

About the problems and peculiar features of machine-building enterprises' operation in the circumstances of economy's cyclicity

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Abstract. The cyclicity theory as a general form and a regularity of economic development attracts attention of scientists of all views currently existing in the economic theory with regard to the process of development of the economic organization of the human society. Based on the perception of cyclicity, the economic cycle characterized by periodical ups and downs of the market situation is a certain form of movement of the market economy. Currently, it is a well-known fact that every economic cycle is very much different from the previous one by both the duration and the intensity. At that, it is to be taken into account, that despite considerable differences, all cycles have the same phases (the lift, the recession (the crisis), the depression, and the buoyancy). However, every sectoral manufacture can differently operate in the said circumstances.

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Introduction

As it was stated, an economic cycle influences on all sectors of the economy, but the extent of influence in various sectors is different, which is determined by the specificity of these industries that are parts of different sectors of the economy. [1] At that, the major influence of the economy cyclicity is normally applied to the industry branches that produce manufacture means, consumer durable goods, as well as the construction industry. At the same time, the crisis influences less on the manufactures producing consumer non-durable goods. [2]

At that, power engineering does not only provide for manufacture of the most science-based machinery, which operates in the most extreme environment, but also is the base branch of the domestic industry, which determines the technical level of the domestic energy safety. Besides, this branch manifests itself as relatively stable in the circumstances of the economy cyclicity. However, power engineering is not the absolute exception and also responds to the changes of the situation in the market.

Body of the work

Power engineering, which provides for manufacture of the most science-based machinery operating in the most extreme operating conditions is the base branch of our domestic industry. At that, it is to be understood, [3] that the development of the domestic engineering is currently restrained by a bunch of problems, which require systematic solution

on the federal level, of which the following ones are worth emphasizing:

- 1) the equipment stock existing currently in the machine-building enterprises is technological and outdated legacy; the equipment at the majority of enterprises has the depreciation rate above 60%;
- 2) the share of imported main equipment at equipping power enterprises is about 80%;
- 3) virtually no innovative development of the power engineering is present;
- 4) the power efficiency of the existing domestic equipment of power engineering is lower than the one of similar foreign equipment, which results in excessive load on the fuel industry and, as a rule, in growth of prices for power energy for industrial users and the population;
- 5) the existing level of operation of power objects is much lower than the level of the enterprises in developed countries of the world.

At that, the turnover of power engineering enterprises in the whole Russia during 2009-2012 is represented in Table 1. [4]

Table 1 shows that the consequences of the crisis started showing their effect on the power engineering companies in 2009: the decrease of turnover of the organizations and of shipped goods manufactured by them is observed after the crisis outburst. It is explained by the specificity of the technological cycle of products manufacture in this industry. As a rule, the manufacture period is long – up to several months. Settlements for the products are

also cleared long after signing the contract for supply of equipment.

Table 1. Turnover of power engineering enterprises in the Russian Federation

| Turnover of power engineering enterprises in the Russian Federation, in thousands rubles | | | | |
|--|--|--|-----------------------|--|
| Year | Turnover of the organization (VAT, excise taxes, and similar regulatory payments excluded) - total | including: | | |
| | | own products shipped, works carried out, and services rendered by the enterprise | goods for resale sold | raw materials, materials, components, fuel, which had been purchased for manufacture of products, sold |
| 2009 | 67,385,014.0 | 61,197,851.0 | 5,564,180.0 | 622,983.0 |
| 2010 | 71,715,429.8 | 65,832,103.3 | 5,139,128.4 | 744,198.1 |
| 2011 | 69,792,490.5 | 56,550,322.9 | 12,479,504.0 | 762,663.6 |
| 2012 | 78,552,589.3 | 73,428,387.9 | 4,413,584.7 | 710,616.7 |

Therefore, the enterprises in this power engineering industry felt the consequences of the crisis only in 2009. During this period, the sales of products increase, which were purchased for resale in order to get additional profit, which is often not related to the main activity of the enterprise. [5,6] Besides, in 2009, the scope of sold raw materials, materials, components, fuel, which had been purchased for manufacture of products, increased. One of the reasons of increasing these sales was reduction of orders for manufacture of goods, and, consequently, sale of raw materials, materials, components, fuel is a coercive measure in the circumstances of cyclicity of the economy (in such its phase as the economic crisis).

During this period, the costs for production and sale of products also decrease, [6] which is determined by external causes – decrease of product supply orders (Table 2).

The provided diagram reads that total costs for manufacture and sale of products were suddenly reduced in 2009, which confirms the above conclusions that the crisis influenced on the power engineering companies only in 2009.

Table 2. Expenditures for manufacture and sale of products of organizations (legal entities) in the Russian Federation

| Expenditures for manufacture and sale of products of organizations in the Russian Federation, in thousands rubles | | | | | | |
|---|--|---|------------------|---|------------------------------|--------------------|
| Year | Expenditures for manufacture and sale of products (goods, works, services) | the expenditures for manufacture of goods included: | | | | |
| | | Material expenditures | Payroll expenses | Insurance fees to the Pension Fund, the Social Insurance Fund, Regulatory Medical Insurance Federal Fund, Medical Insurance Regional Fund | Depreciation of fixed assets | Other expenditures |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2007 | 57,083,587.0 | 34,808,020.0 | 12,692,294.0 | 2,940,738.0 | 1,045,107.0 | 5,597,427.0 |
| 2008 | 75,566,133.0 | 36,606,373.0 | 15,152,421.0 | 3,423,850.0 | 1,336,427.0 | 19,047,062.0 |
| 2009 | 61,201,705.0 | 34,533,395.0 | 14,509,277.1 | 3,214,923.7 | 1,981,169.2 | 6,962,940.0 |
| 2010 | 66,897,571.5 | 37,050,981.7 | 16,384,193.2 | 3,762,766.0 | 1,752,677.5 | 7,946,953.1 |

The reduction of the total costs is determined by the reduction of the demand for the power engineering products due to the reason that prospective buyers lacked required funds. Some prospective buyers choose to purchase equipment made in China as these suppliers offer lower prices

and payments deferred for long periods (up to two years without any deposit dues). In the circumstances of the crisis, such supplies and payments become the determinants at selection of the equipment supplier, and the quality and innovations often recede into the background. [7, 8, 9]

Besides, another interesting point in terms of analysis is the dynamics of costs for purchasing raw materials, materials, purchased semi-finished products and components for manufacture and sale of products, fuel, goods for resale in the Russian Federation (Table 3). Sudden growth of expenditures for purchasing goods for resale took place, while expenditures for purchasing raw materials, materials, components and semi-finished products decreased.

Table 3. Expenditures for purchasing materials for manufacture and sale of products for resale within the territory of the Russian Federation.

| Expenditures for purchasing raw materials, in thousand rubles | | | |
|---|--|-----------|------------------|
| Year | Raw materials, purchased semi-finished products and components for manufacture and sale of products (goods, works, services) | Fuel | Goods for resale |
| 2007 | 30,930,671.0 | 514,572.0 | 4,883,933.0 |
| 2008 | 30,838,557.0 | 523,774.0 | 4,299,060.0 |
| 2009 | 29,433,634.9 | 489,201.8 | 9,873,749.4 |
| 2010 | 32,151,155.5 | 574,625.5 | 3,926,876.2 |

The diagram represented in the figure shows that in 2009. This confirms the conclusions that power-engineering enterprises lost part of their orders in 2009 and were compelled to sell certain goods to gain extra revenue.

As practice shows, the majority of industries, which manufacture production means and durable goods, typically have high degree of production concentration and capital with few major companies dominating. The consequence of this fact is emergence of the monopolistic power of such firms, which is sufficient for resisting the reduction of prices within a certain period by way of limiting the production of goods as a result of recession in demand.

The fact is commonly known that repetition of economic crises takes place in certain intervals. At that, while in the early 19th century crises repeated every 10 or more years, in the 20th century, they took place more often. We can consider several facts. The first economic crisis was recorded in 1825, the second one — in 1836, the third one — в 1847, the fourth one — in 1857 [10, 11]. Besides, it is to be noted that the crisis of 1825 affected only the economy of England, and the crisis of 1857 was a global one and affected England, the USA, France, and Germany. The growth of the frequency of crises repetition was observed in the second half of the 19th century, when the intervals between them reduced to 7-9 years. For example, in the second half of the 19th century, crises took place in 1857, 1866, 1873, 1882, and 1890.

If we take the depth of the financial element of the considered crisis, we need to note that it is unprecedented both by affecting all sides of the financial system, and by its depth and acuteness. At least, after the previous financial crises, the issue of transforming the financial architecture of the world and coordination of the efforts of twenty leading countries with the purpose of elaboration of measures to prevent such crises in the future has never been on the agenda. Neither have so large amounts been allocated for struggling financial crises before.

We need to note that in Russia, according to specialists' calculations, the cost of anti-crisis measures by the end of the 1st quarter of 2009 reached approximately 10 trillion rubles (with expenditure of funds from the Reserve fund), which exceeds 20% of the GDP of Russia (for reference: in 2008, the GDP of Russia equaled to 41 trillion rubles) However, these funds turned out to be insufficient, and additional funds were required to implement the anti-crisis program.

Summary

We need to note that the analysis of scientific and periodical publications, statistical data gives reasons to say that in the current circumstances, which are distinguished for the dynamism of all processes, the length of phases of an economic cycle as well as the amplitude of its fluctuations can take various values. It mainly depends on the reasons that caused the crisis, as well as the existence of certain peculiar features of the economies of various countries, i.e. on the extent of state intervention and the nature of the economy regulation, the level of development of the services sphere and its share in the overall economy, on the conditions of development of the scientific and technical progress, and on application of its results.

It is to be noted that the peculiar feature of the contemporary financial and economic crisis is its omnitude, coverage of all financial spheres, the whole economy, and the social sphere. This is the difference between the contemporary crisis and many specialized crises that took place in certain countries, which crashed mortgage, real estate market, the financial system of the country, or certain branches and sectors of the economy. Based on that, we can formulate the main characteristics of the modern crisis:

- 1) The financially economic nature of the crisis has transformed to a social one;
- 2) the crisis is global;
- 3) the crisis is very severe as it is the longest recession of the recent times and can last up to five years and even longer.

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