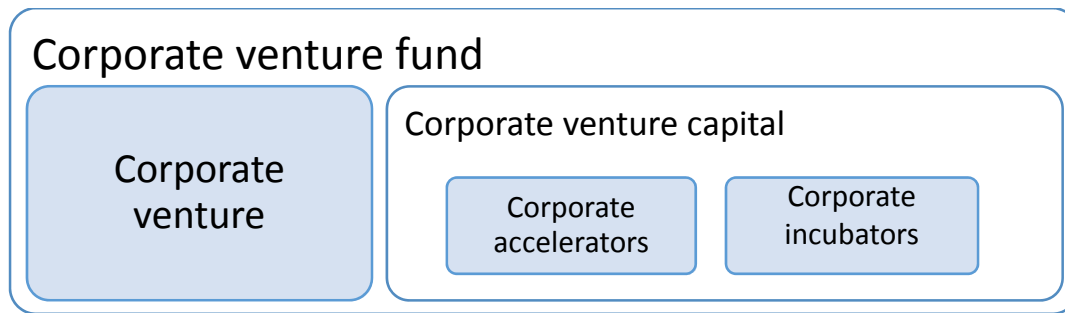


Fig. 2. Corporate venture fund

Source: compiled by the author.

use their own cash reserves to complement internal research and development.

P. Gompers, W. Gornal, S. N. Kaplan and I. A. Strebulaev found out what factor private equity investors consider in the first place when deciding whether to finance a particular startup. "Private equity investors are primarily guided by how talented and balanced the team leads the startup, and to what extent the product it develops meets the needs of the market. In turn, analysts working in the funds of large corporations, when deciding on financing, look at how the project corresponds to the concept of the entire company and what potential benefit the company can get from it" [6].

A prime example is the story of Lucent, which, through CVC, funded the startup Lucent Digital Video, which developed analog-to-digital converters to move audio and video content over analog networks. After successfully launching a new startup product, Lucent began selling its own hardware with the new product. The development of digital technologies required the refinement of the corporation's technologies, Lucent realized the key strategic advantages of corporate venture capital investments, and the corporation began to partner with a successful startup again [7].

For CVC, the most important are incentives and additional investments that can bring significant long-term benefits and advantages to the corporation. The main goal of CVC is to develop technology entrepreneurship. CVCs with quick access to

new technologies can dramatically change the structure of the industry and at the same time are a potential threat and source of income for market leaders [8].

Considering the motives behind European CVC deals in 2016, Corporate Venture Capital obtained the following data:

- 54% of European parent firms invest primarily for strategic reasons, yet with financial concerns;
- 33% invest primarily for financial reasons with strategic concerns;
- 13% invest for purely financial purposes.²

Corporate venture capital investments are not always clearly financially rewarding, but they are an important driver of long-term business growth.

Harvard Business School Assistant Professor Henry W. Chesbrough identifies three types of corporate venture capital investments — driving, emergent, and enabling — and shows six ways different types of corporate venture capital investments can drive business growth [7]:

- *promoting a standard* (investment in startups making products and services that promote the adoption of a technology standard of the corporation);
- *stimulating demand* (investment in startups developing complementary products and services that increase demand for the investor's own products);
- *leveraging underutilized technology*;

² Corporate venture capital. World heritage encyclopedia. URL: http://community.worldheritage.org/articles/Corporate_venture_capital (accessed on 21.01.2020).

- *experimenting with new capabilities;*
- *developing a backup technology;*
- *exploring strategic whitespace.*

Over the past few years, the number of CVCs has grown from a few players in the market to a thousand. At the beginning of 2017, there were 965 corporate venture funds worldwide [9]. According to research by the Stanford Business School, 33% of global investments are in corporate venture capital with a total transaction value of USD\$ 1.5 billion [10]. For many large corporations, CVC is becoming an increasingly popular diversification and hedging tool.

The success of Google Ventures, which funded startups such as Uber, 23 and Me, Nest, Slack, and Jet, also undoubtedly inspired companies to follow in their footsteps. Additional CVCs will only intensify the growing competition to fund the best startup ideas, but it remains to be seen if other CVCs will achieve the same success [11].

Exploring the financial aspects of corporate venture capital, Cyril Vančura identifies three requirements for a sustainable CVC: strategic goals, continuity, and financial sustainability. He argues that financial sustainability is the most critical requirement, which is a complex combination of financial equilibrium and growth in the value of capital, which is ensured by the rational use of technical, material and human resources [12]. However, according to most experts, CVC is mainly aimed at achieving the strategic goals of the corporation, as opposed to institutional venture capital, which focuses solely on financial returns.

CVCs, especially when investing in early-stage technologies, must be in the game for at least as long as the life of the companies they invest in (an average of more than eight years). Long-term sustainability in a corporate setting can only be achieved if the unit is not losing money over a longer period of time, as corporations are often quick in cutting loss-making programs during times of crisis [11].

A survey by NVCA (National Venture Capital Association) published in 2012 shows that a strategic focus is core to 95% of the surveyed CVC groups. Furthermore, about 75% of surveyed CVC groups value delivering on the strategic interest as high as or higher than delivering financial returns [11]. Over the past decade, the use of CVC as an important tool for the innovative development of companies has increased significantly. Thus, in 2018, 264 corporate venture funds were funded, which is 35% more than in 2017. The largest contributors to CVC are Google Ventures, Intel Capital, Salesforce Ventures, Comcast Ventures, and Qualcomm Ventures.³ Startups for such giants provide an opportunity for learning and gaining experience, immersion in strategic issues of company development.

GV (formerly known as Google Ventures, now is the venture capital investment arm of Alphabet Inc), a subsidiary of Google, is a typical example of the concept of independent CVC. GV's main investment objective is to explore new markets, invest in disruptive innovations and a variety of technologies that are of little relevance to each other, but allow broadening the knowledge to cope with future changes. For example, prior to the popularization of smartphones, Google was able to respond to changes from the web-based ecosystem to mobile-based ecosystem by acquiring Android, a startup possessing mobile OS development technology. Recently, GV continues to invest in new and diverse technology areas, including mobile, internet, and software technologies, as well as renewable energy, bio-health care, and organic agricultural products. GV can operate this adventurous exploratory investment portfolio as it has been granted almost complete investment autonomy from Google [13].

New CVCs cover everything from logistics and delivery (Maersk Ventures) to

³ Corporate venture capital growth (TWTR, FB) — 2020 — Talkin go money. TalkingOfMoney.com. 2020. URL: <https://ru.talkingofmoney.com/rise-of-corporate-venture-capital> (accessed on 22.10.2020).

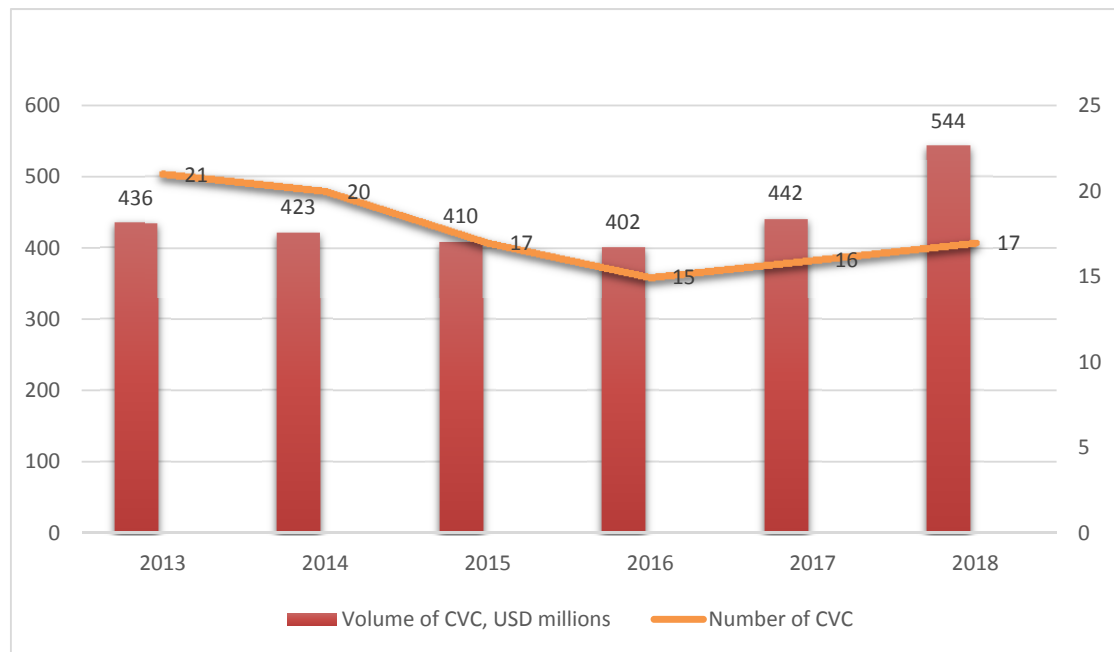


Fig. 3. Dynamics of volumes and number of CVCs in Russia 2013–2019

Source: compiled by the author.

vehicles and mobility (Porsche Ventures) to cryptocurrency exchange (Coinbase Ventures).⁴ In 2019, CVC participated in nearly 1,700 transactions, highlighting how important start-up investments are to corporations in terms of their overall growth strategy. The strategic implications of investing in new technologies for managers were significantly lower, as they competed not only with young startups but also with other large corporations.

CVC AND INNOVATIVE ECONOMY

Venture capital is mainly focused on tech startups as they have the fastest growth potential and relatively low overhead costs. Industries such as biotechnology and telecommunications are gaining increasing attention for CVC. Through open exchange and increased in-house capabilities, parent organizations and startups have the opportunity to significantly accelerate the advancement of specific technologies.

The problems of financing innovative behavior cannot be easily separated from systemic effects. Funding for innovation, mainly related to long-term and uncertain payments, shows that different financial systems are embedded in different financial markets and legal structures cover different elements.

There are numerous corporate strategic investment enterprises, such as Amazon Venture Capital, T-Mobile Venture Fund, Nokia Growth Partners, Motorola Ventures, and Intel Capital, which are devoted to making investments in innovative companies, technological and business process innovations [14]. Firms are increasingly working with CVC's geographically dispersed investment portfolios to access a variety of location-specific knowledge, alongside traditional external strategy knowledge such as technology alliances. Diversity in corporate venture capital investment has a positive impact on companies' technology performance in the context of a simultaneously pursued technology alliance strategy [14]. The geographic diversity in CVC portfolios enhances performance of

⁴ Corporate venture capital growth (TWTR, FB) — 2020 — Talkin go money. TalkingOfMoney.com. 2020. URL: <https://ru.talkingofmoney.com/rise-of-corporate-venture-capital> (accessed on 22.10.2020).

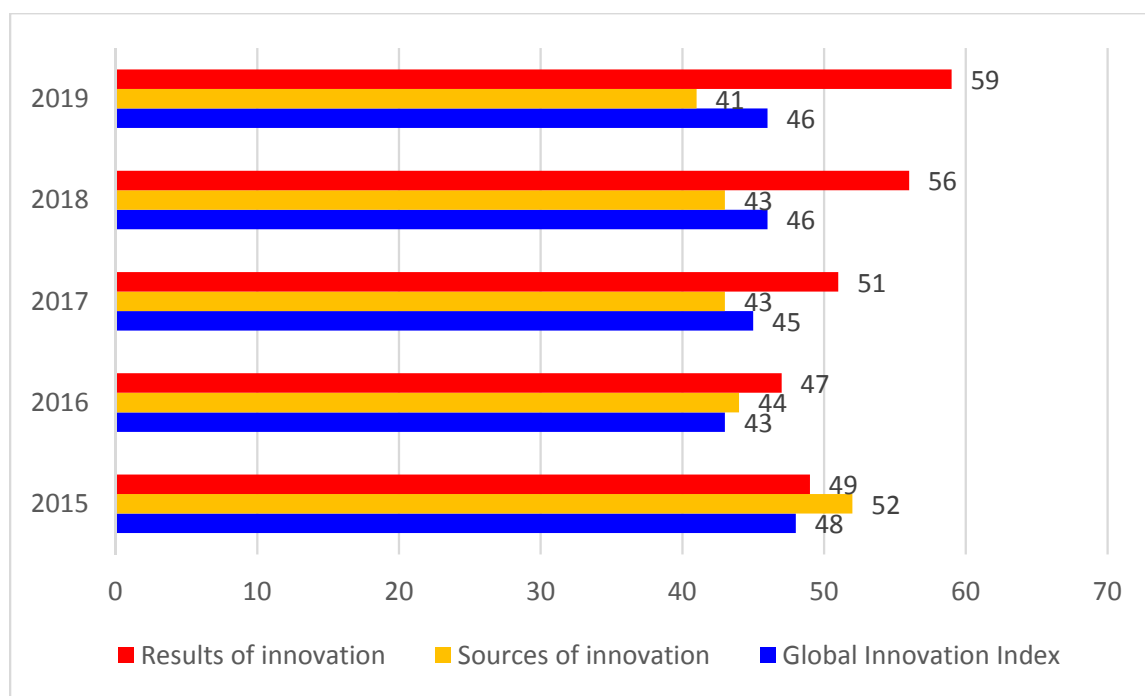


Fig. 4. Dynamics of Russia's positions in the GII ranking: 2015–2019

Source: compiled by the author. Global Innovation Index 2019. URL: https://www.wipo.int/global_innovation_index/ru/2019/ (accessed on 29.11.2020).

investments, on the other hand, increases the managerial complexity. Coordination costs and resource constraints stem from the simultaneous pursuit of diversity in both technology alliances and CVC investments. Our findings are based on a panel data set on the patents, CVC investments, and technology alliances of 55 CVC-active firms in a variety of industries [15].

For incumbent firms to adapt to the modern market environment of rapid and radical changes in technological paradigms, dynamic capabilities are needed to obtain valuable knowledge from external companies and integrate them with internal knowledge [2]. Many scholars argue that in order to have such dynamic capabilities, it is necessary to use external knowledge of supplier selection strategies, such as strategic mergers, strategic alliances, or joint ventures with other firms that have useful knowledge, as well as to use internal research and development of the firm [16].

In recent years, CVC has been recognized as a very useful strategy for incumbent

companies as a tool for developing strategic opportunities. This is evidenced by the increase in the volume of corporate venture capital funds from USD\$ 436 million in 2013 to USD\$ 544 million in 2018 against the background of a decrease in their number from 21 to 17, respectively (Fig. 3).

CVCs are created by incumbent companies that make small investments in startups with good technology potential. CVC investments made by a non-financial company differ from independent venture capital, as most often they pursue not financial goals, but strategic ones, such as finding a new business, opportunities or acquiring valuable knowledge. In Russia, the term “corporate venture fund” is mainly used, which in practice, applying the model of “open innovation”, purchases technologies, external research and development from outside.

Funding for innovation is a highly profitable but risky investment. According to the latest results of the study of the level of countries on the development of innovations in the Global Innovation Index, the Russian

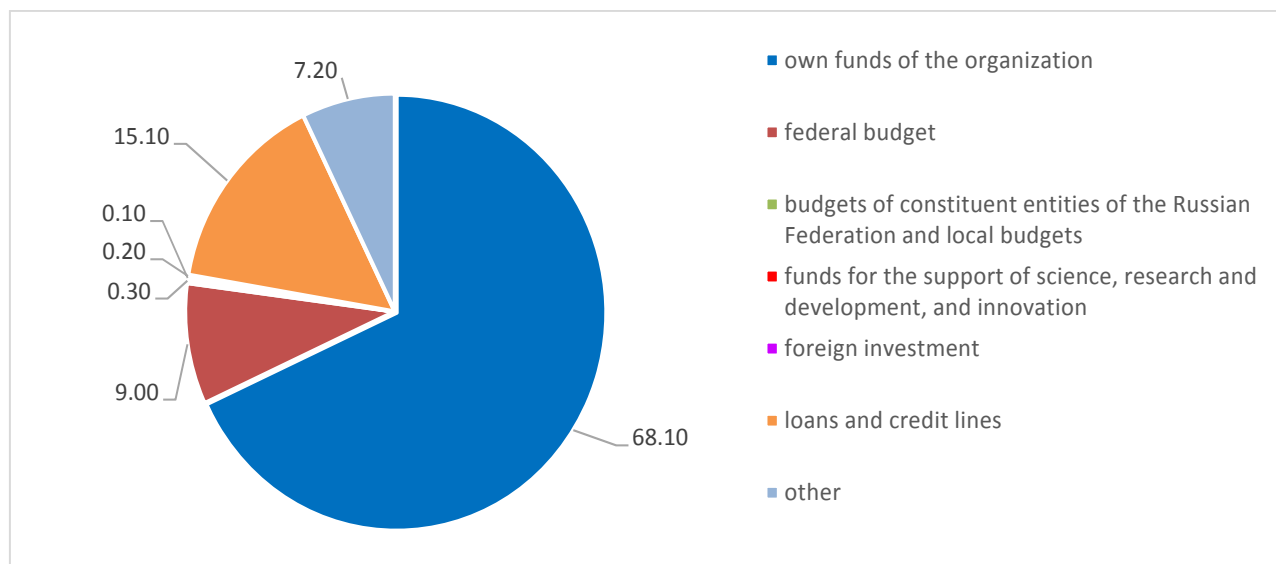


Fig. 5. Structure of expenditures on technological innovations of industrial enterprises in Russia by sources of funds in 2017

Source: data from the Institute for Statistical Studies and Economics of Knowledge, National Research University Higher School of Economics. 28 November 2019.

Federation ranks 46th among 129 countries, behind Thailand, Qatar, Chile, Moldova and Estonia [1] (Fig. 4). Estonia [1] (Fig. 4).

Russian's low position in the ranking is due to such factors as the pace of modernization and innovative transformations, the lack of their compliance with the goals of the country's long-term socio-economic development [1].

The main driver for the development of the state's innovative economy is the innovative activity of entrepreneurs in all its forms [17]. Economic innovation implies that the activities of entrepreneurs are aimed at creating and introducing new products, combinations, and business processes. Experts agree that for the progressive development of the economy, not only innovative products are needed, but also innovative technologies. The main source of funding for R&D in Russia is public funds — their share in the total volume of domestic expenditures in 2018 amounted to 67%. The absolute value of R&D expenditures at the expense of the state in 2018 reached 689.3 billion rubles [18]. Financing of innovative activities of industrial companies is carried out mainly from their own funds.

In the total cost of technological innovations, their share in 2017 was 68.1% (Fig. 5) [19].

Only 7.2% of the cost of technological innovation in Russia is financed from funds to support science, research and development, and innovation.

Considering local peculiarities and innovative potential, corporate venture funds can significantly contribute not only to the growth of the business of domestic corporations but also to the development of the innovative economy of Russia. For the transition to an innovative model, specific directions of the rise of traditional sectors of the economy and the main breakthrough guidelines for the development of high-tech sectors of the economy, which should form the basis of innovative strategic programs of Russian corporations, are highlighted. To achieve results on the priorities of the scientific and technological development of the Russian Federation, complex scientific and technical programs and projects are developed and approved, including all stages of the innovation cycle: from obtaining new fundamental knowledge to their practical use, creating technologies

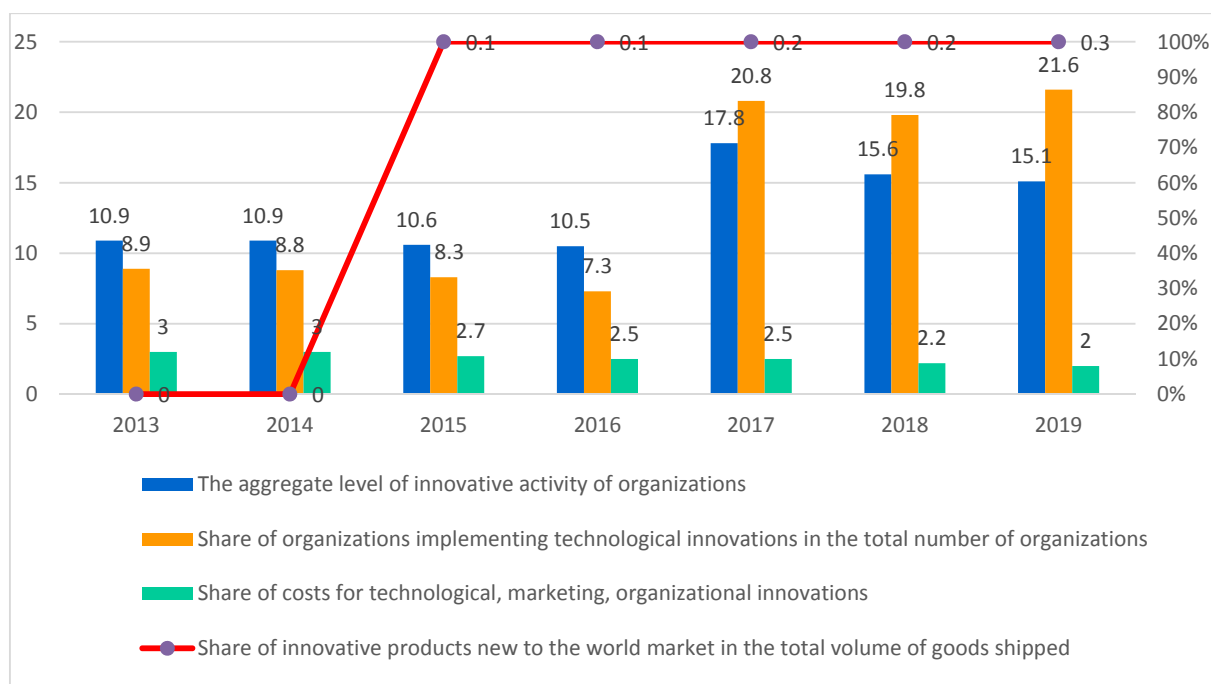


Fig. 6. Dynamics of innovative activity of organizations in Russia in 2013–2019

Source: compiled by the author, based on the data of statistical digest "Indicators of innovation: 2020" by Gokhberg L.M., Ditkovskiy K.A., Evnevich E.I. et al. Moscow: National Research University Higher School of Economics; 2020.

and products and services and their release to the market.⁵

The strategy of scientific and technological development of the Russian Federation was approved by the Presidential Decree of the Russian Federation of December 1, 2016, No. 642.⁶ But, despite all the government's efforts to revive the venture capital market, government funds remain the main source of R&D funding in Russia – their share in total domestic spending in 2018 amounted to 67%. In previous years, this indicator had higher values (from 67.1 to 70.3%), except for 2017 (66.2%). The absolute value of expenditures on R&D at the expense of the state in 2018 reached 689.3 billion rubles [18], this accounted for about 10% of the total budgetary support for technological innovation. In high-tech industries this figure is noticeably

higher – 22.1%, including in the production of computers, electronic and optical products – 24.2%. In organizations involved in the production of finished metal products, more than half of the cost of innovation is covered by budget funds [20]. The costs of technological innovations are mainly associated with the introduction of process innovations aimed at improving the efficiency of production processes: in the total volume of investments, their share is about 60%. Slightly lower costs for more innovative – product – innovations (41.2%); moreover, in recent years, there has been a trend towards narrowing this gap [20]. Most Russian companies prefer to buy ready-made solutions on the market than invest in their own R&D. This is evidenced by the low share of industrial companies introducing technological, organizational, and marketing innovations in the total number of organizations (Fig. 6).

Currently, most businesses choose phased financing to finance innovative projects. The innovation process includes specific stages. The result of each of them is quite

⁵ V.V. Putin. Presidential Address to the Federal Assembly. 2018. URL: <http://www.kremlin.ru/acts/bank/42902> (accessed on 22.04.2021).

⁶ Presidential Decree of the Russian Federation of December 1, 2016, No. 642. URL: <http://www.kremlin.ru/acts/bank/41449> (accessed on 22.04.2021).

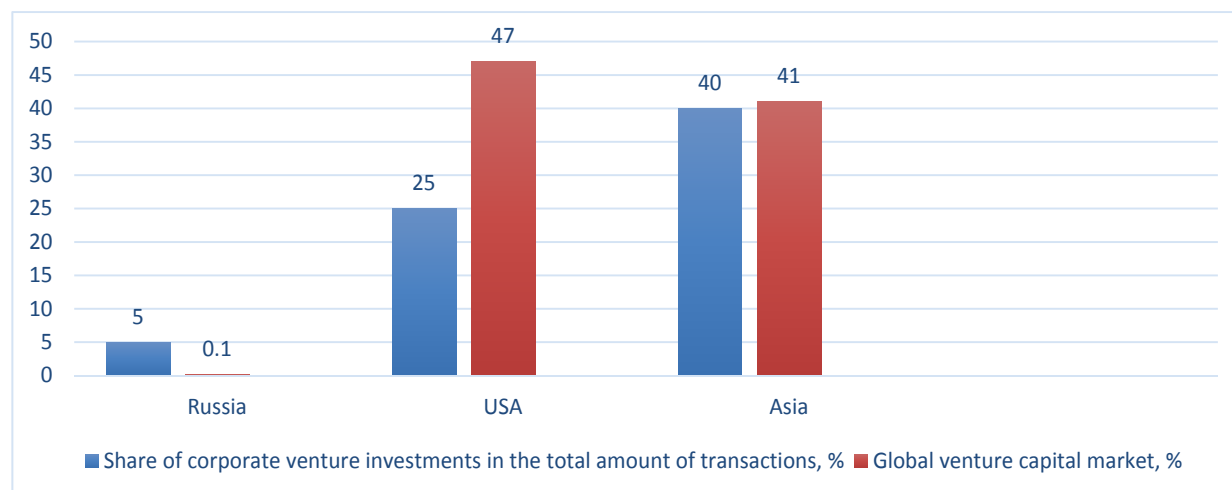


Fig. 7. Share of corporate funds in venture capital investments in Russia, 2018

Source: compiled by the author.

unpredictable due to the great uncertainty and the degree of risk of the innovative project. In addition, during the implementation of each stage, an unexpected urgent decision may appear to adjust the project as a whole or its components. In some cases, already before the start of commercialization, it becomes clear that the project is unprofitable.

In this case, it must be cancelled. The R&D stage is accompanied by a large number of unforeseen situations [21]. At best, when developing or creating an experimental prototype, new functional features of the product or its application area are revealed. The phased method of financing can significantly reduce the level of risk, use a high degree of uncertainty as a means, not a threat.

CVC PRACTICE IN RUSSIA

In 2017, one of the main instruments of state innovation policy was the creation of special units and corporate venture funds in state corporations Rostec, Roskosmos, Rosatom, PJSC United Aircraft Corporation, JSC United Shipbuilding Corporation. The Government of the Russian Federation has ensured that it is necessary to invest in small innovative companies and startups. The system of financing innovative activities is a complex interweaving of sources and forms that differ in the degree of centralization, type of

ownership, forms of financing, and the level of owners. Financing of innovation activities, carried out at the expense of budgetary funds in accordance with the priorities and goals of the state innovation policy, is intended to solve large-scale scientific and technical problems and support small and medium-sized innovative businesses [21] at the expense of CVC. However, according to a study by Strategy&, the share of corporate funds in Russian venture capital investments in Q1 2018 was only 5% (Fig. 7), which is significantly less than in other countries, according to a study by Strategy& (a consulting division of PwC).⁷

According to the executive director of the Russian Venture Capital Association Albina Nikkonen, the institution of corporate venture funds in the country is in its infancy, there are no more than 10. Corporate venture capital has only one shareholder in the person of a corporation, therefore a state corporation, having strong state participation, is inactively working with startups. They also rarely and cheaply buy startups, which is the main pain of private venture investors

⁷ Yastrebova S. Corporations are in no hurry to create venture funds. Therefore, they may miss out on interesting technological innovations. Vedomosti.21.05.2018. URL: <https://www.vedomosti.ru/technology/articles/2018/05/22/770232-korporatsii-venchurnie-fondi> (accessed on 20.11.2020).

in the Russian market. Therefore, strong Russian startups that attract money from private venture capital funds are now usually focused on the global market, where Russian corporations are poorly represented. At the same time, there are points of growth in the Russian venture capital market. The industrial holding Russian Helicopters invested 300 million rubles in the industrial fund Skolkovo Ventures, a subsidiary of the Skolkovo fund that manages three of its venture capital funds. In 2018–2019 the activity of corporations in various forms of participation increased, new funds of RVC, VTB, VEB were created.⁸ Private corporations are starting to implement their strategy more than state-owned ones, although state corporations remain the largest participants.

CVC is a way for corporations to access innovations at a reasonable price, to ensure strategic development, corporations need to constantly monitor and attract innovations. CVC is a way for corporations to access innovations at a reasonable price, to ensure strategic development, corporations need to constantly monitor and attract innovations. Due to the pursued goals, corporate funds have much more simplified access to financing and can develop where full-fledged venture profitability is not available. Only 8% of such funds, according to Pitchbook, have purely monetary motives. 26% of them are driven by strategic goals, but the majority of CVCs — 66% — skillfully combine these two motives.

At the same time, in 2018, Dsight analysts recorded a significant increase in both the number and volume of seed-stage transactions: the number of transactions increased by 46%, from 97 to 142 transactions, the total volume of segment transactions increased by a record 139%, to 11 million. At the same time, the number of business angels and seed funds did not increase,

⁸ Solovyov A. Venture Investors Don't Leave Russia. Yandex Zen. 19.12.2019. URL: <https://zen.yandex.ru/media/id/5c34c677cffc6400aed02c4/venchurnye-investory-iz-rossii-ne-uhodiat-5df90cbd74f1bc00ad769de3> (accessed on 29.10.2020).

the increase in the number of transactions and the volume of injections occurred due to several corporate accelerators, including Sberbank, Kamaz, and MTS. Some corporations carry out acceleration within the framework of the annual RVC Generation S program, including Alrosa, Ilim Pulp and Paper Corporation, VTB Bank, and others. 2018 saw a growing interest in e-commerce from corporations and strategic indicators.⁹ In the first half of the year, Yandex and Sberbank launched a joint Beru marketplace. Then in September Mail.ru Group, Megafon, the Russian Direct Investment Fund (RDIF), with the participation of the Chinese platform Alibaba Group, announced a joint venture in e-commerce called AliExpress Russia. The largest shareholders of the online hypermarket Ozon — MTS and the Baring Vostok fund — invested at least 3.5 billion rubles on these sites. The multi-corporate model of the fund, in which several corporations act as investors at once, is an innovation for the Russian investment market, says Alexei Solovyov, partner of the iTech Capital fund (participates in the co-management of the Skolkovo Ventures IT fund). Given the small size of the Russian technology market, for corporations, this is the only way to effectively search for technology for themselves — to give this task to experienced managers, and not “push” the market on their own.¹⁰

CONCLUSIONS

Thus, the activation of innovation activity through CVC investments in Russia is only developing and largely depends on the business reputation and personal qualities

⁹ Indicators of investment activity of the Russian economy. Bulletin of the Department for Promotion of Investments and Innovations of the CCI RF. 18.06.2019. URL: http://alipina.vi-person.ru/uploads/attachment/file/951633/%D0%92%D0%B5%D1%81%D1%82%D0%BD%D0%B8%D0%BA_%D0%94%D0%A1%D0%98%D0%98_%D0%B8%D1%8E%D0%BD%D1%8C_2019.pdf (accessed on 29.01.2020).

¹⁰ Sukharevskaya A. Russian Helicopters invested 300 million rubles in the Skolkovo Ventures industrial fund. Vedomosti. 31.05.2018. URL: <https://www.vedomosti.ru/technology/articles/2018/05/31/771494-vertoleti-rossii> (accessed on 29.11.2020).

of managers. Any investor, institutional or CVC, should strive to become a reliable and sustainable partner for entrepreneurs, startups, and other investors. Consequently, to create a successful CVC program in Russia, continuity is required in terms of strategy, investment focus, and core corporate team.

Therefore, the innovation process or the commercialization of scientific and technical developments is very risky, which is explained by the peculiarities of the market of ideas and know-how and requires precisely venture financing, which is based on the creation of the value of risk-adjusted capital. It is a corporate venture capital that can specialize in both early-stage R&D financing and partnerships with parent company CVC, which can offer industry expertise and a strong financial position in new markets for already successfully developed products. Such partnerships increase the value of the company and

act as a kind of advertising that increases interest in this business.

On the other hand, today it is extremely important for the state and companies to unleash their potential in terms of digital threats, which requires state policy aimed at developing new models of interaction and further investment of the private sector and the state in innovation. The choice of the development path in the new conditions of total digitalization and trade-in information resources and data will determine the further development of not only an individual state but also of all mankind as a whole. Our future will depend on what innovations will be financed, from what sources (public or private), who will be at the origins of development management: whether we take the path of a digital concentration camp or a highly spiritual-cultural development based not on maximizing the welfare of owners, but on ideas of social equality and justice.

REFERENCES

1. Pashtova L.G., Shokhin E.I., eds. Corporate finance and business management. Moscow: KnoRus; 2021. 392 p. (In Russ.).
2. Teece D.J., Pisano G., Shuen A. Dynamic capabilities and strategic management. *Strategic Management Journal*. 1997;18(7):509–533. DOI: 10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z
3. Van de Vrande V., Vanhaverbeke W. How prior corporate venture capital investments shape technological alliances: A real options approach. *Entrepreneurship Theory and Practice*. 2013;37(5):1019–1043. DOI: 10.1111/j.1540-6520.2012.00526.x
4. Dushnitsky G., Lenox M.J. When do incumbents learn from entrepreneurial ventures?: Corporate venture capital and investing firm innovation rates. *Research Policy*. 2005;34(5):615–639. DOI: 10.1016/j.respol.2005.01.017
5. Dushnitsky G., Lenox M.J. When does corporate venture capital investment create firm value? *Journal of Business Venturing*. 2006;21(6):753–772. DOI: 10.1016/j.jbusvent.2005.04.012
6. Gompers P.A., Gornall W., Kaplan S.N., Strebulaev I.A. How do venture capitalists make decisions. *Journal of Financial Economics*. 2020;135(1):169–190. DOI: 10.1016/j.jfineco.2019.06.011
7. Chesbrough H.W. Making sense of corporate venture capital. *Harvard Business Review*. 2002;80(3):90–99. URL: <https://openinnovationresults.com/wp-content/uploads/2019/10/Making-Sense-of-CVC.pdf> (accessed on 21.11.2020).
8. Rogova E.M., Galaktionov S.S. The impact of corporate venture funds at the results of parent companies' innovation activities. *Innovatsii = Innovations*. 2017;(2):22–28. URL: <https://publications.hse.ru/mirror/pubs/share/folder/et3fu4sj6t/direct/205855192> (accessed on 21.11.2020). (In Russ.).
9. Kosteev V., Sidorovich V. Innovation management in Russian companies 2016. Moscow: iR&Dclub; Russian Venture Co.; 2016. 37 p. URL: <http://irdclub.ru/wp-content/uploads/2018/10/IM-best-practices-2016.pdf> (accessed on 21.12.2020). (In Russ.).
10. Gornall W., Strebulaev I.A. Squaring venture capital valuations with reality. *Journal of Financial Economics*. 2020;135(1):120–143. DOI: 10.1016/j.jfineco.2018.04.015

11. Vančura C. Financial metrics in corporate venture capital: Enhancing strategic value by focusing on financial goals. Kauffman Fellows. June 05, 2014. URL: https://www.kauffmanfellows.org/journal_posts/financial-metrics-in-corporate-venture-capital (accessed on 27.12.2020).
12. Mingaliev K.N., ed. Theory and practice of managing the financial stability of Russian companies. Moscow: RuScience; 2016. 272 p. (In Russ.).
13. Lee S.U., Park G., Kang J. The double-edged effects of the corporate venture capital unit's structural autonomy on corporate investors' explorative and exploitative innovation. *Journal of Business Research*. 2018;88:141–149. DOI: 10.1016/j.jbusres.2018.01.049
14. Strategic investment for innovation support. In: Webb T., Guo C., Lewis J.L., Egel D. Venture capital and strategic investment for developing government mission capabilities. Santa-Monica, CA: RAND Corporation; 2014:3–14.
15. Belderbos R., Jacob J., Lokshin B. Corporate venture capital (CVC) investments and technological performance: Geographic diversity and the interplay with technology alliances. *Journal of Business Venturing*. 2018;33(1):20–34. DOI: 10.1016/j.jbusvent.2017.10.003
16. Van de Vrande V., Vanhaverbeke W., Duysters G. Additivity and complementarity in external technology sourcing: The added value of corporate venture capital investments. Munich Personal RePEc Archive. MPRA Paper. 2009;(26419). URL: https://mpra.ub.uni-muenchen.de/26419/1/MPRA_paper_26419.pdf (accessed on 29.11.2020).
17. Pashtova L.G. Financial role of the state and business in enhancing the innovation activity of companies. *Finansovaya analitika: problemy i resheniya = Financial Analytics: Science and Experience*. 2015;(1):2–10. (In Russ.).
18. Ratai T., Martynova S. Sources of research and development funding: 2018. Institute for Statistical Research and Economics of Knowledge, NRU HSE. Nov. 28, 2019. URL: <https://issek.hse.ru/news/320419226.html> (accessed on 28.09.2020). (In Russ.).
19. Lukinova E.I., Ditkovskii K.A. Financing innovative activities. Institute for Statistical Research and Economics of Knowledge, NRU HSE. Feb. 13, 2019. URL: https://issek.hse.ru/data/2019/02/13/1206653030/NTI_N_119_13022019.pdf (accessed on 28.01.2020). (In Russ.).
20. Ermoshina T.V. The cost of technological innovation as a priority factor in the development of the national innovation system. *Vestnik Evraziiskoi nauki = The Eurasian Scientific Journal*. 2019;11(3):13–21. (In Russ.).
21. Pashtova L.G. Actual problems of financing innovative industries. In: Problems and prospects for the development of Russian industry. Proc. Int. sci.-pract. conf. (Moscow, Mar. 30, 2017). Moscow: Plekhanov Russian University of Economics; 2017:51–58. (In Russ.).

ABOUT THE AUTHOR



Lelya G. Pashtova — Dr. Sci. (Econ.), Prof., Department of Corporate Finance and Corporate Governance, Financial University, Moscow, Russia
lgpashtova@fa.ru

The article was submitted on 02.01.2021; revised on 16.01.2021 and accepted for publication on 27.01.2021.

The author read and approved the final version of the manuscript.