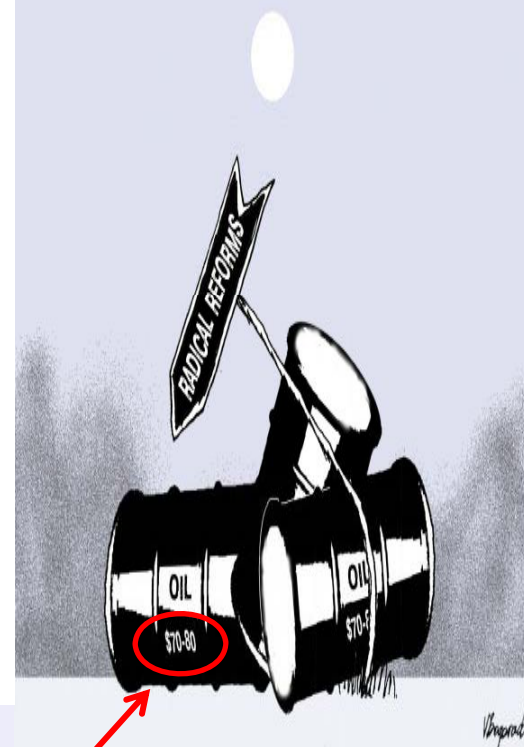
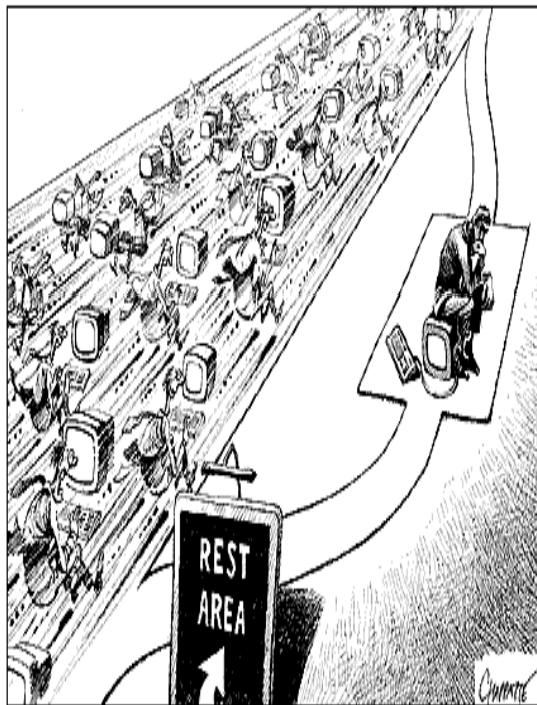


EU-Russia Economic Relations: A Special Emphasis on Innovation Co-operation



© Kari Liulto
Professor, Director
Pan-European Institute
www.tse.fi/pei
Moscow 8.4.2011

Asymmetric foundation for partnership



Population size

7%

2% of world total

Economic size
(GDP at PPP)

20%

3%

Natural gas reserves
Consumption

Below 2%
17%

24%
13%

Oil reserves
Consumption

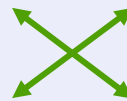
Below 1%
18%

6%
3%

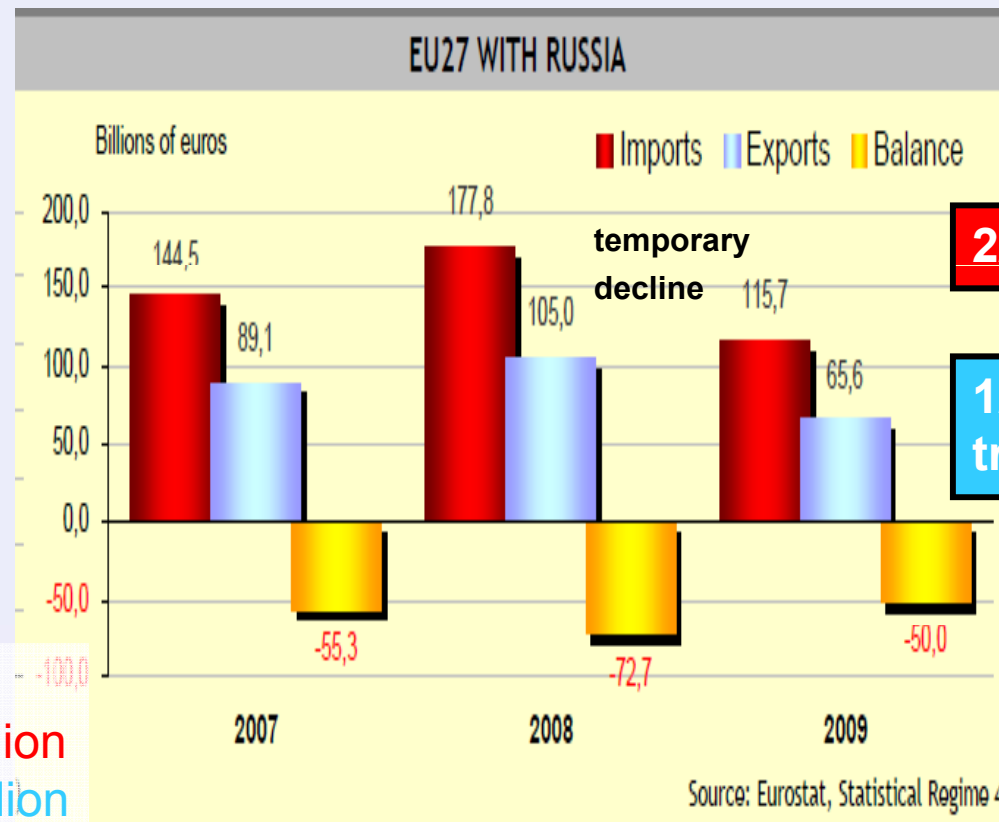
Military expenditure

16% *

4%



Trade growth without restructuring



2/3 energy

1/2 machinery & transport equipment

2003

Imports € 71 billion

Exports € 37 billion

EU and Russia are trade interdependent (10 major trade partners in 2009)



Energy imports from Russia to EU meet 1/5 of EU's primary energy consumption

	Extra EU27	2.297.181,8	100,0%
1	United States	364.648,0	15,9%
2	China	296.517,2	12,9%
3	Russia	181.273,0	7,9%
4	Switzerland	162.396,9	7,1%
5	Norway	106.351,1	4,6%
6	Japan	92.768,2	4,0%
7	Turkey	80.208,5	3,5%
8	South Korea	53.901,0	2,3%
9	India	52.932,7	2,3%
10	Brazil	47.345,8	2,1%

Total 10

62,6%

	World (all countries)	316.058,7	100,0%
1	EU27	145.128,7	45,9%
2	China	27.789,8	8,8%
3	Ukraine	13.352,8	4,2%
4	United States	11.588,1	3,7%
5	Japan	10.221,9	3,2%
6	Turkey	9.595,2	3,0%
7	Kazakhstan	8.795,6	2,8%
8	South Korea	7.364,8	2,3%
9	Switzerland	5.853,4	1,9%
10	India	4.483,1	1,4%

Total 10

77,2%

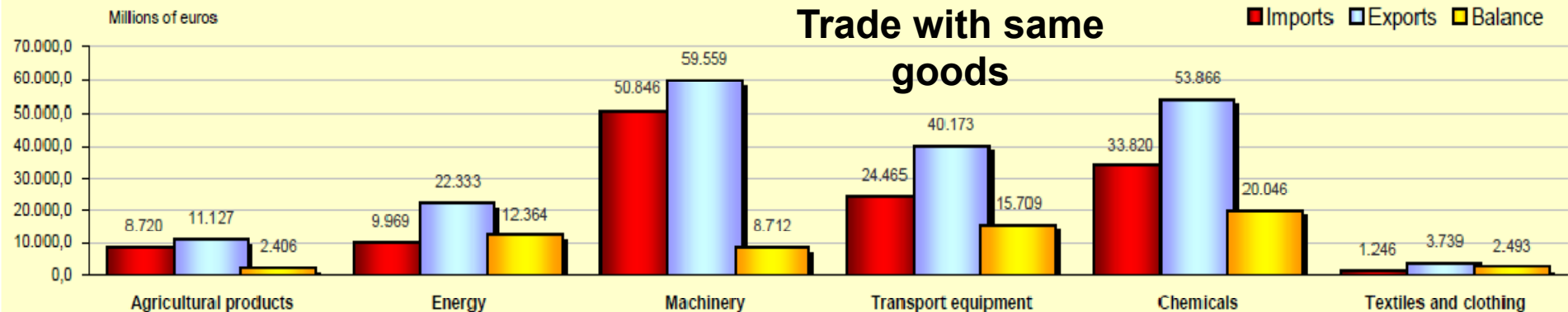
China is Russia's main single trade partner

Ukraine important

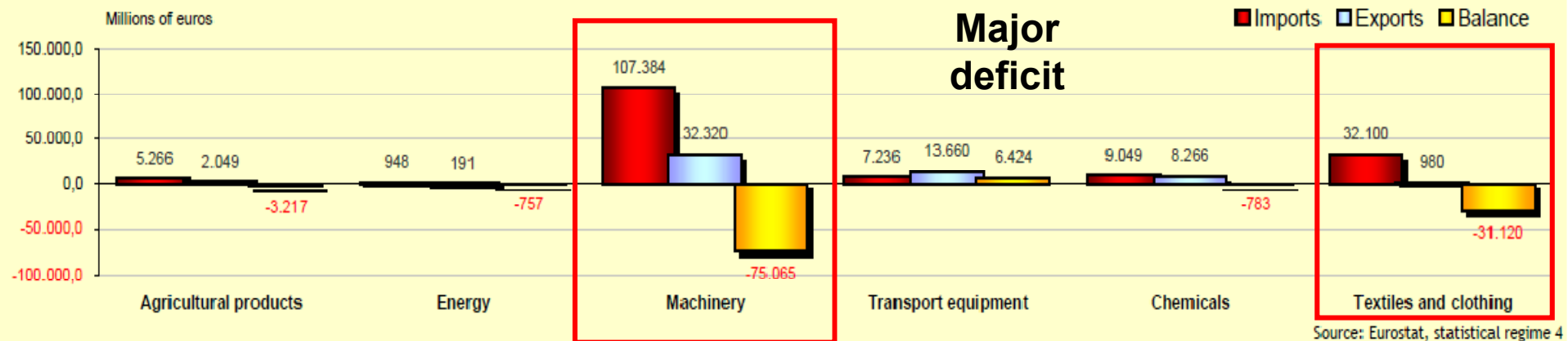
USA twice larger trade partner than Finland

EU's trade structure with 3 main partners

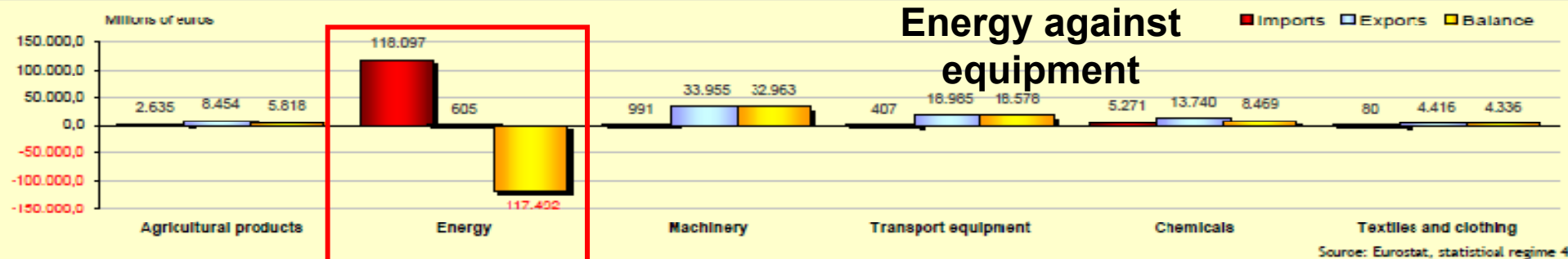
EU27 MERCHANDISE TRADE WITH UNITED STATES BY PRODUCT (2008)



EU27 MERCHANDISE TRADE WITH CHINA BY PRODUCT (2008)



EU27 MERCHANDISE TRADE WITH RUSSIA BY PRODUCT (2008)

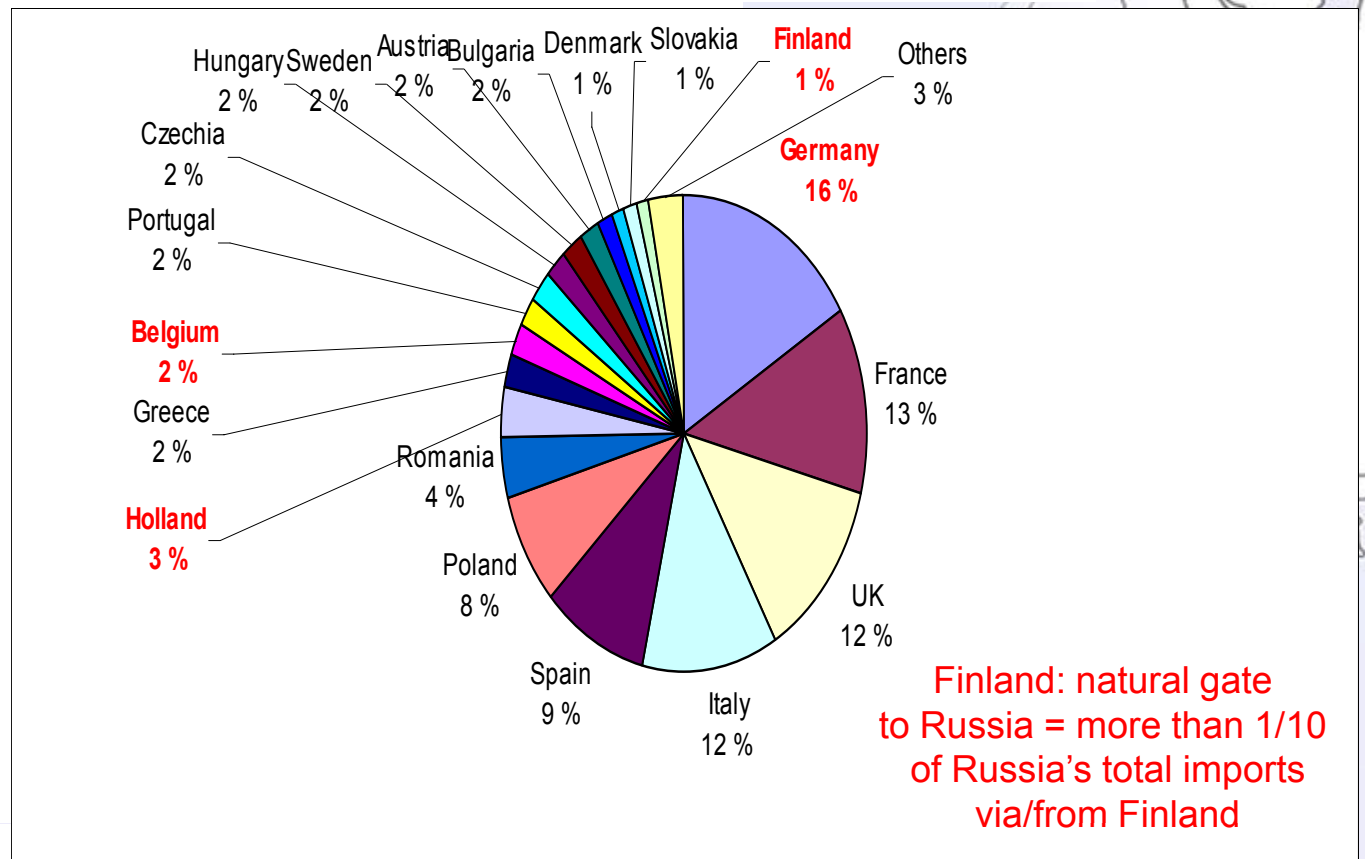
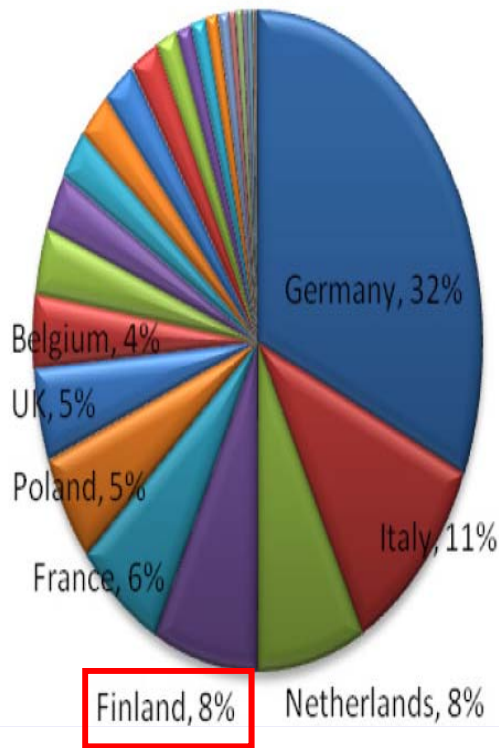


EU exports to Russia by member state

1. EU Member States' Exports to Russia in goods

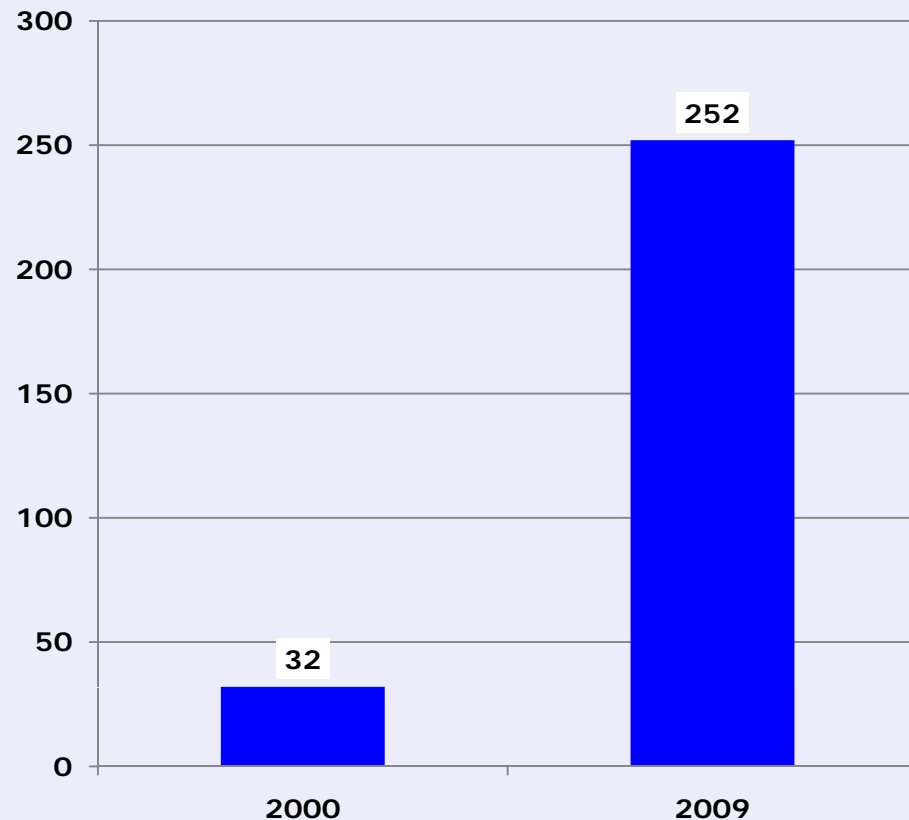
Population share
1.1.2009

Source: EU-Russia Centre



Finland's road transit to Russia = 3,5 x Finland's direct (own) exports to Russia
(Road transit via Finland to Russia was €17 bn in 2010)

Foreign direct investment (FDI) stock in Russia (\$ bn)



Role of FDI in Russia not insignificant
i.e. 13% of GDP (USA 16%, EU 35%)

EU's share 40-50% of FDI stock

Cyp-Rus phenomenon
(at least 1/4 of total FDI stock)

Moscow attracted (1/2) in 2010

St. Petersburg holds second place
with 5% share

Liberalisation of Strategic Sectors Law
necessary step but not sufficient step

Division of FDI inflow to Russia by industry (%)

	2003	2004	2005	2006	3Q2007	
Agriculture, Hunting and Forestry	0.5	0.3	0.2	0.6	0.3	0.7
Mining and Quarrying	19.3	24.5	11.2	16.6	17.3	16.4
<i>mining and quarrying of energy producing products</i>	17.3	21.6	9.6	14.1	16.0	
<i>mining and quarrying, except of energy producing products</i>	2.0	2.9	1.6	2.5	1.3	
Manufacturing	22	25.3	33.5	27.5	24.6	29.3
<i>manufacture of food products</i>	3.4	2.3	2.2	2.5	2.5	
<i>manufacture of chemicals and chemical products</i>	1.2	1.9	2.7	2.8	1.2	
<i>manufacture of metals and fabricated metal products</i>	10.3	12.6	6.4	6.8	12.6	
<i>manufacture of transport equipment</i>	0.7	2.1	1.8	2.6	0.9	
<i>manufacture of coke and mineral oil</i>	0.6	0.2	15.1	7.2	3.8	
Services	58.2	49.9	55.1	55.3	57.8	53.6
<i>construction</i>	0.3	0.6	0.4	1.3	1.2	
<i>wholesale, retail, repair activities</i>	36.1	32.9	38.2	23.7	42.3	
<i>transport and communication</i>	3.8	5	7.2	9.6	6.5	
<i>of which communication only</i>	2.3	3.4	6.1	8.5	2.9	
<i>financial intermediation</i>	2.6	2.5	3.4	8.5	2.4	

As of end 2009

0.7

16.4

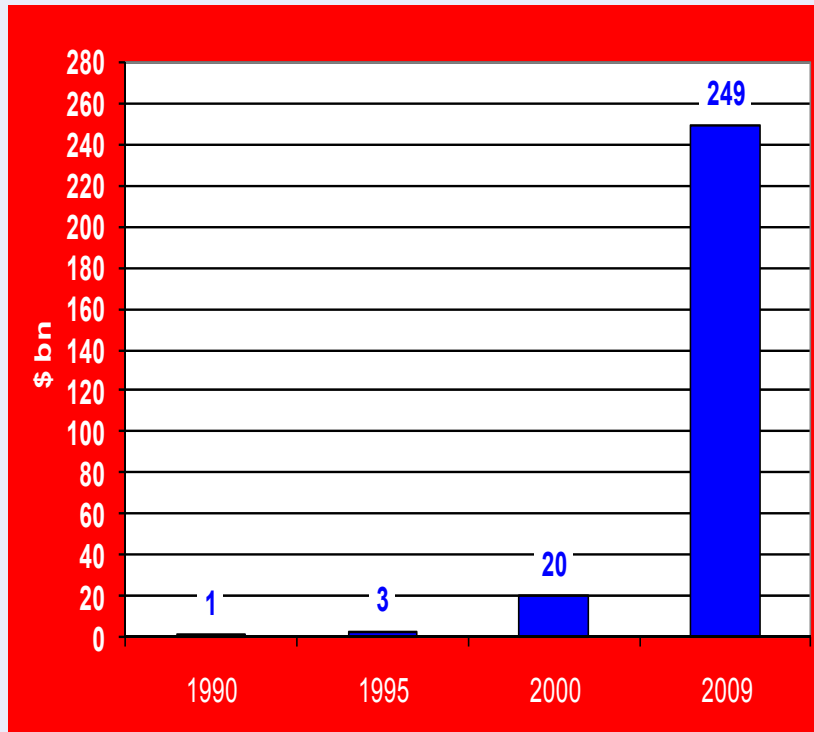
29.3

53.6



Knowledge-intensive
FDI
so far very
modest

Russian investments abroad



Russian capital exports **1886-1914**
 \$ 33 billion (measured at 1996 money)
 = Soviet era - abnormally closed period

Figure 2 Russia's OFDI stock, 2000-2008



Source: Central Bank of Russia 2009.

Global financial crisis caused drop
 – recovery to be expected 2011 onwards

Russian investments abroad

- Some reasons behind growth

- Increased and accumulated wealth in Russia
 - over 100 billionaires in Russia in 2011
- Control over value chain (from exporter of natural resources to active international player – better profit margins)
- Global competition forces (“eat or be eaten”)
- More managerial experience on internationalisation
- Capital exports have become more transparent (from capital flight to recorded FDI, i.e. better statistics)
- Assets moved away from hands of Kremlin (eggs in different baskets)
- Kremlin uses sometimes firms as tools of Russia’s foreign policy
- Investments linked with criminality (internationalisation of crime)
- Some knowledge-intensive investments carried out (new phenomenon)

Russian investments abroad

- Companies behind investments

Table 1 Russia's leading TNCs by foreign assets in 2008.

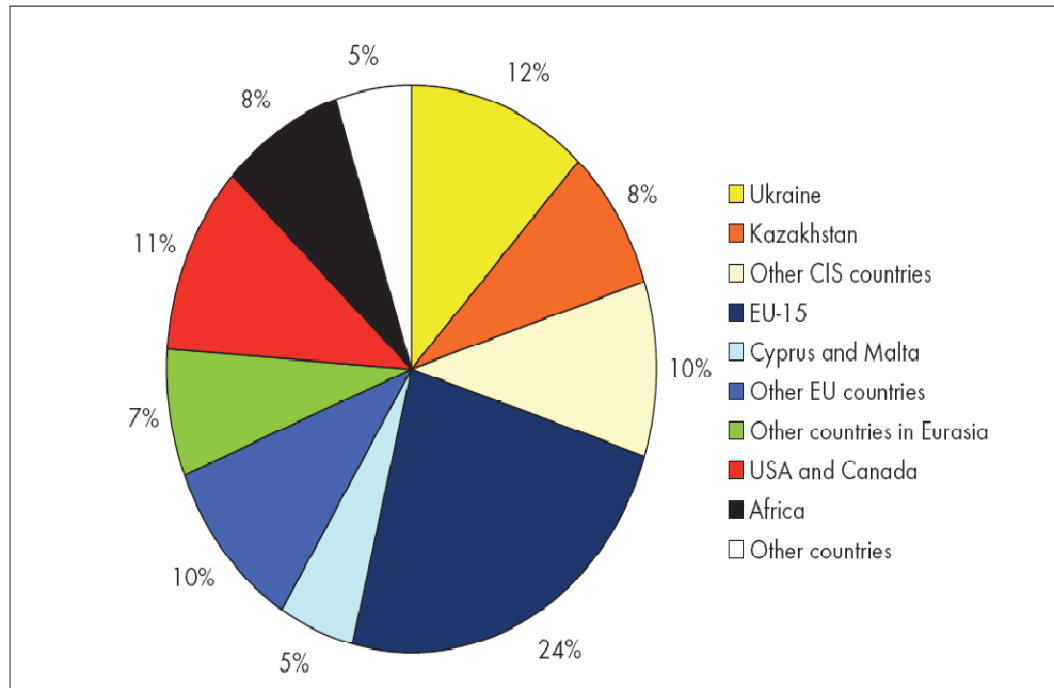
Company	Foreign assets, \$ mn	Principal host countries
Lukoil	23 512	Baltic States, CIS, Finland, USA, Venezuela
Gazprom	12 132 ^a	The majority of the EU and CIS countries, Turkey
Norilsk Nickel	8 965	Botswana, South Africa, USA
Renova	8 200	Switzerland, Italy, USA
Basic Element	7 350	Australia, Kazakhstan, Nigeria, USA
Severstal	4 546	Italy, USA
EvrAZ Holding	4 450	USA
RusAl ^a	3 925	Armenia, Australia, Guinea, Kazakhstan, Nigeria
Altimco	3 825	Armenia, Georgia, Kazakhstan, Tajikistan, Turkey, Ukraine, Uzbekistan
Novolipetsk Steel	3 250	Belgium, France, Italy, USA
Mobile TeleSystems	2 000	Belarus, Ukraine, Uzbekistan
VimpelCom	1 350	Armenia, Georgia, Kazakhstan, Ukraine, Uzbekistan



Oil, gas, metals and telecommunications corporations at least 2/3 of value of Russian investments abroad

Russian investments abroad - Where investments placed ?

Figure 2: Geographical Structure of Russian FDI (End of 2007)
(Fixed Assets of Non-Financial TNCs and M&A Volumes of Banks in % of Non-Current Assets)



Sources: monthly information database "Sliyaniya i pogloshcheniya" – <http://www.majournal.ru>; Internet-sites of Russian large companies, author's calculations.

Statistics extremely deficient:

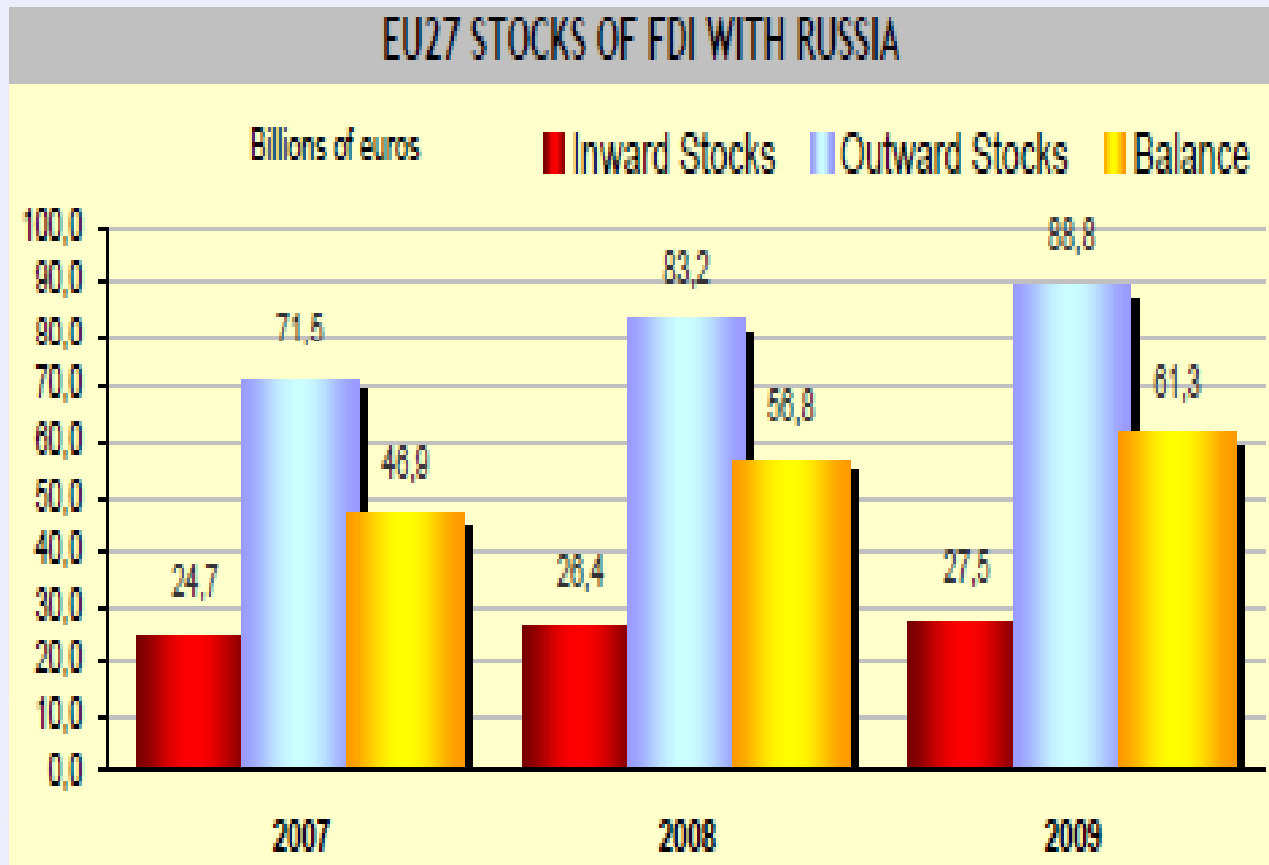
EU approximately 40%

CIS some 30%

North America some 10% ???

Share of South America and Asia may grow in the future

EU-Russia investments



Minimal compared with EU-USA investments i.e. over € 1000 bn to both directions

Larger than EU-China investment (€ 6 bn / € 58 bn) – excl. Hong Kong + statistical bias ?)

How to understand the Russian business expansion abroad?

Russia's foreign policy tool

Foreign policy tools

State-controlled corporations
Strategic industries, such as energy logistics and telecommunications
Political goals are superior to business rationality

Money-driven patriots

Although internationalisation is largely guided by economic rationality, the companies frequently conform to Russia's foreign policies as they often operated in politically sensitive branches

Fugitives & outlaws

Foreign units facilitate capital transfers abroad
Tax evasion is closely linked with internationalisation
Illegal operations (money laundering, illegal armament trade, narcotics business, prostitution)

Ordinary businessmen

Internationalisation is not politically-motivated
i.e. the main goal of the internationalisation is to receive new clients and higher profits
SMEs or companies operating outside the energy sector, raw materials and telecommunications

Attitudes towards Russian investors

Russia's foreign
policy tool

Resistance

Reservations

Non-welcomed

Welcomed

EU-Russia tourism in 2009

21 million visits to Russia

CIS	77%
China	3%
USA	1%
Others	4%

EU 15%

EU total	3.2 mn
Finland (transit)	1.1 mn
Germany	0.6 mn
Poland (Kal-grad)	0.4 mn
Italy	0.2 mn
France	0.2 mn
UK	0.2 mn
Other EU state	0.5 mn

34 million visits from Russia

50%	CIS
7%	Turkey
5%	Egypt
5%	China
5%	Others

28% EU

9.5 mn	EU total
3.0 mn	Finland (transit)
1.6 mn	Estonia
0.9 mn	Germany
0.7 mn	Lithuania (Kaliningrad impact)
0.5 mn	Italy
0.4 mn	Spain
2.4 mn	Other EU state

One should
treat these statistics
with utmost care !



Compare: over 4 million foreign visits to Estonia in 2008

EU-Russia tourism unused potential for integration

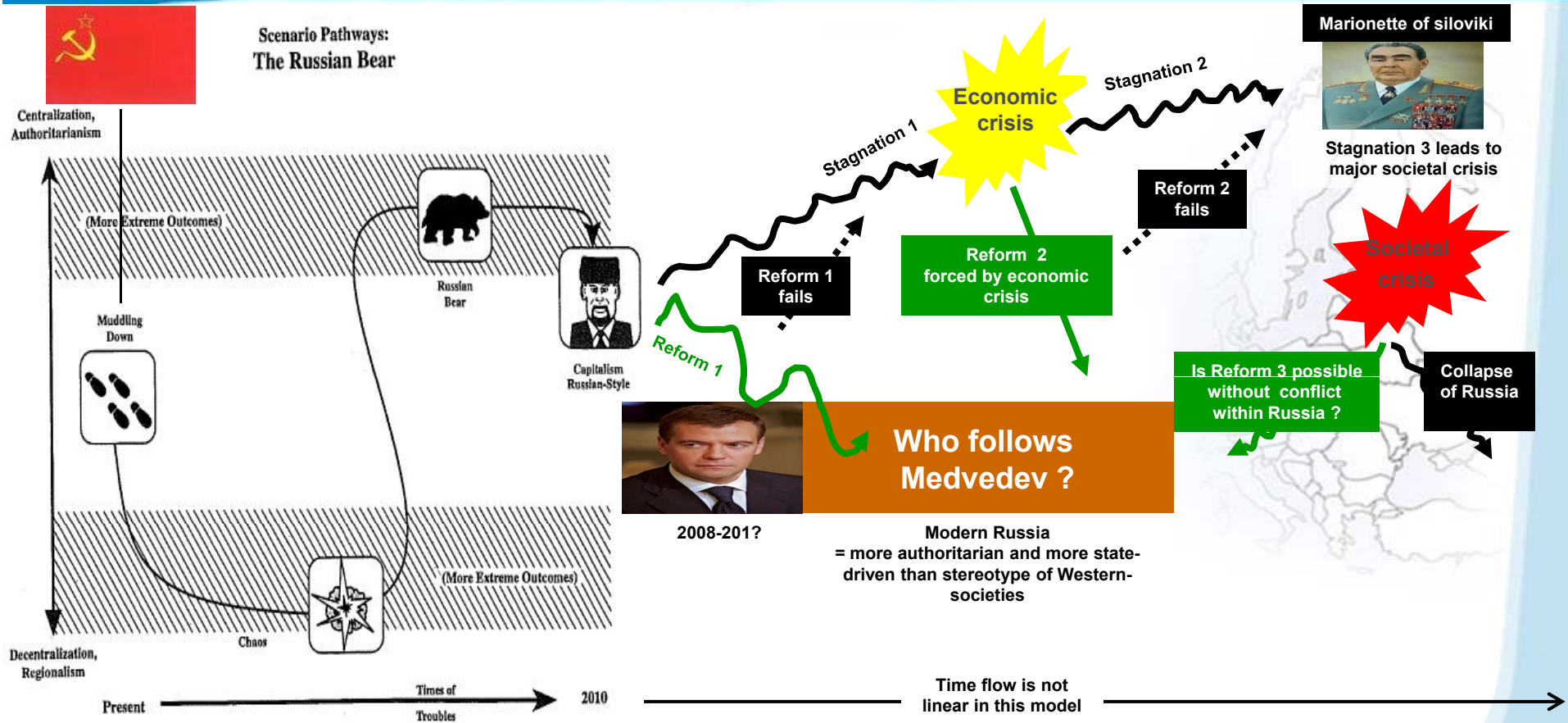
More people-to-people contacts needed i.e. they may open alternative bridge to state-level and business contacts

Personal experience win prejudice at the end of the day

Visa-free travel to be reached after we have reached 3 other freedoms (goods, services, finance) i.e. WTO membership first.



Future of Russia: 2 extreme future scenarios



The Russian Bear – scenario created by Daniel Yergin ja Thane Gustafson (1993)
Russia 2010 and What it Means for the World, p. 159

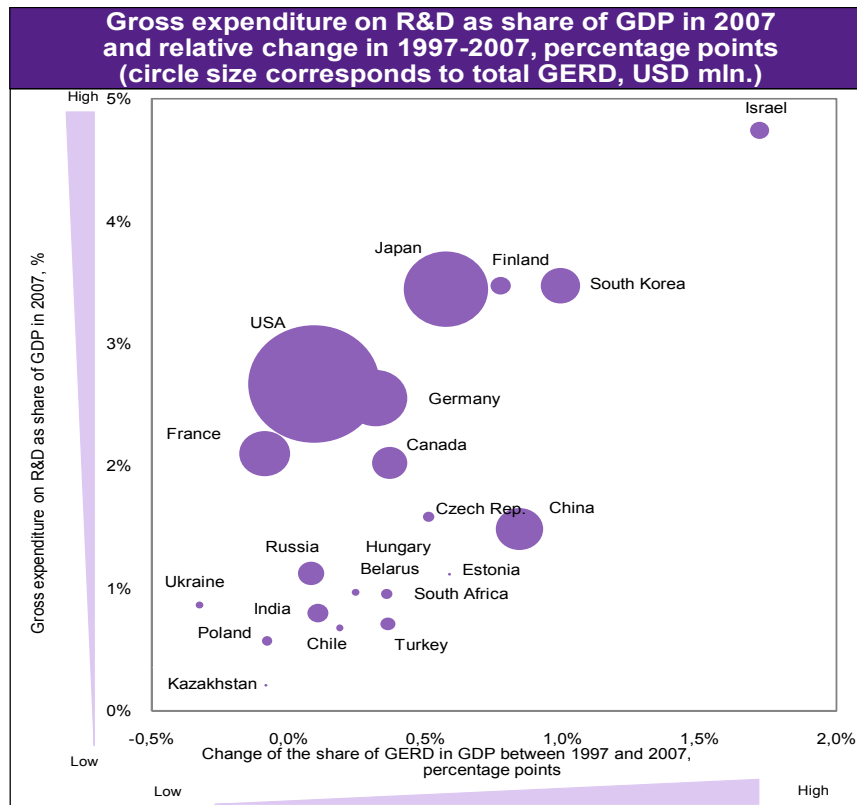
Kari Liuhto drafted the scenarios after 2010

Russia's R&D in global comparison

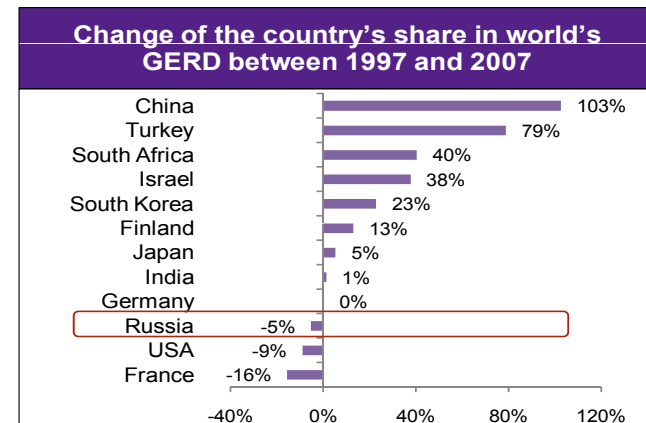
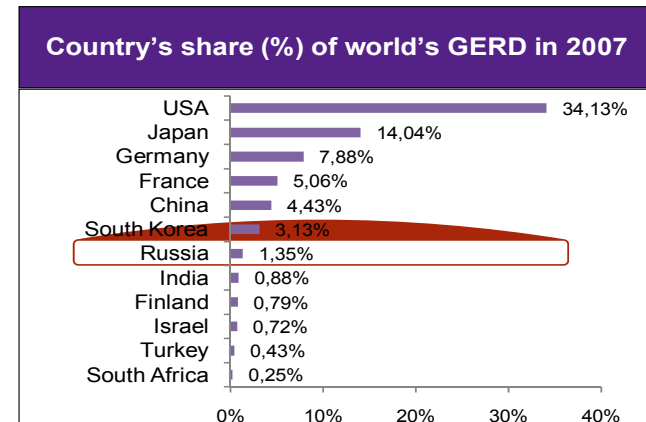
Figure 1

GERD = Gross Expenditure on R&D

Expenditure on R&D



Source: UNESCO Institute for Statistics, World Bank



Russia needs entrepreneurial innovation activity

Country	R&D expenditure (USD billion)	Share of R&D expenditure in GDP (per cent)	Share of industry in R&D expenditure (per cent)	Number of researchers (1000)
USA	398	2.8	67	1 426
EU27	264	1.8	55	1 448
Germany *	72	2.5	68	291
Finland	7	3.5	68	41
Japan *	148	3.4	78	710
China *	102	1.4	70	1 423
Russia	23	1.0	29	451

Myth: China and Russia are not similar

29

Source: OECD, Main Science and Technology Indicators 2009-2.

* data of 2007

International dimension weak side in Russia

Indicators of technological progress and innovation capacity

(latest available year)

	Russia	China	India	Brazil
Researchers (per m population)	3,255	926	111	461
Research & development spending (% of GDP)	1.10	1.42	0.70	0.82
International patent applications (% of world total)	0.4	3.7	0.4	0.3
High-tech exports (% of manufactured exports)	6.9	29.7	5.3	12.4
Published scientific articles (no.)	27,605	112,318	38,366	30,021
Universities in top 500 (no.)	4	11	7	5

Sources: Phil Hanson, "Russia to 2020", Chatham House, 2009; UNESCO; Thomson Reuters; *Financial Times*.

Flagship companies + spillovers needed => innovation subcontracting

	Companies in Fortune Global 500		Companies in top 1,000 R&D investors	
	2005	2009	2005	2009
Brazil	3	6	3	3
Russia	3	8	2	1
India	5	7	1	12
China	16	37	3	5
Europe *	175	180	294	333
USA	176	140	423	378

Main weaknesses of Russia's innovation process

Preparation

Intellectual potential & creativity → Idea & discovery →

Commercialisation

Innovation & patent → Entrepreneurial spirit & activity → Marketing skills

Good educational base

RAS outdated

Innovation infrastructure still developing
(innograds, SEZs, technoparks)

Brain drain since collapse of USSR (return of Russian specialists?)

Triple Helix does not work

Innovation networks weak (slow spillovers)

Technology-oriented innovations
(energy efficiency, nuclear energy, space technology, pharmaceuticals, ICT-technology)

Bureaucratic business environment major obstacle

More private risk funding needed

Service-oriented innovations neglected

Weak legal system

Weak intellectual property rights (piracy)

Relatively large share of foreign-financed R&D (9.4% of total in 2006)

Lack of outsourcing (lack of inter-firm cooperation)

Deficient international marketing

Domestic market oriented

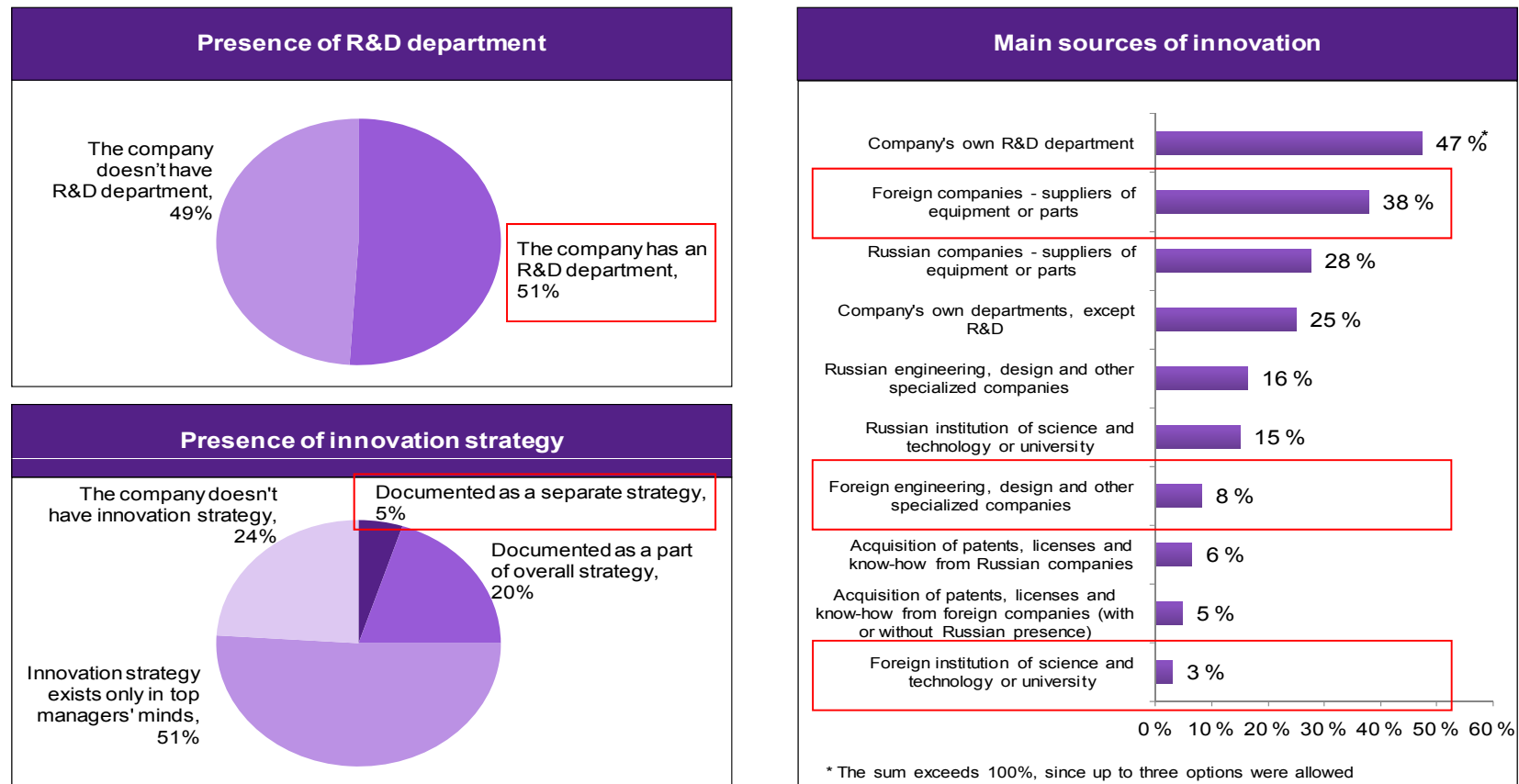
Few international patents (Sweden=7xRussia)

Parts marked in red require major improvement

Starting point for innovation economy

Figure 4

Sample characteristics (innovation), %

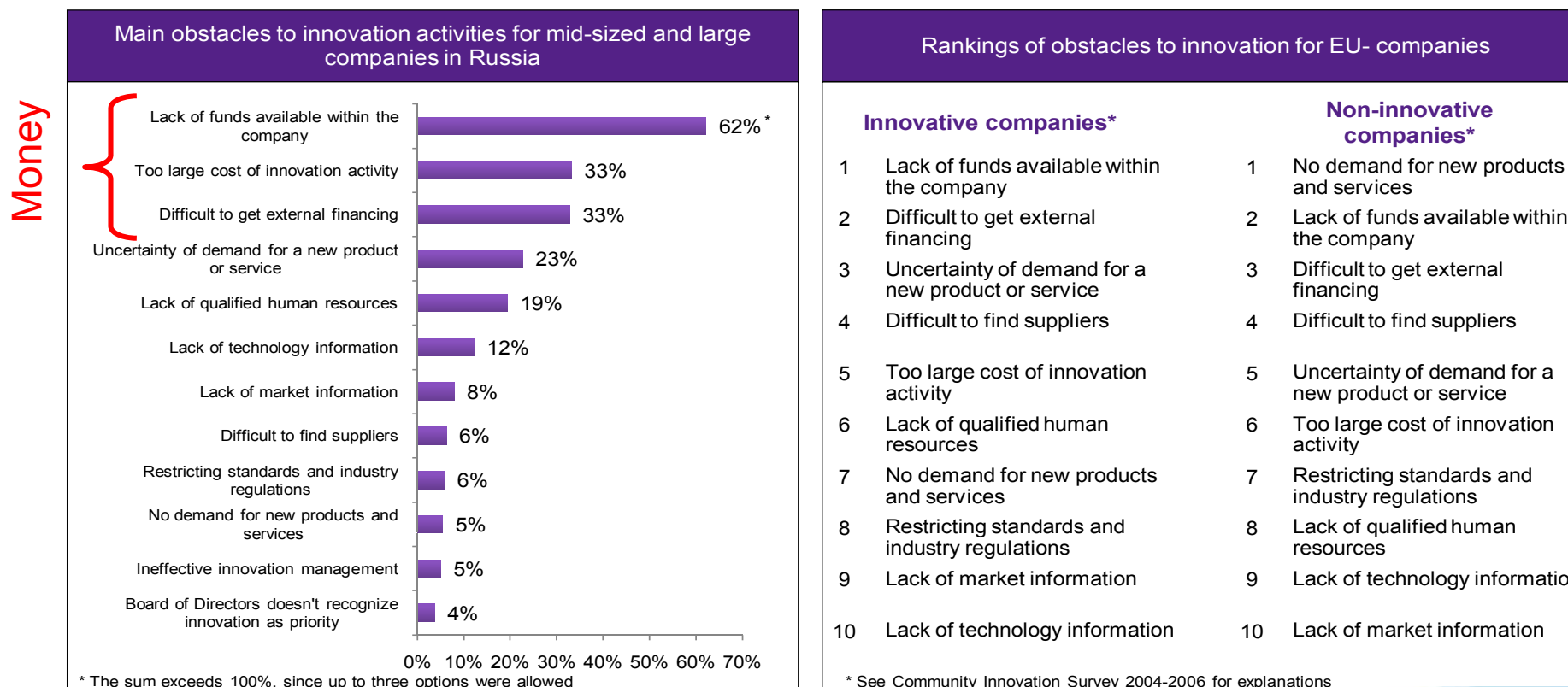


Source: Bauman Innovation and OPORA – Russian Innovation Survey 2009-2010

Main obstacles to innovate

Figure 6

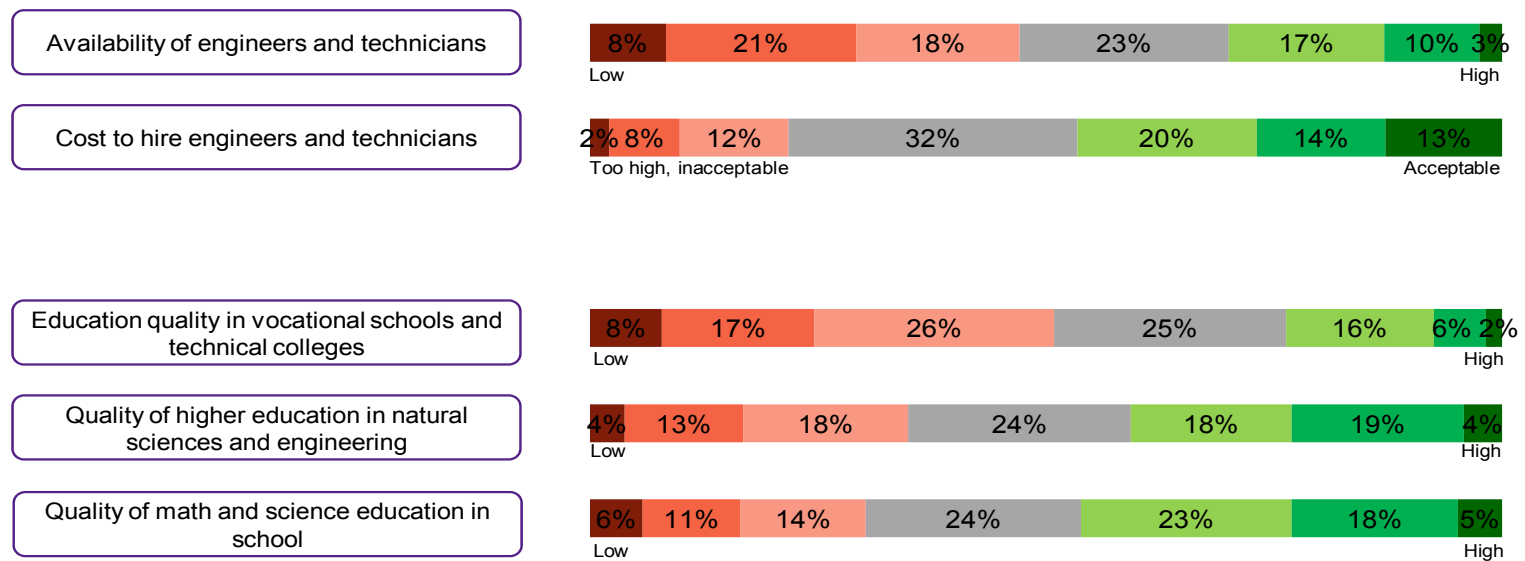
Obstacles to innovation



Obstacles related to HRM

Figure 7

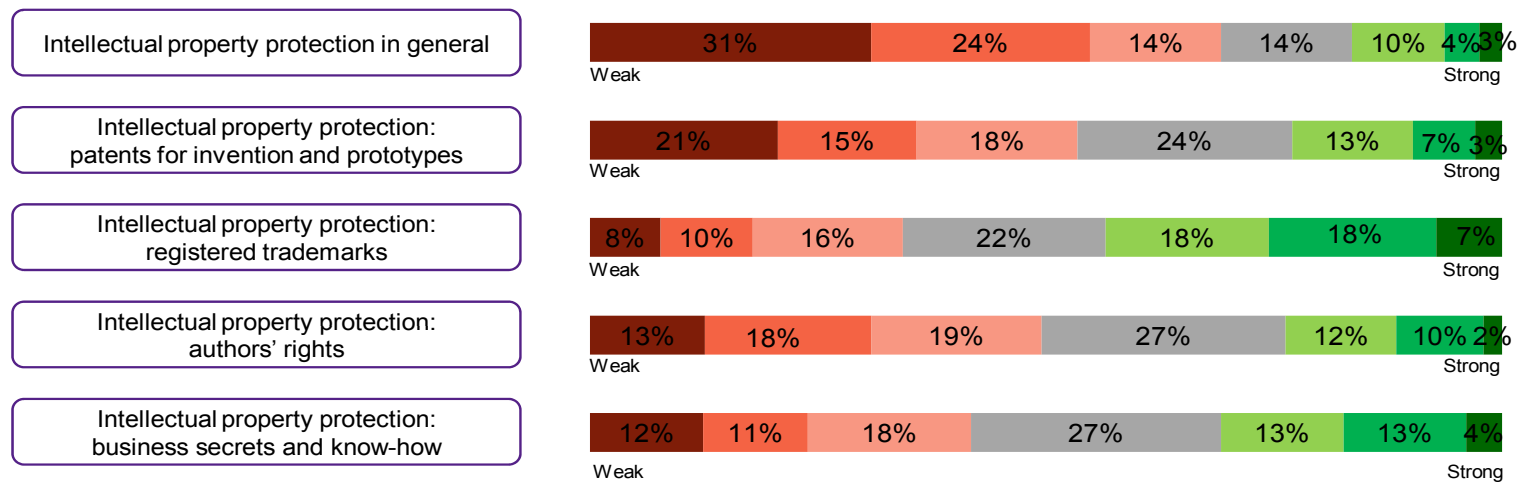
Barriers to innovation: human resources and education



Obstacles related to IP rights

Figure 8

Intellectual property protection

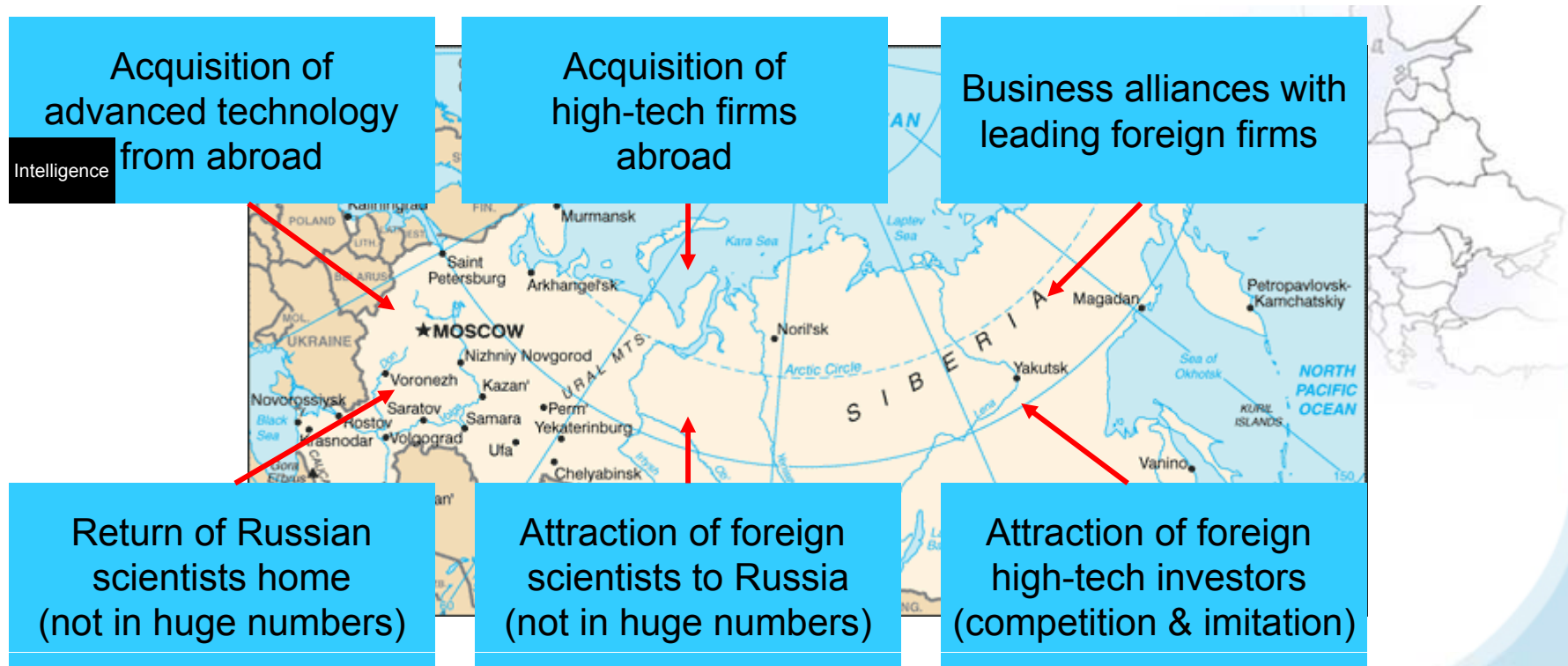


Co-operation with foreigners:

Technology / knowledge transfer from abroad to Russia

“developing countries *should follow a development strategy of openness to foreign ideas and knowledge, and to build capacity to absorb and blend them with existing capacities.*”
Aduagna Lemi (2010, 29) Transnational Corporations, UNCTAD.

Russia is not a developing country but the aforementioned recipe is valid !

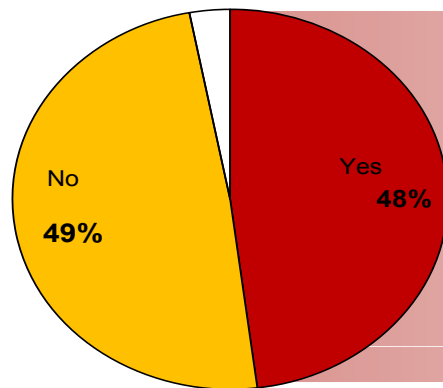


Co-operation with foreigners: A reasonable way to go forward

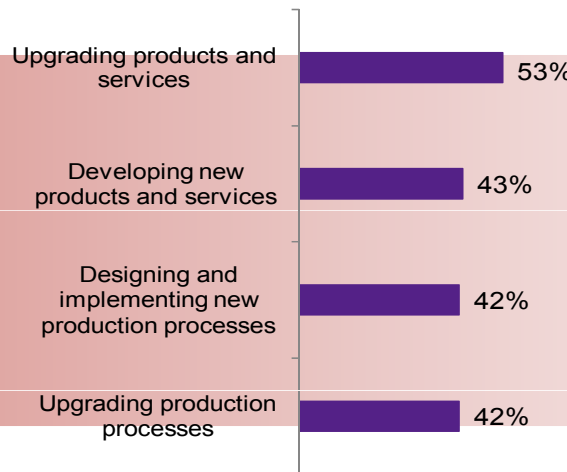
Figure 10

Cooperation with foreign companies in area of technology and innovation

Technological cooperation with partners abroad (during last three years)

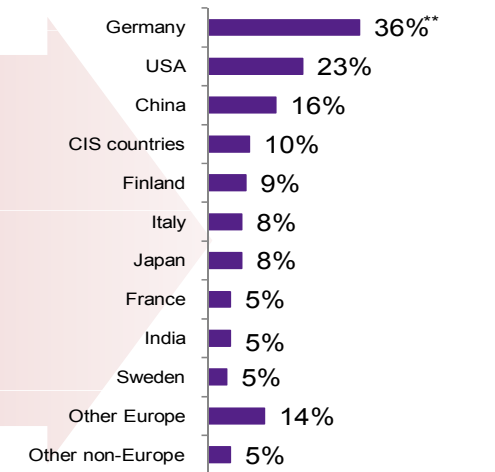


Areas of cooperation



* 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

Modernisation with the EU

General framework:

The EU-Russia Partnership for Modernisation (since Stockholm Summit 2009)

Bilateral platforms:

Modernisation Partnership with Germany (since 2008)

Modernisation Partnership with France (11/2009)

Knowledge Partnership with the United Kingdom (11/2010)

Modernisation Partnership Declaration with Slovenia (11/2010)

Proposal for Modernisation Partnership Declaration with Finland (11/2010)



Russia's innovation co-operation with EU: Different goals ?

Russia's goal for technological modernisation

Innovation rhetoric (inflation)

<p>Increasing mutual competition</p>	<p>True and sustainable partnership</p>
<p>Stagnation of EU-Russia relations</p>	<p>EU for Russia: natural resource market</p> <p>Russia for EU: consumer goods market</p>

Theatre on co-operation

The EU's goal for wider politico-societal modernisation in Russia



How to merge varying goals ?

Doing together better than talking over each other !

Co-operation with foreigners: Case - Finland

Finnish Industry Investment and Rosnano (joint nanotechnology investments)

Nokia's presence in Skolkovo

TEKES and FASIE co-operation (SME funding)

Finnode in St. Petersburg (high-tech gateway)

Technopolis Pulkovo in St. Petersburg (technopark)

Direct business cooperation between Russian and Finnish firms (incl. technoparks)

Academy of Finland and Russian Foundation for Humanities (2006-2009)

Direct research cooperation between Finnish and Russian universities

Second EU-Russian Innovation Forum in Lappeenranta in May 2011 (bilateral event)

Extremely active cross-border activities (collaboration with St. Petersburg)

Company level co-operation still sub-optimal (SMEs unused potential)



Some policy recommendations for Russia

Change policy from creating own break-through innovations into adaptation of existing innovations with cooperation with leading Western corporations.

Promote service-related innovations and organisational innovations (= improvement of daily practices), particularly within state-owned enterprises.

Support internationalisation of Russia's innovation firms, particularly SMEs.

Disintegrate the Russian Academy of Sciences and move its competitive research functions into Russia's leading universities i.e. role of RAS to finance research not to do it (building a new system more efficient and faster than reforming the old).

Publish a list of Russian companies investing the most in R&D (create competition over prestige among oligarchs)

Fight against the militarisation of the innovation sector.

Flagship innovation projects are not enough i.e. support spillovers & networking.

Some general policy recommendations relevant for building an innovation economy

Improve general investment climate to foster spillovers from innovation oases, such as innograds (Skolkovo), SEZs and technoparks, to the rest of the Russian market.

Improve immaterial property rights and functioning of court of laws.

Corruption is only a symptom, over-bureaucracy is the ultimate disease. Intensify the fight against over-bureaucracy. Innovation reform fails, if administrative reform fails.

Create private venture funds and encourage private banks to finance R&D activities of SMEs.

Build conditions for intensive cooperation between research institutes, firms and state (Triple Helix) – the role of academia weak at the moment weak.

Teach entrepreneurship and encourage creativity at Russian schools plus intensify student exchange between top universities in Russia and the EU.

Synchronize competition and industrial policies with innovation policy and be patient, as fruits of the modernisation takes decades to mature.

Summarising 12 main findings

- Flagships needed but entrepreneurial (private) innovation activity is A MUST
- Closer inter-firm co-operation = R&D subcontracting (trust, IPR, court of laws needed)
- Continuous (flexible) innovation process instead of governmental programme(s)
- Within an organisation: from consensus to conflict of opinions (“YES MEN” not needed)
- Service and organisational innovations (spread of best practices) required
- Role of military industrial complex may grow in future (spillovers to civilian sector)
- Results for the ordinary people urgently needed (Moscow traffic, health reform, etc)
- Role of RAS should be changed from actor (social security provider) to a financing body (Finnish experience)
- Imitation more efficient than doing independently (foreign co-operation)
- Open innovation communication (innovation journalism / neo-glasnost)
- Product development / finalisation together with a customer (individual products i.e. no T-Fords any longer)
- Support reform forces and destroy resisting forces (long-term change leadership)



Who is right ?: philosopher or ice hockey player



“ ... 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 ... ”

Niccolo Machiavelli, Prince, 1532

“You'll miss 100 per cent of the shots you never take.”

Wayne Gretzky

Благодарю за внимание !



Recommended further reading:
Pralhad & Krishnan (2008) The New Age of Innovation
– Driving Co-created Value Through Global Networks

Do not hesitate to contact
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