MECHANISMS OF FORMATION OF THE CONTRACT MANUFACTURER OF TELECOMMUNICATIONS EQUIPMENT IN RUSSIA

© 2010 B.Y. Tatarskikh, D.A.. Trubnikov*

Keywords: telecommunications equipment, production specialization, vertical integration, contract system of production, electronics market, electronic industry.

The article examines and analyzes the problems of formation of the contract manufacturing of telecommunications equipment, the history of evolution of the production of electronic products in the context of globalization processes and the possibility of adapting it to the current domestic conditions, and draws attention to the issues of state support for parties of the contract system of production.

Problems caused by the transformation of the domestic economy have led to Russian microelectronics industries being behind the western ones for 12-15 years, resulting in a substantial proportion of import component in the domestic market, which by some estimates accounts for 95%[1] of the total market. The solution to this problem requires a significant investment in research and development.

Domestic research sources are focused mostly on the need to eliminate this backlog. Naturally, proponents of the revival of domestic electronic industry talk of the state financial and organizational support in this direction.

It should be noted that in today's time the electronics industry does not produce products for the end user. Most manufacturers of integrated circuits, including Intel, that release the components separately, and have them assembled into a final product are manufacturers of computers, telecommunications equipment, household appliances, etc., including military equipment manufacturers. Moreover, the company that makes products for the end user, as a rule, has no need in producing a full set of elements of a product; on the contrary, specialized production is the key element to the industrial success. Another thing is that in the electronic industry, these processes are more profound in comparison with other industries.

In the early stages of the consumer electronics market its major growth was achieved at the expense of vertically integrated companies, which solve all problems of the technological chain: the production of new elements, software, installation and assembly of printed circuit boards, as well as the problems of marketing nature. For example, it suffices to consider the history of IBM, which dealt with all these issues and including the leading center of scientific and technical development in the field of computers, electronics and software.

During the evolutionary development of the industry the trend towards specialized production emerged. Moreover, this is reflected in the business models of large, vertically integrated corporations that in order to enhance their competitiveness have been forced to allocate a portion of their assets in individual companies and develop their separate ways.

Thus, we can assume that integration does not make sense in the case of joint production based on assembly of heterogeneous components, as in this case, "the prospect of integration achieved through cost reductions, in general, is not so obvious"[2]. And even if we assume that integration can provide economies of scale, in this case the scale effect is manifested to a greater extent in the division of specialized production, since the selected firm can scale up its production and service more consumers than if the whole process chain was within an enterprise. Naturally, in this case we are faced with increasing transaction costs, which are within the "theory of the firm", but, as we know, the internalization of these costs increases the cost of administrative coordination.

The alternative is the development of electronic industry through state support for vertically-integrated structures. In our opinion the first priority is the implementation of this development through better use of contract manufacturing in terms of specialization and utilizing the achievements of world electronic industry.

* Boris Y. Tatarskikh, Doctor of Economics, Prof. of Samara State University of Economics, Dmitriy A. Trubnikov, post-graduate student of Samara State University of Economics. E-mail: da.trubnikov@gmail.com.

The rapid growth of knowledge-based industries is impossible without the globalization of economy, and therefore one of the priorities of state policy in addition to the above-mentioned should be the "liberalization of international economic relations"[3]. In addition, it is necessary to revise the existing approach, under which the main role in the formation of high-tech sectors of the domestic economy is transferred to the industrial structure, administered by the military-industrial complex, the authorized capital of which is to a large extent formed with state participation. The result of such an approach leads to the problem of vertical integration of data structures, that does not meet today's realities of production of telecommunications equipment. High cost of development in military industry means they are not always economically viable for the civilian market due to the presence in this market of more affordable equipment of foreign manufacturers.

1. *Sydorov M.* Sim-Sim, opened // Energy for industrial growth. 2007. № 9 (19).

2. *Bain G.S.* Industrial Organization. N.Y., 1968.

3. *Bendikov M, Frolov I.* High-tech industrial sector of Russia: Status, Trends, tools for innovation development. M., 2007.

Received for publication on 10.05.2010