Economy of Russia.
History

14.01.2019

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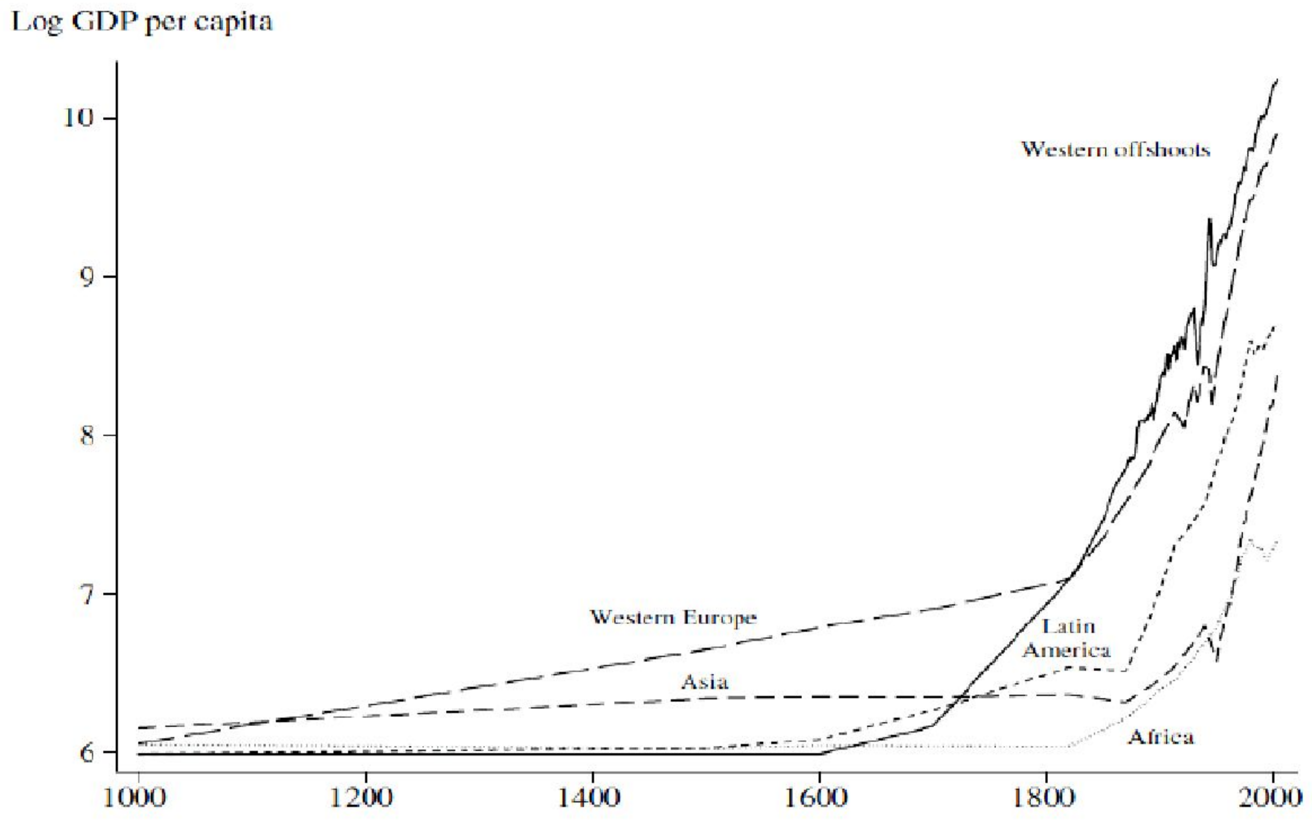
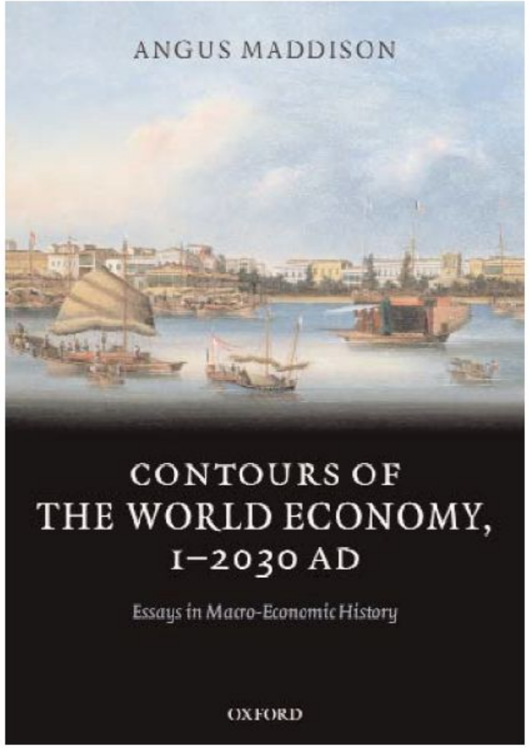
GDP per capita
1000 – 2000, international $, log.scale



Источник: Angus Maddison, 2001, http://www.ggdc.net/MADDISON/oriindex.htm

Attempt to reconstruct the world economy dynamics

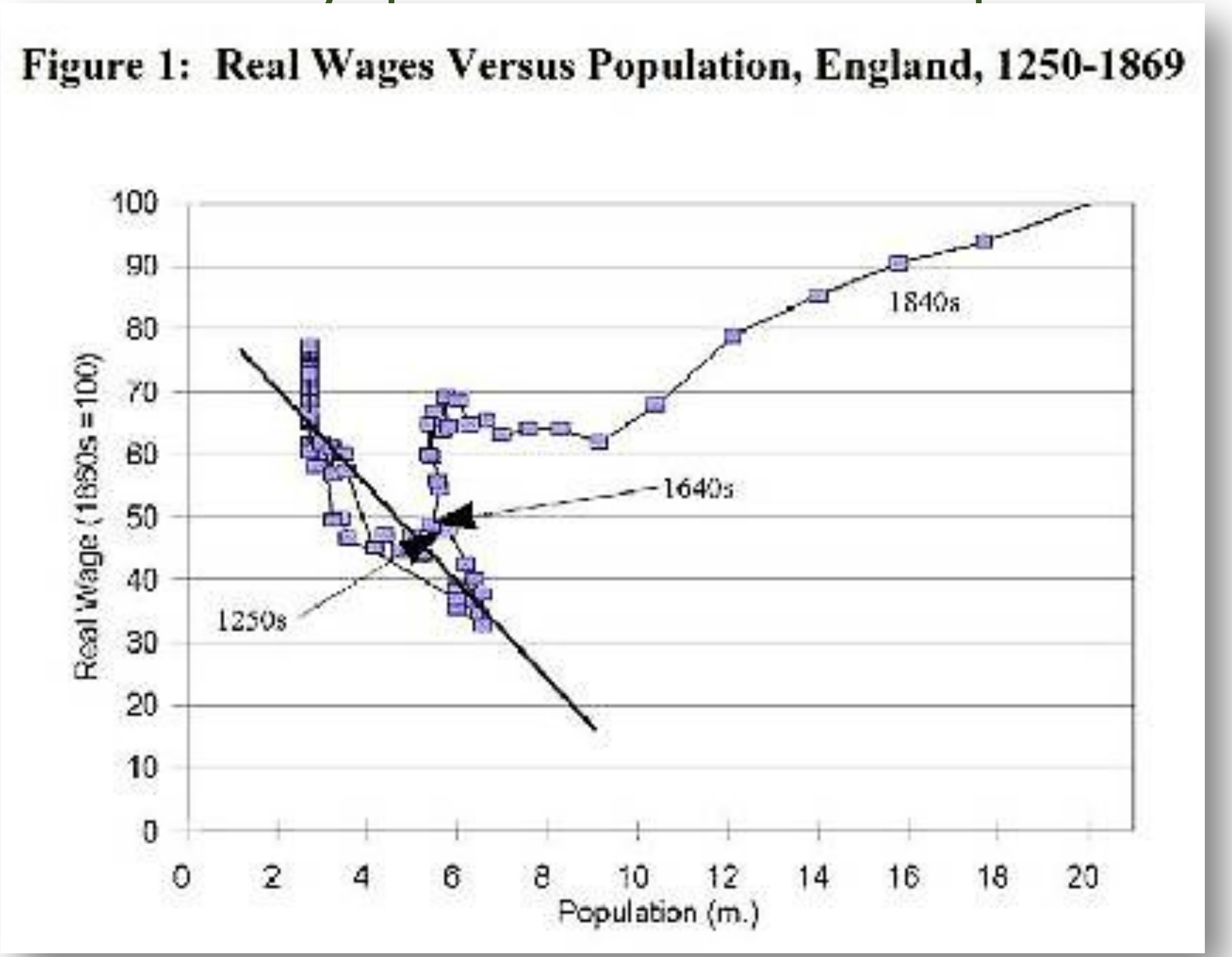


Contours of the World Economy 1-2030 AD

Essays in Macro-Economic History

Angus Maddison, Emeritus Professor of Economic Growth and Development, University of Groningen

Economic history quest: Malthusian trap

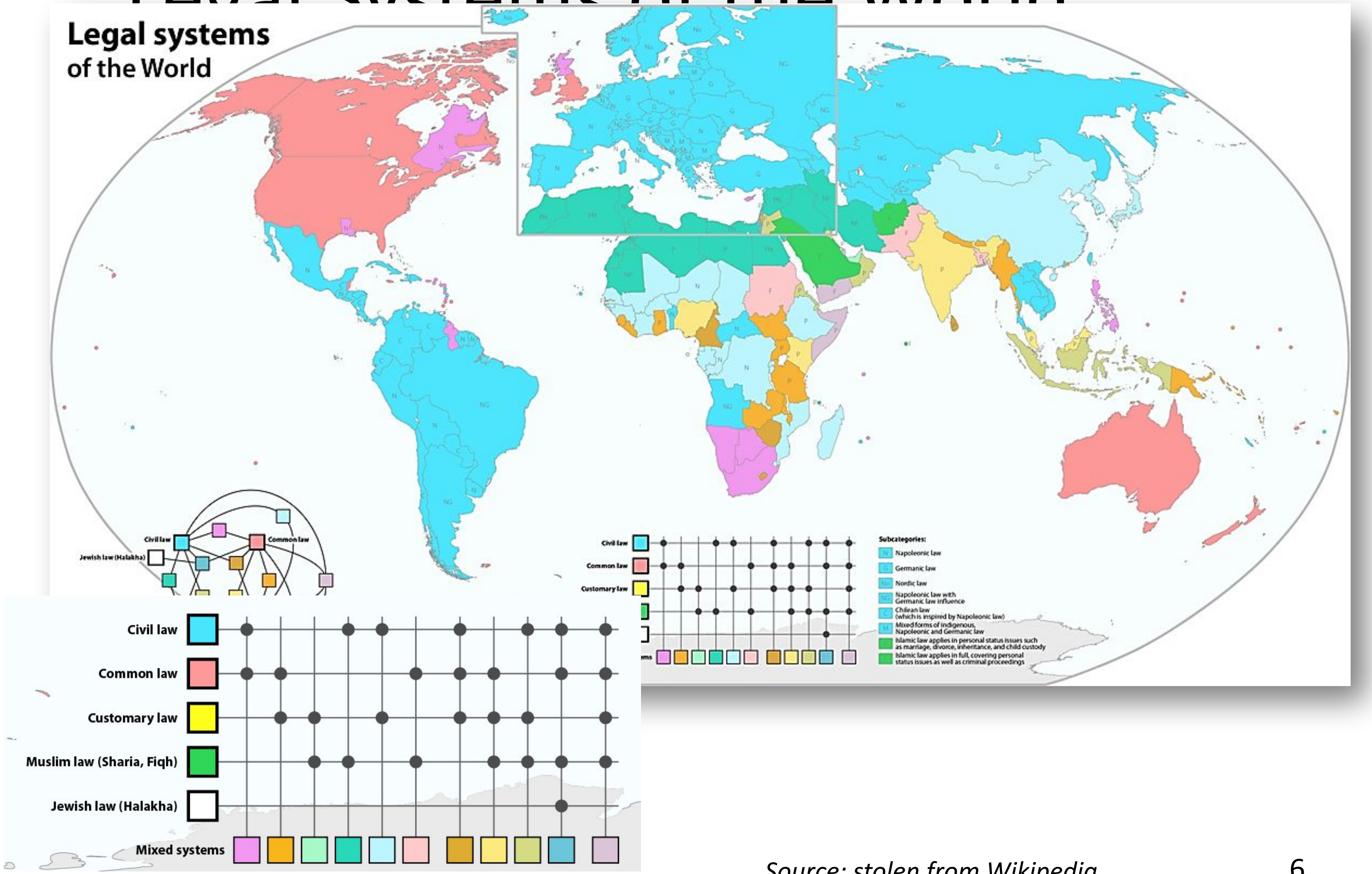


Source:
http://krugman.blogs.nytimes.com/2009/07/01/the-malthusian-insult/comment-page-4/?_r=0
(taken from Brad de Long)

Development rates of countries differ

- Environment: tropics, moderate, North, heath, islands and remote areas
- Primary states and rent concentration
- Mesopotamia – Egypt – China = scientific-and-technological advance from China to Europe and back in the 30-53 latitude!!!
- Vladivostok - Astrakhan: 6300 km: 132 and 48 Eastern longitude
- Genghis Khan and Zheng Khe
- Little space for Christian European states competing fiercely
- Brodel (the importance of the seaside). Mediterranean!
- Technical advance spurred by necessity and overcrowding. Wars…
- Ancient Rus in forests between the Heath and Europe

Legal Systems of the World



Source: stolen from Wikipedia

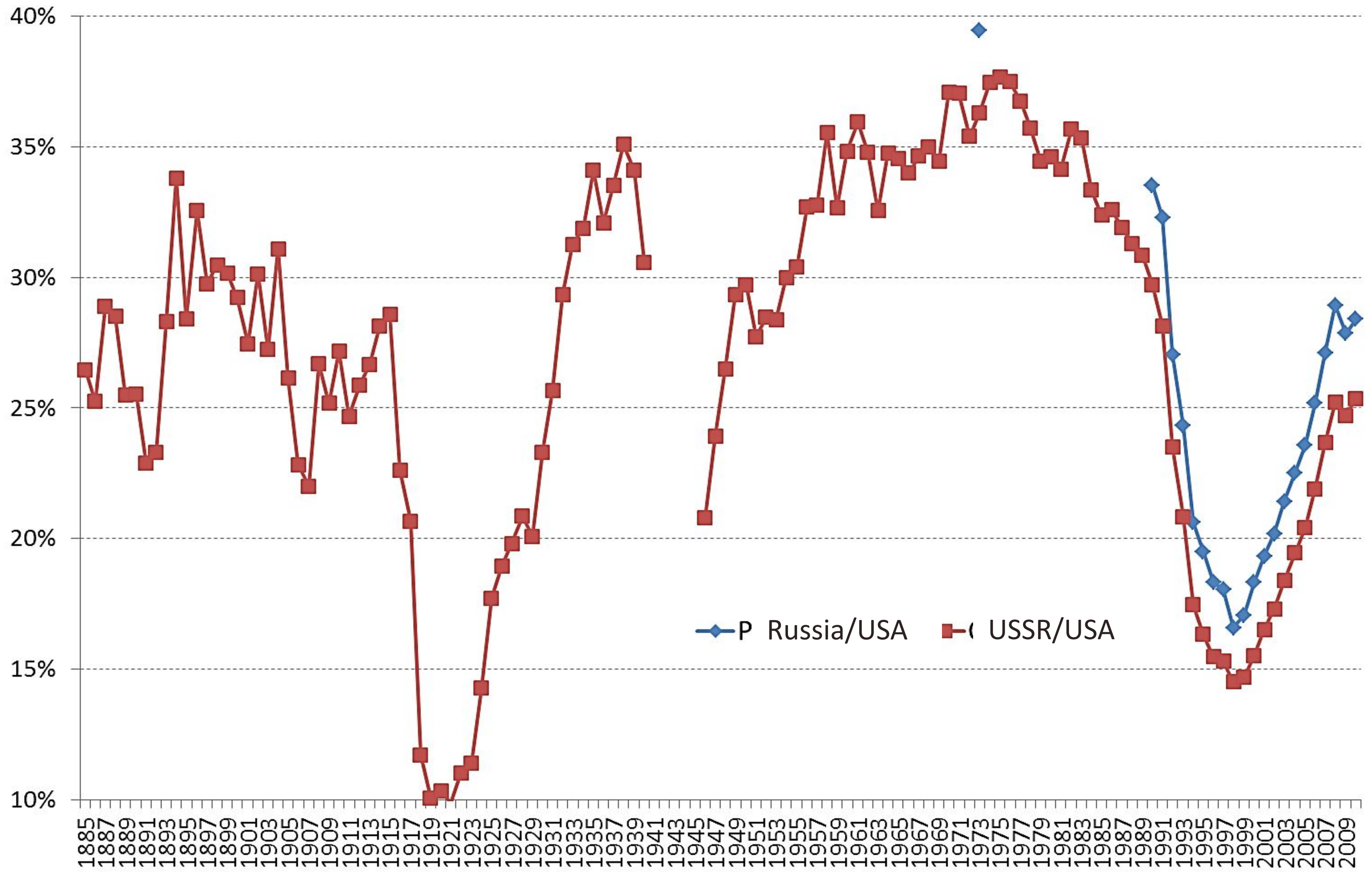
The Great Divergence

- China, India, Japan, Arabs were helpless against Turkey and Europe in XV-XVI cent. Why?
- Cities and finances of the XVI-XVII cent. (%%) – Koot (2013).
- Institutions of competitiveness and reinvestment of profits!?
- Pomerantz “The Great Divergence” (2000) – problems of the Asian disruption and lagging behind in 1700-1870. Asia fell behind during the Industrial revolution.
- America before Columb and Africa – disrupted development. Colonialism means demolition of elites, institutions, rent and resources withdrawal.
- Governance, wealth and social distribution differ a lot.
- Technological advance in Europe XIV-XX cent.
- Stagnation in China, fragmentation processes in Asia
- Russia between the East and the West: huge army expenditures

Key problems of the Russian history

- Millennium+ with no peace, regular wars…
- Big wars – Borders = Pattern of surrounding
- Revolution and XX C. = series of Catastrophes
- Crush of the SU aggravated all crises… - three transformations: state, ideology, ownership.
- 1990-s - shock for people and change of elites.
- People have fixed feelings on external danger.
- Russian Elite behaves like other Great Elites.
- “Declared Loser” now resists new rules, Cold war.

Ratio of GDP per capita of the USSR/Russia to the USA



Problems at the end of the 1980s.

Growth in different countries became stable, living standards were increasing, scientific-and-technological advance was going. China – turnoff in 1986. Growth in the USSR slowed down plummeting to -2% in 1990.

Observable savings ratio – 25%, with the deflator and discounting factors - about 50%, military expenditure = $250 bil. in 1988

Degradation of rent redistribution among the union republics, the feeling of “burden of the center”

IWEIR (ИМЭМО) – reported the growth and scientific-and-technological advance to the OECD, economists raised alarm – ECO=№11 – 1987

Monetary overhang, antialcohol measures, external debts and help to the 3rd-world countries

Public fatigue, annoyance, queues and lack of prospects. Tsoy (ASSA - 1987): «We wait for the changes!»

Moscow princedom, **1533 (in red)**
Moscow – Central Federal Region, **2013 (green borders)**

History – till 1533

- Russian elites – “driving under influence”: Normans since VIII century, Byzantium since X, Nomad neighboring (Steppy) – ever (before Mongols in XIII)
- Languages accent: North Russian = O and G; South Russian = A and H; Moscow = A and G …
- No Peace for Millennium, tough Princes and North land Monasteries. Chivalry suppressed by wars? Schism since 1054,
- Catholic Crusades in Baltics, Difficult contacts with European powers. Constantinople – “Treachery of 1204” for Orthodoxies
- Mongols Invasion of 1237-40 – South (Kiev) goes to Lithuania and Poland. Double rent for 10-15 Centuries, paid by poor peasantry: to Khans and Princes
- 13-15 Centuries: Slow growth, no metals, furs=oil.
- First “preventive” embargo for metals in 1480s

History – 1533- 1991 (1)

- 1533 – turning point for enlarging – post Saint Bartholomew massacre and Stockholm massacre, Henry the Eight etc.
- Ivan the “Terrible”: Siberia – Baltic and South Steppy
- South Borders’ every year protection and the seeking the Sea access. Absorbing tribal nobility into Tsars' Court – contrary to British – Tatars khans, Georgian princes and Baltic barons
- Good Imperia and Bad Imperia – by interests of Political Elites
- British interests: Uprising in India, Crimea war and “Kim”.

History – 1533- 1991 (2)

- WWI and Romanov’s Crush, Revolution out of mainstream;
- Purges and industrialization – huge losses and difficult memory;
- WWII – heroics cherished for Danger, Losses and Sufferings!
- Russia changed the World in 1991 for better, not losing Cold War!
- But Freedom came with a disaster for masses…

Remaining European empires

- Empires were established by ”cool” adventurers followed by boyars and Streltsy
- Old empires had been established after the Crusades: Denmark (Baltic - England); Sweden (Baltic); Poland; Turkey (Byzantium)
- Colonial empires: Netherlands, Portugal, Spain, France, Great Britain (slave-trade). Continental: Austria, Russia, Germany
- United (or organized at least) Europe: Charlemagne, Treaty of Westphalia, Napoleon, Vienna treaty, Hitler, UNO and coalitions, EU

Договора Руси с Византией, 860… 912

Нестор - В Повести временных лет об этом договоре сказано:

«В год 6420 (912). Послал Олег мужей своих заключить мир и установить договор между греками и русскими, говоря так: "Список с договора, заключенного при тех же царях Льве и Александре. Мы от рода русского - **Карлы, Инегелд, Фарлаф, Веремуд, Рулав, Гуды, Руалд, Карн, Фрелав, Руар, Актеву, Труан, Лидул, Фост, Стемид** - посланные от Олега, великого князя русского, и от всех, кто под рукою его, - светлых и великих князей, и его великих бояр, к вам, Льву, Александру и Константину, великим в Боге самодержцам, царям греческим…»

Договора Руси с Византией, 860… 912

Русско-византийский договор (907-912). Заключен после успешного похода на Константинополь князя Олега. Основными его положениями было восстановление мирных и добрососедских отношений между двумя странами. Византия обязалась платить Руси ежегодную дань в солидных размерах и выплатить единовременную контрибуцию деньгами, золотом, вещами, тканями и др., оговаривает размер выкупа каждому воину и месячное содержание для русских купцов.

1533 – 1917, 1991 – the Big Bang

Ivan the “Terrible”: Siberia – Baltic and South Steppy

South Borders’ every year protection and the seeking the Sea access. Absorbing tribal nobility into Tsars' Court – contrary to British – Tatars khans, Georgian princes and Baltic barons

Good Imperia and Bad Imperia – by interests of Political Elites

British interests: Uprising in India, Crimea war and “Kim”.

Romanov’s Crush, Failure of Elites to adapt

WW I – final mistake (Durnovo) Revolution out of mainstream;

Purges and industrialization – huge losses and difficult memory;

WWII – heroics cherished for Danger, Losses and Sufferings!

Russia changed the World in 1991 for better, not losing Cold War!

But Reforms turned out to be disaster for masses…

Empire is what it is

By A.N. Kuropatkin, the Nikolai II Minister of War count, there had been 72 years of peace and 128 years of war for Russia during XVIII and XIX century. Only 4 from 33 wars were defensive and 29 – offensive, launched either for “the boundaries extension” (what can be understood) either for “the interest of public policy” (what is much more difficult to be understood).

Defensive wars: the Great Northern war, some of the Russo-Turkish Wars, the 1812 war (Napoleon) and the Eastern War. This was common for all the empires – Austria, Prussia, France and Great Britain.

What exactly has to be transformed during a country transition?

- The most crucial thing is property and control handover and control over economic decision-making.
- Political system, civil society and political parties, rights and values
- Free commerce authorization, external markets are open for competition (but to what extent?)
- Financial system setting up (calculations, savings, financial tools)
- Transformation of rights for the mass elements of savings: houses, pensions, shares
- Jobs, income and society structure

How deals on territorial changes are hold

- Potential elites and legitimacy
- Negotiations, elites` interests
- Arrangements (referendums on territories) on the national issues
- Property arrangements
- Language arrangements
- International arrangements
- Colonies, India, Ireland, Bangladesh, Czechoslovakia, Yugoslavia
- In the case of the USSR collapse there was no agreement

Might the development and transformation issues be resolved?

- Goals of the transformation: democracy and market economy
- Long-term development goal: to achieve middle-developed market economy from middle-developed planned economy
- Was the goal of integrating set down? It appears that it wasn`t.
- Strategy and chaos: «the market will make it» – both the woes of the institutes` transformation and development
- The Goal and Resources correspondence
- Resources – Subjects of the two goals achievement
- The factor of the USSR collapse (the 1990 negotiations), GKChP 1991 and the factor of economic disruption

Difficulties and losses of the transitional period boost phobias:

- Foreign capital as a threat
- Corruption omnipotence – the excuse of doing nothing
- External criticism – the source of troubles

…and manias:

- Foreign capital as panacea
- Chasing – global competition
- Conspiracy – our own disorder
- The problem of the countries income distribution
- We should have started in 1990 with -2% GDP and not in 1991 with -16% GDP

…and utopias:

- Ideal policy exists
- Governance instead of initiative
- All-purpose instruments
- Sudden leaps for no reason
- Quick solutions for long-term problems
- Little importance of institutional design
- Possibility of the institutions direct transfer
- Anticipation of the very same results with change of an institute context

What did Russia obtained after the collapse?

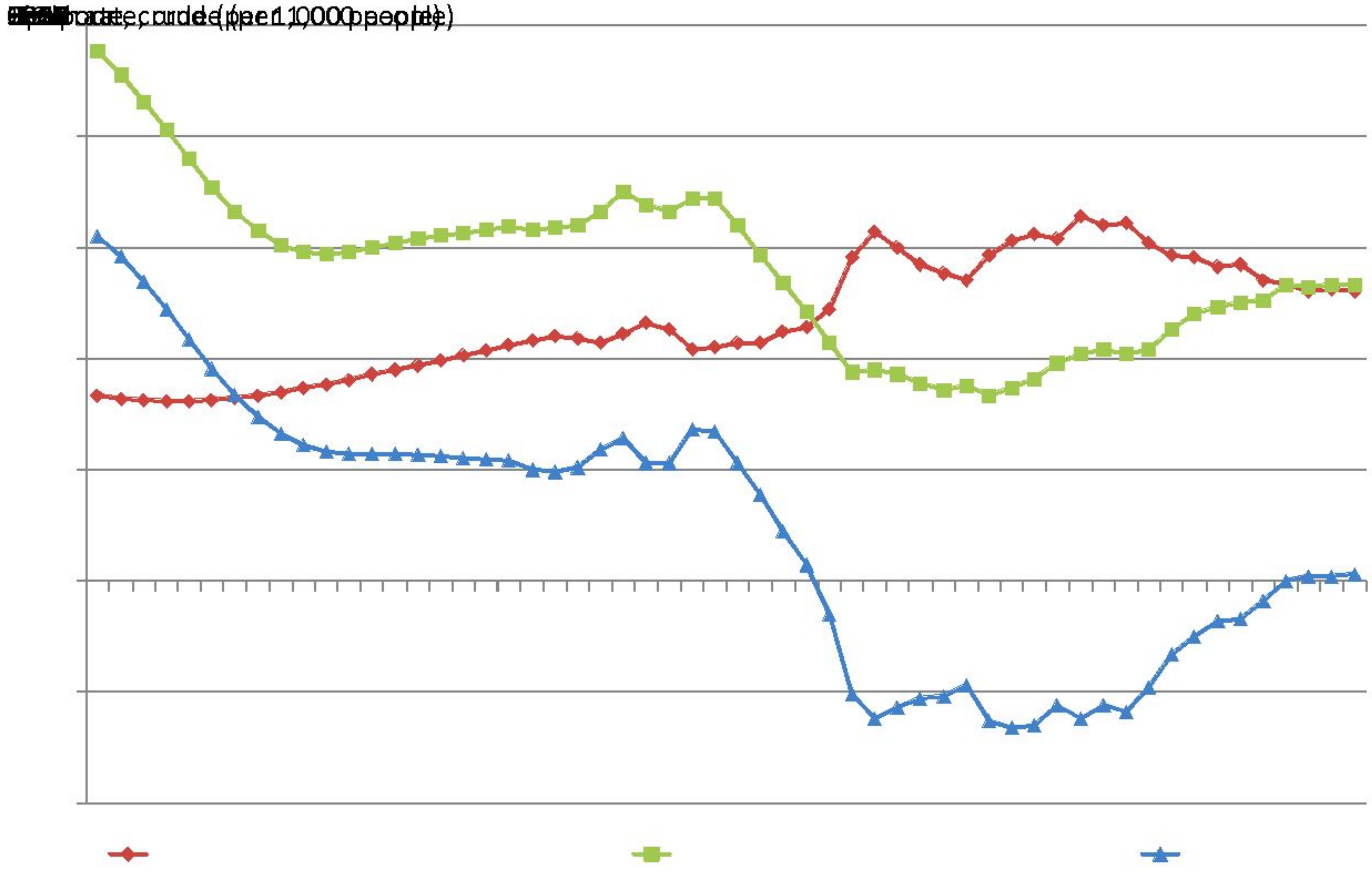
- Territory – more than 80% and natural resources
- Population – 51%
- Industry – approximately 60%
- Agriculture – about 50%
- The gross of the army (nuclear)
- Universities and science – more than 90% (“in lay terms”)
- Embassies and foreign buildings – exchange for debts
- Russia paid all the debts of USSR (with 1994 debt restructuring) and gave to all the 14 countries “zero debts”
- More mining and extraction (with Kazakhstan)
- Less manufacturing (Belarus and to the West as a whole)

Dynamics of GDP per capita PPP (2011 prices) and population of EAEU countries), 1990-2016

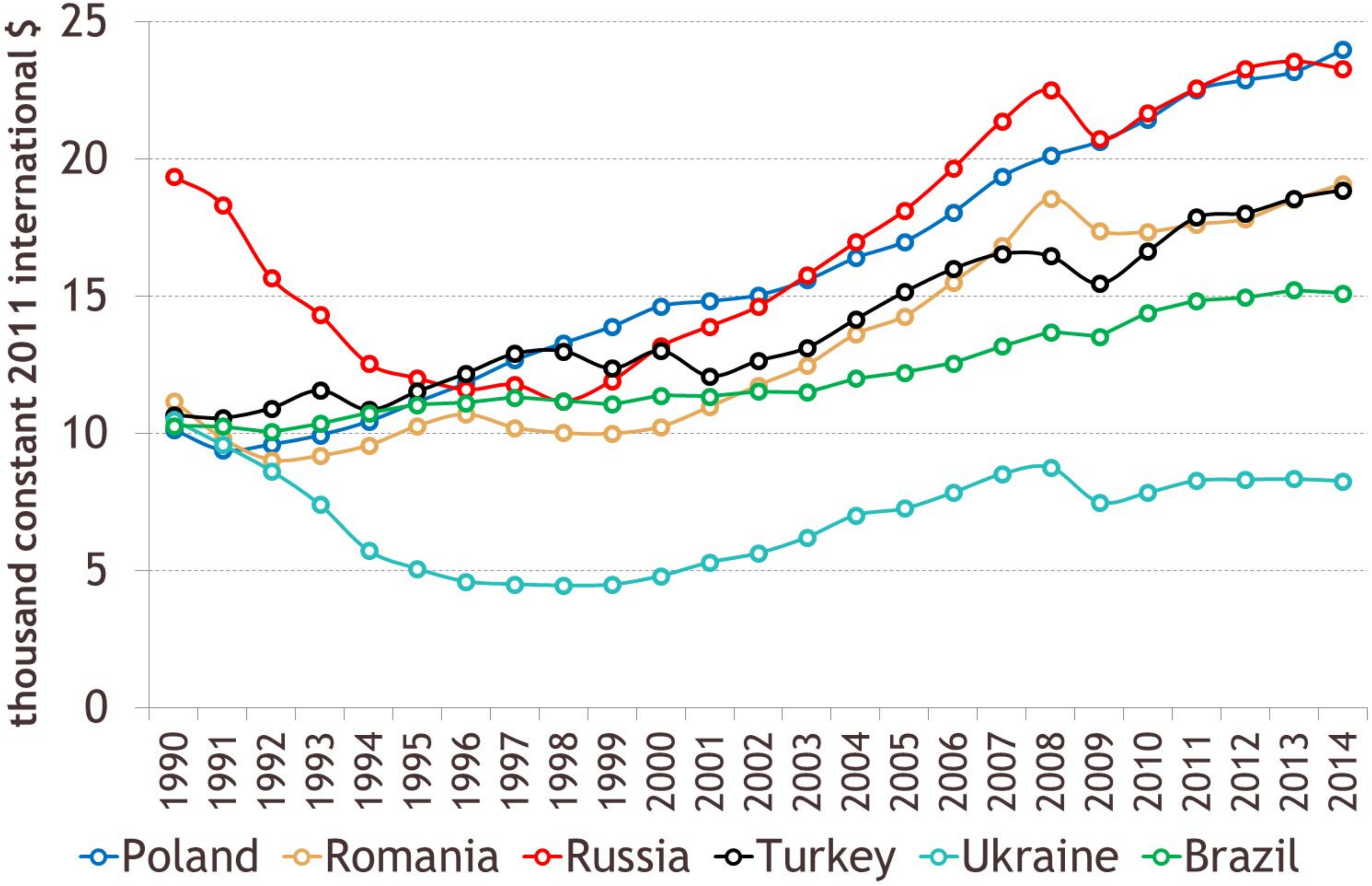
	Population, mln people				GDP per capita PPP (2011 prices)			
	1990	2000	2010	2016	1990	2000	2010	2016
Armenia	3,5	3,1	2,9	2,9	3,7	2,9	6,7	8,2
Belarus	10,2	10,0	9,5	9,5	8,4	7,6	16,2	16,7
Kazakhstan	16,3	14,9	16,3	17,8	13,1	10,0	20,1	23,4
Kyrgyz Rep.	4,4	4,9	5,4	6,1	3,5	2,1	2,8	3,3
Russia*	148,3	146,6	142,8	146,7*	20,6	14,1	23,1	24,0*
For reference								
Azerbaijan								
Georgia	4,8	4,4	3,9	3,7	8,0	3,3	6,7	9,3
Turkey	53,9	63,2	72,3	79,5	11,4	13,9	18,0	23,7
Uzbekistan	20,5	24,7	28,6	31,8	3,1	2,5	4,2	6,0
Ukraine	51,9	49,2	45,9	42,7	10,5	4,8	7,8	7,7

** Including Republic of Crimea and Sevastopol*
Source — World Bank

Death, birth and natural increase in Russia, 1960-2015s



GDP PPP per capita, constant US$

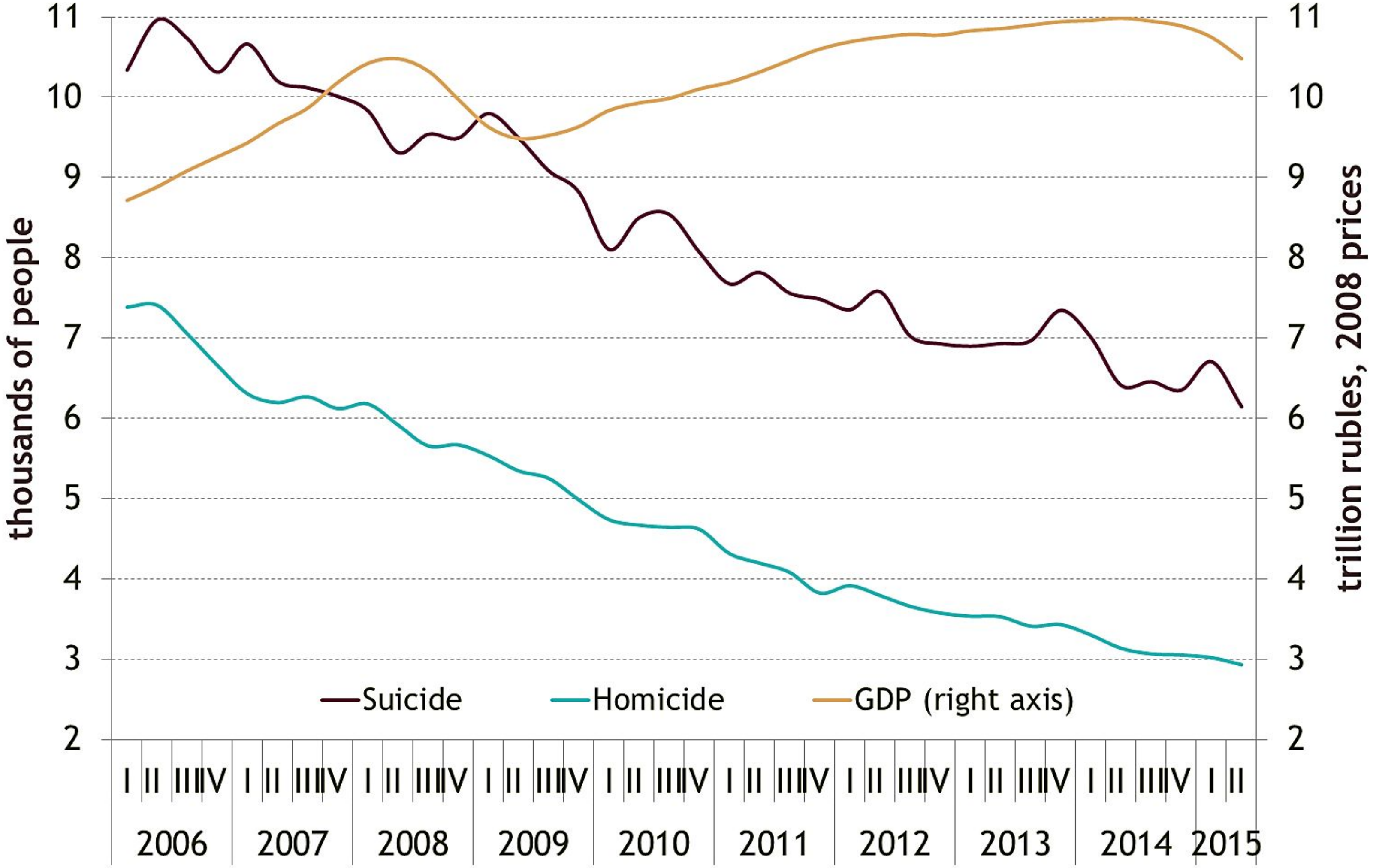


Source: World Bank

Key topics – crush of 1990-s

- GDP = minus 43%, jump in Suicides and Murders
- Failure of Transition to mainstream: privatization for Oligarchs, high Inequality, concentration of property
- SU’s dissolution without agreements – aggravation!
- Soviet ideology had gone very fast – to vacuum…
- Limited numbers of strong industries: Resources, Energy, Agriculture, Nuclear, Defense, Space etc.
- Oil prices helped to meet immediate needs.
- People feel much safer after collapse of 1990s.
- Two million educated emigrated… +Access to Info!
- Education and oil money – reestablishing of hard core.

Russia: GDP level, Suicide and Homicide, qtr., s.a. 2006-2015



Russians speaking English and Russian & the Internet access

	Percentage of Households with Access to Internet		Possession of Mobile Telephone (%)		Possession of Personal Computer (%)	
	2010	2015	2010	2015	2010	2015
Brazil	27,1	54,5	91,8	93,4	34,9	53,5
Canada	78,4	85,9	78,1	87,2	82,6	85,5
China	23,7	54,2	86,9	94,6	35,4	49,6
Germany	72,9	85,0	88,9	93,5	80,8	88,3
Italy	59,0	75,4	88,8	92,6	64,8	72,5
Russia	41,3	72,1	93,0	96,6	55,0	72,5
South Africa	10,1	50,6	85,8	96,3	18,3	23,4
Spain	59,1	78,7	94,6	96,7	68,7	75,9

Society after 1/4 Century of Transition

Current Russian Socio-economic realty is the result partly of Soviet times, mostly from 1990-s transition.

Privatization and Inequality connected! Transformation failed to support educated social strata, create mass shareholding, stable civil society!

Recessions and oil-price fluctuations dominate the economic and social situation.

Tough Russian History – Tough Russian Mentality – it always here, fatalistic and used to hardship.

Pressure from outside puts Russian Elites on defensive and leads to consolidation, the old style. New Cold war was the convenient “gift” from outside. It goes since 2012.

Key topics – Cold war in minds of Elites

Russians never lost Cold War, better forget it…

It is not world of Fukuyama… - it's of "Fukusima"…

Russian Political Elites want equal footing and recognition of Russian interests in the World.

Since Russia was considered a Looser, no "interests" for losers – let them weep! Comfortable…till 2014.

Russian pretense for equality, interests, roles was ignored and Russian Elites made a last ditch stand.

Failures in Middle East, problems in other places - for R. Elites were recognition of the urgency of defense.

Elite insists – Russia behaves exactly as super powers.

It was unexpected for West and met with a Cold war…

Trap of the middle level development?

The «500 days» program 1990; attempts of 1991; IMF and IBRD 1992-1998; again in 2001; «Coalitions for the future» 2007-08; the Concept of long-term development (КДР) 2008; «Strategy 2020» in 2013; Sustainable development goals (Kudrin) 2017-2018; The strategy of the Ministry of Economy-2035

The necessity of:

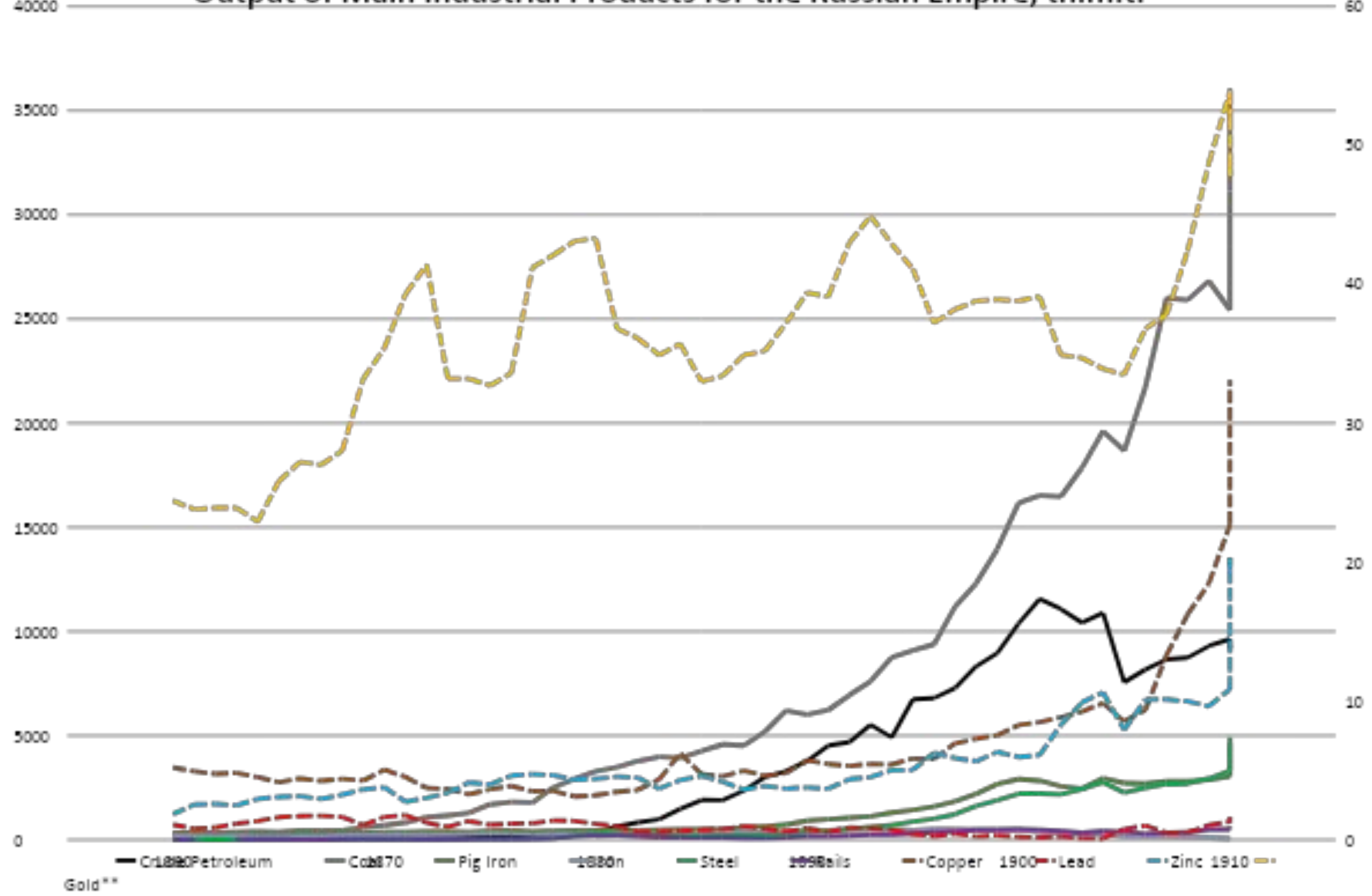
- mass shareowner;
- more science & innovations sustainability;
- independence from oil money;
- more equality in personal income;
- entrepreneurship development

becomes evident

Leonid Grigoryev – some publications

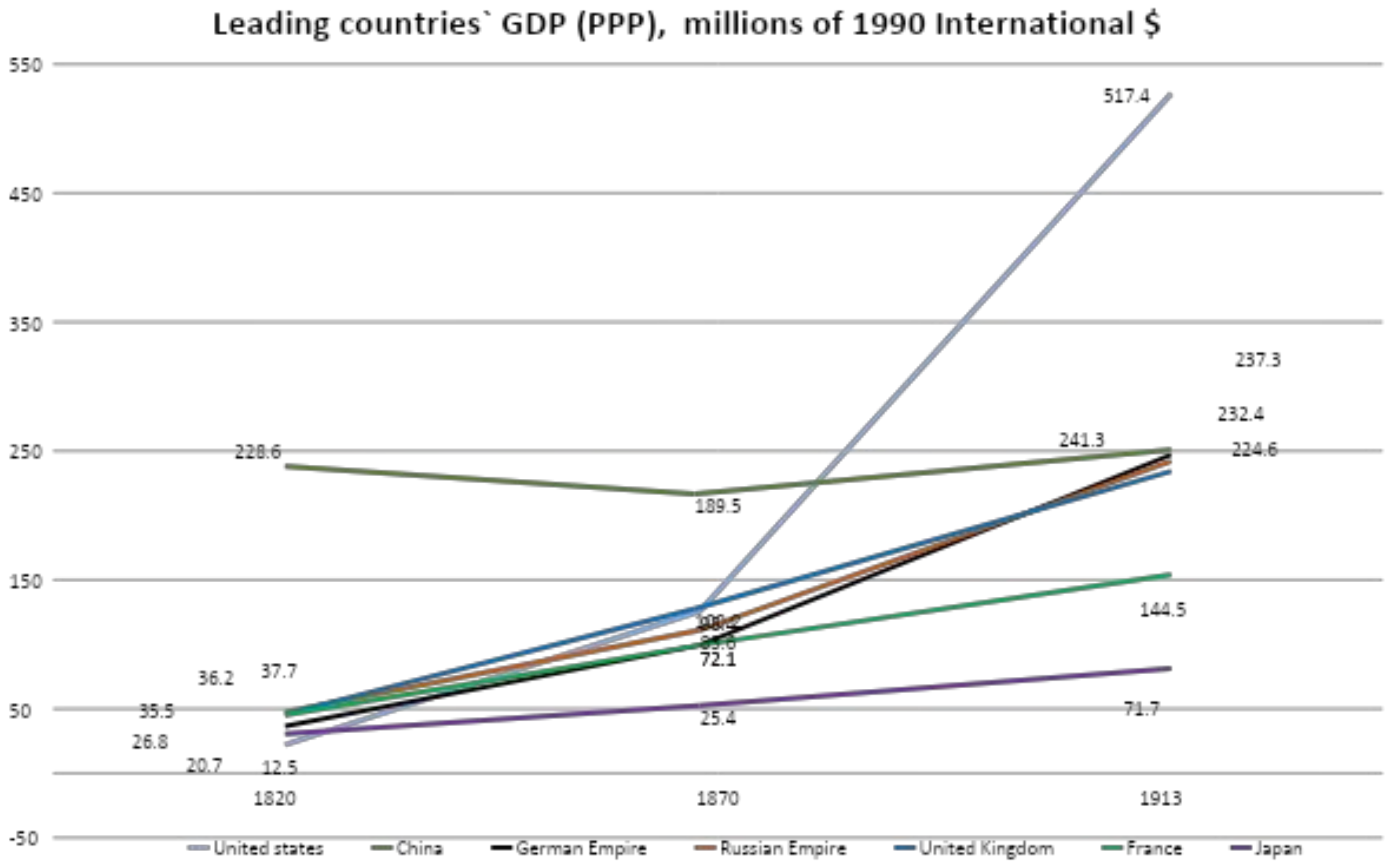
- Elites - the Choice for Modernization in “Russia: the Challenges of Transformation”, P. Dutkiewicz and D. Trenin (Ed), NYUP, 2011.
- “The elites’ demand for law: Overcrowded streetcar (tram) effect” // The Russian Journal of Economics, #3 – 2015, pp 313-327.
- «Transformation: For the people or for the elite?» - in “The Social History of Post-Communist Russia”, Edited by P. Dutkiewicz, V. Kulikov and R. Sakwa. Routledge, NY, 2016, pp. 58-80.
- “Russia in the System of Global Economic Relations” // Strategic Analysis. Delhi, Vol. 46. 2016. № 6. (special issue: Russia in Global Affairs.) P. 498-512.

Output of Main Industrial Products for the Russian Empire, th.m.t.



* Dotted-line graphs refer to the right axis
**Gold is measured in metric tons

Source: Suhara (2013, pp. 545-548



Source: Maddison 2007, p. 379, table A.4

Literature, basic:

1. Mau V., Drobyshevskaya T. "Modernization and the Russian Economy: Three Hundred Years of Catching Up."// The Oxford Handbook of the Russian Economy Edited by Alexeev M. and Weber Sh., 2012

2. Grigoryev L. Russia in the System of Global Economic Relations // Strategic Analysis. Vol. 46. 2016. № 6. Special Issue: Russia in Global Affairs. P. 498-512.

Additional:

3. Markevich A., Zhuravskaya. E. The Economic Effects of the Abolition of Serfdom: Evidence from the Russian Empire. SSRN Working paper. URL: https://ssrn.com/abstract=2514964

4. Galor O. Moav O. Vollrath D. Inequality in Landownership, the Emergence of Human-Capital Promoting Institutions, and the Great Divergence. Review of Economic Studies, 2009, vol. 76, issue 1, pages 143-179

5. Фернан Бродель Материальная цивилизация, экономика и капитализм, XV-XVIII вв. Том 3. Время мира ... Москва: Весь мир, 2006 (in Russian)

6. Мэддисон, Энгас. "Контуры мировой экономики в 1-2030 гг." (2012)

Transformations of 1917-2018

(ideology, ownership, country's configuration)

and objective reasons for problems.

21.01.2019

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Topics for discussion:

- Russian in 1913 – Development V Institutions
- European politics and WWI
- WWI – Game Changer
- Russian economic future WITHOUT wars?
- Human losses at 1914-1920
- Great October Revolution – post war changes
- Fate of European empires: Austria-Hungary, Germany, Turkey. Return of national states.
- Belgian, British, French, Portuguese empires survival till aftermath of WW II

History

- Millennium+ with no peace, regular invasions
- Normans, Byzantium, Nomads before Mongols
- Big wars – Borders = Pattern of surrounding
- Revolution and XX C. = series of Catastrophes
- Dissolution of the SU aggravated all crises…
- Difficult shock for people and elites
- People have fixed feelings on external danger
- Pressing on the state (or Russian language) is not taken easy by people, not just propaganda
- Russian Elite insists, it copies other Great Elites
- If somebody resists on new rules, it may be Cold…

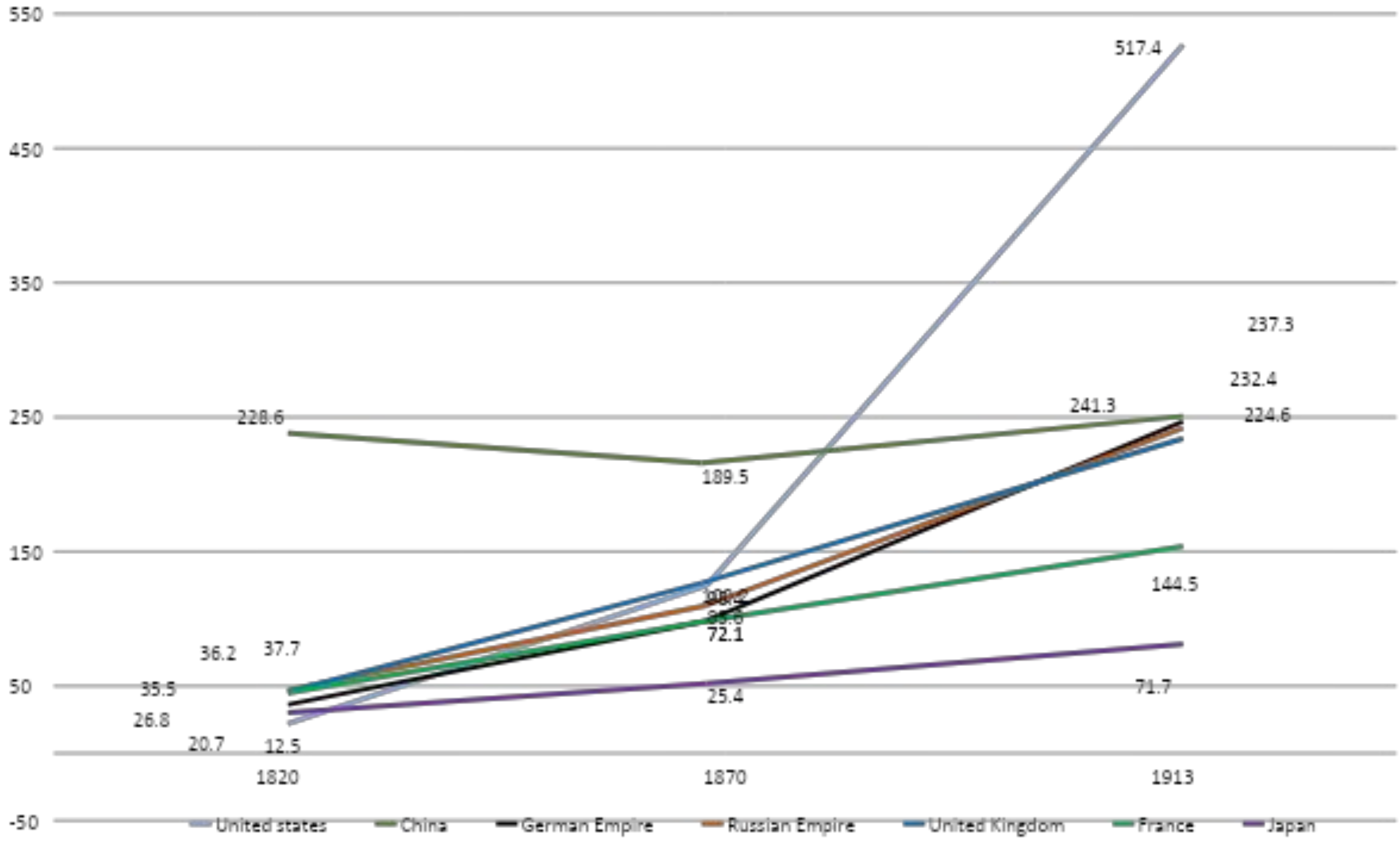
The Empire Map

Олифирова Т.И.

Periods of Russian History in XX-XXI C

- Tsar Nikolai II – till 1917
- Revolution and Civil war – 1917- 1920
- Recovery – 1920 – 1928
- Stalin’s industrialization – 1930-1941
- WW II – 1939 – 1945; USSR and USA –1941-1945
- Reindustrialization – 1945 – 1990
- Transition crisis – 1990 – 1998
- Slow recovery – 1999 – 2002
- Oil prices up and fast growth – 2002-2008
- Slow growth – 2009 - 2018

Leading countries` GDP (PPP), millions of 1990 International $



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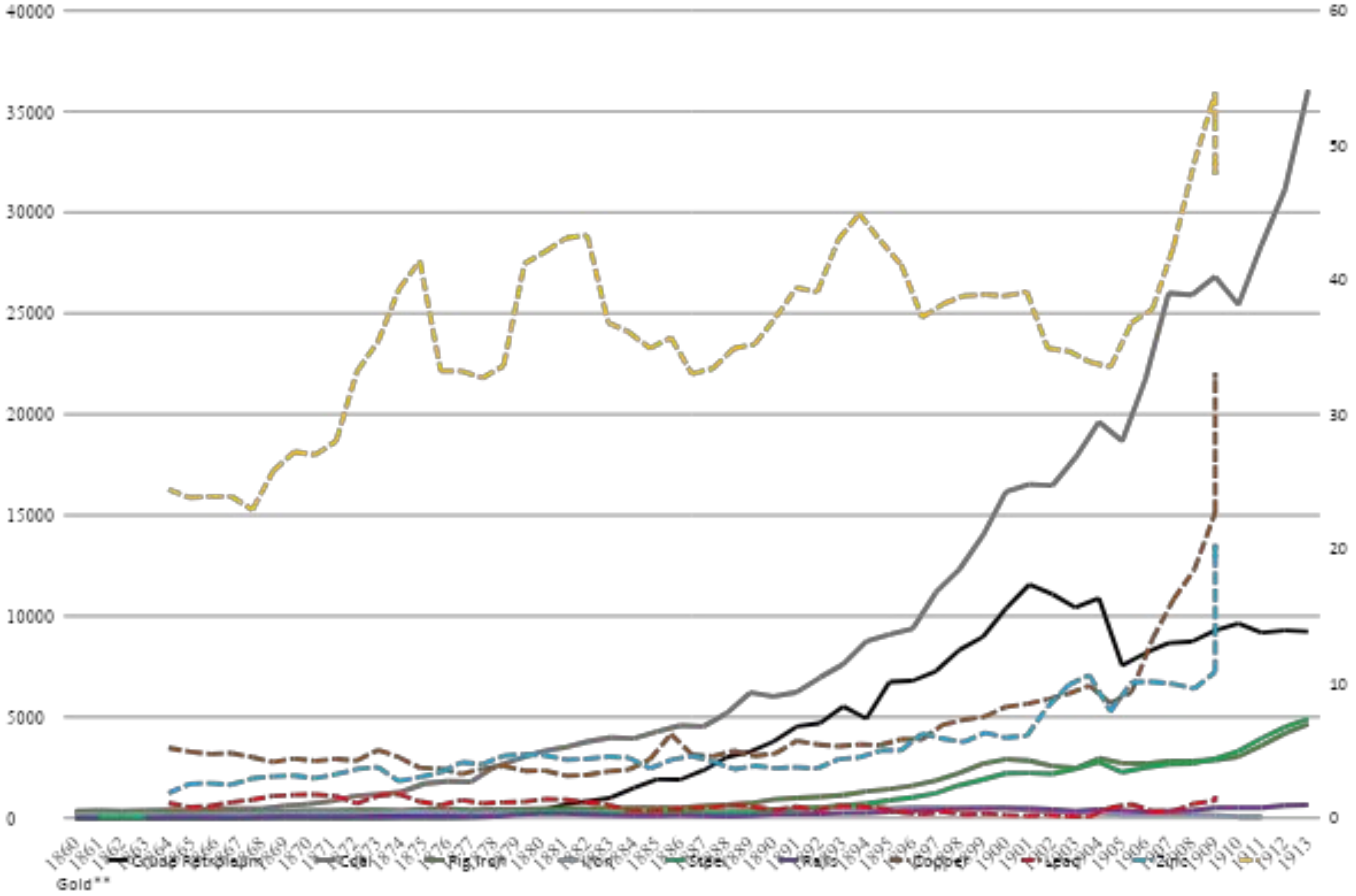

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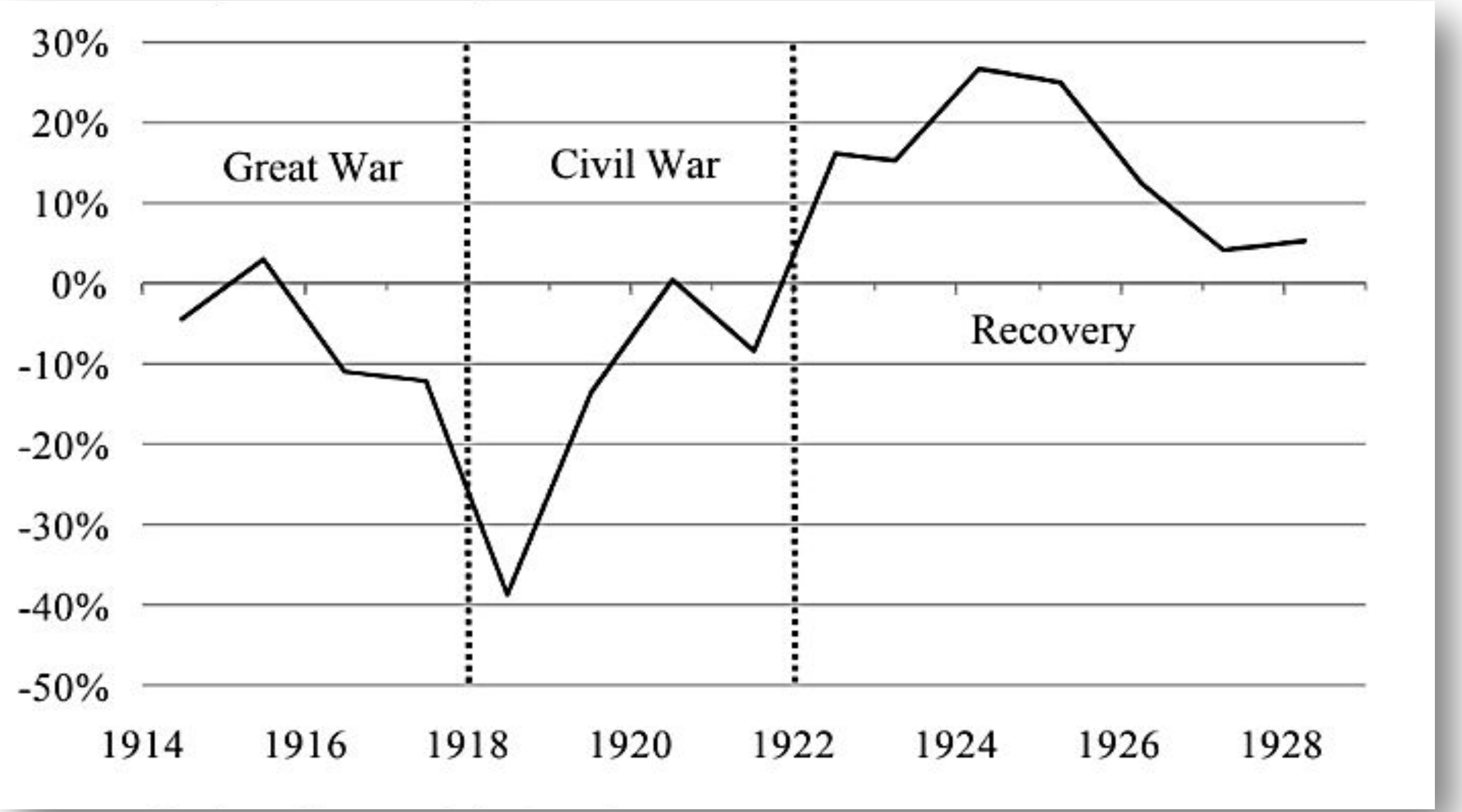
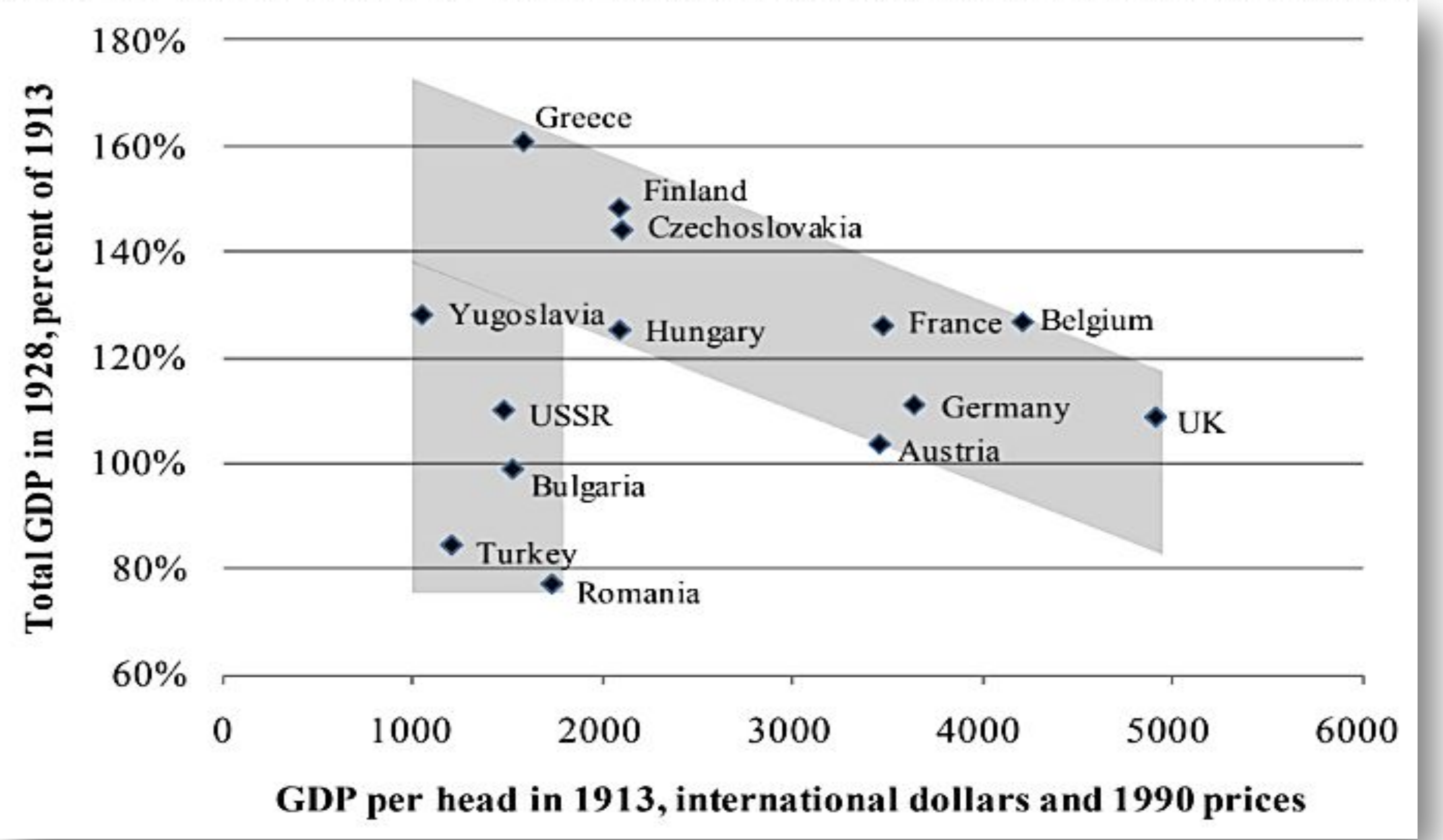
Soviet territory and at 1913 prices



Source: Markevich A., Harrison M. Great War, Civil War, and Recovery: Russia's National Income, 1913 to 1928

countries in 1928, percent of 1913



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European Empires and Unions

- Empires were established by ”cool” adventurers followed by “Boyars and Streltsy” = “Lords and Troops”
- Old empires had been established after the Crusades till 16 C.: Denmark (Baltic - England); Sweden (Baltic); Poland; Turkey (Byzantium); German conglomerate of 12
- Colonial empires since 16 C.: Belgian (Congo), Netherlands, Portugal, Spain, France, Great Britain. Germans - too late…
- Continental: Austria-Hungary, Russia, Turkey…
- First “World war” – the Netherlands against Portugal: in 17 C.
- United (organized at least) Europe: Charlemagne, Treaty of Westphalia, Napoleon, Vienna treaty, Hitler’s attempt, EU
- Cost of Empires, cost of breakdown, cost of national states.

Russian and Soviet economic and demographic losses in four crises

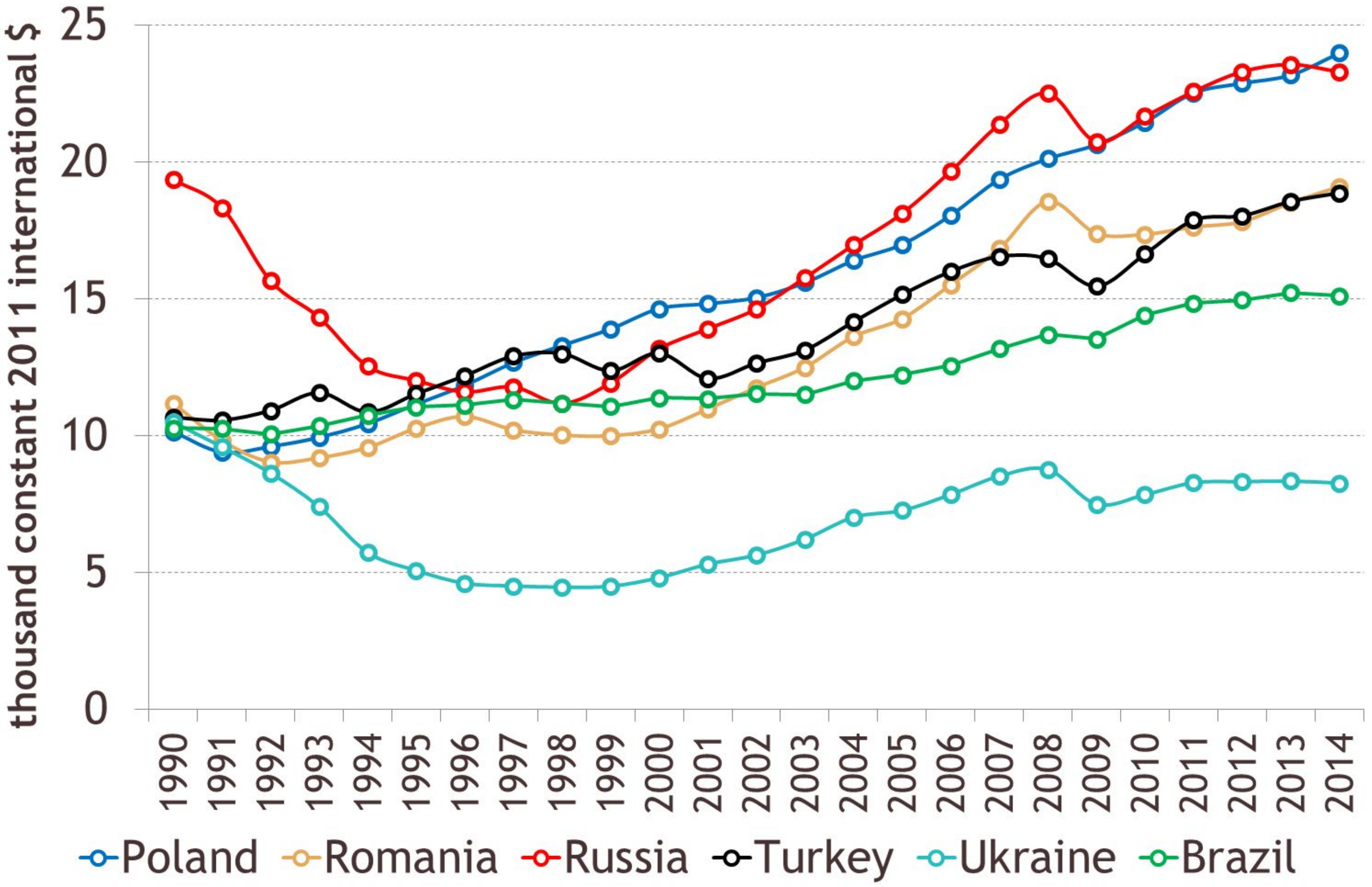
	Decline over period, percent			Premature deaths		
	Total national income	Personal con-sumption per head	Years	Million	Per cent of initial popul-ation	Years
World War I-Civil War	-62%	-56%	(1913-21)	13.0	8.4%	(1914-23)
Great Breakthrough	1%	-14%	(1930-32)	6.0	3.8%	(1932-34)
Great Terror-World War II	-21%	-44%	(1937-42)	28.6	15.1%	(1937-47)
Post-Soviet transition	-38%	-38%	(1990-94)	0.1-3.8	0.1-2.6%	(1991-98)

Source: Markevich A., Harrison M. Great War, Civil War, and Recovery: Russia's National Income, 1913 to 1928

1990 - 2018

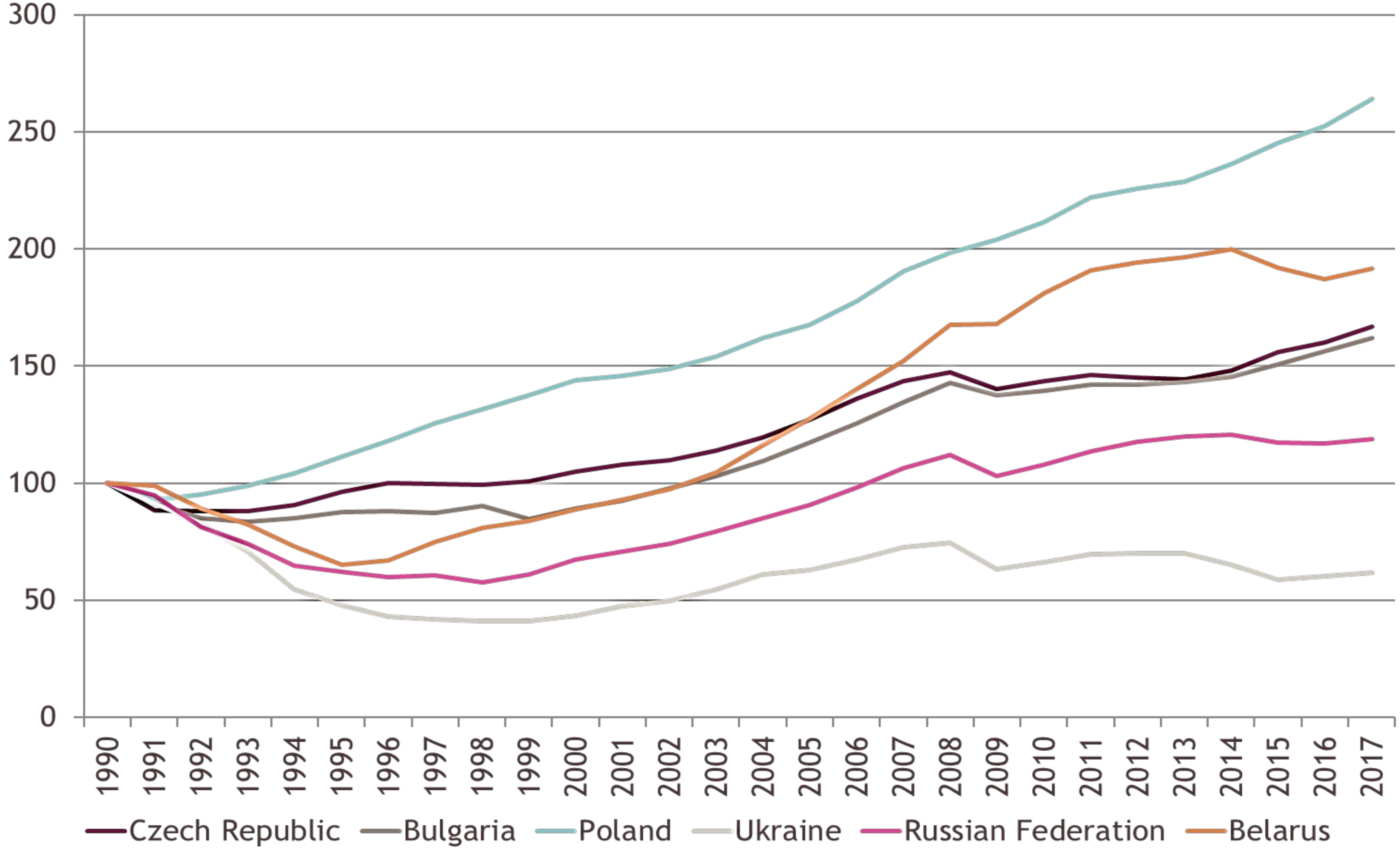
- Three Transformations:
- State configuration
- Politics and ideology
- Ownership
- Steps of 1992: free trade, open external trade, free prices
- Case of Poland
- “500 days” – Yavlinski, Yasin + 10 (LG in)
- Summer 1990
- All subsidies down
- Assets and Debts sharing

GDP PPP per capita, constant US$



Source: World Bank

Economic history quest: Growth of transition economies. **1990 – 2017,GDP PPP per capita, 1990 = 100**



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What did Russia obtain after the collapse?

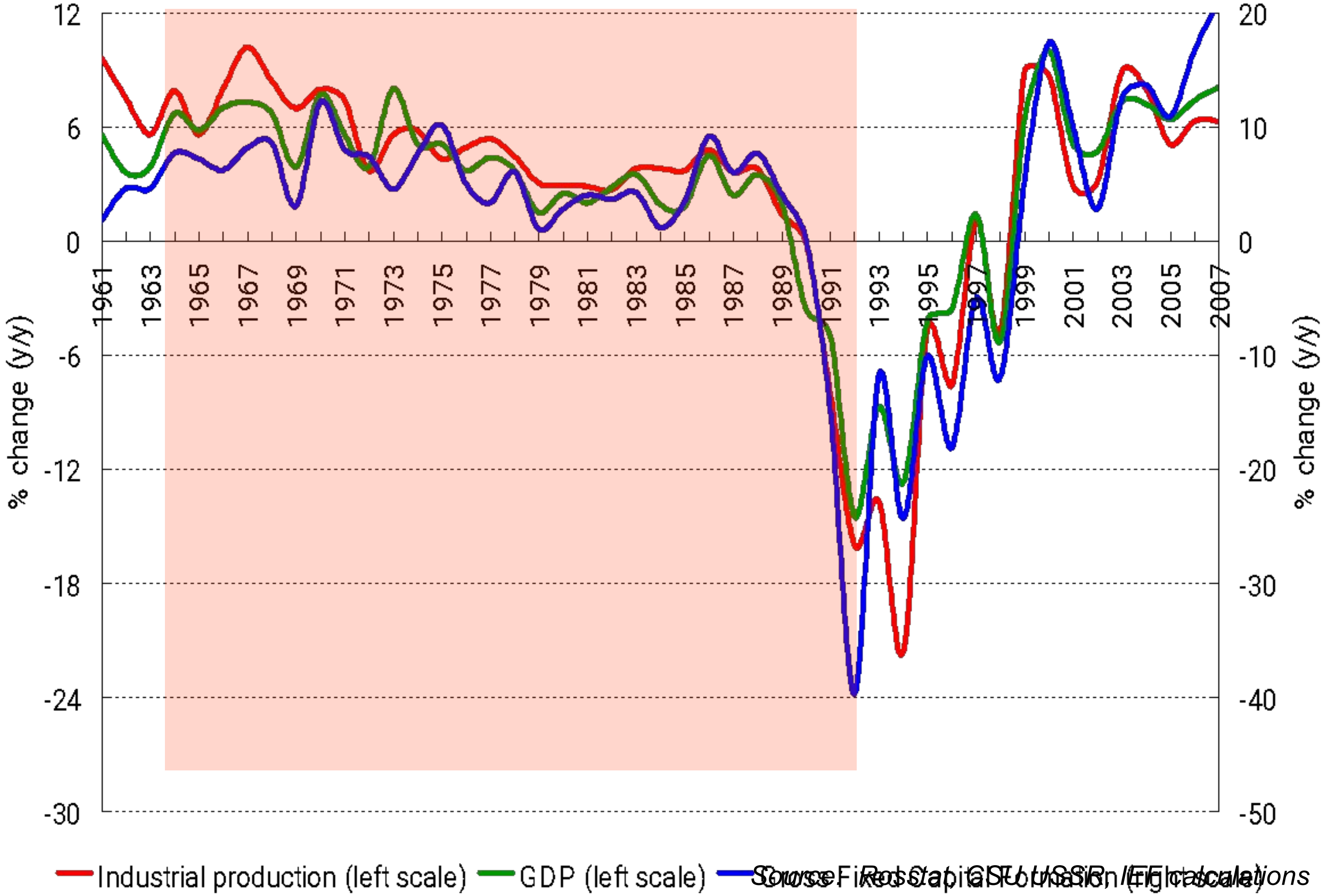
- Territory – more than 80% and natural resources
- Population – 51%
- Industry – approximately 60%
- Agriculture – about 50%
- The gross of the army (nuclear)
- Universities and science – more than 90% ("in lay terms")
- Embassies and foreign buildings – exchange for debts
- Russia paid all the debts of USSR (with 1994 debt restructuring) and gave to all the 14 countries "zero debts"
- More mining and extraction (with Kazakhstan)
- Less manufacturing (Belarus and to the West as a whole)

Russia key indicators, growth for the period,%

	1989–1998	1998–2008	2008–2016
Gross Domestic Product	-44	95	3
Gross Fixed Capital Formation	-79	229	-4
Industrial production	-57	77	4
Mining	-35	57	9
Manufacturing	-64	104	3
Electricity, gas and water utilities	-24	19	-2
Retail sales	4	161	5
Food sales	-4	121	-2
Non-food sales	9	202	12
Sales of organizations (stores)	-17	207	13
Sales in "open" markets	306	32	-44
Market services rendered to population	-75	75	8

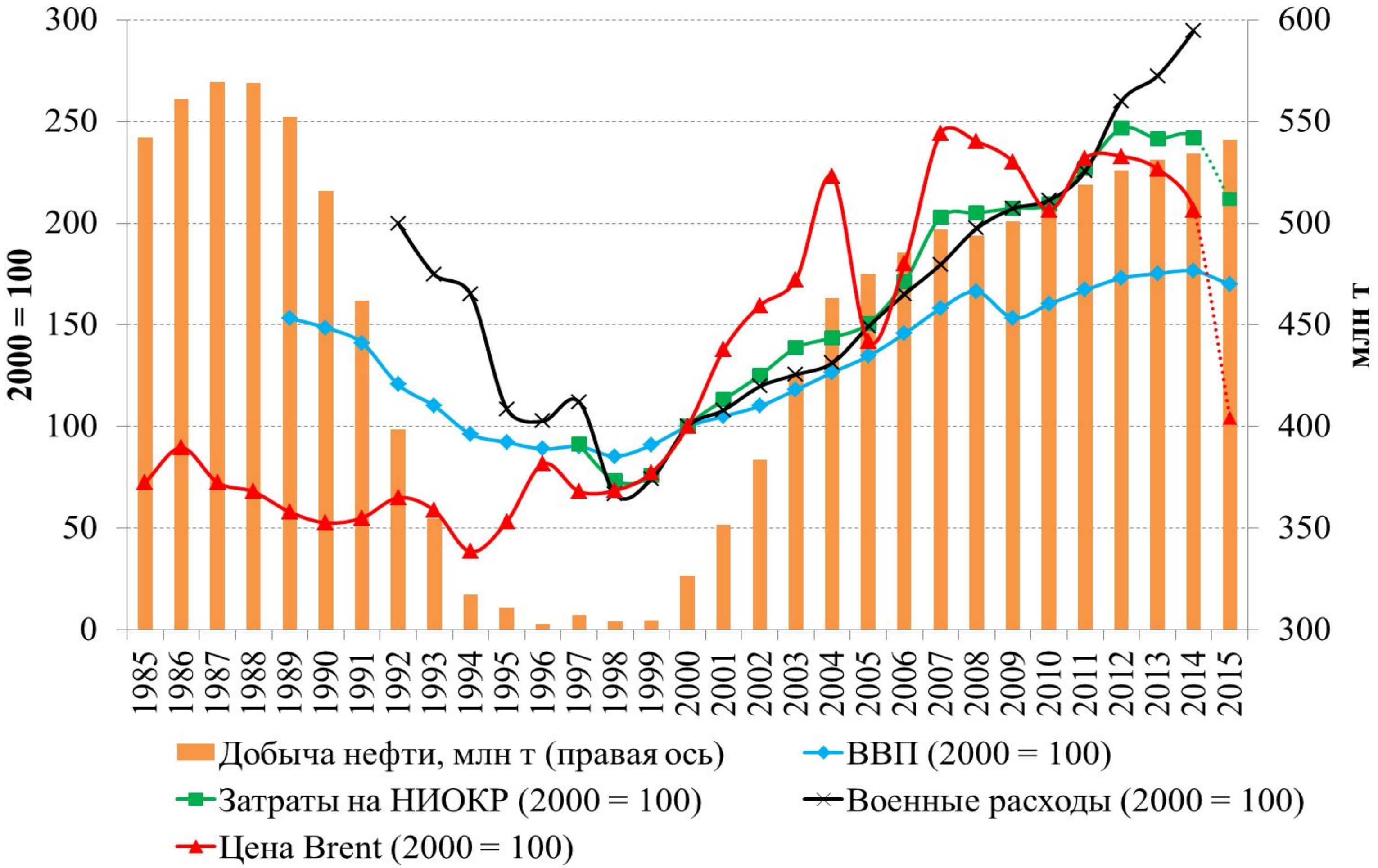
Source: Rosstat

GDP, Industry production and Gross Fixed Capital Production, 1961-2007

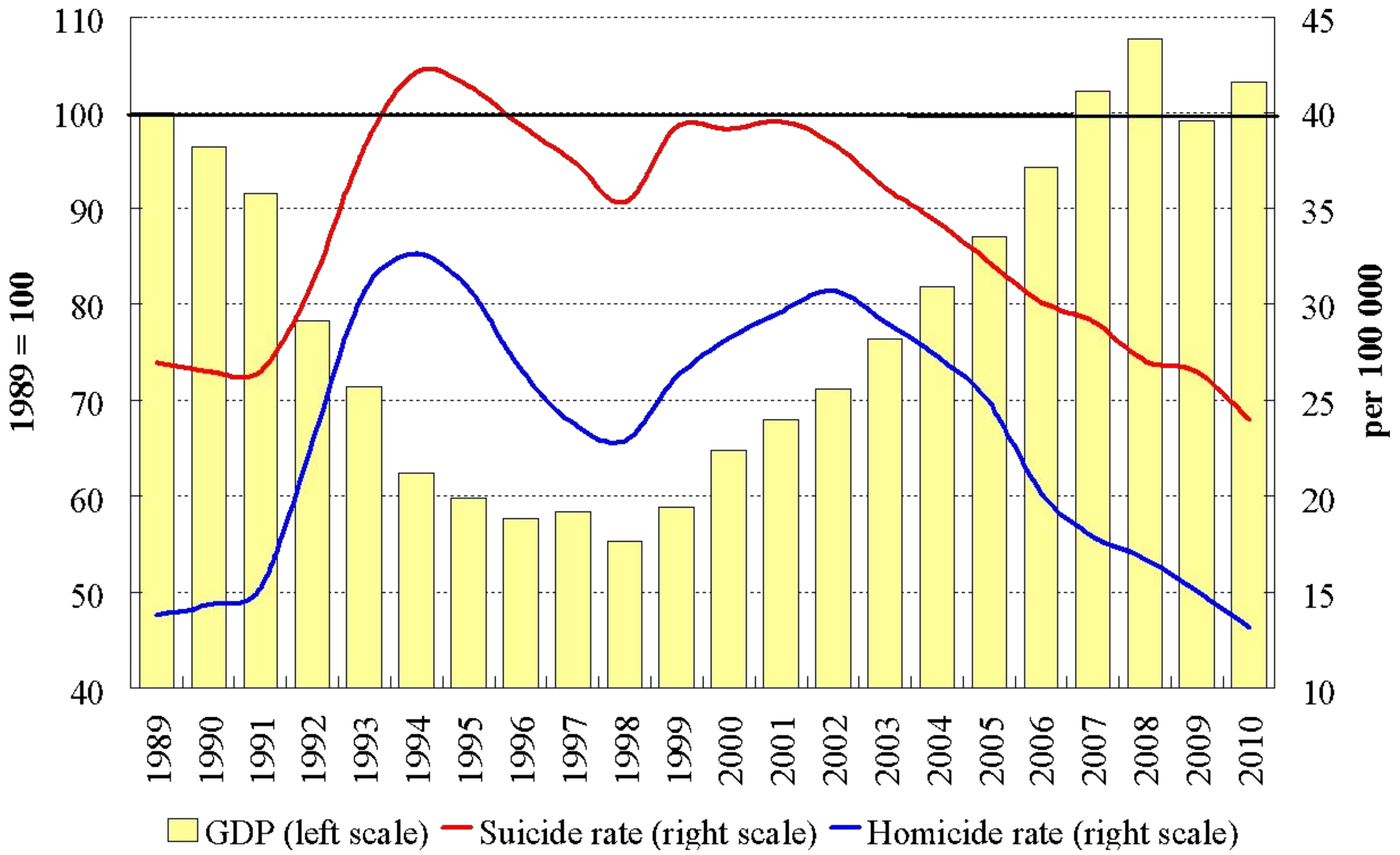


Source: Rosstat, CSU USSR, IEF calculations

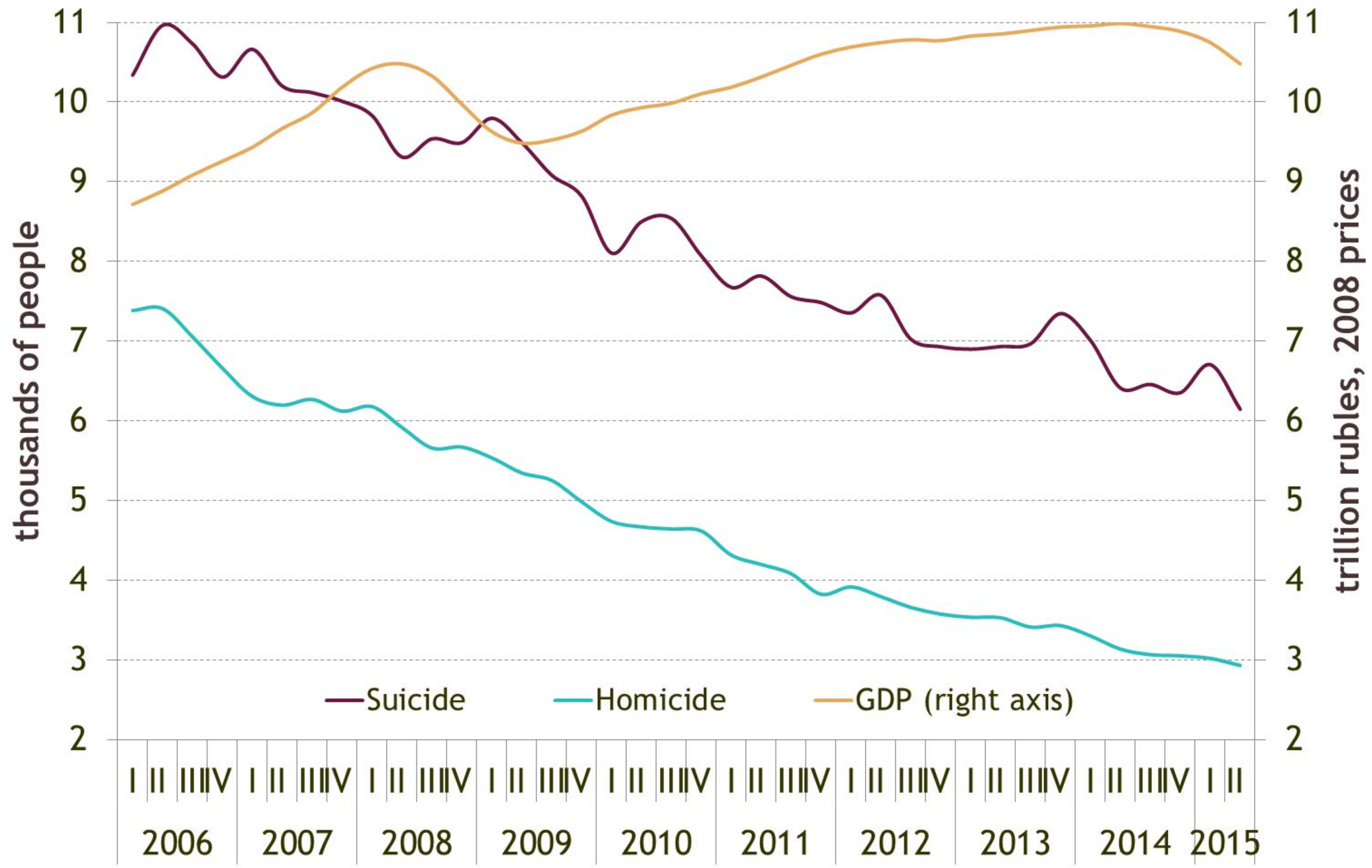
GDP (2000=100), military and R&D expenditures, oil extraction and prices



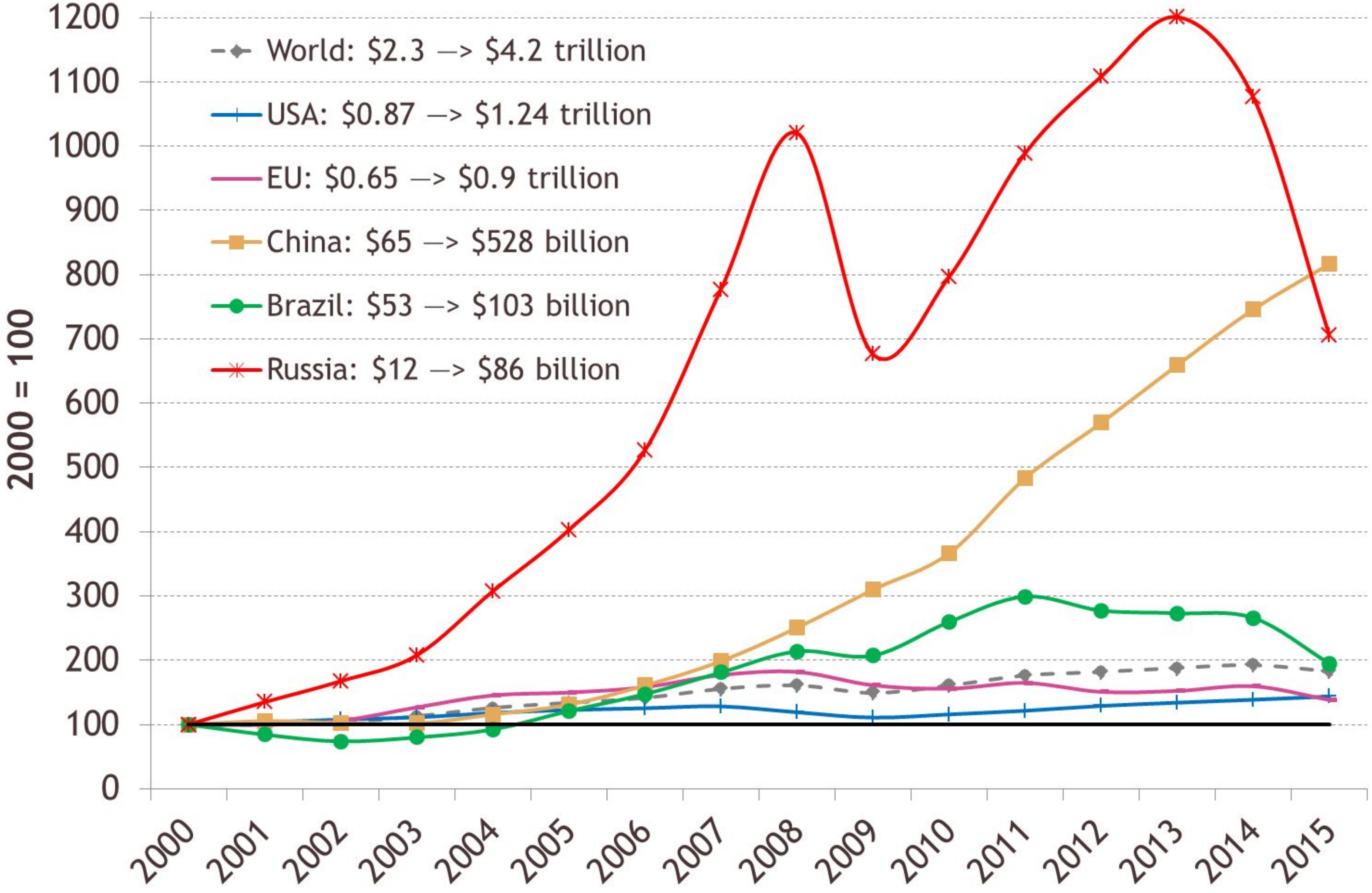
Russia: GDP level, Suicide and Homicide rates, 1989-2010



Russia: GDP level, Suicide and Homicide, qtr., s.a.2006-2015



Consumer Expenditure on Durable Goods, US$, Current Prices, 2000-2015



Source: Euromonitor

Society after 1/4 Century of Transition

Current Russian Socio-economic realty is the result partly of Soviet times, mostly from 1990-s transition and of course of recent developments.

Recession and oil-price fluctuations dominate the economic and social situation.

Transformation failed to support educated social strata, create mass shareholding, stable civil society!

Tough Russian History – Tough Russian Mentality – it always here, fatalistic and used to hardship.

Pressure from outside puts Russian Elites on defensive and leads to consolidation of old style. And Cold war is the convenient gift from outside. It goes since 2012.

Key topics – Cold war in minds of Elites

- Russians never lost Cold War, better forget it…
- It is not world of Fukuyama… - it's of "Fukusima"…
- Russian Political Elites want equal footing and recognition of Russian interests in the World.
- Since Russia was considered a Looser, no "interests" for losers – let them weep! Comfortable…till 2014.
- Russian pretense for equality, interests, roles was ignored and Russian Elites made a last ditch stand.
- Failures in Middle East, problems in other places - for R. Elites were recognition of the urgency of defense.
- Elite insists – Russia behaves exactly as super powers.
- It was unexpected for West and met with a Cold war…

Military expenditure, in constant (2015) US$

	constant (2015) US$				% GDP			
	1988	1998	2008	2016	1988	1998	2008	2016
USA	587,4	398,8	683,8	606,2	5,7	3,0	4,2	3,3
China	20,2 (1989)	32,7	113,5	225,7	2,5 (1989)	1,7	1,9	1,9
Russia	250,0 (USSR)	14,0	41,4	70,3	-	3,0	3,3	5,3
Saudi Arabia	23,3	31,4	50,0	61,4	15,2	14,3	7,4	10,4
France	57,7	51,1	53,6	55,7	3,6	2,7	2,3	2,3
India	17,9	22,8	41,0	55,6	3,7	2,8	2,6	2,5
United Kingdom	59,4	47,8	64,4	54,2	3,8	2,4	2,4	1,9
Japan	34,5	40,9	40,2	41,6	0,9	1,0	1,0	1,0
Germany	58,2 (West G)	42,1	39,5	41,0	2,8 (West G)	1,5	1,3	1,2
Republic of Korea	14,1	20,1	29,5	37,3	4,3	2,9	2,6	2,7
Italy	31,7	32,4	34,3	28,0	2,3	1,9	1,7	1,5
Australia	12,1	13,6	19,6	24,4	2,2	1,9	1,8	2,0
Brazil	14,5	14,8	20,6	22,8	2,1	1,7	1,5	1,3
Israel	14,3	12,5	14,7	17,8	17,1	7,9	6,5	5,8
Canada	16,9	12,5	17,9	15,5	2,0	1,3	1,3	1,0
Turkey	7,9	16,3	13,8	15,0	2,9	3,3	2,3	2,0

Source: SIPR, 2017I

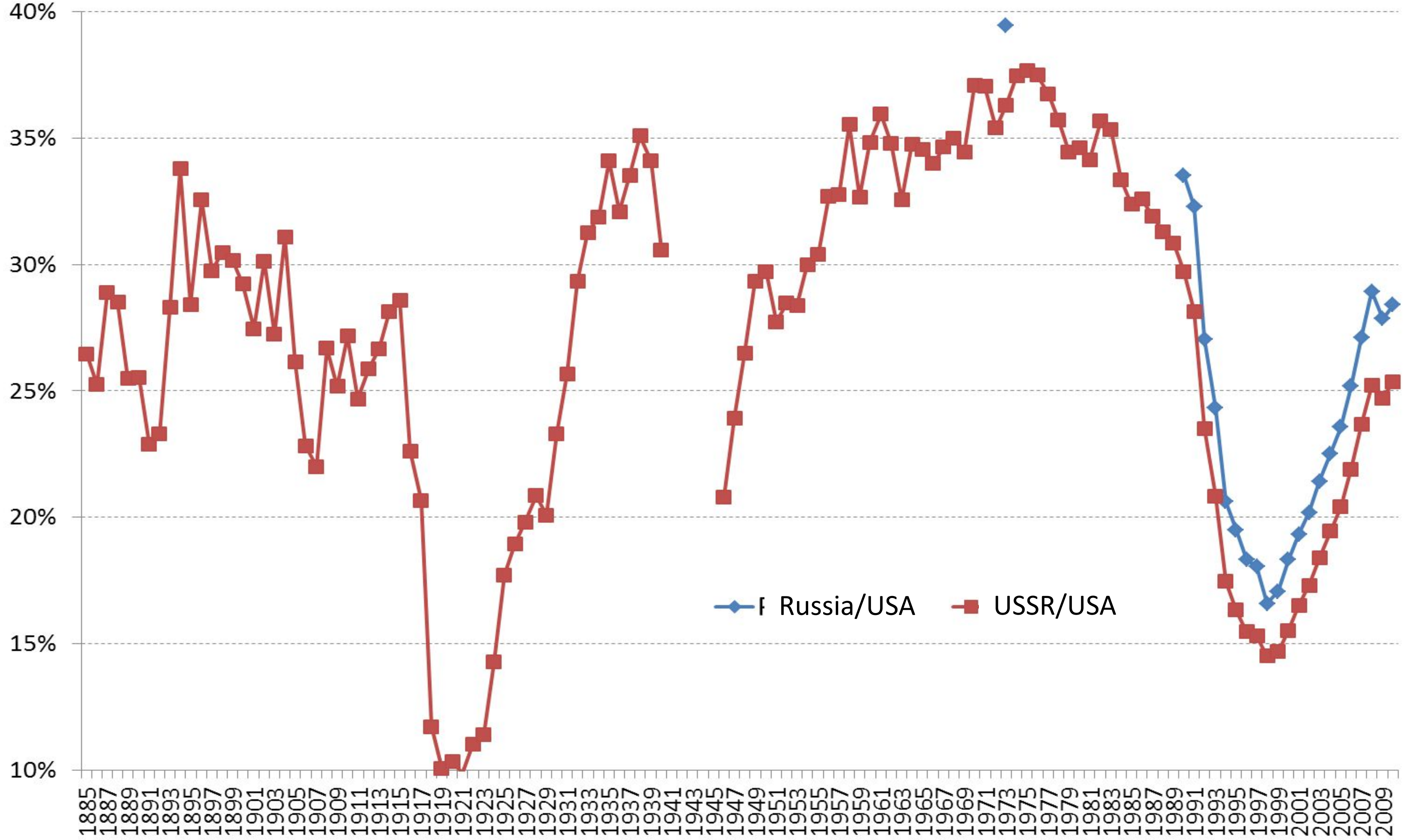
Russians know English and Russian & got access

Country	Percentage of Households with Access to Internet		Possession of Mobile Telephone (%)		Possession of Personal Computer (%)	
Years	**2010**	**2015**	**2010**	**2015**	**2010**	**2015**
Brazil	27,1	54,5	91,8	93,4	34,9	53,5
Canada	78,4	85,9	78,1	87,2	82,6	85,5
China	23,7	54,2	86,9	94,6	35,4	49,6
Germany	72,9	85,0	88,9	93,5	80,8	88,3
Italy	59,0	75,4	88,8	92,6	64,8	72,5
Russia	41,3	72,1	93,0	96,6	55,0	72,5
South Africa	10,1	50,6	85,8	96,3	18,3	23,4
Spain	59,1	78,7	94,6	96,7	68,7	75,9

Logic of this Presentation

- Objective problem of Russian history and institutions with limited information and prejudices of observers…
- Empire on Continent – difference from others
- Terrible 20 Century – Crush of Elites
- Lost chances in 1917 and in 1990-s
- Interests and Borders = “Ireland border” x 15
- Transformation of 1990s defined the hybrid institutions of Wealth and Power and Politics
- Rigid Interests of Elites and loss of Trust
- “Self righteous” West V “Stubborn” East

Ratio of GDP per capita of the USSR/Russia to the USA



Literature:

- “Transition to Market Economy” (in collaboration), Moscow, 1990, a.k.a. "500 days. Transition to the Market", St. Martins Press, NY, 1991;
- Elites - the Choice for Modernization in “Russia: the Challenges of Transformation”, P. Dutkiewicz and D. Trenin (Ed), NYUP, 2011.
- “Mechanisms of Global Governance: economic analysis” (with AKudin). // “Voprosy Ekonomiki”, 7, 2013, pp. 4-28.
- **«Transformation: For the people or for the elite?» - in “The Social History of Post-Communist Russia”, Edited by P. Dutkiewicz, V. Kulikov and R. Sakwa. Routledge, NY, 2016, pp. 58-80.**
- **“Russia in the System of Global Economic Relations” // Strategic Analysis. Delhi, Vol. 46. 2016. № 6. (special issue: Russia in Global Affairs.) P. 498-512.**
- **“Markevich A., Harrison M. «Great War, Civil War, and Recovery - Russia's National Income, 1913 to 1928» Journal of Economic History, Vol. 71, Issue 03, 2011**
- **Mau V., Drobyshevskaya T. Modernization and the Russian Economy: Three Hundred Years of Catching Up // The Oxford Handbook of the Russian Economy Edited by Alexeev M. and Weber Sh., 2012**

Russia - transformations of 1990-2018

Privatization and Ownership
and corporate governance

"Even God cannot change the past"

Agathorn, 4 C BC

28.01.2019

Professor Leonid Grigoryev,
HSE, Moscow

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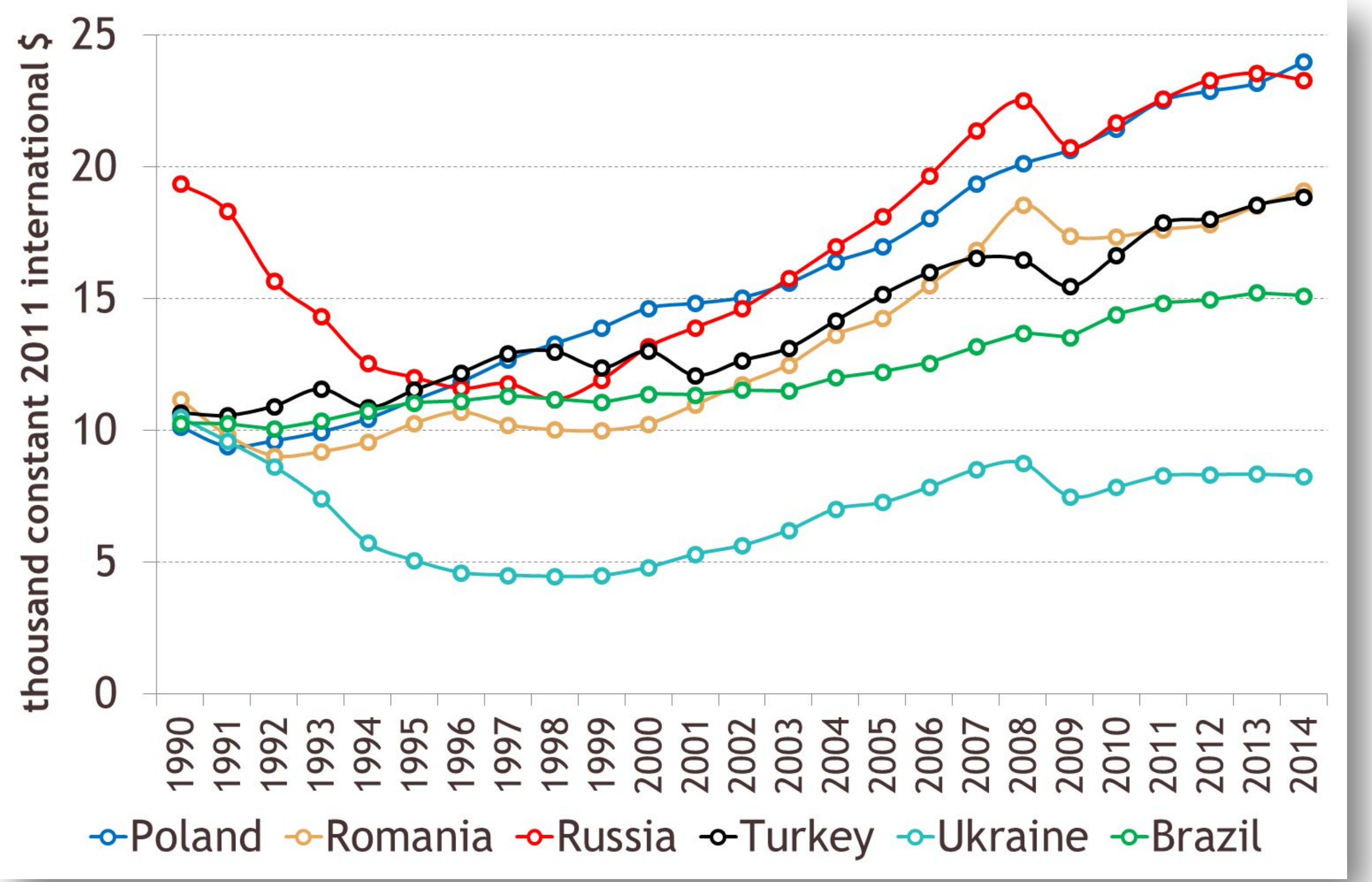
No warning for the People of the USSR

"No leader has yet had the courage to tell the peoples of the Soviet Union of the obvious: that the transition to a market economy will entail much hardship. Western living standards will not be achieved overnight. The creation of a middle class that can stabilize social and political life will take time. After a lifetime's worth of a central controlled economy, there are no alternatives to hard work, modesty and patience."

Leonid Grigoriev – New Yok Times 12.09.1991

GDP PPP per capita, constant US$



Source: World Bank

Russia key indicators, growth for the period,%

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Sales of organizations (stores)	-17	207	13
Sales in "open" markets	306	32	-44
Market services rendered to population	-75	75	8

Source: Rosstat

1990-s

- GDP = minus 43%, jump in Suicides and Murders
- Failure of Transition to mainstream: privatization for Oligarchs, high Inequality, concentration of property
- SU’s dissolution without agreements – aggravation!
- Soviet ideology had gone very fast – to vacuum…
- Limited numbers of strong industries: Resources, Energy, Agriculture, Nuclear, Defense, Space etc.
- Oil prices helped to meet immediate needs.
- People feel much safer after collapse of 1990s.
- Two million educated emigrated… +Access to Info!
- Education and oil money – reestablishing of hard core.

Transformation Debates 1987-1992

- 1987 – "ECO" = 70 years since 1917; Aganbegian, Kornai, Gaidar, Yasin – Yavlinskiy
- "500 days" plan as last chance on soft landing
- 1991 – Putsch, GDP minus 18%; SU exit;
- Choice of the Future – "Sauna Decision"
- Liberalization, Opening the economy, Macroeconomic stabilization, Privatization
- Speed vs institution building; Coase theorem!!
- Choice of Elites – nobody was actually consulted: dissolution and speed

"Soviets need a unified Free Economy" (1/2)
Leonid Grigoriev – New York Times: 12 Sept. 1991

- "The swiftness of the collapse of Soviet Communism did not allow democratic forces time to study various routes to economic reform or develop exercise to carry them out. Virtually all leading politicians in the Soviets republics have their own vision of the system to be built – a tower of Babel of economic reform."

- In what direction should they go? Today, three competing programs are being discussed in Moscow. Two would leave economic changes in the hands of individual republics, thereby slowing reform. But the third, advocated by the economist Grigory Yavlinsky and offered as a formal agreement yesterday, recommends the preservation of a strong economic union including an integrated banking system and single currency. Mr. Yavlinsky and Yevgeny Yasin, who helped craft the plan, are correct in warning of economic collapse if their four-to-six week timetables is ignored.

"Soviets need a unified Free Economy" (2/2)
Leonid Grigoriev – New York Times: 12 Sept. 1991

- *Privatization.* Everyone agrees this is the linchpin of the reform, but the new republic leaders are puzzled about how to privatize the large heavy industries. Who's going to invest in nuclear submarine plant?
- Then there's a fear factor. Western economists are urging large-scale privatization in all sectors of economy, but the new leadership fears complete collapse if it turns over the means of production to untested entrepreneurs. It has no choice, however. I've had countless conversations with bureaucrats who want to privatize their companies but keep their control over the property. The problem is that these bureaucrats may also retain their command-economy style of decision-making.

Global Choice of privatization

To privatize:

Lands, houses, infrastructure, firms, natural resources, financial assets, human capital

Ownership, enjoying proceeds, management

Corporate Governance and Management

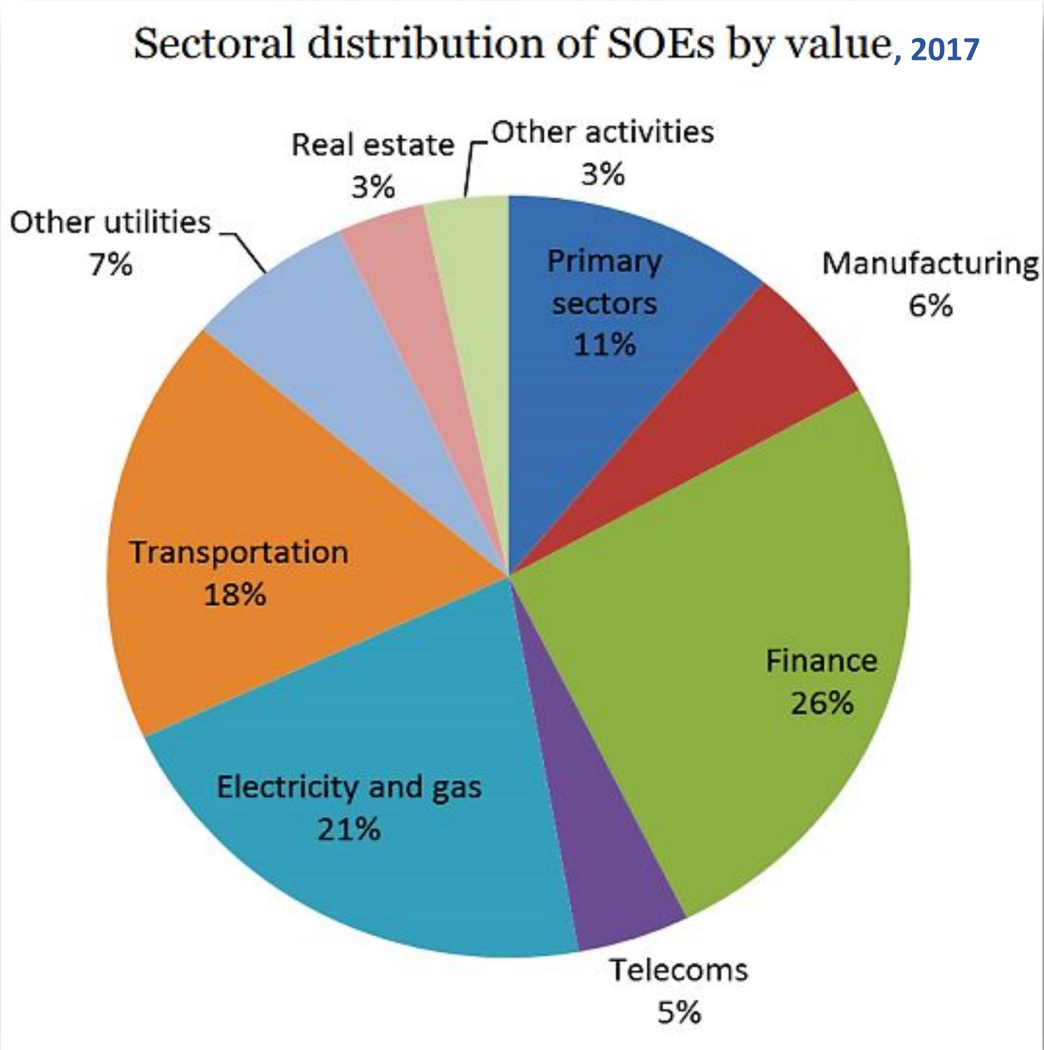
Programs of Privatization: Sale, Insiders’, Peoples’

Declarations of intent – technologies – outcomes

UK, France, Argentina, Brazil

DDR, Poland, Czechoslovakia, Russia

OECD countries in 2017



Source: Size and Sectoral Distribution of Stateowned Enterprises // OCDE

1990 - 2018

- Three Transformations
- State configuration = dissolution of the USSR into 15
- Politics and ideology – total loss of old, what new?
- Ownership change = crucial role in the long-term
- Sequence: free trade, open external trade, free prices
- Privatization – at once or after stabilization
- Summer 1990: "500 days" – Yavlinski, Yasin + 10 (LG)
- All central subsidies down
- Rubles printed by 15 Central Banks
- Inter republican trade down, political conflicts
- Assets and Debts sharing with republics

Ronald Coase and transaction costs

- Stigler 1966: "the Coase theorem thus asserts that under perfect competition private and social costs will be equal".
- Cooter, 1987 - New Palgrave Dictionary of Economics:
- "The initial allocation of legal entitlement does not matter from an efficiency perspective so long as the transaction costs of exchange are nil".
- Coase received Nobel prize in 1991 for his work of 1937 "Theory of Firm" (born in 1910). Too late to influence universities and Bretton-Woods for works on transition.
- After all privatizations "transaction costs of exchange" were too high for easy reallocation. Finders keepers, losers weepers.

Bundle of Rights – Honore 1961 – Ownership (1/2)

(1) The Right to Possess: The right to possess, *viz.* to have exclusive physi cal control of a thing, or to have such control as the nature of the thing admits, is the foundation on which the whole superstructure of ownership rests. It may be divided into two aspects, the right (claim) to be put in exclusive control of a thing and the right to remain in control.

(2) The Right to Use: The present incident and the next two overlap. On a wide interpretation ·of 'use', management and income fall within use. On a narrow interpre tation, 'use' refers to the owner's personal use and enjoyment of the thing owned. On this inter pretation it excludes management and income.

Bundle of Rights – Honore 1961 – Ownership (2/2)

(3) Right to manage is the right to decide how and by whom the thing owned shall be used.

(**4) The Right to the Income**: To use or occupy a thing may be regarded as the simplest way of deriving an income from it, of enjoying it.

(5) The Right to the Capital: The right to the capital consists in the power to alienate the thing and t.he liberty to consume, waste or destroy the whole or part of it: clearly it has an important economic aspect.

Privatization" and Choice of Objectives

- Interests in Privatization differ:
- Nation – soft transition to new institutes
- Nation - effective owner & modernization = investments
- New owners – at least stability of property rights
- Budgets – financing during crisis
- Politicians – Machiavellian priv.: to win next elections
- Outsiders: non return to socialism and "cheap buy"
- To whom: managers, workers, households
- Reformers: fast run from planned economy
- Voucher system as Speed solution = 45 th. enterprises in 1993-1999 for little money – nothing to Budget
- Ulterior Property Rights = Managers with "Right to use"

Institutional conditions for effective privatization

Conditions within a country	A company`s conditions (environment)	
	Competitive	Non-competitive
High controllability; good market-oriented conditions	Solution: to sell	Solution: to provide the necessary regulative environment and consider selling afterwards
Low controllability; lack of market-oriented conditions	Solution: to sell, paying special attention to competition	Solution: to consider privatization or management agreements; set market-oriented political goals; form pertinent regulative environment; consider selling afterwards

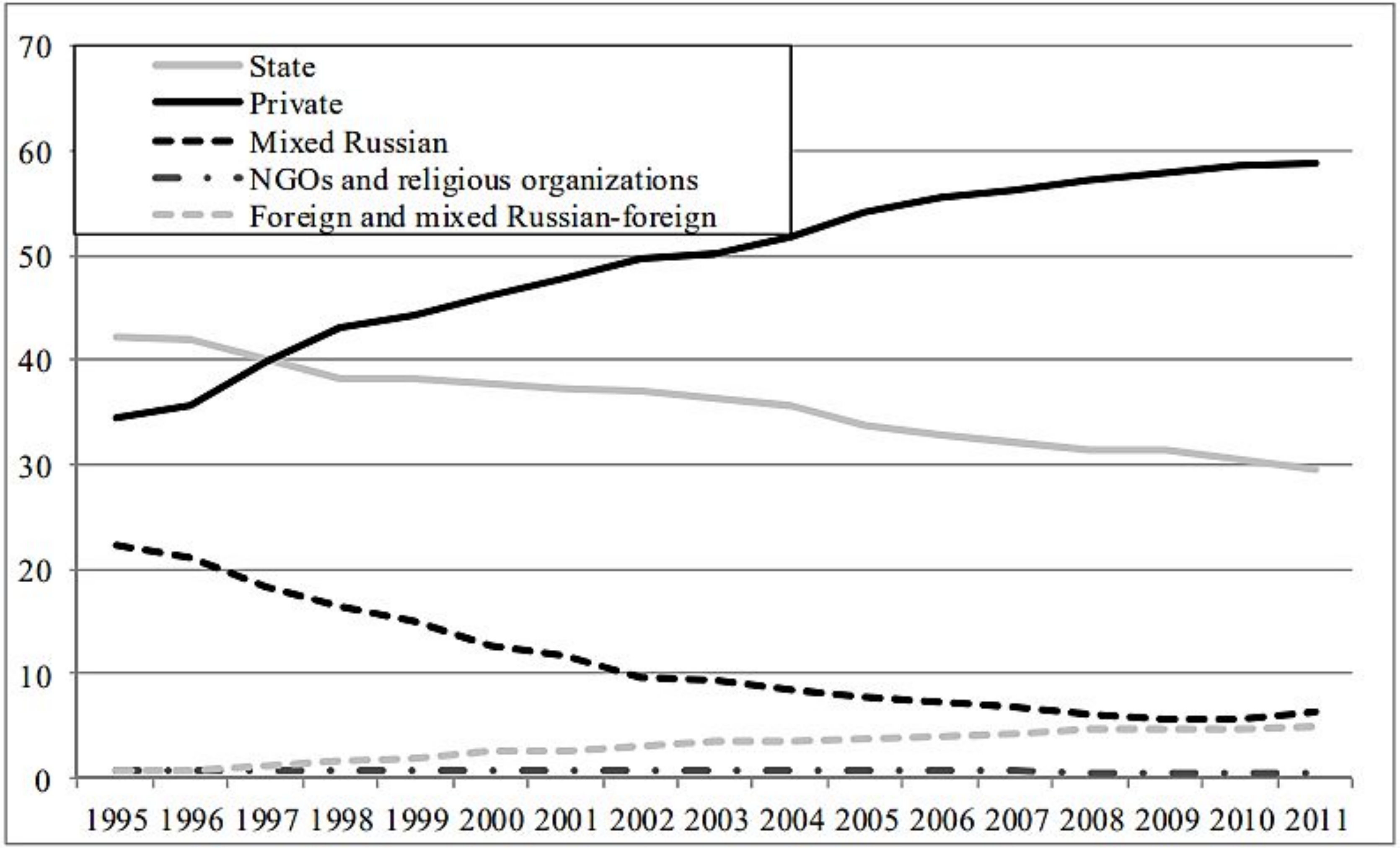
Source: Kikery S, Nelis J., Shirly M., 1992, p.5.

Table 1. The structure of privatised enterprises by form of state ownership in the period 1993-2011

Year	Number of privatised enterprises - total	Including, by form of state ownership		
		Federal	Local	Municipal
1993	42924	7063	9521	26340
1994	21905	5685	5112	11108
1995	10152	1875	1317	6960
1996	4997	928	715	3354
1997	2743	374	548	1821
1998	2129	264	321	1544
1999	1536	104	298	1134
2000	2274	170	274	1830
2001	2287	125	231	1931
2002	2557	86	226	2245
2003	434	161	152	121
2004	502	121	246	135
2005	491	112	226	153
2006	444	98	254	92
2007	302	73	115	114
2008	260	26	135	99
2009	366	140	87	139
2010	217	97	56	64
2011	276	119	80	77

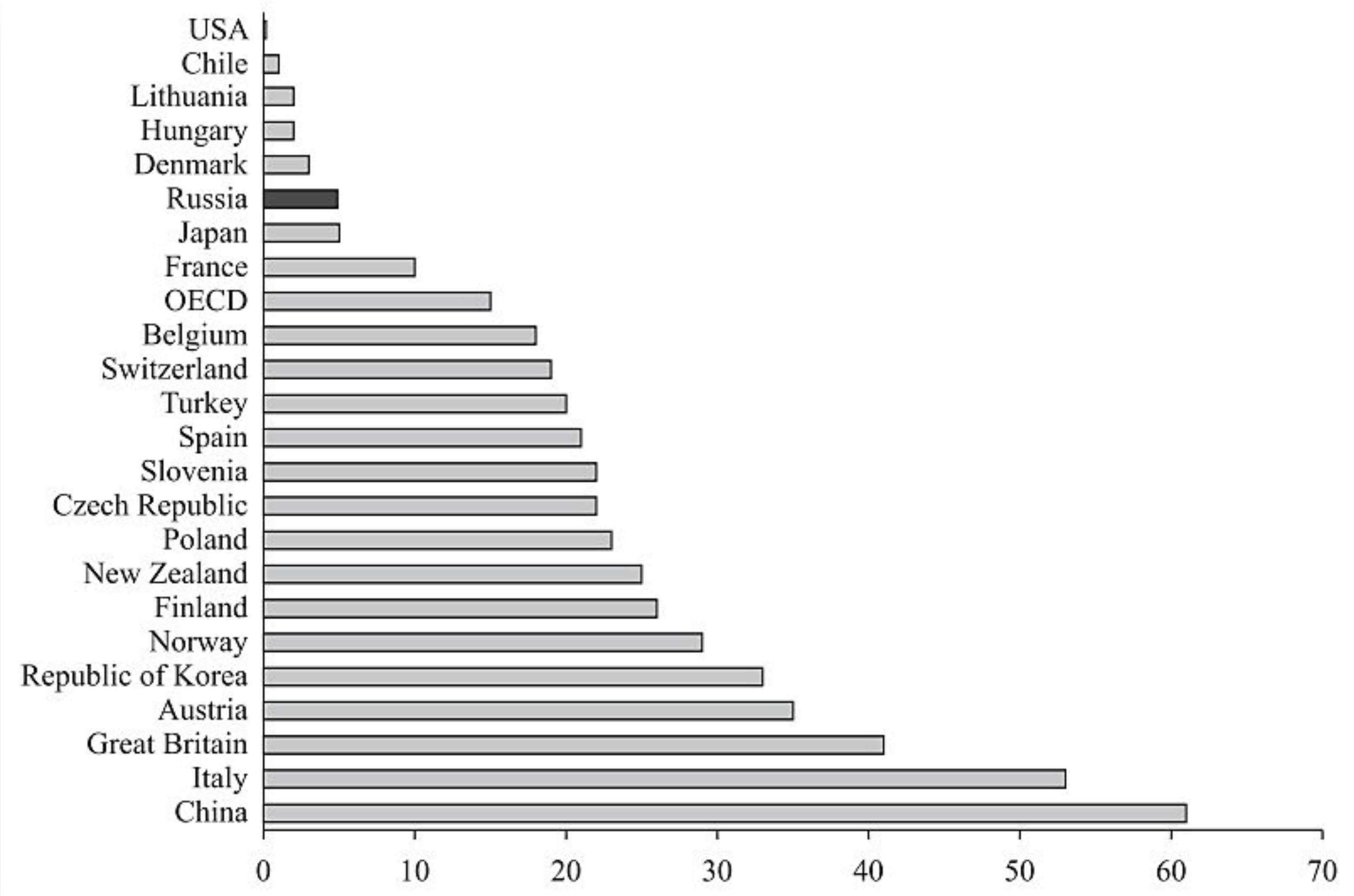
Source: *Voszka, É. – Kiss, G. D. (eds) 2014: Crisis Management and the Changing Role of the State. University of Szeged Doctoral School in Economics, Szeged, pp. 133-145*

Figure 3. The structure of employment in the Russian and former Soviet-Union economies in the years 1970−2010 by type of ownership, in%

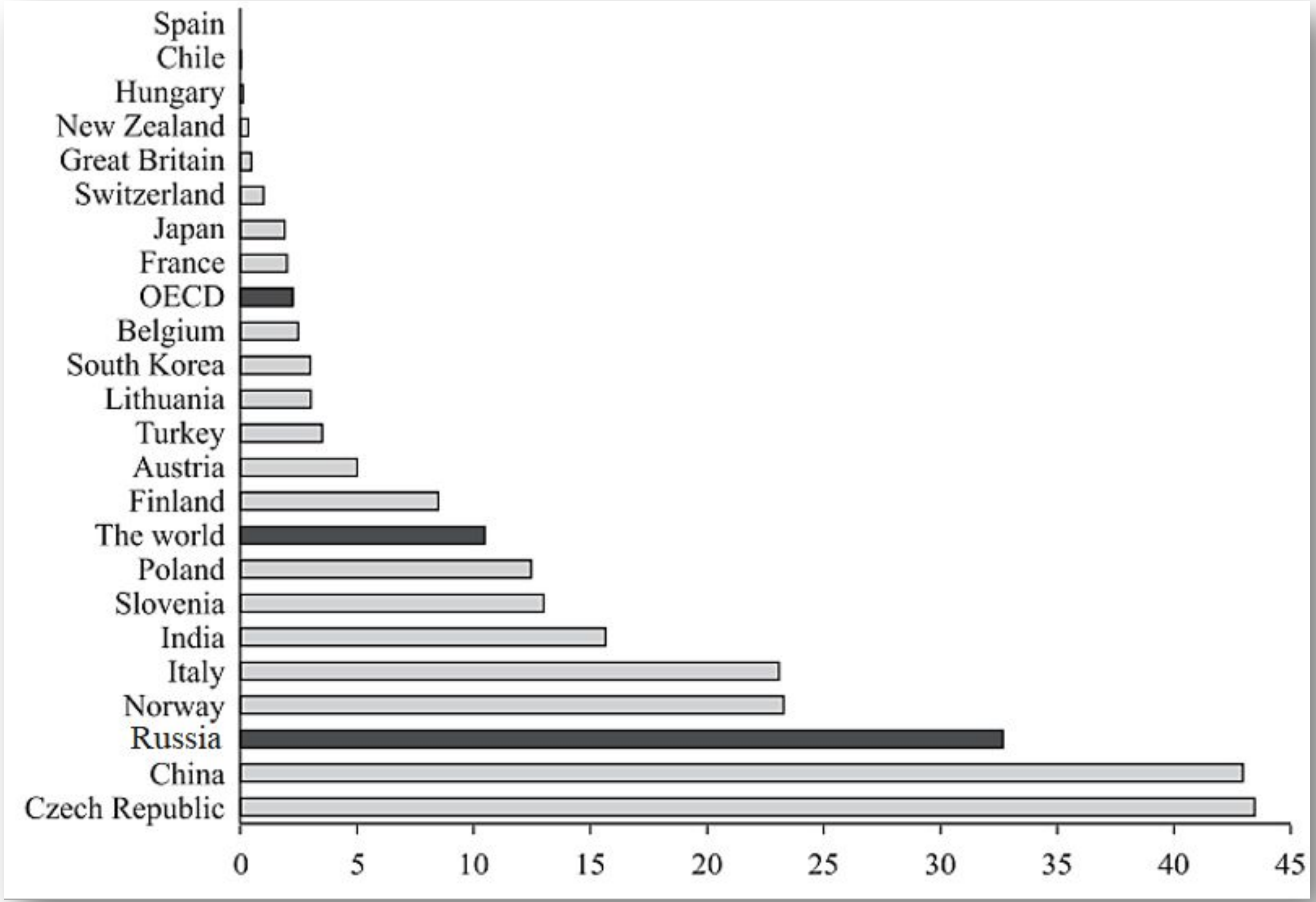


Source: *Voszka, É. – Kiss, G. D. (eds) 2014: Crisis Management and the Changing Role of the State. University of Szeged Doctoral School in Economics, Szeged, pp. 133-145*

Share of public SOE`s in total employment, 2012 (%)



Share of public SOE`s in total market capitalization for various countries, 2012 (%)



Privatization revenues, 1990-1999, bill. dollars

Countries/ years	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Argentina	7,5	2,8	5,7	4,7	0,89	1,2	0,64	4,4	0,51	16,16
Brazil	0,04	1,6	2,4	2,6	2,1	0,99	5,7	18,7	32,4	4,4
Mexico	3,16	11,3	6,9	2,1	0,77	0,17	1,5	4,5	0,99	0,29
Hungary	0,48	0,79	0,78	1,7	1,5	3,9	0,95	2,1	0,34	1,4
Poland	0,06	0,34	0,24	0,73	0,64	0,98	0,61	2,2	2,44	3,9
Russia	-	0,04	0,09	0,11	0,84	1,0	1,2	4,2	0,91	0,76
Turkey	0,44	0,21	0,78	0,48	0,35	0,57	0,29	0,47	1,01	0,04

Source: Goskomstat, Jan.2002, World Bank Privatization Database, Global Development Finance 2001

Outcome of privatization in Russia

Politicians and Reformers may believe in their decisions

But actual results are the genuine judge for the solution!

Big assets left with the state or gone to oligarchs

Small property – local solutions, low competition

Difficulty with property rights for businesses

Corruption with a weak state

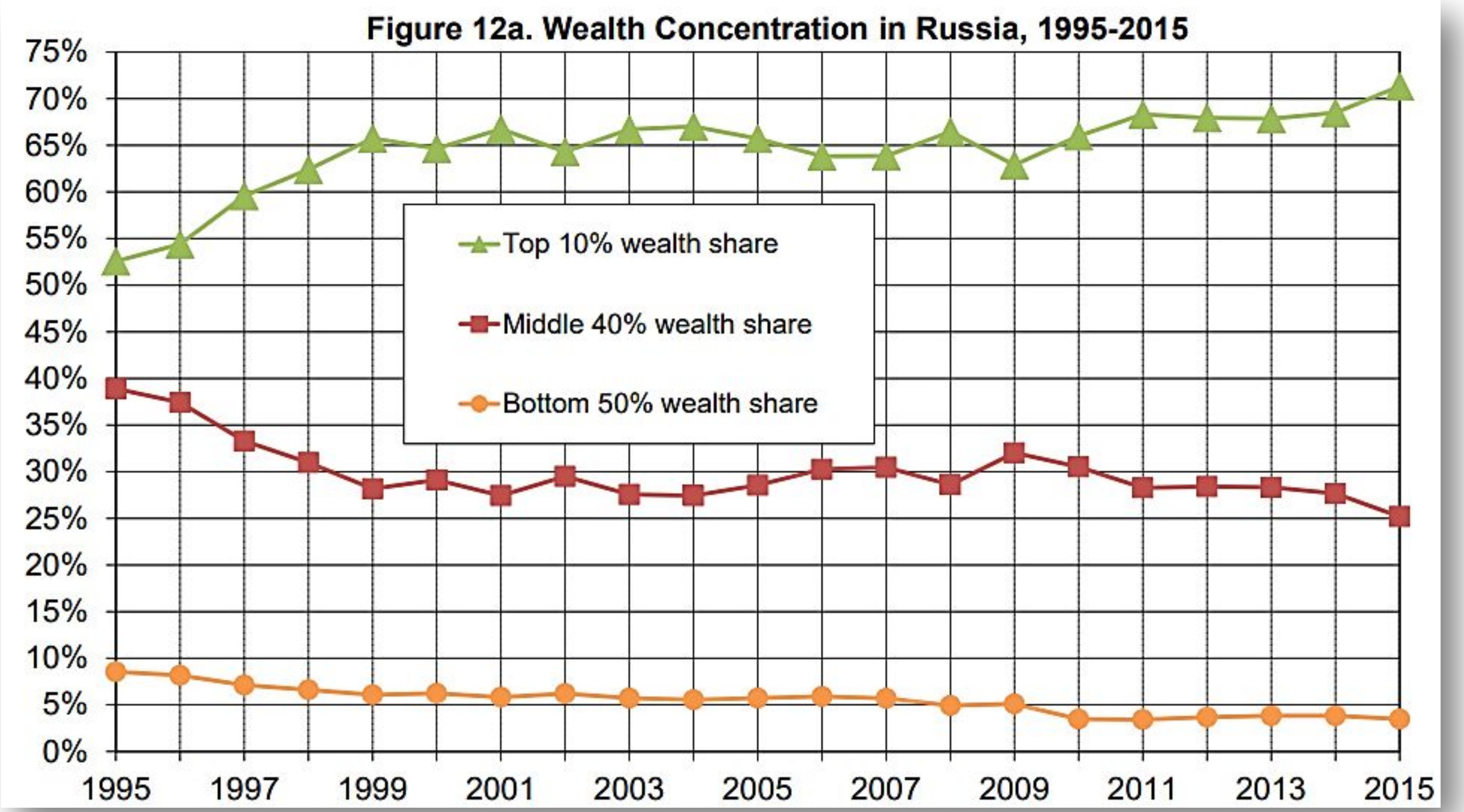
Real role and value of vouchers is unknown

Mass ownership of shares never materialized

Debt for shares of 1996 – and elections

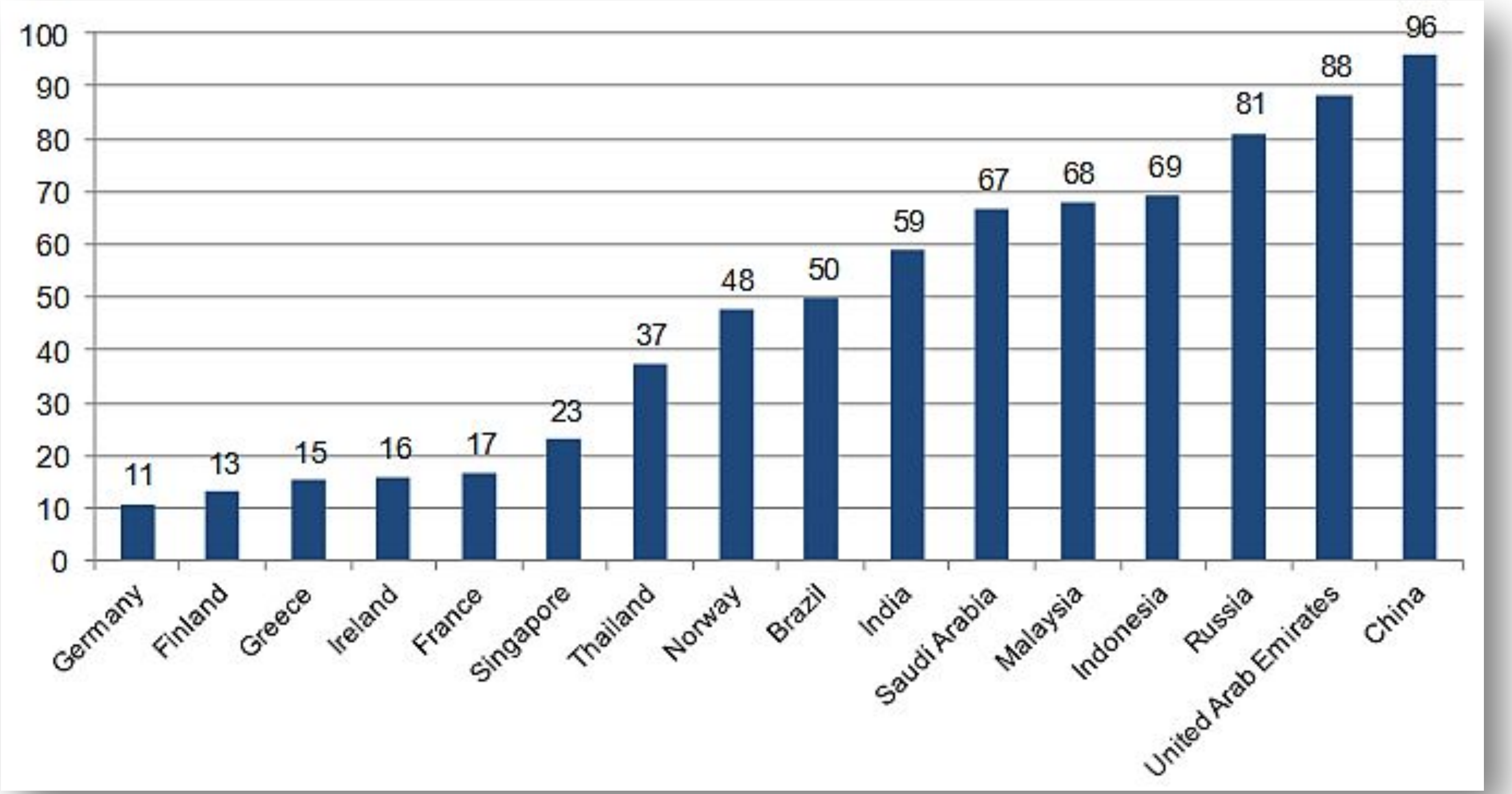
Disillusion of masses by 1993 – and by 1996

Crush 1998 and return of the state later on



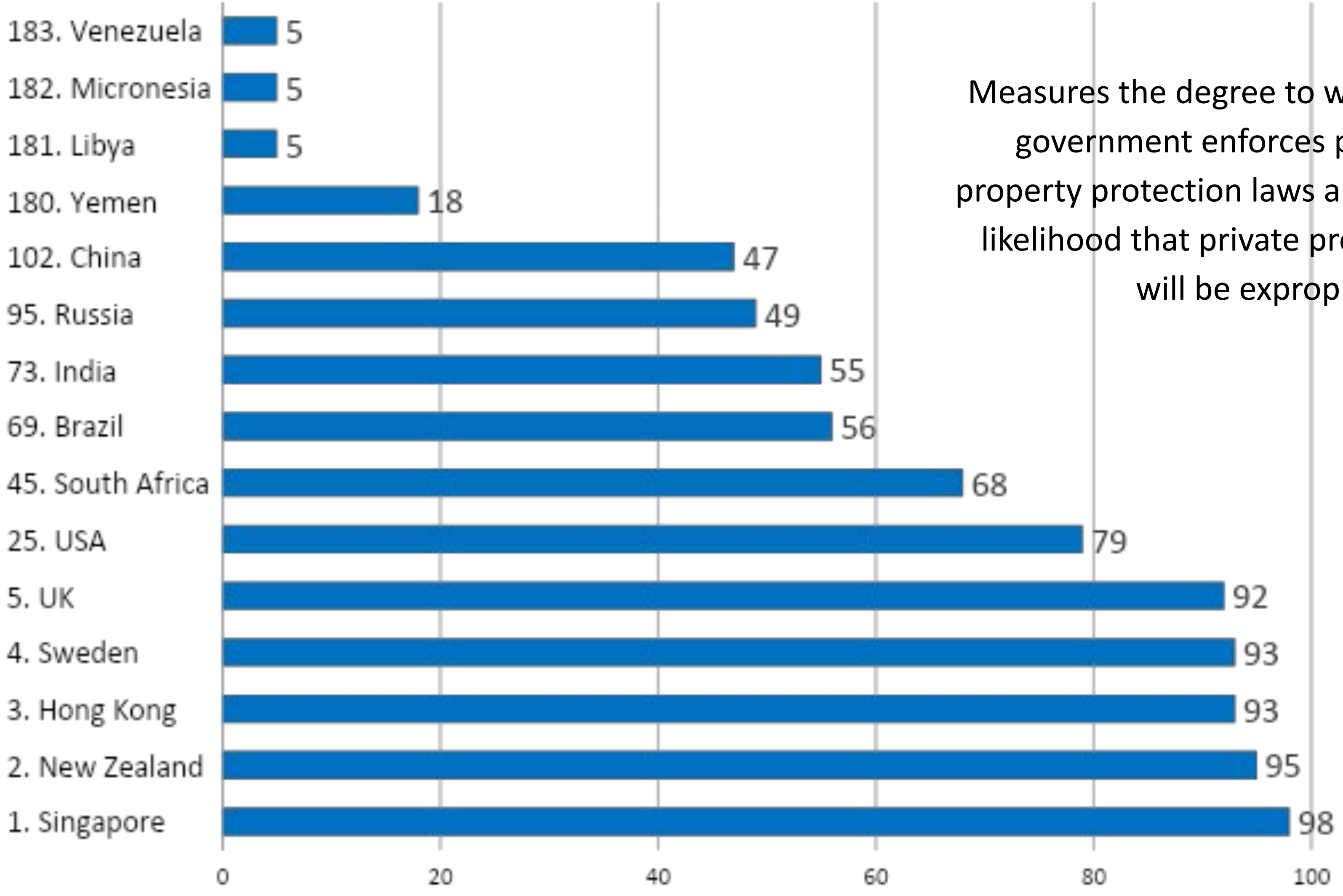
Source: F. Novokmet, T. Piketty, G. Zucman. From Soviets to Oligarchs: Inequality and Property in Russia 1905-2016

SOE shares among countries' top ten firms (%), 2013



Source: State-owned enterprises in the global economy // WEF

Property Rights Index



Measures the degree to which a government enforces private property protection laws and the likelihood that private property will be expropriated.

Source: GlobalEconomy
https://www.theglobaleconomy.com/rankings/herit_property_rights/

Calculations of Piketty and Co

- Russia made its way to high concentration of Property in 1993-1996 – superior to Old West! (Long before Putin)
- Was it a goal of Reformers?
- Top private companies without mass shareholding.
- State companies encroaching on private business.
- Big enterprises under old managers or mirky characters.
- Low dividends, while high Rate of Return.
- Big money made in 1990-s and Offshore camping.
- Low market valuation = closely held companies.

Table 1: Income thresholds and income shares in Russia, 2016

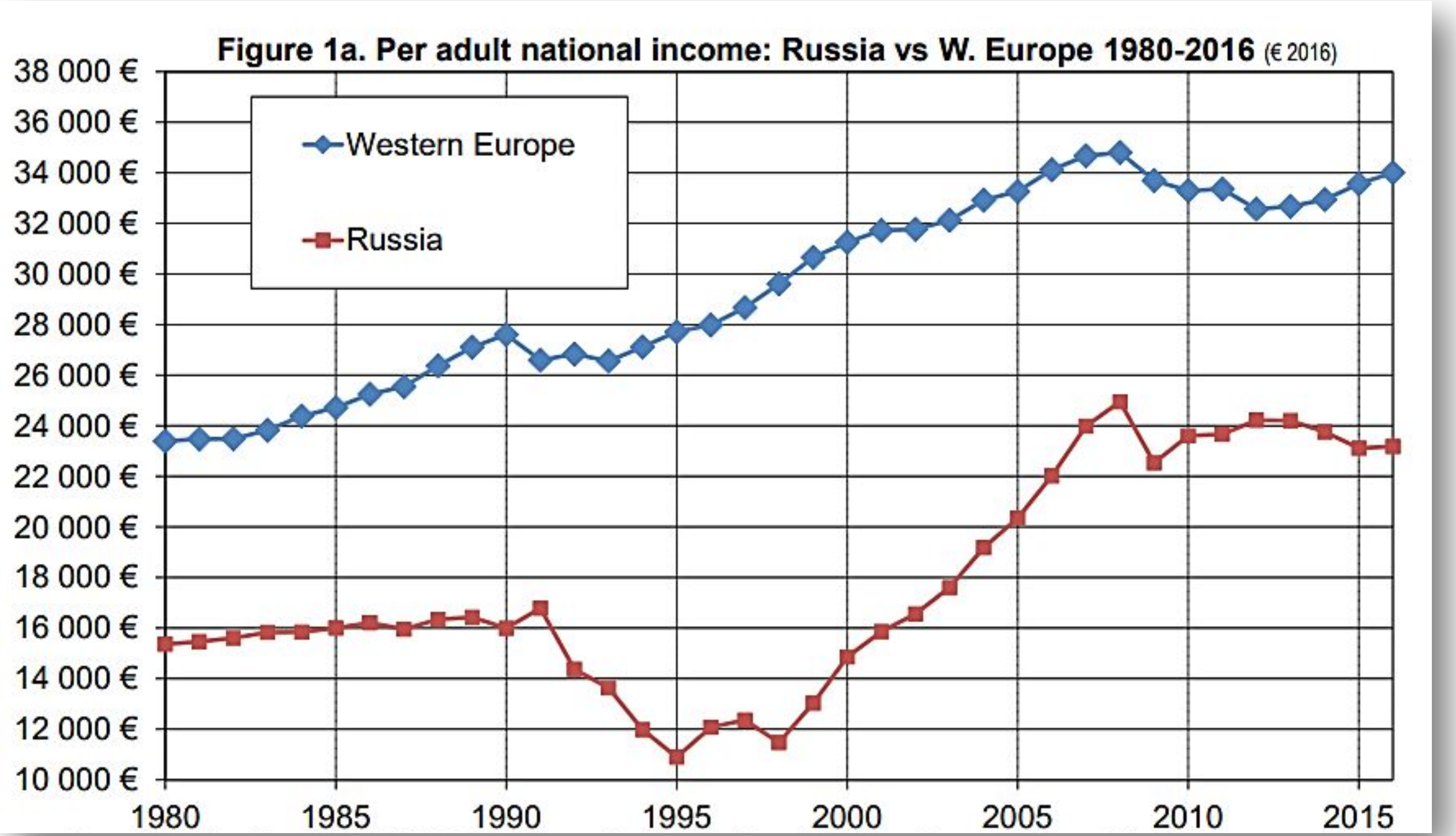
Income group	Number of adults	Income threshold	Average income	Income share
Full Population	114 930 000	0 €	23 181 €	100.0%
Bottom 50%	57 465 000	0 €	7 877 €	17.0%
Middle 40%	45 972 000	13 959 €	21 728 €	37.5%
Top 10%	11 493 000	36 311 €	105 516 €	45.5%
incl. Top 1%	*1 149 300*	*133 107 €*	*469 105 €*	*20.2%*
incl. Top 0.1%	*114 930*	*638 423 €*	*2 494 185 €*	*10.8%*
incl. Top 0.01%	*11 493*	*3 715 478 €*	*12 131 771 €*	*5.2%*
incl. Top 0.001%	*1 149*	*18 769 565 €*	*58 575 685 €*	*2.5%*

Source: F. Novokmet, T. Piketty, G. Zucman. From Soviets to Oligarchs: Inequality and Property in Russia 1905-2016

Table 2: Income growth and inequality in Russia 1989-2016

Income group (distribution of per adult pre-tax national income)	Average annual real growth rate 1989-2016	Total cumulated real growth 1989-2016	Share in total macro growth 1989-2016
Full Population	**1.3%**	**41%**	**100%**
Bottom 50%	**-0.8%**	**-20%**	**-15%**
Middle 40%	**0.5%**	**15%**	**16%**
Top 10%	**3.8%**	**171%**	**99%**
incl. Top 1%	*6.4%*	*429%*	*56%*
incl. Top 0.1%	*9.5%*	*1054%*	*34%*
incl. Top 0.01%	*12.2%*	*2134%*	*17%*
incl. Top 0.001%	*14.9%*	*4122%*	*8%*

Source: F. Novokmet, T. Piketty, G. Zucman. From Soviets to Oligarchs: Inequality and Property in Russia 1905-2016



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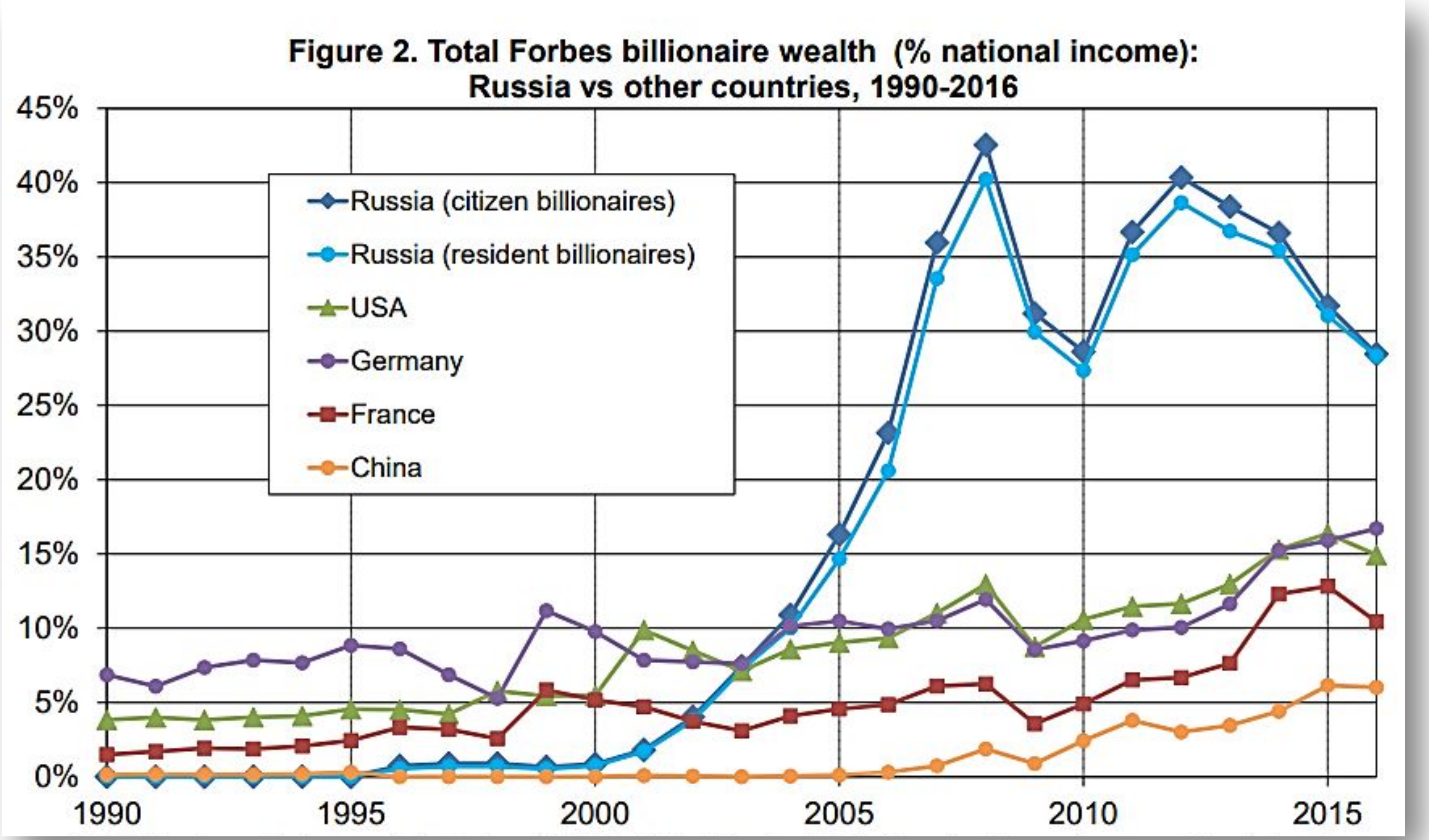

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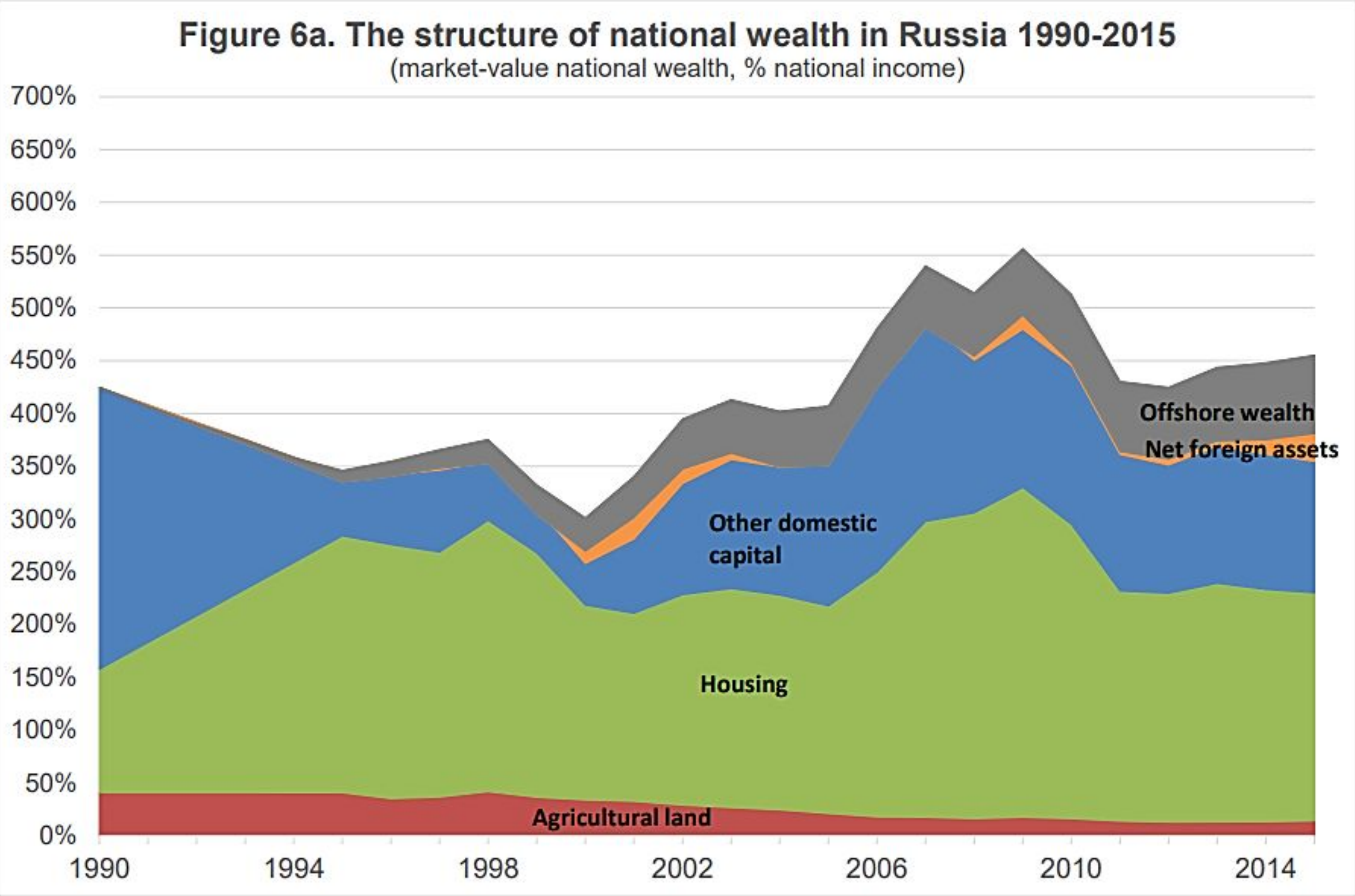

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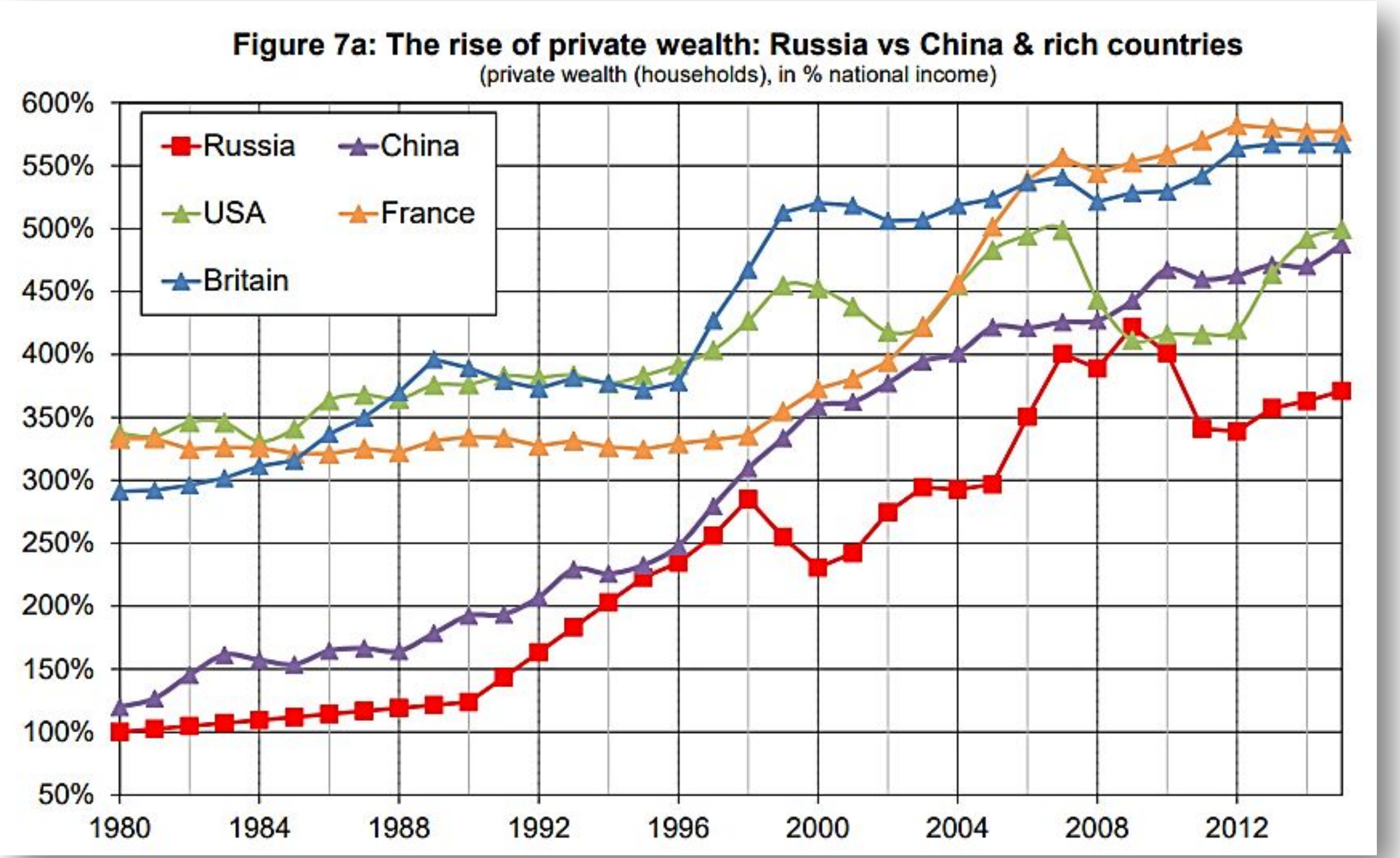

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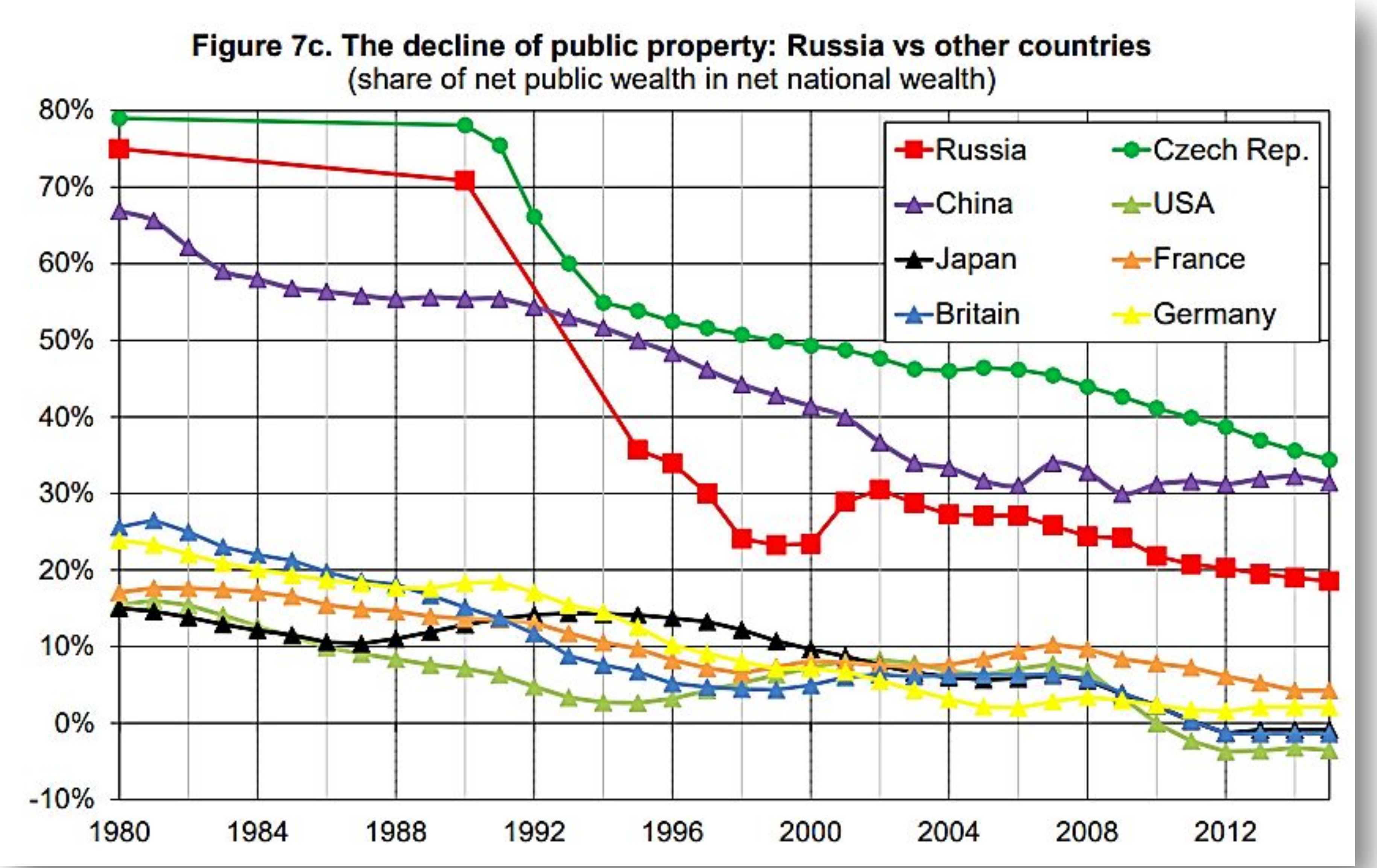


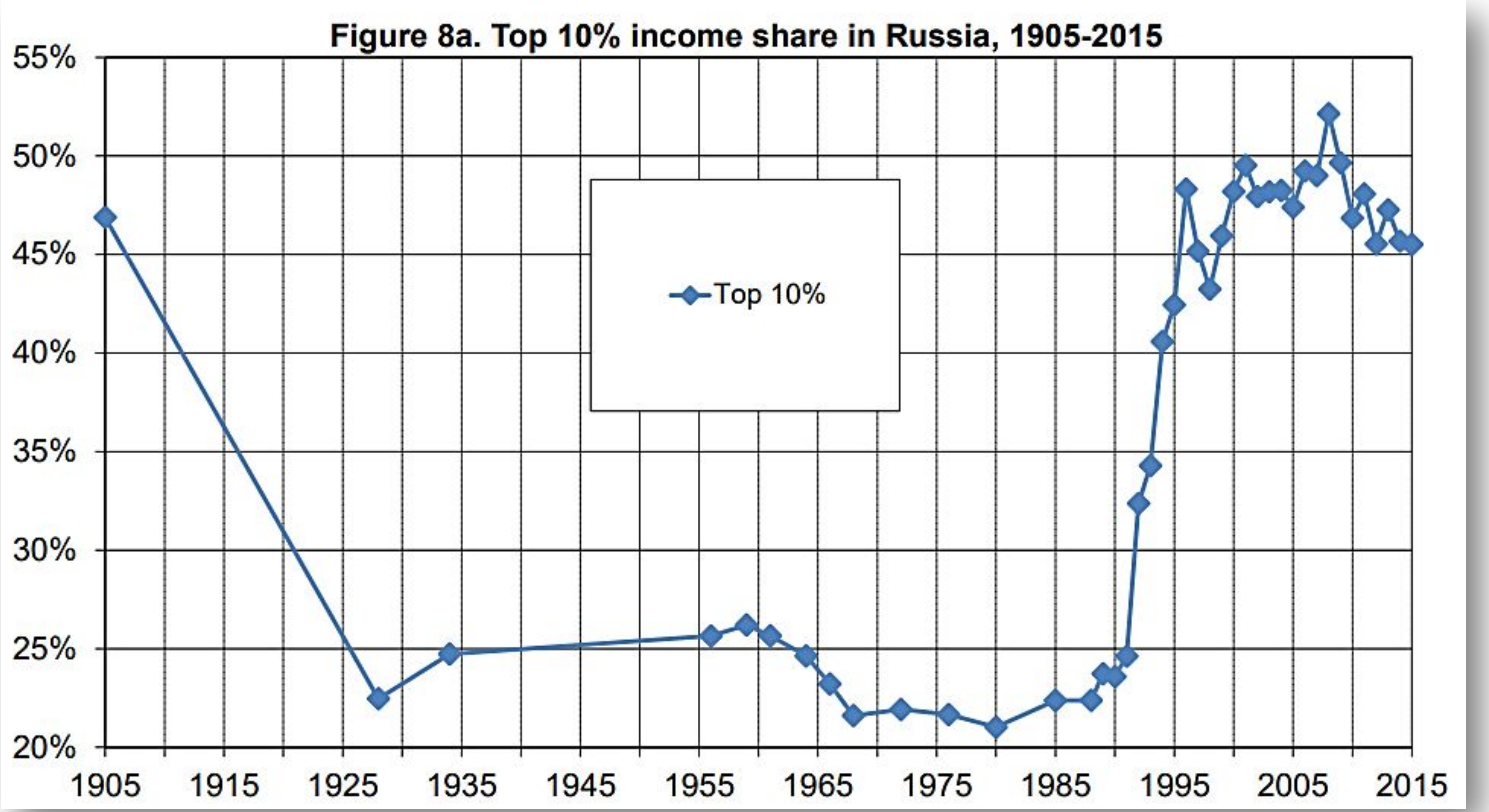
Source: F. Novokmet, T. Piketty, G. Zucman. From Soviets to Oligarchs: Inequality and Property in Russia 1905-2016

Byproducts of Wealth Distribution

- Inequality may be measured differently. Might have been a correct approach – to look at the distribution along society!
- Best major = Share of income belonging to 10^{th} decile.
- Gini is difficult for interpretation – the most of variety connected to the share of the Rich. The rest is similar.
- Share of 1% is impressive but mostly reflects the fluctuation of the stock pricing. Passive ownership!
- The 10th decile normally concentrates households from Upper Class and Upper Middle Stratum.
- Once formatted the Inequality becomes rigid.

Wealth share of top decile by country, 2000-2014	Year				GDP per capita (PPP, current) 2014	Income share held by highest 10%
	2000 (%)	2001 (%)	2014 (%)	2014-2000 (pp)		
Russia	77,1	76,7	84,8	7,70	24 805	31
Latin America						
Mexico	68,9	63,2	64,4	-4,50	17 880	38,9
Argentina	63,1	61,3	71,8	8,70	22 582	31,8
Brazil	69,4	69,4	73,3	3,90	16 096	41,7
Chile	67,6	62,7	68,9	1,30	22 971	24,2
Anglo-Saxon and Israel						
United Kingdom	51,5	52,4	54,1	2,60	39 510	28,6
United States	74,6	74,7	74,6	0,00	54 596	29,6
Israel	62,4	65,4	67,3	4,90	32 691	31,3
South&East Europe						
Italy	52,6	47,9	51,5	-1,10	35 486	26,2
Spain	54,1	52,4	55,6	1,50	33 711	25,2
Greece	54,8	49	56,1	1,30	25 858	26,2
Poland	69,9	60,5	62,8	-7,10	25 105	25,9
Central&North Europe						
France	56,4	51	53,1	-3,30	40 374	24,7
Germany	63,9	61,5	61,7	-2,20	45 888	24,4
Netherlands	55,2	53,5	54,8	-0,40	47 354	22,9
Sweden	69,7	68,8	68,6	-1,10	45 986	21,4
Czech Republic	62,7	60,1	67,3	4,60	29 925	22,2
Switzerland	73,4	71,9	71,9	-1,50	58 087	
Africa						
South Africa	72,2	69,1	71,7	-0,50	13 046	53,8
Asia&…						
Japan	51	49,1	48,5	-2,50	37 389	24,8
India	65,9	73,6	74	8,10	5 855	28,8
China	48,6	58,7	64	15,40	12 879	30

Source: The World Bank Global Wealth Databook 2014 (Credit Suisse)



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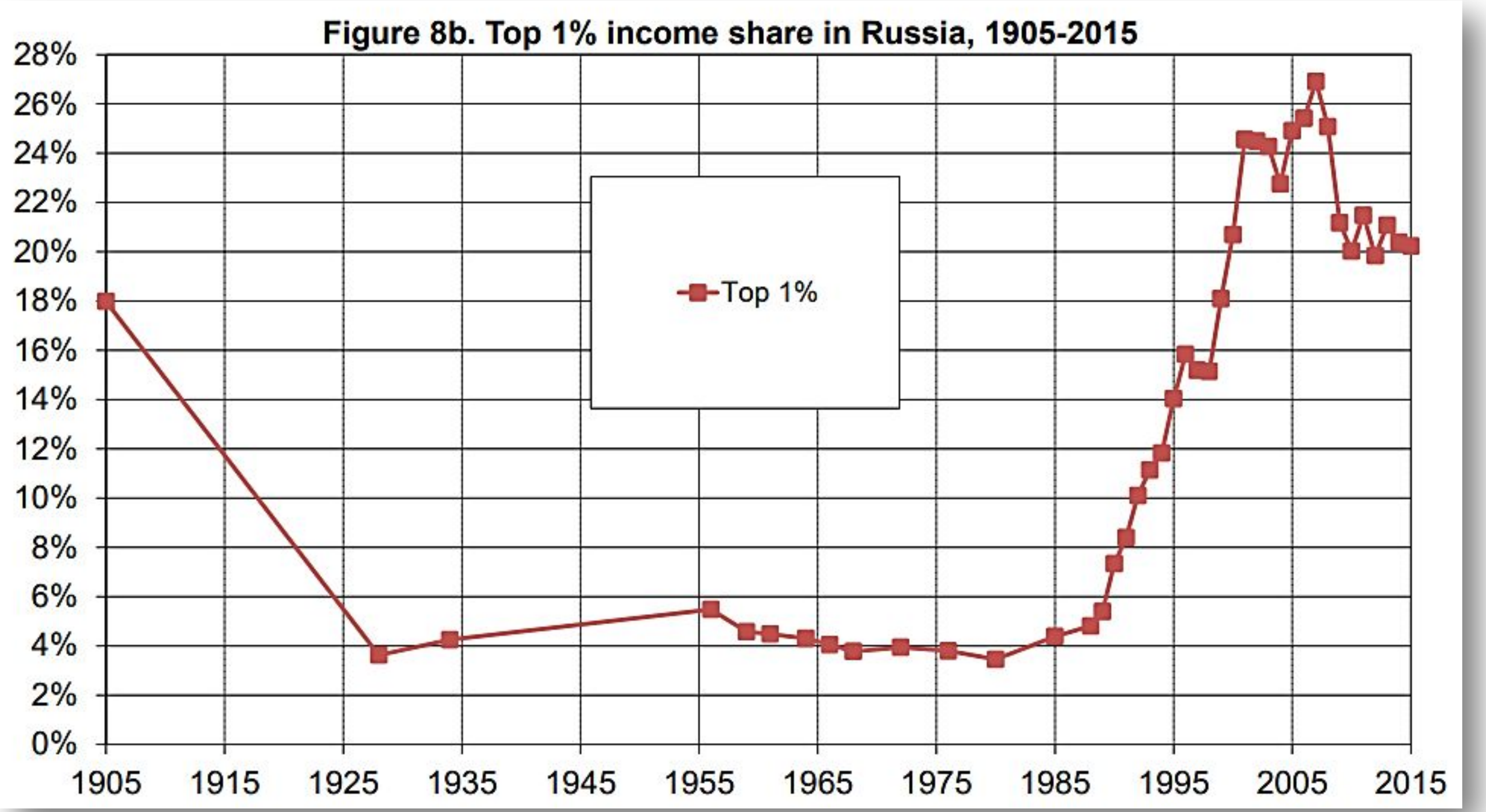

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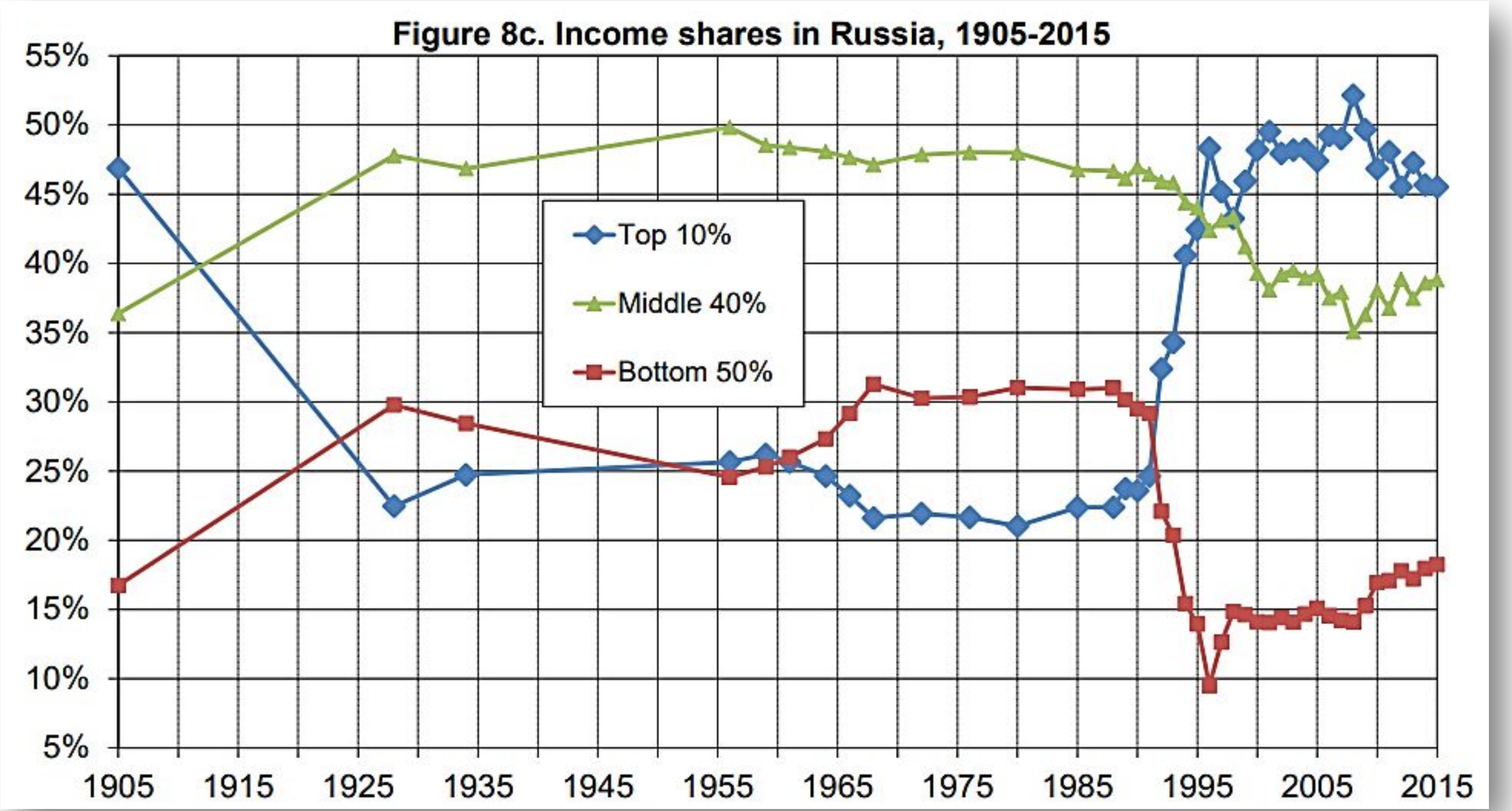

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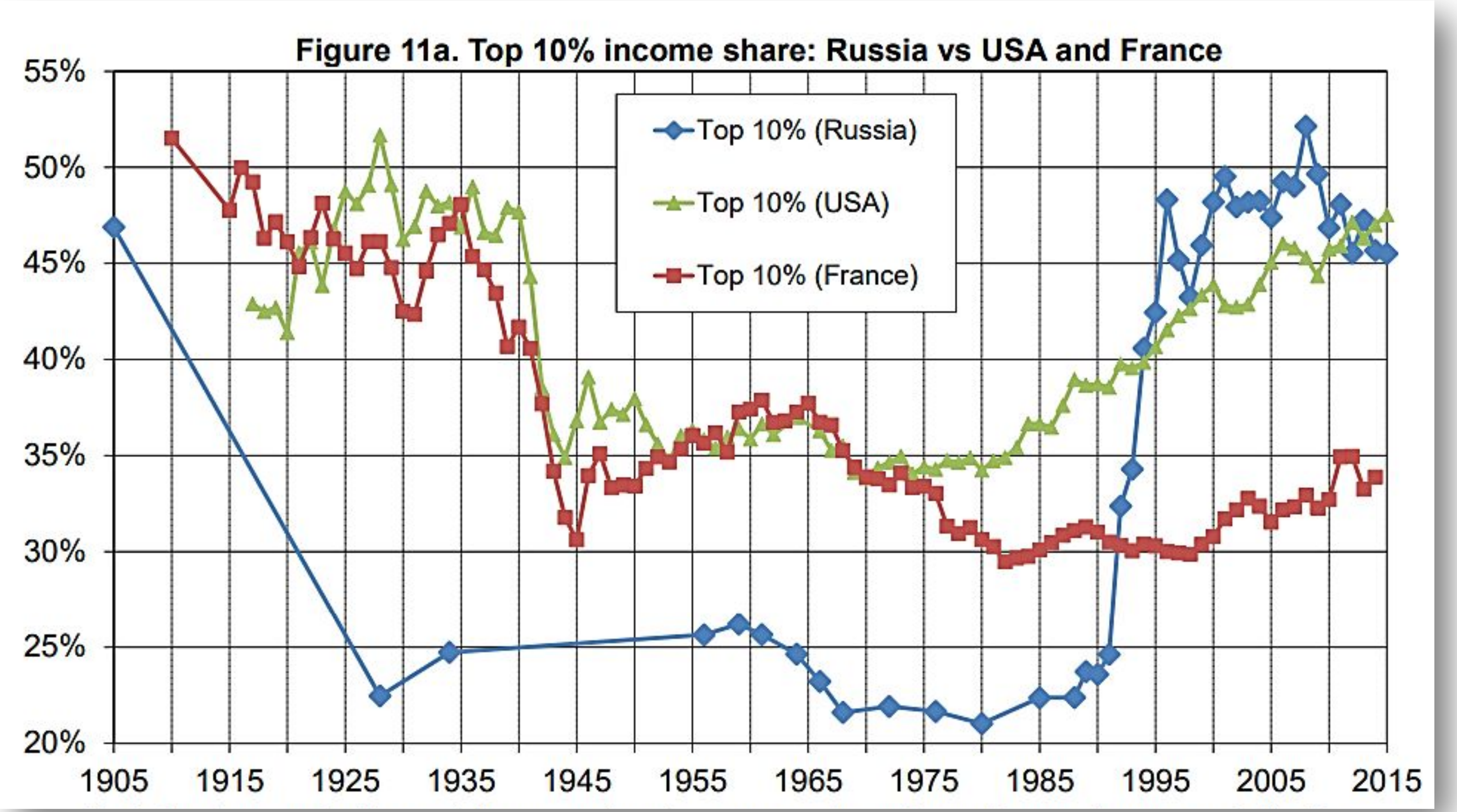

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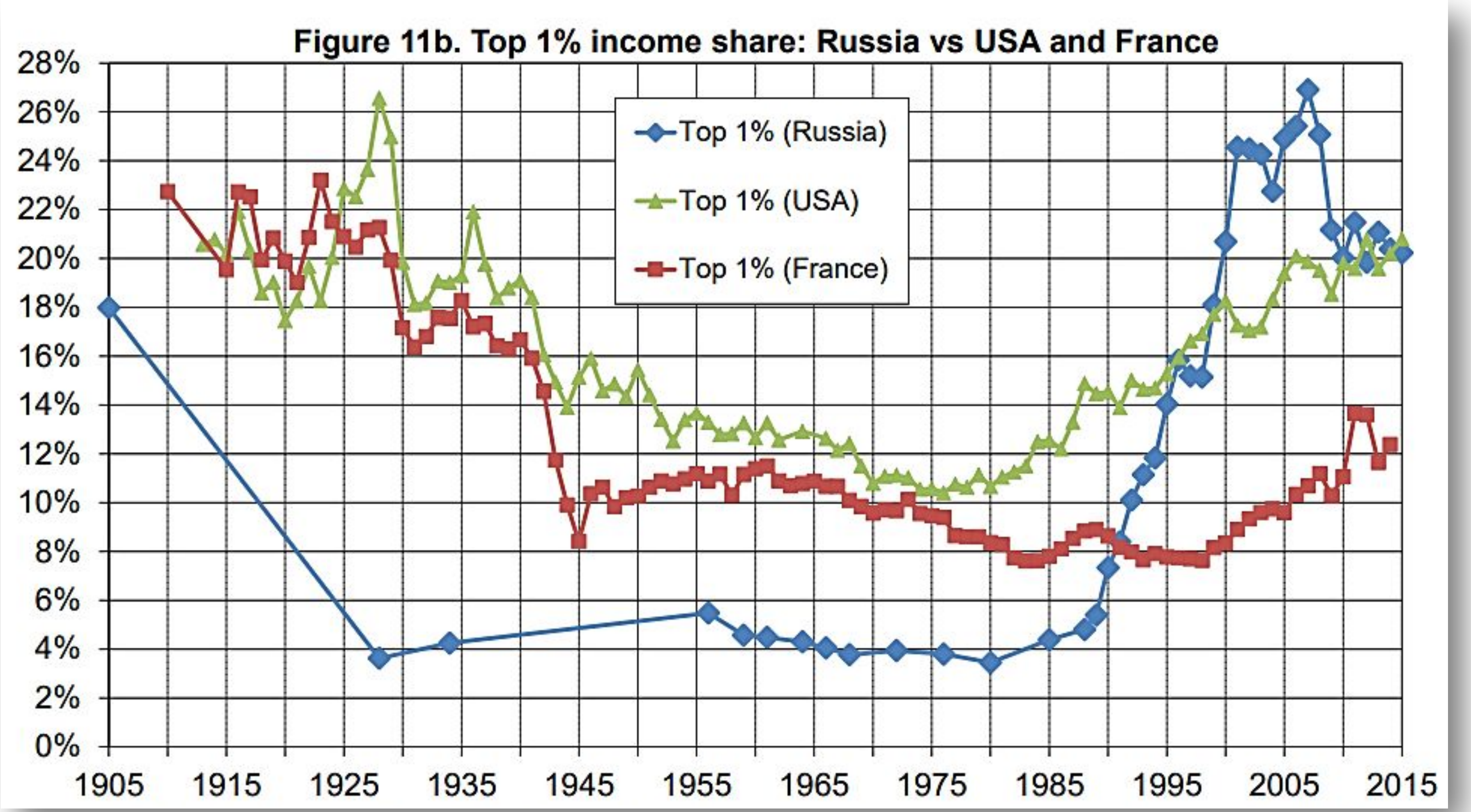

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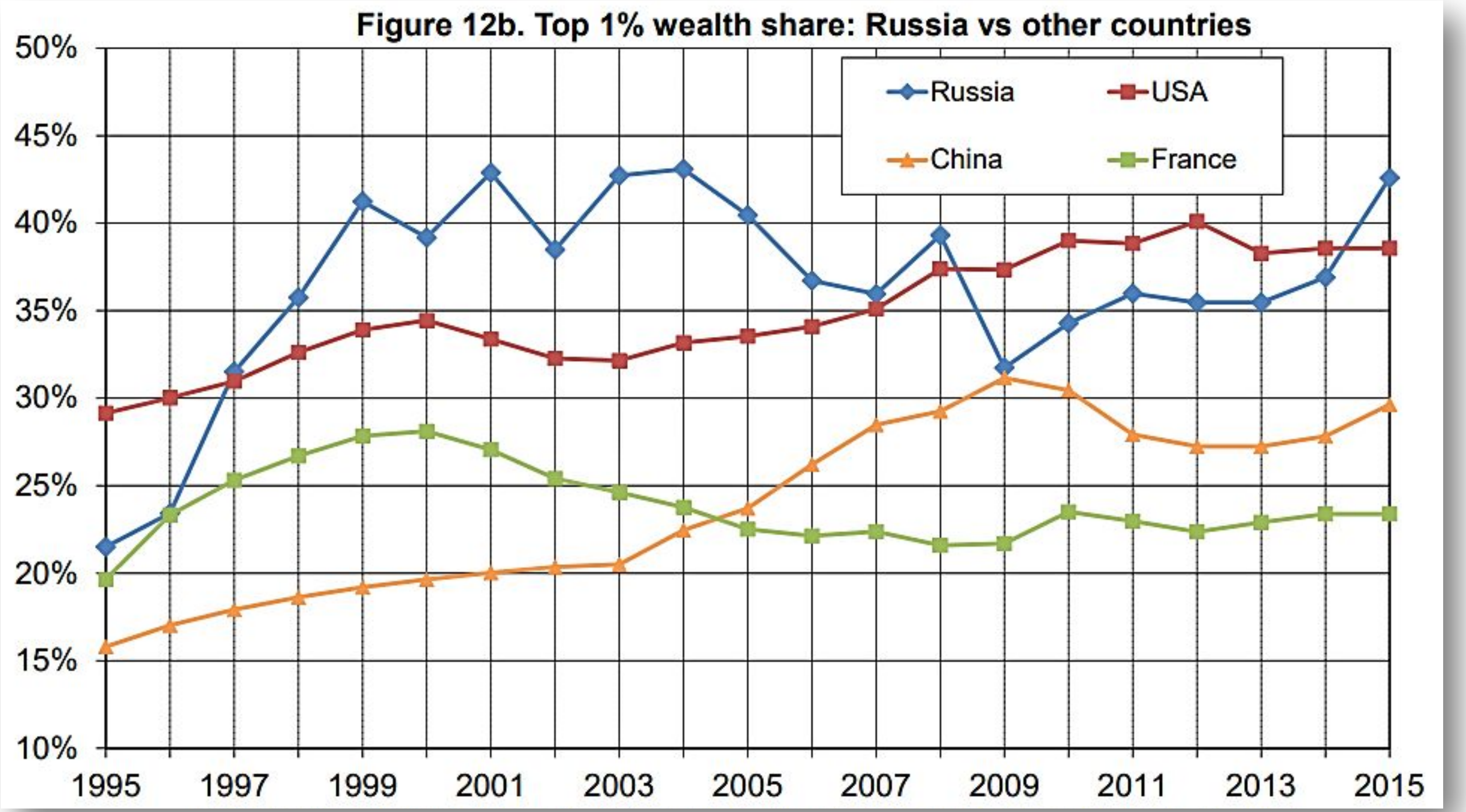

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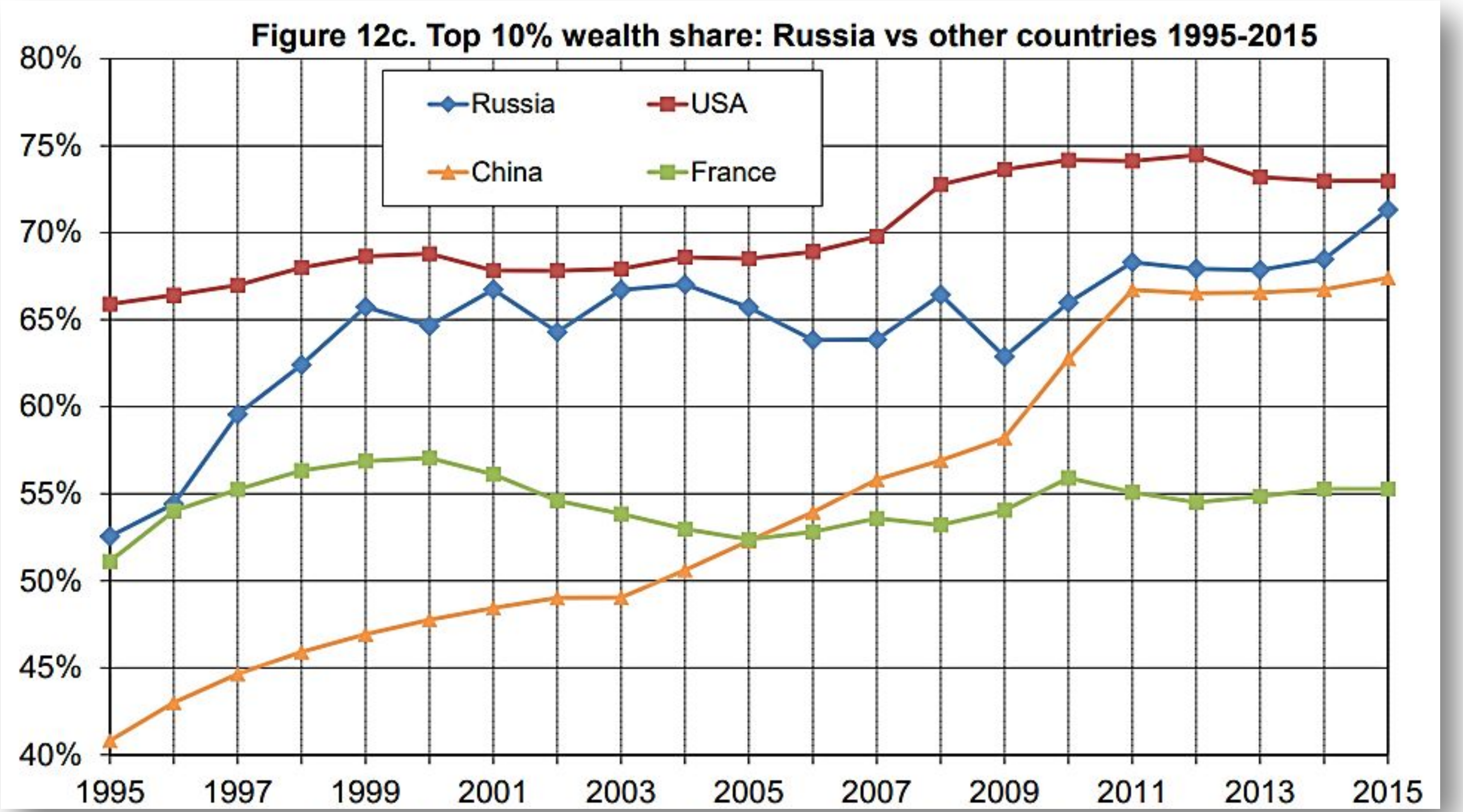

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Literature:

- Kornai Y. The Socialist System: The Political Economy of Communism. Oxford University Press, chapter 3, 1992.
- Biais B. and Perotti E. "Machiavellian Privatization" *The AER,* Vol. 92, No. 1 (March, 2002), pp. 240-258 .
- Brown J. David, Earle S. John, and Scott Gehlbach "Privatization" // The Oxford Handbook of the Russian Economy Edited by Alexeev M. and Weber Sh., 2012
- Hoff K., J. Stuglitz "The creation of the rule of law and the legitimacy of property rights: the political and political and economic consequences of a corrupt privatization"

publications

- Grigoryev L. "Ulterior Property Rights" (chapter) in "The Post-Soviet Economy". Edited by A. Ausland, Pinter, London, 1992;
- "Transition to Market Economy" (in collaboration), Moscow, 1990 **OR** "500 days. Transition to the Market", St. Martins Press, NY, 1991;
- "Conflicts of interests and Coalitions. //"Pro et Contra", September 2007.
- "Mechanisms of Global Governance: economic analysis" (with AKudin). // "Voprosy Ekonomiki", 7, 2013, pp. 4-28.
- "The elites' demand for law: Overcrowded streetcar (tram) effect" // The Russian Journal of Economics, #3 – 2015, pp 313-327.
- «Transformation: For the people or for the elite?» - in "The Social History of Post-Communist Russia", Edited by P. Dutkiewicz, V. Kulikov and R. Sakwa. Routledge, NY, 2016, pp. 58-80.

Global Structure Inequality: Income and Wealth

(4.02. 2019)

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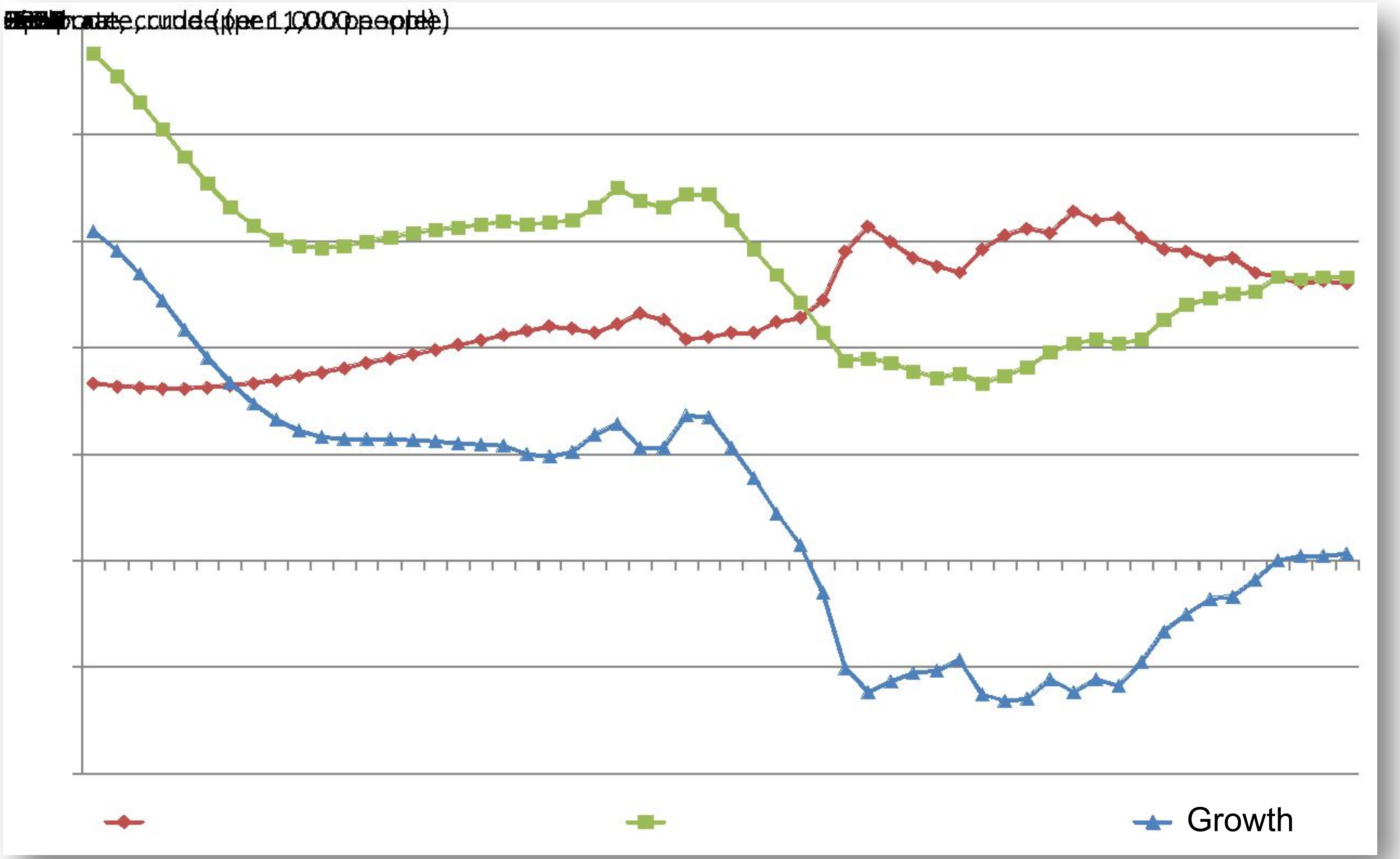
Births, Deaths And Natural Increase Dynamics in Russia, 1960-2015



World Population and GDP in Various Dimensions, 1992–2016

	1992	2000	2008	2016
World	5,5	6,1	6,8	7,4
World without China	4,3	4,9	5,4	6,1
World	48,7	63,3	87,1	112,2
World without China	46,5	58,6	76,6	92,3
World	8,9	10,3	12,9	15,1
World without China	10,8	12,1	14,1	15,2
World	–	16,0	24,5	17,0
World without China	–	11,4	16,7	8,1
China	–	99	115	81
World	39,1	50,0	64,3	77,6
World without China	38,1	47,8	59,3	68,0
World	7,2	8,2	9,5	10,4
World without China	8,9	9,8	10,9	11,2

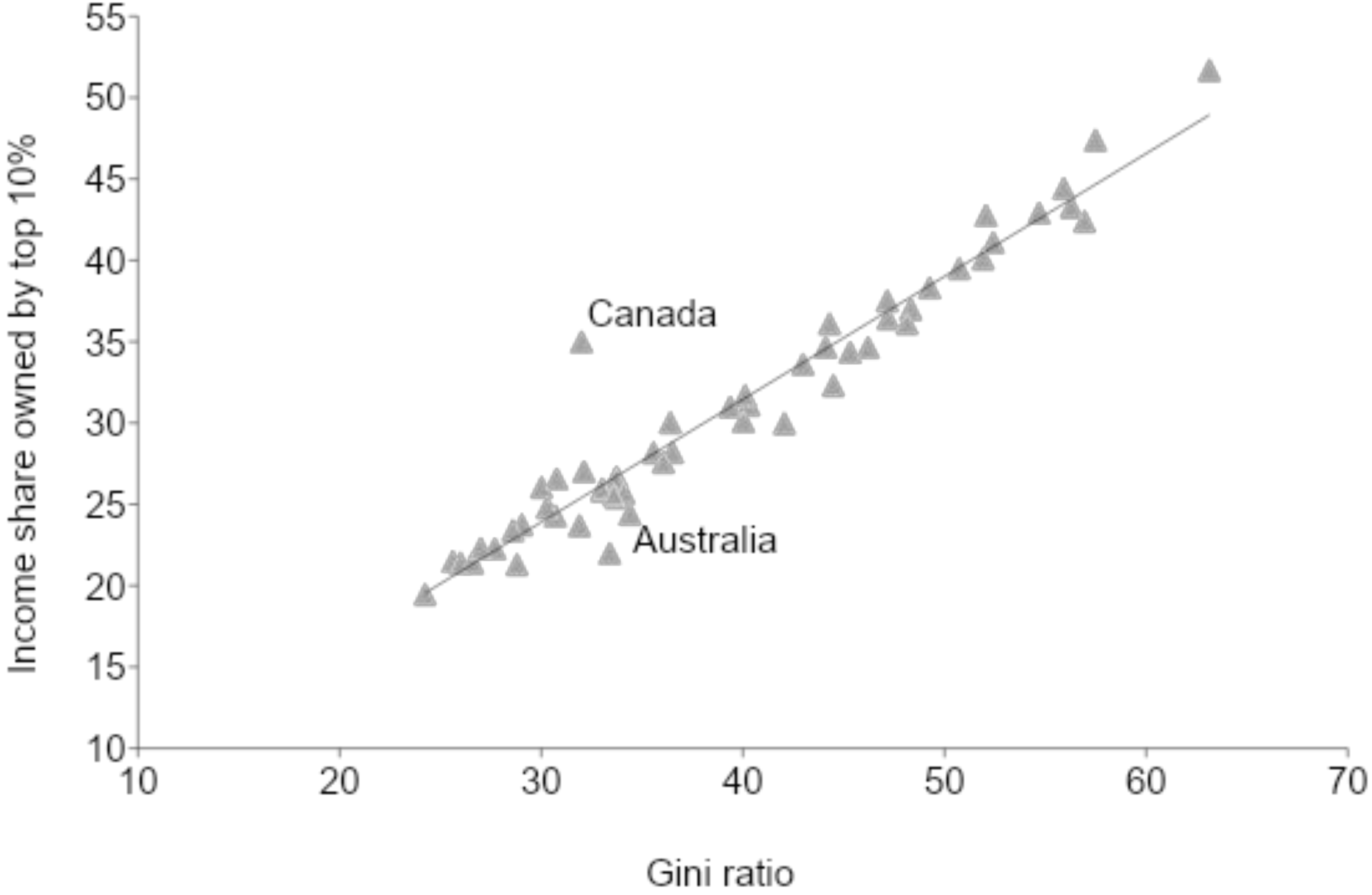
Key points (1/2):

- Inequality between countries changes, Clusters go apart.
- Global economic growth has not changed the key parameter – the share of 10th decil in the most of the developed and developing countries – 2014;
- Between 1992 and 2016 the global GDP (PPP) per capita had grown by 40%. But except for success of few countries (China etc.) the inequality by countries has not changed in many respects; China also got Inequality.
- Great Recession somewhat reduced top incomes in some countries, but in the upturns the Rich gets the Premium – not the Poor or the Middle.

Key points (2/2):

- Domestic inequality is rigid, Growth is not changing distances for deciles.
- As we know, a number of the Governments turned now on the Rich for better collection of taxes, and Public – for less rewards for Managers.
- High Inequality in Anglo-Saxon countries connected with strong Vertical lifts.
- Transitional Inequality appears quite stubborn.
- China has formatted high inequality in 30ty years of fast economic growth.

Gini coefficient reflects mostly variation in rich deciles. Gini in comparison with IS -10th



Average and weighted average GDP per capita, PPP current prices (thousand USD and thousand int. dollars), 174 countries, 1992 and 2016

Cluster	Number of countrues	Population, bil.people	Average		Weighted Average	
			PPP	Current	PPP	Current
1992						
1	26	1,06	41,7	24,1	34,6	25,2
2	16	0,23	19,7	9,6	18,7	6,6
3	22	0,45	12,1	4	11,7	3,8
4	37	0,60	7,1	1,8	6,8	1,3
5	31	0,46	3,2	0,8	3,3	0,6
6	24	2,40	1,7	0,4	1,8	0,3
7	18	0,19	0,9	0,2	0,8	0,2
Total	174	5,39	x	x	x	x
2016						
1	28	1,23	53,9	48,8	48,7	49,8
2	28	0,53	26,7	16,6	26,8	15,1
3	22	2,00	16,9	9,7	14,9	8
4	35	0,75	10,2	4,8	9,9	3,8
5	29	2,27	4,7	2,2	5,5	1,7
6	15	0,21	2,3	1,1	2,3	0,8
7	17	0,35	1,3	0,5	1,3	0,5
Total	174	x	x	x	x	x

Source: authors` calculations on the World Bank data

UN sustainable development goal №10. Reduce inequalities (1/2)

Socio-economic parameters of various countries, 2000 and 2013/14

Indicator	Year	Russia	USA	Germany	Brazil	Spain	Poland
Users (per 100 persons)	**2000**	2.0	43.1	30.2	2.9	13.6	7.3
	2014	70,5	87.4	86.2	57.6	76.2	66.6
Labor force with tertiary education (% of the total)	**2000**	24.8 (2002)	34.8	23.5	–	26.7	12.3
	2014	56.3 (2013)	33.8	27	13.4 (2013)	37.2	31
Expenditure on R&D (% of GDP)	**2000**	1.0	2.6	2.4	1.0	0.9	0.6
	2013	1.1	2.8 (2012)	2.9	1.2 (2012)	1.2	0.9

Income Inequality – International Comparison, 2014 or latest available

Country	GDP per capita (PPP), 2011, 2016, thousand U.S. $	GINI index, %	Income share held by						
			lowest 10%	lowest 20%	second 20%	third 20%	fourth 20%	highest 20%	highest 10%
Russian Federation	23,2	41,59	2,3	5,9	10,1	14,5	21,2	48,3	32,2
Mexico	17,9	48,21	1,9	5,1	8,8	12,7	18,9	54,5	39,7
Brazil	15,1	51,48	1,2	3,6	7,9	12,6	19,6	56,3	40,7
Argentina	19,9	42,67	1,6	4,8	9,6	14,9	22,9	47,8	30,8
Chile	24,0	50,45	1,7	4,6	8,3	12,1	18,3	56,7	41,5
United States	57,5	41,06	1,7	5,1	10,3	15,4	22,7	46,4	30,2
United Kingdom	42,6	32,57	2,9	7,5	12,3	17,0	23,1	40,1	24,7
Israel	37,9	42,78	1,7	4,6	9,6	15,5	22,9	47,4	31,3
Italy	38,2	35,16	1,9	6,2	12,3	17,0	22,8	41,7	26,3
Spain	36,3	35,89	1,7	5,8	11,9	17,0	23,5	41,8	25,9
Greece	26,8	36,68	1,7	5,6	11,7	17,2	23,3	42,3	26,7
Hungary	26,7	30,55	3,0	7,8	13,4	17,6	22,7	38,6	23,9
Poland	27,8	32,08	3,3	8,0	12,5	16,8	22,6	40,2	25,2
Bulgaria	19,2	36,01	2,0	6,2	12,2	16,6	22,4	42,7	27,4
Ukraine	8,3	24,09	4,5	10,5	14,6	18,0	22,4	34,7	20,6
France	41,5	33,1	3,1	7,8	12,6	16,5	21,8	41,2	26,8
Germany	48,7	30,13	3,4	8,4	13,1	17,2	22,7	38,6	23,7
Netherlands	50,9	27,99	3,4	8,9	13,9	17,6	22,5	37,1	22,6
Sweden	49,2	27,32	3,2	8,7	14,3	17,8	23,0	36,2	21,5
Czech Republic	34,7	26,13	3,9	9,6	14,5	17,9	21,9	36,1	22,2

Personal Consumption in Selected Countries, 2016

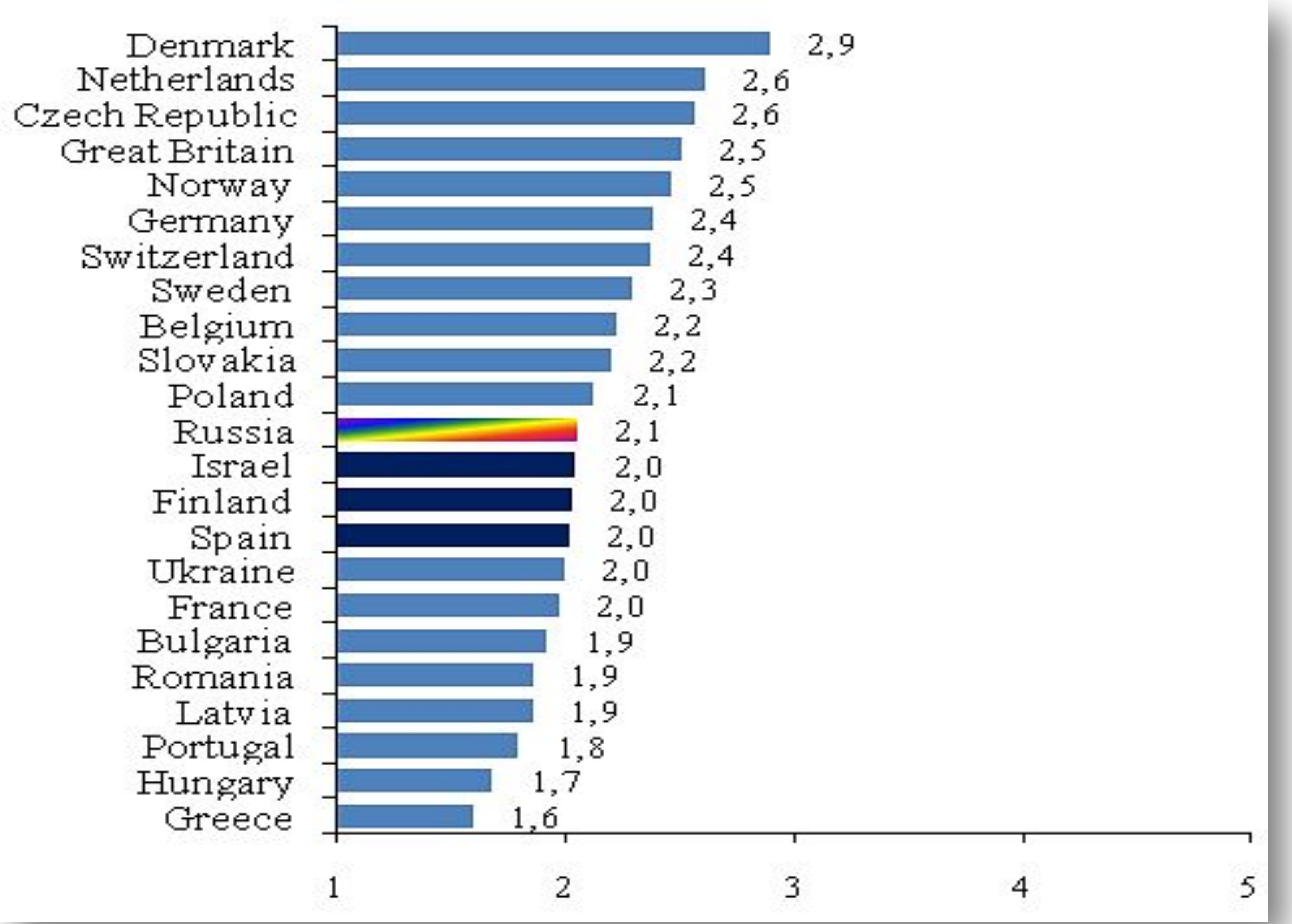
	Share of personal consumption in GDP, %	Share of different product types in consumption, %			
		Durable	Semi-durable	Non-durable	Services
World	56,7	9,2	7,4	28,9	54,5
Brazil	61,8	10,2	7,6	39,3	43,0
South Africa	61,1	8,2	8,4	39,9	43,4
Russia	49,1	12,1	7,0	49,1	31,8
China	38,6	7,3	9,5	34,7	48,5
India	59,1	3,3	8,3	41,0	47,4
Kazakhstan	53,4	5,9	12,1	53,9	28,1
Belarus	53,1	11,9	8,9	53,0	26,2
Turkey	62,9	18,3	5,7	38,3	37,6
Poland	58,5	10,5	7,5	43,2	38,8
Ukraine	64,8	8,0	6,6	56,8	28,6
Developed countries	59,3	9,5	7,2	23,0	60,3
Canada	56,2	12,9	7,3	23,9	55,9
Japan	54,8	8,2	5,6	27,3	59,0
USA	67,3	8,8	6,7	17,8	66,6
France	53,4	9,1	7,6	30,6	52,6
Germany	50	11,2	9,1	27,3	52,3
Italy	61,2	8,5	8,1	34,0	49,3
UK	61,3	10,1	10,8	21,5	57,7

Source: Euromonitor

Attitudes and Happiness

- Transformation has reduced expectations of state support. Not Russia is the center of paternalism
- Connection between level of development (GDP per capita) and happiness is limited
- Fully satisfied share among the people with highest income in BRICS countries in 1990-2014 is about one quarter, and it’s not the simple function of level
- By countries the distributions of satisfaction of life in Brazil and Russia are on opposite in one aspect: 28.7% fully satisfied in Brazil and 6,6% - in Russia. GDP level per head of both countries are similar

The degree of agreement of respondents with the statement “Government should reduce differences in income levels” - country average (ESS)*



* 1 - "strongly agree", 5 - "strongly disagree"

Level of life satisfaction in BRICS countries by income level, 1990-2014, %

		Income level									
		Lowest	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**Highest**
Fully NOT satisfied		13,2	7,8	5,4	4,4	3,5	2,6	2,0	1,8	2,8	3,9
2		5,8	6,6	3,9	2,3	2,2	1,4	1,8	1,8	1,5	1,5
3		8,5	10,3	10,6	6,7	5,1	3,1	3,0	3,4	5,6	2,5
4		7,3	6,2	6,7	6,5	5,2	4,2	3,7	3,6	4,7	2,5
5		17,1	20,2	21,1	18,9	17,4	12,2	11,7	10,5	12,8	9,2
6		8,2	8,7	9,6	11,4	11,1	12,0	9,5	8,1	8,2	8,2
7		8,5	10,9	13,1	15,2	15,6	17,8	16,8	15,7	13,0	14,2
8		9,7	11,6	12,6	15,6	16,9	21,3	22,7	23,8	20,1	20,5
9		5,3	5,9	6,4	7,3	8,3	10,6	12,9	16,1	15,4	11,3
Fully satisfied		16,5	11,8	10,8	11,9	14,7	14,7	15,9	15,1	15,9	26,2
Total	100	100	100	100	100	100	100	100	100	100	100

Level of life satisfaction in BRICS countries, 1990-2014, %

	BRICS	Brazil	China	India	Russia	South Africa
Fully NOT satisfied	5,3	2,3	2,7	5,8	8,0	5,8
2	3,3	1,2	2,8	3,4	4,7	3,3
3	6,6	1,9	3,9	11,2	9,0	5,0
4	5,6	2,8	4,8	3,6	9,1	6,4
5	16,4	12,2	11,6	25,8	19,9	12,2
6	10,0	7,6	13,9	7,2	11,2	9,9
7	13,9	12,3	14,8	15,7	12,7	13,4
8	16,2	19,6	21,7	9,6	13,6	17,9
9	8,7	11,4	10,7	5,1	5,3	10,9
Fully satisfied	14,1	28,7	13,1	12,5	6,6	15,2
Total	100	100	100	100	100	100

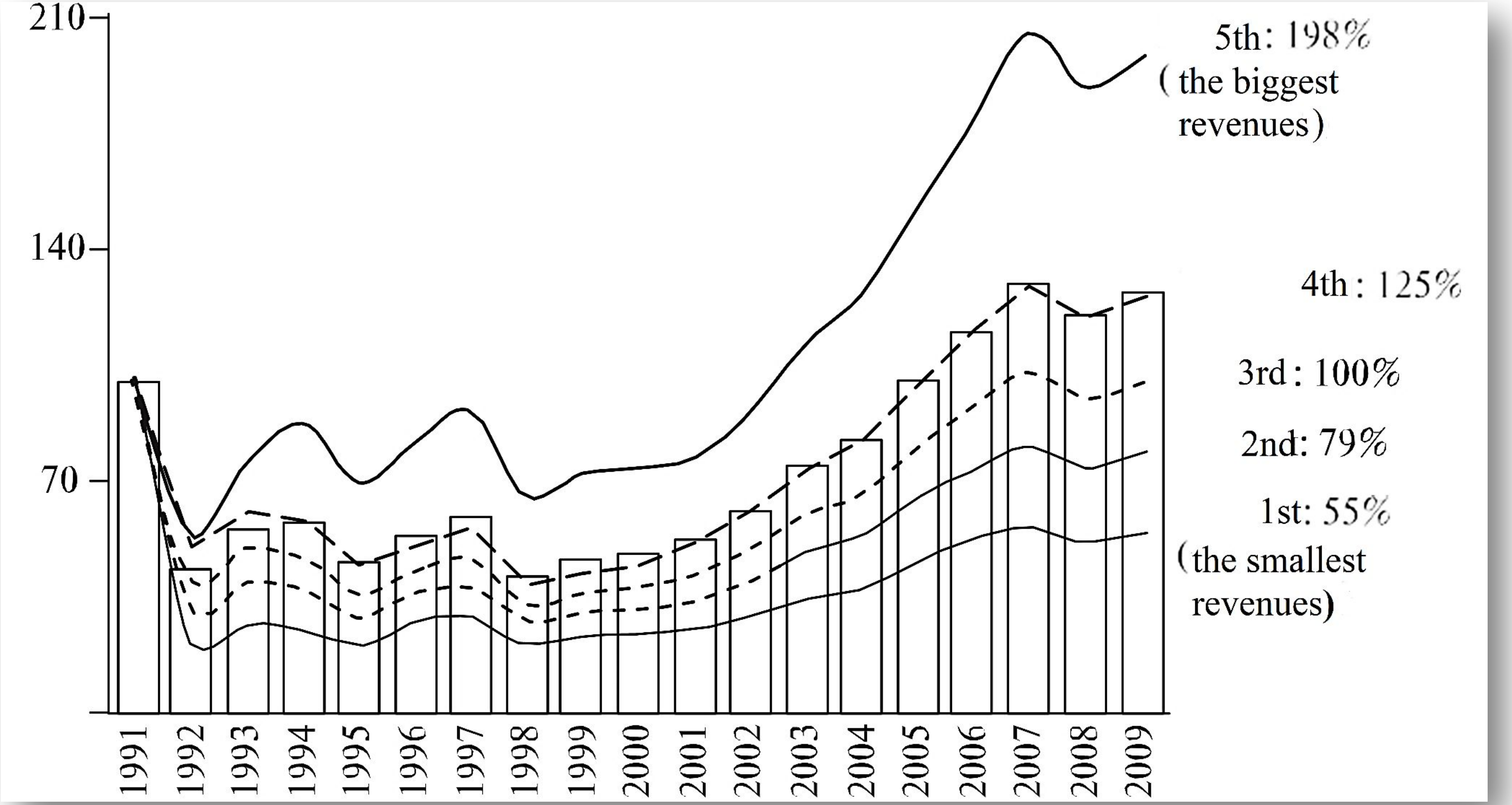
Access to Internet, mobile phone and personal computer usage, % households, 2010, 2015

Country	Access to Internet, %		Mobile phone, %		Personal computer, %	
	2010	**2015**	**2010**	**2015**	**2010**	**2015**
Germany	72,9	85,6	93	99,1	80,8	88,3
Spain	59,1	77	94,6	96,6	69	79,1
Poland	63,4	76,8	91,8	96,4	68,7	75,2
Russia	41,3	72	85,8	96,2	55	72,8
Brazil	27,1	50,6	88,8	94,9	34,9	54,2
China	23,7	50,3	88,9	94	35,4	48,1
South Africa	10,1	39,5	89,8	93,9	18,3	29,7
India	4,2	17,1	55,7	76,2	6,1	14,2

Russia: from quasi egalitarian to?

- Yasin's work of 2010: only top 20% are better off to 1991; 4th quintal a bit better; 3d is "the same"; two other much lower.
- Please, mark: we do not have a systematic picture of re stratification. We definitely know that the most of surveys give the same response from the citizens – big privatization is not legitimized after quarter a century,
- But no political forces are claiming nationalization or any serious redistribution of the assets,
- Intellectuals are more concerned about lost generations for children, emigration and losses in arts and sciences.
- Relatively high growth in 2000-2014 came too late for compensation for long losses for the most of people.

Real cash income dynamics by 20% - income groups, 1991–2009 гг., *%*



E.Yasin et all, 2011 - HSE

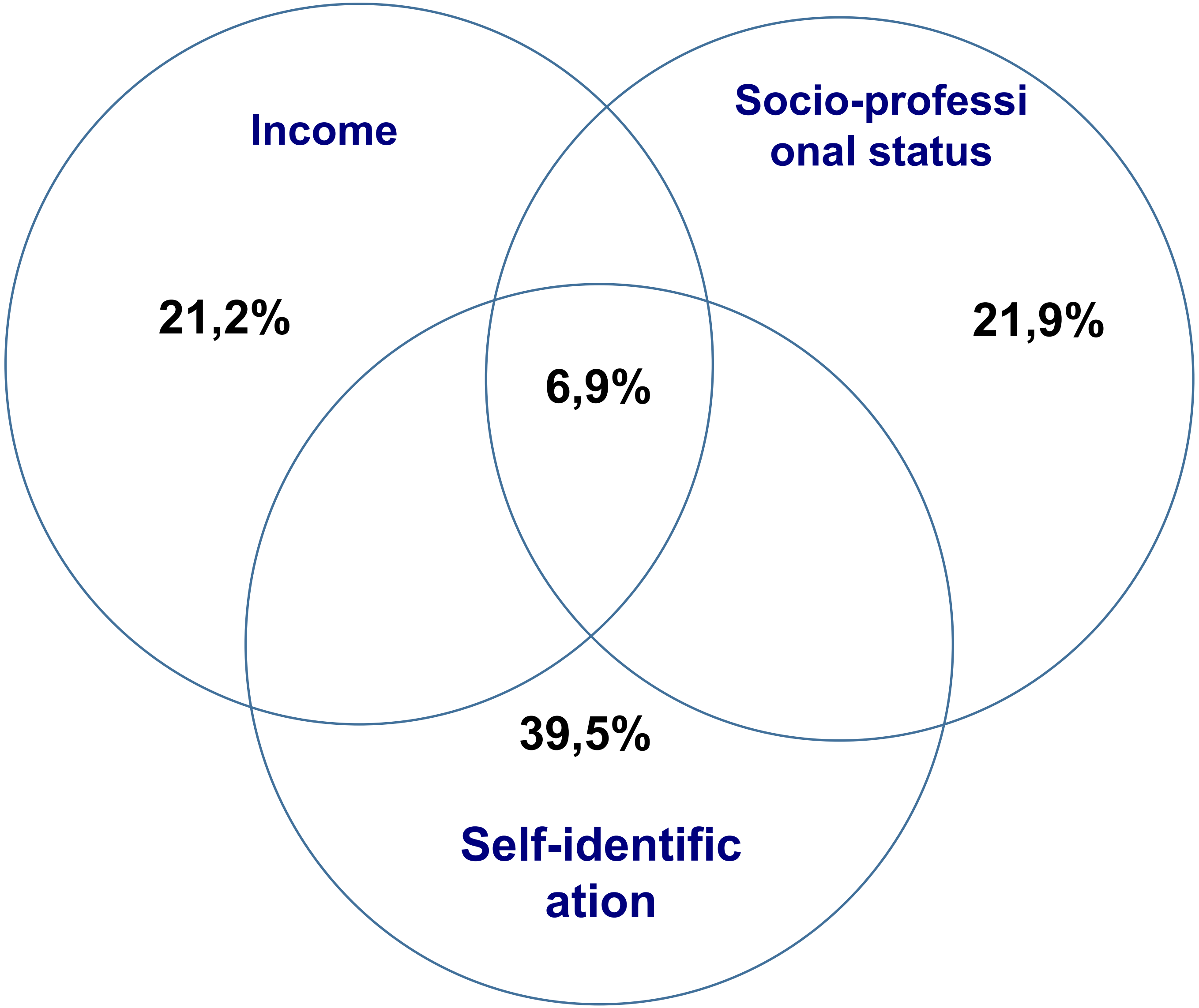
Re-stratification of the society

- I could not find a study of the “navigation” of social groups between 1990 and 2000,
- Yasin’s study indicate 5th quintile doubled its income (constant prices) by 2007. Warning: it’s NOT the same 5th quintile of 1990 but “mixture”.
- All people from the budget sector without skills for new market suffered probably the worst,
- Intellectuals were without big advantages in the SU, but respected and had interesting occupations which were lost,
- Length of the recession was another key issue: 10 years (1990-1999) V recession in the CEE (1989-1994).
- Here comes the fight for assets, corruption and banditry.

Seven Stratas of Society

- **Upper** class – income, rent, etc.: (1) Upper upper and (2) Lower upper. Small part of the society (except for the USA).
- Middle class – the question of definitions. Historical middle class (before Karl Marks). Mark's Class and Middle Class – what's now?
- **Middle** class in developed and developing countries: the capital – province, formation.
- (3) Upper Mid., (4) Middle Mid., (5) Lower Mid. – up to 70% in developed, distinctions with developing
- 3 layers – general: earn by themselves, education, property (apartments, etc.), savings, behaviour, self-identification, firmness.
- **Lower**: (6) Upper lower (workers); (7) Lower lower (lumpens) – by countrie

Russia: Middle class structure in 2000s (T. Maleva)

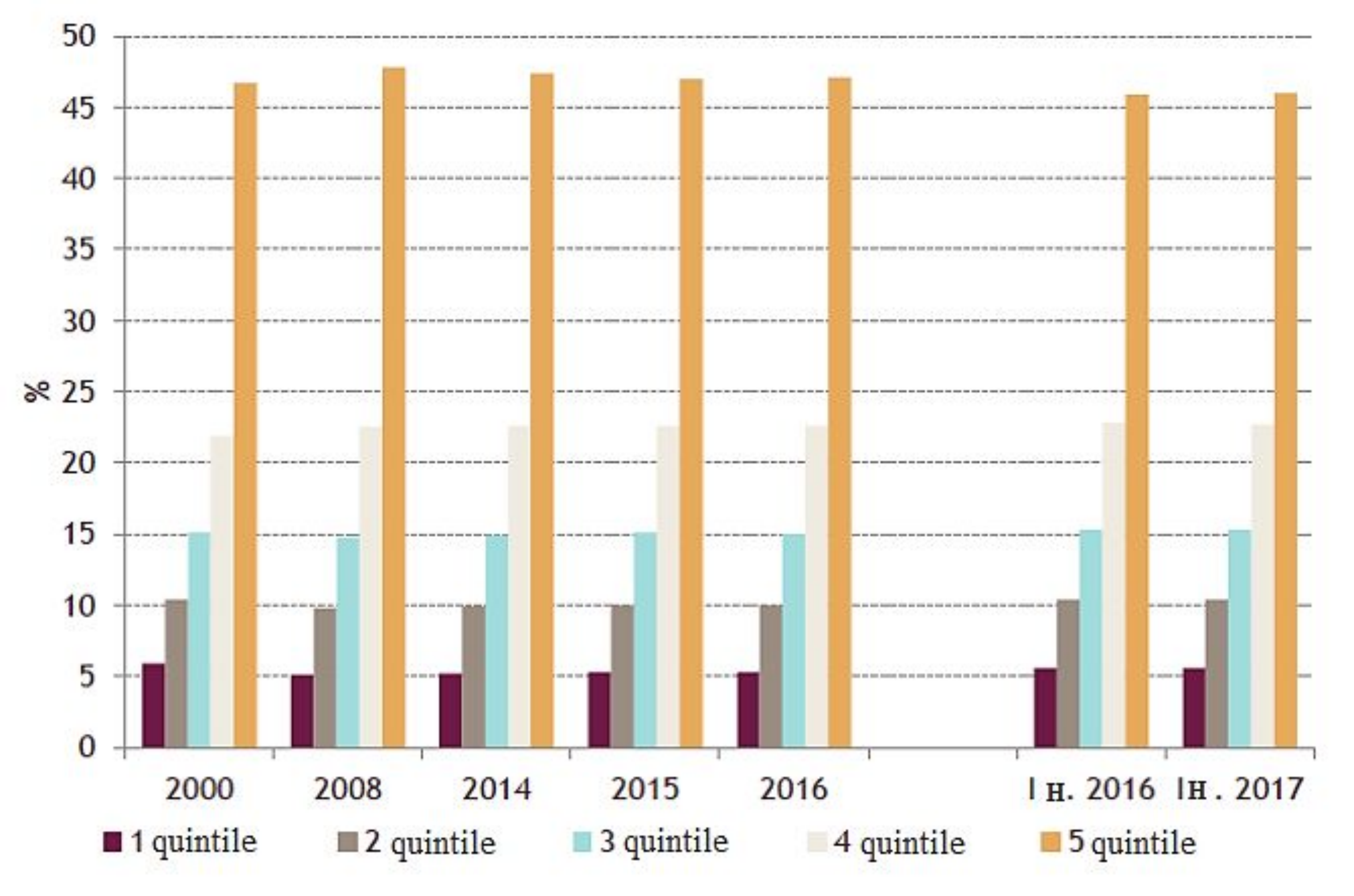


Dynamics of inequality in Russia (1/2)

- High social inequality in Russia has formed in the 1990s;
- Since 2000 the distribution of the population incomes by 20% groups (quintiles) remained practically unchanged;
- The significant economic growth of 2000-2008 did not lead to the inequality reduction, although nominal per capita incomes increased significantly.

Dynamics of inequality in Russia (2/2)

Share of income by 20-percent groups of population, %



Source: Rosstat

features

- 10 years of economic decline (minus 43) lead to different cumulative degree of income loss by strata,
- Destruction of wellbeing, plans, financial assets (hyper inflation and bank failure); deterioration of housing etc.
- Main suffered groups ay first: industry workers, teachers, military personnel
- By the way – impoverished society supports teachers, doctors and priests at its own ”above bottom” level,
- Winners take it all! Formation of entrepreneurs and owners - not an over night story. Good instincts but bad traders,
- Income structure was set by 2000 – practically no change.
- **Top 10% comprises high classes plus upper middle strata.**

Income and Wealth Inequality

- Inequality has a long history – in Europe and in Asia.

  Estimated Gini=50% in XIX Century
- In 1920 – it goes down, after 1980 – soars
- Business cycles and trends – usual effects
- Gini is not the best, unlike the share of 10% (decile)
- Table on Income corresponds to Wealth inequality (mostly financial wealth)
- THE WEALTH REPORT – see for yourselves
- Share of Wealth of 10% = USA = 75%, China = 65%, Russia =85%, Italy= 52%, the Netherlands = 55%

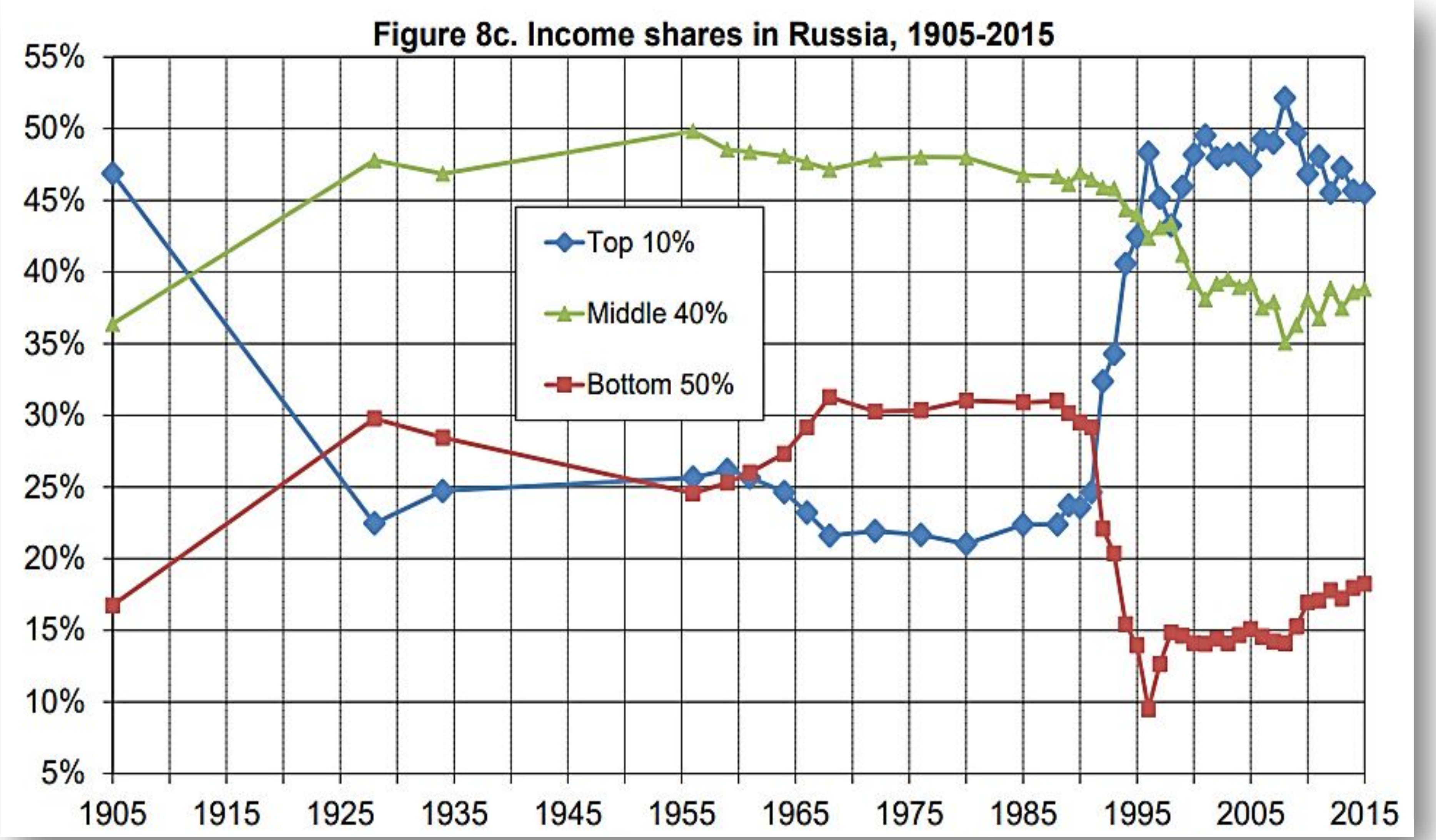
Wealth share of top decile by country, 2000-2014 (The World Bank Global Wealth Databook 2014 (Credit Suisse)

	Year				**GDP (PPP) per capita, current, 2014**	**Income share held by highest 10%**
	2000 (%)	**2001 (%)**	**2002 (%)**	**2014-2000 (ppp)**		
Russia	77,1	76,7	84,8	7,70	24 805	31
Latin America						
Mexico	68,9	63,2	64,4	-4,50	17 880	38,9
Argentina	63,1	61,3	71,8	8,70	22 582	31,8
Brazil	69,4	69,4	73,3	3,90	16 096	41,7
Chile	67,6	62,7	68,9	1,30	22 971	24,2
Anglo-Saxon and Israel						
United Kingdom	51,5	52,4	54,1	2,60	39 510	28,6
United States	74,6	74,7	74,6	0,00	54 596	29,6
Israel	62,4	65,4	67,3	4,90	32 691	31,3
South&East Europe						
Italy	52,6	47,9	51,5	-1,10	35 486	26,2
Spain	54,1	52,4	55,6	1,50	33 711	25,2
Greece	54,8	49	56,1	1,30	25 858	26,2
Poland	69,9	60,5	62,8	-7,10	25 105	25,9
Central&North Europe						
France	56,4	51	53,1	-3,30	40 374	24,7
Germany	63,9	61,5	61,7	-2,20	45 888	24,4
Netherlands	55,2	53,5	54,8	-0,40	47 354	22,9
Sweden	69,7	68,8	68,6	-1,10	45 986	21,4
Czech Republic	62,7	60,1	67,3	4,60	29 925	22,2
Switzerland	73,4	71,9	71,9	-1,50	58 087	
Africa						
South Africa	72,2	69,1	71,7	-0,50	13 046	53,8
Asia&…						
Japan	51	49,1	48,5	-2,50	37 389	24,8
India	65,9	73,6	74	8,10	5 855	28,8
China	48,6	58,7	64	15,40	12 879	30

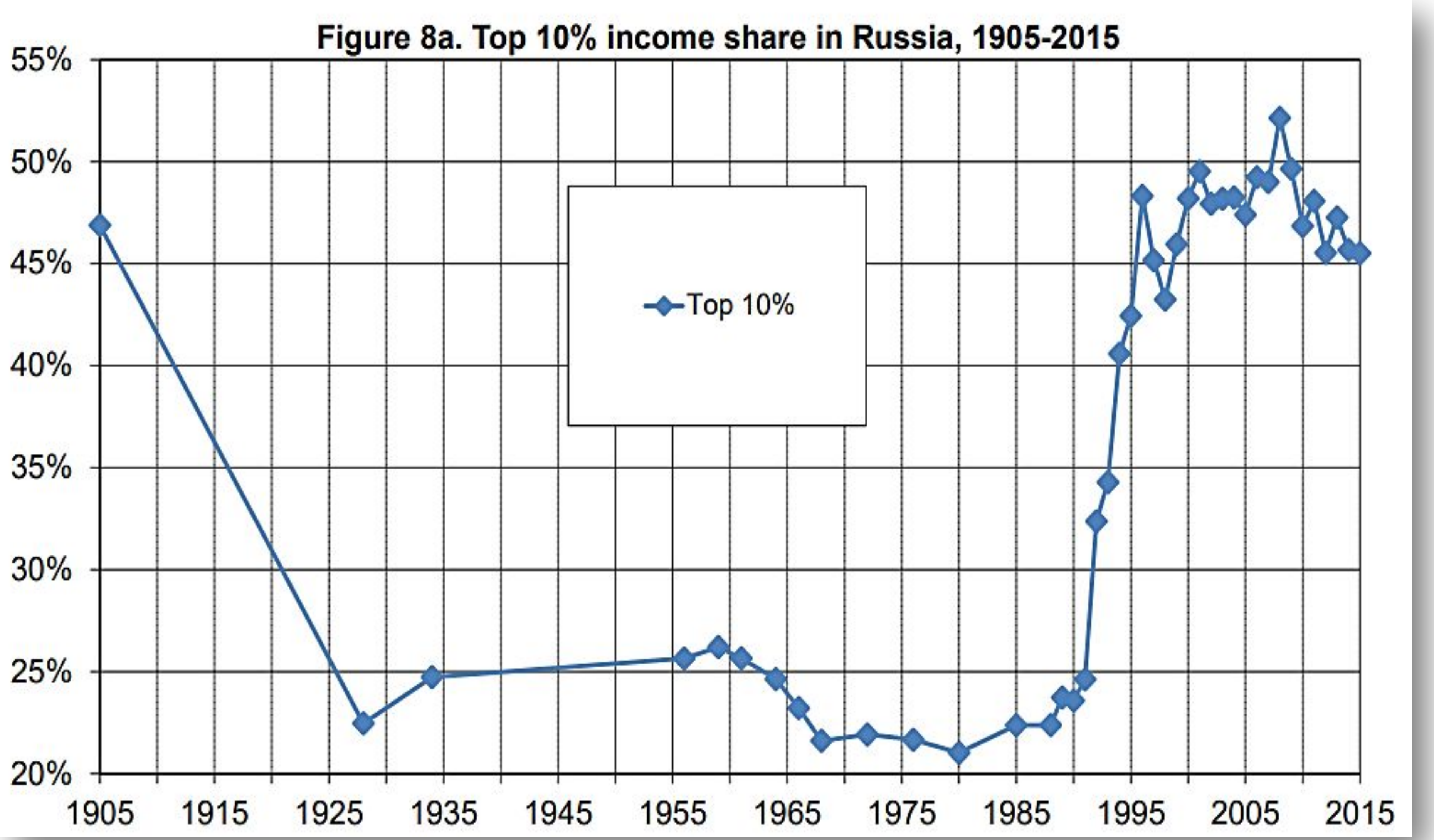
UN sustainable development goal №10. Reduce inequalities (2/2)

Distribution of financial income of the population in Russia, by quintiles, %, 1970-2015

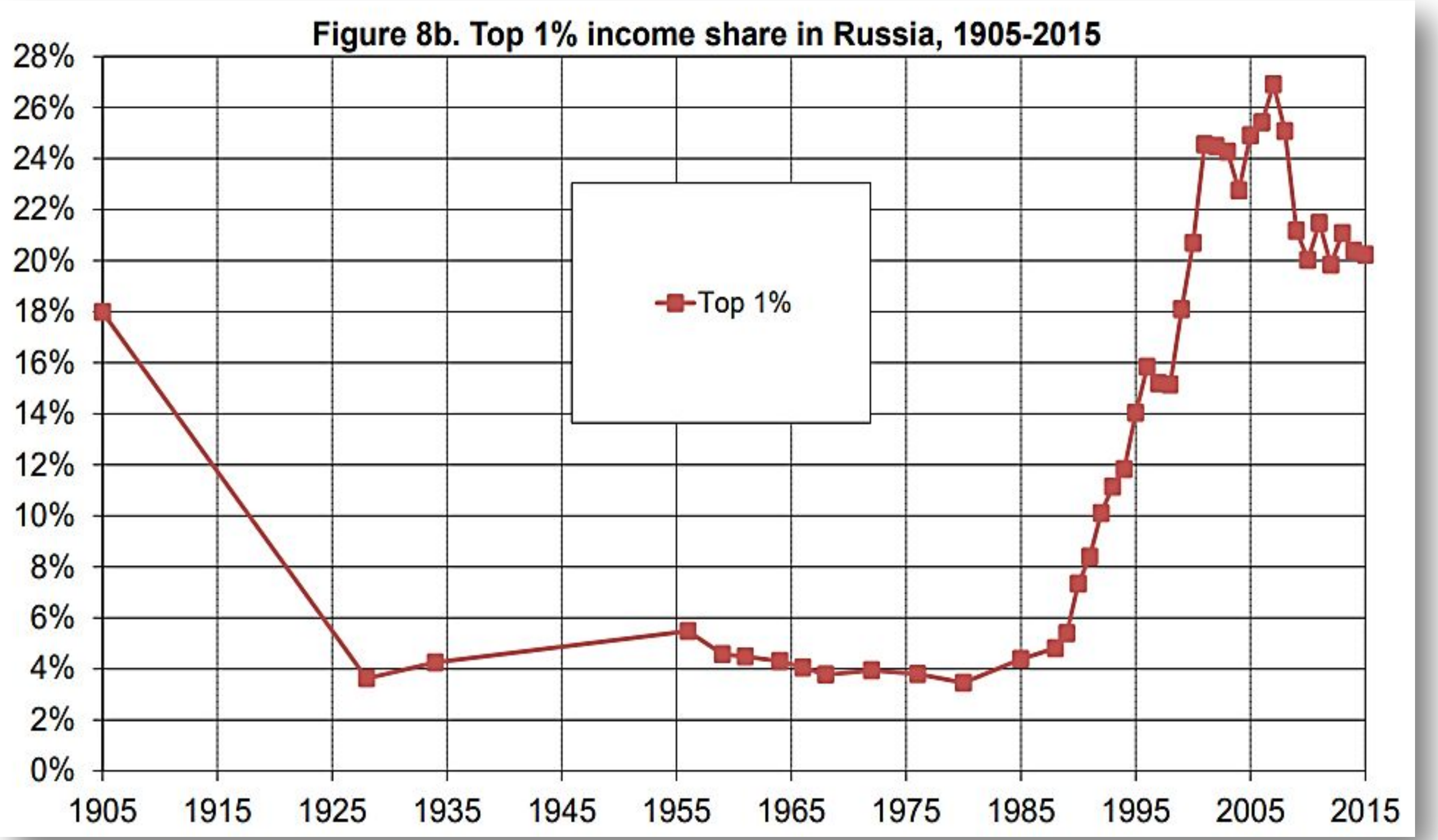
Year	Share of population quintiles, %				
	First (With The Least Income)	**Second**	**Third**	**Fourth**	Fifth (With The Most Income)
1970	7.8	14.8	18.0	22.6	36.8
1980	10.1	14.8	18.6	23.1	33.4
1990	9.8	14.9	18.8	23,8	32.7
1999	6.0	10.5	14.8	21.1	47.6
2008	5.1	9.8	14.8	22.5	47.8
2015	5.3	10.0	15.1	22.8	47.0



Source: F. Novokmet, T. Piketty, G. Zucman. From Soviets to Oligarchs: Inequality and Property in Russia 1905-2016



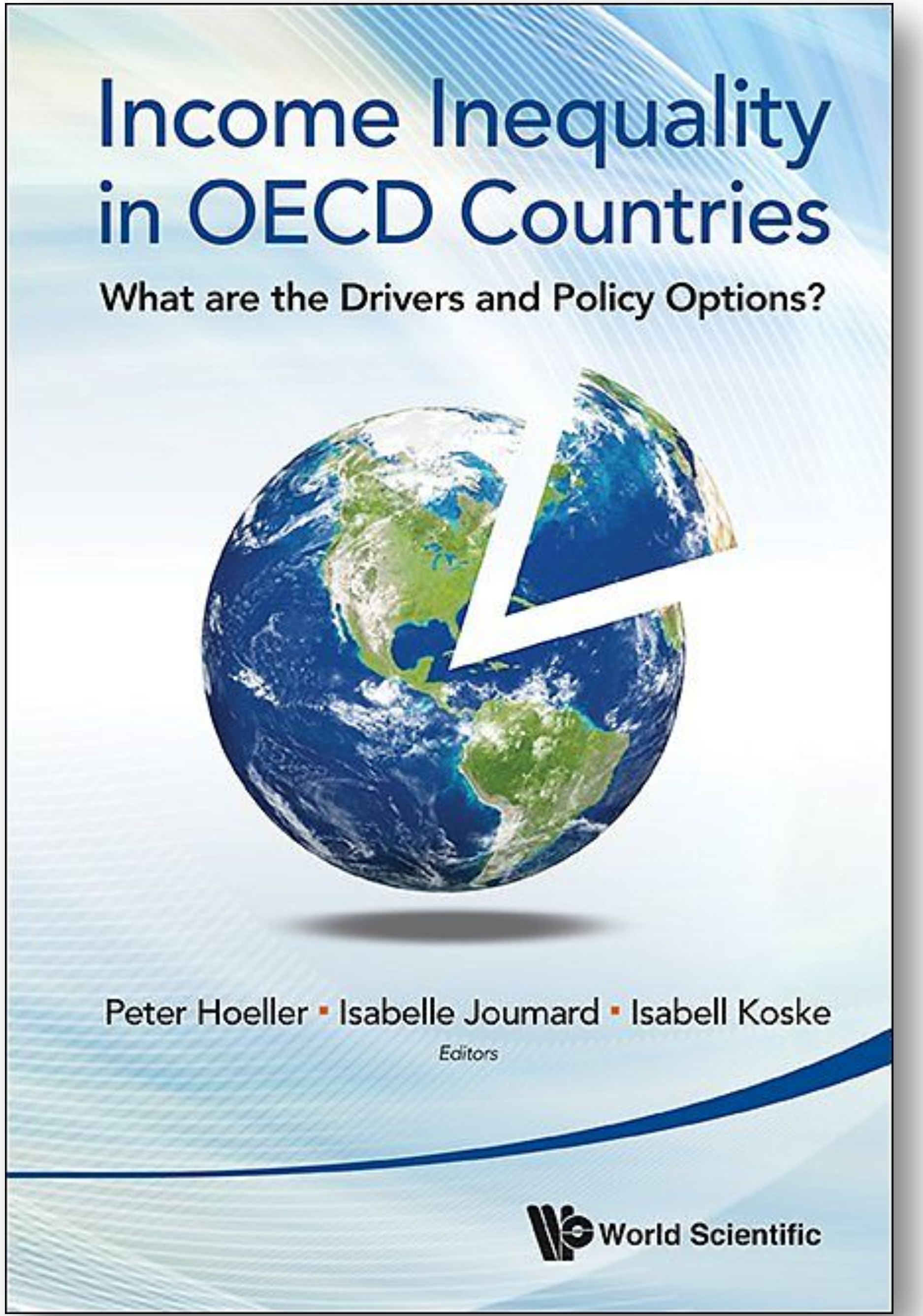
Source: F. Novokmet, T. Piketty, G. Zucman. From Soviets to Oligarchs: Inequality and Property in Russia 1905-2016



Source: F. Novokmet, T. Piketty, G. Zucman. From Soviets to Oligarchs: Inequality and Property in Russia 1905-2016

Conclusion: Russia

- Russia has made the detour from European income distribution to Latin American one. We recorded it in 2000 – now it's the stable result of transition.
- Inequality is similar to Anglo – Saxon, but Russia lacks the that vertical mobility and entrepreneurship.
- Financially sustainable middle class is within 30% of households, and little has changed in the upturn of 2000s.
- Distribution in Russia – judging by the income share of top 10% of population – is quite Latin American.
- The State has some degree of "independence" from tax-payers due to high oil-rent.
- Political system is based on the weak middle class and weak civil society


Income Inequality in OECD Countries
What are the Drivers and Policy Options?
Peter Hoeller ▪ Isabelle Joumard ▪ Isabell Koske
Editors
World Scientific

Literature – 1

- Atkinson Anthony “Inequality. What can be done?”, Cambridge, Harvard Un. Press, 2015.
- Grigoryev Leonid, Alla Salmina “Inequality in Russia during transformation: to Europe or Latin America?”, IPSA-ECPR Joint Conference, Sao Paulo, 2011
- Grigoryev Leonid. Russia in the System of Global Economic Relations // Russia in Global Affairs. Delhi, 2016, pp. 498-512.
- Kuznets Simon. Economic growth and income inequality // Am. Ec. Review. 1955, vol. 45. №1, P. 1-28.
- Milanovic Branko. Income, Inequality, and Poverty during the Transition from Planned to Market Economy // WorldBank Regional and Sectoral Studies, 1998. Available at: http://documents.worldbank.org/curated/en/229251468767984676/pdf/multi-page.pdf.
- Milanovic Branko. Income, Inequality, and Poverty during the Transition from Planned to Market Economy. Available at: http://documents.worldbank.org/curated/en/229251468767984676/pdf/multi-page.pdf.
- OECD. Income Inequality and Poverty. Available at: http://www.oecd.org/social/inequality-and-poverty.htm.
- Piketty Thomas. Capital in the Twenty-First Century. Cambridge: Harvard University Press, 2014.
- Stiglitz George. The price of inequality. Than the stratification of society threatens our future. 2016.
- Rajan R., Zingales L. Saving Capitalism from the Capitalists. Princeton: Princeton Un. Press, 2004.
- Leonid M. Grigoryev, Victoria Pavlyushina Social inequality: Problems of stagnation in 2000–2016 - “Voprosy Ekonomiki”, 2018, #10, pp.29-52

Literature - 2

- Григорьев Л.М, Павлюшина В.А. Социальное неравенство в мире и в России. Доклад о человеческом развитии в РА. Аналитический центр при Правительстве РФ, Москва, 2016.
- Григорьев Л, Салмина А. «Структура" социального неравенства современного мира: проблемы измерения. «Социологический журнал», №3, 2013, стр. 5-16.
- Цели устойчивого развития ООН и Россия. Под ред. С.Н.Бобылева и Л.М.Григорьева, М., АЦ, 2016.
- Григорьев Л., Павлюшина В. «Бразилия: в ловушке среднего уровня развития», в «Мир новой экономики», №2, 2016 с. 28-37.
- Григорьев Л. Социальное неравенство в мире – интерпретация неочевидных тенденций. Журнал НЭА, №3 (31), 2016, с.160-170.
- Григорьев Л., Павлюшина В. «Социальное неравенство как проблема экономической стратегии России», в «Мир новой экономики», №3, 2017. Малева Т.М., Бурдяк А.Я., Тындик А.О. Социальная структура российского общества в зеркале демографии // Журнал Новой экономической ассоциации, 2016, №4 (32), с. 62–85.
- Григорьев Л.М. и В.А.Павлюшина «Межстрановое неравенство и проблема стадий развития», «Вопросы экономики», №7, 2018, стр.5-29.
- Салмина А. Избыточное неравенство и развитие человеческого потенциала. Доклад о человеческом развитии в Российской Федерации. Аналитический центр при Правительстве РФ, М., 2014, с. 84-106.
- Средние классы: экономические и социальные стратегии / под ред. Т.М. Малевой. Московский Центр Карнеги. М.: Гендальф, 2003.
- Прогресс и риски: Неравенство и человеческое развитие в Восточной Европе, Турции и Центральной Азии. Доклад ПРООН. 2016.

Growth and Macro

11.02.2019

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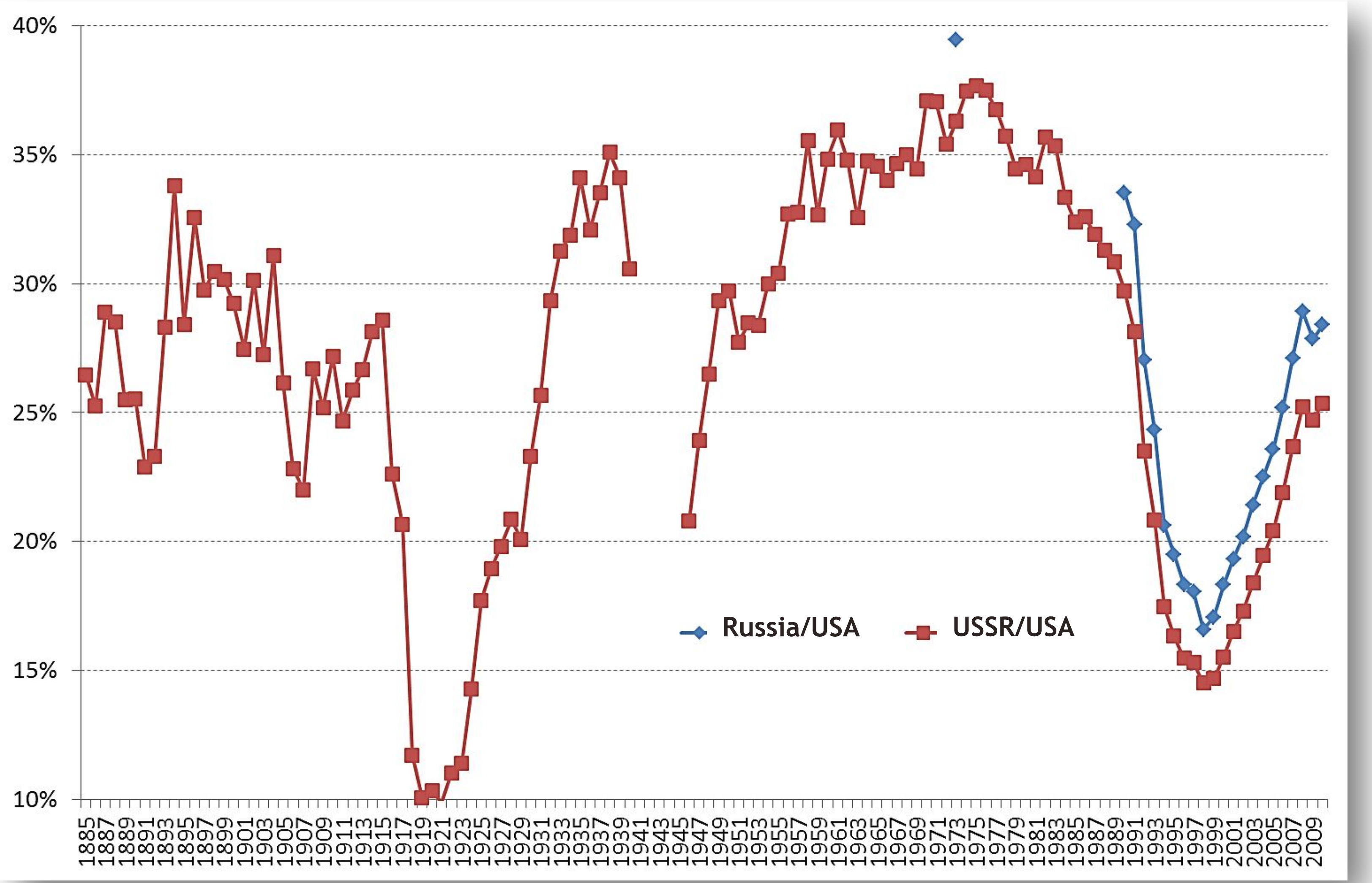
Ratio of GDP per capita of the USSR/Russia to the USA

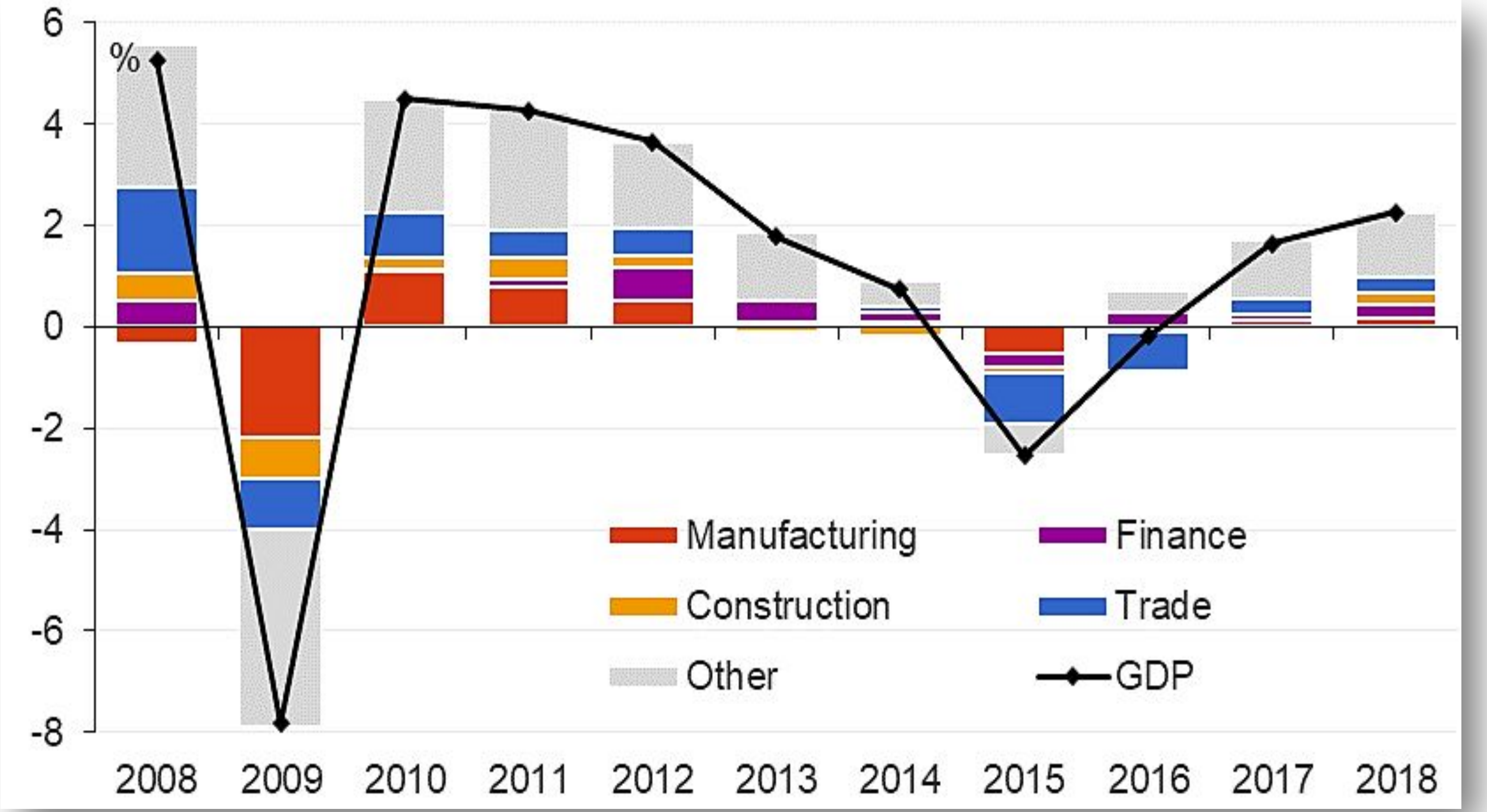


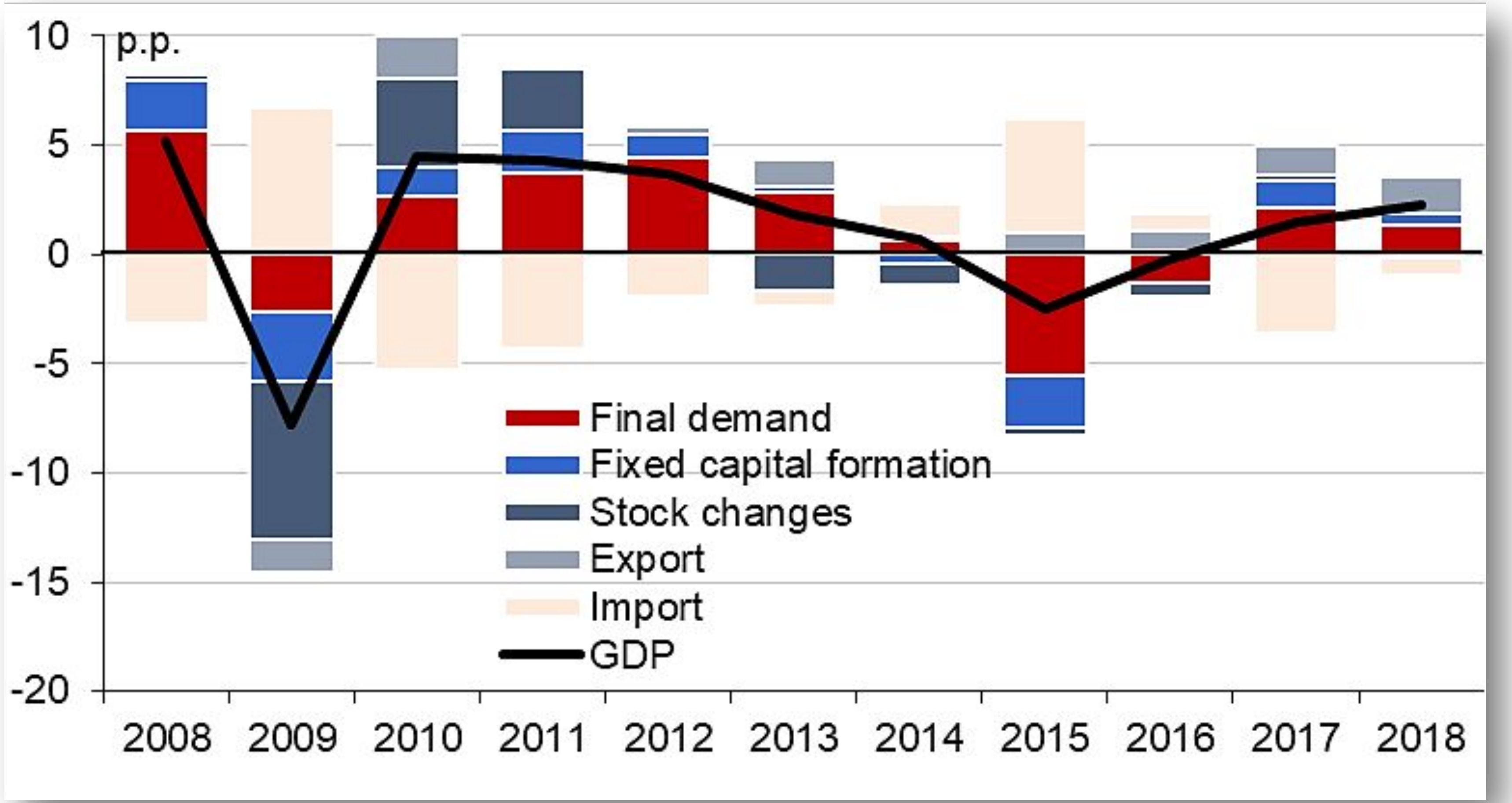
Source: Maddison Project

Growth factors – long-run demand

- Infrastructure – roads and communications,
- Housing = new tendencies – two dwellings
- Modernization of Equipment: industry etc.
- Consumer Durables
- Regional differences and development
- Defense sector – quite “cheap” modernization
- Oil sector = driver or milk cow
- Financial sector – too weak for credits
- Foreign money = cheap or expensive?

Contribution to real GDP growth from production side




10
5
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-15
-20
p.p.
Final demand
Fixed capital formation
Stock changes
Export
Import
GDP
2008
2009
2010
2011
2012
2013
2014
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2016
2017
2018

Federation, 2007-2010, 2014-2017 (1/4)

Table 3
Main economic indicators of the Russian Federation, 2007–2017.

	2012	2013	2014	2015	2016	2017
GDP	3.7	1.8	0.7	–2.8	–0.2	1.5
Industry	3.4	0.4	1.7	–3.4	1.3	1.0
Agriculture	–4.8	5.8	3.5	2.6	4.8	2.4
Construction	2.5	0.1	–2.3	–3.9	–2.2	–1.4
Wholesale trade	3.6	0.7	3.9	–5.5	2.6	5.9
Retail trade	6.3	3.9	2.7	–10.0	–4.6	1.2
Households final consumption	7.9	5.2	2.0	–9.4	–2.8	3.4
Investments in fixed assets	6.8	0.8	–1.5	–10.1	–0.2	4.4
Wages as a percentage of GDP [1)]	44.2	46.1	46.4	46.8	48.4	47.7
Profit and mixed income as a percentage of GDP [1)]	41.1	39.7	39.5	41.8	40.7	41.4

Federation, 2007-2010, 2014-2017 (2/4)

Table 3
Main economic indicators of the Russian Federation, 2007–2017.

	2012	2013	2014	2015	2016	2017
Indicators of public finances and international reserves						
Surplus (+)/deficit (–) of the consolidated budget as % of GDP	0.4	–1.2	–1.1	–3.4	–3.7	–1.5
Surplus (+)/deficit (–) of the federal budget as % of GDP	–0.1	–0.5	–0.5	–2.4	–3.4	–1.5
Non-oil-and-gas deficit of the federal budget as % of GDP	–9.5	–9.4	–9.8	–9.4	–9.1	–7.9
Domestic state debt, end of year, billions rubles	4977.9	5722.2	7241.2	7307.6	8003.5	8689.6
Foreign state debt, end of year, billions dollars (Ministry of Finance data)	50.8	55.8	54.4	50.0	51.2	49.8
Total state debt as % of GDP	10.5	11.4	14.4	13.6	12.9	12.6
Reserve fund (Stabilization fund in 2007), end of year, billion dollars	62.08	87.38	87.91	49.95	16.03	0.0
National Welfare Fund, end of year, billion dollars	88.59	88.63	78.00	71.72	71.87	65.15
International reserves of the Bank of Russia, end of year, billion dollars	537.6	509.6	385.5	368.4	377.7	432.7
Prices and interest rates						
Consumer price index, December to previous December	6.6	6.5	11.4	12.9	5.4	2.5
Producer price index, December to previous December	5.1	3.7	5.9	10.7	7.5	8.4
Key interest rate of the Bank of Russia [2)], yearly average, % per annum	5.3	5.5	7.9	12.6	10.6	9.1

Federation, 2007-2010, 2014-2017 (3/4)

Table 3 *(continued)*

	2012	2013	2014	2015	2016	2017
Average interest rate on loans to businesses in rubles, yearly average, % per annum	9.1	9.5	11.1	15.7	12.6	10.6
Average interest rate on savings of individuals (except demand deposits), % per annum	6.5	6.5	6.7	9.7	7.3	6.0
Labor market						
Overall unemployment (ILO methodology), annual average, % of population	5.5	5.5	5.2	5.6	5.5	5.2
Average salary, thousand rubles per month	26.6	29.8	32.5	34.0	36.7	39.1
Salary in real terms, % change from previous year	8.4	4.8	1.2	–9.0	0.8	3.4
Real disposable household income, % change from previous year	4.6	4.0	–0.7	–3.2	–5.8	–1.7
Population with money income below the subsistence level, million people	15.4	15.5	16.1	19.5	19.6	20.3 [3)]

Main economic indicators of the Russian Federation, 2007-2010, 2014-2017 (4/4)

	2012	2013	2014	2015	2016	2017
Banking system						
Number of active credit organizations, end of year, units	956	923	834	733	623	561
Number of revoked banking licenses in the course of the year, units	22	32	86	93	97	51
Rate of asset growth, % for the year	20.4	14.2	18.6	–1.5	2.1	7.8
Indebtedness of resident legal entities except banks in terms of bank loans, % for the year	15.5	11.6	12.7	5.0	-0.1	4.6
Indebtedness of resident individuals in terms of bank loans, % for the year	39.1	27.7	11.6	–7.3	0.7	12.3
Share of overdue loans to resident legal entities except banks in total volume of debt, %	4.6	4.1	4.1	6.2	6.1	5.9
Share of overdue loans to individuals in total volume of debt, %	4.1	4.5	6.0	8.4	8.3	7.3
Profit, billion rubles	1012	994	589	192	930	790

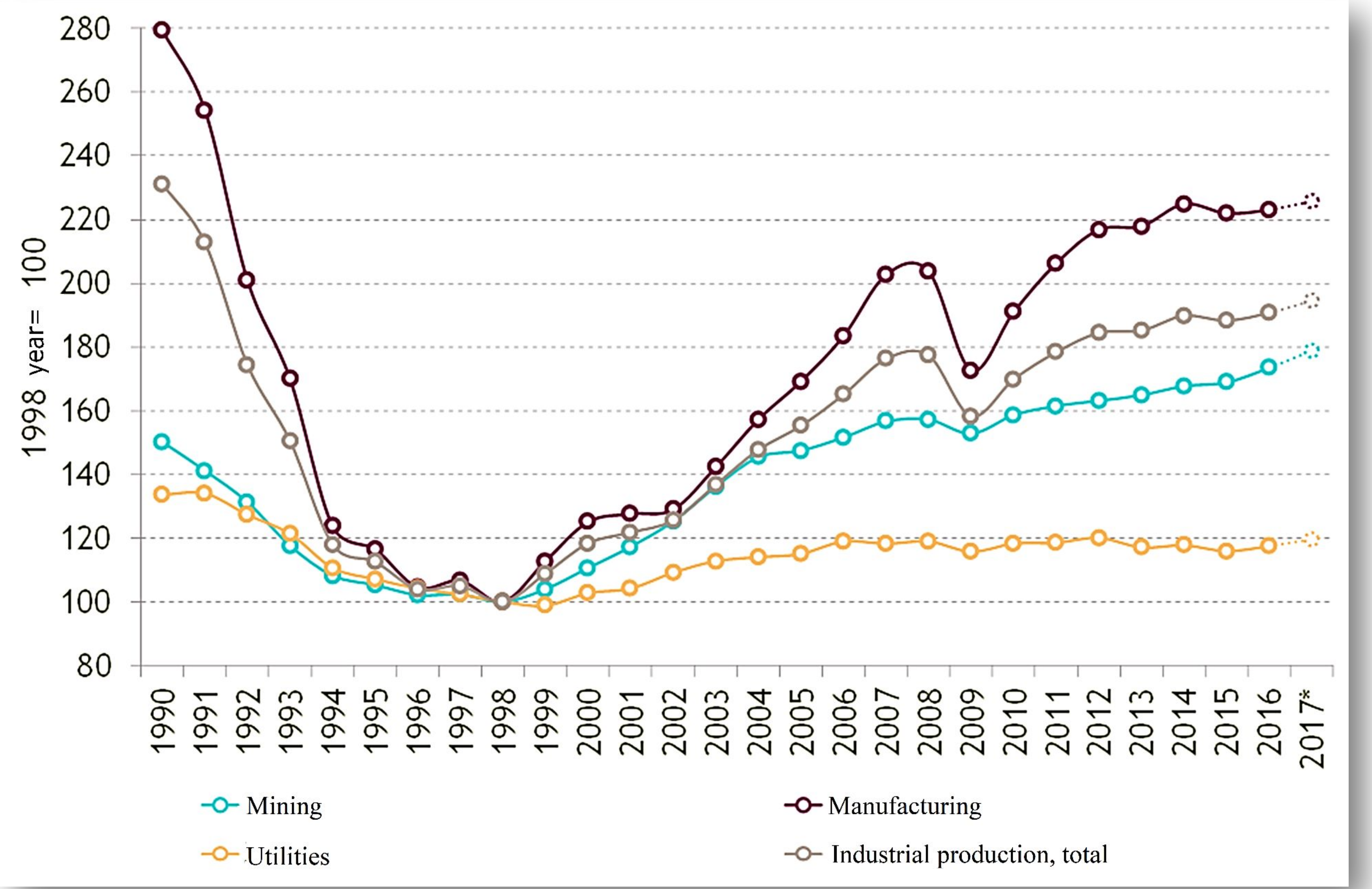
[1] Figures for percentages and structure of GDP for 2007–2010 and 2011–2016 cannot be compared due to a change in the methodology of calculating the GDP in 2011.
[2] Until 2013, the minimum rate for 1-day repurchase operations per year.
[3] In Q3 2017.
Sources: Federal State Statistics Service; Russian Ministry of Finance; Bank of Russia.

Russia key indicators, growth for the period, %

	1989–1998	1998–2008	2008–2016
Gross Domestic Product	-44	95	3
Gross Fixed Capital Formation	-79	229	-4
Industrial production	-57	77	4
Mining	-35	57	9
Manufacturing	-64	104	3
Electricity, gas and water utilities	-24	19	-2
Retail sales	4	161	5
Food sales	-4	121	-2
Non-food sales	9	202	12
Sales of organizations (stores)	-17	207	13
Sales in "open" markets	306	32	-44
Market services rendered to population	-75	75	8

Source: Rosstat

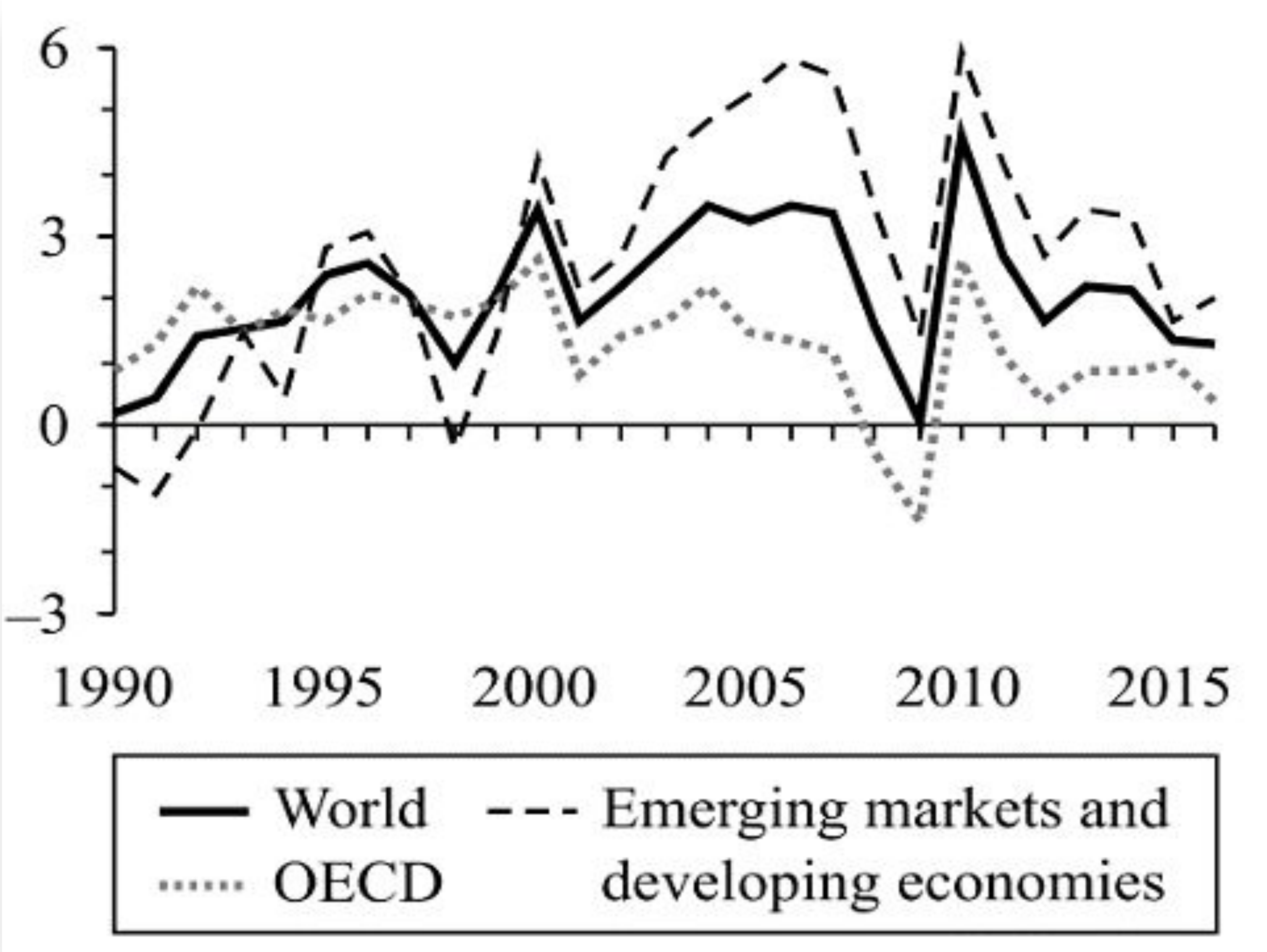
Industrial production, 1990—2017*, 1998 = 100



*Half year 2017

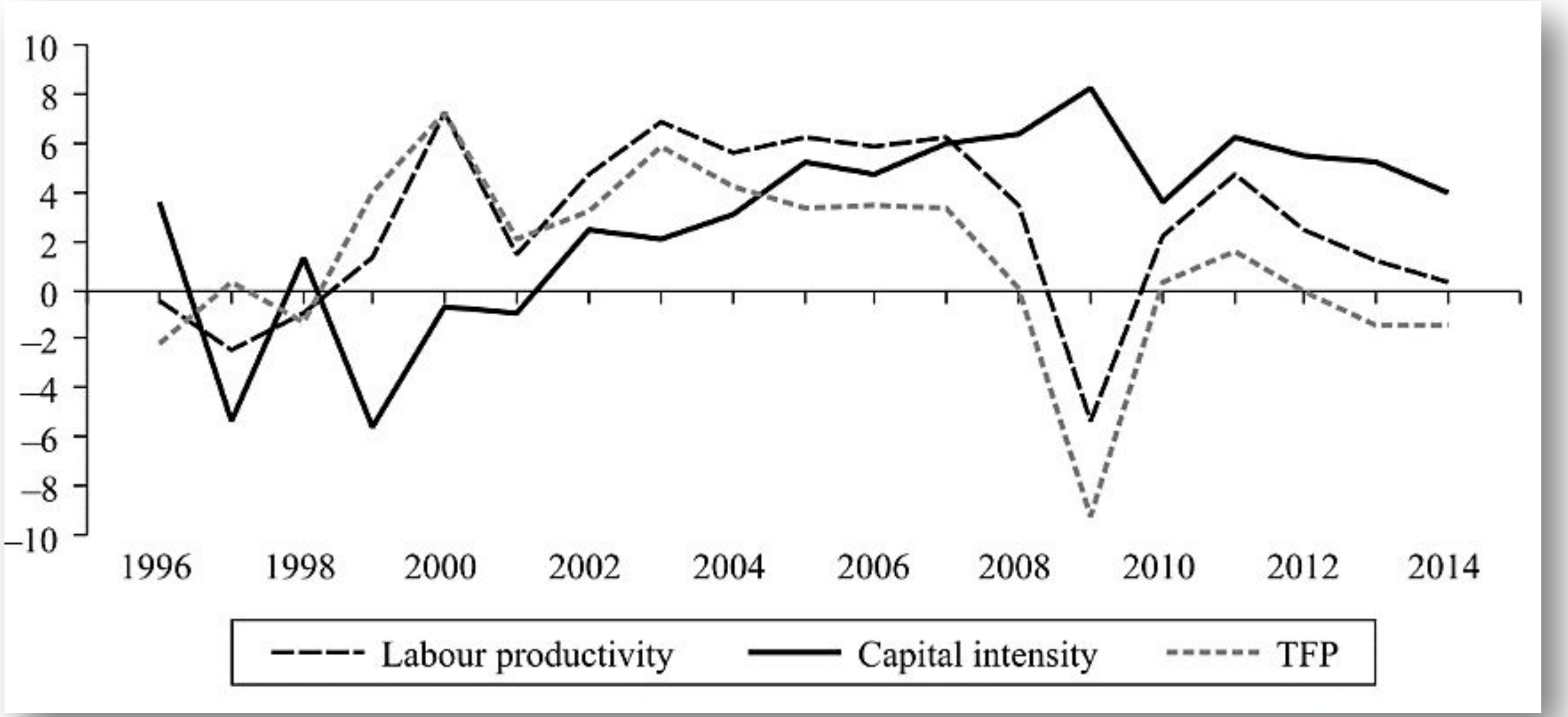
Source: Rosstat

Labour productivity growth rates in the world, the OECD region and emerging ,arkets and developing economies



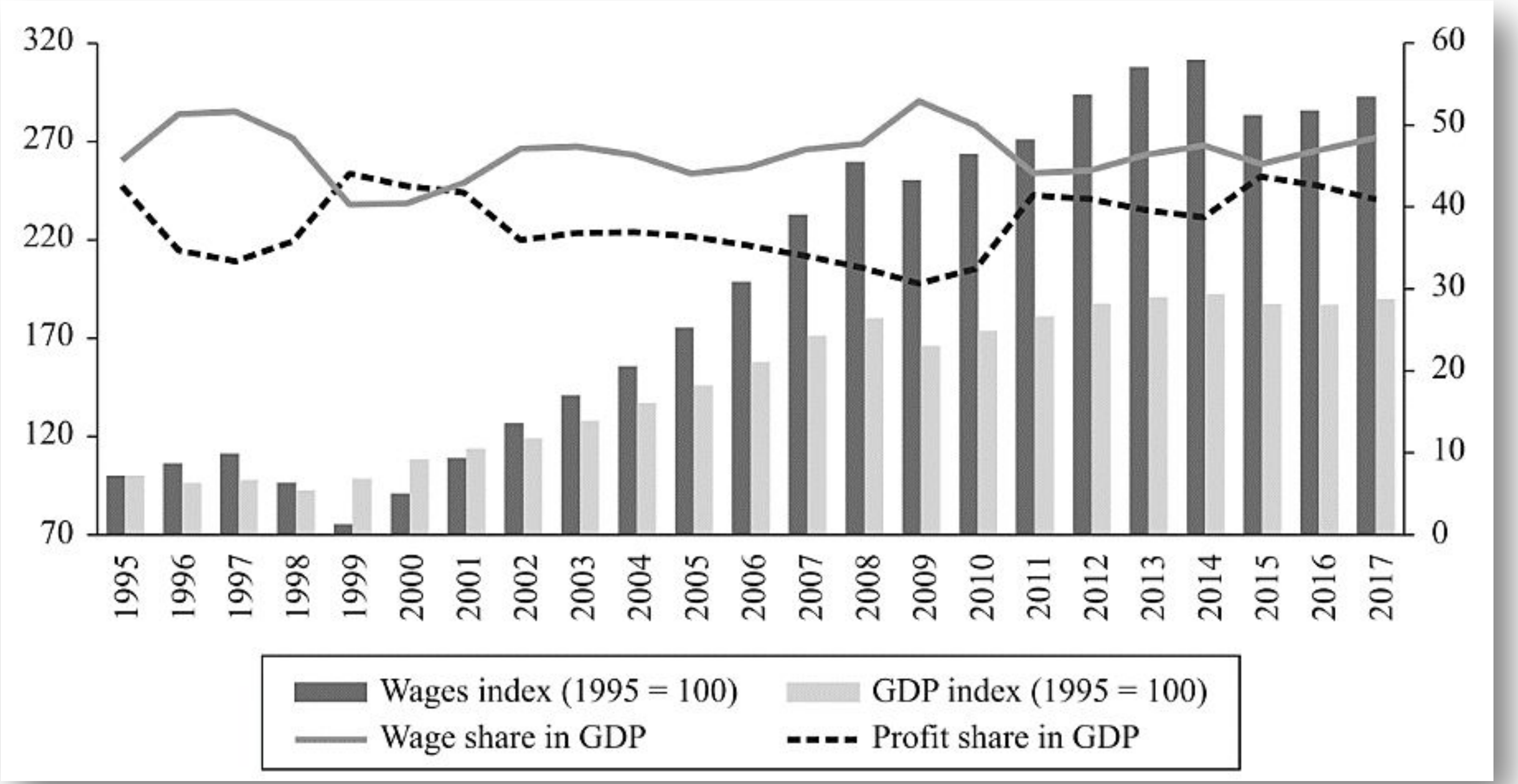
Source: The Conference Boars Total Economy Database (Adjusted version), May 2017

Growth of labour productivity, capital deepening and TFP in the market sector of the Russian economy in 1995-2014 (annual growth rate)

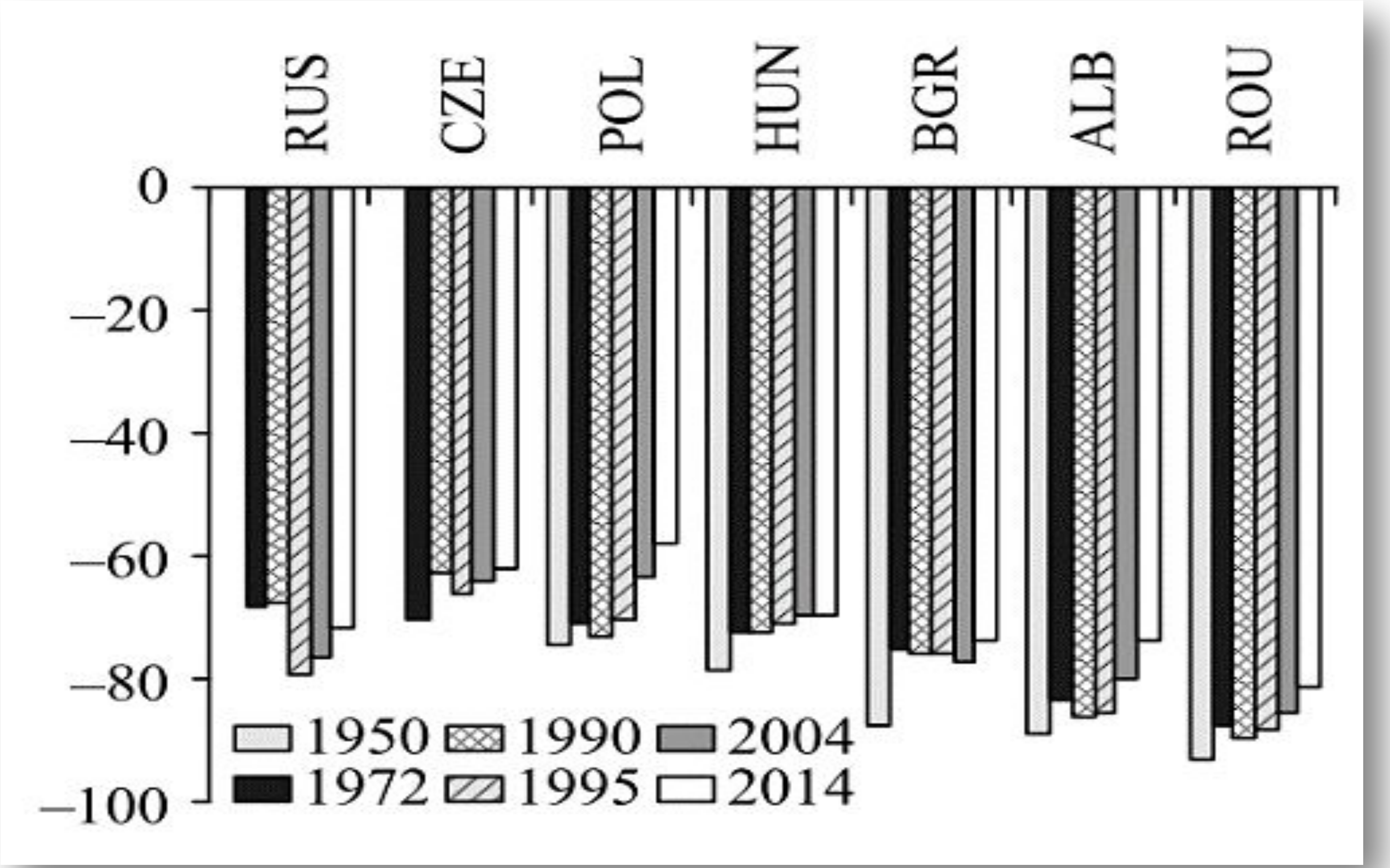


Source: Russia KLEMS, 2017

Gross profit and wages as a percentage of GDP (right scale)

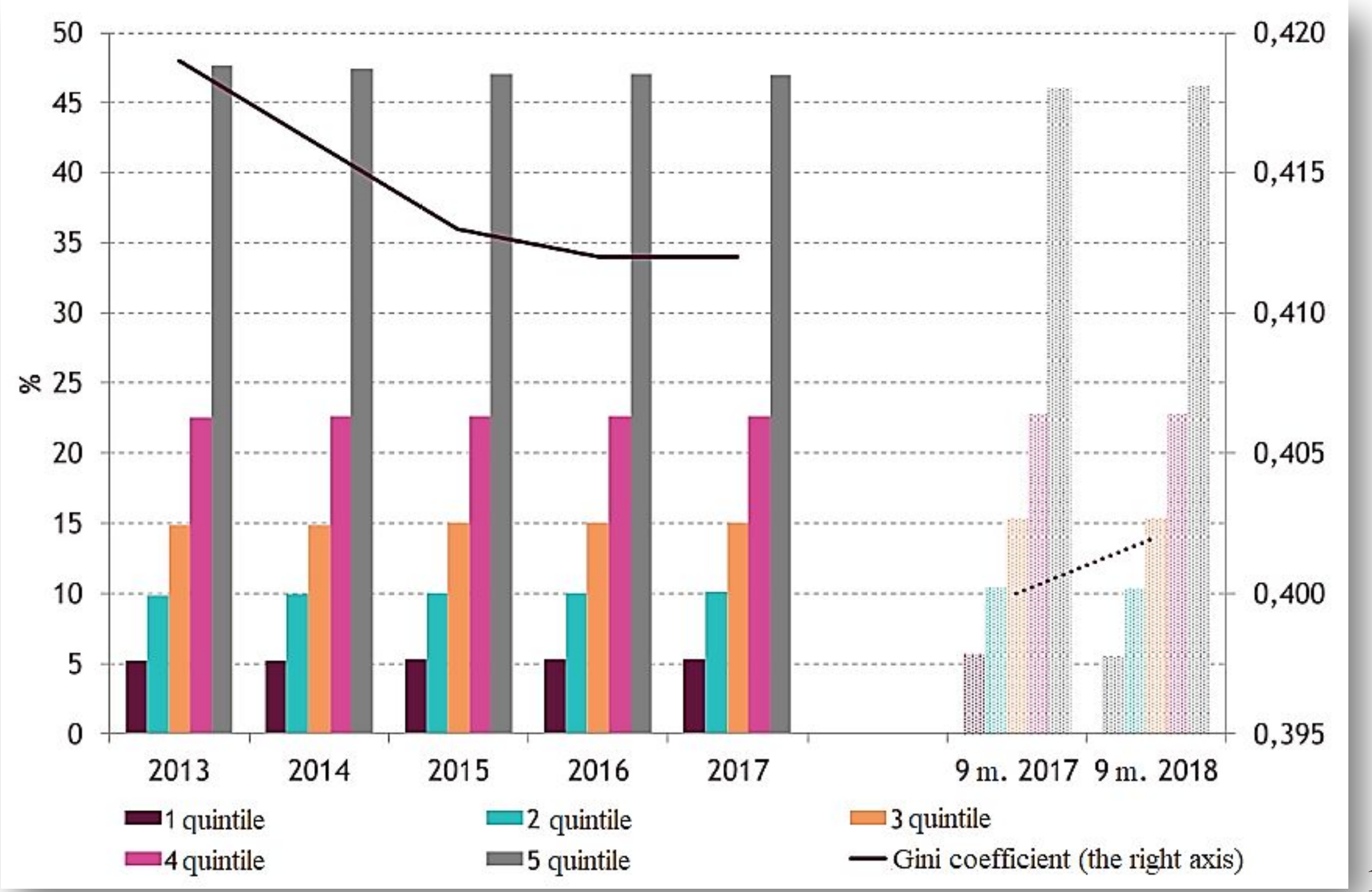


Percentage gap in GDP per worker in some Central and East Europe economies and Russia, arranged by levels in 1972 (% gap relative to US)



Source: The Conference Boars Total Economy Database, May 2015

Income ratio by quintile, population, %; Gini coefficient, 2013-2018



Source: Rosstat

Population income distribution, thousand roubles, 2013-2018

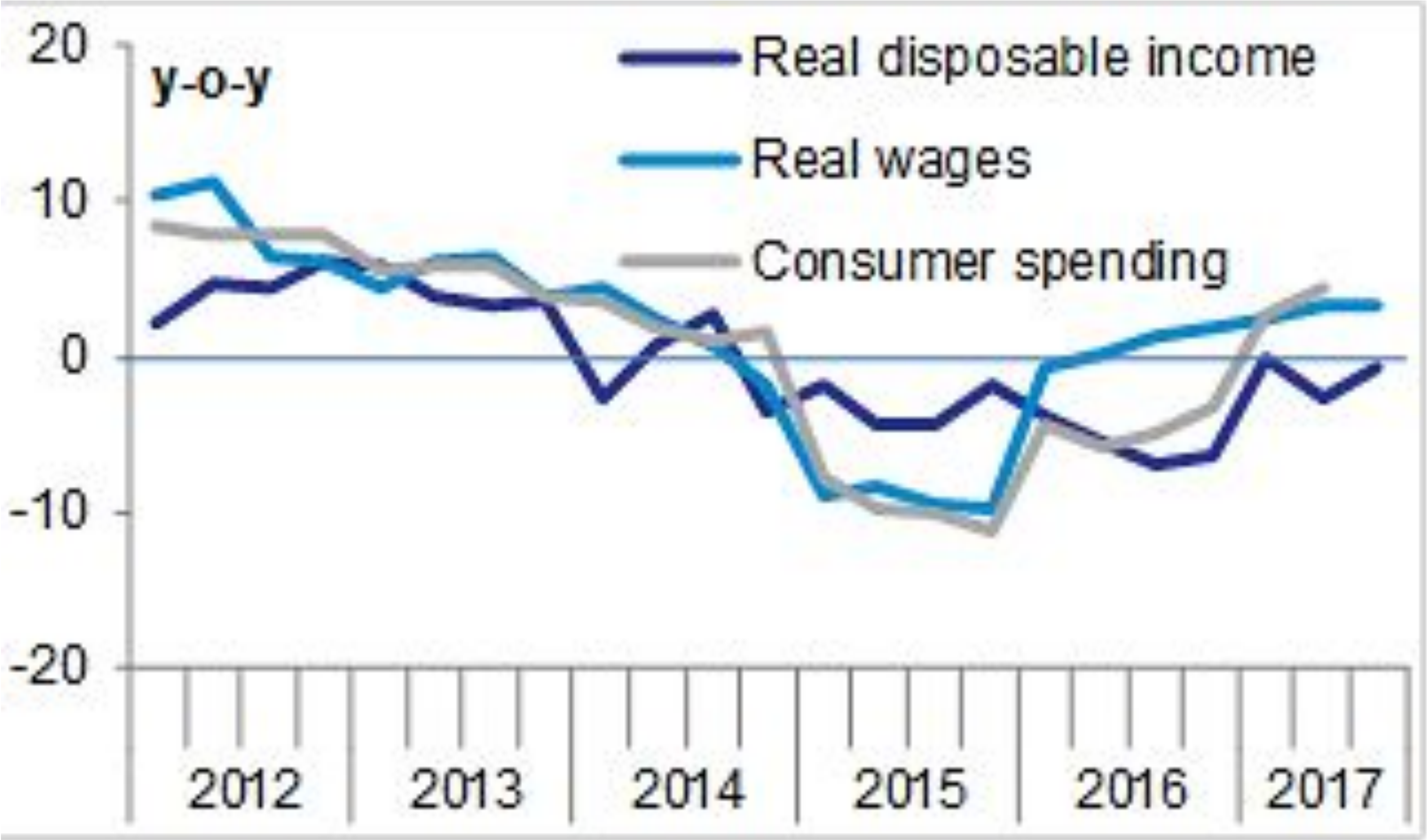
Source: Rosstat

Personal consumption structure in Russia,

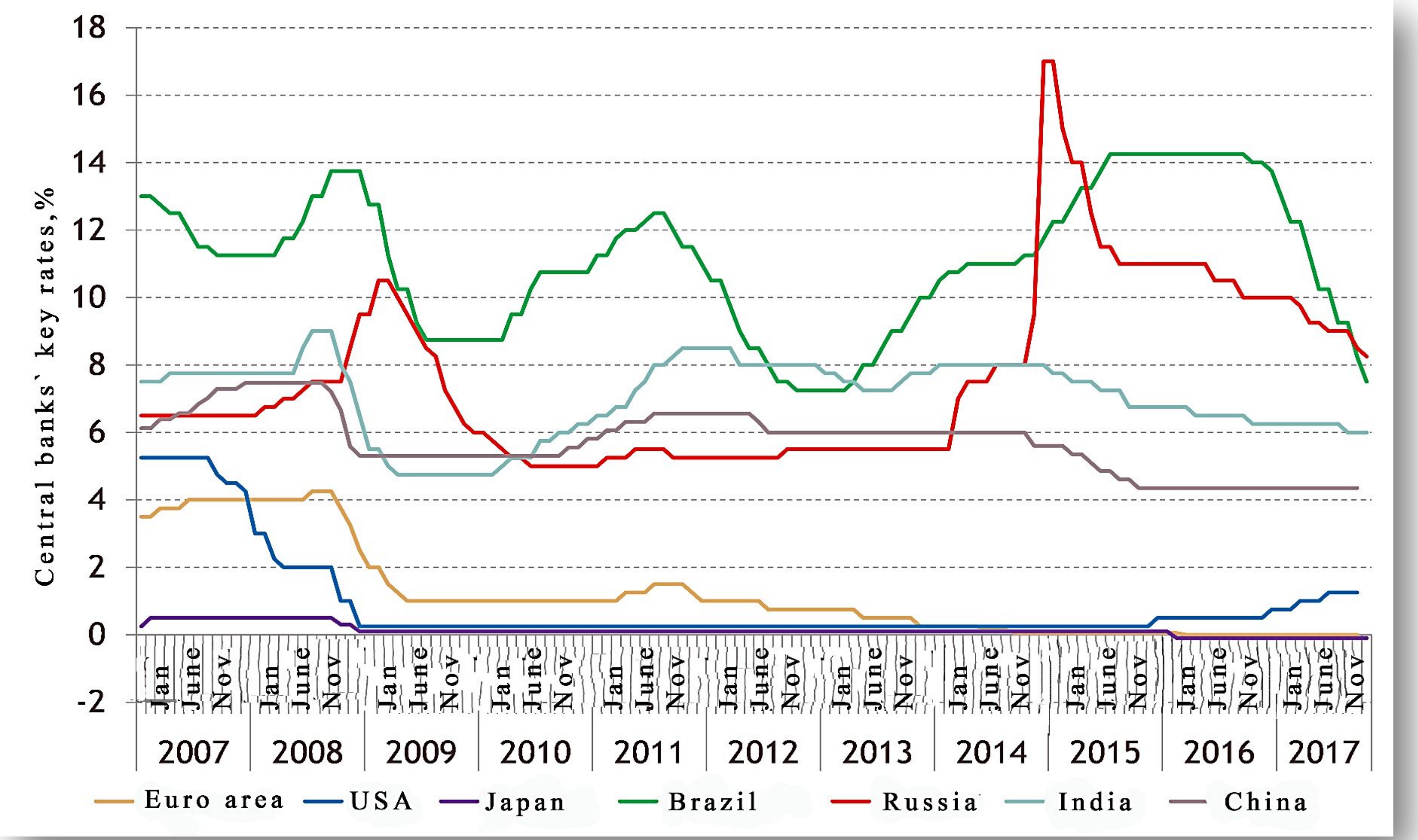
	1990	1995	2000	2005	2008	2010	2014	2017
GDP, tril.roubles	0,0006	1,4	7,3	21,6	41,3	46,3	79,2	92,0
Consumption, tril.roubles, including:	0,0003	0,7	3,2	10,4	19,7	23,1	40,6	45,9
Durable goods,%	13,8	8,3	9,5	13,8	16,7	13,7	14,9	12,0
Semi-durable goods,%	9,1	11,5	10,5	8,4	7,9	7,7	7,1	7,0
Non-durable goods,%	38,0	62,4	59,3	46,6	43,0	46,9	46,5	49,2
including food and beverages	-	43,1	41,2	29,1	25,6	27,5	26,9	30,1
including alcohol and tobacco	12,9	12,5	11,0	7,4	6,3	6,7	7,3	7,5
Services, %	39,1	17,8	20,7	31,2	32,4	31,7	31,6	31,7

Source: Euromonitor

Real disposable income, real wages and consumer spending, 2012-2017



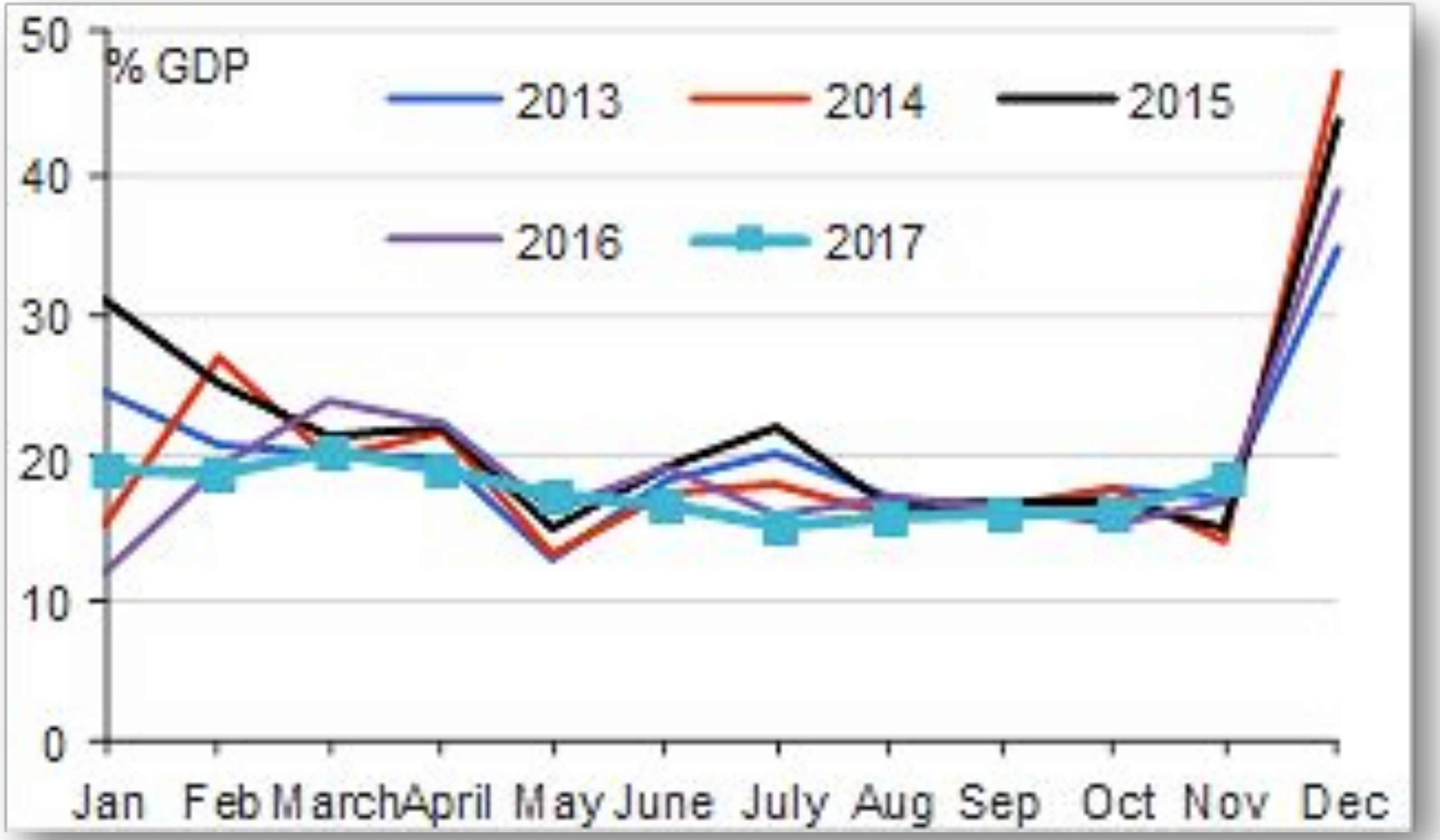
Key interest rates of the leading countries` Central banks



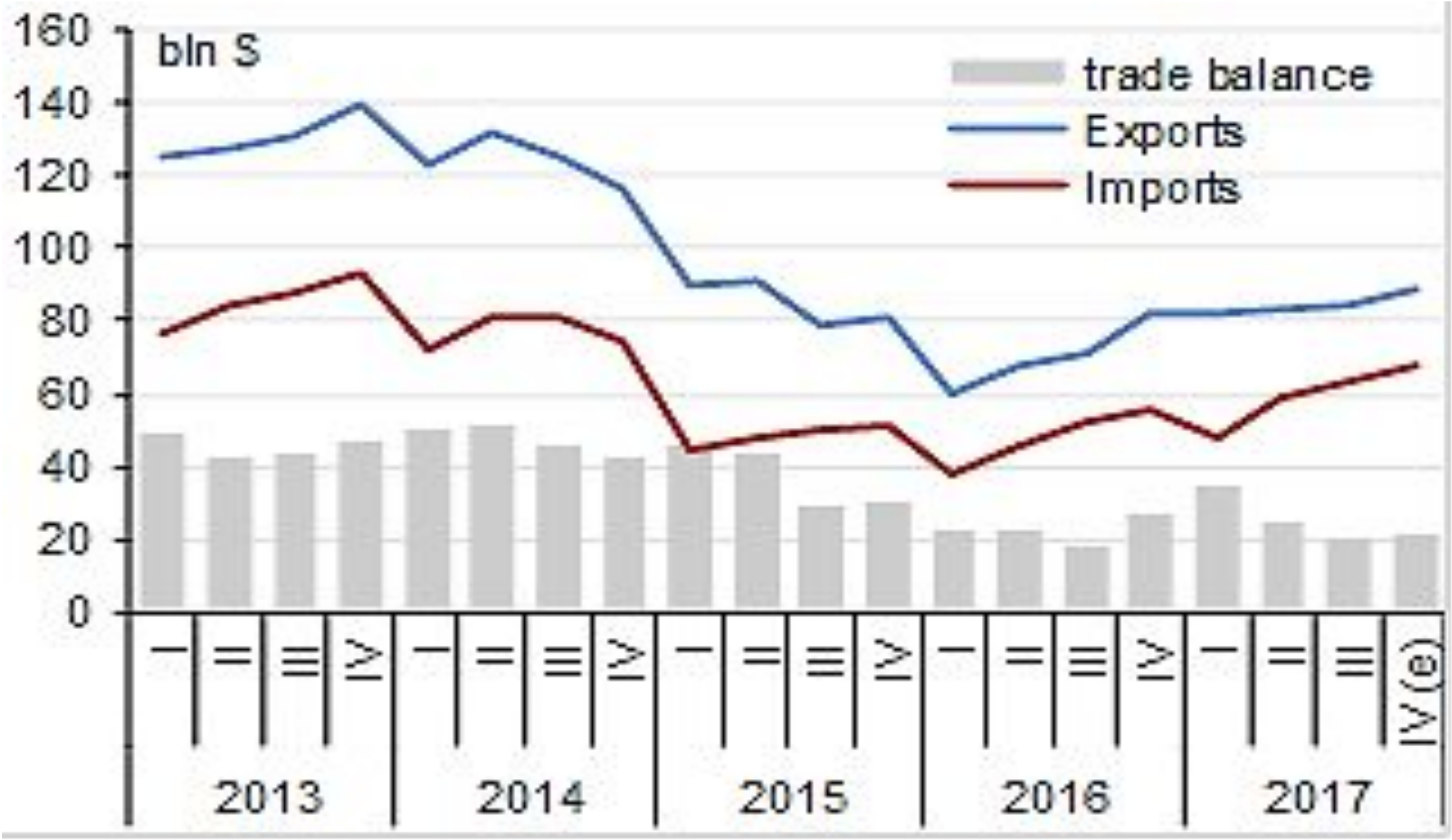
Source — Thomson Reuters, Baker Hughes

Actual CPI and survey inflationary expectations, 2010-2017 (by November)

Federal Budget Expenditures



Foreign Trade Main

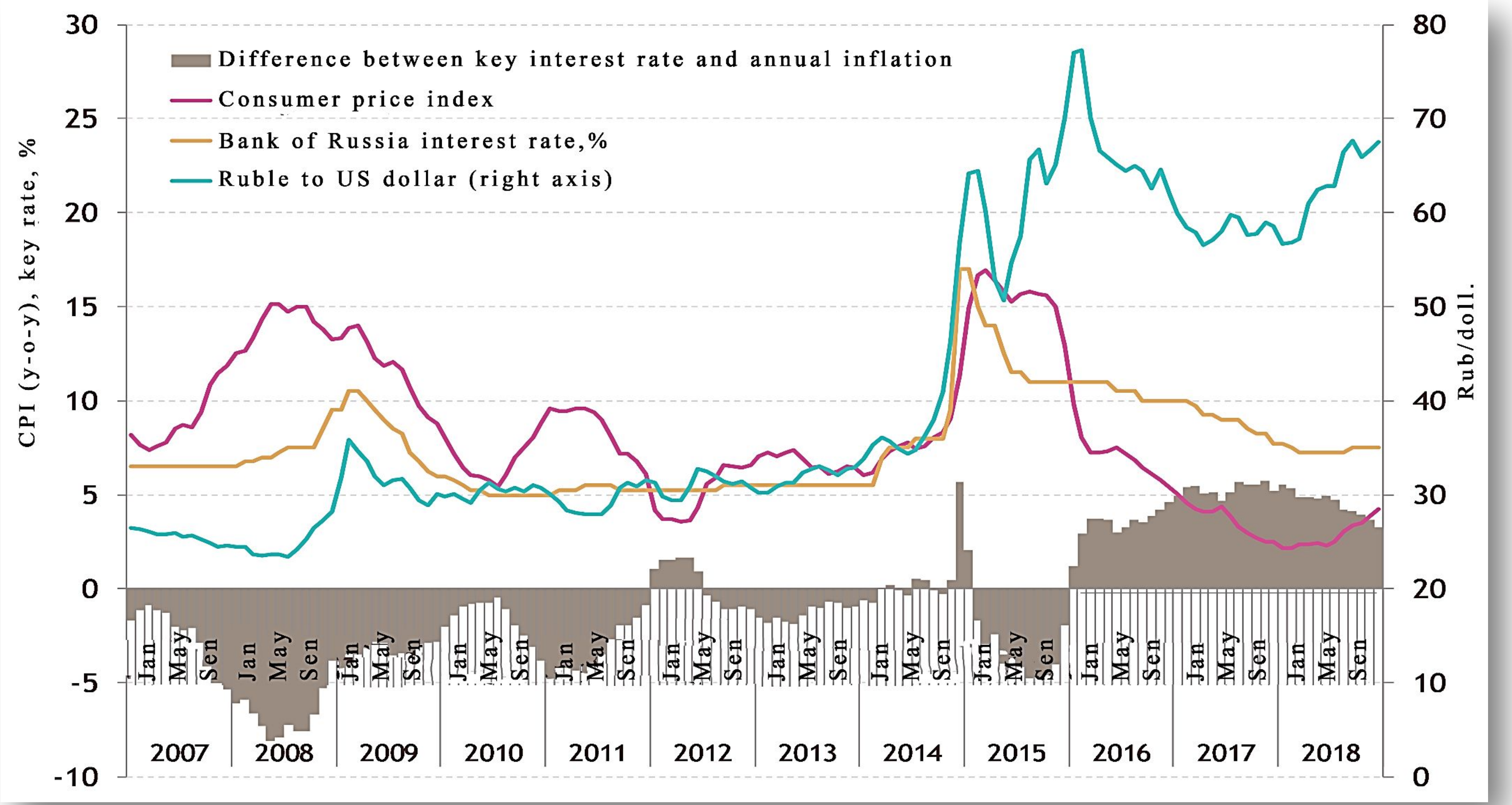


Military expenditure, in constant (2015) US$

	constant (2015) US$				% GDP			
	1988	1998	2008	2016	1988	1998	2008	2016
USA	587,4	398,8	683,8	606,2	5,7	3,0	4,2	3,3
China	20,2 (1989)	32,7	113,5	225,7	2,5 (1989)	1,7	1,9	1,9
Russia	250,0 (USSR)	14,0	41,4	70,3	-	3,0	3,3	5,3
Saudi Arabia	23,3	31,4	50,0	61,4	15,2	14,3	7,4	10,4
France	57,7	51,1	53,6	55,7	3,6	2,7	2,3	2,3
India	17,9	22,8	41,0	55,6	3,7	2,8	2,6	2,5
United Kingdom	59,4	47,8	64,4	54,2	3,8	2,4	2,4	1,9
Japan	34,5	40,9	40,2	41,6	0,9	1,0	1,0	1,0
Germany	58,2 (West G)	42,1	39,5	41,0	2,8 (West G)	1,5	1,3	1,2
Republic of Korea	14,1	20,1	29,5	37,3	4,3	2,9	2,6	2,7
Italy	31,7	32,4	34,3	28,0	2,3	1,9	1,7	1,5
Australia	12,1	13,6	19,6	24,4	2,2	1,9	1,8	2,0
Brazil	14,5	14,8	20,6	22,8	2,1	1,7	1,5	1,3
Israel	14,3	12,5	14,7	17,8	17,1	7,9	6,5	5,8
Canada	16,9	12,5	17,9	15,5	2,0	1,3	1,3	1,0
Turkey	7,9	16,3	13,8	15,0	2,9	3,3	2,3	2,0

Source: SIPR, 2017I

CPI, key interest rate CBR, ruble to $ rate and key % minus CPI



gadgets in Russia, 1992-2017

	1992	2000	2008	2013	2014	2015	2016	2017
Passenger car	23,0	43,0	44,0	57,0	61,0	62,8	64,2	65,1
Washer	64,4	75,3	85,2	89,4	90,1	90,8	91,5	92,1
Microwave oven	0,8	8,1	45,0	72,0	75,0	76,4	77,6	78,7
Air conditioning system	0,2	1,1	6,0	17,0	20,0	21,1	22,1	23,0
Color TV	66,4	88,1	97,6	98,6	98,8	98,9	99,0	99,0
Cable TV	9,1	20,2	29,0	36,2	30,5	33,6	33,6	33,3
Satellite TV	0,2	0,8	9,1	34,1	31,9	27,9	28,9	28,9
Mobile phone	0,7	21,1	87,1	95,7	96,4	96,9	97,4	97,8
Smart phone	-	-	7,8	42,0	48,8	55,2	61,3	66,9
PC	0,7	9,1	43,0	69,7	71,0	72,5	74,3	75,8
Laptop	0,0	0,5	1,0	28,0	39,0	44,2	49,2	53,9
Tablet	-	0,1	0,7	14,1	19,2	24,8	30,7	36,8

Source: Euromonitor

Regional structure of the population and GRP (gross regional product) in Russia, 1990, 1997, 2007, 2015/2016

Federal District (FD) / Type	Population				Gross Regional Product		
	1990	1997	2007	2016	1997	2007	2015
Central FD	25,7	25,9	26,7	26,7	27,5	36,5	34,9
Northwest FD	10,3	9,9	9,6	9,5	9,5	9,9	10,4
South FD	9,0	9,6	9,7	11,2*	5,7	5,6	7,1*
North Caucasus FD	5,1	5,7	6,4	6,6	2,1	2,0	2,6
Volga FD	21,5	21,6	21,2	20,2	20,4	15,5	15,3
Ural FD	8,6	8,5	8,5	8,4	15,1	15,1	13,8
Siberia FD	14,3	14,0	13,5	13,2	13,8	10,7	10,4
Far East FD	5,4	4,9	4,5	4,2	6,0	4,6	5,5
TOTAL - Russia	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Financial and economic centers	14,0	14,2	15,9	17,0	21,2	32,6	30,4
Commodity export-oriented regions	3,3	3,1	3,1	3,1	11,5	11,4	11,2
Developed regions with a diversified economy	16,2	16,2	16,1	15,8	15,8	13,9	13,8
Developed regions based on manufacturing	13,4	13,1	12,7	12,2	13,4	11,5	11,2
Developed regions based on mining	9,3	9,2	9,0	8,7	9,7	7,7	7,3
Industrial-and-agrarian regions	12,9	12,5	11,7	11,1	9,5	7,2	7,8
Agrarian-and-industrial regions	25,0	25,6	25,0	25,2*	16,1	13,3	15,2*
Less developed commodity regions	2,0	1,7	1,5	1,4	1,6	1,0	1,1
Less developed agrarian regions	4,0	4,4	5,0	5,5*	1,2	1,4	2,0*

**Including the Crimea and Sevastopol*

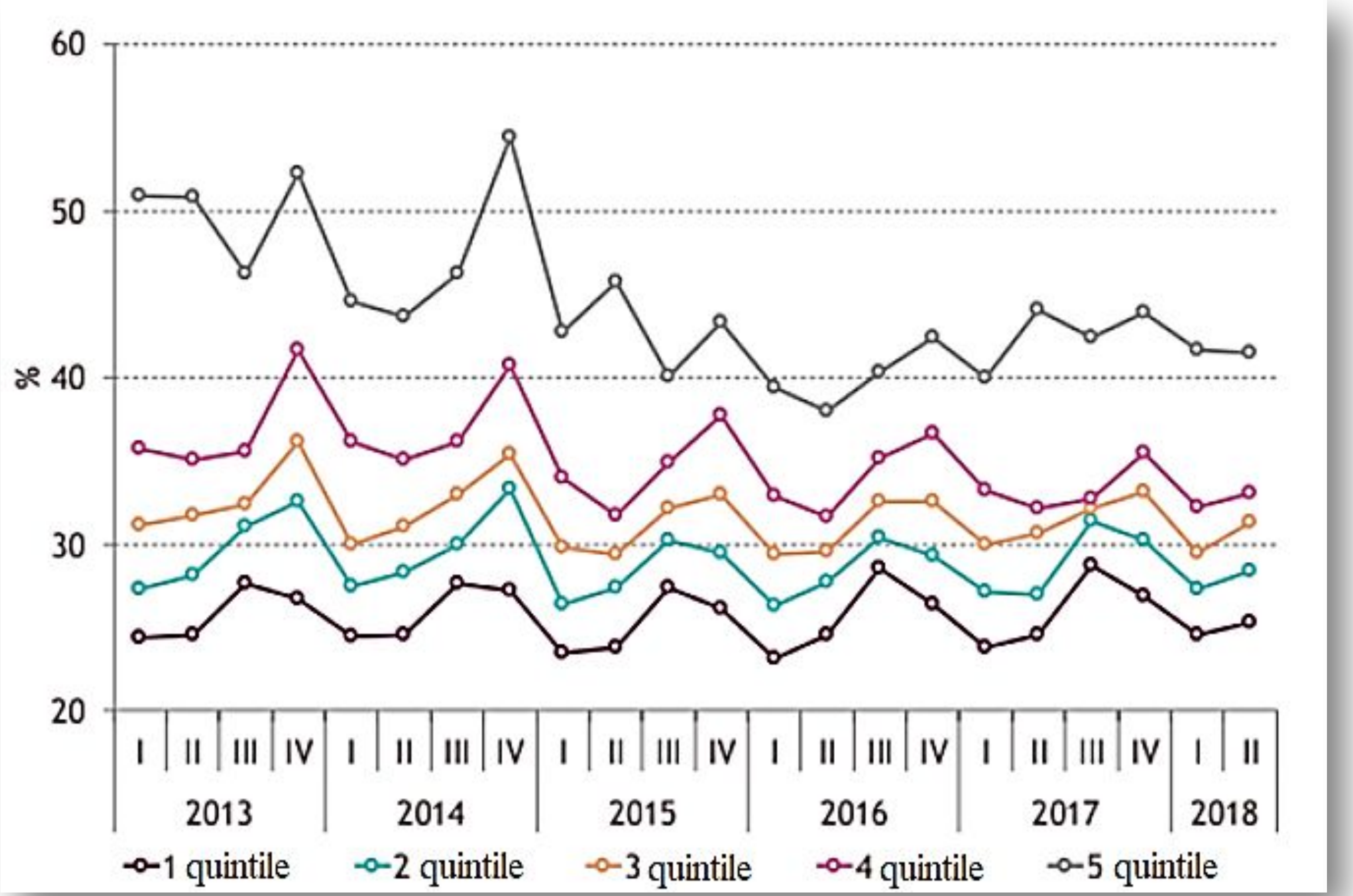
Source: Rosstat

Retail sales 2015-2016, per capita by type of regions

Group of regions	Type of regions	2015				2016			
		Food		Non-food		Food		Non-food	
		thousand rubles, per person per month	real growth, %, y/y	thousand rubles, per person per month	real growth, %, y/y	thousand rubles, per person per month	real growth, %, y/y	thousand rubles, per person per month	real growth, %, y/y
Highly developed	Financial and economic centers	11,8	-12,4	12,1	-13,5	12,1	-4,0	12,6	-4,1
	Commodity export-oriented regions	8,9	-9,6	9,3	-7,6	8,8	-9,2	9,6	-4,6
Developed	with a diversified economy	7,9	-10,4	8,6	-15,0	8,1	-3,2	8,8	-4,2
	based on manufacturing	6,0	-9,2	6,6	-13,1	6,2	-3,3	6,6	-7,2
	based on mining	6,8	-11,8	7,2	-12,9	6,9	-4,3	7,6	-2,5
Middle-developed	Industrial-and-agrarian regions	6,9	-6,0	6,6	-8,3	7,1	-3,5	6,8	-4,0
	Agrarian-and-industrial regions	6,2	-8,6	6,9	-8,2	6,4	-2,9	7,1	-5,4
Less developed	commodity regions	6,6	-6,2	6,6	-7,8	6,9	-0,8	6,8	-4,5
	agrarian regions	5,8	+2,2	6,0	-3,4	6,3	+1,3	6,2	-3,6
Russia — TOTAL / AVERAGE		**7,6**	**-9,0**	**8,0**	**-10,9**	**7,8**	**-5,0**	**8,3**	**-4,2**

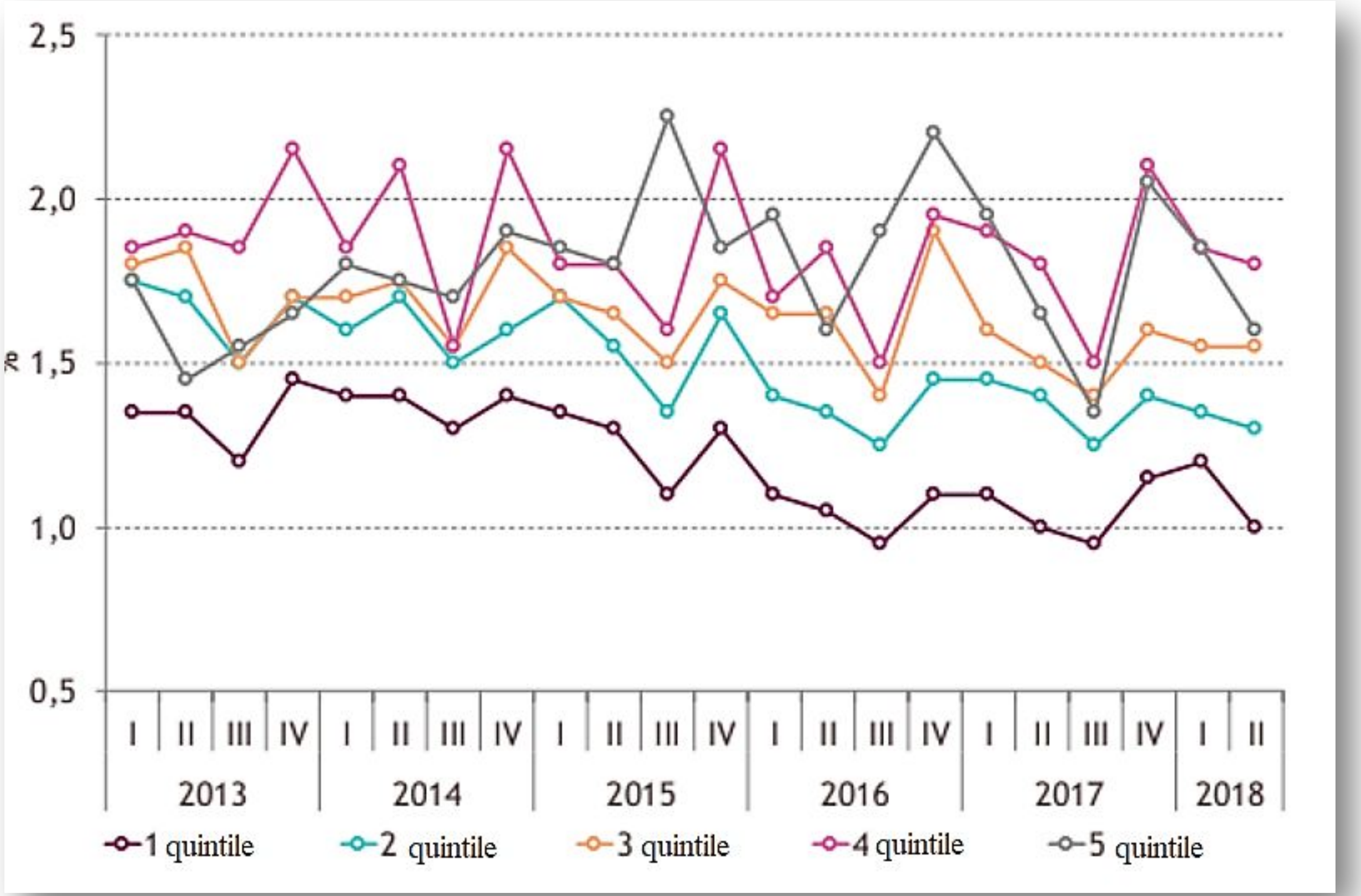
Source: Rosstat, Analytical center calculations

Share of non-food goods expenditures in consumer spending of Russian families by quintiles, 2013-2018



Source: Rosstat

Share of alcohol expenditures in consumer spendings of Russian families by quintiles, 2013-2018



Source: Rosstat

Total area, number of flats and mean flats` area in houses built by legal entities and individuals, million square meters and thousand square meters, 2008-2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Taken into use, total, including:										
Total area, mln.sq.m.*	64	60	58	62	66	70	84,2	85,3	80,2	79,3
Number of flats, th.	768	702	717	786	838	929	1124	1195	1167	1139
Mean area, sq.m.	83	85	82	79	78	76	75	71	69	70
Individuals (private, predominantly single family houses)										
Total area, mln.sq.m.*	27	29	25	27	28	31	36,2	35,3	31,8	33,0
Number of flats, th.	200	210	192	201	211	228	268	272	251	244
Mean area, sq.m.	137	136	133	133	134	134	135	130	127	135
Legal entities (multifamily dwelling)										
Total area, mln.sq.m.*	37	31	33	36	37	40	48,0	50,1	48,4	46,3
Number of flats, th.	568	492	525	585	627	701	856	923	916	895
Mean area, sq.m.	65	64	63	61	60	57	56	54	53	52

*Total floor space, mln.sq.m. calculated as the number of flats and their mean area multiplication.

Recession and implications

- Recession is difficult for everybody
- Unofficial evaluations gave the loss of GDP to sanctions as 1 p.p. of GDP, the rest is “oil”.
- Budget is close to Maastricht norms
- Devaluation brought further separation of “have” and “have not” in terms of financial stability
- Upper strata has purchased “enough”; poor do not have money
- Agriculture and Mining keep growing
- Real personal income declined, real wages turned up. It is not enough to consumer spending recovery.
- Investments are traditionally slow – it is not just %

Conclusion: Russia

- Russia has made the detour from European income distribution to Latin American one in 1990s. We recorded it in 2000 – now it’s the stable result of transition.
- Gini coefficient in RF is similar to Anglo – Saxon, but Russia lacks their vertical mobility and entrepreneurship.
- Financially sustainable middle class is within 30% of households - a little change in the upturn of 2000s.
- Distribution in Russia – judging by the income share of top 10% of population – is quite Latin American.
- The oil rent gave the State has some degree of “independence” from income tax-payers.
- **Key issues:** ownership structure and corporate governance; no mass shareholding; oligarchs of 1990s and rigid social structure – the risks of returning poverty.

Literature:

- Voskoboynikov, I. "Sources of long run economic growth in Russia before and after the global financial crisis." Russian Journal of Economics 3 (2017): 348-365.URL: https://rujec.org/article/27998/;

- Kudrin A., Gurvich E. A new growth model for the Russian economy." Russian Journal of Economics 1 (2015) 30–54;

- Mau V. "Russian economic policy: Challenges of growth" Russian Journal of Economics 4 (2018) 87–107;

- The Russian Economy: Modest Growth Ahead. 39 Russia Economic Report 2018 // World Bank Group. URL: https://openknowledge.worldbank.org/bitstream/handle/10986/29913/127254-WP-PUBLIC-ADD-SERIES-JunefinalRussiaEconomicReportENG.pdf?sequence=1&isAllowed=y

Economy & Energy

18.02.2019

Professor Leonid Grigoryev

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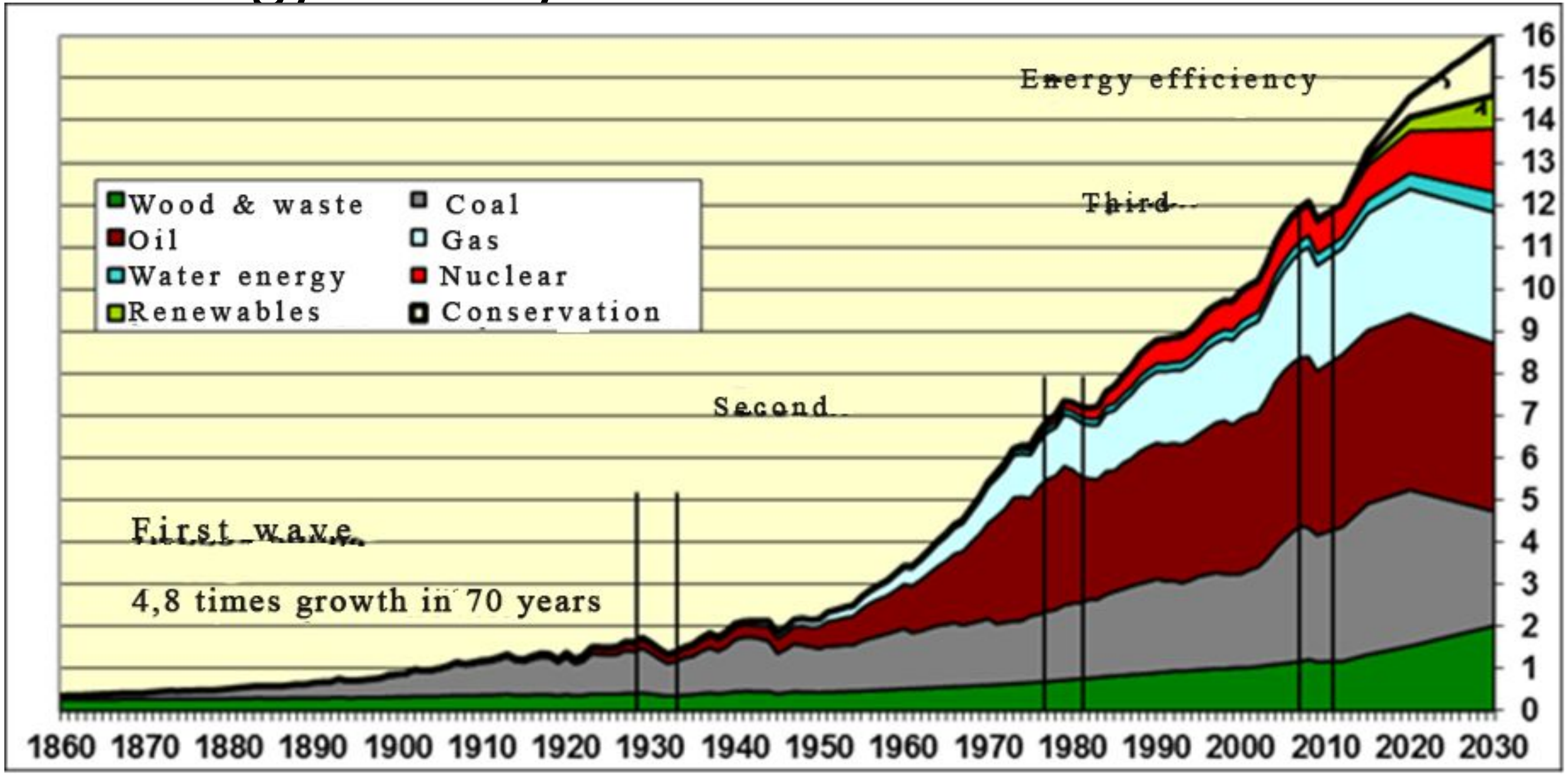
Energy – history and theory

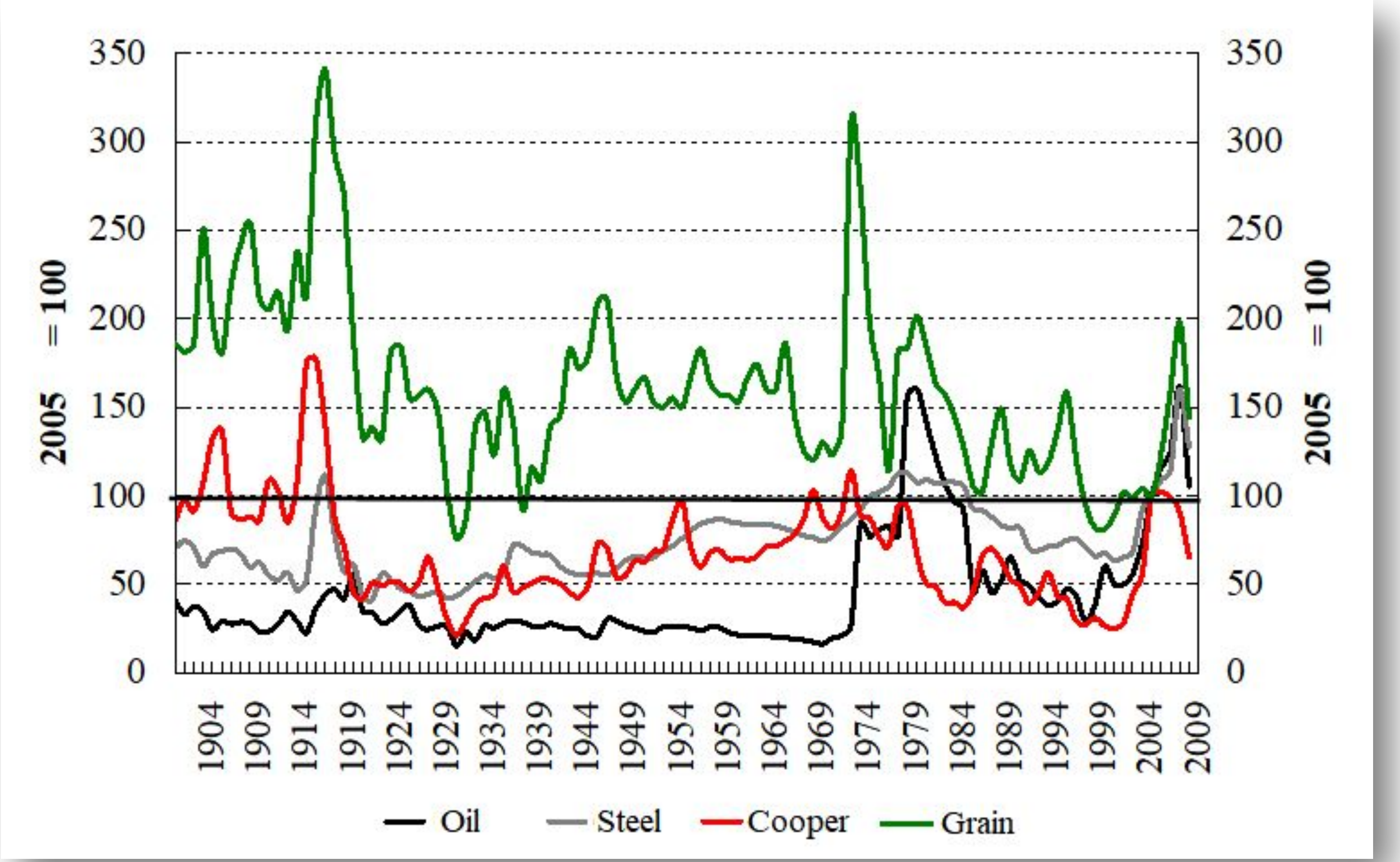
- Energy waves – replacement by efficiency, costs, for mass use of specific technology, abundance;
- Changes were coming by firms with technology and access to invest, financing and policies;
- UK in XIX = cheap coal for industrial revolution;
- Oil in XX – Gas – Nuclear, RES, New role of Climate
- Advanced tech. and mass use;
- Energy security: development, poverty, finance;

Energy: history



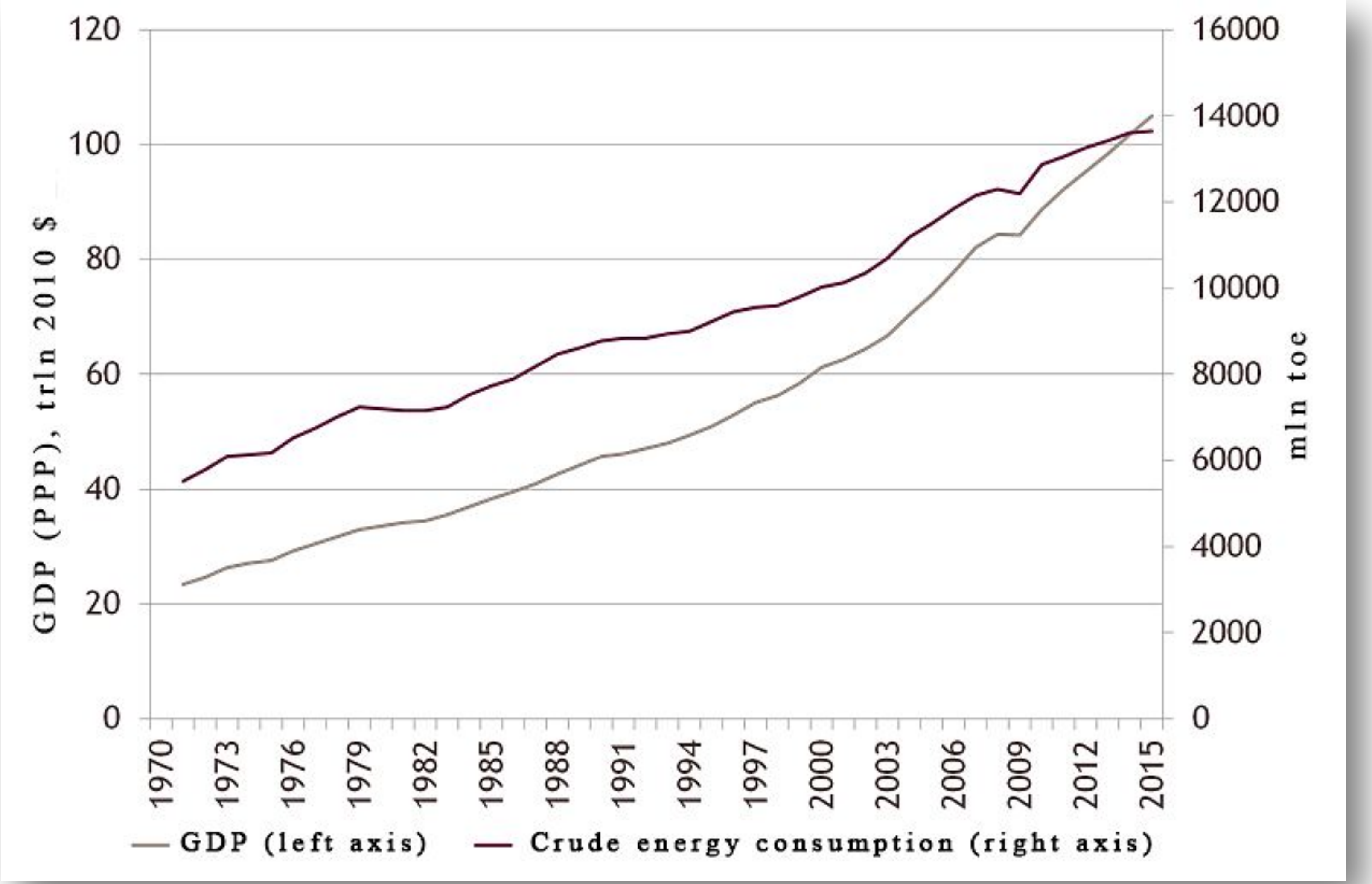
Source: A. Makarov, A. Makarov. Laws of Power Industry Development: Elusory Essence. Thermal Engineering, Vol. 57, No 13, 2010

Dynamics of the real prices for the key primary products 1901-2010, where 2007 = 100



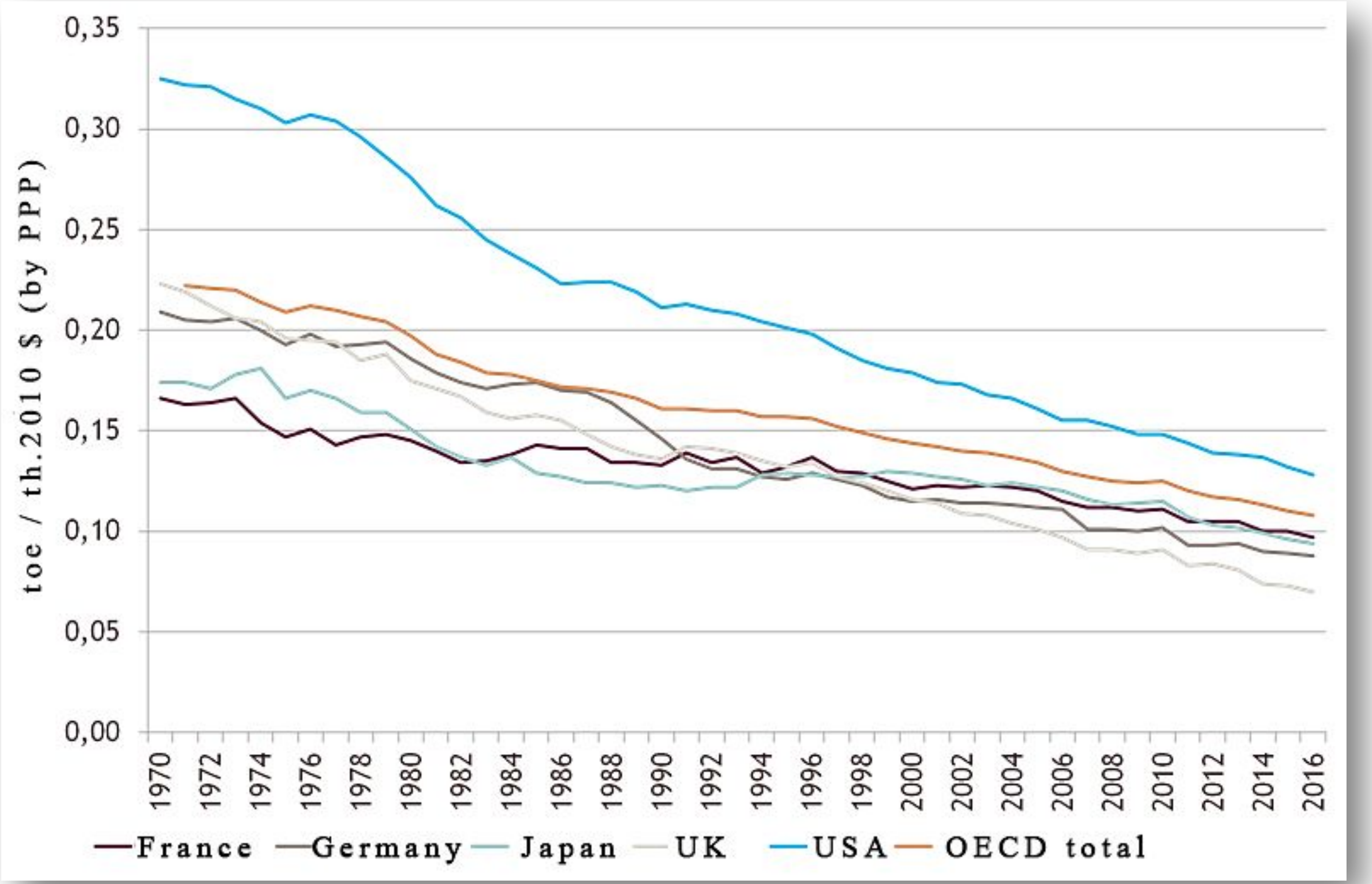
Source: OECD, World Bank, IEF estimates

Dynamics of the global energy consumption and GDP, 1971 - 2015



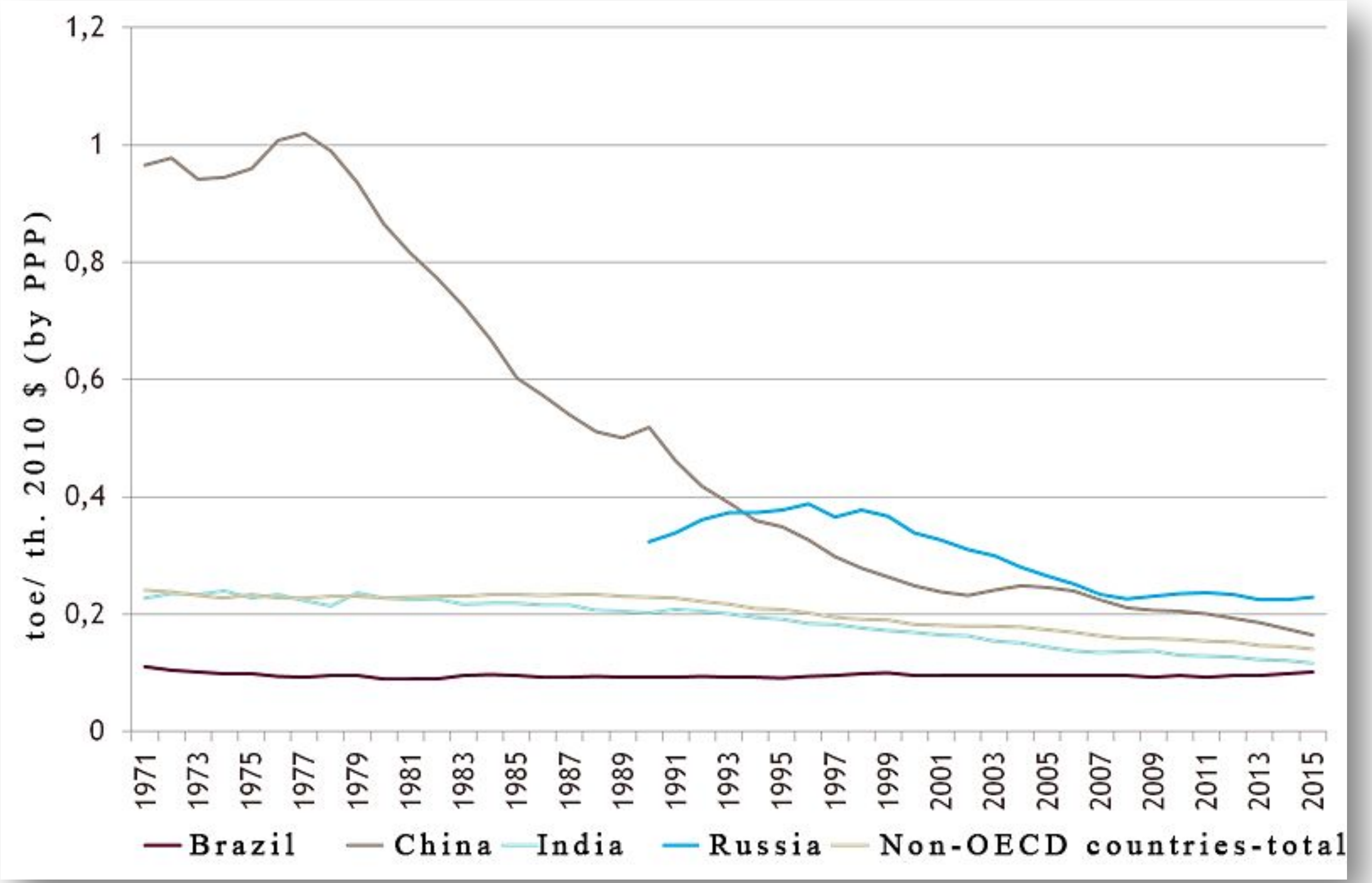
Source: IEA

GDP energy capacity: developed countries,1970 – 2016



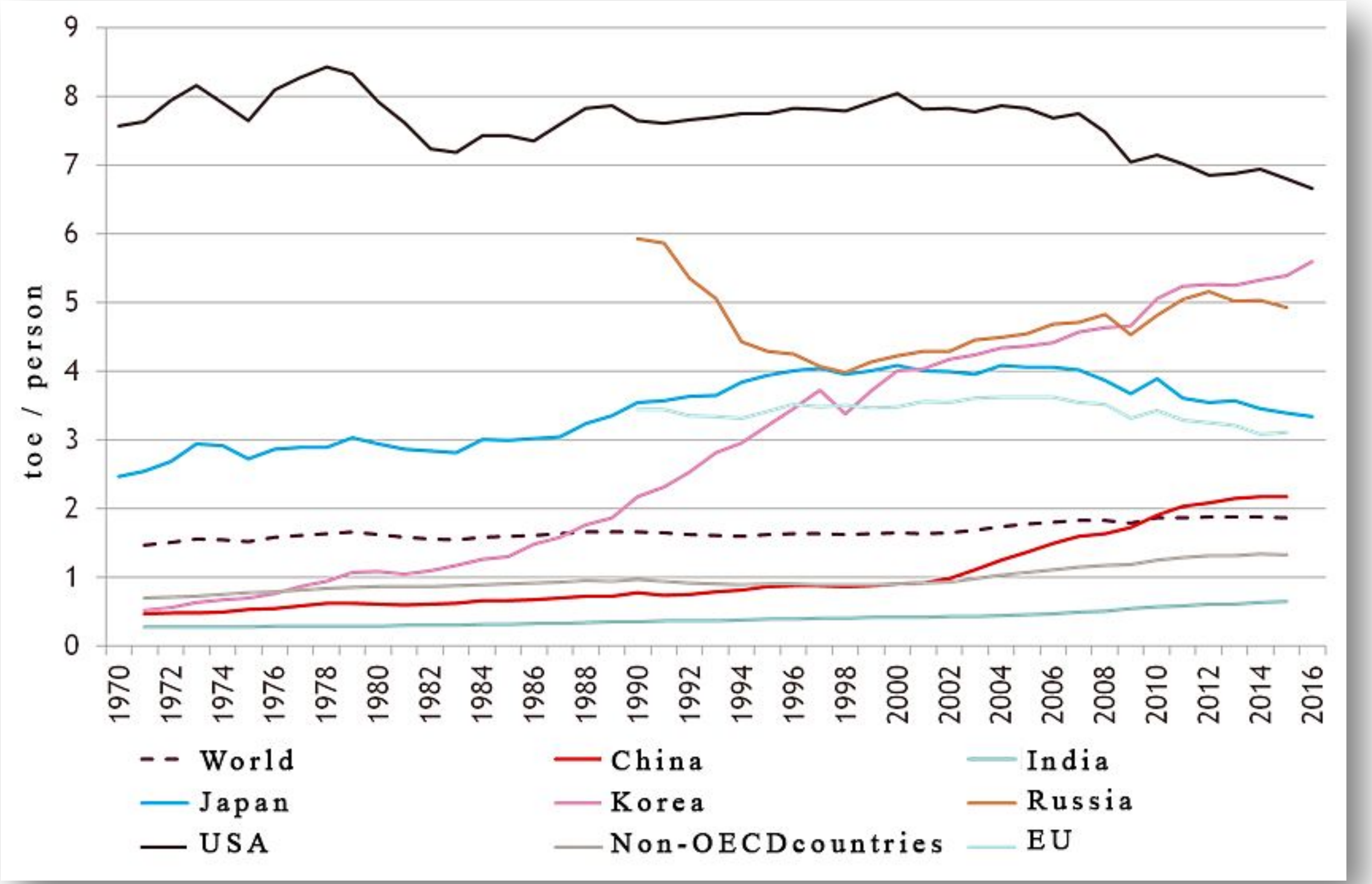
Source: IEA

GDP energy capacity: developing countries,1971 - 2015



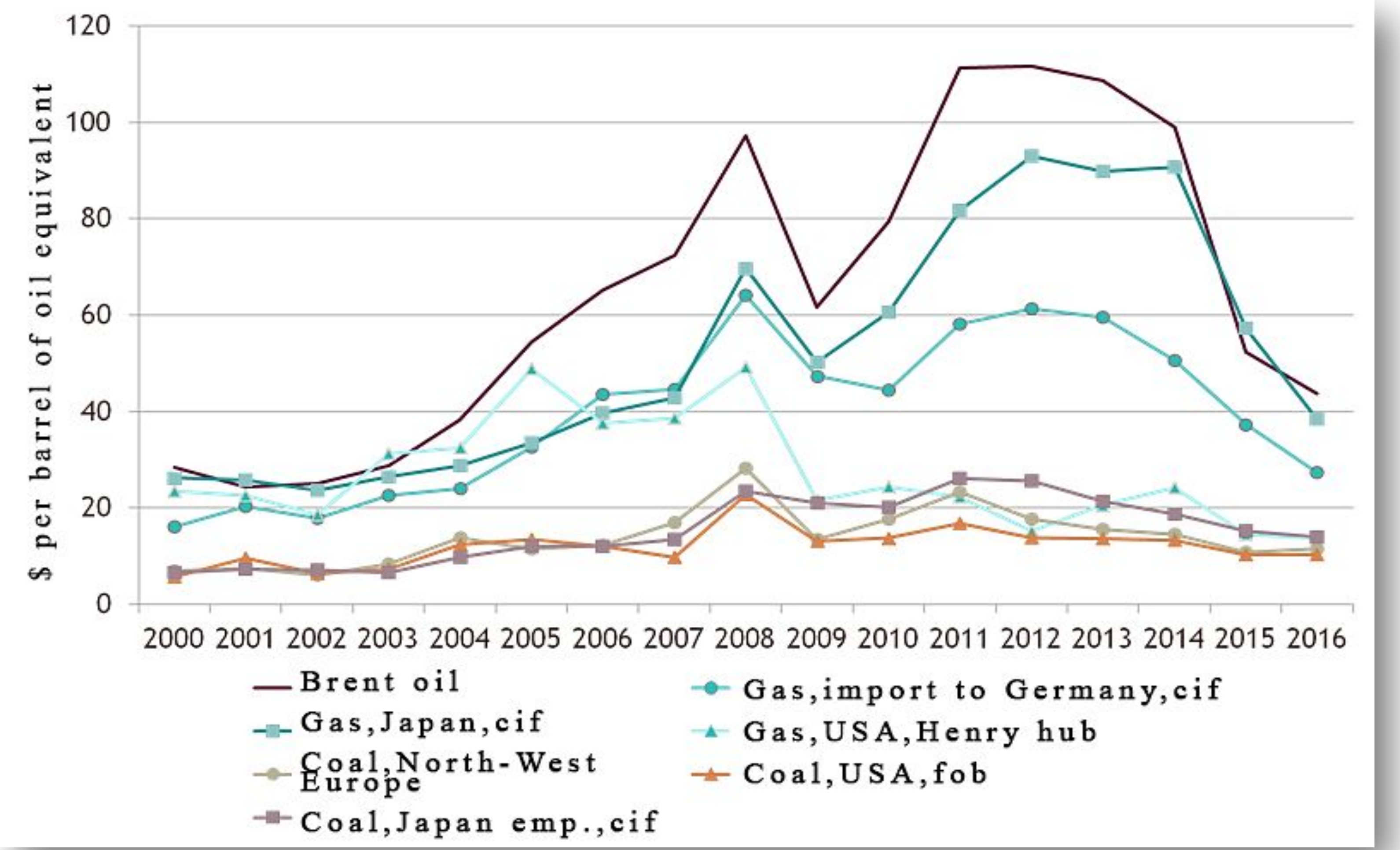
Source: IEA

Average per capita energy consumption, 1970 - 2016



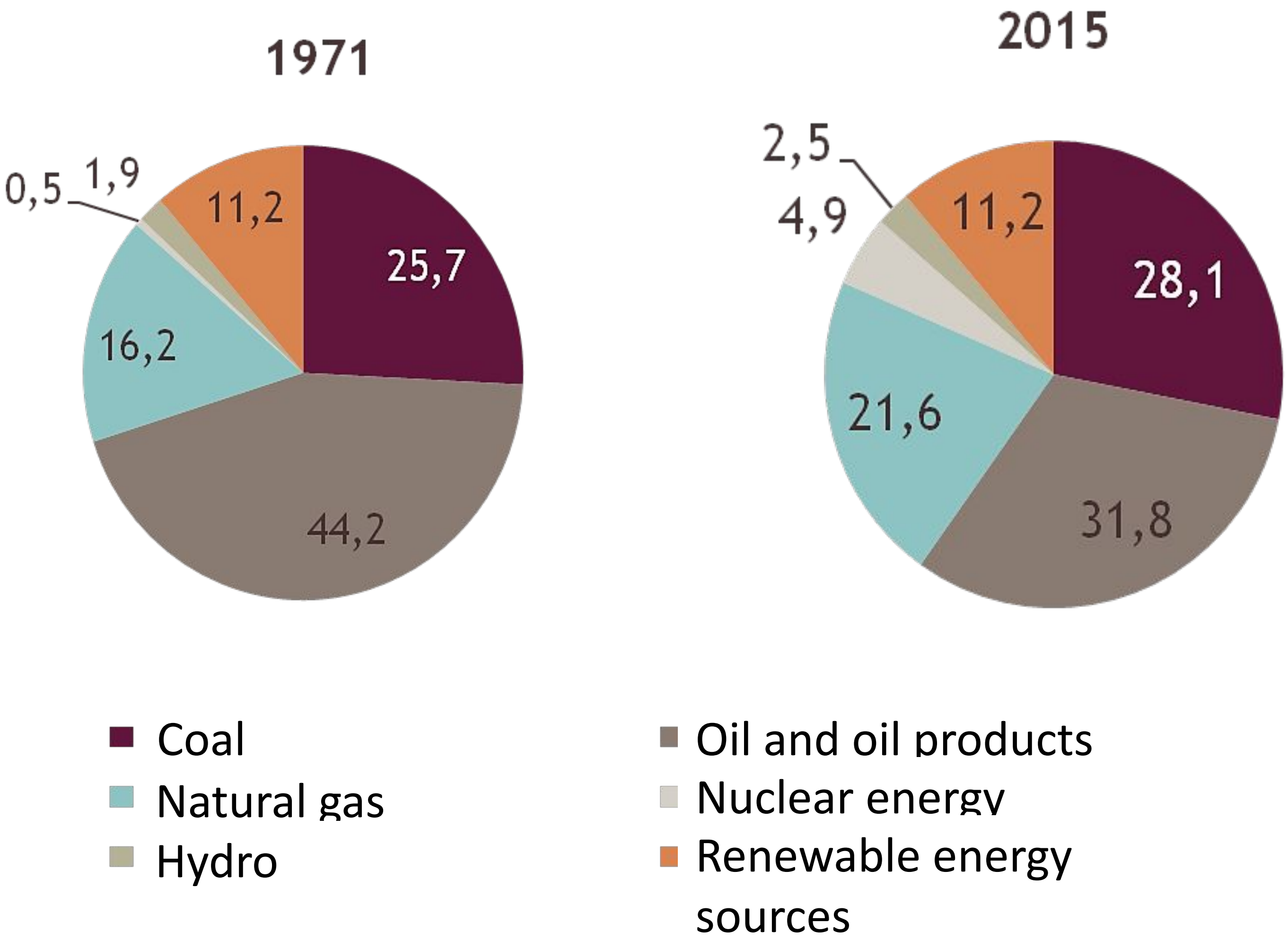
Source: IEA

Comparison of the prices for different fuels, 2000 – 2016, $ / barrels of oil equivalent



Source: BP

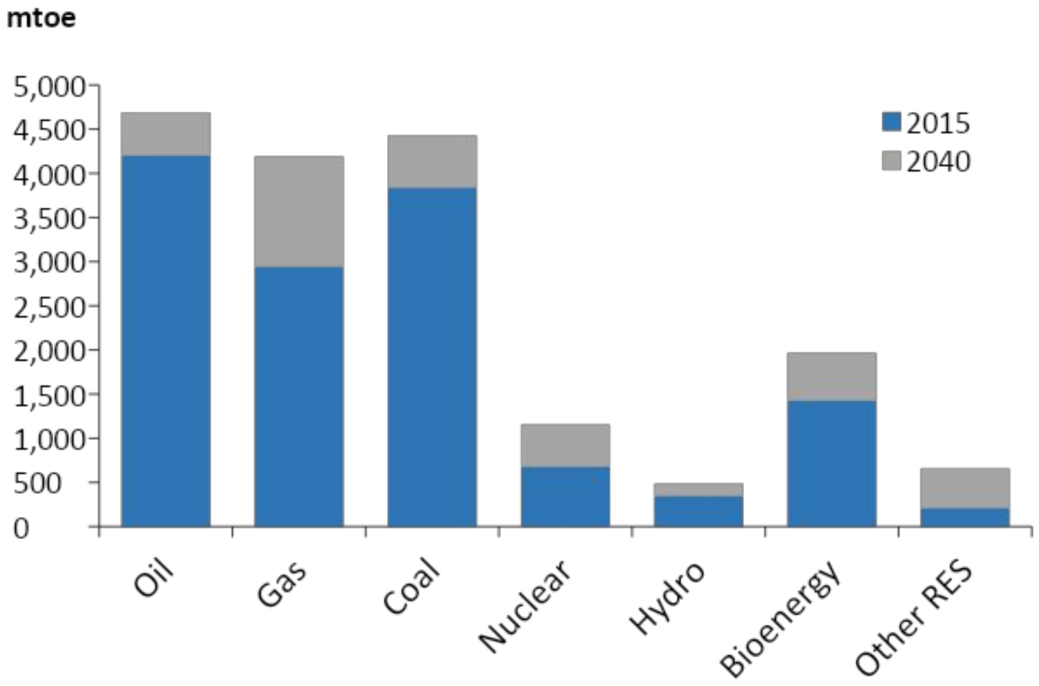
The Structure of World Energy Consumption, 1971 and 2015, % total consumption



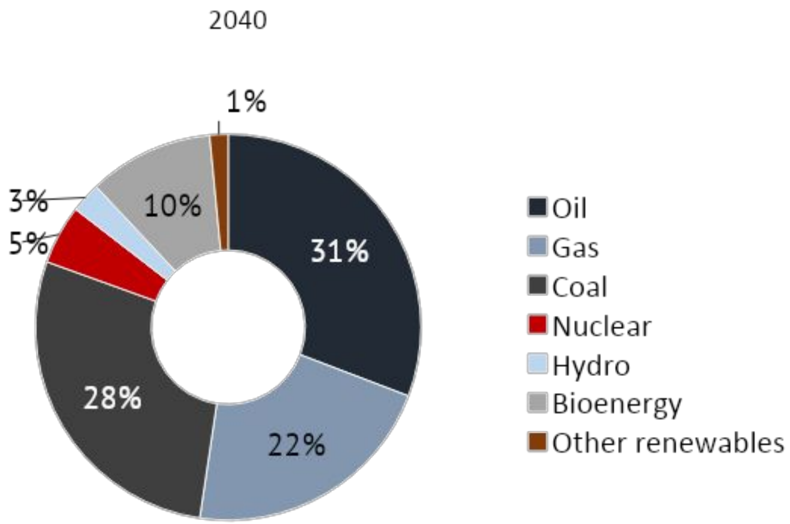
Source: IEA

Global fuel mix is becoming more diversified, gas and RES are demonstrating the highest growth (2016)

Primary energy demand by fuel (in 2015 and increase by 2040), Probable Scenario



Structure of primary energy demand by fuel in 2015 and in 2040, Probable Scenario

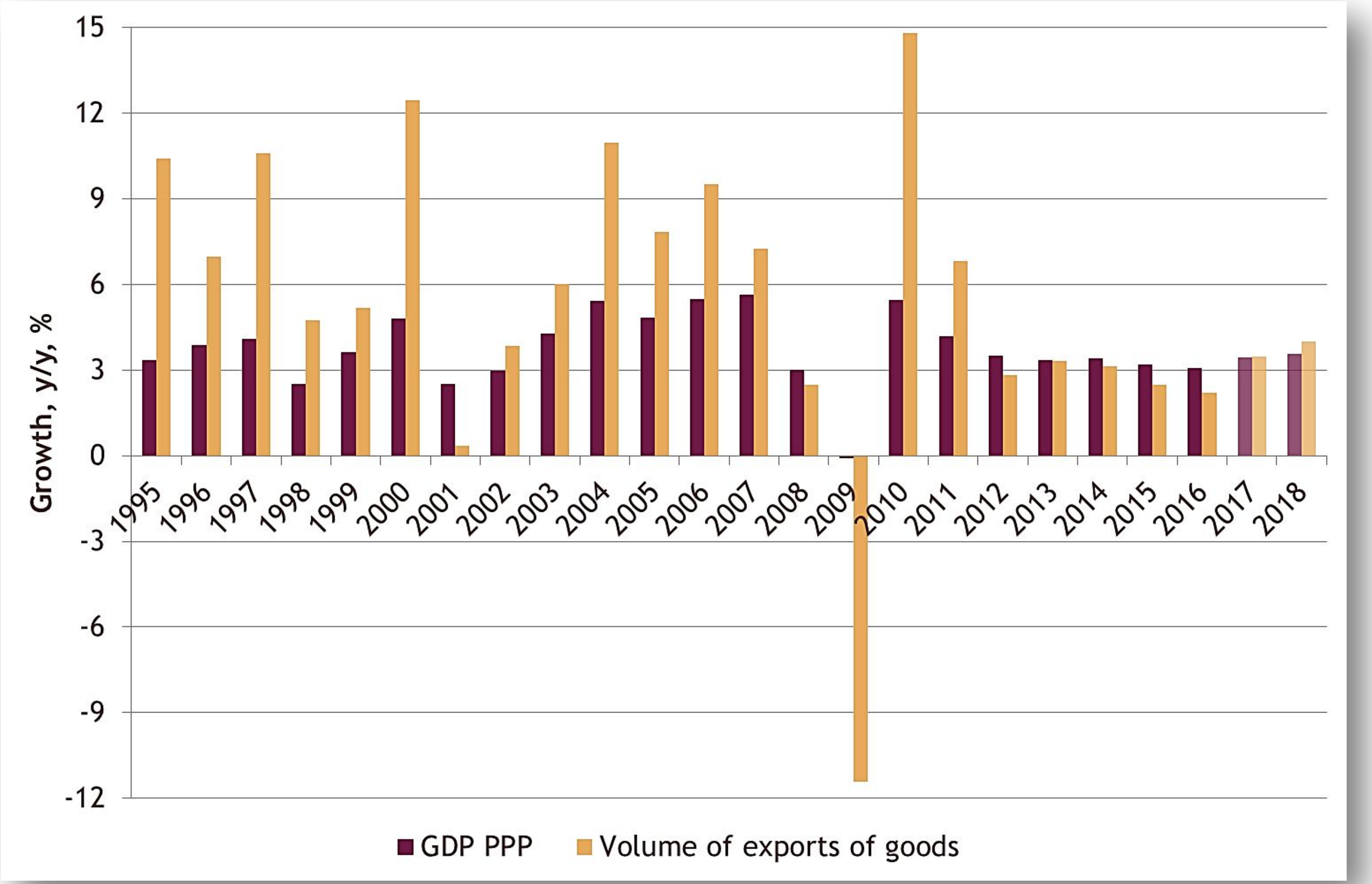


Source: Global and Russian Energy Outlook-2016, ERI RAS-AC

Geopolitics & Rational Changes

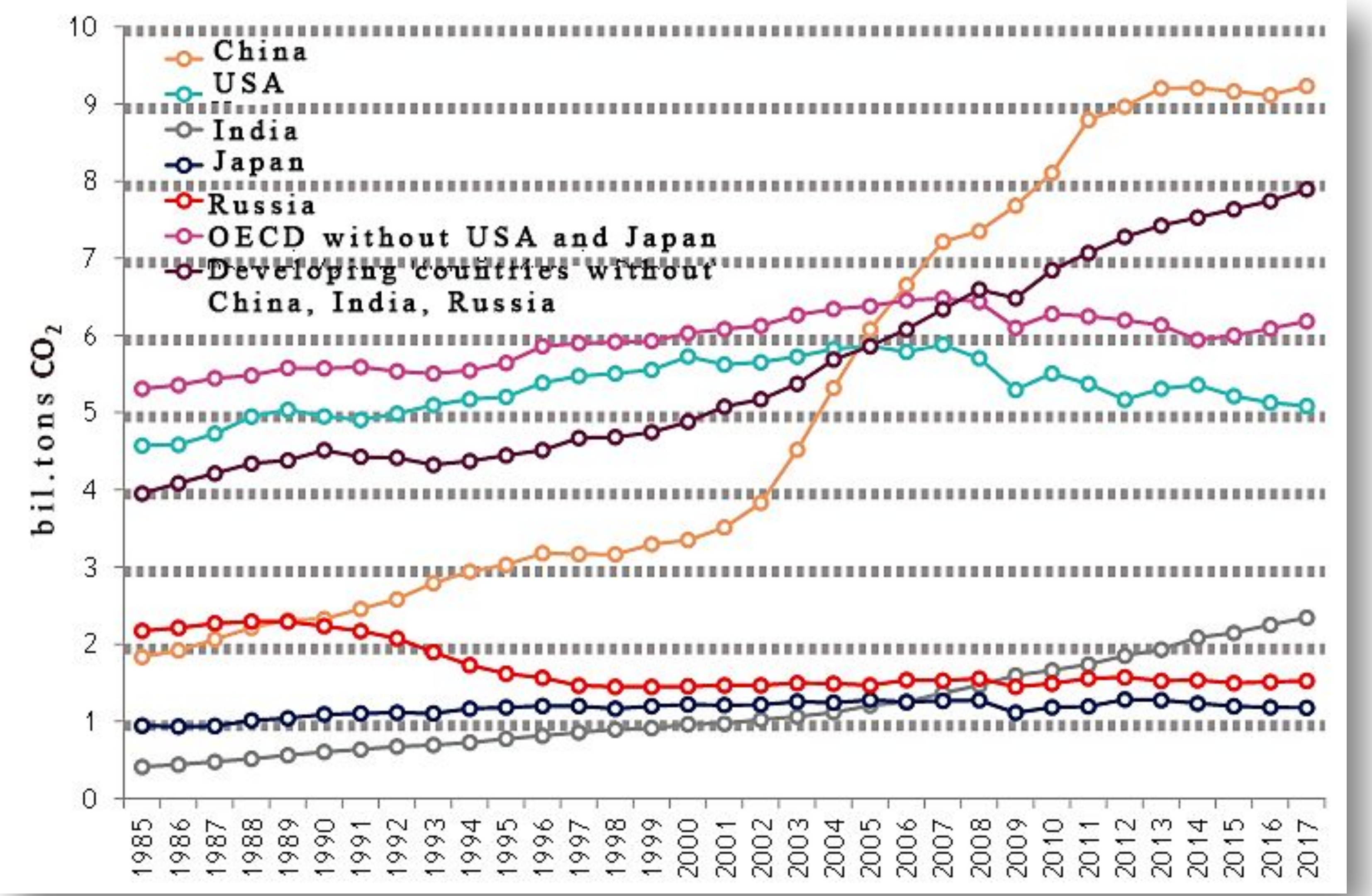
- Growth and Energy consumption
- Embargo of Arab OPEC 1973 and Fear of Security
- Energy Transition: Actual processes and Expectations
- Climate Change prevention = Kyoto and Paris 2015
- EU-2020 and EU-2050 - Decarbonization and MFG import in EU (please see Makarov)
- Russian 10% of World primary energy and 5 p.p. export.
- China (65% coal), India and South Africa
- Poverty Vs Climate

World GDP and Trade Growth rate, %, 1995-2018



Source: IMF, WEO April 2017 Edition

Carbon Dioxide Emissions, 1985-2017



Source: BP Stat. Review 2017

Geopolitics steps over trade, development and Global problems' solutions

- World is losing stability but keeps talking about Climate change prevention, Water, Food, Poverty. Middle class role?
- Global community is losing the Battle of Mitigation
- Growth is not bringing more Equality, in or between!
- New growth regime for GDP and Trade
- Stable Energy Prices for next decades ($50-70)?
- Promoting Growth requires New Globalization:
  - Stability of "game's rules"
  - Long horizons of planning – investments needs
  - Predictability of world development
  - Sustainable Development Goals

GDP and Primary Energy Consumption, annual growth rates, 1991 - 2017

	GDP (PPP const. 2011, World Bank)				Primary energy consumption			
	1991-2002	2003-2008	2009	2010-2017	1991-2002	2003-2008	2009	2010-2017
World	3,0	4,7	-0,4	3,5	1,6	3,2	-1,6	1,6
OECD	2,7	2,4	-3,5	2,0	1,4	0,5	-4,8	0,1
USA	3,4	2,2	-2,8	2,1	1,4	0,1	-4,8	0,0
EU	2,3	2,5	-4,3	1,5	0,4	0,1	-5,8	-0,7
Japan	0,9	1,2	-5,4	1,1	1,2	0,0	-8,6	-1,4
Non-OECD	3,5	7,6	3,0	4,9	1,8	6,1	1,4	2,7
Brazil	2,6	4,8	-0,1	0,4	3,5	4,4	-0,6	1,6
Russia	-2,2	7,1	-7,8	1,4	-2,8	1,3	-4,7	0,6
India	5,8	8,0	8,5	6,8	4,4	6,6	7,5	4,9
China	10,2	11,6	9,4	7,6	4,5	10,5	4,4	3,3
	Energy consumption (p. %) minus GDP (p.%)							
World					-1,4	-1,5	-1,2	-1,9
OECD					-1,3	-1,8	-1,4	-1,9
Non-OECD					-1,7	-1,4	-1,6	-2,1

Source: World Bank, BP

Oil and Gas Consumption, annual growth rates, 1991 - 2017

	Oil consumption				Gas consumption			
	1991-2002	2003-2008	2009	2010-2017	1991-2002	2003-2008	2009	2010-2017
World	1,4	1,5	-1,7	1,3	2,1	3,3	-2,8	2,1
OECD	1,2	-0,3	-4,9	0,0	2,6	1,6	-3,2	1,2
USA	1,5	-0,5	-4,6	0,4	1,5	0,9	-1,8	1,9
EU	0,5	-0,1	-5,3	-0,9	2,6	0,9	-6,3	-1,6
Japan	-0,1	-2,2	-10,4	-1,6	3,3	3,3	-6,7	2,4
Non-OECD	1,6	4,0	2,2	2,7	1,5	5,2	-2,4	2,8
Brazil	3,4	4,2	0,2	1,4	14,5	9,6	-19,5	4,6
Russia	-6,1	1,2	-4,1	1,5	-1,1	1,9	-5,5	0,1
India	6,1	4,4	5,1	4,9	6,8	7,1	20,9	-1,3
China	6,7	6,5	3,8	4,2	5,9	19,1	10,1	12,0
Oil / Gas consumption (poins %) minus GDP (points %)								
World	-1,6	-3,1	-1,3	-2,1	-0,9	-1,4	-2,4	-1,4
OECD	-1,5	-2,7	-1,4	-2,0	-0,1	-0,8	0,4	-0,7
Non-OECD	-1,8	-3,4	-0,8	-2,1	-1,9	-2,3	-5,2	-2,0

*Calculated index

Source: World Bank, BP

Coal consumption and Electricity generation, annual growth rates, 1991 - 2017

	Coal consumption				Electricity generation			
	1991-2002	2003-2008	2009	2010-2017	1991-2002	2003-2008	2009	2010-2017
World	1,1	5,3	-1,5	0,5	2,7	3,8	-0,8	2,4
OECD	0,4	0,3	-10,5	-2,8	2,2	1,6	-4,0	0,0
USA	1,3	0,1	-12,0	-5,6	2,1	1,2	-4,2	-0,4
EU	-2,7	-1,8	-11,9	-2,5	1,6	0,9	-4,9	-0,3
Japan	2,7	2,4	-15,5	0,6	1,8	1,6	-5,9	-1,8
Non-OECD	1,8	8,4	2,9	1,7	3,5	6,9	2,9	4,6
Brazil	1,1	1,4	-19,3	1,9	3,6	4,9	0,7	2,0
Russia	-4,3	-0,7	-8,5	0,3	-1,6	2,6	-4,5	0,7
India	3,6	7,4	8,3	5,6	6,0	5,4	6,2	6,9
China	3,6	10,7	4,8	1,1	8,5	12,8	6,3	6,4
Coal consumption / Electricity generation (p %) minus GDP (p %)								
World	-1,9	0,5	-1,2	-2,9	-0,4	-0,9	-0,4	-1,1
OECD	-2,3	-2,1	-7,3	-4,7	-0,5	-0,8	-0,5	-1,9
Non-OECD	-1,6	0,7	-0,1	-3,0	0,0	-0,6	-0,1	-0,2

*Calculated index

Source: World Bank, BP

Global Energy Balance, mln tons, 2015

	Production	Import	Export	Stocks (reserves) change	Consumption	The share in consumption%
Coal	3865,0	791,7	820,3	-7,1	3829,2	28,1
Oil and oil products	4416,3	3562,1	3612,7	-31,3	4334,3	31,8
Natural gas	2975,7	868,7	883,4	-17,2	2943,7	21,6
Nuclear energy	670,7	0,0	0,0	0,0	670,7	4,9
Hydropower	334,4	0,0	0,0	0,0	334,4	2,5
Renewable energy sources (except hydro)	1519,6	20,7	16,6	0,3	1524,0	11,2
Total	13790,0	5307,9	5395,5	-55,1	13647,4	100,0

Source: IEA

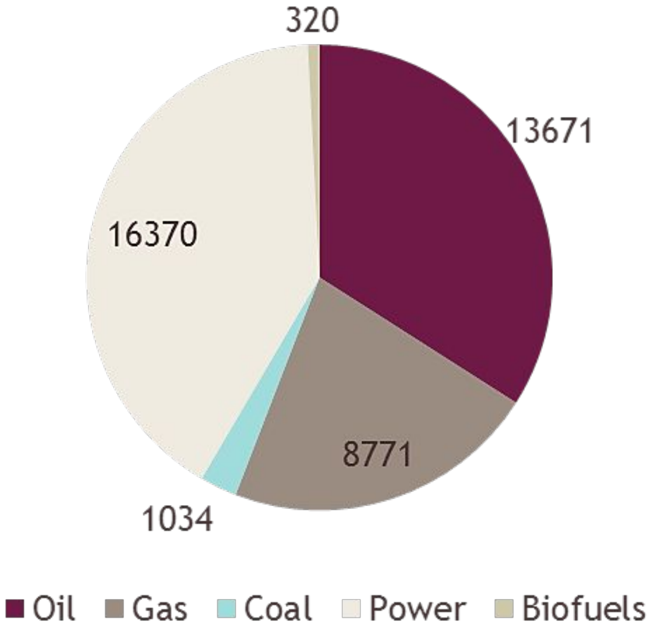
Energy poverty

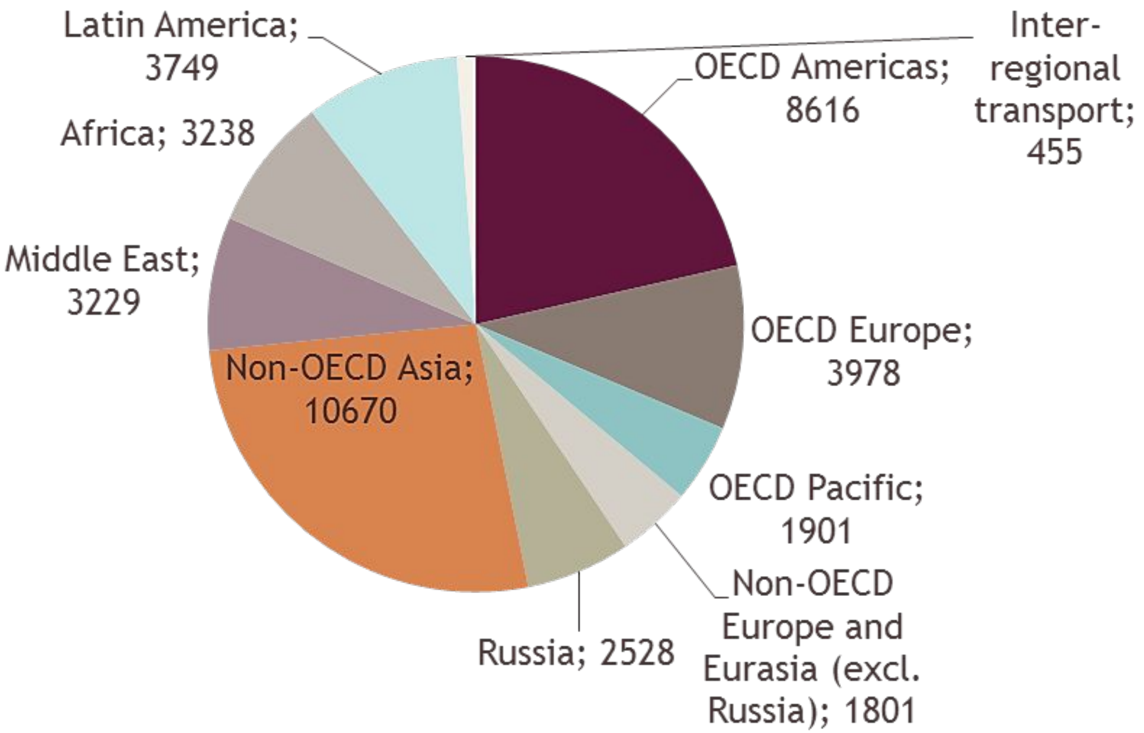
Electricity Access, Regional Summary

	Rate of access				Population without access (million)
	National		Urban	Rural	
	2000	2016	2016	2016	2016
WORLD	73%	86%	96%	73%	1060
Developing Countries	64%	82%	94%	70%	1060
Africa	34%	52%	77%	32%	588
North Africa	90%	100%	100%	99%	<1
Sub-Saharan Africa	23%	43%	71%	23%	588
Developing Asia	67%	89%	97%	81%	439
China	99%	100%	100%	100%	-
India	43%	82%	97%	74%	239
Indonesia	53%	91%	99%	82%	23
Other Southeast Asia	67%	89%	97%	82%	42
Other Developing Asia	32%	73%	87%	65%	135
Central and South America	87%	97%	98%	86%	17
Middle East	91%	93%	98%	79%	17

Source: IEA, World Energy Outlook 2017

Global energy supply investment in 2014 – 2035, IEA estimate (2014), bln USD-2012, by industry, by region





Total: 40 165 bln USD (year-2012 prices)

Source: IEA, World Energy Investment Outlook 2014

Example of interfuel substitution

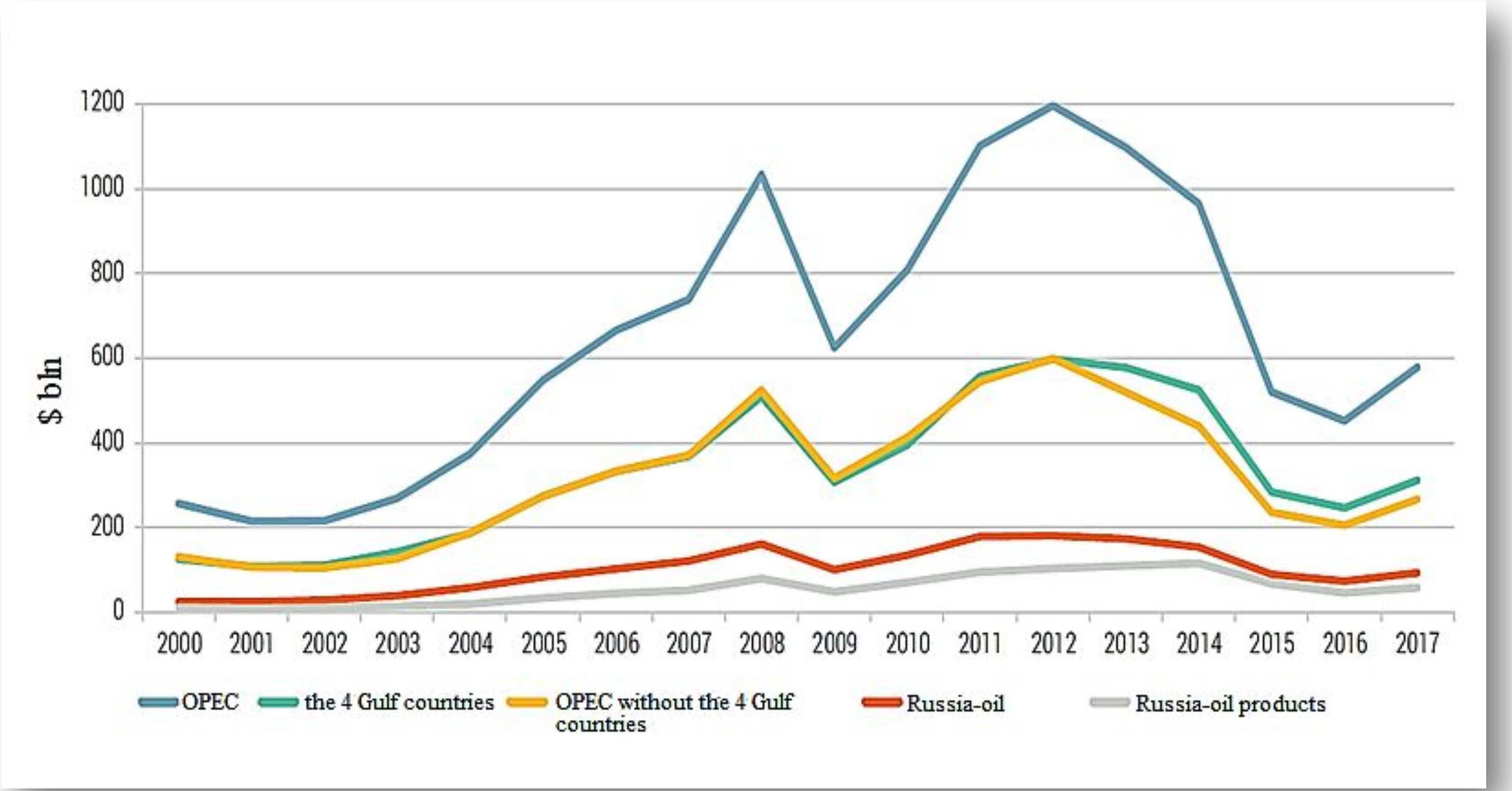
Table 10.4 • Assumed cost and technical parameters of power plants in the OECD starting commercial operation in 2015-2020

	Unit	Gas (CCGT)	Coal ultra-supercritical	Coal IGCC	Coal IGCC with CCS	Nuclear power	Wind onshore
Capacity factor	%	80%	80%	80%	80%	90%	27%
Thermal efficiency (net, lower heating value)	%	58%	47%	48%	38%	33%	n.a.
Capital cost (overnight)	$2008/kW	900	2 400	2 800	3 400	3 800	1 700
Construction lead time	Years	3	4	4	5	5	2
Economic plant life	Years	25	35	35	35	40	20
Unit cost of fuel	Various*	11	95	95	95	10	n.a.
Non-fuel O&M costs	$2008/kW	13	49	83	72	117	40
Long-run marginal cost	$2008/MWh	78	69	78	95	72	94

Source:IEA

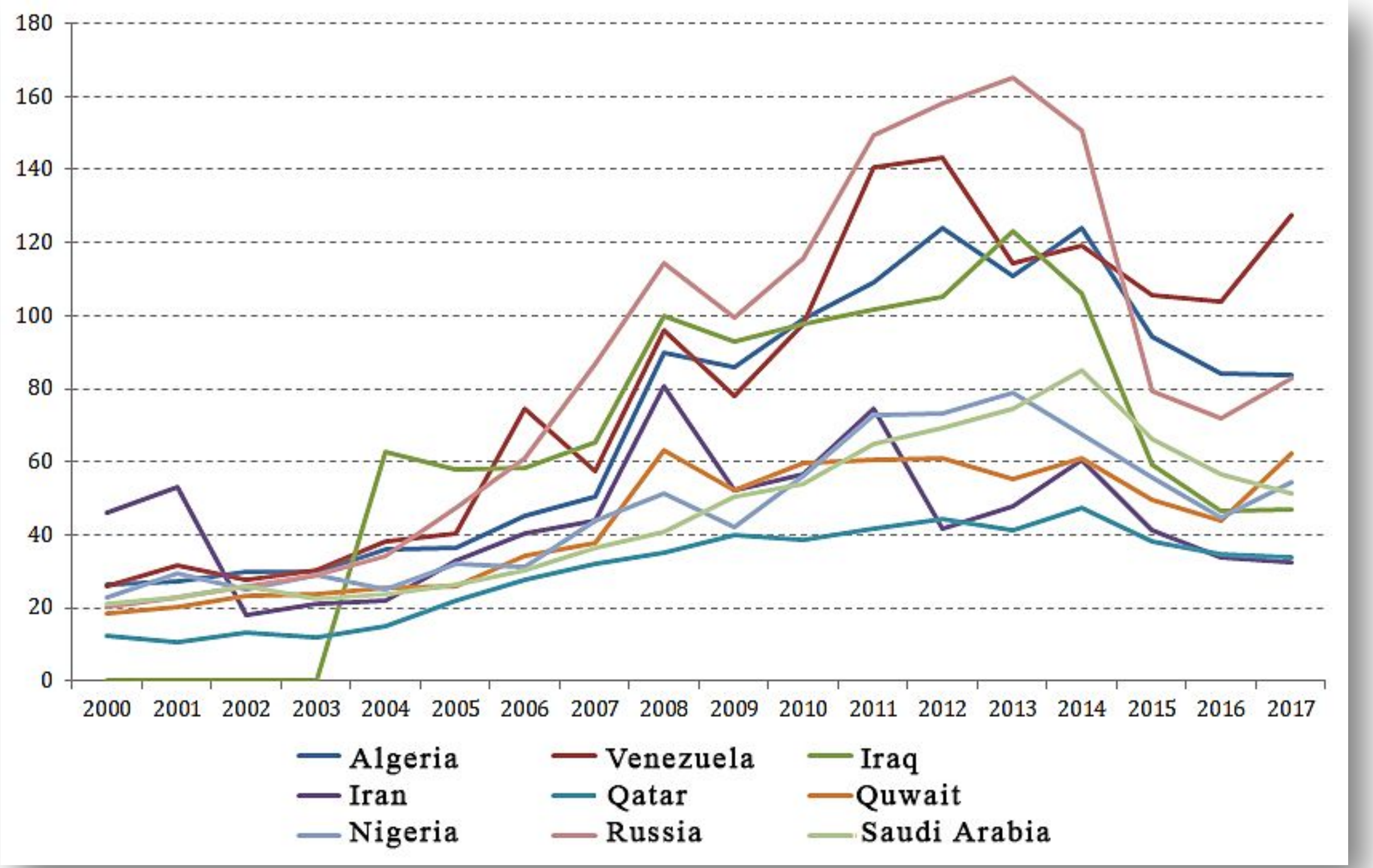
OPEC & RUSSIA

Export Incomes in OPEC countries and Russia, bln. $, 2000-2017

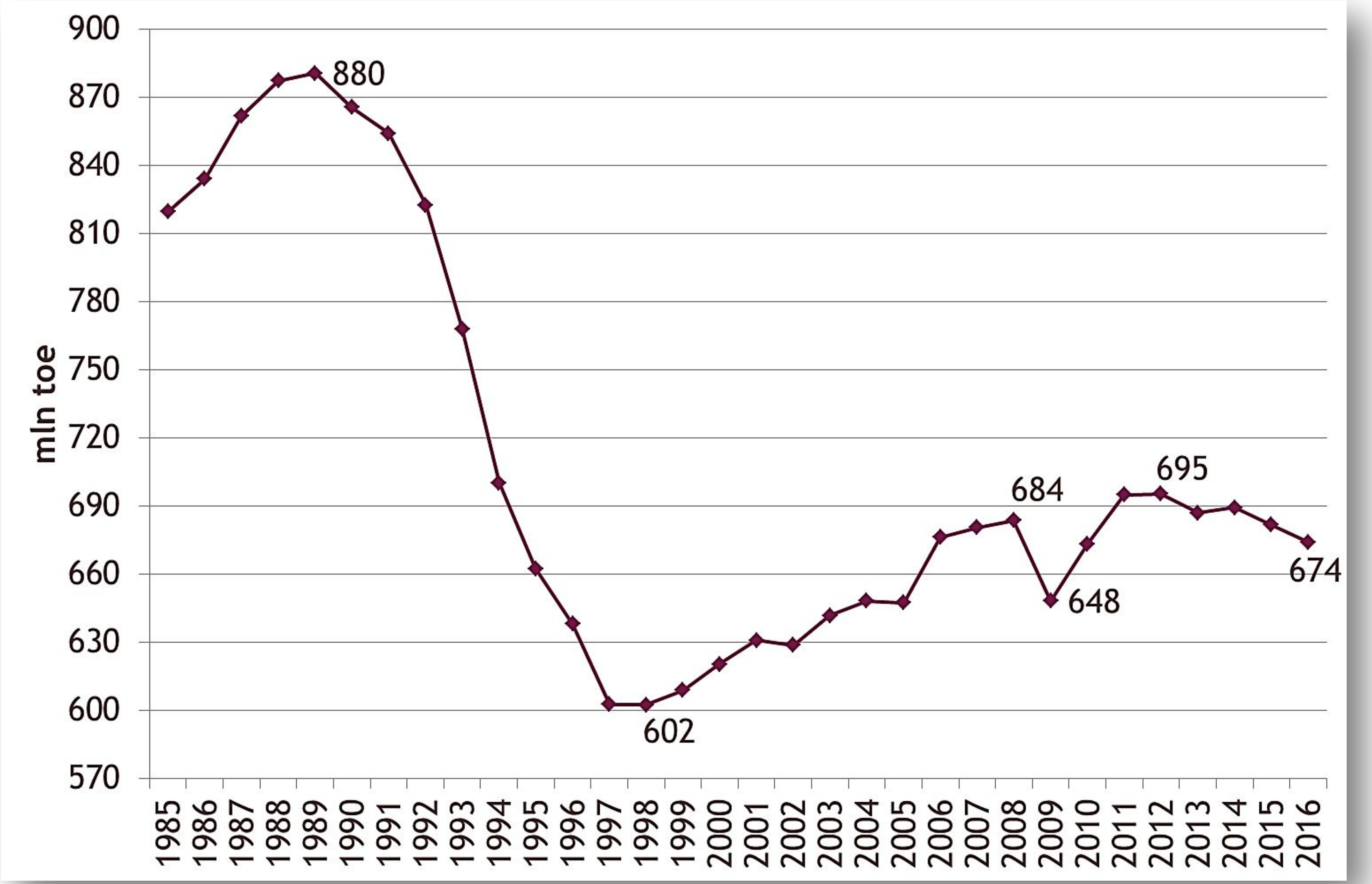


Source: Analytical Center

The acceptable price in budget leveraging, 2000-2017

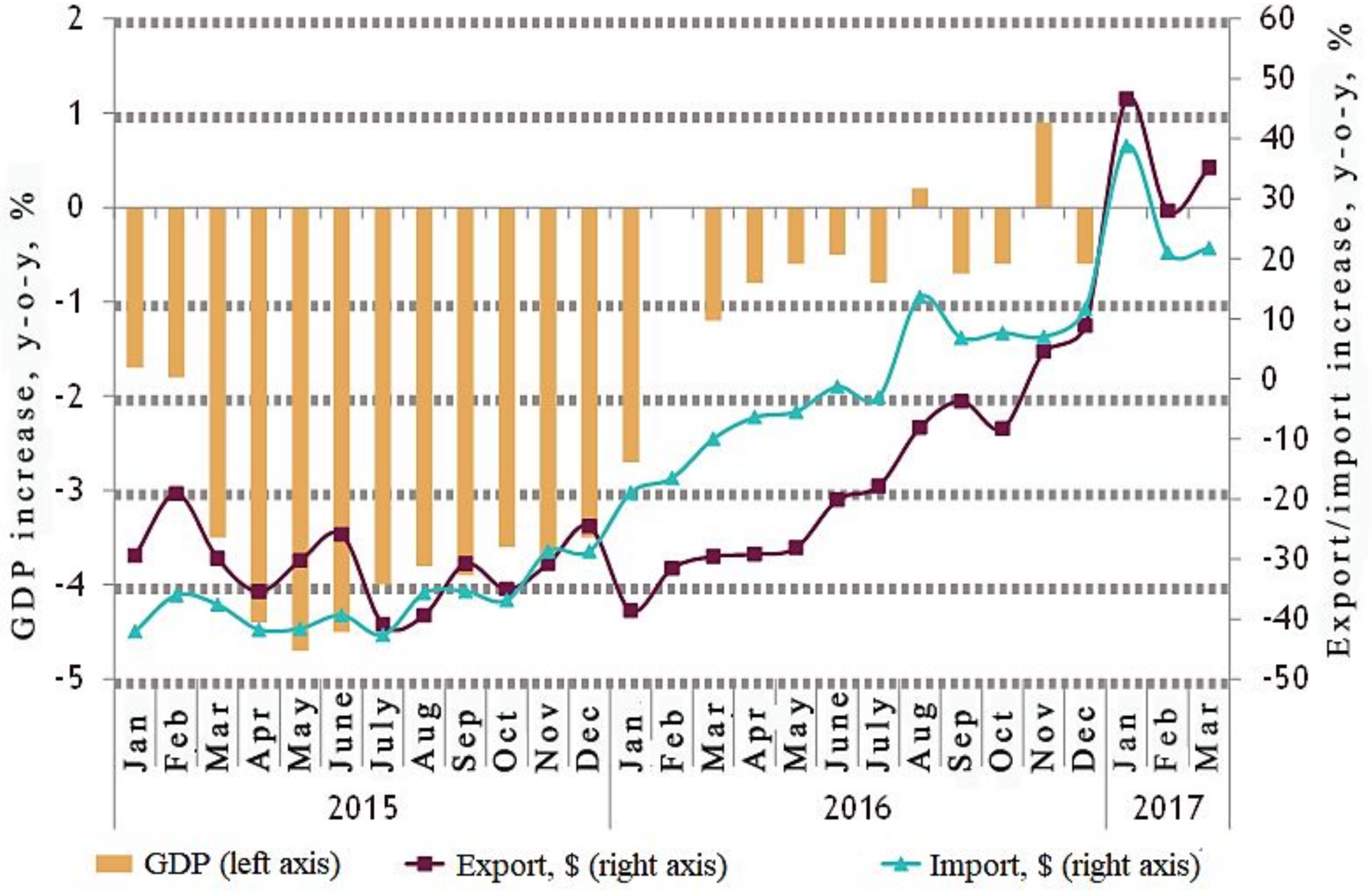


Russian Primary Energy Consumption, mln toe



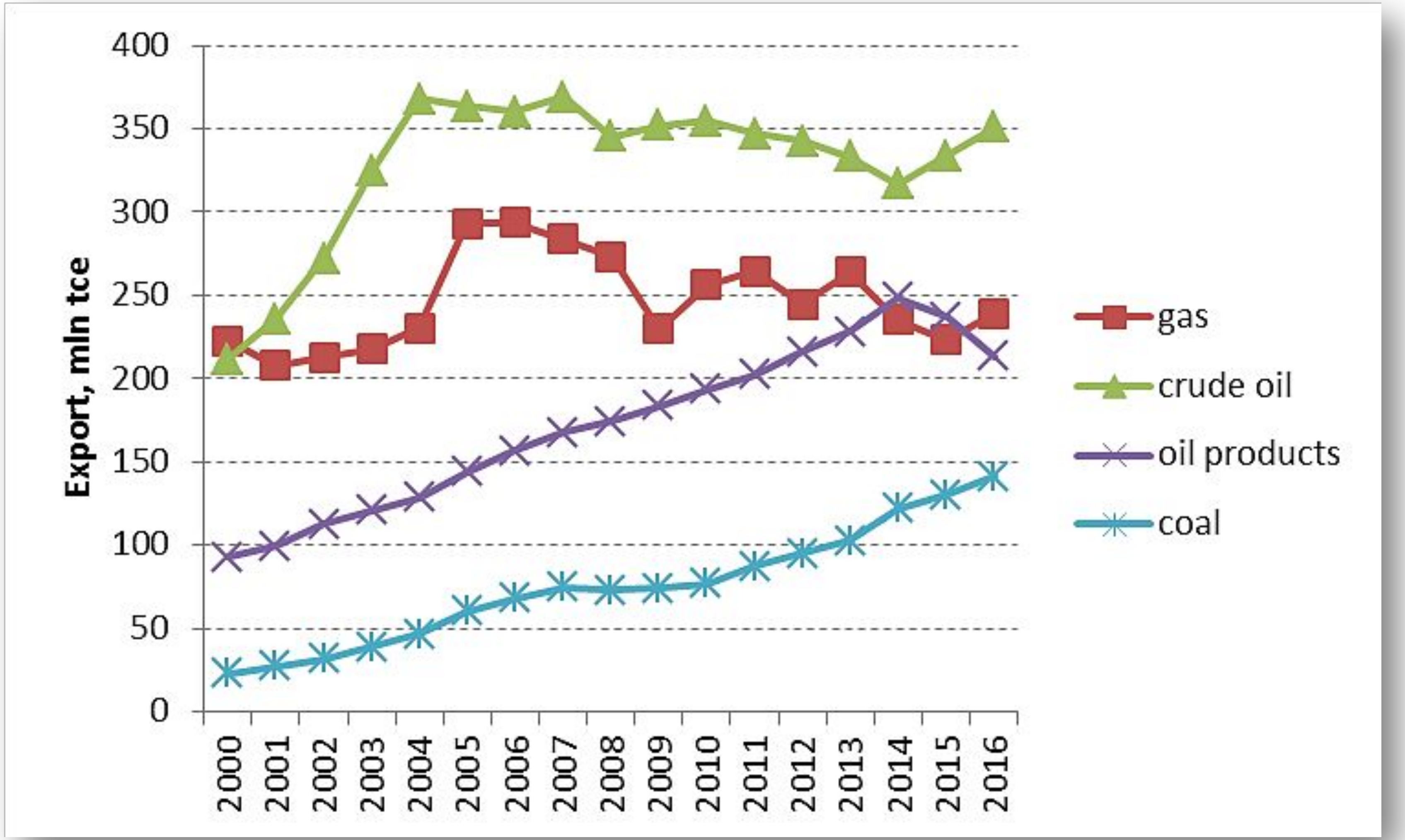
Source: BP

15-2017



Source: Thomson Reuters Datastream

Russian export of energy, mln toe



Source: ERI RAS

Russian Primary Energy Consumption, mln toe

	2015	2016	*Δ*
Oil	144,2	148,0	*2,6%*
Natural Gas	362,5	351,8	*-3,0%*
Coal	92,2	87,3	*-5,3%*
Nuclear Energy	44,2	44,5	*0,6%*
Hydro electric	38,5	42,2	*9,8%*
Renewables	0,15	0,16	*7,2%*
Total	**681,7**	**673,9**	***-1,1%***

Source: BP

Conclusions on OPEC+

- Oil prices of \$55 - \$70 helped to Global growth restoration in 2016-2018
- Global forecast for 2040 is still open page.
- May be peak at 110 mbd. of oil extraction
- Incomes are more important than records of output
- Energy transition is inevitable, but speed and scope are not rigid
- Huge investments needs for transition, reducing energy poverty
- China, India and Africa are still in coal for a long time.
- Emission of GHG is still growing, Paris 2015 is to be reviewed.
- OPEC+ to reinvest export incomes into development.
- Beware of demography in Middle East
- There is no Global Energy Strategy!

World Energy Transition and Future

- World is undergoing Energy transition, but still not that fast as Green people hope.
- Current oil prices are secured the Global Growth in 2016-2018.
- Car are still mostly non-electric in stock and in annual sales.
- Energy sector and any changes in its structure require huge investments.
- One mbd a day per year = looking to 100 mbd in 2019
- Climate Change prevention V Energy Poverty and Development needs
- American oil takes quite a bite from others in 2018
- Prices are stable due to growing demand and decline of output.
- Sanctions as a factor of pricing – Fall of 2018
- Stability of pricing corridor depends on coordination – to assure price wars avoidance.

Literature 1

1. Григорьев Л.М., Чапыгина А.В. «Саудовская Аравия – нефть и развитие», «Мировая Энергетическая политика», №7, 2002.
2. Григорьев Л.М., Крюков В.А. «Мировая энергетика на перекрестке дорог: какую дорогу выбрать России?» - «Вопросы экономики», №12, 2009.
3. Россия, Газпром и Центральная Азия-Центр: интересы и отношения. В “Russian Energy Security and Foreign Policy”, Ed. By A. Dellecker and Th. Gomart, London and New York, IFRI, Routledge, 2011, стр.147-169.
4. Макаров И.А., Соколова А.К. «Оценка углеродоемкости внешней торговли России», «Экономический журнал ВШЭ», №3, 2014.
5. «Энергетические субсидии в современном мире». Страны «Группы двадцати», под редакцией Л. М. Григорьева, А. А. Курдина –, 2014.
6. Григорьев Л.М., Курдин А.А. «Дисбаланс нефтяного рынка: технологии, экономика, политика.» - «Энергетическая политика», №1, 2015.
7. «Прогноз энергетики мира и России до 2040 года», Научный руководитель А. А.Макаров, Т.А.Митрова, Л.М.Григорьев и др. ИНЭИ РАН и АЦ, М. 2016.

Literature 2

- “Global and Russian Energy Outlook Up To 2040”, IES, RAS,2016
- “Domestic Debates on Climate in Russia”, L.Grigoryev, I.Makarov, A.Salmina, “Climate Change, Sustainable Development, and Human Security”, Ed. Dhirendra K. Vajpeyi, Lexington Books, 2013, chap. 9, pp. 249-280.
- 2018 Outlook for Energy: A View to 2040 [online] IEA: http://cdn.exxonmobil.com/~/media/global/files/outlook-for-energy/2018/2018-outlook-for-energy.pdf.
- I. Makarov and A. Sokolova “Carbon EmissionsEmbodied in Russian trade: implications for Climate Policy” - Review of European and Russian Affairs 11 (2), 2017.

Macro &

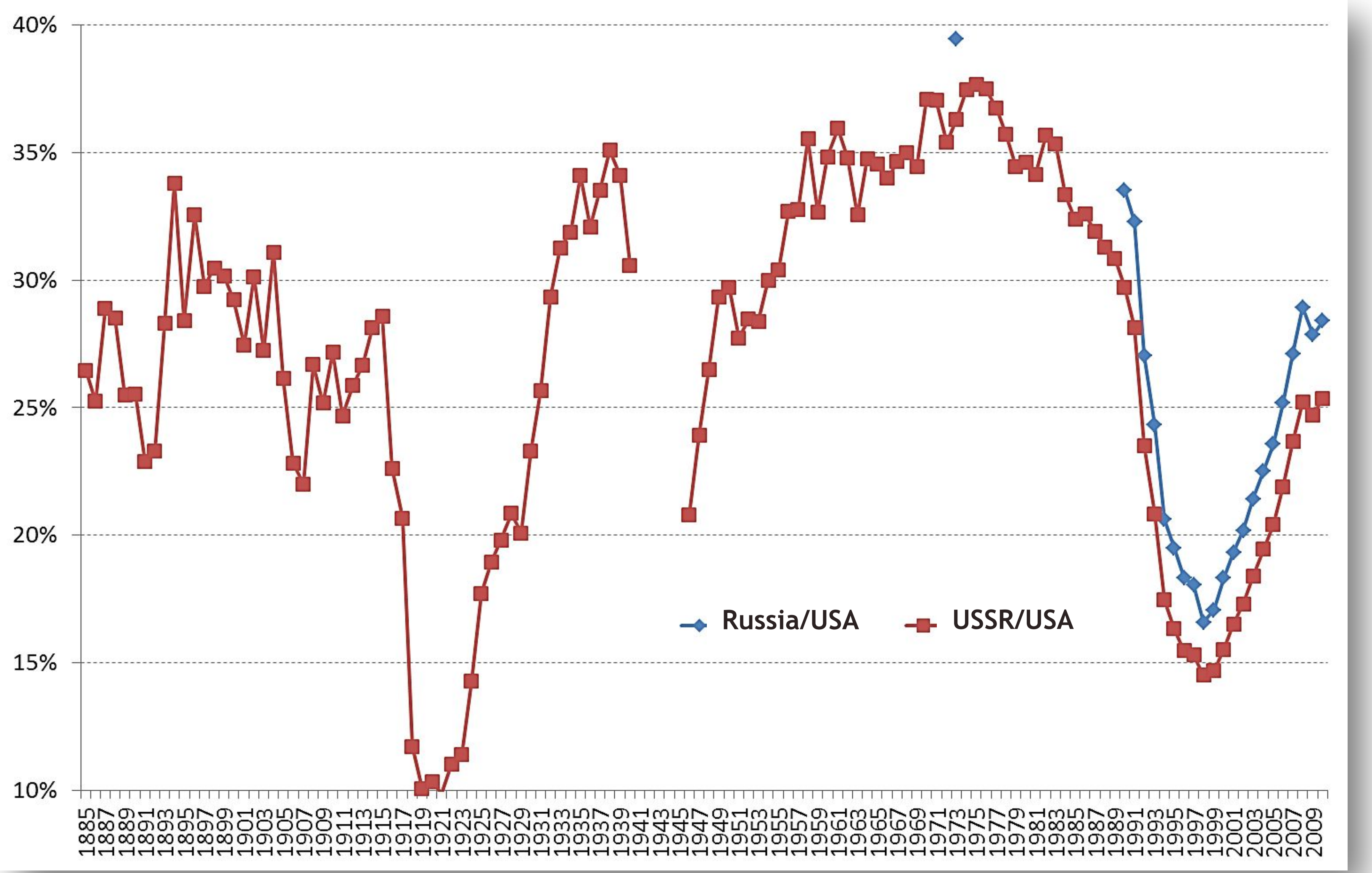
4.03.2019

Professor Leonid Grigoryev
HSE, Moscow
www.leonidgrigoryev.com

Upcoming events

- 4 of March – Macro light questions for students
- 11 of March – lecture on Transition and discussion
- 16 of March – test by groups
- 18 of March - Discussion of the crucial topics
- 25 of March at 12:00 – Exam

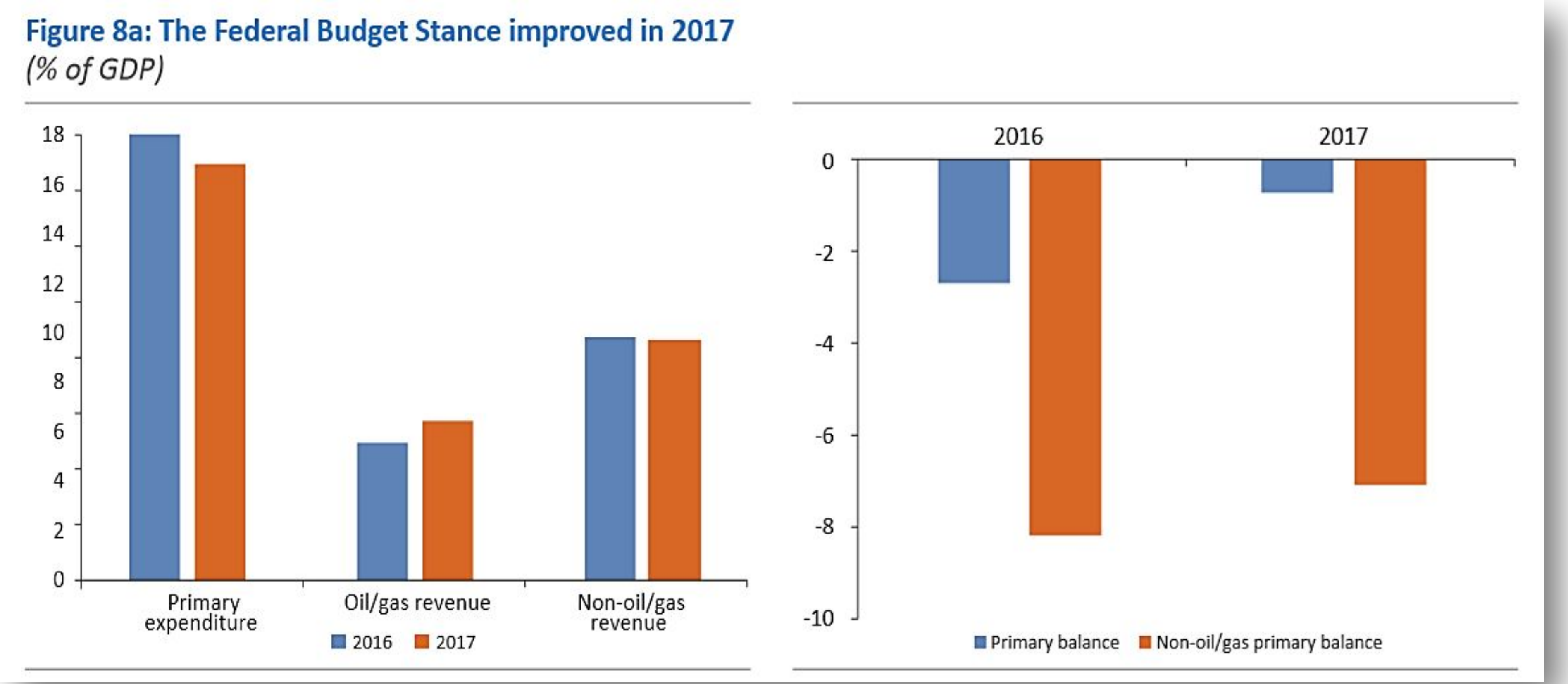
Ratio of GDP per capita of the USSR/Russia to the USA



Source: Maddison Project

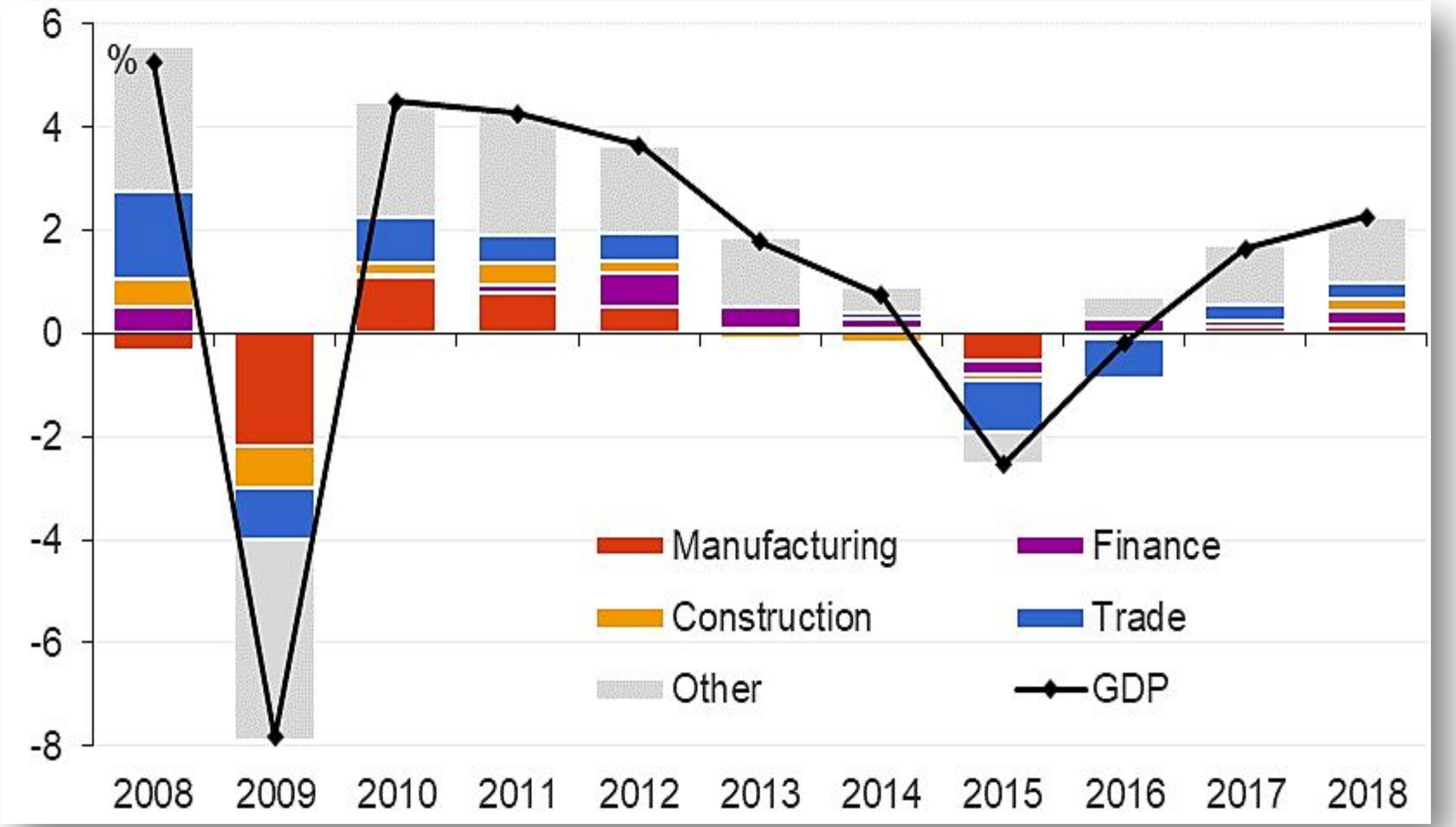
Growth factors – long-run demand

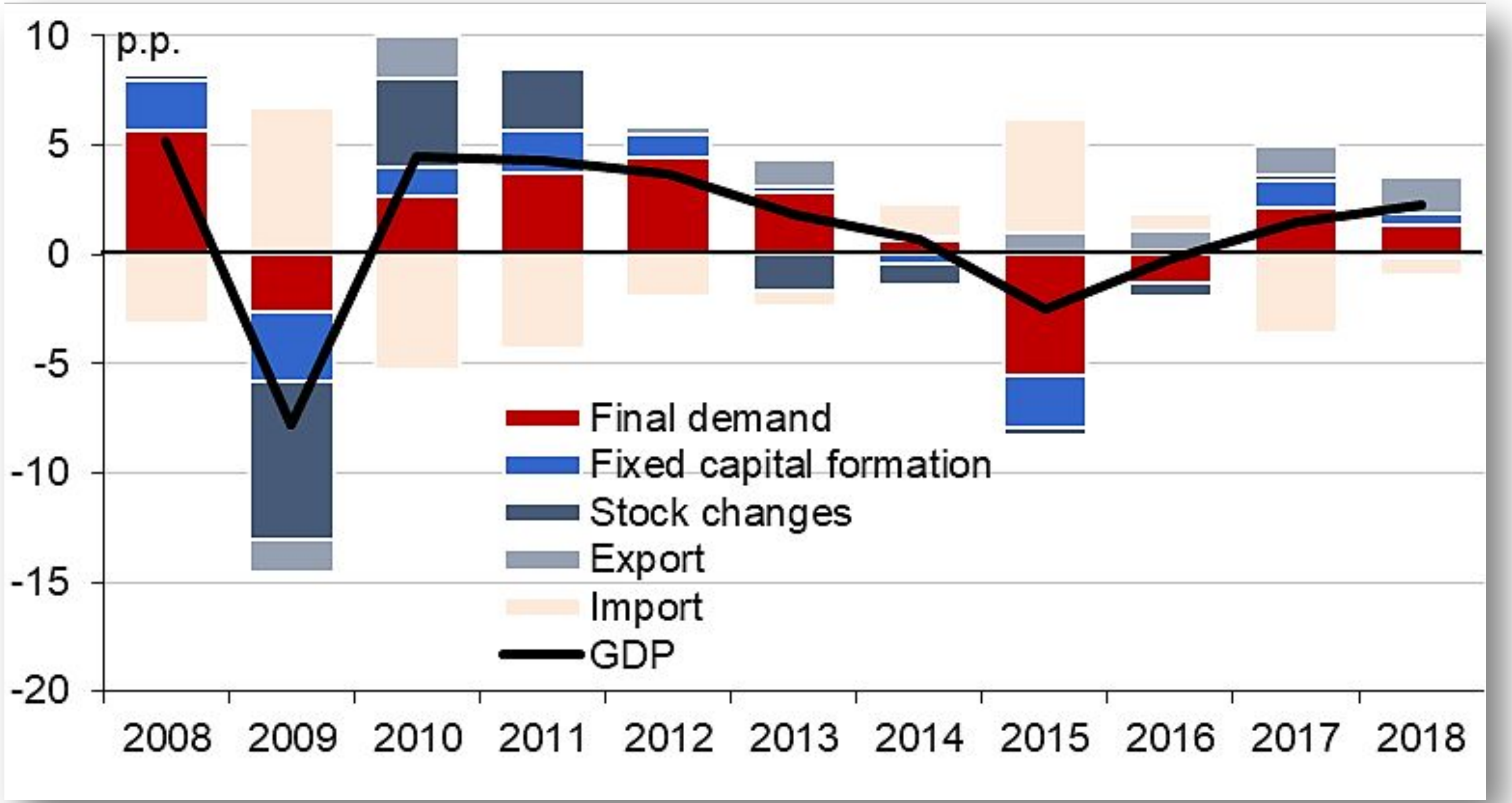
- Infrastructure – roads and communications,
- Housing = new tendencies – two dwellings
- Modernization of Equipment: industry etc.
- Consumer Durables
- Regional differences and development
- Defense sector – quite “cheap” modernization
- Oil sector = driver or milk cow
- Financial sector – too weak for credits
- Foreign money = cheap or expensive?



Source: Haver Analytics

Contribution to real GDP growth from production side




10
5
0
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p.p.
Final demand
Fixed capital formation
Stock changes
Export
Import
GDP
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018

Federation, 2007-2010, 2014-2017 (1/3)

	2007	2008	2009	2010	2014	2015	2016	2017
Macro indicators (rates of growth in physical volume, % change from previous year, unless otherwise indicated)								
GDP	8.5	5.2	–7.8	4.5	0.7	–2.8	–0.2	1.5
Industry	6.8	0.6	–10.7	7.3	1.7	–3.4	1.3	1.0
Agriculture	3.3	10.8	1.4	–11.3	3.5	2.6	4.8	2.4
Construction	18.2	12.8	–13.2	5.0	–2.3	–3.9	–2.2	–1.4
Wholesale trade	9.5	5.4	2.0	3.0	3.9	–5.5	2.6	5.9
Retail trade	16.1	13.7	–5.1	6.5	2.7	–10.0	–4.6	1.2
Households final consumption	14.3	10.6	–5.1	5.5	2.0	–9.4	–2.8	3.4
Investments in fixed assets	23.8	9.5	–13.5	6.3	–1.5	–10.1	–0.2	4.4
Wages as a percentage of GDP[1)]	46.7	47.4	52.6	49.6	46.4	46.8	48.4	47.7
Profit and mixed income as a percentage of GDP[1)]	34.1	32.6	30.8	32.6	39.5	41.8	40.7	41.4

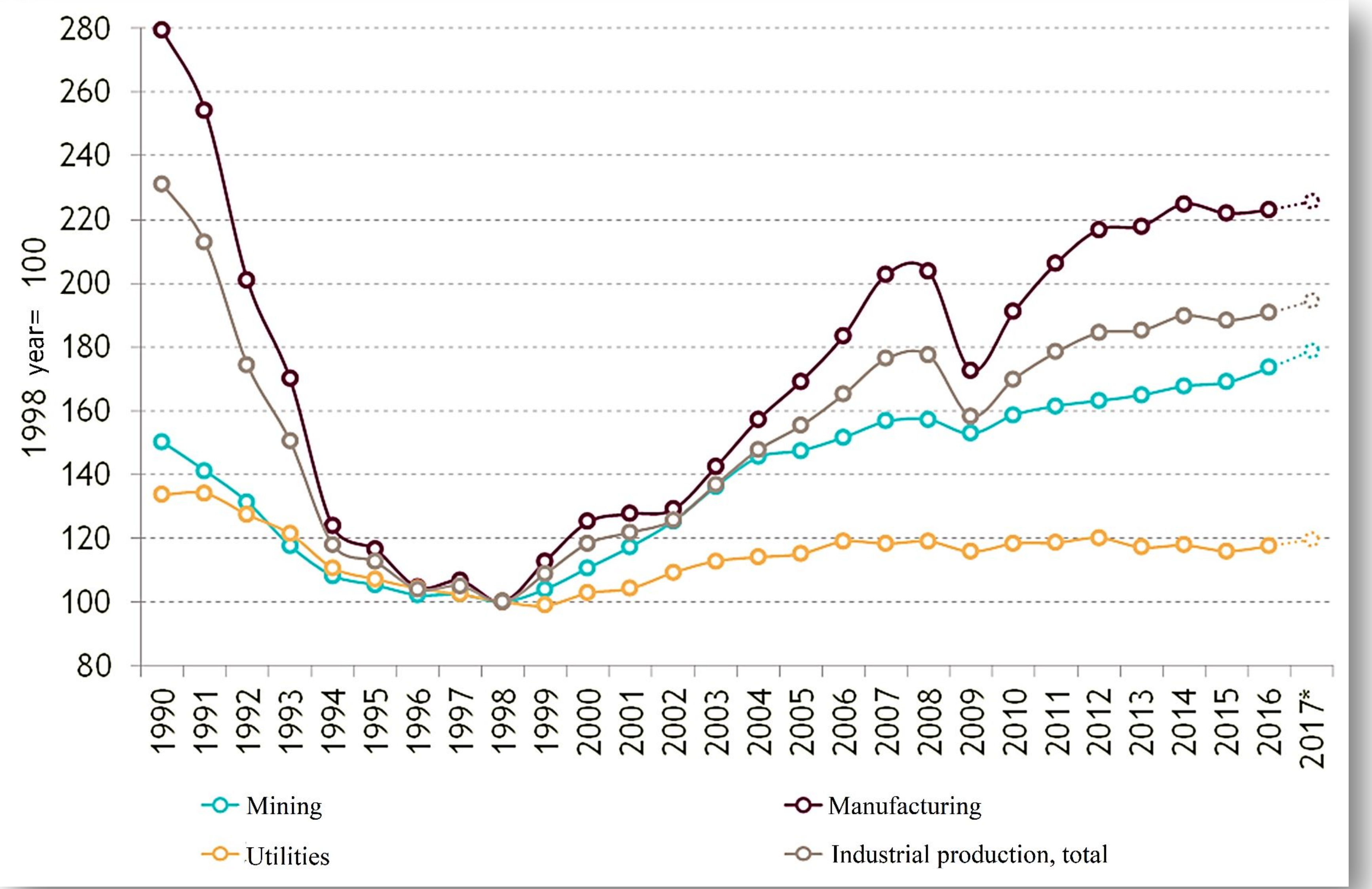
Federation, 2007-2010, 2014-2017 (2/3)

	2007	2008	2009	2010	2014	2015	2016	2017
Indicators of public finances and international reserves								
Surplus (+)/deficit (–) of the consolidated budget as % of GDP	6.0	4.9	–6.3	–3.4	–1.1	–3.4	–3.7	–1.5
Surplus (+)/deficit (–) of the federal budget as % of GDP	5.4	4.1	–6.0	–3.9	–0.5	–2.4	–3.4	–1.5
Non-oil-and-gas deficit of the federal budget as % of GDP	–3.3	–6.5	–13.7	–12.2	–9.8	–9.4	–9.1	–7.9
Domestic state debt, end of year, billions rubles	1248.8	1499.8	2094.7	2940.4	7241.2	7307.6	8003.5	8689.6
Foreign state debt, end of year, billions dollars (Ministry of Finance data)	44.9	40.6	37.6	40.0	54.4	50.0	51.2	49.8
Total state debt as % of GDP	7.2	6.5	8.3	9.0	14.4	13.6	12.9	12.6
Reserve fund (Stabilization fund in 2007), end of year, billion dollars	156.81	137.09	60.52	25.44	87.91	49.95	16.03	0.0
National Welfare Fund, end of year, billion dollars		87.97	91.56	88.44	78.00	71.72	71.87	65.15
International reserves of the Bank of Russia, end of year, billion dollars	478.8	426.3	439.5	479.4	385.5	368.4	377.7	432.7
Prices and interest rates								
Consumer price index, December to previous December	11.9	13.3	8.8	8.8	11.4	12.9	5.4	2.5
Producer price index, December to previous December	25.1	–7.0	13.9	16.7	5.9	10.7	7.5	8.4
Key interest rate of the Bank of Russia[2)], yearly average, % per annum	6.0	6.9	8.3	5.3	7.9	12.6	10.6	9.1

Main economic indicators of the Russian Federation, 2007-2010, 2014-2017 (3/3)

	2007	2008	2009	2010	2014	2015	2016	2017
Average interest rate on loans to businesses in rubles, yearly average, % per annum	10.0	12.2	15.3	10.8	11.1	15.7	12.6	10.6
Average interest rate on savings of individuals (except demand deposits), % per annum	7.2	7.6	10.4	6.8	6.7	9.7	7.3	6.0
Labor market								
Overall unemployment (ILO methodology), annual average, % of population	6.0	6.2	8.3	7.3	5.2	5.6	5.5	5.2
Average salary, thousand rubles per month	13.6	17.3	18.6	21.0	32.5	34.0	36.7	39.1
Salary in real terms, % change from previous year	17.2	11.5	–3.5	5.2	1.2	–9.0	0.8	3.4
Real disposable household income, % change from previous year	12.1	2.4	3.0	5.9	–0.7	–3.2	–5.8	–1.7
Population with money income below the subsistence level, million people	18.8	19	18.4	17.7	16.1	19.5	19.6	20.3
Banking system								
Number of active credit organizations, end of year, units	1136	1108	1058	1012	834	733	623	561
Number of revoked banking licenses in the course of the year, units	49	33	43	27	86	93	97	51
Rate of asset growth, % for the year	46.1	32.7	3.7	14.8	18.6	–1.5	2.1	7.8
Indebtedness of resident legal entities except banks in terms of bank loans, % for the year	52.4	28.6	0.0	9.6	12.7	5.0	-0.1	4.6
Indebtedness of resident individuals in terms of bank loans, % for the year	58.3	31.2	–11.7	14.4	11.6	–7.3	0.7	12.3
Share of overdue loans to resident legal entities except banks in total volume of debt, %	0.9	2.2	6.0	5.5	4.1	6.2	6.1	5.9
Share of overdue loans to individuals in total volume of debt, %	3.1	3.6	6.9	7.1	6.0	8.4	8.3	7.3
Profit, billion rubles	508	409	205	573	589	192	930	790

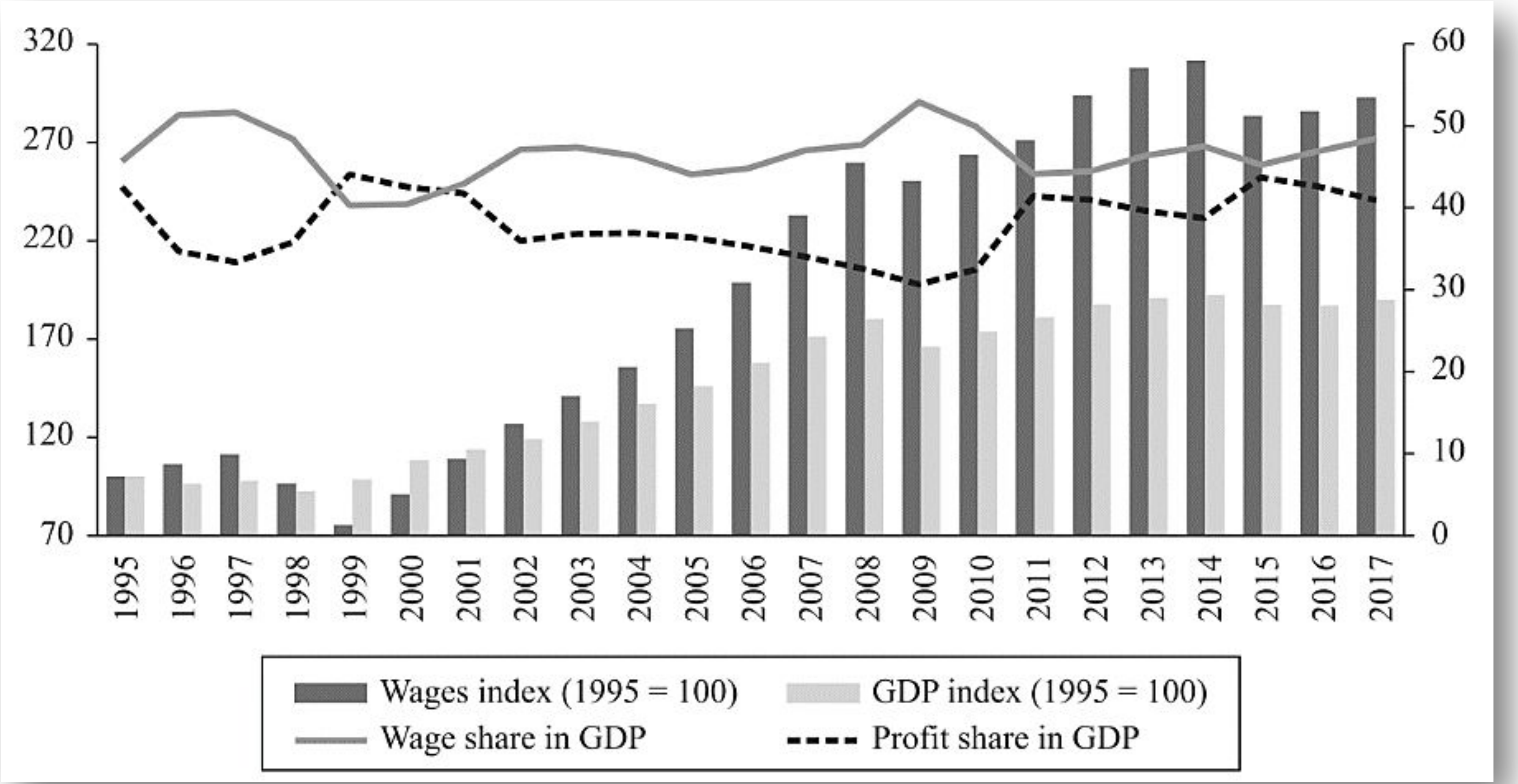
Industrial production, 1990—2017*, 1998 = 100



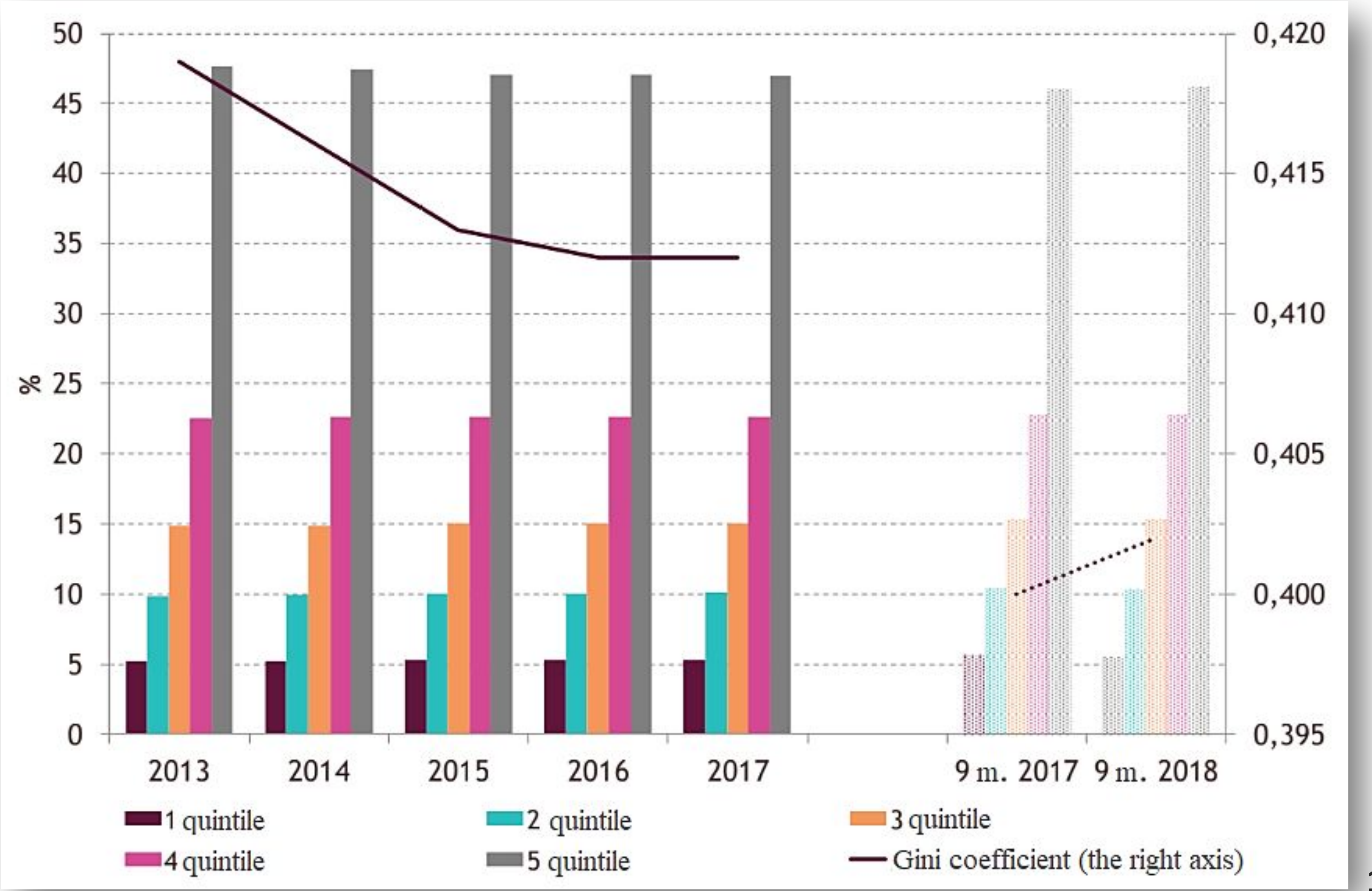
*Half year 2017

Source: Rosstat

Gross profit and wages as a percentage of GDP (right scale)



Income ratio by quintile, population, %; Gini coefficient, 2013-2018



Source: Rosstat

Population income distribution, thousand roubles, 2013-2018

Source: Rosstat

Personal consumption structure in Russia,

	1990	1995	2000	2005	2008	2010	2014	2017
GDP, tril.roubles	0,0006	1,4	7,3	21,6	41,3	46,3	79,2	92,0
Consumption, tril.roubles, including:	0,0003	0,7	3,2	10,4	19,7	23,1	40,6	45,9
Durable goods,%	13,8	8,3	9,5	13,8	16,7	13,7	14,9	12,0
Semi-durable goods,%	9,1	11,5	10,5	8,4	7,9	7,7	7,1	7,0
Non-durable goods,%	38,0	62,4	59,3	46,6	43,0	46,9	46,5	49,2
including food and beverages	-	43,1	41,2	29,1	25,6	27,5	26,9	30,1
including alcohol and tobacco	12,9	12,5	11,0	7,4	6,3	6,7	7,3	7,5
Services, %	39,1	17,8	20,7	31,2	32,4	31,7	31,6	31,7

Source: Euromonitor

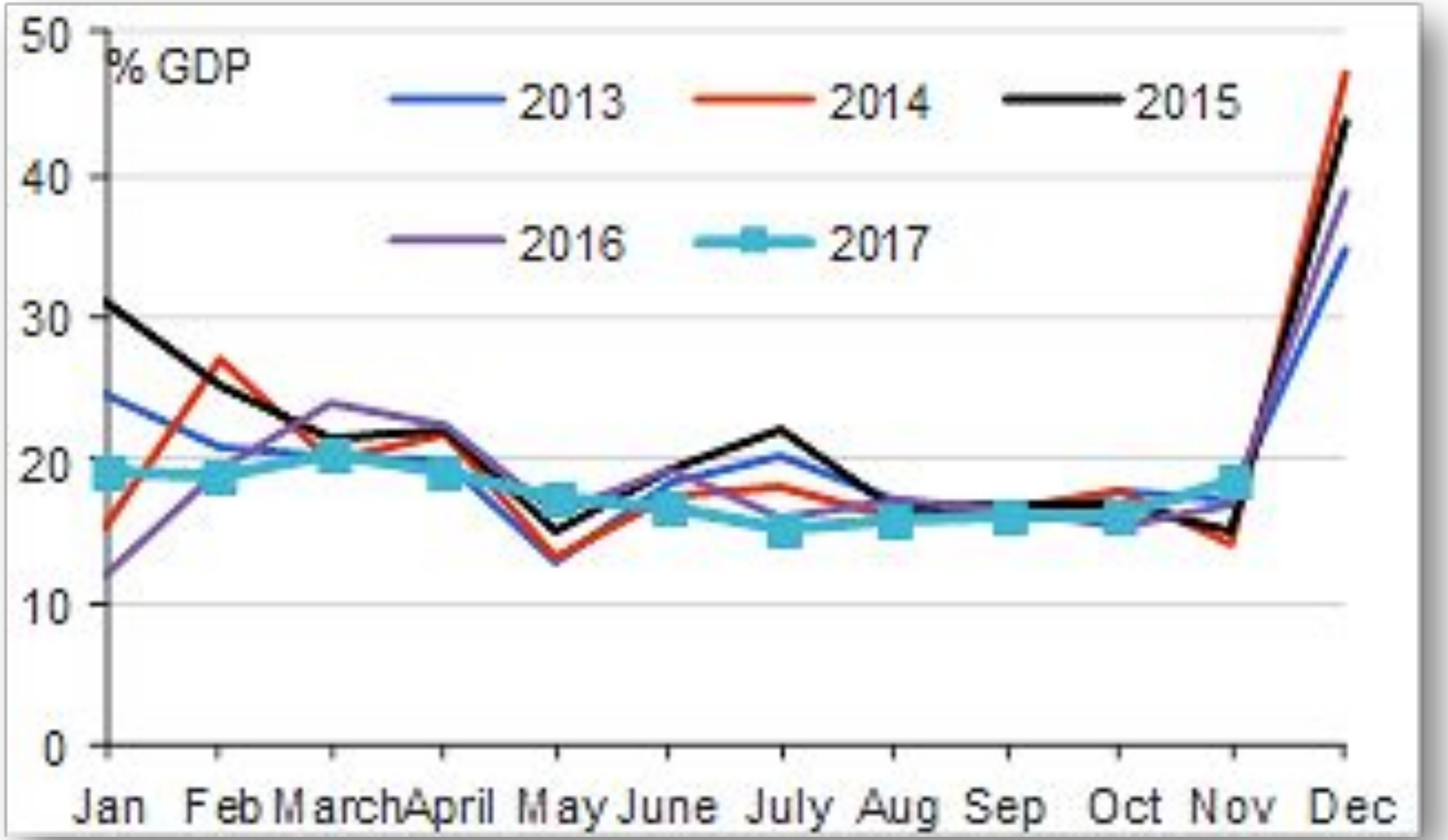
gadgets in Russia, 1992-2017

	1992	2000	2008	2013	2014	2015	2016	2017
Passenger car	23,0	43,0	44,0	57,0	61,0	62,8	64,2	65,1
Washer	64,4	75,3	85,2	89,4	90,1	90,8	91,5	92,1
Microwave oven	0,8	8,1	45,0	72,0	75,0	76,4	77,6	78,7
Air conditioning system	0,2	1,1	6,0	17,0	20,0	21,1	22,1	23,0
Color TV	66,4	88,1	97,6	98,6	98,8	98,9	99,0	99,0
Cable TV	9,1	20,2	29,0	36,2	30,5	33,6	33,6	33,3
Satellite TV	0,2	0,8	9,1	34,1	31,9	27,9	28,9	28,9
Mobile phone	0,7	21,1	87,1	95,7	96,4	96,9	97,4	97,8
Smart phone	-	-	7,8	42,0	48,8	55,2	61,3	66,9
PC	0,7	9,1	43,0	69,7	71,0	72,5	74,3	75,8
Laptop	0,0	0,5	1,0	28,0	39,0	44,2	49,2	53,9
Tablet	-	0,1	0,7	14,1	19,2	24,8	30,7	36,8

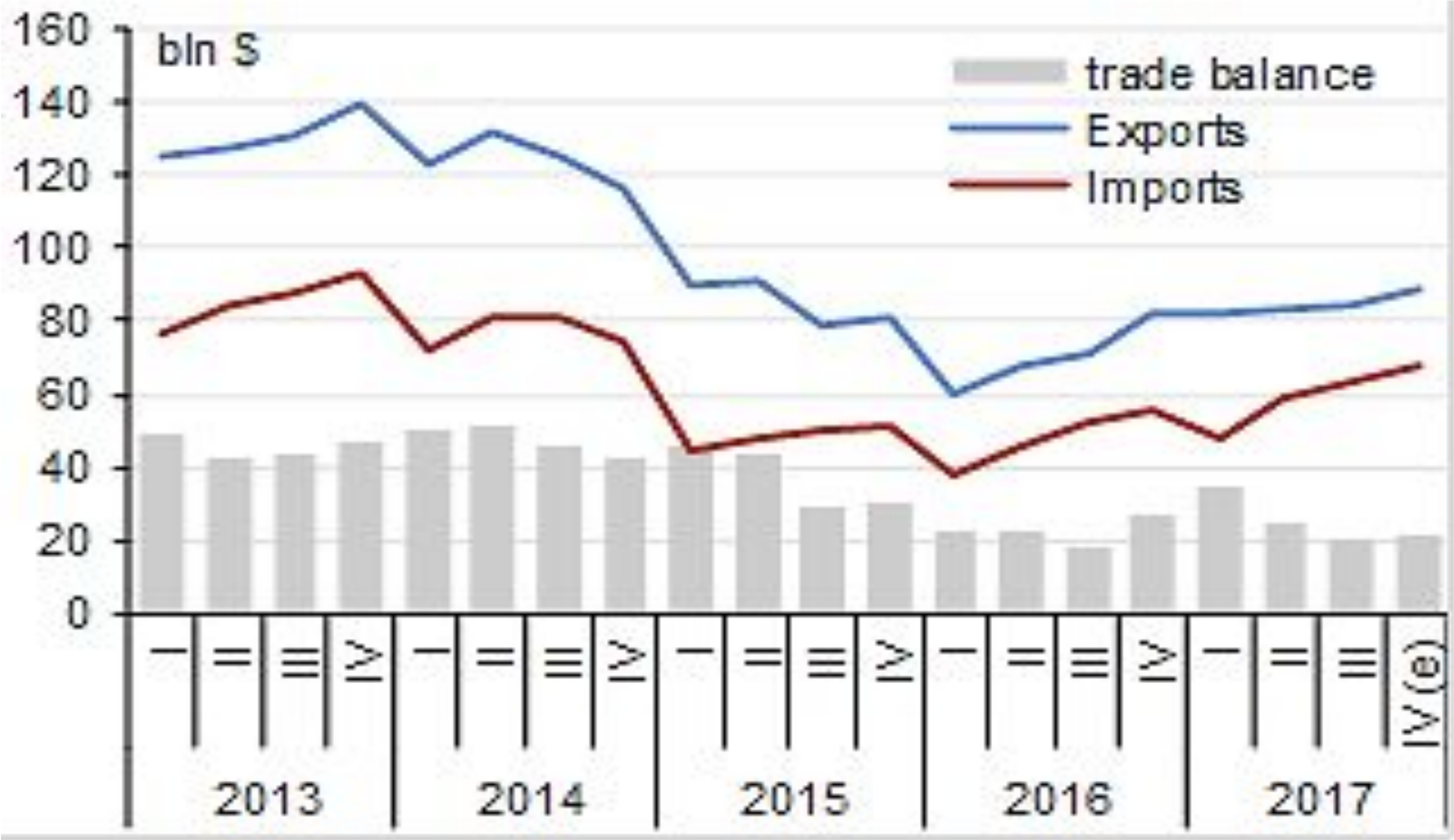
Source: Euromonitor

Actual CPI and survey inflationary expectations, 2010-2017 (by November)

Federal Budget Expenditures



Foreign Trade Main



Military expenditure, in constant (2015) US$

	constant (2015) US$				% GDP			
	1988	1998	2008	2016	1988	1998	2008	2016
USA	587,4	398,8	683,8	606,2	5,7	3,0	4,2	3,3
China	20,2 (1989)	32,7	113,5	225,7	2,5 (1989)	1,7	1,9	1,9
Russia	250,0 (USSR)	14,0	41,4	70,3	-	3,0	3,3	5,3
Saudi Arabia	23,3	31,4	50,0	61,4	15,2	14,3	7,4	10,4
France	57,7	51,1	53,6	55,7	3,6	2,7	2,3	2,3
India	17,9	22,8	41,0	55,6	3,7	2,8	2,6	2,5
United Kingdom	59,4	47,8	64,4	54,2	3,8	2,4	2,4	1,9
Japan	34,5	40,9	40,2	41,6	0,9	1,0	1,0	1,0
Germany	58,2 (West G)	42,1	39,5	41,0	2,8 (West G)	1,5	1,3	1,2
Republic of Korea	14,1	20,1	29,5	37,3	4,3	2,9	2,6	2,7
Italy	31,7	32,4	34,3	28,0	2,3	1,9	1,7	1,5
Australia	12,1	13,6	19,6	24,4	2,2	1,9	1,8	2,0
Brazil	14,5	14,8	20,6	22,8	2,1	1,7	1,5	1,3
Israel	14,3	12,5	14,7	17,8	17,1	7,9	6,5	5,8
Canada	16,9	12,5	17,9	15,5	2,0	1,3	1,3	1,0
Turkey	7,9	16,3	13,8	15,0	2,9	3,3	2,3	2,0

Source: SIPR, 2017I

Relative Stability
of main economic indicators

CPI, key interest rate CBR, ruble to $ rate and key % minus CPI

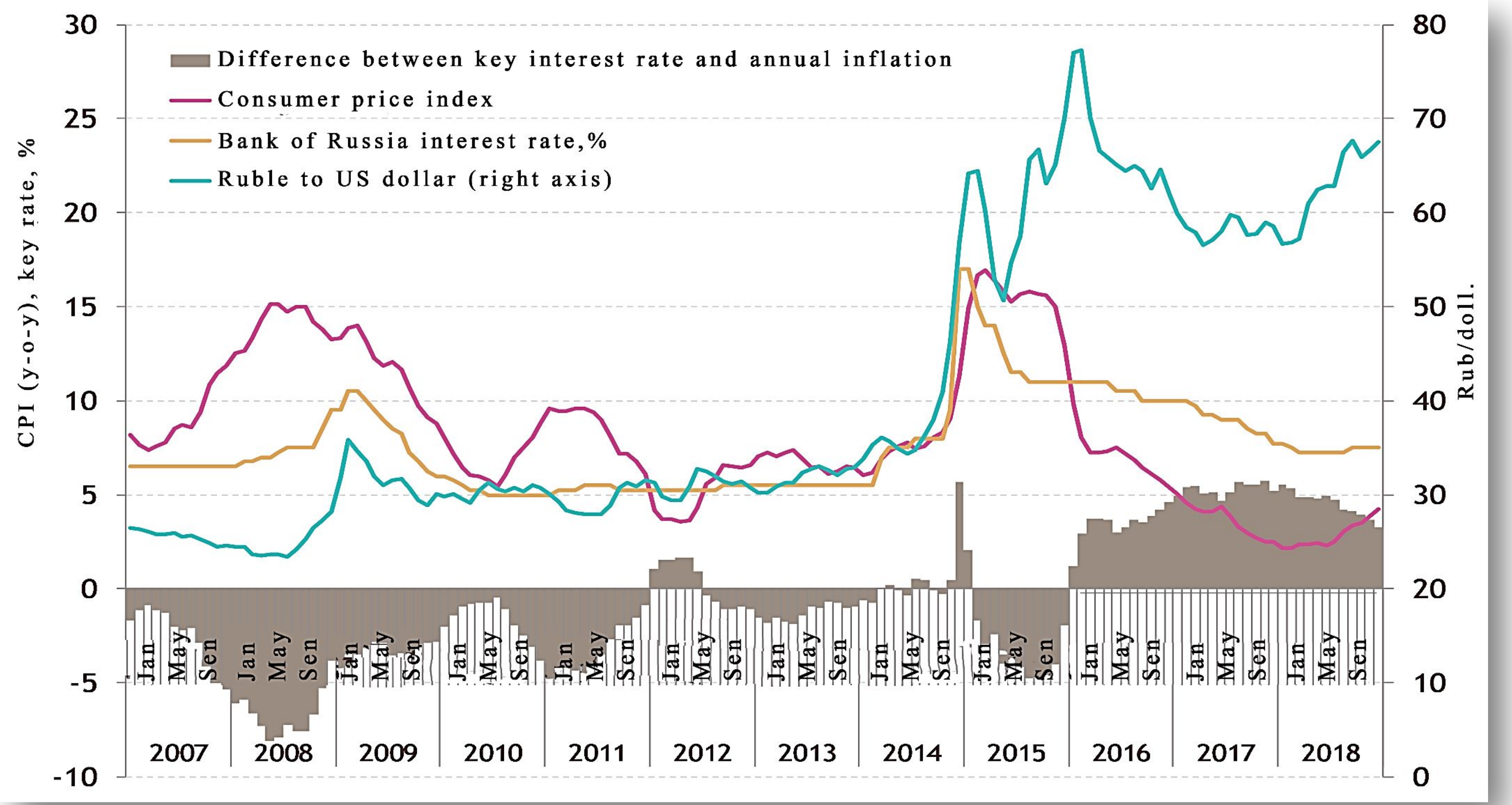
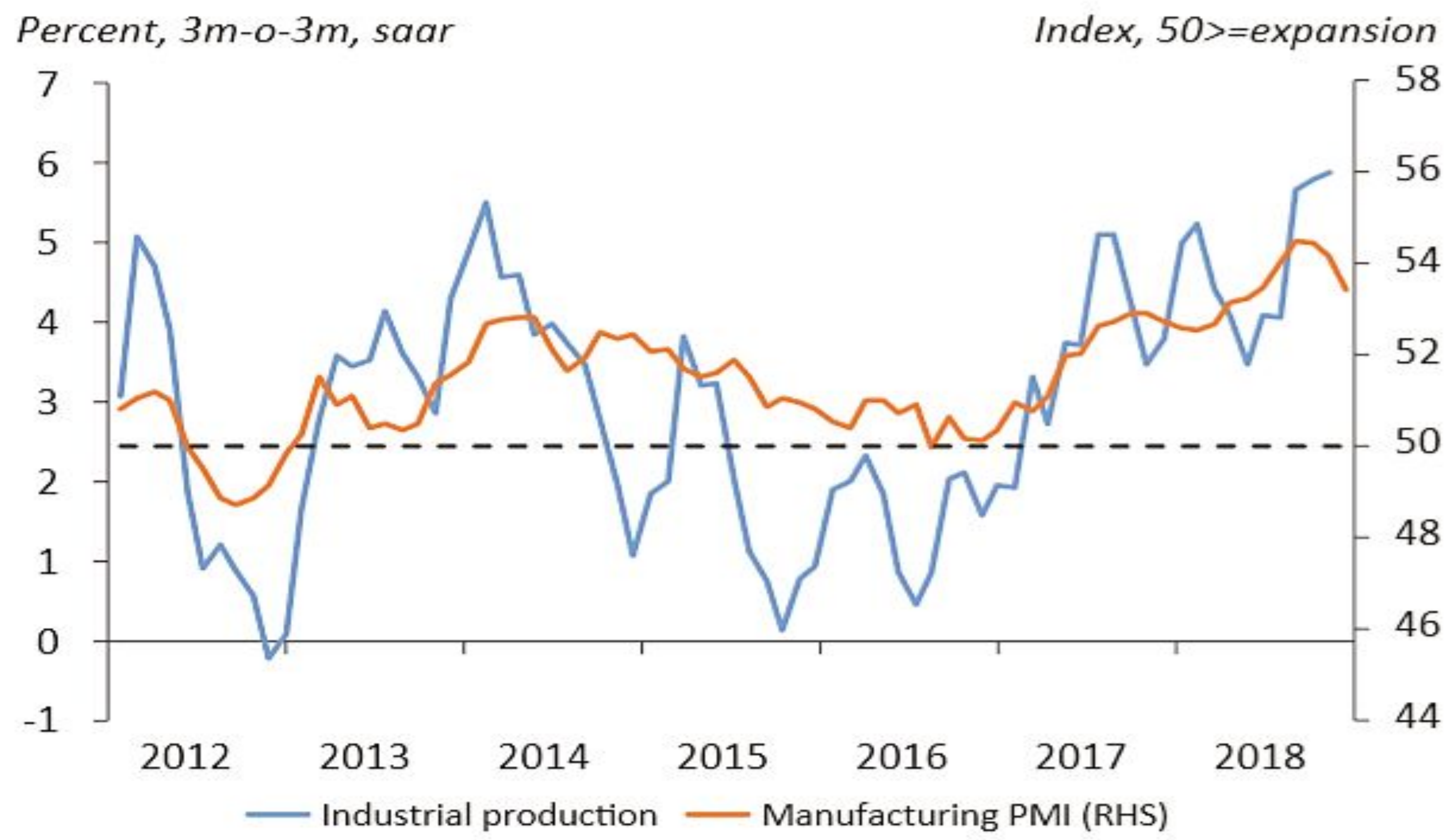


Figure 1a: Global Growth continued its momentum in early 2018

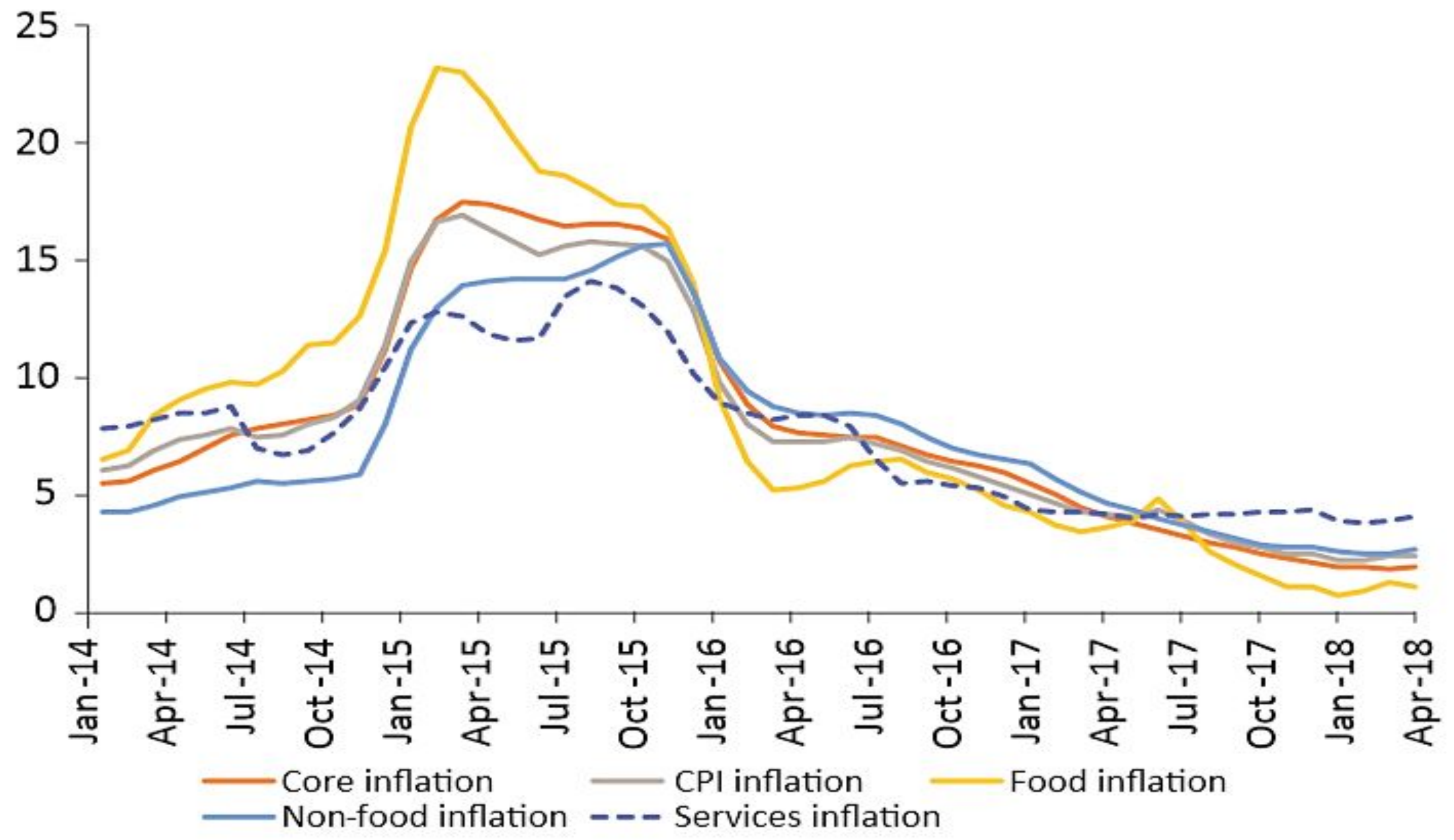


Note: Seasonally adjusted quarterly growth, annualized. PMI stands for Purchasing Manager's Index.

Source: Haver Analytics, World Bank

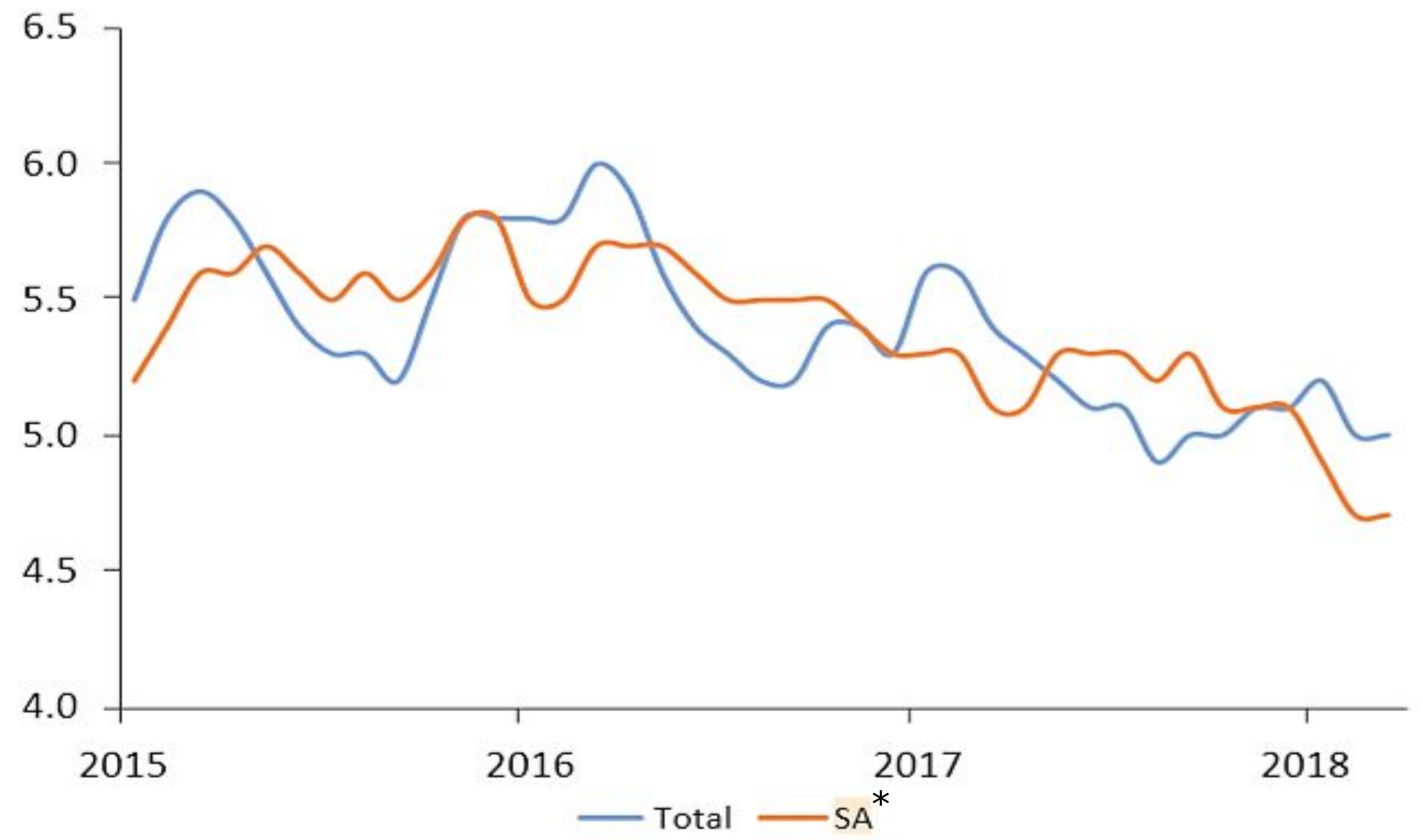
Figure 5a: Inflation is at a record-low level below the CBR's target

(CPI index and its components, percent, y-o-y)



Source: CBR and Haver Analytics

Figure 15: ... while unemployment rate is at historical minimums *(percent)*



*SA – Seasonally Adjusted

Source: Rosstat and Haver Analytics

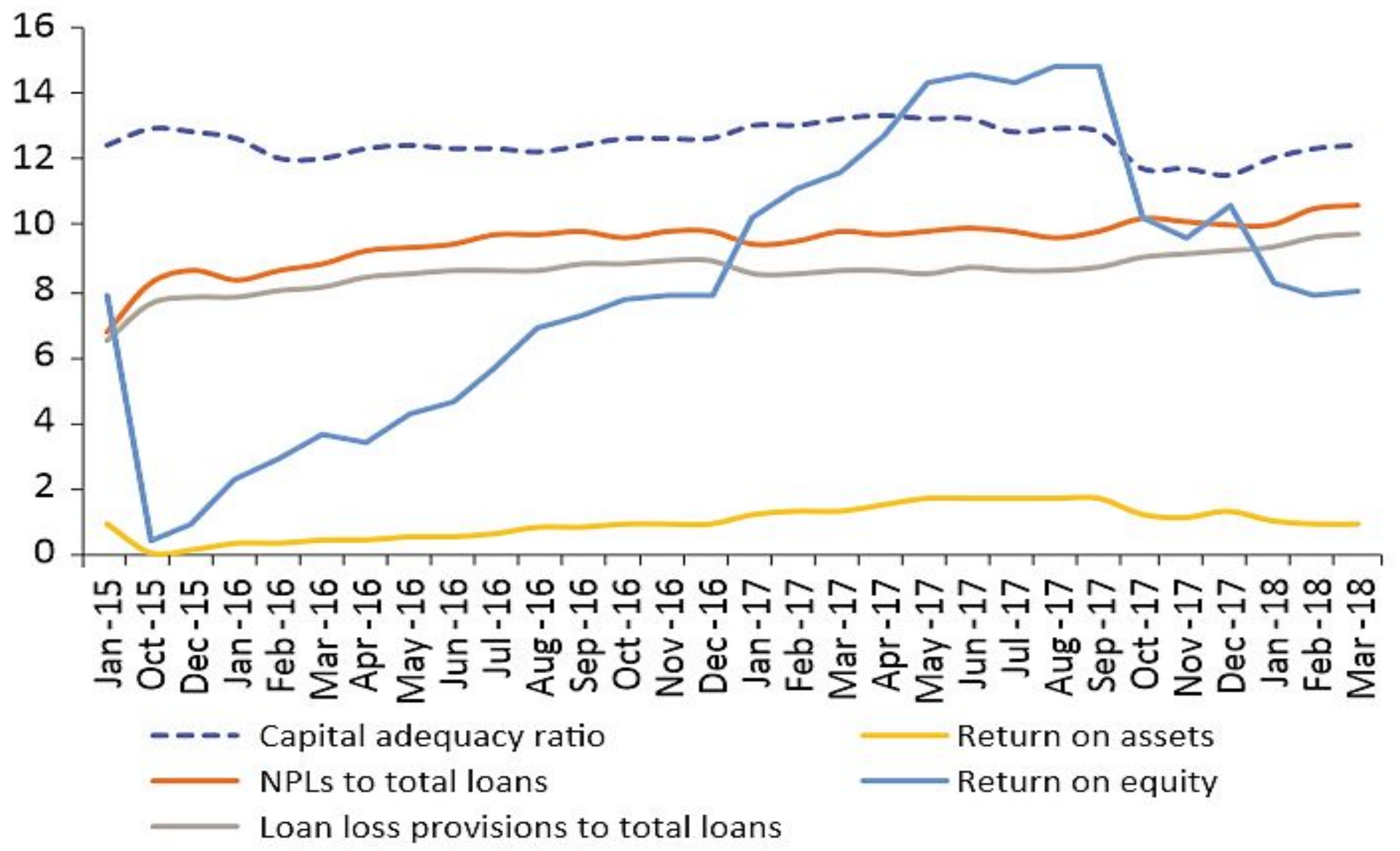
Table 1: External debt of the Russian Federation
(US$ billions)

	1-Jan-16	1-Jan-17	1-Jan-18
Total	**518.5**	**511.7**	**518.9**
Government (w/t CBR)	30.5	39.1	55.8
Corporate	476.3	460.5	448.6
Banks	131.7	119.4	103.4
Short-term	25.3	26.7	30.6
Non-banking sector	344.5	341.1	345.2
Short-term	13.2	13.5	14.2

Source: CBR

Figure 6a: Overall financial sector indicators remained broadly stable

(Key credit and performance indicators, percent)



Source: CBR.

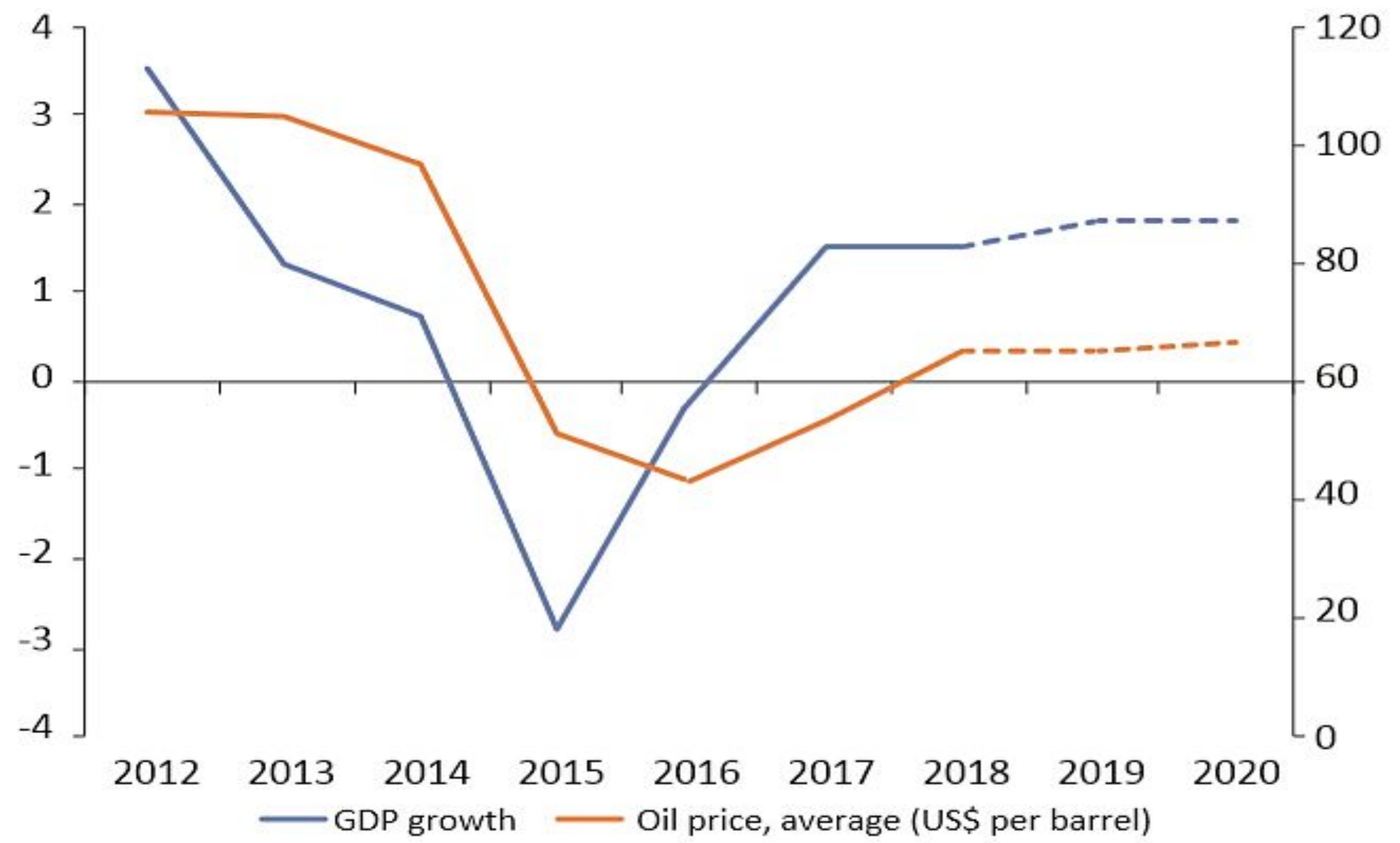
Table 2: Balance of payments, 2013–2017
(US$ billions)

	2013	2014	2015	2016	2017
Current account balance	33.4	57.5	68.8	25.5	35.2
Trade balance	122.3	133.7	111.5	66.4	115.0
Non-oil current account balance	-315.6	-266.9	-134.5	-128.5	-154.5
Capital and financial account	-46.6	-89.0	-69.4	-11.1	-16.3
Errors and omissions	-8.9	8.0	2.9	-4.6	3.8
Change in reserves (- = increase)	22.1	107.5	-1.7	8.2	-22.6
Memo: average oil price (Brent, US$/barrel)	108.4	97.5	54.4	45.9	54.4

Source: CBR

Figure 10a: The growth forecast for Russia for 2018 has been slightly decreased

(real GDP growth, percent)



Source: Rosstat, World Bank

Recession and implications

Recession is difficult for everybody

Unofficial evaluations gave the loss of GDP to sanctions as 1 p.p. of GDP, the rest is “oil”.

Budget is close to Maastricht norms

Devaluation brought further separation of “have” and “have not” in terms of financial stability

Upper strata has purchased “enough”; poor do not have money

Agriculture and Mining keep growing

Real personal income declined, real wages turned up. It is not enough to consumer spending recovery.

Investments are traditionally slow – it is not just %

Conclusion: Russia

- Russia has made the detour from European income distribution to Latin American one in 1990s. We recorded it in 2000 – now it's the stable result of transition.
- Gini coefficient in RF is similar to Anglo – Saxon, but Russia lacks their vertical mobility and entrepreneurship.
- Financially sustainable middle class is within 30% of households - a little change in the upturn of 2000s.
- Distribution in Russia – judging by the income share of top 10% of population – is quite Latin American.
- The oil rent gave the State has some degree of "independence" from income tax-payers.
- **Key issues:** ownership structure and corporate governance; no mass shareholding; oligarchs of 1990s and rigid social structure – the risks of returning poverty.

Literature:

- Voskoboynikov, I. "Sources of long run economic growth in Russia before and after the global financial crisis." Russian Journal of Economics 3 (2017): 348-365.URL: https://rujec.org/article/27998/;

- Mau V., Drobyshevskaya T. "Modernization and the Russian Economy: Three Hundred Years of Catching Up."// The Oxford Handbook of the Russian Economy Edited by Alexeev M. and Weber Sh., 2012.

- Grigoryev L. Russia in the System of Global Economic Relations // Strategic Analysis. Vol. 46. 2016. № 6. Special Issue: Russia in Global Affairs. P. 498-512.

- Mau V. “Russian economic policy: Challenges of growth” Russian Journal of Economics 4 (2018) 87–107;

- The Russian Economy: Modest Growth Ahead. 39 Russia Economic Report 2018 // World Bank Group. URL: https://openknowledge.worldbank.org/bitstream/handle/10986/29913/127254-WP-PUBLIC-ADD-SERIES-JunefinalRussiaEconomicReportENG.pdf?sequence=1&isAllowed=y