

# Paradoxes of the region's economy and searching for the ways of restructuring

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**Abstract.** According to the authors of the article, establishing of effective policy of investment support of restructuring of the regional economy and also functioning of the regional investment and construction complex as a main instrument of the realization of this policy, are insufficiently investigated in modern scientific literature. In this regard, there are some shortcomings in the current legal and regulatory environment which allow the market participants to avoid their obligation to follow the principles of scientific and technological advance and to introduce advanced technologies in their field of activities. The level of methodical support of solution to the problems connected with the investment support of structural transformations in national economy is insufficient and significantly fails to keep pace with the world trends. In this regard, not the most effective solutions in the field of investment support of transformations of the economic structure are chosen very often. Much of the general findings that are contained in this research are formed on the basis of the analysis of the official statistics for the Tyumen region that is the main oil-producing region of Russia and play an important role in the economic development of the country.

## 1 Introduction

Dictionary of foreign words the notion of "paradox" (Greek paradoxos) defines as unexpected phenomenon that doesn't match the usual views. The authors of the article seems appropriate to show some of the paradoxes associated with the Russian economy on an example of a particular region. Taking into account the deepening of investment crisis in the Russian Federation in general and in the most of its regions, it can be said that the problem of formation of effective investment policy in the sphere of restructuring of the region economy not only did not lose the relevance, but also it was transformed to one of the most important conditions of ensuring intensive economic growth.

The economic mechanism functioning in the investment sphere has been legitimately criticized in connection with the prevailing trend of annual reduction in investment since 2014 and low return of the capital investments undertaken with the expense of various sources of financing. In spite of the fact that the need of the revival of investment activity is constantly noted in program documents and acts of both regional [1-8], and federal level, the real results do not achieved.

As shown by the data of Rosstat, the gross investment in fixed capital in the Russian Federation showed reduction in productive investments more than tripled and non-productive - 1.5 times from 2000 to 2017 in adjusted prices. Negative dynamics of investment activity in the real sector of economy led to great wear and tear and obsolescence of fixed assets. The boom of import deliveries of fixed assets took place in 2003-2007. In this regard, by different estimates there are from 50 to 70% of fixed assets for production purposes demand the immediate replacement to date. If to consider that the wear is not compensated by new capital investments, then current situation leads to significant strengthening of technical and technological backwardness practically of all sectors of economy of the Russian Federation. It has a particular importance for a construction complex as the sphere of production of goods focused on creation and updating of production capacities and objects of social and transport and logistics infrastructure.

The sectoral investment activity is distinguished by considerable unevenness. Investment activity is higher in the extractive sectors and spheres of natural fuel and energy monopolies against the insufficient investment of hi-tech and knowledge-intensive sectors of economy. Growth of a share of raw materials and fuel (9.5% – 15%) and also materials and intermediate goods (44.5% – 51.8%) in all industrial products – at reduction of a share of imports of machinery (13.6% – 9.2%) and non-food consumer goods (28.6% – 11.1%) became one of consequences of changes in structure of investments into fixed capital for the period 2014-2017. It reinforces the established structural disproportions and preserves mainly raw type of economy.

The disproportions in the level of regional economic development deepen because of extremely uneven distribution of regional investment activity. According to the data of the Center on the Prevailing Economic Situation, the significant reduction of capital investments is observed more than in a half of regions of the country. Characteristic feature of transformation of the Russian economy for 30 years is that it occurred in the lack of accurately formulated strategy of development for the country. As a result, the spontaneity of such transformation takes place. This is evidenced by the fact that the structure of investments into fixed capital by the sectors of economy and the structure of industrial production change. The violation of the balance between the state and market and spontaneous regulation of investment process in favor of the first led to decrease in a share of the private sources in investment.

The investment sphere is financed from the federal and territorial budgets actually by the leftover principle. The rate of implementation of the federal program of investment that is the main tool of the national investment policy is in an interval of 10 - 20% in recent years. Restructuring is intended to provide the accumulation of necessary investment potential. However, it should be noted scarcity of funds that could be used on structural transformations. According to the experts, the minimum need for investments that could show positive results of restructuring in short terms makes 15 – 20 bln. dollars. The possibilities of the private Russian investments do not exceed 4 – 5% of this sum for the next 3 – 4 years.

The lack of control of financial outflow from economy leading to exhaustion of liquid resources in domestic market is the main reason of shortage of financial resources at all levels. In normally functioning economic system the circulation of the capital has the closed character: depreciation is spent for needs of simple reproduction, and profit – for investments and formation of technical and strategic funds. In our country the chain of a circulation is opened and a considerable part of depreciation charge and profits does not return to the sphere of production of goods, and the private companies remove it outside the Russian market of the capitals with the State participation. In many sectors of economy including in construction, real investments for the considered period were nearly 3 times

less than the sum of the added depreciation. In most of sectors of economy not only expanded, but also simple reproduction of fixed capital was not carried out. It is impossible to solve problems of transition to economic growth due to scientific and technical progress, restructuring and technical modernization of the sectors of economy under such circumstances.

The possibility of overcoming the crisis in the sectors of economy and regions of Russia is more and more connected with considerable accumulation of investment activity not only in the center, but also in regions, with creation of prerequisites for the effective use and regulation of investments [9-14].

In this regard, during the deepening of economic reforms, the problem of acceleration of restructuring of economy through considerable accumulation of the investments and increase in their effectiveness with active use of a wide range of tools of investment policy moves forward. Its main task consists in elimination of the collected deep structural deformations. The considerable part of the recommendations and conclusions that are contained in this research are developed on the basis of the analysis of investment and construction processes in the Tyumen region which is the main oil-producing region of Russia and play an important role in the economic development of the country.

## **2 Literature review**

The formation of the effective policy of investment support of the restructuring of economy of the region and also functioning of the regional investment and construction complex as main instrument of its realization, in our opinion, are insufficiently investigated in modern scientific literature. This problem does not allow to regulate activity of participants of the market from a position of the joint liability for inefficiency of implementation of investment policy in regions in ensuring scientific and technical breakthrough of the Russian economy properly. The level of methodical support of solution to the problems connected with the investment support of structural transformations is insufficient and significantly fails to keep pace with the requirements of practice. In this regard, not the most effective solutions in the field of investment support of transformations of the economic structure are chosen very often. The development of methodical bases of the investment activity management is a key issue of enhancing its effectiveness.

It must be noted that the questions of the research of problems of restructuring of the regional economy, its investment support in the conditions of the urgent need for transformations and the crisis of investment sources are insufficiently developed in domestic economic science. All above caused the relevance and the choice of a subject of this publication. The crisis that developed in the investment sphere in regions of Russia after 2014 is caused by a variety of reasons among which experts note the following.

1. The lack of political and economic stability and predictability; high level of investment risks; inability of authorities to provide the law and order and, as a result of it, low level of credibility of potential investors to economic partners and to the state; lack of macroeconomic balance; undeveloped market infrastructure.

2. Uncertainty of the restructuring of economy which main task consists in elimination of the collected deep structural deformations which are expressed in hypertrophied development of defense industry complex and a mineral and raw complex, poor development productive, transport and logistic and social infrastructure, deformation of technological structure of production, distortions in regional structure of economy which is the base of investment policy. Now the Government of the Russian Federation in the forefront during deepening of economic reforms puts the acceleration of the restructuring of economy.

However, in spite of the fact that the task of restructuring was repeatedly set in government programs, it did not begin as it is not supported with either the theory, or the legislative base, or the organization, or finance. There is no accurately worked comprehensive state target program that would provide large-scale restructuring of economy, there are also no effective target programs at the level of the region economy. Lack of accurately formulated strategy of the development for the country (three scenarios of the development are formulated: the economy without development of the effective tools and an algorithm of their realization) led to spontaneous transformation of industry structure of investments and to the low level of effectiveness of the investment activities.

3. The necessary condition of the restructuring and renewal of economic growth is accumulation of the investments due to voluntary return of the capital to the country and increase in their effectiveness. However, the sharpest shortage of financial resources became universal at all levels. At federal and regional administrations it is expressed in chronic budget deficit, at the enterprises – in a lack of current assets and resources for investments, at the population – in low income, small savings. The lack of control of financial outflows from economy leading to exhaustion of the national resource is considered one of the main reasons for such shortage.

The domination of the financial and credit sector represented by large commercial banks over real economy play an important role in a complex of the reasons. They concentrate their activity on the operations with securities, currency, etc., almost without investing money in the real investments.

The private capital is poorly interested in investment owing to high political risks.

In works of various authors different factors which had and have an impact on the deterioration in the state in the investment sphere are formulated: low volumes of the foreign capital as a result of underestimation of wishes of foreign partners and investors that demands significant transformations in the system of professional project management and programs at the federal and regional levels; unreliability of sources of financing; not readiness and lack of a full package of the acts directed to regulation of investment and economic activity; decrease in controllability from the state at insufficient development of market mechanisms; lack of the mechanism of motivations to the long-term investment of capital. The sharp slowdown of investments; the changes in the system of the financial and credit relations which limited access to investment resources; the general decrease in investment activity caused by economic and political instability in the country; decrease in effectiveness of investments is indicated the need of radical reorganization of the management of investment activities both on federal, and at the regional level. The restructuring of economy is impossible without attraction of large investments, first of all at the expense of internal sources and until the problem of financial outflow will not be solved. And it is fraught with negative consequences as in the weak economy deprived of sufficient investments, progressive technologies and innovations, structural changes anyway happen, but they are spontaneous and uncontrollable, being result of contradictory devices of economic entities to internal and external conditions. An essential part of such changes leads to deterioration in structural parameters of economy.

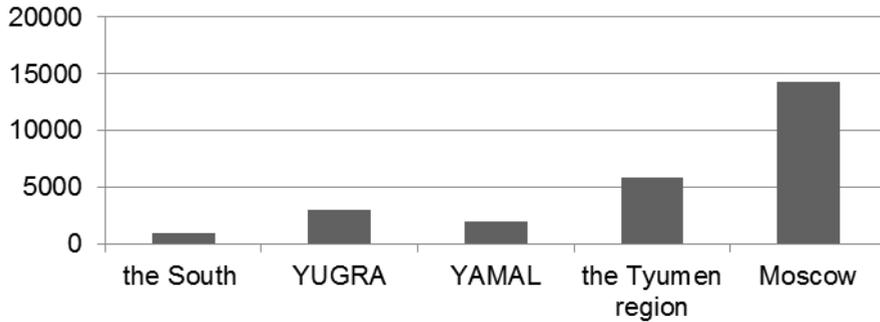
### **3 Results of approbation**

The choice of the Tyumen region with the areas as an object of the research has been dictated by the need of purposeful regulation of investment processes for the sphere of restructuring of the regional economy and increase in effectiveness of the investment decisions for this sphere in modern conditions of managing [15-20].

It is necessary to refer some issues to the main shortcomings of the developed structure of economy of the Tyumen region. They are: absolute prevalence of raw structure of

products (oil, gas, the wood ...) and a low share of products with high rent of treatment; lack of the productions which are engaged in release of household appliances, equipment for processing of wood, quality construction materials, etc.; very high dependence on use of exhaustible natural resources from which the rest tends to deterioration in qualitative characteristics. Thus, one may say, that there is an objective need to restructure the region economy.

The Tyumen region with the autonomous areas is exceeded in the contribution to formation of the gross domestic product (GDP) of the country only by Moscow. Information on the gross regional product (GRP) of the region is provided in figure 1.



**Fig. 1.** Average annual level of the gross regional product during 2016-18, billion rubles.

More than 50% of GRP of the region (including autonomous areas) are formed due to mining. However, the oil production indicator in the region decreases every year.

In the formation of GRP of the South of the Tyumen region, the oil production sector of the economy does not play such important role, as in autonomous areas. Oil production is conducted only in the Uvat district, and gas production is not conducted absolutely. As of 2016 GRP of the South of the Tyumen region is created at the expense of the industrial sector for 31.5%. The industry share in GRP of the South of the Tyumen region grew more than by 3 times for the last 10 years. The leading role belongs to the processing productions, more than 5% of the Russian investments into processing are carried out on the South of the Tyumen region. The shares of the main spheres of the industry of the Tyumen region in GRP are presented in table 1.

**Table 1.** The structure of GRP of the Tyumen region (percent).

The type of economic activity	2015			2017		
	the South of the Tyumen region	Khanty-Mansi Autonomous Area (YUGRA)	Yamal-Nenets Autonomous Area (YAMAL)	the South of the Tyumen region	Khanty-Mansi Autonomous Area (YUGRA)	Yamal-Nenets Autonomous Area (YAMAL)
Agriculture	4.9	0.2	0.1	4.7	0.3	0.1
Mining	14.4	67.7	55.7	14.4	66.1	54.5
Manufacturing	14.7	2	2	13.7	2	1.8
Production and distribution of electrical energy, gas and water	3.1	2.8	1.8	3.1	3.1	1.8
Construction	6.9	5.1	11.9	7.1	5.2	17

In the formation of GRP of the South of the region the shares of manufacturing and mining are approximately identical. In YAMAL the second most important for a contribution to GRP is the sector of construction. In YUGRA - it is mining. The income from taxation on mining of the region forms about 40% of the tax base of the country.

Following the results of 2017, the index of industrial production of the Tyumen region totaled 101.8% that is below the index of industrial production in general across the Urals Federal District - 102%, and more, than in the Russian Federation – 101.0%. The data on indexes of industrial production are provided in the table 2.

**Table 2.** The indexes of industrial production across the Tyumen region, the Urals Federal District and Russian Federation (percent).

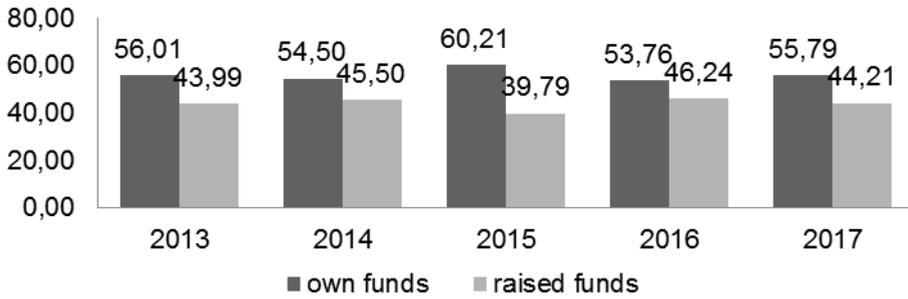
The constituent entity of the Russian Federation	2012 year	2013 year	2014 year	2015 year	2016 year	2017 year
the Tyumen region	99.3	100.8	99.8	100	102.3	101.8
incl.: YUGRA	98.6	98.4	98.7	97.5	100.5	98.7
YAMAL	99.5	106.2	100	104.5	106	109.6
the South of the Tyumen region	113.2	115.1	112.9	109.7	104.2	102.6
the Urals Federal District	101.6	101.1	100.7	98.1	101.8	102
Russian Federation	103.4	100.4	100.7	96.6	101.1	101.0

Receiving the subsidies of Ministry of Industry and Trade of Russia for compensation of a part of costs of production and realization of pilot production lots contributes to the development of the industry in the territory of the Tyumen region. The compensation corresponds to 50% of actually incurred costs of payment of raw materials, engineering development and design, acquisition of the equipment and tools, logistic operations, etc.

In the structure of industrial production of YUGRA and YAMAL the mining prevails, and in the structure of the industry of the South of the Tyumen region the manufacturing prevails. The economy of the South of the Tyumen region is more diversified and independent of raw material resources today, than the neighboring autonomous areas. In the Tyumen region the creation of new types of productions (for example oil and gas chemistry, biotechnologies, glass production, ferrous metallurgy) can be considered the reserve of growth of economic potential.

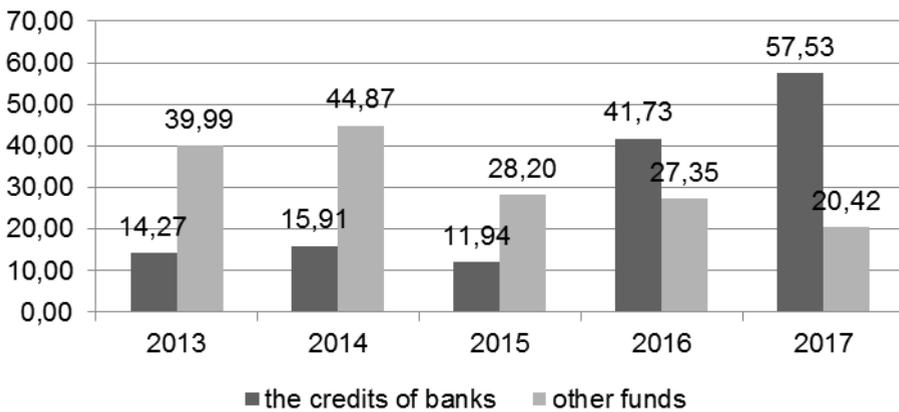
The investments into fixed capital also carry a trend of positive growth only since 2016. In 2017 the volume index of the investment into fixed capital in comparison with the same period of last year totaled 104.9%, the investments per capita of 629760 rubles. The extractive industries had the greatest inflow of investments in 2017 – 41.9%, extraction of fuel and energy minerals – 43.4%, transport and communication – 5.7% processing productions – 3.5%. The largest volume of investment into the Urals Federal District is attracted in economy of YUGRA and YAMAL (77.8%). In the specified constituent entities of the Russian Federation the share of the investments into extraction of fuel and energy minerals from total amount totaled: in YUGRA – 65.8%, in YAMAL - 28.5%.

Own funds prevail in the structure of investments into fixed capital of the organizations. The data is provided in figure 2.



**Fig. 2.** The structure of the investments into fixed capital of organizations, percent.

The share of the credits increased in the structure of the raised funds (figure 3).



**Fig. 3.** The share of the credits of banks and other funds in the structure of investments into fixed capital of the organizations, percent.

The share of the credits obtained from a bank have increased for the last 5 years and now it is more than 50% of investments into fixed capital of the organizations while the investments of other funds which made the main share of investments in 2013 be reduced to 20.42%. The increased role of credit funds in the structure of investments into fixed capital of the organizations can be connected with the introduction of measures of the state support of the industrial enterprises and organizations rendered in the form of compensation of a part of costs of payment of percent on the loans agreement. One more factor affecting the increased demand for the credits is a gradual interest rates reduction on banking products.

The consolidated budgets of the constituent entities of the Tyumen region are generally formed from the receipt of four types of tax: company income tax, personal income tax, wealth tax and excises. The information on tax revenues in the consolidated budgets of the constituent entities of the Tyumen region is provided in table 3.

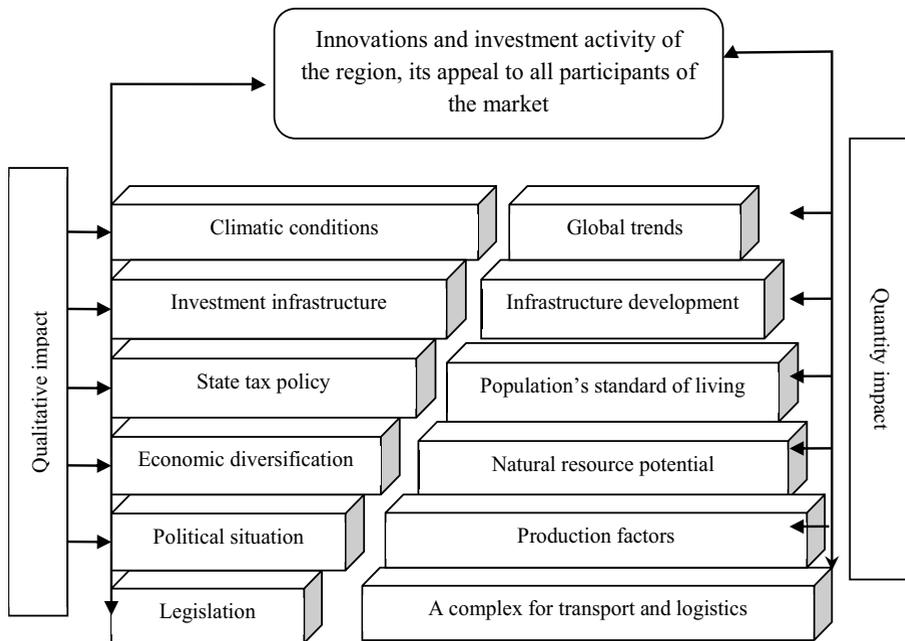
What is the situation with the advanced technologies in the Tyumen region? Much attention is paid innovative development of the region. The share of innovative products in GRP of the Tyumen region varies within 7-8% lately. The volume of innovative services in the structure of the shipped goods increased to 3.3% by 2016 (in the USA it is at the level of 12%; in Europe it is at the level of 22%) while in 2010 totaled 0.9%. The number of the developed advanced technologies increased to 34 from 22 for the same period last year. There are some issues that are possible to carry to the factors constraining innovative development of the region.

**Table 3.** The main tax revenues of budgets in 2017 (billion rubles).

The type of income	the Tyumen region (without autonomous areas)	YUGRA	YAMAL
Company income tax	87.96	45.2	54.2
Personal income tax	20.42	49.8	35.2
Wealth tax	10	60.6	64.4
Excises	5.08	5.5	1.9

They are: the weak system of stimulation of research activity in educational institutions, the insufficient level of integration of regional scientific centers with the activity of the world centers of innovative development, weak effectiveness of involvement in a turn of intellectual and technological resources, lack of interest of representatives of a business sector in implementation of the projects which are demanding big investments and having a long payback period, because of existence of the corresponding risks of loss of invested funds.

Let's formulate the main groups of the factors capable to have an impact on the readiness of the regional economy to the structural transformations according to world trends and calls (figure 4).



**Fig. 4.** The systematization of the factors defining the need for restructuring of the regional economy.

The indicators rendering positive influence on the capacity of the region and limiting its development belong to the each group of the factors. For example, the qualitative impact of such block as "legislation" can be considered as implementation of the state programs directed to the improvement of the investment climate and standard of living of the population and as actions of the government in the sphere of taxation (withdrawal from the budget of MET and 1% of income tax).

In general, the analysis of the readiness of the Tyumen region for structural reboot of economy and also the analysis of the factors having an impact on the formation of the capacity of the region and its investment attractiveness allow to draw a conclusion that the

Tyumen region is rather competitive region by the international standards of the 2000s. The region has the considerable natural and resource potential and advantageous geographical location, provides the high income of the population employed in the oil and gas extraction sector of economy, has the reserves of growth and development. However, limiters and risks of the development are also inherent in the region. Decrease in the specified risks is possible only within realization of actions for structural reboot of the regional economy.

## **4 Conclusion**

High rates of economic growth and socio-political stability of the constituent entities of the Tyumen region nominate it to the positions of the donor region of the Russian budget for several years. Great contribution of the Tyumen region to the formation of GDP of the country, growth of investment streams to region economy, vigorous foreign trade activity, the powerful industrial sector, the developing agro-industrial sector allow to speak about the considerable economic capacity of the region and to position it as one of the leading regions of the country by level of the development.

Returning to the dynamics of the index of industrial production of the Tyumen region, it is necessary to look at the situation from a position of the root cause of positivity of the trend of the Tyumen region (including autonomous areas) in comparison with the indicators across the Urals Federal District and in general across the Russian Federation. Namely, YAMAL provides the positivity of dynamics of the subject with the reserves of gas (a gain was 4-9.6% for the last three years). As for oil production, here are pessimistic forecasts as from a position internal (the country and regional levels), and from a position of a geopolitical situation and world trends. As the international practice shows, the industrial developed countries of North America and Europe invest money in "long projects" which have to keep the natural minerals and resources for future generations, and to save the resources and energy efficiency of productions and fundamentally human processes for present generations. According to the international civilized society, the era of "a hydrocarbon lobby" has to come to the end.

The basic sector allows to provide inflow of the Russian and foreign investments into the regional economy, forms the budgetary situation, defines a vector of development of ancillary industries, influences infrastructure economy, labor migration of the population. However, the resource and raw model of social and economic development of the region is accompanied by certain risks. The high dependence of the basic sector on the price fluctuations in the world market of hydrocarbons provides very serious dependence of development of the basic sector of the region on the external influencing factors. The unstable situation about the oil prices affects the change of income of the regional budget and compression of the budgetary sector of economy. High tax burden of oil production that is the main limiter of increase in oil production is one of the internal factors. Similar internal restrictions have a negative impact on the level of oil production and involve adverse effects for the economy. It is possible to allocate the decrease in investment attractiveness of the region and the difficulty in implementation of diversification of the economy among them. The developing in recent years trend of decrease in oil production in the fields functioning for decades, decrease in gain of stocks and resources through the decrease in exploration works are also possible to refer to risks of an oil and gas complex.

As it was already told, all constituent entities that are a part of the region are donor regions of the Russian budget. It means that the constituent entities of the Tyumen region do not receive grants from the federal budget for alignment of the fiscal capacity. However, because of such situation, the budget of the South of the Tyumen region and the autonomous areas suffers multiple withdrawals. Acceptance by the Government of the Russian Federation in 2009 the decision on the centralization of the mineral extraction tax

(MET) sharply struck on the structure of budgets of the Tyumen region. It caused a number of the problems connected with financing of social programs, the need for creation of new economic subjects, jobs, taxpayers appeared. In such conditions, the realization of strategy of diversification of economy became even more relevant. The questions about the need to get off the oil train were brought up even long before the adoption of the law on withdrawal of MET. The federal compensation of the MET that is dropping out of budgets of regions within four years decreased by 25%, and gave time for reorientation of the economy and for changing the structure of the budget. Tax revenues make over 70% of income of budgets of the constituent entities of the Tyumen region in 2017.

In 2016 the Government of the Russian Federation made the amendments to the Tax Code. They assume a transfer 1% to Moscow from those 18% of income tax that are taken away to itself by each region in 2017-2019 (in scales of the Russian Federation it is about 121 billion rubles) [15]. Such measure was taken for support of poorly developing regions at the expense of the richest and this measure cost to the Tyumen region 15 billion rubles.

The withdrawal from the budget of the Tyumen region MET and the part of income tax create the interfering conditions for the implementation of regional programs, difficulties in attraction of the investments into implementation of scientific and technical breakthrough of the regional economy.

The restructuring is the changes in the structure of economy that are necessary for social reorientation of all branches of economy of the Russian Federation, creation of effective, competitive, hi-tech and mobile economy. There are favorable conditions for considerable inflow of investments in the Tyumen region. Here are almost unlimited free land areas, very essential water resources, excess capacities for power production, considerable reserves of hydrocarbon raw materials and wood, rather developed infrastructure.

However, there are certain shortcomings of the existing structure of economy of the region connected with the increased dependence on exhaustible minerals, the situation on the market of other types of energy resources, insufficient variety of products. The analysis of these strengths and weaknesses allows to define the purposes and the perspective directions of the structural transformations increasing the stability and effectiveness of the development of the region economy.

## References

1. Federal Law of the Russian Federation N 172-FZ (2014)
2. *Concepts of socio-economic development of the Tyumen region until 2020 and for the future until 2030. Ordinance of the Government of the Tyumen Region 652-rp* (2009)
3. *Forecast of the socio-economic development of the Tyumen region for the long term until 2030*
4. *On the strategy of socio-economic development of the Khanty-Mansiysk Autonomous Okrug-Ugra until 2020 and until 2030. Order of the Government of the Khanty-Mansiysk Autonomous Okrug-Ugra*
5. *On the strategy of socio-economic development of the Yamalo-Nenets Autonomous District up to 2020. Resolution of the Legislative Assembly of the Yamalo-Nenets Autonomous District* (2011)
6. Yamal is preparing for a breakthrough, <https://t-i.ru/article/new/12050>
7. *On approval of the Fundamentals of the state policy of regional development of the Russian Federation for the period up to 2025* (2017)
8. *On the approval of target models for simplifying business procedures and increasing the investment attractiveness of the subjects of the Federation* (2017)

9. V.V. Litvinova, Finance. Theory and practice **1**, 139-152 (2014)
10. G.P. Podshivalenko, Financial analytics: problems and solutions **15**, 7-10 (2010)
11. Symbols and rating definitions of Moody's agency, [https://www.moody.com/sites/products/ProductAttachments/2007100\\_000528403.pdf](https://www.moody.com/sites/products/ProductAttachments/2007100_000528403.pdf)
12. L.M. Kapustina, News of the USUE **2**, 35-41 (2014)
13. Donors are tired. What did the heads of the impoverished regions ask Moscow for? <http://fedpress.ru/article/1726226> (2017)
14. E. Makovetskaya, A. Deniskina, E. Krylov, F. Urumova, E3S Web of Conferences **91**, 02036 (2019) [doi.org/10.1051/e3sconf/20199102036](https://doi.org/10.1051/e3sconf/20199102036)
15. I. Ogorodnikova, V.V. Sysoev, Bulletin of Tyumen State University. Socio-economic and legal research **1**, 166-178 (2016)
16. E.V. Miloenko, Research publications **16(20)**, 12-18 (2015)
17. E.A. Stepanov, Bulletin of Chelyabinsk State University **14**, 53-61 (2017)
18. M.M. Makhmudova, Bulletin of the Perm University of Economics **1**, 69-78 (2015)
19. E.V. Miloenko, Research publications **1**, 34-38 (2015)