CONVERSION AS ONE OF THE MECHANISMS OF RUSSIAN ECONOMY RESTRUCTURING

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ABSTRACT

The conversion experience in Russia showed that the subjunctive and arbitrary decrease of military resource consumption can lead to economic and social crisis and break down the high-tech military-industrial complex.

Restructuring of military enterprises must combine reduction of military industry and ensuring of optimal adaptation to the market competitive mechanism and the new proportions and conditions of economic functioning.

This proves the necessity to take into account all the factors, proportions, dependences and to create a general conversion theory.

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INTRODUCTION

The processes of conversion and restructuring of the State Defence Industry that began at the end of the 1980s – at the beginning of the 1990s turned this once flourishing economy sector into the focus of economical and social problems. The falling, that had been going on throughout the whole first half of the 1990s became a little slower.

There is no sufficient and effective mechanism of conversion process managing, though there are a lot of different programs created by enterprises at a local, regional and state level.

Restructuring of military-industrial complex, its parts and restructuring of economy connected with it have two aspects : special organizational-technological and general economic.

This can be explained by the fact that in practical economic life of enterprises regions and the whole country conversion is a specific complex of technological and organization measures of military industrial complex restructuring and its transformation of the manufacturing of alternative civilian products.

The solution of conversion problems of military enterprises is closely connected with the solution of restructural problems of military industrial complex on the whole. This proves the necessity to improve the scale of military industrial base and its structure. And as a result – restructuring of civil sector of economy in the process of its encreasing under the influence of conversion restructuring of Military industrial complex.

The conversion experience in Russia showed that the subjunctive and arbitrary decrease of military resource consumption can lead to economic and social crisis and break down the high-tech military-industrial complex.

Restructuring of military enterprises must combine reduction of military industry and ensuring of optimal adaptation to the market competitive mechanism and the new proportions and conditions of economic functioning.

This proves the necessity to take into account all the factors, proportions, dependences and to create a general conversion theory.

In order to form a general theory it is necessary to take into account the three main aspects, such as:

1. All military enterprises must be regarded as compound parts of a system of military-industrial base where conversion process take place.
2. Conversion is not only a complex of measures but an objective economic process of military-industrial complex structure which interact with the economic system of a country, region and the whole world.
3. A military enterprise is a special military-industrial system which use resources for specific purposes.

The main function of economic conversion concept is to create a system approach to the forming of different models, programs and economic regulation mechanism of military-industrial complex conversion of a whole country and its regions and individual enterprises, bases on the acknoledgement of objective regularities of conversion processes.

The main application field of general economic conversion concept – is to create an optimal conversion economic policy. And the main function of special organizational-technological conversion concept is to form the scientific foundations for effective solution of practical problems raised during the reorienting of the whole military-industrial complex technological base and individual military enterprises to manufacturing of alternative civilian products and to the adaptation to the market competitiveness.

The main application sphere of special conception of conversion is elaboration of technological, organization, financial, economic, legal measures by profile companies' change of military industry.

Dynamics of Changes in Production and Wages

Production level of Defence Industry enterprises in 1998 was less than 20 percent of the production level in 1991. It should be noted that military production output continued to descend up to 1997 inclusive, and only the totals of 1998 began to show some increase. Civil production output descent since 1996 became slower, but it is persist up to now.

Let us dwell on analysis of production output rates in 1998. During the first three months of the year output rate of both military and civil production exceeded the rate of corresponding month of 1997. Since April civil production output rate descended a little, but nevertheless until June it was not less than 90% of the output rate of corresponding month of 1997; military production output rate during that period was still higher than previous year activities. However, during the second half of the year there was a downfall: in July, ratio of civil production output rate reached its lowest mark of 71.2%, and in August there was the lowest descent of military production output rate – 80.5%.

Later on the civil production output rate stabilised, and military production output increased and reached the level of 1987. During the last two months output of both, military and civil production exceeded the rate of the previous year. In the beginning of 1999 there was a trend towards the growth of production rate comparing to the corresponding period of 1998 in both production types: the growth of civil production output rate was insignificant (less than 5%), but military production output rate increased nearly by one half. Latest actions, taken to improve the state of affairs in Military-Industrial Complex, including number of financial and organising measures, began yielding positive results. Thus, in 1998 relative stabilisation of RF Defence

Industry took shape. In particular, total production output for 8 months amounted (in comparison with corresponding period of 1997) to 97.2% (92% in civil production and 107% in military production; this was an evidence of quota increase of the latter). At the same time there was significant increase in Space Rocket (119.9%) and Radio Industry (109%), and state of Aircraft (90.1%) and Ammunition (93.3%) Industries became more stable. On the whole the production output increased by 20%.

Analysing changes that took place during 1998 let us pay attention to drastic decrease of Communication Industry output – the decrease of nearly 30% comparing to the previous year. Notably decreased production in Armament (22.5%) and Shipbuilding (24.7%) Industries. Increase (in respect of the previous year level) was noted in two fields – Aircraft Industry (66.9%) and Russian Space Agency (19.8%).

For production volumes in Defence Industry the typical feature was drastic decrease at the beginning of the 1990s and relative stabilisation starting from 1996; on the other hand, for the number of the employed the following trend was typical: in 1990s retirement of the employed was more smooth in character than downfall of production, and the curve of number of employed wass more smooth. However, in contrast to production volume dynamics, decrease of number of employed continued more actively: in 1997-1998 decrease fluctuated between 11% and 12% per year (Table 1). Rate of people employed in Defence Industry in 1998 constituted only about 35% of the rate of 1991. If we assume wage level in Military Complex in 1997 for 100%, in Power Industry it amounted to 304%, and in Gas Industry – 472%. Average wage in industry amounted to 1245 rubles, whereas at the Complex enterprises it was approximately 794 rubles (in Electronic Industry it was 600, and in Communication Industry – 625 rubles). Even the most successful among the "defenders" branch of Space Rocket Industry (1062 rubles) was behind the industry as a whole.

Nowadays there is concealed unemployment at many enterprises of Military-Industrial Complex. Qualitative composition of manpower deteriorated as well. Thus, mean age of an employee constituted 43 years (at research institutes and engineering departments – 45 years). Young people of the age beyond 30 constitute 16% of total number of personnel. There is high percentage of women (52%) and working pensioners (11.5%) (at research institutes and engineering departments – 12.5%). Among the people accepted for employment from 1991 to 1997 only 2% had higher or secondary technical education. Total number of Candidates and Doctors of Science decreased by 10%.

Table 1.

Dynamics of changes in number of people employed in Russian Federation Defence Industry, % to corresponding period of the previous year

Branch	1997	1998											
		1 month	2 month	3 month	4 month	5 month	6 month	7 month	8 month	9 month	10 month	11 month	12 month
Defence Industry, Total	87.9	89.1	89.3	89.5	89.6	89.7	89.7	89.7	89.7	89.8	89.8	89.8	89.8
Including Industry of Defence Complex	87.4	88.7	88.9	89.2	89.3	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.5

The reasons of manpower flow-out are poor financial state of enterprises and low wages. On average, in 1998 the wage in Defence Industry amounted to 65/4% of mean wage in the industry and 77% of mean wage in the national economy (Table 2).

The lowest wage rate in 1998 was at enterprises and institutions of Electronic Industry (606.6 rubles) and in Communication Industry (638.3 rubles), and the highest – at enterprises and institutions of Russian Space Agency (1085.4 rubles) and in Shipbuilding Industry (1039.1 rubles). Even in the prosperous branches of Defence Industry the wages are lower than mean wage in the national economy of Russian Federation.

Table 2.

Mean monthly wage of a person, employed in Defence Industry

Branch	1997, ths. rubles	1998, rubles											
		1 month	2 month	3 month	4 month	5 month	6 month	7 month	8 month	9 month	10 month	11 month	12 month
In Defence Industry, Total	718	802	801	812	820	817	820	827	825	828	831	837	857
Including Industry of Defence Complex	N/A	N/A	775	787	795	789	792	798	797	797	799	805	N/A
Reference:													
In National Economy, Total	965	992	993	1018	1024	1028	1043	1051	1050	1055	1061	1068	1100
In Industry	1137	1209	1203	1230	1236	1231	1239	1245	1245	1250	1259	1273	1309
In Mechanical Engineering	810	872	877	894	904	902	907	911	910	912	919	926	946

Civil Production Output

Since 1996 one can notice stabilisation of growth of civil production output, produced by enterprises of Defence Industry; during 1993-1997 there was steady growth of export volume. In particular, during this period Russian Defence Industry succeeded in getting international certificates for a number of produced products.

In 1998 in comparison with the previous year rate there was evident decrease in civil production output. From April was noted lagging of the previous year activities, and from July civil production output stabilises at the rate of slightly more than 70% of the previous year volume. Though, starting from September civil production output overtook and later on surpassed the rate of the corresponding month of the previous year, on the whole, during 1998 there was output descent of this kind of production of more than 5%.

Poor financing led to performance instability and cutting down of competitive product production programmes.

During the first four months of 1998 there was considerable increase of production volumes. After that, from May the output fell down below the mark of 400 million rubles per month, and in September it reached its lowest point of a little more than 350 million rubles.

However, in October the increase and return to the rate of the first four month of the year was noted. In November and December there was further increase of production (in the current prices); nevertheless it is difficult for me to evaluate the extent of distortion caused by inflation.

On the whole, according to the experts' assessment, quota of civil production involving high technologies remained insignificant.

Thus, main problems facing the Defence Industry enterprises are:

- choice of efficient lines of activity, i.e. either orientation toward production of armament and military equipment, either reorientation of production and competitive civil production output;
- search of financing sources.

Financing

The most important financing source for the Defence Industry is as usual State Budget. However, the volumes of financing during the last years are obviously insufficient. Funds that are planned by the budget do not satisfy actual requirements of the branch, and, besides that, actual funds that reached the enterprises were much less than the planned amounts.

Data represented clearly reveal the trend of consistent decrease of State's interest in problems of Defence Industry survival in 1997 (the Federal Budget transferred only 22.5 billion non-denominated rubles, i.e. 1.5% of sequestered on-budget expenditures for these purposes).

During the first half of 1998 the State allocated to the defence branch 59.4 million rubles. Assessment of debtor and creditor indebtedness ratio of Defence Industry enterprises varied from 2.1:1 to 3:1. By May 1, 1998 395 enterprises of this branch were declared insolvent. According to data of State Committee of Statistics, by August 1, 1998 indebtedness of the State to the Defence Industry enterprises for delivered goods for state needs and in accordance with federal programmes amounted to 10.6 billion rubles (including overdue repayment of

debts – 7.2 billion rubles), whereas debt of defence branch enterprises to the Federal Budget amounted to 5.5 billion rubles (including overdue repayment of debts – 4.5 billion rubles).

According to the experts' estimation, yearly assets necessary for maintenance and support of Defence Industry production capacities amount to 4 billion rubles. However, funds allocated are less than 10%, and actual funds that are received by these enterprises are 10% of the planned amount.

From 1992 Defence Industry production volume has greatly decreased and in 1997 it was only 8.7% of the rate of 1991. Nearly all defence enterprises are in poor financial condition due to, first of all, improper fulfilment of financial engagements by the State. State defence order is still not financed properly. Russian Federation Ministry Defence's debt to Military-Industrial Complex is swiftly increasing. By January 1, 1997 it amounted to 4 billion rubles, and by January 1, 1998 it was 15 billion rubles, and the beginning of 1999 it had exceeded 25 billion rubles. About 400 of 1500 enterprises of Military-Industrial Complex by the beginning of 1999 were on the point of bankruptcy. There are 1500 enterprises in Military-Industrial Complex; 41% of them are government enterprises, 33% are joint-stock companies with state capital share, and 25% - without state capital share. The structure of total production output of Defence Industry enterprises is 46.1%, 33.6% and 20.3% correspondingly. All federal programmes of defence enterprise conversion had failed due to poor funding. The table given below shows the trend of non-governmental enterprise growth:

Differentiation of enterprises of various ownership patterns, % to the total

Pattern of ownership	Prosperous enterprises	Enterprises on the rise	Unfavourable enterprises	Total
State (governmental)	16	28	56	100
JSC with state capital share	18	21	61	100
JSC without state capital share	33	29	38	100

The process of sale of shares and privatising of Defence Industry state enterprises is continuing. Enterprises of different organisation-and-legal forms and patterns of ownership participate in military production: governmental enterprises (635), defence-oriented joint-stock companies with state capital share and joint-stock companies without state capital share, but possessing the necessary scientific-and-technical and manufacturing capabilities. State plants, financial and industrial groups, holding companies and other enterprises are created and operate in Military-Industrial Complex.

Mechanical Engineering

Output of key mechanical engineering products is steadily declining. In 1998 (comparing with the rate of 1990) production of heavy electric machines, generators, cable products, metal cutting machines had decreased more than 8 times, production of telephones – in 7 times, production of gasoline saws – in 3 times. Production of underground conveyors has been decreased nearly to zero.

At the same time, production facilities of generator manufacturing are used by 30%, heavy machines – by 13%, cable products – by 19%, metal cutting machines – by 3%, etc.

From 1994 profitability rate in the industry began to decrease drastically (from 42% in 1993 to 2.9% in 1997).

Decrease of profitability rate was caused by increase of production cost. Production cost is greatly influenced by advance in prices for fuel and energy.

Fuel and energy costs in mechanical engineering had increased by one third since 1993 and now constitute 13% of total costs. The largest specific weight in structure of mechanical engineering production cost has raw materials – 32.6%.

Military-Industrial Complex

Present poor economic status of Perm region is caused by high concentration of defence complex enterprises. Unordered conversion that started in 1980s had weakened industrial potential of the region. From 1985 to 1995 there was slump in military production, and then slight increase of production volumes began (see Table below).

	1990 %	1991 %	1992 %	1993 %	1994 %	1995 %	1996 %	1997 %	1998 %
Total production volume	100	100	100	100	100	100	100	100	100
Including:									
Military production	30	25	14	10	10	9	10	11	10.5
Civil production	70	75	86	90	90	91	90	89	89.5

Here is the peculiarity of defence enterprises: they are outfitted with high quality, expensive equipment; underuse of this equipment causes increase in the production costs and makes these production unobtainable for consumers.

On the whole, defence complex enterprises of the region are in very tight situation. Main reasons of such situation are:

- outstanding debt for fulfilled defence order (over 639.0 million rubles) resulting in mutual non-payments, arrears of wages at the enterprises (from 3 to 8 months), debts to the budgets of all levels and to off-budget funds;
- uncertainty in defence order volume for the current year and in near-term outlooks;
- necessity of mobilisation facility maintenance at financing of 12% of necessary amount.

Due to the lack of funds and mobilization facility upkeep, the enterprises could not compensate for drastic decrease of military production output volume by means of increasing civil production output and consumer goods.

Insolvency of consumers, severe competition with foreign goods at Russian market resulted in recession in demand on durable goods.

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