AMERICAN JOURNAL OF ECONOMICS AND BUSINESS MANAGEMENT

ISSN: 2576-5973
Vol. 6, No. 6, 2023

Theoretical-Methodological Foundations of the Management of Natural Monopolies

Samieva Maftuna
Researcher of Tashkent State University of Economics

Abstract: This scientific article covers theoretical methodological aspects in the regulation and management of the spheres of natural monopolies. The reasons for the origin of natural monopolies, their negative consequences in the economy are covered. Proposals and recommendations have been developed on the economic features of the regulation of natural monopolies.

Keywords: monopoly, natural monopoly, pure natural monopoly, legal natural monopoly, regulation, Management, positive theory, technogic property, economic efficiency.

Introduction

On the basis of both conditions for the emergence of natural monopolies, one thing lies. It is also, if not, technology. In the first case, the properties of technologies are influenced by supply to the emergence of natural monopolies, and in the second by demand. Technological innovation was the reason for the emergence of natural monopolies in its day (for example, the emergence and development of Railways in the XVIII century, and the emergence and development of electricity, telephone, water transmission and heating networks at the beginning of the XX century). Alternatively, it is technological development that, to this day, violates the status of natural monopolies (for example, the development of the cellular service as an alternative to the universal services of the terrestrial telephone line, the production of heat and electricity, etc.). The present nature of technology and its role in the development of capitalist markets was determined by the famous Austrian – American economist Joseph Schumpeter, who characterized the process in question as a "significant disruption" (creative destruction).[1] Schumpeter and his followers studied innovation and technological development as a driving factor in the evolution of capitalist markets.

In the dissertation work, noting that it is important to introduce modern management methods in the management of natural monopolies in our country, a natural monopoly was defined by the author as follows: natural monopoly is a situation when it is not possible or economically productive to create a competitive environment in terms of satisfaction of a need, according to the permanent or temporary technological characteristics of In this regard, according to the constant or temporary technological characteristics of demand, we explain as follows: in the management of the spheres of natural monopolies, we consider that the basis of the transition to a market economy is the five popular principles of the "Uzbek model", as well as the accounting of foiling from the organizational, economic and legal methods of modern management. In addition to them, functions such as self-management; strategic planning; innovation management; the influence of factors of the external environment in the management of the

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm

internal market can be used. A natural monopoly entity is an economic organization (legal entity) that is occupied with the production (sale)of goods in the context of a natural monopoly.

Therefore, in the conditions of a natural monopoly, the presence of a single enterprise that provides the entire market for certain goods is considered economically expedient. For example, you can take a railway. In this situation, it will not be wise to build additional parallel railways in order to develop competition. Thus, on the basis of the construction of natural monopolies, it usually lies the presence of a large Network: Rail, pipe conductors, electricity, etc.

Analysis of thematic literature. A natural monopoly situation can occur for the following two reasons:

1. The presence of large-scale savings opportunities in the industry (also known as a growing return);
2. Tendency to universality or standardization. In this case, consumers are more inclined to consume all the goods and services used (for example, universal services of telephone companies, operation systems, etc.).

The concept of "natural monopoly" - in terms of its origin-is characteristic of the Classical School of Economix, for the analysis of which the static ratio of supply and demand is the basis.

Monopoly-secluded domination in one area of the economy; a form of market organization. In such markets, the sole seller operates with his own goods, in other networks there is no substitute for such goods.[2] monopoly arises in a context where competition as a result of interaction between enterprises (e.g. merger, agreement or cartel agreements) is wholly appropriate and justifies state intervention to preserve Liberal traditions. Monopoly can also be natural or relative to a much more deficient commodity in the industry. In this case, the reasonable size of the unit of production is paid to satisfy the entire market. All other alternatives: state regulation, such as public ownership or private monopoly, are inappropriate in such a situation. In this case, the problem arises of choosing the smallest of them.[3]

Natural monopolies-a situation when the creation of competitive conditions in the market in meeting the demand for certain types of goods (works, services) is impossible or economically unacceptable by technological characteristics. [4]

The reform of natural monopolies does not lead them to completely disappear, they lead to reciprocity, aimed at increasing the competitive environment in quality and price when applying modern other-ruv and market mechanisms in their activities, moving to a low cost balance, satisfying consumer envy. [5]

In the context of globalization of the economy, the role of the state is important in the formation of a free competitive environment for the development of each sector and sphere, ensuring economic growth, increasing competitiveness, deepening the processes of modernization and diversification of the economy, attracting investments to the sphere and sectors, creating favorable conditions. In Mundazam, the state acts as the chief reformer in the conduct of the regulation and management of monopolistic States in the field, the reduction of natural monopolies, their re-composition (restructuring). [6]

The effectiveness of competitive policy on the management and regulation of natural monopolistic organizations in the country is studied in three main directions: legislation and the practice of antimonopoly regulation; problems of economic concentration and its regulation; mechanisms for the development of a competitive environment.[7]

The histories of the origin of natural monopolies and its peculiarities have been widely studied by economists. Natural monopolies, if they arose once in the course of human life in the process of satisfying their needs, or in the spheres of the economy, remain natural and subsequent. However, as practice shows, some of them eventually lose their "naturalness". This is due to the fact that in the field of natural

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm

monopolies, the state is constantly developing a competitive environment and regulating their activities. [8]

Despite the fact that the existence of natural monopoly areas seems more effective (cost effective), natural monopolies are traditionally studied by classical political economy theory as a violation of market principles (market failure), which is based on the following hypotheses:

1. Information (on costs, prices, demand, etc.) is convenient for all interested groups;
2. The firm seeks to maximize its profits;
3. A profit maximizing commodity (service)is achieved at the point of production in a situation where limited costs are equal to limited income, while the price is determined by the level of demand.

As mentioned above, such hypotheses give reason to conclude that market defects such as dependence on consumers, the lack of production of sufficiently high-priced goods that meet demand from average costs, would be appropriate in a monopoly setting.

For the following reasons, as natural monopolies, it is necessary to introduce the following in a regular way: the first is that the regulator has complete information about the market situation (production costs, demand, etc.). The latter is in the case of monopolistic commodity production or price recording, due to the fact that the regulator has the appropriate powers.

Research methodology. The paper made extensive use of scientific study of existing problems in the management of natural monopolies, comparative comparison, study and economic comparison and analysis of statistical data, logical reasoning, scientific abstraction, analysis and synthesis, induction and deduction methods.

Analysis and results. In Uzbekistan, the spheres of natural monopolies are somewhat wider than in international practice. Their formation is associated with structures resulting from the restructuring and management of the economy during the transition period.

In accordance with the law of the Republic of Uzbekistan "on natural monopolies"(April 25, 1997, in a new edition-August 19, 1999), the activities of natural monopolies entities in the following areas in Uzbekistan are regulated by the state: oil, gas condensate, natural gas and coal production, oil, oil products and gas pipeline transportation, electricity and thermal energy production and transmission, freight and passenger transportation on Railways, General free-use electric and postal services, water pipelines and sewage services.

In terms of occurrence and technological nature, natural monopolies can theoretically be categorized as follows (Table 1).

Table 1. Categorization of natural monopolies

Pure natural monopoly	Legal (legal) natural monopoly
➢ oil, gas condensate, natural gas and coal production;	➢ transportation and transmission of oil, petroleum products and gas through pipelines;
➢ general freely used electrical services;	➢ transportation of goods and passengers on railways;
➢ water pipes and Sewer Services.	➢ general freely used postal services.

Source: developed by the author.

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm

It will not be possible to create a competitive environment in terms of a purely natural monopoly – technological and geographical location.

Legal natural monopoly-in terms of technological and geographical location, it is possible to create a competitive situation, but not necessarily acceptable.

Based on the subject and object of the study, let's consider economic descriptions of the field of electricity as an example of the field of natural monopoly, these characteristics provide the basis for noting this area as a field of natural monopoly.

As you know, electricity is a product that is not stored in one place. The demand for electricity fluctuates strongly, depending on the time, day and year, and the model of these fluctuations is not stable. The electricity proposal is related to four vertically interconnected stages of production: generating electricity; transmission; distribution; ultimately to the consumer (Figure 1).

The electric power sector has existed for about 100 years and has gone through a series of structural, technological and regulatory changes during this time.

In the years after World War II (1945-1960.) in the field of electricity, signs such as price wars, cartels, antimonopoly behavior of oligopolies began to manifest. Technical progress has significantly changed the scope and descriptions of generalization and transmission. The minimum volume of effective capacities has grown. During this period, many states came to the conclusion that the entire field of electricity belongs to the field of natural monopolies. The successful elimination of destructive monopolistic behavior is carried out with the introduction of state ownership and thorough regulation. In France, the "Elektrisite de France" was formed in 1946. Italy created a state monopoly in the field of electrification in 1962, the end among European countries.

Generalization is the process of converting some type of energy into electricity (by activating different types of fuel (coal, oil, gas)or using water or wind kinetic energy). Different types of generalised enterprises are characterized by different ratios of constant (primarily power itself) and variable (more fuel) costs.

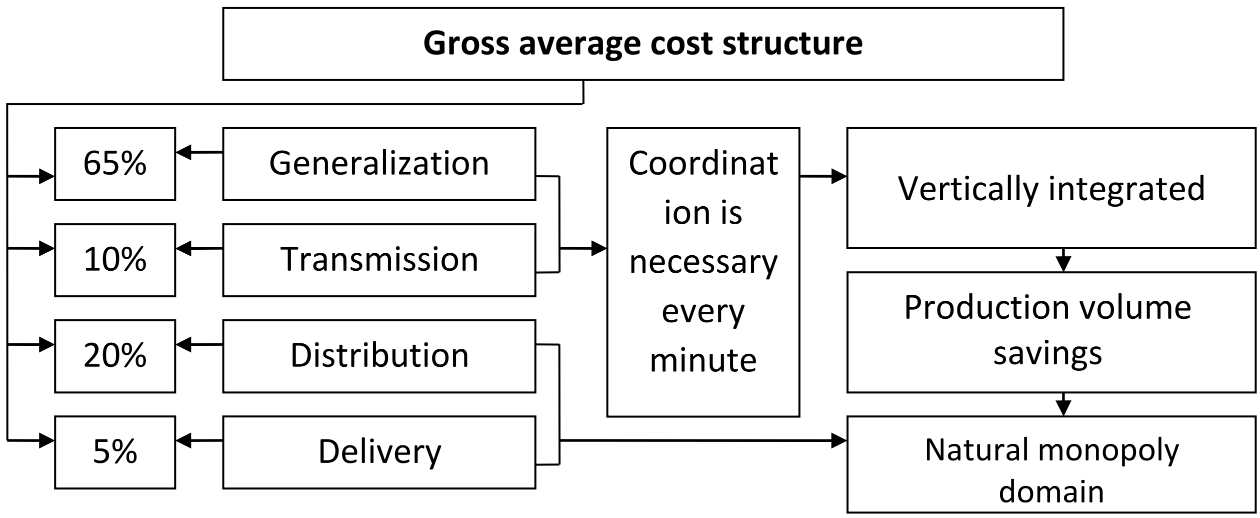

Figure 1. Economic characteristics that make the electricity sector a natural monopoly (logical imagination)
Source: developed by the author.

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm

Power generation is a non-reversible high-cost, capital-capacity generation. The volume of non-refundable costs varies according to the use of various energy resources.

In addition, electricity generation (when any resources are used) is associated with large environmental costs. Effective control over compliance with requirements of an ecological nature is necessary, which requires large investments. However, generalization does not in its own right have natural monopoly signs and is a potential area of competition.

The transmission and distribution of electricity is valuable, characterized by capital capacity, as well as high non-refundable costs, and has descriptions of natural monopolies. In addition to the high costs for the construction and operation of transmission lines, the inevitable losses of electricity constitute a large share of costs. Effective production should be focused on stratified prices that include loss items.

For this reason, the modern system of electrical transmission requires the Coordination of the movement of network generators and owners (operators) every minute. It is this generalization and transmission that has traditionally been vertically integrated.

Vertical integrality in electrical energy has imposed certain limitations on possible structural changes in the field. When combining generalization and transmission, savings in the volume of production occur, and a natural monopolistic environment is formed, generalization does not create it on its own. Due to this, the question of whether the losses associated with the loss of coordination occurring between generalization and transmission exceed the benefits gained from the introduction of competition in the field of generalization is a fundamental issue of structural policy.

Thus, the main descriptions of the network can be summed up in the following way: electricity is not stored in one place; demand for it is distinguished by strong fluctuations; costs associated with social costs and Environmental Protection are high; the network is distinguished by capital capacity, high irreversible costs; transmission and distribution (transportation industry) has the sign of natural monopolies; at the same time, a potentially competitive network such as Generation and delivery requires constant and thorough coordination across the vertical loop, especially between generation and transmission, which is a limitation for any structural change; the technology does not allow connections between generation and transmission to be interrupted.

From the above technological features, we are most interested in regulation, which is determined primarily by the presence of natural monopolies. In modern management theory, there are two different approaches to the regulation of natural monopolies: positive and normative.

Positive and normative studies approach the problem of regulation in different ways. The normative approach provides for the regulation of natural monopolies, in general, but at the normative level, covering a narrow range of research. Therefore? we will focus on a positive approach/

Theories of the positive regulation of natural monopolies. An important sign of regulation from the point of view of Economic Policy (positive approach) is that it generates winners and losers through the redistribution of income and, accordingly, forms interest groups and organizations. For this reason, there are many studies of a positive nature that take a somewhat broader approach to regulation than a purely natural monopoly approach. They study the formation of regulatory bodies, the issues of organizing their activities. Common positive theories include theories such as the theory of social interests, the theory of "Capture" (acquisition), and the economic theory of regulation.

Social Interest theory has recently been used with great support among economists. For example, Winston writes: "the impotence of this theory is based on the assumption that regulatory and regulated enterprises

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm

themselves are governed by social welfare maximizers with absolutely complete and accurate information". [9]

Another theory is the "capture" of regulatory authorities

the (takeover) theory (capture theory) states that no matter what initial targets are given to regulatory authorities, they can change the direction of activity to satisfy their private interests.

The content of the acquisition theory is derived from the following cases[10]:

- the state has the power of" legal " coercion and thus has monopoly control over the "proposal" of regulation;
- state regulation in practice can protect competing enterprises from price wars and eliminate access to profitable markets;
- while regulated enterprises are often more comfortable (comprehensively convenient) and profitable than unregulated enterprises, private enterprises fight for a regulatory proposal;
- Regulatory bodies, such as the US International Chamber of Commerce and the Federal Commission for communications, are formed with the intention of correcting "market defects", over time such types of bodies are subject to "appropriation" by the enterprises they regulate. That is, the regulatory authority is inclined in one way or another to take regular events that serve the interests of regulated enterprises.

Appropriation theory shows that a regulated enterprise benefits above average than an unregulated one. At the same time the theory of appropriation also has a number of disadvantages, which are as follows:

- does not theoretically substantiate the process of appropriation of the regulatory body;
- cannot agree with co-subsidization, which is widely used in regulated networks;
- a number of routine measures taken by regulatory bodies cannot be explained, but they are opposed by regulated enterprises.

Thus, economists-theorists are skeptical about the idea that this regulation will achieve its reliable effect. Cases of overt suppression of regulation by regulated enterprises also occur. At the same time, examples of when corporations oppose regulation are also found in practice – such regulatory measures can include laws "on Environmental Protection", "on ecology", "on labor protection". In addition, researchers find the inefficiency caused by regulation in networks where there are "market defects" very easily.

Experiments have shown that regulation under certain circumstances can deepen "market defects". Because of this, regulation does not always justify itself.

Working as part of the Asian Development Bank (ORB)project to institutionally strengthen the state distrust committee, Professor Tim Brennan explains to Mycrosoft Corporation, which has a popular Windows operation system, that it is not advisable to regulate certain areas of natural monopoly. In his opinion, it is practically impossible to effectively regulate the sphere of the operating system for computers. First of all, the technological features of these networks do not allow this. Technologies in the field of software are changing so quickly that they do not allow limiting or regulating business activities in this area. Secondly, the activities of this field will depend on the development of a high level of Science and a lot of know – how and patents. No one in the world has yet thought about calculating the company's costs for the production of the Windows operation system and setting "fair" prices for its product.

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm

Conclusion. It has been described that if a single firm can serve the market with lower costs than two or three firms, its manufacturing technology will embody the natural monopoly properties. In other words, represents the effect of saving from the scale of production (in the case of a one-product natural monopoly) and the scope of production (in the case of a multi-product natural monopoly) in the respective volume of production.

If the limited production costs are less than the average costs in the volume of production of the corresponding product, that is, the costs per unit of product decrease with an increase in the volume of production, savings in the scale of production occur. For a one – product firm, savings in the scale of production-will be sufficient grounds for the validity of a natural monopoly.

So, we studied that on the basis of the emergence of natural monopolies, one thing lies – technology. While in one situation, technologies can influence the emergence of natural monopolies by supply as a result of large savings, in other situations, descriptions of demand, such as a tendency to universality, standardization, contribute to this.

In conclusion, despite the fact that natural monopolies are recognized as a rational form of business from an economic point of view, they are not without the following problems caused by monopolism:

- prices will be higher in conditions of low production than in the case of pure competition;
- the use of monopoly power for bad purposes (for example, different types of discrimination). For this reason, even the Liberal School of Economics has traditionally favored intervention in the form of regulation of these markets.
- However, the regulation of the management of natural monopolies, especially the high level of regulation by the state, has recently come under sharp criticism from theorists – economists. The main conclusions from the criticism of economists can be stated in the following points:
- regulation is an area that changes rapidly, so that any results, economic and technological States achieved at this stage are subject to changes over time;
- even because the publicly stated goals of regulation are priority, economists do not want to take it as a priority practice. In our opinion, regulation ensures the achievement of the intended result only in those conditions that have created the right incentives.

List of literature used

1. Joseplr Alois Schumpeter, (1883-1950), “Capitalism, Socialism and Democracy” (1942).
2. National Encyclopedia Of Uzbekistan. Tashkent. Volume 6. 2004. 77 PP.
3. Ahblvfy V/ Kb,thfkbpv? ;ehyfk “Collier’ s Year Book”? 1955/ 56 ,tn/
4. Ўзбекистон Миллий Энциклопедияси.Тошкент 8-том. 2004 й. 215 бет.
5. Saidov Mashal Samadovich (2021) foreign experience in the management and regulation of natural monopolies. Economics and education.2021yil, No. 5. https://cedr.tsue.uz/index.php/journal/article/view/209/256
6. Saidov Mashal Samadovich (2022) institutional features of state regulation of the activities of natural monopoly organizations in the context of globalization. Republican scientific and practical conference on" innovative approaches, problems and solutions to the educational process". - Tashkent 2022. 197-203 b.file:///C:/Users/Acer/Downloads/globallashuv-sharoitida-tabiiy-monopol-tashkilotlar-faoliyatini-davlat-tomonidan-tartibga-solishning-instituttsional-hususiyatlari%20(2).pdf

ISSN 2576-5973 (online), Published by “Global Research Network LLC"
under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm

7. Saidov Mashal Samadovich (2021) economic and legal aspects of the management and regulation of natural monopoly organizations in Uzbekistan. Scientific electronic journal" Economics and innovative technologies". № 3, may-June, 2021. file:///C:/Users/Acer/Downloads/%D0%93%D0%9E%D0%A2%D0%9E%D0%92%D0%9E+%E2%84%963+2021_97%20(3).pdf

8. Saidov Mashal Samadovich (2021) CHALLENGES AND SOLUTIONS OF FORMATION OF COMPETITIVE ENVIRONMENT IN REGULATION OF NATURAL MONOPOLIES. International Journal of Advanced Research in ISSN: 2278-6244 IT and Engineering. Vol. 10 | No. 11 | Nov 2021. https://garph.co.uk/IJARIE/Nov2021/G-6.pdf

9. "Social welfare maximizers are individuals who work to cultivate absolute social welfare without any personal incentives. Winston, 1993, p.126.

10. George Stigler. Theory ekonomicheskogo regulirovania Vell journal of Economics, 2. 1973. -21.

11. Saidov M.S., Shafaiziev Sh. The main aspects of the development of the production potential of the enterprise. "Экономика и социум" №1(104)-1 2023. https://cyberleninka.ru/article/n/the-main-aspects-of-the-development-of-the-production-potential-of-the-enterprise/viewer

12. Saidov M.S., Koshbokov D.M. Features of international companies in world business. "Экономика и социум" №1(104)-1 2023. file:///C:/Users/Acer/Downloads/features-of-international-companies-in-world-business.pdf

13. Saidov M.S., Abdumadjidova Sh. Main tools of lean manufacturing in the management system. "Экономика и социум" №1(104)-1 2023. file:///C:/Users/Acer/Downloads/main-tools-of-lean-manufacturing-in-the-management-system.pdf

14. Saidov M.S., Barnaeva N. Features of diversification of products and products of competitive procedure. "Экономика и социум" №1(104)-1 2023. file:///C:/Users/Acer/Downloads/features-of-diversification-of-products-and-products-of-competitive-procedure.pdf

15. Saidov M.S., Karshiev A.N. System of export activity management in Uzbekistan. "Экономика и социум" №1(104)-1 2023. file:///C:/Users/Acer/Downloads/system-of-export-activity-management-in-uzbekistan.pdf

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm