



# *MoneyTree*<sup>TM</sup> Venture Capital Market Navigator

Overview of Russian venture capital deals in 2016





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# Main venture capital ecosystem's development trends in 2016

PwC and OAO Russian Venture Company (RVC) are pleased to present the sixth annual Russian venture capital market report, MoneyTree™: Venture Capital Market Navigator (MoneyTree™: Russia) for 2016.

In 2016, significant pressures were placed on the Russian venture capital market by a number of factors, including the general decline in business activity, the uncertainty of macroeconomic indicators and the devaluation of the Russian rouble (by 10% from 2015 to 2016<sup>1</sup>).

The total amount of capital in the venture ecosystem in 2016 declined to USD 410 million (from USD 2.19 billion in 2015). A single deal worth USD 1.2 billion, involving the exit of investors from Avito, had a sizeable effect on the 2015 figure. Excluding this deal, the total value in the venture ecosystem in 2015 was USD 990 million, 59% more than in 2016.

In 2016, the venture capital deals market – the basis of the venture capital ecosystem – declined by 29% to USD 165.2 million from USD 232.6 million in 2015. Last year, the number of deals amounted to 184 (including 27 transactions with an unknown value), while in 2015, there was 180 deals. Relative stability of venture deals number indicates that venture investors continue to be active on the Russian market.

The average deal size in 2016 declined to USD 1.1 million from USD 1.5 million a year earlier. Expansion-stage and start-up-stage deals demonstrate the most significant decline in the average investment amount, by 47% from USD 5.26 million to USD 2.81 million, and by 23% from USD 0,73 million to USD 0,56 million, respectively. The average investment amount fell less sharply at the seed-stage (by 8%), whereas the average amount at early-stage remains relatively stable, falling by only 1%. In 2016, the number of early- and expansion-stage deals remained nearly the same as in 2015: 104 deals versus 105 deals.

Decline in the average deal size can be explained by a number of factors, including (a) growing caution among investors about venture assets; (b) a desire among investors to diversify their portfolios through a larger number of smaller investments; and (c) a transition from individual investing to consortium investing.

There were no large deals worth more than USD 100 million in 2016, whereas two deals for a total of USD 200 million were carried out in 2015.

The number of exits increased slightly in 2016, coming to 30, which is of four transactions increase compared to the previous year. Excluding the Avito exit deal, the total value of exits in 2016 fell by three times to USD 120 million.

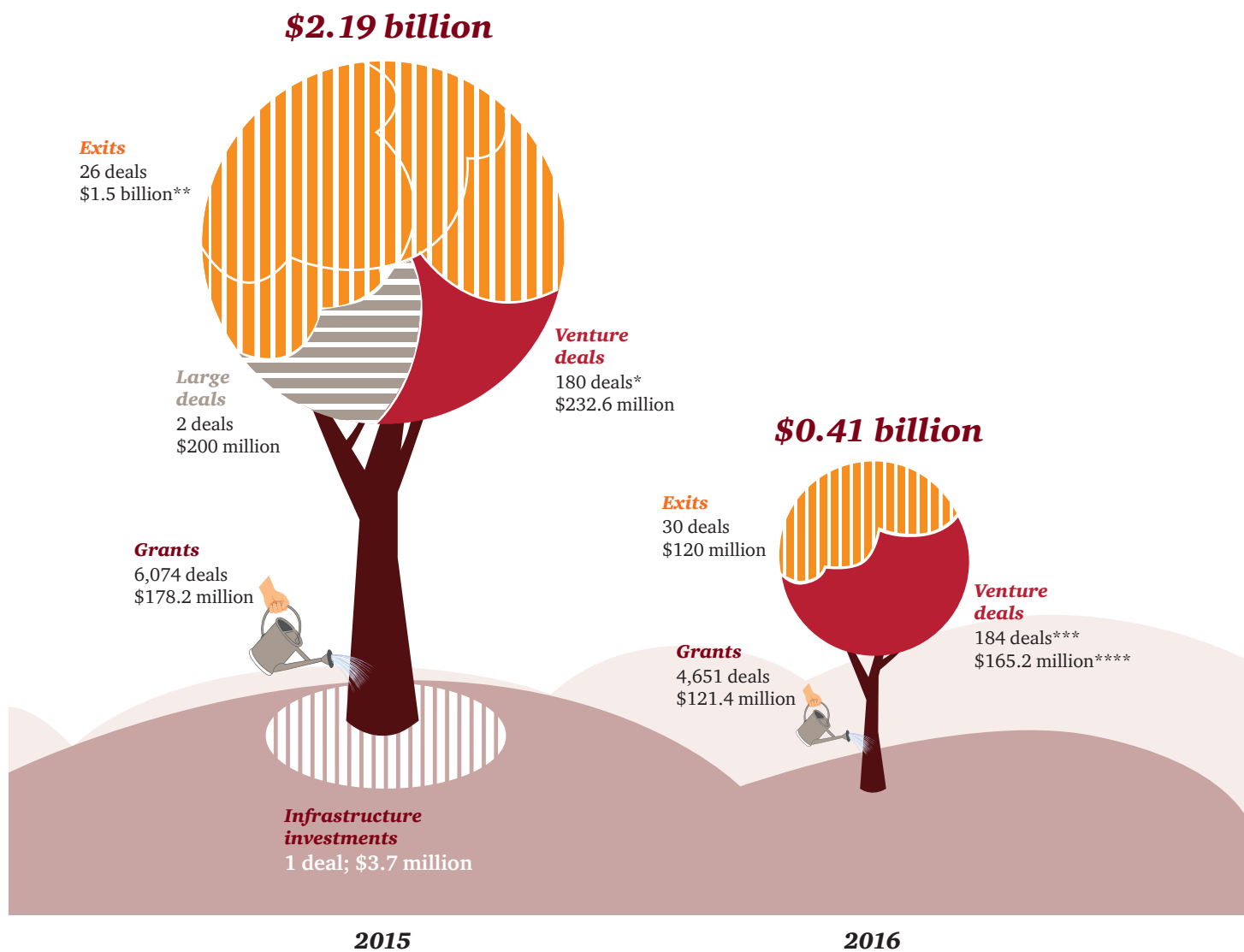
The number of grants issued in 2016 was 4,651 for a total value of USD 121.4 million. Just as in 2015, the most active grant issuers were the Foundation for Assistance to Small Innovative Enterprises in Science and Technology (the Bortnik Foundation) and the Skolkovo Foundation.

Overall, the Russian venture capital industry remains small and is driven mostly by large deals that tend to be one-off transactions.

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<sup>1</sup> According to the Central Bank of the Russian Federation, the average nominal USD/RUB exchange rate in 2016 was RUB 66.83 (versus RUB 60.66 in 2015).

Figure 1. Venture capital ecosystem



\* including 29 deals with an unknown value

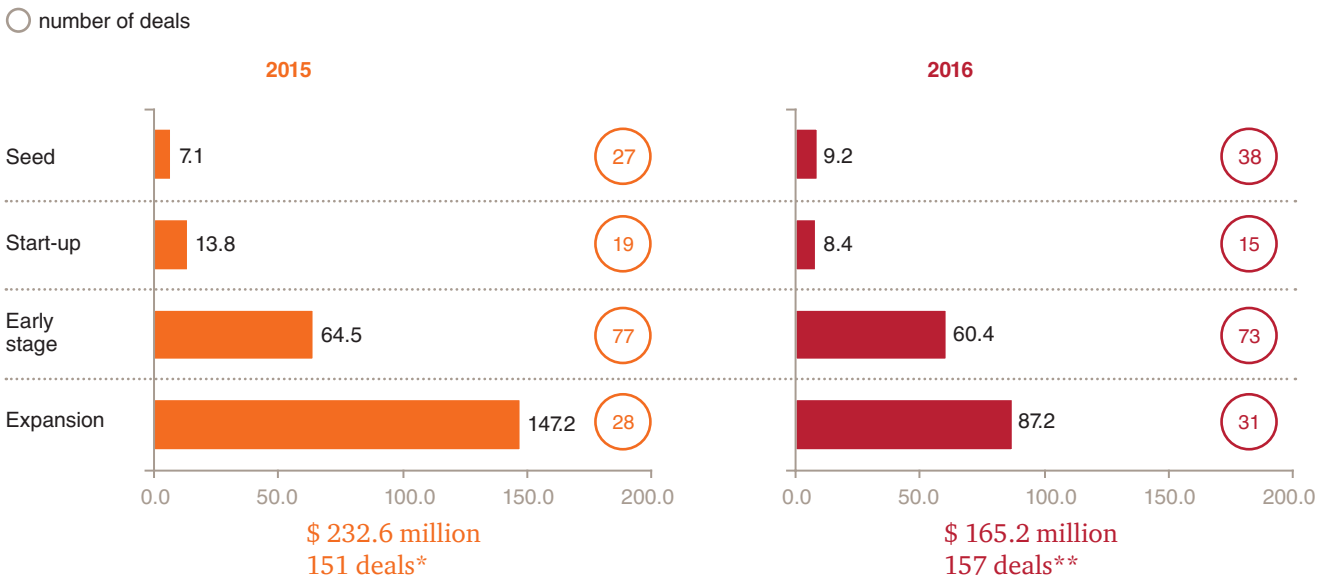
\*\* taking into account the exits of Accel Partners, Kinnevik and Northzone from Avito (the deal value was USD 1.2 billion)

\*\*\* including 27 deals with an unknown value

\*\*\*\* excluding 73 deals (each less than USD 50,000) by the Internet Initiatives Development Foundation

Source: RVC, Russian Venture Capital Association (RVCA), PwC

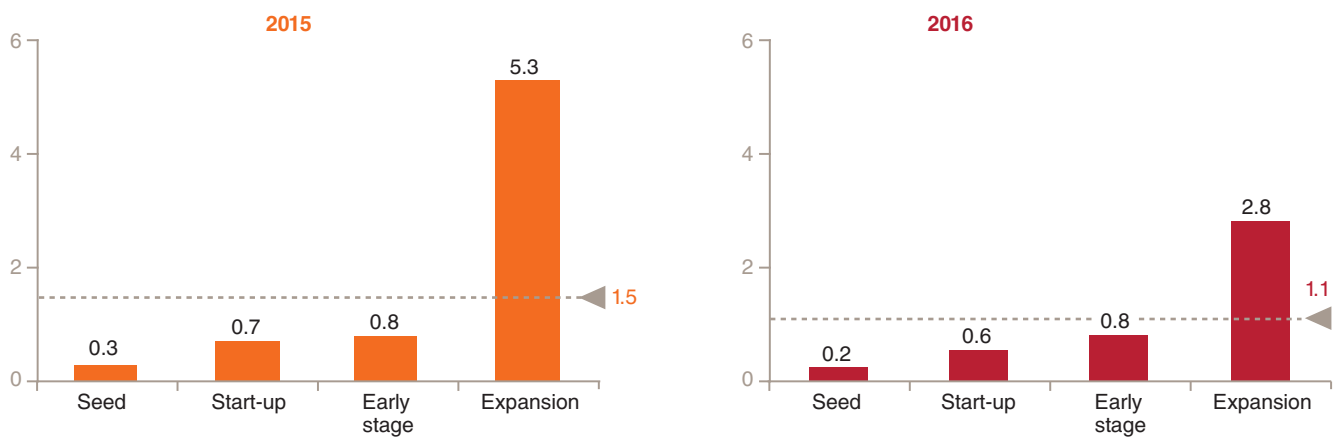
**Figure 2. Venture capital investment by business development stage, USD million**



\* excluding 29 deals with an unknown value  
 \*\* excluding 27 deals with an unknown value

Source: RVC, Russian Venture Capital Association (RVCA), PwC

**Figure 3. Average deal size by company development stage, USD million**



Source: RVC, Russian Venture Capital Association (RVCA), PwC

# Venture investment analysis by sector

IT is the leading sector in terms of the number and investment amounts of venture capital deals. In 2016, deals in the IT sector stood at 70% of the total number of deals and 90% of the total amount of all deals. This is generally in line with the performance over previous years. The number of deals in the IT sector increased by 13% compared to 2015. This trend is driven by the increasing role of information technology in all areas of business and investors eagerness to support potentially transformative projects. Herewith, due to the average deal size decline, from USD 2.1 million in 2015 to USD 1.4 million in 2016, the total value of deals in the IT sector dropped by 27% to USD 149.6 million.

The number of deals in the biotechnology and industrial technology sectors remained relatively low compared to IT.

The number of deals in the industrial technology sector increased significantly in 2016: from 15 to 21 deals. Nevertheless, the total value of investments fell by 29%, coming to USD 6.1 million from USD 8.6 million a year earlier.

Investment in biotechnology in 2016 fell in terms of quantity and value. The number of deals decreased from 39 to 26 – just as in 2015, RVC funds made most of the investments in biotech – while the total value of investments fell by 48% to USD 9.5 million from USD 18.1 million in 2015. Investors continue to be cautious about investing in Russian biotech due to its capital-intensive and high-risk nature.

**Figure 4. Venture capital deals by sectors**



\* excluding 26 deals with an unknown value

\*\* excluding one deal with an unknown value

Source: RVC, Russian Venture Capital Association (RVCA), PwC

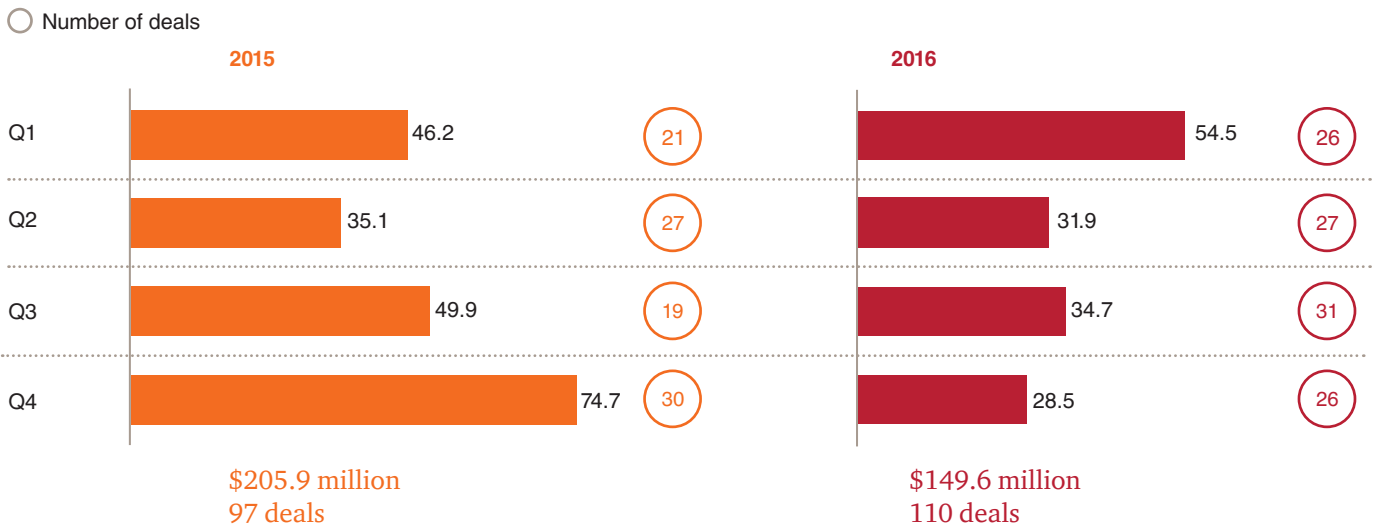
# Information technology

In 2016, IT remained the largest sector in terms of venture capital investment.

Despite the number of venture capital deals in this sector showed an increase from 97 to 110 in 2016, the total deal value decreased by 27% to USD 149.6 million. In the first quarter of 2016, the total value of deals grew by 18%. However, after the first quarter the total value of deals began to decline: by 9% in

Q2, 30% in Q3 – despite a 63% increase in the number of deals – and 62% in Q4. Despite the fact that the total number of deals in the final quarter of 2015 and 2016 were comparable: 26 deals worth USD 28.5 million in 2016 versus 30 deals worth USD 74.7 million in 2015.

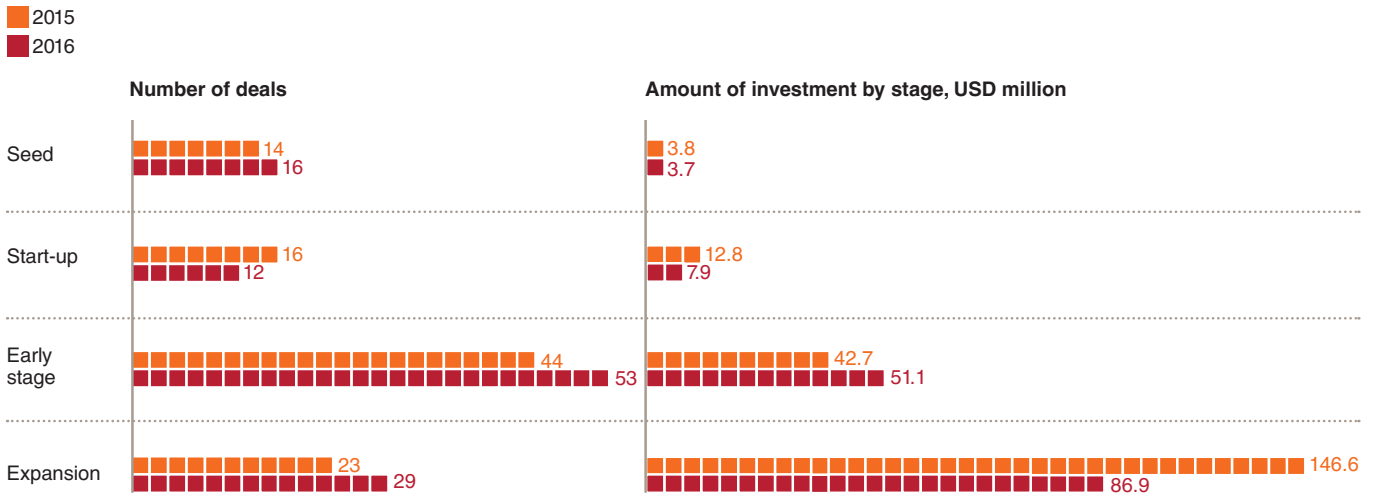
**Figure 5. Venture capital investment in the IT sector by quarter, USD million**



Source: RVC, Russian Venture Capital Association (RVCA), PwC

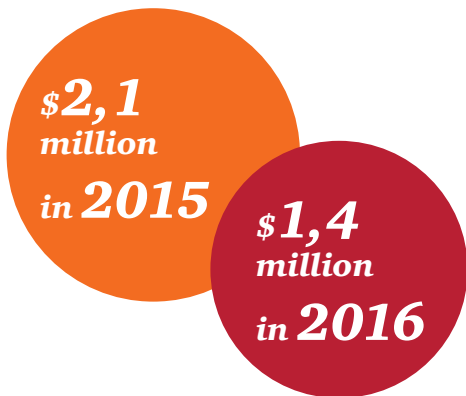


**Figure 6. Venture capital investment by company development stage in the IT sector**



Source: RVC, Russian Venture Capital Association (RVCA), PwC

**Figure 7. Average deal size in the IT sector, USD million**



Source: RVC, Russian Venture Capital Association (RVCA), PwC

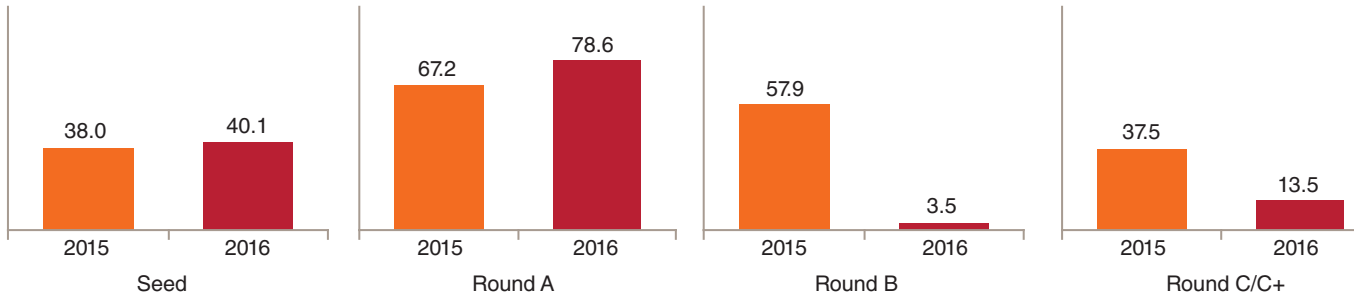
The start-up stage was the only stage that experienced a decline in the number of deals from 2015 to 2016: by 25% from 16 to 12 deals. As for other stages, their numbers increased in 2016: seed-stage deals grew by 14% from 14 deals in 2015 to 16 deals in 2016; early stage deals increased by 20% from 44 to 53 deals; and expansion-stage deals increased by 26% from 23 to 29 deals.

Early and expansion stages deals accounted for 92% of the total value of investments in the IT sector, while seed and start-up stages deals accounted for 8%.

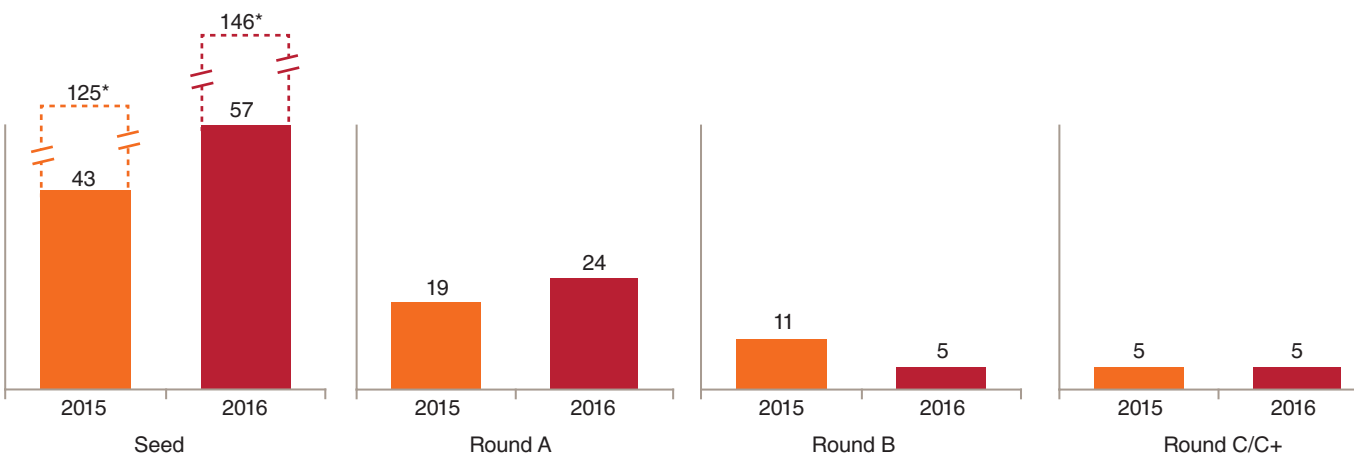
The fact that the share of investments in later stages remains unchanged shows that investors are growing more cautious in response to the uncertainty of macroeconomic indicators and now tend to prefer projects with more clear product and, in some cases, a proven business model.

**Figure 8. Venture capital deals by investment round in the IT sector<sup>2</sup>**

**Value of deals by investment round in the IT sector, USD million**



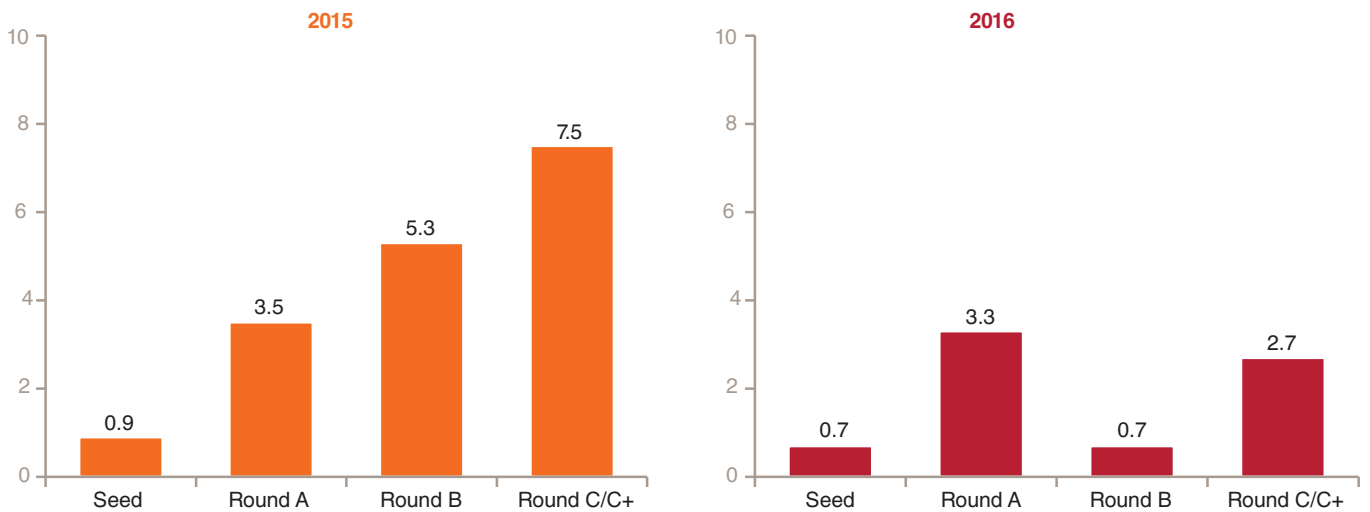
**Number of deal by investment round in the IT sector**



\* taking into account deals below USD 50,000

Source: RVC, Russian Venture Capital Association (RVCA), PwC

**Figure 9. Average deal size by investment round in the IT sector, USD million**



Source: RVC, Russian Venture Capital Association (RVCA), PwC

<sup>2</sup> The distribution of financing by rounds does not include 19 deals worth USD 5.3 million in 2015 and 19 deals worth USD 13.9 million in 2016 for which no data is available.

# Venture capital investment by IT sub-sector

In 2016, the cloud technology and software sub-sector raised the largest share of total investments (USD 41.8 million, or 28% of the total value), while in 2015, e-commerce was the leading IT sub-sector (with a total investment value of USD 73 million). This change within the industry sector can be explained by the fact that e-commerce technologies are already fairly advanced, while software, cloud technologies, data migration and related cybersecurity issues have become some of the hottest topics for business executives.

Financial technologies (FinTech) and reference services/social media share second place in terms of investment value, with each sub-sector raising USD 15 million and accounting for 10% of the total value of investments.

In terms of the number of deals, the sub-sector of cloud technologies and software ranks first again, with 19 deals (8 more than in 2015). The e-commerce and advertising technologies sub-sectors tied for the second place with 13 each. In the sub-sector of advertising technologies, the number of deals grew substantially, from 2 to 13 deals. This supports the notion that investors are showing more interest in sectors where they can promote goods in the new era of digital business.

Tourism is the leading sub-sector in terms of the average deal size, with 4 deals worth USD 3 million. The telecommunications sub-sector ranks second, with 4 deals worth USD 2.7 million. The sub-sector of cloud technologies and software – leader in terms of the total number and value of investment deals – rounds out the top three in this category with 19 deals worth an average of USD 2.2 million.

Deals with GridGain Systems and NGINX were the largest deals in the IT sector in 2016.

**Table 1. Major deals in the IT sector**

Company name	Investors	Deal value, \$ million	Deal date
GridGain Systems	Sberbank, Almaz Capital, MoneyTime Ventures and RTP Ventures	15	February
NGINX	Runa Capital, Telstra Ventures, NEA, e.ventures and Index Ventures	8	April

**Table 2. Investments by major IT sub-sector**

	2015 <sup>3</sup>			2016		
	Number of deals	Total deal value, \$ million	Average deal size, \$ million	Number of deals	Total deal value, \$ million	Average deal size, \$ million
Cloud technologies, software	11	34.4	3.1	19	41.8	2.2
Financial technologies	6	9.8	1.6	9	15.0	1.7
Reference services / social media	8	43.2	5.4	7	15.0	2.1
Other services	11	2.8	0.3	16	13.9	0.9
Tourism	6	11.1	1.8	4	12.1	3.0
Telecommunications	3	3.3	1.1	4	10.9	2.7
Medical services	3	2.4	0.8	5	10.3	2.1
E-commerce	17	73.0	4.3	13	10.3	0.8
Media	1	0.2	0.2	3	6.1	2.0
Advertising technologies	2	11.0	5.5	13	4.9	0.4
Electronics and hardware	9	6.5	0.7	10	4.2	0.4
Educational services	7	4.1	0.6	4	2.9	0.7
Mobile applications	3	1.5	0.5	3	2.2	0.7

Source: RVC, Russian Venture Capital Association (RVCA), PwC

<sup>3</sup> The distribution by sub-sector does not include 10 deals worth a combined USD 2.6 million for which no data is available.

# Biotechnology and industrial technology

The biotechnology sector experienced declines in both in the number and value of deals between 2015 and 2016 – from 39 to 26 deals, and from USD 18.1 million to USD 9.5 million. Meanwhile, the average deal value in the sector contracted by 20% to USD 0,37 million. Investments in the biotechnology sector mostly came from government funds and government-supported venture capital funds. RVC-backed funds were the most active in the sector.

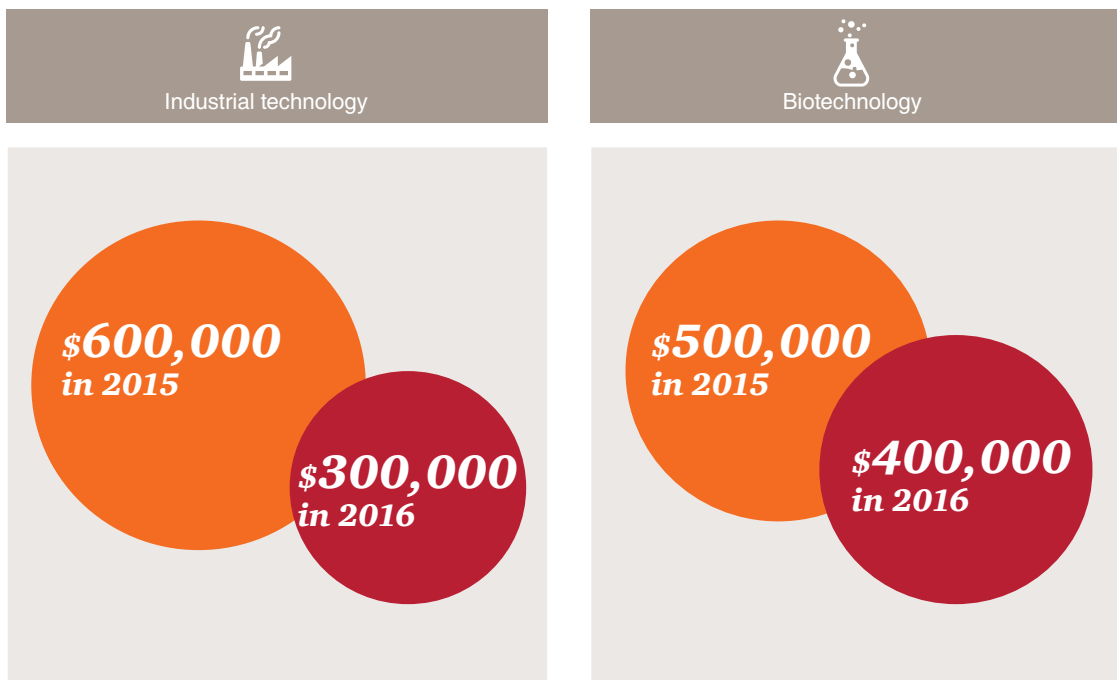
In 2016, the biotechnology sector saw only two investment rounds undertaken by private equity funds: Primer Capital invested in FK Laboratoriz, a biotech developer working on a drug to prevent and treat thrombosis, and in CSB Genomika, that is developing new methods for non-invasive cancer diagnostics.

Early stage deals accounted for the bulk of investments, including 70% of total investments in 2016 and 79% in 2015.

Seed and start-up investments accounted for 30% of financing. No expansion-stage deals were recorded.

In the industrial technology sector, the total number of deals continued to grow and increased from 15 deals in 2015 to 21 in 2016. The total investment amount dropped by 29% to USD 6.1 million, and the average deal value declined by 49% to USD 0,29 million. The value of expansion-stage investments fell from USD 0,4 million in 2015 to USD 0,3 million in 2016. In 2016, early stage investments amounted to USD 2.7 million (down from USD 7.5 million in 2015), while seed and start-up investments were valued at USD 3.1 million (in 2015, data was recorded only for seed stage deals, that were worth USD 0,7 million).

Figure 10. Average deal size in industrial technology and biotechnology sectors, USD million



Source: RVC, Russian Venture Capital Association (RVCA), PwC

# Investor exits and major deals

There were no major deals (worth more than USD 100 million) in 2016. In 2015, there were two such deals, with a combined value of USD 200 million.

In 2016, the number of investor exits increased by four deals. The total value of exits decreased by 13 times to USD 120 million from USD 1.57 billion in 2015. It should be noted, however, that the exit of Accel Partners, Kinnevik and Northzone from Avito accounted for 76% of the total value in 2015. Excluding this deal, the value of exits in 2016 decreased by three times from 2015.

As in past years, the largest number of investor exits occurred in IT companies (16 out of 18 exits)<sup>4</sup>. The remaining two exits were in the industrial technology sector: OAO Rosnano exited NikoMag, a producer of innovative nanostructured chemicals, while

RVC Infrafund sold its share in Regional Engineering Center of Additive and Laser Technologies, Inc (REC ALT, Inc), an engineering company.

The lack of potential strategic investors interested in buying high technology companies is still one of the main hindrances to further growth in the Russian venture capital industry.

**Table 3. Major deals, 2016**

Major investor exits valued at over USD 30 million

Company name	Deal type	Company sector	Buyer	Seller	Deal value, USD million	Deal date
NikoMag	Exit	Industrial technology	NIKOCHEM	OAO Rosnano	39	August
Pixonix	Exit	IT	Mail.ru Group	Kite Ventures; Andrey Romanenko; AddVenture business angel fund	30	September

Source: RVC, Russian Venture Capital Association (RVCA), PwC

<sup>4</sup> Information is not available for 12 investor exit deals..

# Grants

According to our methodology, grants are not directly included in our assessment of the venture capital market volume, as they are a non-market instrument for supporting innovation-related activity.

At the same time, grants are important for the sustainable development of the venture capital market and the innovation ecosystem in general.

**Table 4. Grants, USD million**

Grant donors	2015		2016	
	Number	Amount	Number	Amount
Bortnik Fund	5,792	155.4	4,075	92.3
Skolkovo	256	21.3	576	29.1

Source: RVC, Russian Venture Capital Association (RVCA), Foundation for Assistance to Small Innovative Enterprises in Science and Technology, Skolkovo Foundation, PwC

Traditionally, the greatest portion of grants was issued by the Foundation for Assistance to Small Innovative Enterprises in Science and Technology (the Bortnik Fund). In 2016 the Fund issued 4,075 grants worth a combined USD 92.3 million. The Skolkovo Foundation issued 576 grants worth USD 29.1 million.

The number of grants issued in 2016 was 4,651. The total amount of grants issued by these two foundations dropped by 31% to USD 121.4 million from USD 176.7 million in 2015, when 6,048 grants were issued.

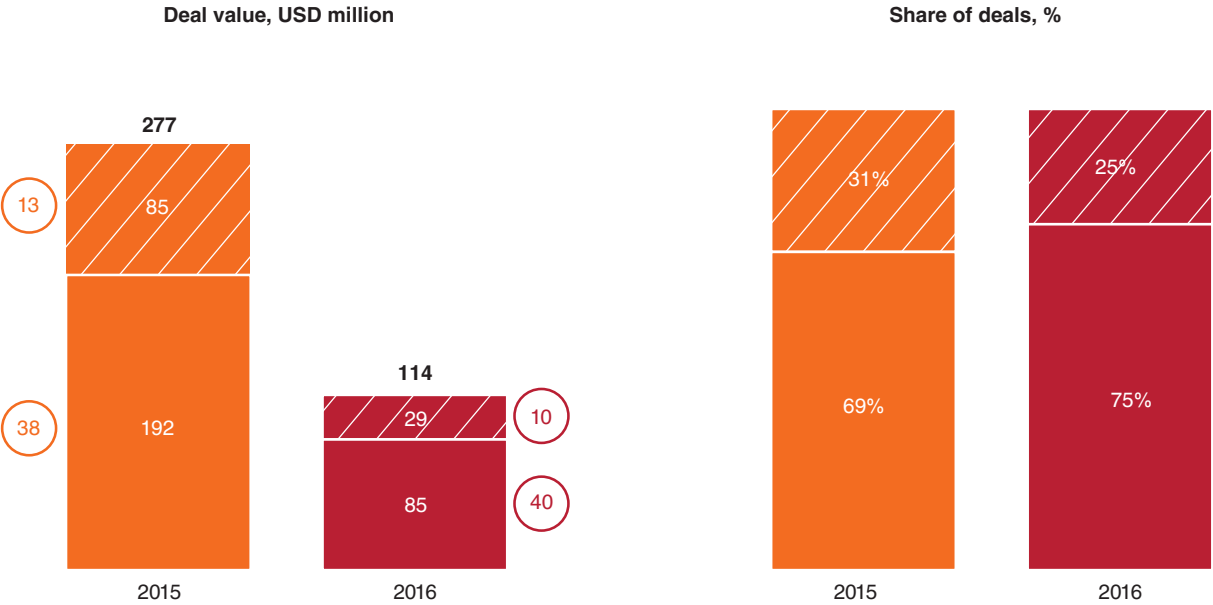


# Foreign assets investments

Russian investors continue to invest in foreign venture capital assets. However, in 2016, the total value of deals by Russian investors involving foreign assets declined to USD 114 million from USD 277 million in 2015<sup>5</sup>. The number of foreign deals in 2016 was comparable to the number in 2015 (50 deals versus 51), while the value of the average investment dropped from USD 5.8 million to USD 2.6 million.

**Figure 11. Venture capital investments in foreign companies by Russian investors**

- Number of deals
- Russian investors
- ▨ Russian investors together with foreign investors



Source: RVC, Russian Venture Capital Association (RVCA), PwC

<sup>5</sup> Including deals in consortia with foreign investors

# Conclusion

The total number of venture capital deals remained practically the same from 2015 to 2016 (184 versus 180 deals). However, the volume of USD-denominated venture capital deals declined by 29% to USD 165.2 million. The main reason for this was a decrease in the average deal value, from USD 1.5 million in 2015 to USD 1.1 million in 2016.

In 2016, investors continued to show strong interest in projects at later development stages. In 2016, early and expansion stages deals accounted for 66% of deals (104 deals), whereas they accounted for 70% (105 deals) in 2015.

The market retains a sectoral structure. The IT sector continues to attract the largest number of investors and accounts for 90% of the market volume. The biotechnology and industrial technology sectors account for a combined 10% share of the market. This trend is driven by the increasing role of information technology in all areas of business and is likely to continue in the future.

Russian investors continue to invest in foreign venture capital assets. However, in 2016, the total amount of deals by Russian investors in foreign assets was lower than in 2015: USD 277 million versus USD 114 million.

Overall, remaining investor's activity on venture capital market and the projected investment recovery in 2017 suggest a cautiously optimistic forecast for the future of the Russian venture capital market.





# Methodology

This report was prepared according to The MoneyTree™ Report methodology ([www.pwc.com/globalmoneytree](http://www.pwc.com/globalmoneytree)).

The MoneyTree™: Russia report is issued by PwC in cooperation with RVC and based on information provided by the United Analytical Group established at the initiative of the Russian Venture Capital Association (RVCA) and supported by RVC.

The MoneyTree™: Russia report focuses on the venture capital market and venture capital ecosystem in general. The report's approach differs from the methodology of collecting and analysing the key parameters and activity of Russian venture funds developed by the RVCA.<sup>6</sup> For instance, the statistics on the venture capital market in this report can include deals carried out by investment companies, strategic and other non-financial investors, as well as deals with companies at a more mature development stages (e.g. at the expansion or later stage), provided that these investments meet the other criteria set out by the MoneyTree™: Russia approach. Also, the maximum/minimum deal amount is restricted in the MoneyTree™: Russia report.

In analysing the data, we consider venture capital investments actually received during the first round of financing from business angels, investment companies, and private, corporate and public venture capital funds of at least USD 50,000 and not exceeding USD 100 million. If a company has received investments in two or more rounds, each round is viewed as a separate deal. This study considered deals that were formally concluded between 1 January and 31 December 2016.

The term “venture capital investment” is understood here to mean the acquisition of a less than controlling equity stake or charter capital share in a new or growing company. Funds invested are primarily directed toward growing the business, and not toward the purchase of shares owned by the company's current shareholders (founders). This report covers companies active in Russia's IT, biotechnology and industrial technology sectors.

Please note that this report does not include information about outbound deals involving Russia-based investors oriented toward foreign markets.

This report provides information about the size of grants issued. The term “grant” is understood here to mean a free subsidy for pursuing scientific research or R&D work. However, as non-market sources of funding, grants have not been factored into the total market volume. This report also covers deals related to investor exists. However, similar to grants, these transactions are not factored into the total venture capital market volume.

All financial indicators in our report are shown in USD.

## Definition of sectors and sub-sectors

The biotechnology sector includes companies involved in the development of medical devices and pharmaceuticals, medical research, and the provision of innovative medical services, as well as companies launching innovations in the agricultural and food technology sub-sectors.

The industrial technology sector includes entities involved in the development of devices and technologies for application in clean technologies; manufacturing of machinery and equipment for various purposes in industrial production; chemical production; and automated industrial operations.

The IT sector includes the following sub-sectors: e-commerce; development and application of cloud technologies; telecommunications; cellular applications; social network services and applications for the creation and development of social networks, Internet groups, information and recommendation services; tourism (hotel reservations, tickets, recommendations and reviews of tourist services); development of electronic and computer equipment; services and resources for the collection, processing and transmission of audio and video material (media); medical and healthy lifestyle services; educational services; and financial services.

## Stages in the life cycle of a project/company and their definitions

- **Seed stage:** The company has a concept or idea for a product, but no final product; work is under way on a prototype.
- **Start-up stage:** The company has a pilot version of a product, or an initial demonstration version; testing is under way.
- **Early stage:** The company has a product that is ready to bring to market, and demand is being tested.
- **Expansion stage:** The product is available on the market, and there is visible growth in sales and demand.
- **Later stage:** The company is becoming a major organisation, showing the characteristics of a public company.

<sup>6</sup> <http://www.rvca.ru/upload/files/lib/methodology-of-data-collection-and-analysis.pdf>



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AO Russian Venture Company (RVC) is a government-operated fund of venture capital funds, a Russian Federation development institution, and one of the key instruments for building Russia's national innovation system. RVC's charter capital comprises over RUB 30 billion. The Russian Federal Agency for State Property Management (Rosimuschestvo) holds a 100% equity stake in RVC. To date, RVC has formed 18 funds with a combined value of RUB 26 billion. RVC's stake in these funds is RUB 16.1 billion. The number of portfolio companies approved for RVC investment funds came to 168. The total value of funds approved for investing in innovative companies is RUB 15.2 billion.

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Overview of Russian IT venture capital deals in 2011



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Overview of Russian venture capital deals in 2012



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Overview of Russian venture capital deals in 2013



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Overview of Russian venture capital in 2014



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**Venture Capital Market Navigator**

Overview of Russian venture capital deals in 2015



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