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Innovation Potential in Russia

Jari Varis, DSc in Tech., MBA, Director
of NORDI, LUT

Katja Novikova, PhD in Economics,
Research Director of NORDI, LUT

Dmitri Medvedev, Presidential Address to the Federal Assembly of the Russian Federation



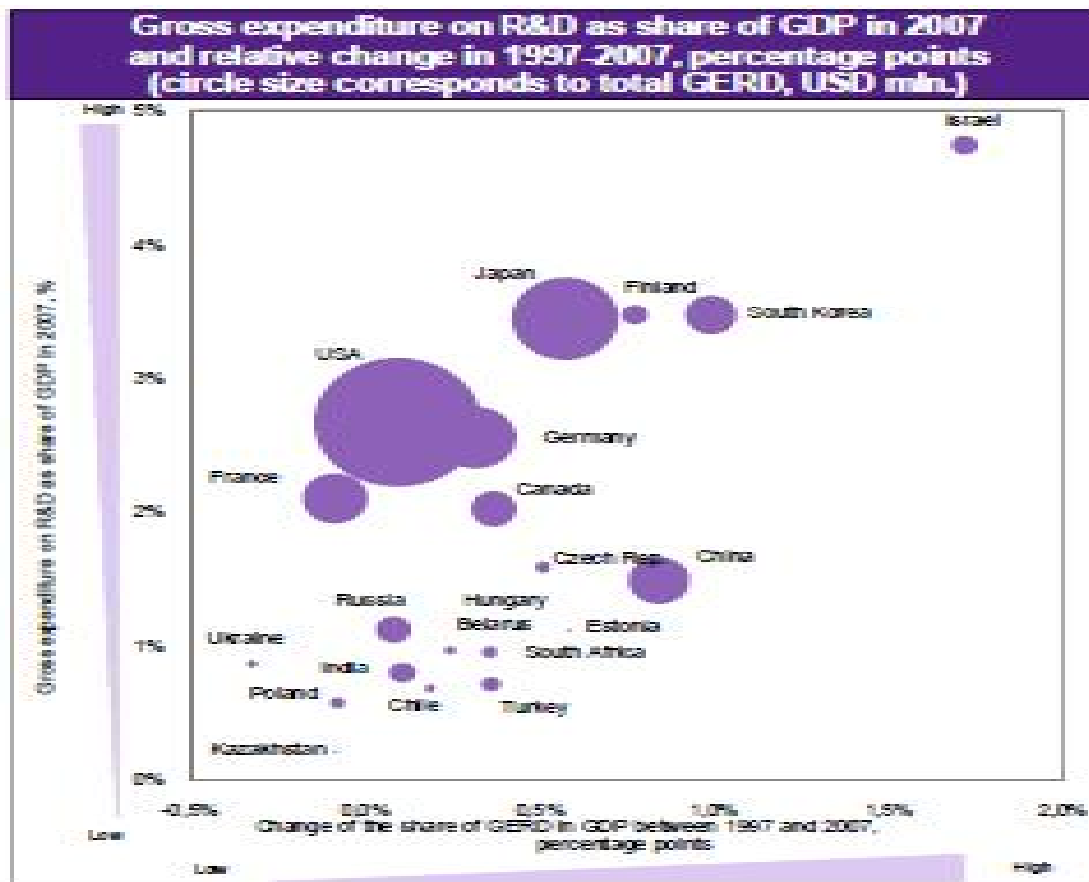
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“I published my proposal to reflect on how we can overcome our chronic backwardness, dependence on raw materials exports, and corruption, how we can prepare ourselves for the fierce competition on global markets, and create the best possibilities for ensuring that each of us can make full use in practice of our knowledge, opportunities, and experience without depending on higher-ups.

In other words, I proposed that we reflect on the steps we need to take right now to improve the quality of life in Russia and make our country one of the world’s leaders. ...”

Moscow, November 12, 2009

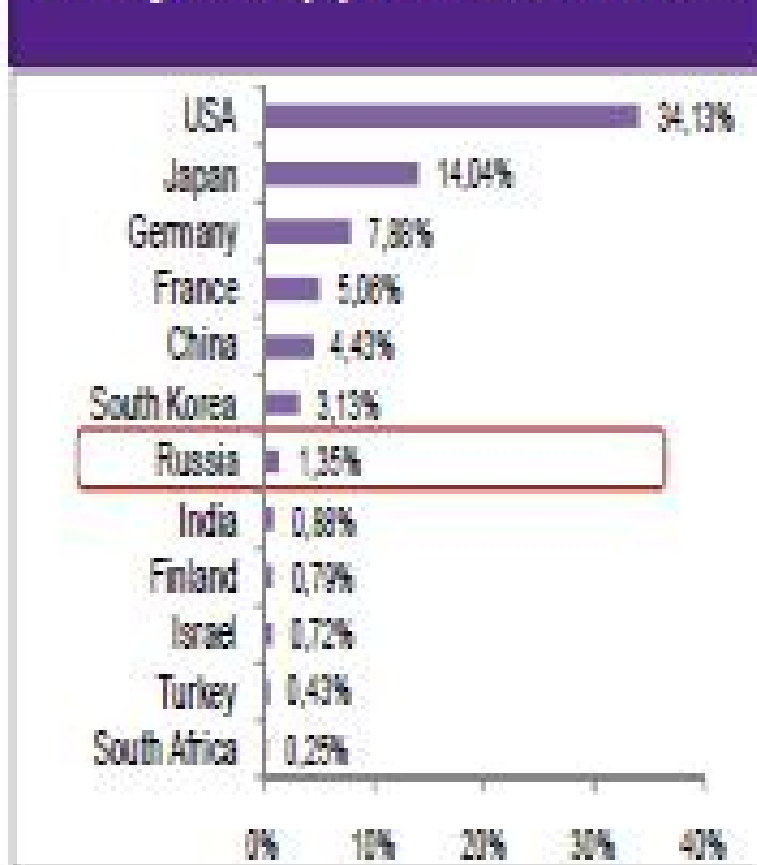
Gross expenditures on R&D (GERD)



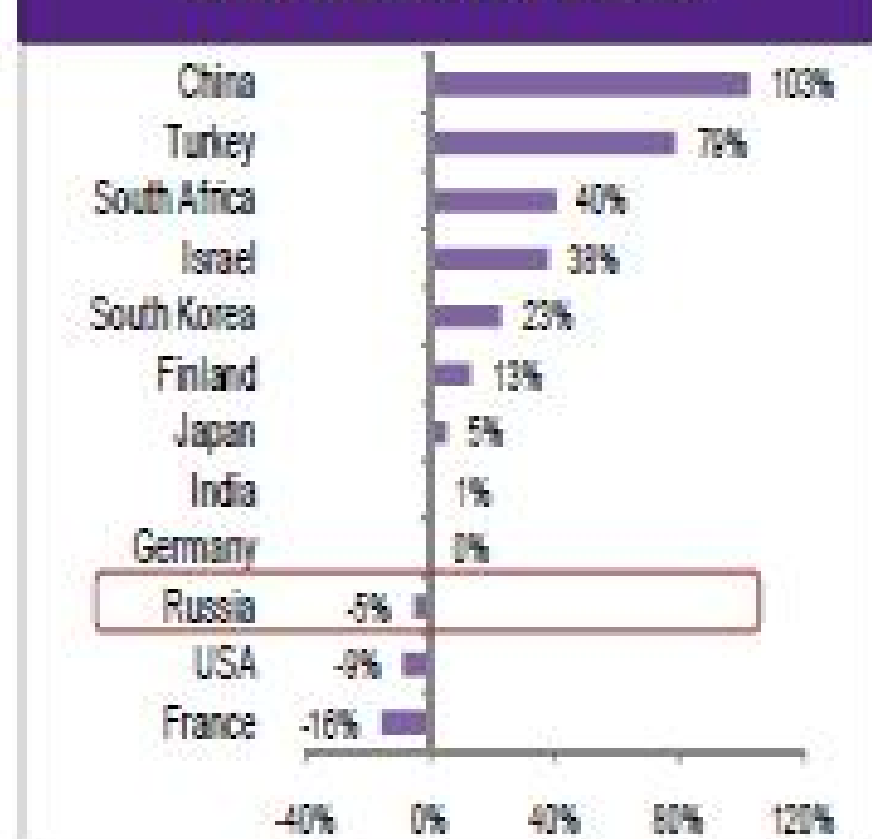


Gross expenditures on R&D (GERD)

Country's share (%) of world's GERD in 2007



Change of the country's share in world's GERD between 1997 and 2007



The state of innovation in Russia according to statistics and WEF Executive Opinion Survey 2009-2010



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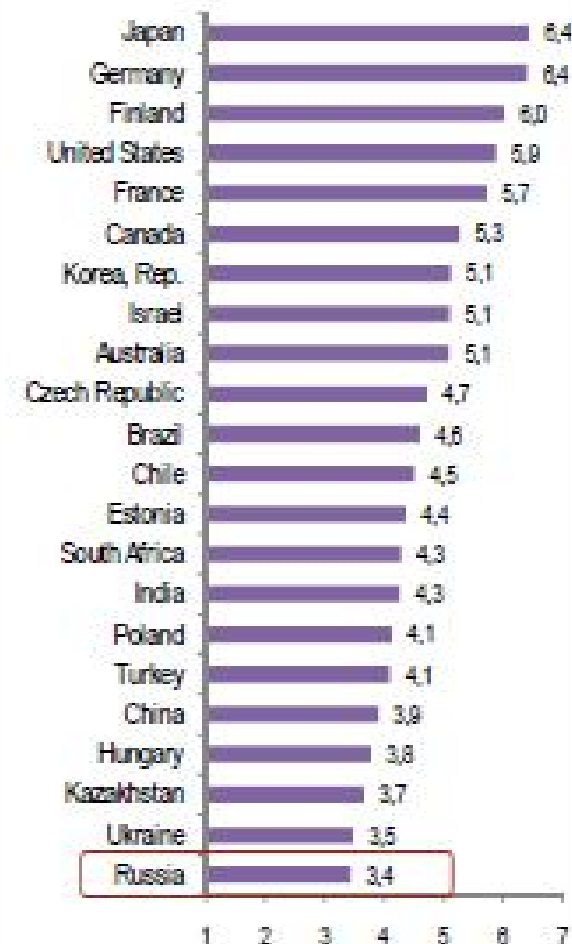
Business expenditures on R&D as % of GDP, 2007



Firm-level technology absorption, WEF executive opinion survey, 2009



Production process sophistication, WEF executive opinion survey, 2009



Research Setting



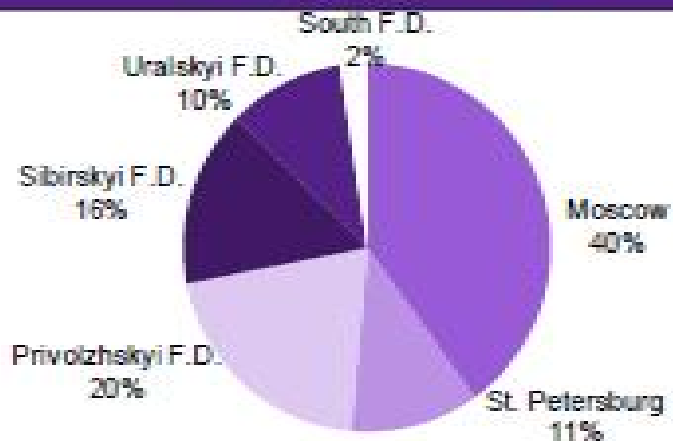
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- The data for our analysis were taken from the Russian Innovation Survey 2009- 2010, which is a part of joint effort by Bauman Innovation and OPORA (the All-Russian association of SME unions) to evaluate the strengths and weaknesses of the national innovation system in Russia.
- The objective of the survey was to evaluate innovation activity and innovation performance in Russia, as well as to identify the priorities of the government policy to promote innovation.
- Due to the research budget constraints it was decided to enrol a sample of 250 executives.

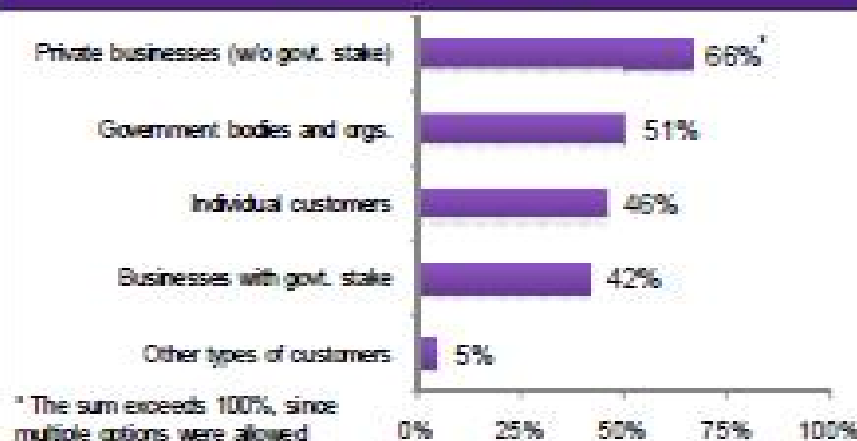
Research Setting



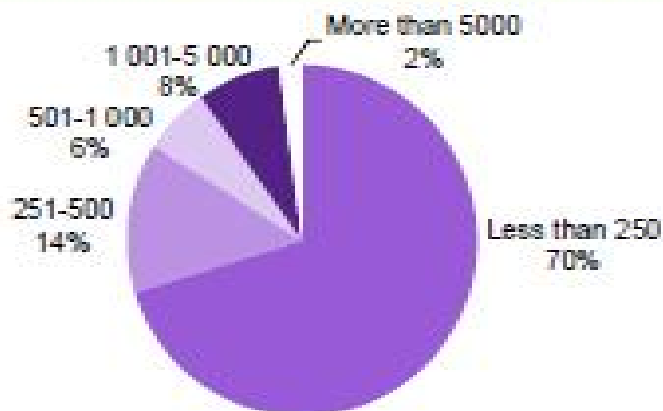
Location of companies,
by city or federal district



Target customers,
by customer type



Size of companies:
number of persons employed (FTEs)



Regional coverage of sales



Empirical Results

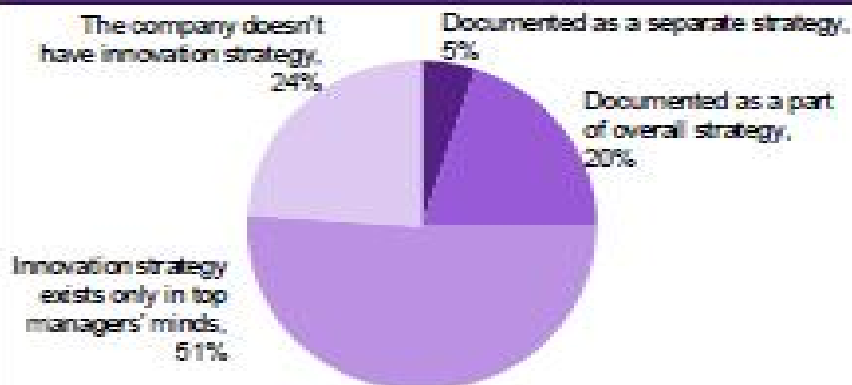


Sample characteristics (innovation), %

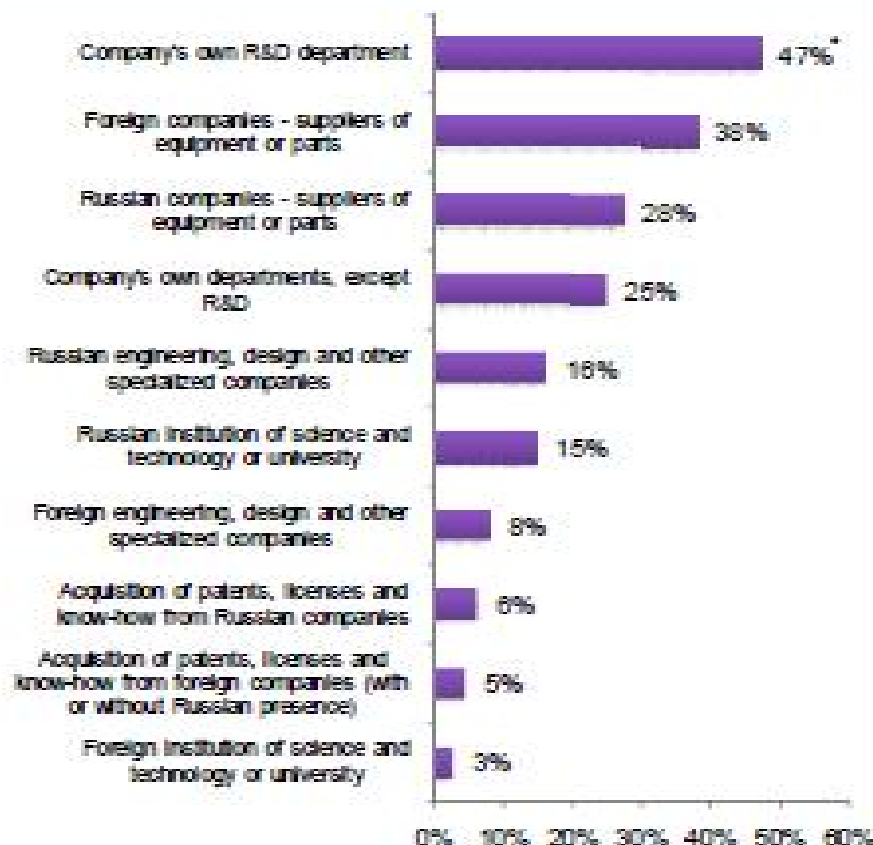
Presence of R&D department



Presence of innovation strategy



Main sources of innovation

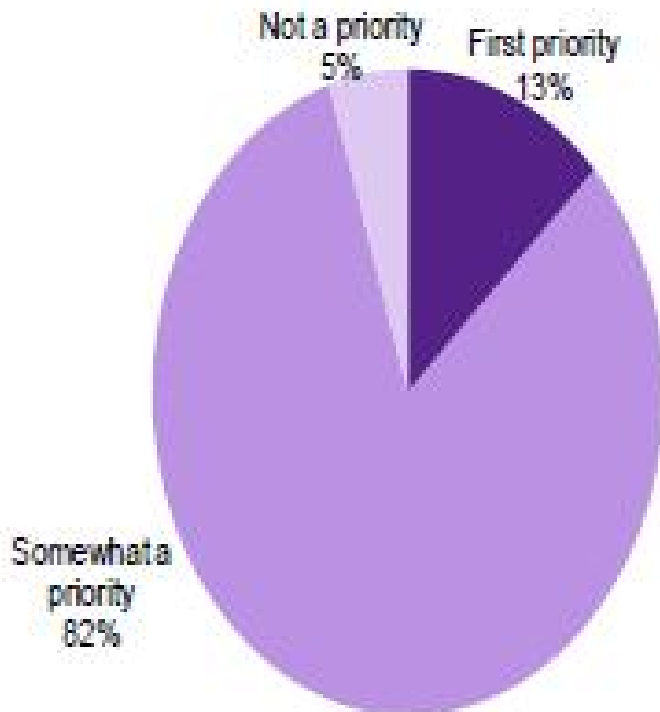


* The sum exceeds 100%, since up to three options were allowed

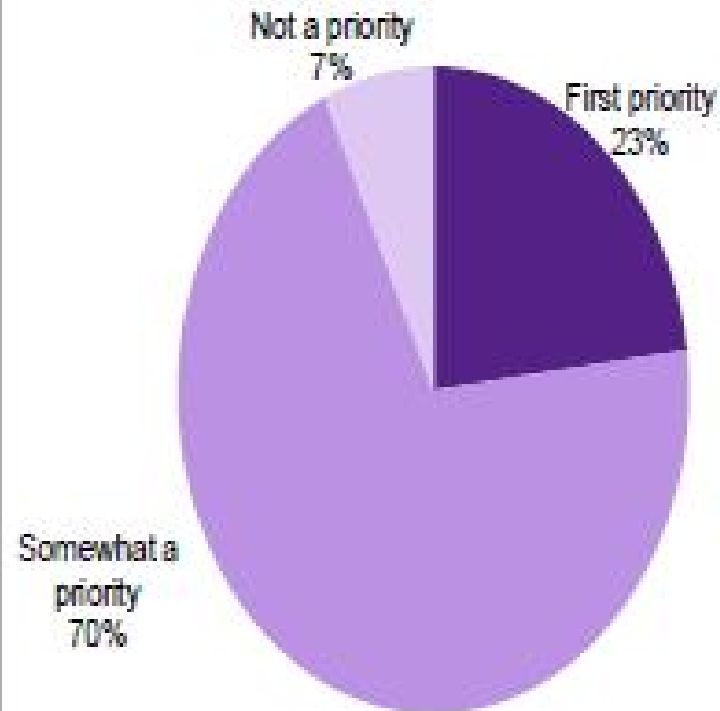
Priority of Innovation



Priority of innovation in Russian companies



Priority of innovation in the companies globally*



* Results of the survey of 2 500 top managers in 58 countries

Discussion in groups



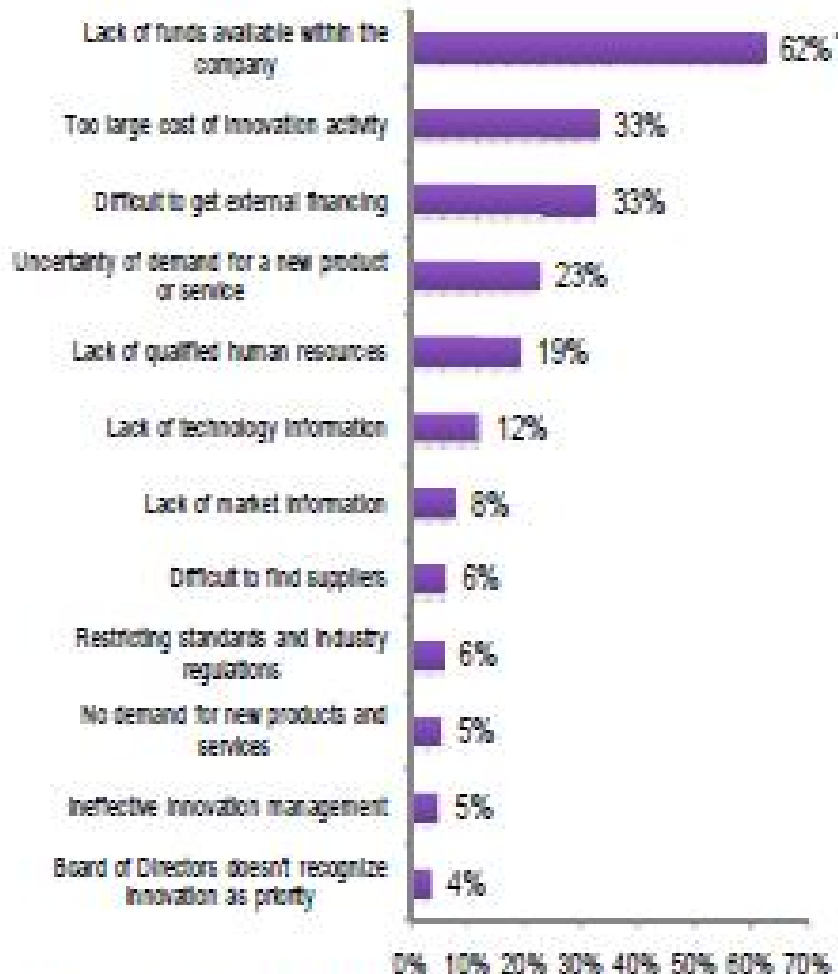
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- 1. What kind of obstacles to innovation there are in Russian companies?*
- 2. What kind of recommendations could be offered for the strong innovation development in Russian companies? Propose some steps for innovation improvement in companies...*

Obstacles to Innovation



Main obstacles to innovation activities for mid-sized and large companies in Russia



* The sum exceeds 100%, since up to three options were allowed

Rankings of obstacles to innovation for EU-companies

Innovative companies*		Non-innovative companies*	
1	Lack of funds available within the company	1	No demand for new products and services
2	Difficult to get external financing	2	Lack of funds available within the company
3	Uncertainty of demand for a new product or service	3	Difficult to get external financing
4	Difficult to find suppliers	4	Difficult to find suppliers
5	Too large cost of innovation activity	5	Uncertainty of demand for a new product or service
6	Lack of qualified human resources	6	Too large cost of innovation activity
7	No demand for new products and services	7	Restricting standards and industry regulations
8	Restricting standards and industry regulations	8	Lack of qualified human resources
9	Lack of market information	9	Lack of technology information
10	Lack of technology information	10	Lack of market information

* See Community Innovation Survey 2004-2006 for explanations

Barriers to innovation: human resources and education



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Availability of engineers and technicians



Cost to hire engineers and technicians



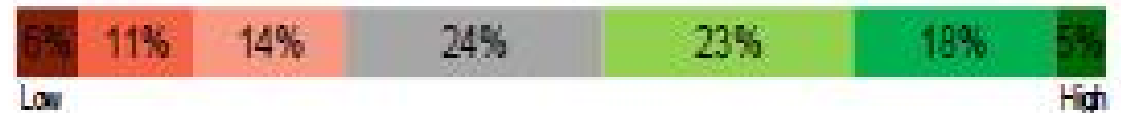
Education quality in vocational schools and technical colleges



Quality of higher education in natural sciences and engineering



Quality of math and science education in school



Some survey-based policy recommendations



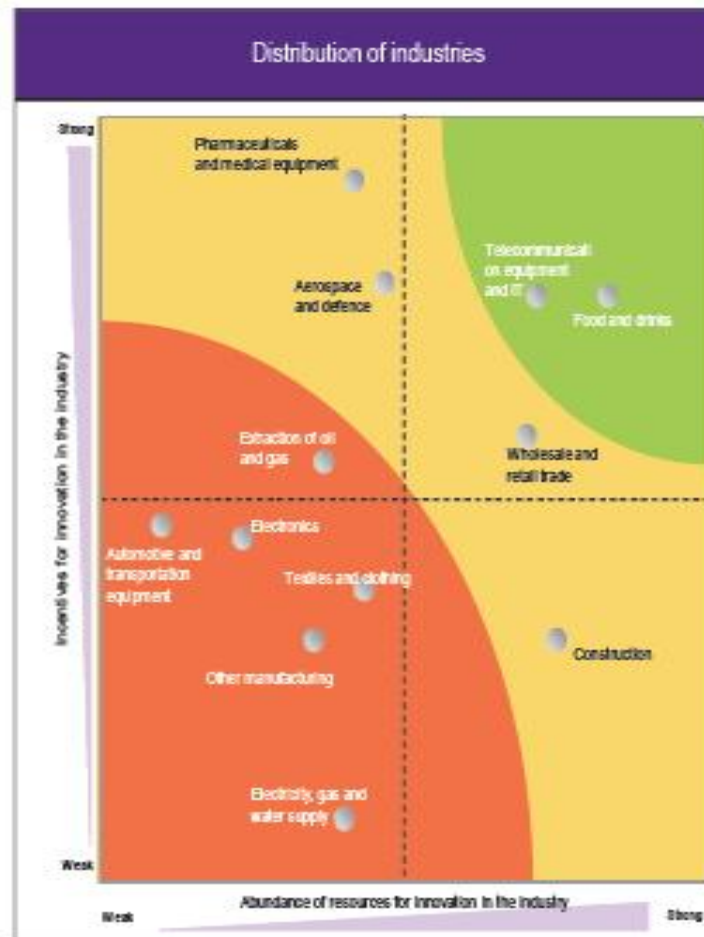
- ***The government should take into account industry-specific characters, when designing its innovation policy***

Incentives for innovation in the industry

- Intensity of local competition
- Private sector demand for innovative products
- Intellectual property protection

Resources for innovation in the industry

- Availability of funds for innovation
- Availability of human resources
- Quantity and quality of components suppliers and equipment
- Opportunities to procure R&D externally

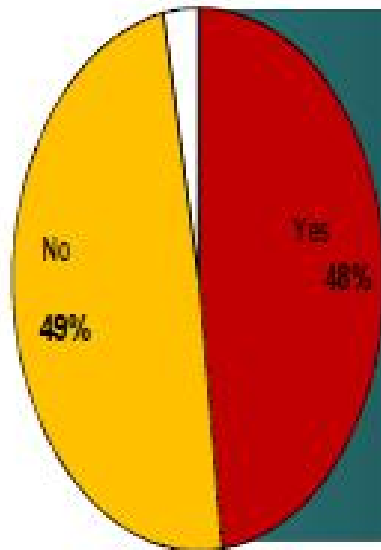


Some survey-based policy recommendations

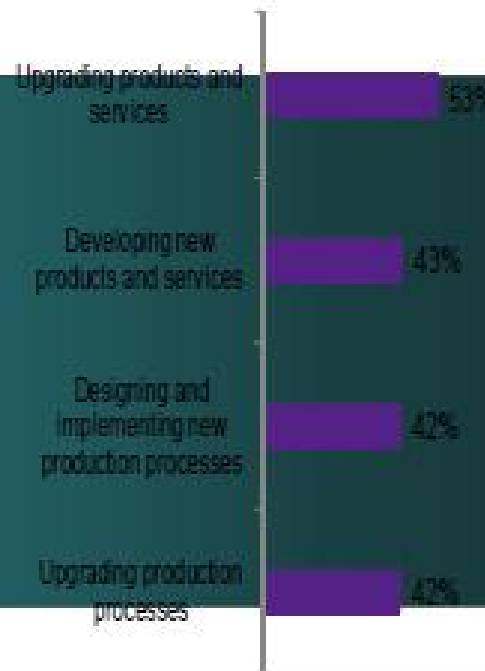


- ***Establish associations and specialised technology trade agents between Russia and her key technology partners***

Technological cooperation with partners abroad (during last three years)

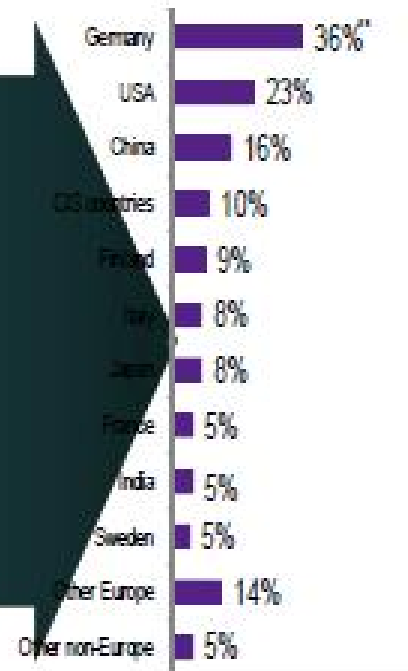


Areas of cooperation



* The sum exceeds 100%, since multiple options were allowed

Location of main technology partners



** The sum exceeds 100%, since up to two options were allowed

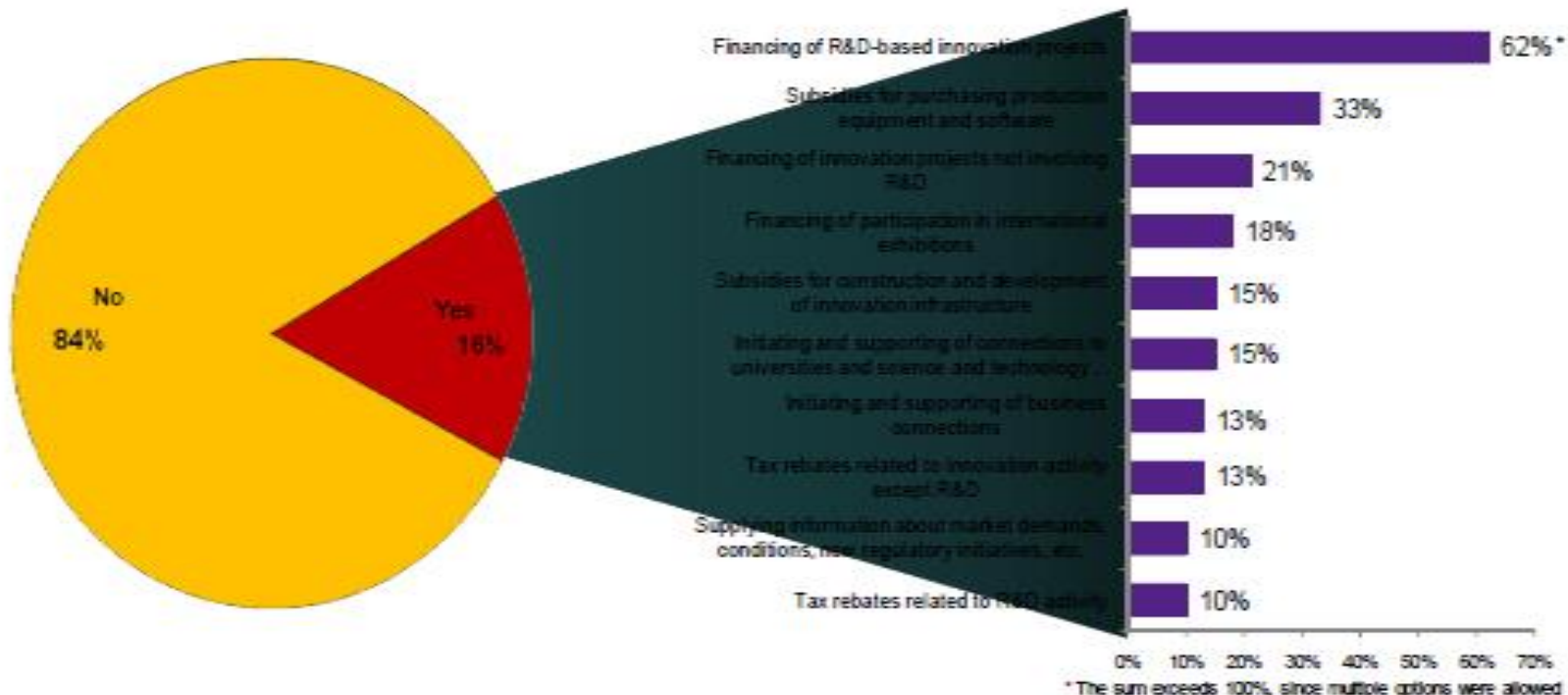
Some survey-based policy recommendations



- **The surveyed firms regard the R&D funding as well as policy steps to increase effectiveness of the R&D-related institutions as the highest priority measures in the Russian government's innovation policy**

Companies receiving support via government's innovation support programs

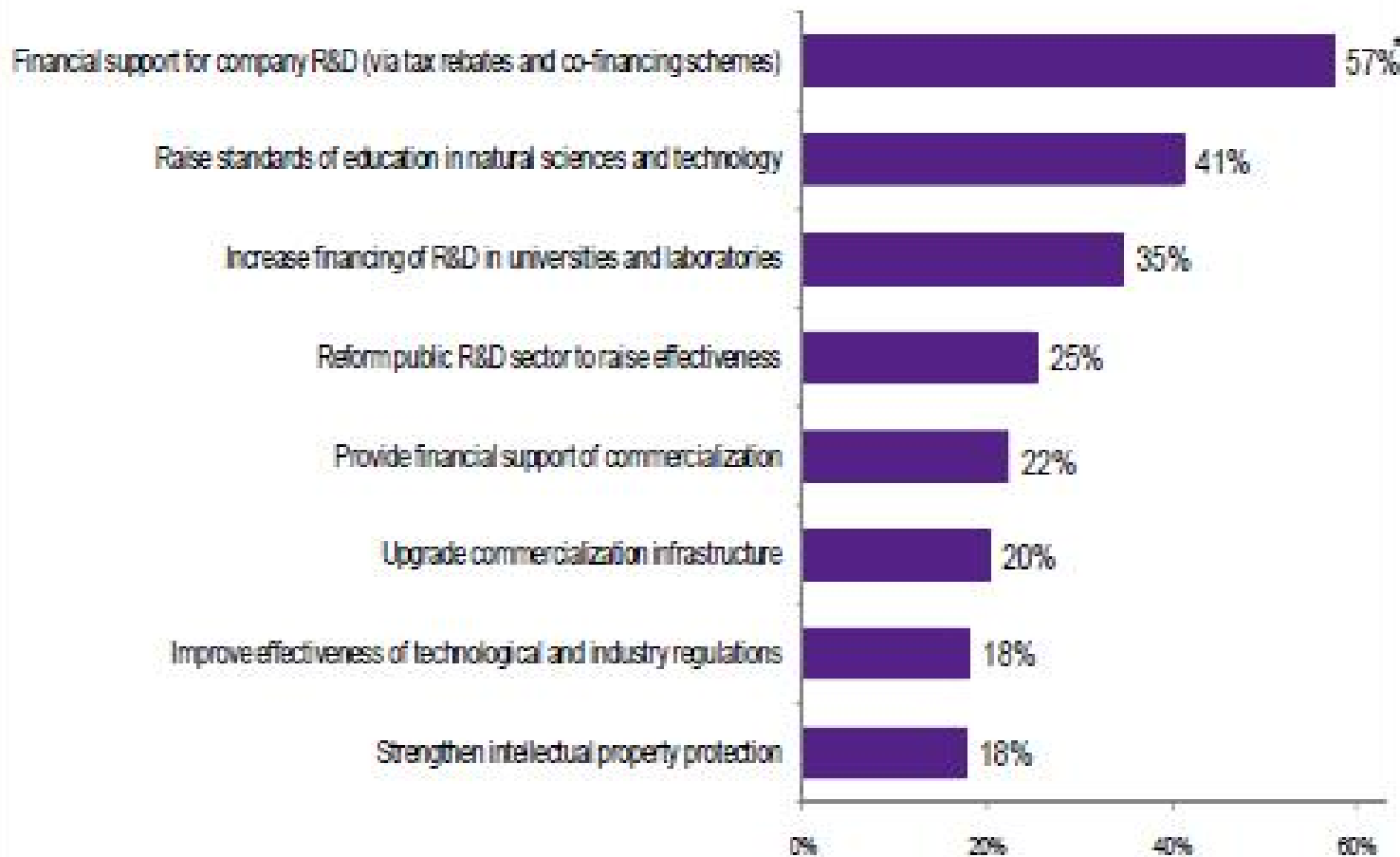
Forms of innovation support received





Policy priorities to foster innovation

Policy measures to foster innovation, designated as priority by companies



* The sum exceeds 100%, since up to three options were allowed

Conclusion...



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“... there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order ... arising partly from fear of adversaries ... and partly from the incredulity of mankind, who do not truly believe in anything new until they have actually experience of it.”

Niccolo Machiavelli
Philosopher