

The basic tendencies of development of the Russian export of coal: Problems of the forthcoming period

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Abstract – Article is devoted to the basic tendencies of development of the Russian export of coal. The main problems of forthcoming period are shown. Prospects of growth of export of coal in Russia are considered. Measures on decrease in threat of loss of market niches of the Russian coal abroad are offered.

Index Terms – export of coal, world financial crisis, a coal mining, the program of «20-20-20», investments, productivity of work, the prices of coal, oil and gas, the list of innovative technologies and the equipment, a measures on stimulation of export of the Russian coal.

INTRODUCTION

Russia occupies the 5-th place in the world on coal mining volume. The share of the Russian Federation in universal manufacture of coal makes 4 %. The structure of a world coal mining on the basic countries of the world in 2007 is presented on fig. 1.

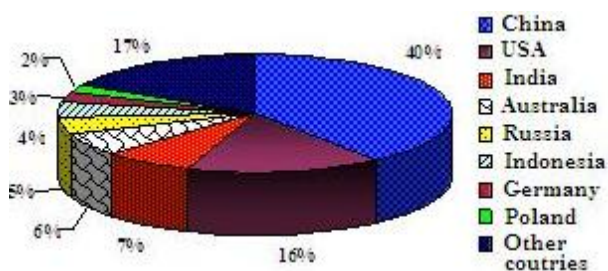


Fig. 1. The structure of coal production on the world countries

The basic country on a coal mining in the world is China, where in 2007 it has been extracted more than 2,5 billion T of coal (rate of increase by 2000 – 207,1%). On the second place there are USA where coal manufacture in 2007 has made 1,1 billion T, on the third – India (484,5 million), on the fourth – Australia (395,3 million), on the fifth Russia (314 million).

Owing to the favorable conjuncture developing in the world market last years, the volumes of extraction and export of the Russian coal constantly increased (fig. 2). Thus for export to the period since 2004 and on 2009 it was delivered

nearly 30% from all volume of the extracted coal (fig. 3). Whether there are prospects of the further grew export of the Russian coal?

2. PROSPECTS OF GROWTH OF EXPORT OF COAL IN RUSSIA

Recently in a number of mass-media "the iridescent" opinion on rather effective work of the coal industry of Russia in 2009 Thus is expressed it is marked, what even during the crisis period the branch could increase essentially the export potential, having increased deliveries to foreign consumers, including steam coal by 1,2 %, coking coal - on 5,7 %. But, whether it so? And in what the principal cause of increase in the Russian coal export in crisis - is covered 2009.

It is known that development of world financial crisis is connected with falling of the prices for oil. Following the results of 2009 the price for oil was reduced on 35,6%. It has led to falling of the prices and in other resources sectors of economy. So, for example, in sector of extraction of nonferrous metals of the price for copper and tin have decreased, accordingly, for 24,3% and 27,6%. Decrease in price "ruler" has pulled behind itself corresponding falling of volumes of output, including and branches of thermal power station of Russia. Thus in a greater degree (on 12,1%) such decrease has concerned on gas industry. Volumes of output in 2009 in electric power industry were reduced to 4,6%. Even, despite growth of volumes of coal, this was supplied to the export, as a whole on 8% coal mining volumes have decreased. And only the oil branch, following the results of 2009, has appeared in small pluses: extraction volumes have increased by 1,2%. In what the reason of the created position generated by development of world crisis? Before to answer on this question we will notice that, despite growth of volume of export of coal, the general falling of volume of a coal mining in

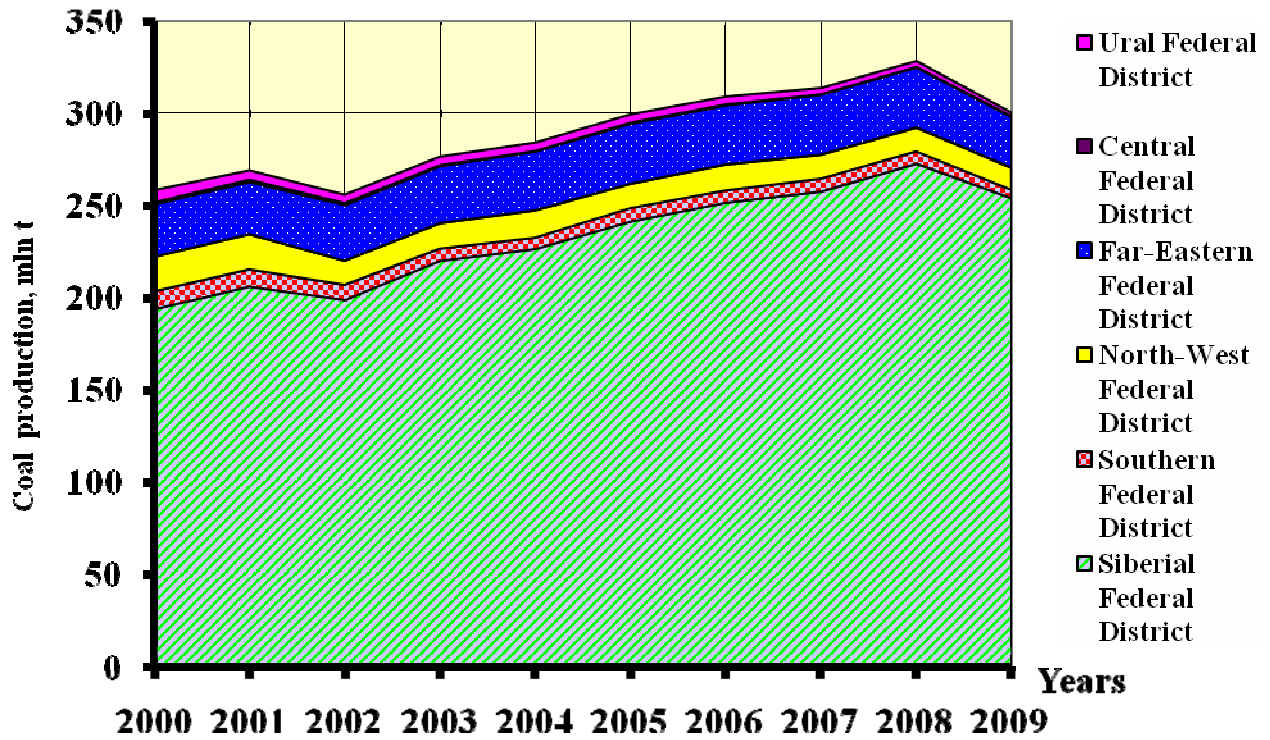


Fig. 2. Dynamics of a coal production in the Russian Federation with 2000 for 2009 years

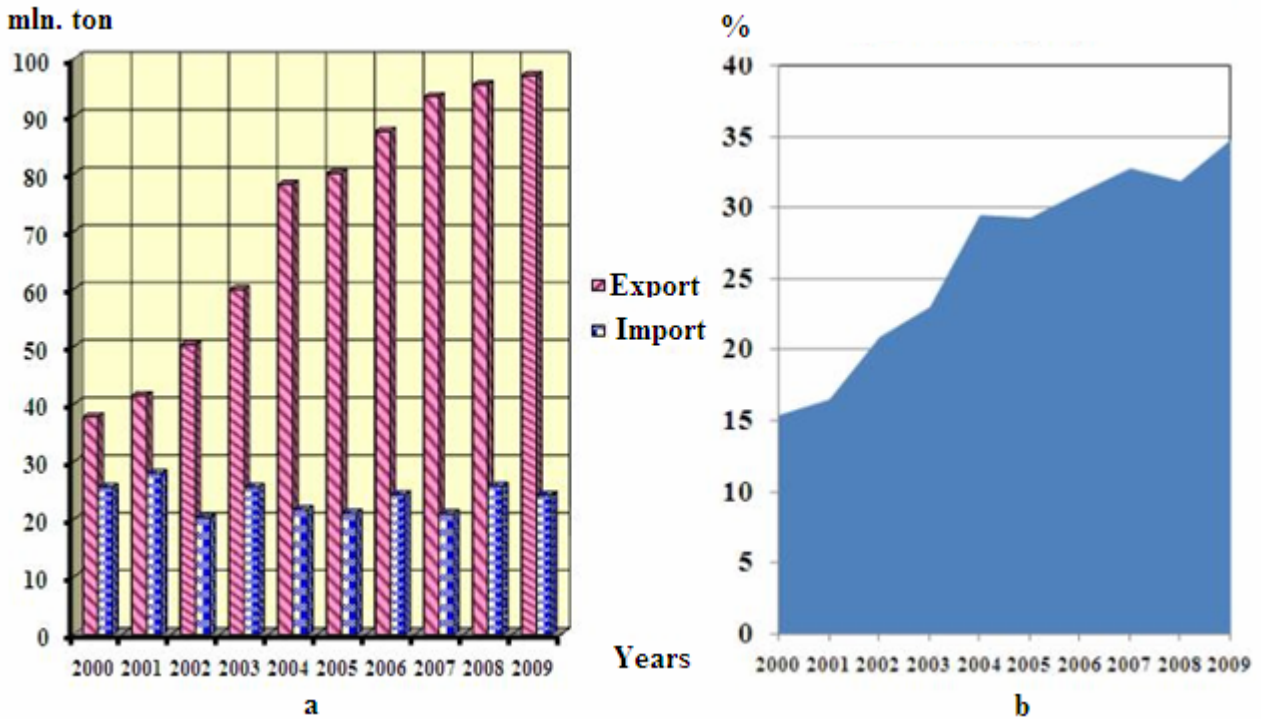


Fig. 3. a - development of export and import of coal of the Russian Federation (mln. ton),
 b – a share (%) of export in deliveries of Russian coal

2009 "has completely laid down" on domestic market.

Deliveries of coal to home market were decreased on 10,6 %. To such condition of the coal market two reasons have produced:

- Contract prices of export of the Russian gas;
- "The Chinese" factor.

The analysis of dynamics of the national currencies, spent by us on seven currency to basket of world currencies, has shown that in 2009 the US dollar has become stronger on 5%, euro – almost on 1%, and here the Chinese currency – at once on 8-9%. The Ruble exchange rate, by our calculations, has decreased approximately on 10-20%. Strengthening of Yuan against other national currencies, and also presence in economy of China of a significant amount of the financial actives emitted by the USA, actually has compelled it to carry out global purchases of resources worldwide. Hedging the future risks, China has transformed money into a stock of commodity resources for the future manufacture. Having bought ore, metal and other resources, China, certainly, has increased volumes of import of coal, including for coking. Naturally, it has increased export of the Russian coal to China in 2009. Certainly, it is impossible to consider that growth of Russian export of coal in this direction will be system. Such increase can last 1-2 years, is bought resources yet will not end during crisis.

In the western direction the increase in export of coal looks in general as «caricature». In the power market of Europe in 2009 among themselves simultaneously the Russian gas, the Russian coal and the Russian oil actually began to compete. It testifies to the weak coordination policy of the state in the European power market.

As it is known, contract prices of gas "are adhered" to the world price of oil (mineral oil). Thus change the contract prices for gas occurs by results of nine-monthly monitoring behind the oil world prices. Thereupon in crisis there was a unique situation: at falling of the world price of oil the export prices for the Russian gas continued to grow. Thus the difference in

the prices under the Russian contracts on gas and spot prices for the gas competitors delivering gas in the form of LNG, began to reach 40-50%. Such situation has led to that the European consumers began to buy cheaper power resources – oil, coal and LNG. As more than 80% of export of the Russian oil and mineral oil are necessary on the European countries and thus about three quarters of the Russian oil (in a kind siding oil and mineral oil) is delivered for export growth of its extraction in 2009 looks abundantly clear. All have increased for the same reason and deliveries of the Russian coals to the European consumers, but it, exclusively, because of the applied contract export prices for gas. By the way, for the same reason in 2009 gas actually began to "beat out" coal from consumption on the domestic market. The logic of such replacement is absolutely simple. In connection with refusal of foreign consumers of import of the Russian gas in the country there was its surplus, and it became still in more to a measure, than before, to replace coal. Thus, it is possible to notice that as on western, and east directions, the increase in export of the Russian coal is no by system character, and an additional competition between the Russian suppliers of power resources in the European market even has caused a damage to the internal Russian coal market.

What it is necessary to worry to the Russian coal export to the nearest and intermediate term post crisis prospect?

For the answer to this question it is necessary to state an estimation to forthcoming demand for power resources in the world.

In the conditions of crisis development many countries have developed own programs of anti-recessionary measures. In spite of the fact that crisis has the financial character. The essential part of these measures is devoted to using of power resources. Thus, for example, Japan in the program of measures has proclaimed essential reduction during the period till 2030 of import of power resources, staking on the power savings, use of alternative energy sources in the form of ocean waves and energy of recycling of a product at all stages of its re-partition.

The USA also have proclaimed the essential reduction of import of power resources, approximately in 10 times having increased assignments in 2009 by working out of projects of alternative power.

The countries of incorporated Europe have headed for reduction of consumption of energy, having developed the so-called program «20-20-20» providing decrease by 2020 on 20% of consumption of energy and finishing to 20% in balance of primary energy sources of a share of alternative power. It means that by 2020 Europe approximately intends to reduce consumption of coal and hydro carbonic resources to 25%. It is obvious that coal, as a closing power resource will be the first candidate on reduction of market niches in Europe. Thereupon the potential of decrease in its consumption should be estimated at the rate about 30%. Even if the European countries will execute the declared program only on 50%, reduction of volumes of consumption of coal in Europe in 2020 is estimated at level of 15%. It means that annual decrease in consumption of coal can make approximately 2% a year. However, such scenario can be realized in case "Gazprom" will deliver pipeline gas to Europe under the prices above, than prices LNG.

But even in this case there are risks of reduction of consumption of coal in Europe and, accordingly, export of the Russian coal. Moreover, realization above the resulted programs can lead to surplus of gas in the country. It will lead to the further replacement of coal from Russian energy researches balance. Thus, in intermediate term prospect there are real threats of reduction of volumes of consumption of import coals in Europe, America, Japan, leading to decrease in export of the Russian coal. What will be with the prices for power resources?

According to our calculations spent on a 50-year-old interval of time, dependence between the price of energy and volume of its consumption has cyclic character (fig. 4).

Cycles repeat approximately through each 4 million ton of reference fuel of a gain of con-

sumption of energy. Thus the periods of rise in prices for energy vary for the periods of reduction of prices. Moreover, synchronously to this change occurs «exchange pole» the market: the offer market varies on the demand market etc. According to calculations, outside of 2010 the energy market will be included into a bearish stage of the price, and the main thing, - during this period will occur next it «exchange pole»: the market of the offer of energy in the forthcoming period will be transformed to the demand market which the leading role will be played not by the manufacturer of power resources, and the consumer.

All it testifies that in the forthcoming period of the price for coal will not have increasing character.

So, foreign deliveries of coal will be under the influence of threats of decrease in volumes of consumption and reduction of price. It for the Russian coal companies means only one - strengthening of competitive struggle for preservation (at least) the niches in the foreign markets.

Whether there is at the Russian coal industry a potential for such competitive struggle?

For an estimation of this situation we investigated dependence of a share of deliveries of the Russian coal in the general deliveries of coal to the markets of the EU countries and Japan from the coal prices in these markets (fig.5). Settlement schedules show that long time the share of the Russian coal in the foreign markets was risen in connection with growth of the price for coal. And only now there has come a limit of this growth. Even at increase in the prices in these markets the share of the Russian coal in the markets will not rise as a whole - neither on steam, nor on coking coals. In a case of look-ahead reduction of prices on coal there is a real threat of decrease in a share of the Russian coal and, accordingly, losses by the Russian exporters of the markets.

There is an immemorial question: what to do? Can it is necessary reduce expenses for a coal mining to survive in struggle against compete-

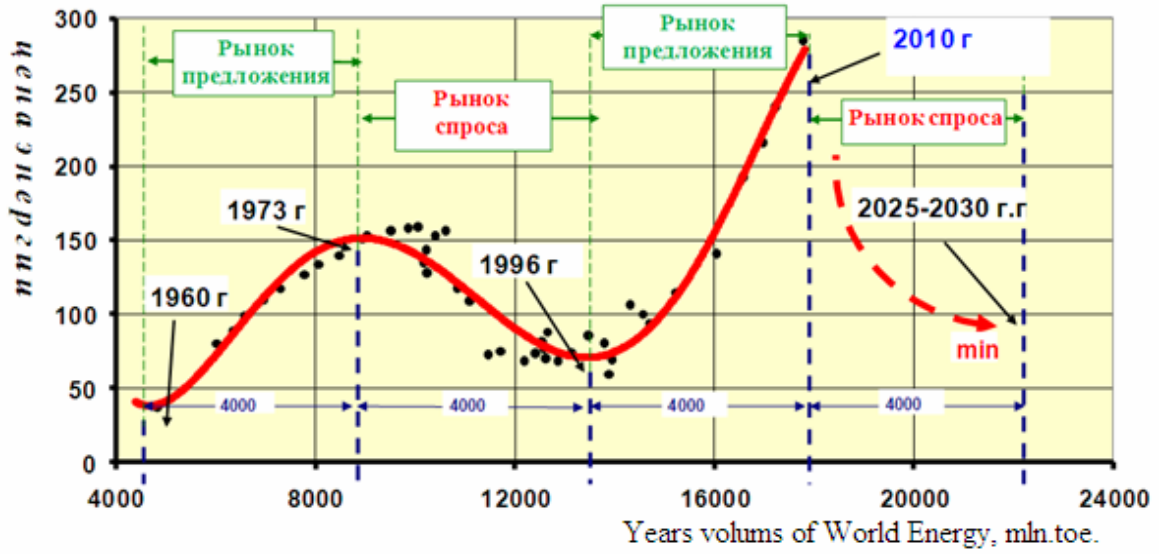
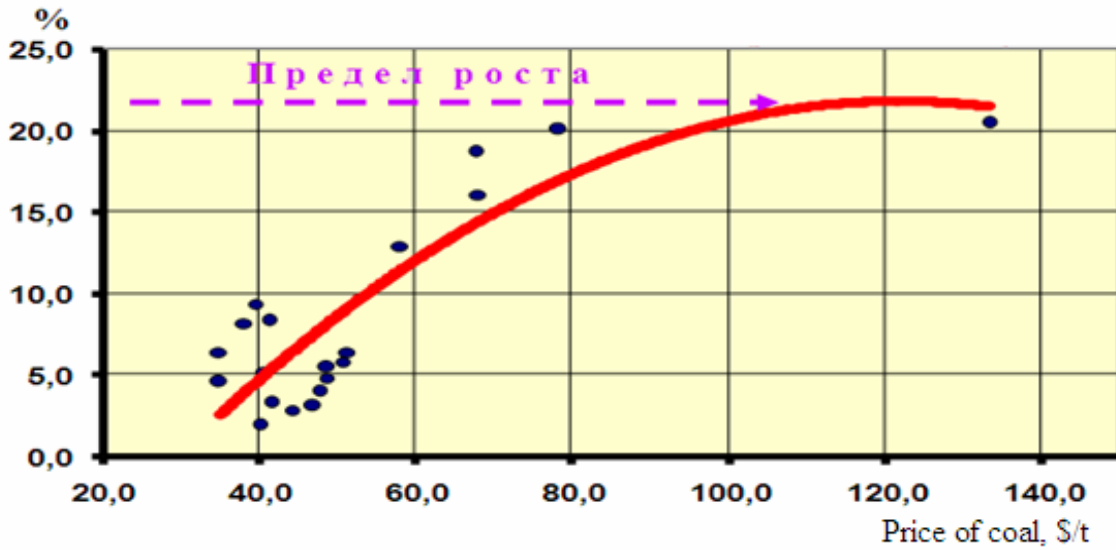
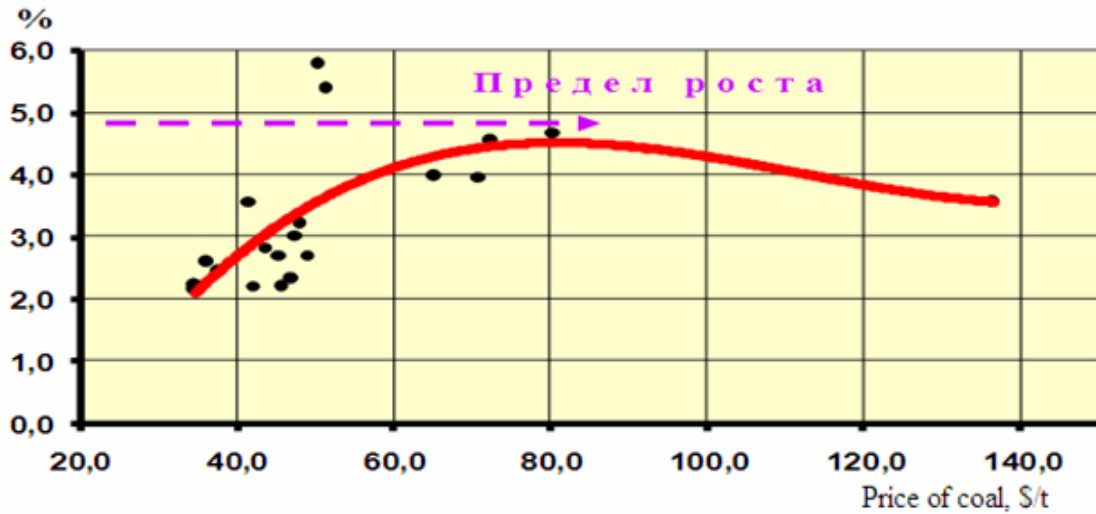


Fig. 4. Laws of change of the price of Energy (a dale. The USA / т.у.т) from annual volumes of world consumption of Energy



a) steam coal



b) coking coal

Fig. 5. Dependence of a share (in %) deliveries of the Russian coal to the market of the EU countries and Japan, from the average export price (in \$/t)

tors? Likely, in it is meaningful. But *whether there is in coal industry a potential for such decrease?*

In structure of the cost price of a coal mining the payment fund makes about 25%, material inputs reach 40% and approximately 25% make all types of tax and deductions.

Analyzing such structure, we will notice that in the future period the state does not intend to reduce a payment. It and is correct, the salary of workers should be raising. Material expenses also are a little subject to decrease. Their big part of these expenses makes production of natural monopoly, the prices on which grow almost multiply from an official rate of inflation. Taxes..., but they are actually proportional to expenses. Thus, in structure to itself more than 70% of expenses for a coal mining not operated character carries from outside the coal companies. Moreover, they are not simply uncontrollable, but also increasing character. As the certificate to it we will cite the given of statistics: the average price of realization of coal production decreased in 2009 concerning 2008 has, approximately, on 28%, and the cost price - not only has not decreased, and on the contrary, - has increased by 6%. All it means that to avoid threat of loss of market niches in the foreign markets at the expense of reduction of expenses hardly it will be possible. Such reserve is rather weak. *What to do? Not to leave to the state the Russian coal export to the mer-*

cy of fate? For the answer to this question we have made the dependences of efficiency of the "live" and "substantiated" labour are carried out in coal industry from volumes of annual investments. As shows the analysis, many long years labour productivity growth in industry it was provided at the expense of growth of investments and a fixed capital (fig. 6, fig. 7).

And only the limit of this growth is by this time reached. Additional volumes of investments any more do not lead to labour productivity growth. The further escalating of investments into industry even a way stimulating influence of the state will not lead any more to efficiency growth in branch. It means what to provide export potential growth in coal industry at the expense of stimulating growth of investments it is already impossible.

Threat of loss of market niches in the foreign markets in intermediate term prospect remains real. For decrease in such threat of coal branch volumes of investments are necessary not simply. Today not so much volumes of investments, how many the investments raising in 3-5 times labor productivity in branch are important.

It means that the state, stimulating with different ways realization of the investment projects which are carried out by the coal companies, should supervise not so much return of the investments, the saved up monetary stream under

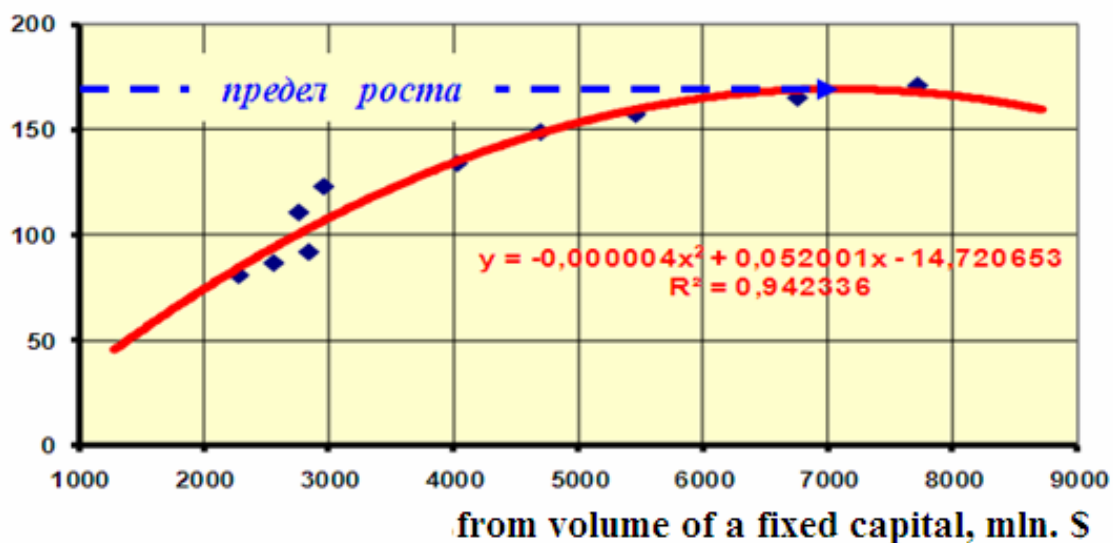


Fig. 6. Dependence of labour productivity people on a coal mining, (the t/people - month) from volume of a fixed capital

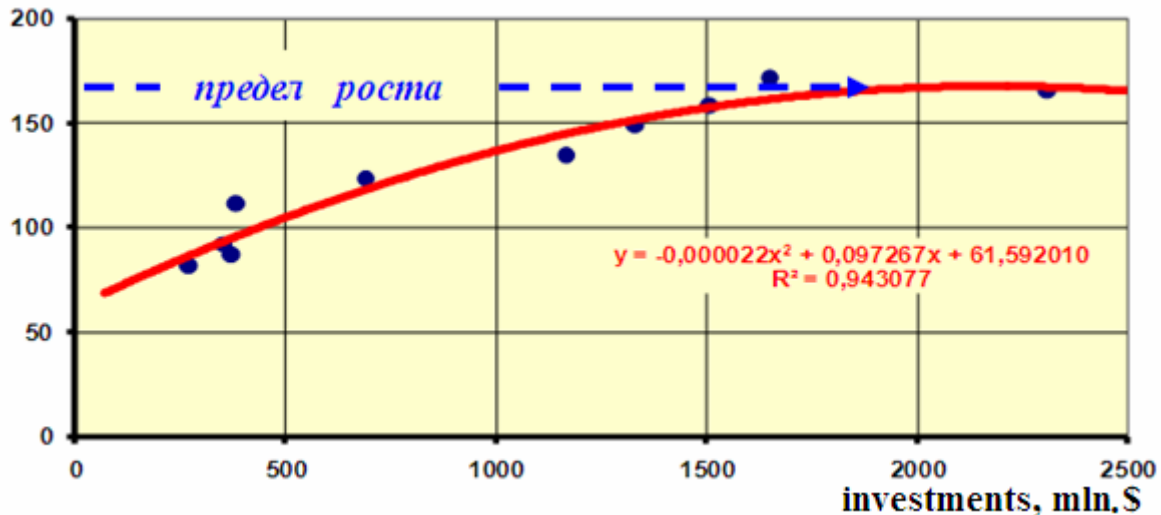


Fig. 7. Dependence of labour productivity people on a coal mining, (the t/people - month) from annual investments investment projects, how much structure of investments and a share in them, concerning highly innovative technologies.

For realization of such state control, certainly, it is necessary to generate annually filled up list of innovative technologies and the equipment which will be supported by the state at level of Ministry for the Power Generating Industry of Russia. Originally this list can be easily generated on the basis of the analysis of the customs sheet on purchases of the mountain equipment.

On the basis of this list of technologies it is necessary to develop the mechanism of granting to the companies of the state guarantees, tax indulgences for financing of investment projects (in any form credit, leasing etc.), but only from the supported list. Certainly, granting to the companies of the state guarantees in this scheme can be one of effective mechanisms of reception by them of bank credits. Banks reluctantly finance coal sector in view of low estimation of cost of the worn out property intended for maintenance of credits.

One more effective measure attraction of the foreign capital for creation in Russia manufactures of the hi-tech equipment for the coal companies should be.

Rather effective measures are the control from outside the states not only behind application of the new hi-tech equipment and cars, but also a conclusion of out-of-date technologies from production.

For this purpose, besides above specified list of high technologies, in parallel it is necessary for it to generate annually filled up list of "forbidden" technologies. As "forbidden" can be having become outdated-shies technologies and the equipment, the XX-th centuries concerning the middle. The conclusion of such technologies from a turn is possible methods of technical regulation.

Considering that new innovative equipment and cars are expensive, it is necessary to use of tax privileges which have been already widely approved by world practice is necessary for their application, such as:

- granting of tax credits (in the USA of 25% from investments);
- reduction by 50% of the tax on the high-technological equipment;
- increasing in norm of amortization on hi-tech equipment and cars in 2-3 times;
- growth to 40-50% of a share of write-off on the cost price of investment expenses at statement of the basic means for the amortization account.

Apparently from the presented analysis, coal industry it is necessary to pass in post-crises period not the most "sweet" piece of a way. Earlier applied methods of increase of an overall performance in new conditions will not give necessary results. The mainstream of increase of efficiency of industry is its turn to new tech-

nologies. Without such effective turn it will be impossible even to keep, instead of what to increase exports potential of the branch in the conditions of forthcoming strengthening of competitive struggle for the world coal markets. However now, besides the factor of innovations, one more factor – time was already connected.

The leading world powers have taken a new way of postindustrial development. Being under "press" of new technological ways, they will raise efficiency in all directions of industrial production by 2020. To be competitive, the coal branch by 2020 should increase labour productivity in 3 times. By our calculations, the branch already is in a delay mode. Even if since 2011 to begin systematically, within 10 years, to replace out-of-date branch actives on new, in which labour productivity on 200-300 % above existing level by 2020 labour productivity in branch can be lifted only on 100-120 %.

It is clear that business without participation of the state will not master necessary rates of updating. Thereupon the set above is specified thy measures should be realized within the limits of the private-state partnership indicative planning of development of branch, including on realization of large innovative projects of coal business should be which core.

THE CONCLUSION

1. The share of the Russian Federation in universal manufacture of coal makes 4%. For export it is delivered about third from extracted 300 million tons and more.
2. Despite growth of export of coal, in 2009 the general falling of its extraction "has completely laid down" on domestic market (reduction on 10,6%). Two reasons have produced to such condition of the coal market: the contract prices of export of the Russian gas in the European market and "the Chinese" factor.
3. As on western and east directions, the increase in export of the Russian coal carries temporary, instead of system character.
4. In intermediate term prospect there are real threats of reduction of volumes of consumption

of import coals in Europe, America, Japan, leading to decrease in export of the Russian coal.

5. Outside of 2010 the energy market will be included into a bearish stage of the price; the market of the offer of energy in the forthcoming period will be transformed to the demand market which the leading role will be played not by the manufacturer of power resources, and the consumer. It testifies that the prices for coal in the forthcoming period will tend to decrease.

6. Foreign deliveries of coal will be under the influence of threats of decrease in volumes of consumption and reduction of price. It for the Russian coal companies means only one - strengthening of competitive struggle for preservation (at least) the niches in the foreign markets.

7. It is already impossible to provide export potential growth in coal branch at the expense of stimulating growth of investments. Threat of loss of market niches in the foreign markets in intermediate term prospect remains real. For decrease in such threat of coal branch volumes of investments are necessary not simply. Today not so much volumes of investments, how many the investments raising in 3-5 times labour productivity in branch are important.

8. The state, stimulating with different ways realization of the investment projects which are carried out by the coal companies, should supervise not so much return of the investments, the saved up monetary stream under investment projects, how much structure of investments and a share in them, concerning highly innovative technologies.

9. It is necessary to generate annually filled up list of innovative technologies and the equipment which will be supported by the state at level of Ministry for the Power Generating Industry of Russia. On the basis of this list of technologies it is necessary to develop the mechanism of granting to the companies of the state guarantees, the tax indulgences for financing of investment projects (in any form credit, leasing etc.), but only from the supported list.

10. On the basis of this list of technologies it is necessary to develop the mechanism of granting to the companies of the state guarantees, tax indulgences for financial investment projects (in any form credit, leasing etc.).

BIOGRAPHIES

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