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*SYSTEMIC TRAPS: ENERGY OUTLOOK FOR RUSSIA AND THE TYUMEN REGION**

SUMMARY. This article focuses on the analysis of global trends in energy development, where Russia and the Tyumen region act in the context of global dynamics in terms of the theory of natural resource abundance ("resource curse", "Dutch disease"). We consider the energy and raw materials as the base case development scenario for Russia and the Tyumen region, based on the rent distribution chains (E. Gurvich, K. Gaddy, B. Ickes, and N. Suslov). The authors employ the theories of institutional traps (V. Polterovich), traps of absence of confidence (S. Guriev), traps of competitiveness (V. Mau) that have a systemic nature and, therefore, are identified by the authors of this article as systemic traps. The analysis of the database and forecasts about the prospects for international energy markets up to the year 2040 is based on the methodology International Energy Outlook 2013 (IEO2013). It is shown that the all-Russian energy trend is jointly involved in the world's growing trends according to key indicators of production of liquid fuels (oil and other liquid hydrocarbons), coal, natural gas, nuclear power and renewable energy sources till 2040. This means that in the context of the energy trend in the next 25 years, Russia and the Tyumen region as "energy regions" which are "inbuilt" in the global energy context are not endangered. However, as, on the one hand, the well-being of the extracting sector in Russia is associated with access to rent, and on the other hand, for the bias in favor of the commodity sector the retribution in the form of depressive conditions for high-tech industries is inevitable, these factors in the aggregate form a system of traps combining three types of traps: the institutional trap, traps of distrust, and competitiveness traps.

KEY WORDS. Region, energy development in the context of global dynamics, abundance of natural resources, rent, systemic traps, institutional traps, traps of distrust, competitiveness traps.

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The Tyumen region now stands as one of the basic energy regions of Russia, economic specialization in the region is still determined by oil and gas production and electric power industry. According to the operation parameters of its fuel and energy complex, Russia holds a leading position in the world.

Despite the fact that the gross domestic product (GDP) of Russia is only 4.1% of the global one, Russia is considered as a country of great energy power (Table 1).

Table 1

Characteristics of the fuel and energy complex in Russia in 2011/2012 in global measure

Index	Output	Position in the world	Share in the world	Net export
Gas, billion m^3	677.0 / 655.0	1	20.0	173.5 / 179.0
Oil, million tons	517.0 / 518.0	2	12.9	246.0 / 240.0
Petroleum, million tons	240.0 / 261.8	3	6.3	131.9 / 138.0
Electricity, billion kWh	1036.0 / 1070.7	4	4.8	24.0 / 19.1
Coal, million tons	334 / 348	6	4.3	110.3/ 130.0
The volume of GDP according to PPP (purchasing power parity), billion dollars	2414 / 2509	6 / 7	4.1	506.5 / 524.7

Sources: Central Dispatching Department of the Fuel and Energy Complex of The Ministry of Energy in the Russian Federation, the Federal Customs Service, the World Bank, the World Fact Book, CIA (Central Intelligence Agency), the International Energy Agency.

The fundamental and applied issues of the socio-economic development of the Tyumen region rest not only in the national but also in the global economic context. This is due to the fact that oil and gas production and electric power industry as the basic sectors of the Tyumen region, determining its economic specialization and many social implications, have real access to the global market (Figure 1).

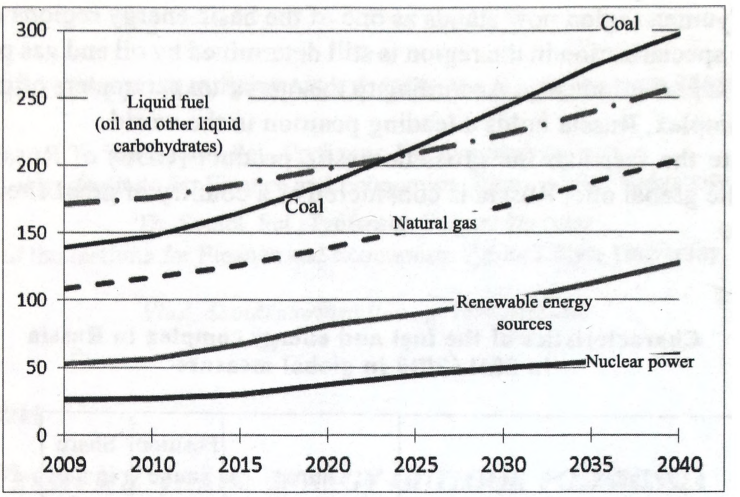

Figure 1. Global energy consumption for OECD countries*.
Actual and forecast energy consumption according to the types of energy sources
for the period of 2009-2040 (in quadrillion BTU)

Sources: International Energy Outlook 2013. With Projections to 2040. July 2013. U.S. Energy Information Administration Office of Energy Analysis. U.S. Department of Energy. Washington, DC 20585. P. 180-181 [1]. The table data presented in this source were transformed by the authors of this article into the above-presented diagram.

According to the IEO 2013 forecast, world energy consumption in 1990-2040, according to the type of fuel: liquid, coal, natural gas, renewable energy and nuclear power, is expected to grow in the baseline scenario **.

* The OECD member countries (OECD) for September 1, 2013 are as follows: The United States, Canada, Mexico, Austria, Belgium, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, Japan, South Korea, Australia and New Zealand. For the purposes of statistical reporting Israel is included in the share of European OECD countries. Organization for Economic Cooperation and Development (OECD) is an international economic organization of developed countries admitting the principles of representative democracy and free market economy.

** Forecasts of global energy demand in the IEO 2013 were based on the methodology, concepts and models of EIA's World Energy Projections Plus (WEPS +). Platform and computer technology WEPS + are iterative algorithms for constructing models of sector-specific demand (consumption) of energy in different countries, using the integrated iterative process for solving problems basing on the study of general and specific energy databases on the grounds of market prices.

WEPS + is used to create a baseline scenario of energy prospects, as well as alternative, based on different assumptions for GDP growth trends and market prices of mining. Platform and computer technology of WEPS + produces forecasts for 16 countries, including OECD and South America (the USA, Canada, Mexico, Chile), European OECD countries, OECD of Asian countries (Japan, South Korea, Australia, New Zealand), Russia, other non-OECD countries (China, India, Brazil and other countries in Central and South America). Currently the prospects are made till 2040. The platform and computer technology of WEPS + can also be used for other types of analysis.

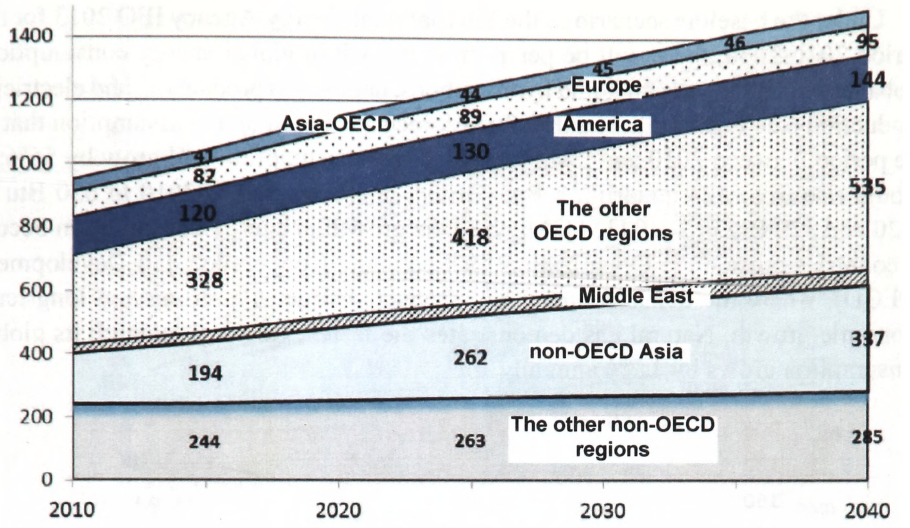

Figure 2. World energy consumption in some countries and regions during the period 2009-2040 (fact and forecast) (quadrillion Btu)

Source: International Energy Outlook 2013. P. 200 [1]. The tabular data presented in the source were transformed with the help of «Excel» into this figure.

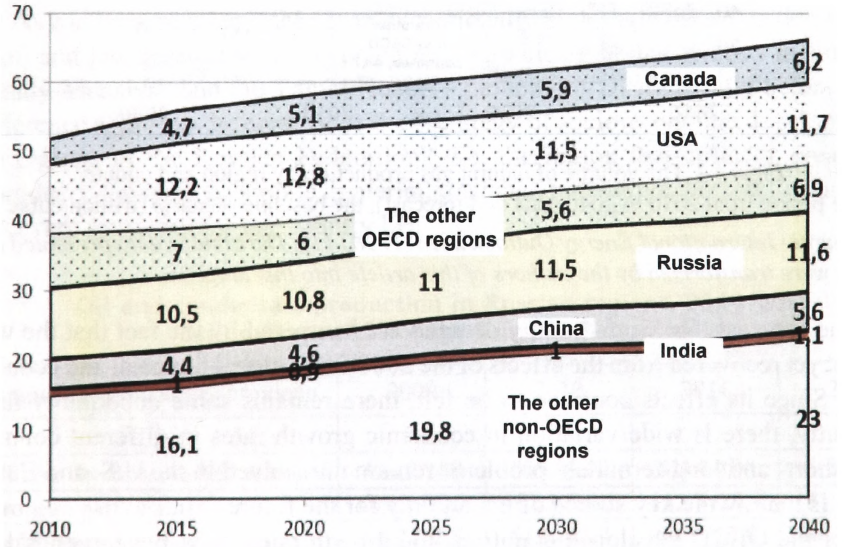

Figure 3. World production of oil and other liquid hydrocarbons in some countries and regions, the period 2009-2040 (fact and forecast); baseline scenario (million barrels per day)

Source: International Energy Outlook 2013. P. 247 [1]. The tabular data presented in the source were transformed by the authors of this article into the diagram.

Under the baseline scenario of the International Energy Agency IEO 2013 for the period 2010-2040, there will be perspective growth in global energy consumption, global production of oil and liquid hydrocarbons, natural gas production, and electricity production (see Figs. 2-5). The IEO 2013 forecast is based on the assumption that in the period between 2010 and 2040 world energy consumption will grow by 56%; it should rise from 524 quadrillion Btu (British thermal units) in 2010 to 630 Btu in 2020 and 820 Btu in 2040 [1, 1]. Much of the growth in energy consumption occurs in countries outside the Organization for Economic Cooperation and Development (OECD), where the demand for energy products is due to a strong and long-term economic growth. Natural gas demonstrates the fastest growing demand; its global consumption grows by 1.7% annually.

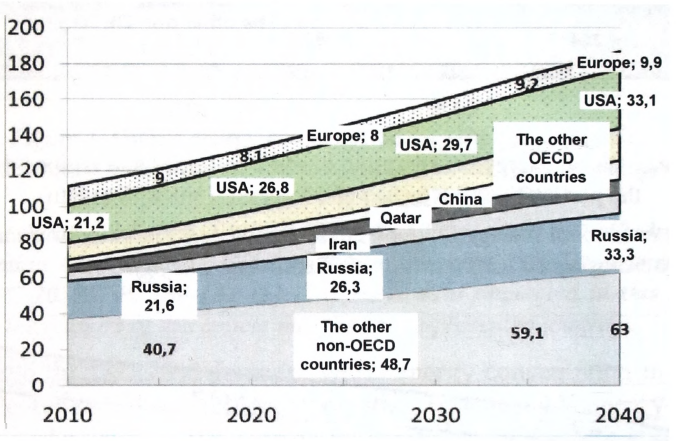

Figure 4. The volume of natural gas production by region and country, for the period from 2010 to 2040 (fact and forecast), the baseline scenario (trillion cubic feet)

Source: International Energy Outlook 2013. P. 283 [1]. The tabular data presented in the source were transformed by the authors of this article into this diagram.

The forecasts for world energy demand are hampered by the fact that the world has not yet recovered from the effects of the 2008-2009 global financial and economic crisis. Since its effects continue to be felt, there remains some uncertainty factor. Currently, there is wide variation in economic growth rates in different countries. Both short- and long-term debt problems remain unresolved in the U.S. and Europe, which is mainly the key source of uncertainty for the future.

For the OECD developed countries, the growth rates vary; but in general they change relatively slowly compared to the developing economies of the countries outside the OECD. From this perspective, the macroeconomic context of the forecasts is extremely favorable for Russia as a whole and for the Tyumen region in particular, which is a major participant in the international energy market and has its own very significant and fairly stable niches (Table 2-4).

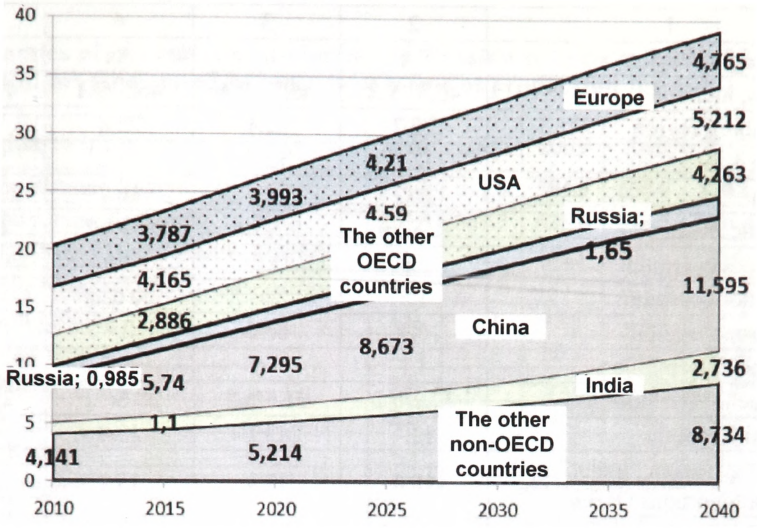

Figure 5. World production of electricity in regions and countries for the period from 2010 to 2040 (fact and forecast), the baseline scenario (billions of kilowatt-hours)

Source: International Energy Outlook 2013. P. 270 [1]. The tabular data presented in the source were transformed by the authors of this article into this diagram.

As can be seen from Table 2, an exceptionally high share of production volumes of oil and gas belongs to the Tyumen region, which together with its members the Khanty-Mansiysk and the Yamal-Nenets Autonomous Districts fully belongs to the "reference areas" in the concept of the "Strategy of socio-economic development of the regions of the Russian Federation", i.e. the region that collects, creates and reproduces the main economic, material, financial, innovative, human resources and other rare resources for our country [3].

Table 2

Oil and condensate production in Russian regions, 2000-2012, million tons / % of the Russian Federation*

Region, as oil and gas province	2009	2010	2011	2012
1	2	3	4	5
Total for the Russian Federation	**494.2/100**	**505.1/100**	**511.1/100**	**518.0/100**
European part of Russia	**149.2 /30.2**	**152.3 /30.2**	**152.7 /29.9**	**151.6 / 29.3**
The Volga region, including	**61.8 /12.5**	**64.1 /12.7**	**69.1 /13.5**	**70.4 / 13.6**
The Republic of Tatarstan	32.4	32.4	32.5	32.7
The Republic of Bashkortostan	11.4	13.4	14.4	14.9
The Samara region	13.1	13.8	14.2	14.8

* In the table the regions where oil and condensate production was less than 1 million tons per year are not indicated. The authors did not manage to find accurate data on the production of oil and gas condensate for all regions of Russia.

1	2	3	4	5
The Volgograd region	3.4	3.4	3.4	3.3
The Urals, including	**45.3 / 9.2**	**45.7 / 9.4**	**46.5 /9.1**	**47.3 / 9.1**
The Orenburg region	20.7	22.4	22.8	22.4
The Perm Krai	12.1	12.5	13.2	13.9
Udmurtia	10.3	10.5	10.7	10.8
North Caucasus	**9.9/2.0**	**9.3/1.8**	**8.6/1.7**	**6.7/1.3**
The Astrakhan region	3.6	4.2	4.6	4.6
The Krasnodar region	1.3	2.0	no data	0.6
The Stavropol region	0.9	0.96	0.9	0.8
The Chechen Republic	1.1	1.0	0.8	0.7
Timan-Pechora, including	**32.2/6.5**	**31.5/6.2**	**28.5/5.6**	**27.2/5.3**
The Komi Republic	13.4	13.1	13.4	13.7
The Arhang. region., including the Nenets Autonomous Okrug	18.8	17.9	15.2	12.3
Western Siberia, including*	**322.1/65.2**	**318.3/63.0**	**316.3/61.8**	**317.2/61.2**
The Tyumen region, including	311.0	306.8	305.5	302.8
- The Khanty-Mansi Autonomous District	270.4 /54.7	265.9 /52.6	262.5 /51.3	259.9 /50.2
- The Yamalo-Nenets Autonomous District	35.3 /7.1	34.5/6.8	34.5 /6.7	36.4 /7.0
- The South of the Tyumen region	2.9 /0.6	5.2/1.0	6.5 /1.3	8.0 /1.5
The Tomsk Region	10.6 / 2.1	10.6 / 2.1	11.6 /2.3	11.9 /2.3
The Novosibirsk region	2.1	1.3	0.9	0.6
The Omsk region	0.8	0.8	0.7	0.9
Eastern Siberia	**7.5/1.5**	**19.7/3.9**	**27.2/5.3**	**35.1/6.8**
The Krasnoyarsk Territory	3.8 / 0.7	12.9 / 2.5	15.1 / 3.0	18.5/3.6
The Irkutsk region	1.6 / 0.3	3.3 / 0.7	6.5 / 1.3	9.9/1.9
Far East	**17.4 / 3.5**	**18.3 / 3.6**	**20.8 / 4.1**	**20.9/4.0**
The Sakhalin Region	15.4	14.8	15.2	14.2
The Republic of Yakutia (Sakha)	2.5	3.5	5.6	6.7

In the Russian economy, the gas sector of the Tyumen region presents a complex set of production facilities for extraction, transportation and processing of hydrocarbon gases of natural origin. The data on natural gas extraction in Russian regions are presented in Table 3. While the oil sector has a fairly wide geographical area, almost 90 % of the gas sector is concentrated in the Tyumen region.

* Oil, gas and condensate production in the Tyumen region began in the 1960s. The highest volume of 406 million tons was reached in 1988. In the 1990s the economic crisis was followed by severe recession which resulted in an almost 2-fold decrease of production volumes. A new stage of development of the Tyumen region began after the year of 2000, when oil companies gained some investment potential and massively began to use more intensive technologies of field development.

Table 3

Dynamics of natural gas production in Russian regions in 2000-2012, Bn. m³ (the rating of regions in terms of production for 2012)

Region, as oil and gas province	2000	2005	2009	2010	2011	2012
Total for the Russian Federation	**584.0**	**641.0**	**584.5**	**650.8**	**670.1**	**655.0**
The Tyumen region, including	**530.4**	**585.3**	**521.6**	**578.5**	**596.4**	**576.4**
- The Khanty-Mansi Autonomous district	20.1	27.5	36.3	36.2	36.6	36.2
- The Yamalo-Nenets Autonomous district	510.3	557.8	485.3	542.3	559.8	540.2
The Sakhalin region	1.9	2.0	17.5	24.3	25.7	27.4
The Orenburg region	25.9	21.0	20.2	21.1	20.6	20.4
The Astrakhan region	9.8	11.9	9.5	11.8	12.0	12.1
The Tomsk region	2.6	5.0	4.3	4.0	4.3	4.6
The Komi Republic	4.1	3.5	3.2	3.3	2.7	2.4
The Irkutsk region	-	-	no data	no data	1.1	2.4
The Krasnoyarsk Territory	-	0.8	no data	no data	2.2	2.4
The Republic of Yakutia (Sakha)	1.6	1.6	1.9	1.9	2.0	2.1

Sources: [2], summarized by the authors.

The overall increase in the cost of energy resources, including natural gas, occurred in the context of rising oil prices. The gross natural gas production increased before 2011, but further a very sharp decline started. Marketable natural gas is produced mainly in the Yamalo-Nenets autonomous district. In 2012, in YaNAD 540.2 billion m3 of natural gas was produced, which is 3.5% less than in 2011.

The overall decline in natural gas production is linked with its production decrease in the enterprises of JSC "Gazprom". This, in turn, is due to a decrease in Russia's gas exports abroad.

Table 4

Electricity production in the world (billion kW·h)

	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
China	2371.8	2800.0	3256.0	3300.0	3451.0	4206.5	4604.0	4744.0
The USA	4250.0	4280.0	4370.0	4330.0	4110.0	4325.9	3953.0	3900.0
Russia	953.1	995.8	1015.3	1040.4	992.1	1038.0	1054.9	1064.0
Japan	1025.0	1008.0	991.0	974.0	957.0	1145.3	937.6	937.6
India	579.4	615.5	651.6	687.7	723.8	922.2	835.0	835.0
Canada	661.6	651.4	641.2	630.9	620.7	629.9	604.0	604.0
Germany	609.6	605.6	601.5	597.5	593.4	621.0	556.0	556.0
France	543.6	541.6	539.7	537.7	535.7	573.2	510.0	510.0
Brasil	372.6	389.2	405.7	422.3	438.8	484.8	509.0	509.0
The Republic of Korea	150.0	190.0	220.0	330.0	440.0	497.2	459.5	459.5
Great Britain	396.4	389.5	382.5	375.6	368.6	381.2	346.0	346.0

Sources: US Energy Information Administration (EIA), Ministry of Economic Development of the Russian Federation, Russian Statistics Service (Rosstat).

As can be seen from Table 4, since 2011, China has become the leading country in electricity production, which is the most important indicator of the development of its power industries and the country as a whole. The world's second largest energy producer is the U.S., Russia takes the third position. However, the level of electricity production in China and the U.S. cannot currently be reached by any other country. Other countries/regions of the world are far behind them, producing 3-4 times less energy. Electricity production in the Khanty-Mansi Autonomous District – Yugra is sufficiently large compared with production in Russia and is comparable with the largest suppliers of electricity (Table 5). The forecasts of the Global energy agency IEO 2013 are based on the fact that Russia will be able to provide the greatest amount of additional energy supply capable of meeting the increasing demand from the non-OECD countries of Europe and Eurasia. Net export of Russia is growing by an average of 2.4% per year, which is an increase from 6.6 trillion cubic meters in 2010, and is expected to grow up to 13.5 trillion cubic meters by 2040 [1, 59]. However, if we examine the factual data on the output of the gas sector in Russia, its capabilities are very risky, and JSC "Gazprom" has been repeatedly recognized by various international agencies as one of the most inefficient owners. Along with electricity, oil and gas have become the foundation of the Russian economy in the 1970s, especially with the development of gigantic fields in the Tyumen region. In the 1980s the first "peak earnings" from the production and sales of oil and gas were reached: oil and gas sector revenue was $ 400 billion [5]. Its decrease by almost a half by the mid-1980s largely contributed to the collapse of the USSR.

Table 5

Electricity production in the Khanty-Mansi Autonomous District — Yugra comparing to the production in Russia as a whole and to other top regions in electricity production — the first ten regions, billion kW·h

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
1	2	3	4	5	6	7	8	9	10	11	12
The Russian Federation	1082.2	860.0	877.8	953.1	995.8	1015.3	1040.4	992.1	1038.0	1054.9	1064.0
the Khanty-Mansi Autonomous District – Yugra and the Tyumen region*	61.4 73.1	52.0 63.1	53.5 63.4	66.4 78.1	71.3 84.7	74.4 88.6	75.2 90.5	76.8 91.1	80.2 94.9	85.2 101.0	86.5 96.5
Moscow and The Moscow region**	50.3 27.6	49.7 22.3	48.3 20.6	51.7 23.8	53.9 25.3	54.1 25.1	52.8 27.6	49.8 26.2	52.0 30.1	53.0 31.9	 80.6

* Rosstat has registered Yugra-the KMAD and the Tyumen region twice – at respectively 2nd and 1st positions in the Russian Federation. In 2012, Tyumen energy complex developed 96.5 billion kW·h.

** Moscow and the Moscow region in 2012 merged into a single energy complex for objective geographical and economic reasons. In 2012 Moscow energy complex developed 80.6 billion kW·h.

1	2	3	4	5	6	7	8	9	10	11	12
The Irkutsk region	67.1	59.5	54.1	56.7	58.2	59.7	61.4	57.9	62.6	60.7	62.0
The Leningrad region and St. Petersburg*	37.9 13.2	26.4 9.3	30.8 8.2	37.7 10.7	37.0 11.6	38.5 12.6	41.5 13.8	39.1 15.1	41.8 15.0	40.9 18.2	56.8
The Sverdlovsk region	60.6	39.0	43.7	46.2	48.8	47.1	52.6	49.4	52.4	52.2	53.5
The Krasnoyarsk territory	51.8	48.0	50.9	52.4	54.5	57.1	59.8	60.0	61.8	57.8	46.2
The Saratov region	27.3	23.9	37.2	40.4	41.4	41.6	42.8	42.3	42.1	42.9	41.8
The Tver region	27.7	17.7	22.3	26.3	31.2	32.7	32.5	31.0	32.9	33.9	37.9
The Perm Krai	32.1	24.3	22.6	28.0	28.5	31.9	32.2	28.8	29.7	31.4	30.9
The Kursk region	26.0	18.9	23.1	28.3	28.5	25.6	24.1	28.8	29.4	30.1	30.5

Sources: [4], summarized by the authors.

At the turn of the XX and XXI centuries Russia again faced the boom in oil and gas revenues and their new peak was reached in 2008 – about $ 650 billion. In 2010, this figure was $ 500 billion. The boom of oil and gas revenues decreased, but the volume of oil and gas rent in 2010 made a considerable amount of about $ 400 billion, or 27% of the GDP. Almost half of the total oil produced was directly exported: in 2011 * – 242 million tons, or 47.4% of production, and the rest was processed, though after processing about 130 million tons of oil was exported [6].

According to the Federal Customs Service of Russia in 2012, Russian exports made $ 524.7 billion, while in structure of Russian export was still dominated by a group of "mineral raw materials and fuel". In 2012, its share was 71.4%. Russian oil export decreased by 4.4 million tons and was 240 million tons, export of petroleum products increased by 5.9 million tons and was 138 million tons (which was a new all-time high). In 2012, the country exported 71.4% of total oil produced [7]. Natural gas is exported to a lesser extent: in 2011, 203 billion m^3 was exported (30.3% of production), and in 2012 its export amounted to 179 billion m^3, but it is still too much. In addition, in 2012, Russia exported 130 million tons of coal (coal exports reached a new historical maximum), 25.5 million tons of iron ore (export almost repeated the second result in the history in 2007); electricity exports amounted to 19.1 billion kW·h [5].

Russia, as a world energy power, will continue to further expand its share in this sector. One point of view is that the abundance of resources, their export can and should stimulate economic development in Russia. Another point of view is that Russia continues to be immersed in a situation of "resource curse".

In the raw materials forecasts of economic development of Russia the prospects are set on the operation of primary competitive advantages that are constituted by the presence of concentrated natural resources: minerals, forests, hydropower resources, fuel and others. The emphasis is made on oil, gas and their preferential export; thus

* St. Petersburg and the Leningrad region merged into a single energy complex for geographical and economic reasons, and in 2012 developed 56.8 billion kW·h.

providing simple divisions, the products of which are also mainly exported. These options are supported by strong interests of elite groups. Not only Russian elite groups such as oil and gas companies, the government, including law enforcement agencies, industry lobby groups, elite members of the military-industrial complex, receiving orders for products paid for by rental income, are interested in energy resource development strategies.

Representatives of infrastructure sectors including electricity, transport complex, whose demand for products and services largely depends on the welfare of industrial enterprises, supported by natural resource rent, are interested in raw material strategies. Energy and raw materials strategy is also supported by the majority of Russian society, accustomed to living at its expense and waiting for its further division [8-11].

In Russia the amount of oil and gas is enough to suppress other industrial sectors, yet too little in order to ensure the normal level and quality of life [12, 4]. The problem here is the emergence of an institutional trap: the impact of rent is accumulated; its influence persists after it ceases to be retrieved. In the processes, aimed at fighting appropriating the rent and adapting it to the interests of certain groupit, is accumulated in the rent-seeking behavior, which becomes a stereotype of life. In this case, resource rents are considered to be "the first prize" and mean everything [10].

If the rent is really high and the rent-seeking activity (lobbying, corruption, seizure of assets, "raider assaults") is not suppressed, it is advantageous for investors to invest in rent-appropriating. In conditions of low level of public protection of property rights the rich provide themselves with private protection and receive additional benefits from the struggle for rent (rent-seeking behavior), which suppresses the institutional development [8]. An important channel of the resource curse manifestation is the negative impact of resource abundance on the institutional quality [9].

In accordance with this view, revenues from resource development in the case of the resource boom increase so rapidly that it becomes profitable to invest in the division of rents, rather than in productive activities. Lobbying, unfair competition, and corruption increase slowing down the long-term economic growth. Insufficient institutions reduce economic growth and retard development. The competitiveness trap also exists in cases when expensive labor is combined with insufficient institutions [13]. In addition, there is a connection of low quality of institutions with the existence of an edge for propensity to corruption. The main factor generating corruption is the inevitable redistribution of rents in raw appendages.

Since the effectiveness of the use of fuel resources in developed (OECD) countries is higher than in developing ones, in accordance with the imperatives of market equilibrium, resource-rich developing countries should select raw materials specialization. Thus, there is consolidation of resource-rich countries in the niche of "underdeveloped", which again finds its action in an institutional trap.

The same trap mechanism explains the stable equilibrium state of the system with insufficient institutions. In this case, there is demand for such institutions from the very groups of people with rent-seeking behavior. Reciprocal and related interaction between the various institutional traps as equal inefficient states of the economic

system, manifestations of the elements of the resource curse, sustainable socio-economic conditions accompanied by insufficient institutions, brings us to the conclusion that this condition is profitable for leaders of developed countries as well as the political leaders of the countries being raw materials appendages. On the one hand, the leaders of developed countries maintain a competitive advantage of their industry sector over the competitive sector of oil and gas exporters, contributing to the further scientific and technical degradation of Russia in particular (as their potential rival). On the other hand, they withdraw from participation in solving the global problem of resource curse, which requires sharing their wealth.

At the same time, the political leaders of the countries acting as raw materials appendages are satisfied with the model of the export-oriented Russian economy, mainly due to fiscal measures suppressing investment activity.

Russia has become heavily dependent on natural resource rents generated in the extractive sectors. Energy and raw material development strategy is supported by a complex of interests of ruling elites, industrial and infrastructure sectors of the economy, based on the existing distribution chains of rents [8-10]. In this case, to overcome the inertia of energy and raw materials development becomes virtually impossible. From all stated above one can make a conclusion that the transition to development based on innovation, can only begin in conditions of dramatic reduction of the volume of natural resource rents [14, 79].

In this case, again referring to Figures 1-5 and Tables 1-5, we see that everything stated above is a combination of different traps that will last for a very long time. All-Russia energy trend is inscribed in all the world's growing trends in key indicators of production of liquid fuels (oil and other liquid hydrocarbons), coal, natural gas, nuclear energy and renewable energy resources by 2040. This means that in the context of the energy trend in the next 25 years both Russia and the Tyumen region as an energy region embedded in the global energy context, on the one hand, are not endangered.

However, since, on the other hand, the extracting sector in Russia is associated with access to the rent and skewing towards the commodity sector, which is inevitably followed by retribution in the form of depressive conditions for high-tech industries, in coalition these factors form a system trap that combines the above three trap types: institutional, mistrust and lack of competitiveness.

In the latest rating of the relative competitiveness of countries, compiled by the World Economic Forum [15], out of 148 countries participating in the survey, Russia ranks 133rd in protection of property rights; 125th in the impact of tax policy on the propensity to invest, 122nd by the possibility to rely on the police; 120th by the effectiveness of the legal system in disputes with regulators; 119th in the degree of independence of courts; 118th in the effectiveness of the legal system to resolve disputes; 113nd by the level of embezzlement; 112th in the country's ability to retain talent, 109th in terms of corruption degree, and so on.

The causes of the slowed-down development of the Russian economy are obvious: a sharp decline in private business investment due to the continually deteriorating

investment climate. Reducing business confidence in authorities leads to capital outflow from the country. Russia has fallen into a system trap – a state when global mistrust of people to one another generates global distrust to both decentralized market and the state.

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