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## **MARGINALISM AS THE BASIS OF ECONOMIC BEHAVIOR**

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### **МАРЖИНАЛІЗМ ЯК ОСНОВА ЕКОНОМІЧНОЇ ПОВЕДІНКИ**

*The article presents separate results of the theoretical substantiation of the marginal approach to the research and optimization of company expenses. The ways of further elaboration of practical recommendations concerning the complex application of the marginal approach to research, optimization of the company's activities and its costs are given.*

*It is proved that from the positions of marginalism such categories as price, value and value do not act as synonyms, one-serial interchangeable entities, as each of these words has its strict meaning, and their corresponding phenomena - their boundaries, their content, a kind of immanent content. It is determined that cost is a key problem of market relations, and therefore only in connection with the value measure (explicit or implicit) market relations actually occur. The genesis of the phenomenon of value is accompanied by the development of not only forms of exchange (from the natural to the money, further - to the virtual), but also in the form of participants, in the form of observance of its main principle of communication - equivalence.*

*The main approaches to the problem of analysis and cost accounting are generalized, the possibility of using the margin approach is determined. The key elements of margin analysis and further implementation in the activities of firms are determined. The nature of the influence of marginal (marginal) costs on the results of activities in conditions of imperfect competition, and not in abstract, perfectly competitive, is established. The correlation between value, price and marginal costs was established, which allowed to determine certain directions of increasing the efficiency of economic behavior. Particular attention is paid to the relationship between value, price, marginal costs and financial ratios, which are the second and third derivative function to cost, which allows a new interpretation of financial relations, namely: the relationship of the real sector of the economy with the financial, commodity market - from currency, money market, mortgage, debt markets. It is assumed that it is probably the breakdown of prices and values and forms the source*

*of economic imbalances and crisis phenomena in the modern economy, and the state has every means to correct this.*

У роботі представлені окремі результати теоретичного обґрунтування застосування маржинального підходу до дослідження і оптимізації витрат фірми. Наведені шляхи подальшої розробки практичних рекомендацій щодо комплексного застосування маржинального підходу до дослідження, оптимізації обсягів діяльності фірми та її витрат. Доведено, що з позицій маржиналізму такі категорії як ціна, вартість та цінність не виступають синонімами, одно-порядковими взаємозамінними сутностями, так як кожне з цих слів має свій строгий сенс, а відповідні їм явища - свої кордони, своє наповнення, своєрідне іманентна зміст. Визначено, що вартість - ключова проблема ринкових відносин, а отже тільки в зв'язку з вартісним виміром (явним або неявним) ринкові відносини власне і виникають. Генезис явища вартості супроводжується розвитком не тільки форм обміну (від натурального до грошового, далі - до віртуального), але і за формулою учасників, за формулою дотримання головного свого принципу зв'язку - еквівалентності.

Узагальнено основні підходи до проблеми аналізу та обліку витрат, визначена можливість застосування маржинального підходу. Визначено ключові елементи маржинального аналізу і подальшої реалізації в діяльності фірм. Встановлено характер впливу граничних (маржинальних) витрат на результати діяльності в умовах недосконалості конкуренції, а не у абстрактних, досконалоконкурентних. Встановлено співвідношення між вартістю, ціною і маржинальними витратами, що дозволило визначити певні напрямки підвищення ефективності економічної поведінки. Особлива увага приділена співвідношення між вартістю, ціною, маржинальними витратами і фінансовими коефіцієнтами, які є другою та третьою похідною функцією до вартості, що дозволяє по-новому тлумачити фінансові відносини, а саме: зв'язок реального сектора економіки з фінансовим, товарного ринку - з валютно-грошовими, фондовими, іпотечними, борговими ринками. Зроблено припущення, що, ймовірно, саме розрив цін та вартостей і утворює джерело економічної нерівноваги і кризових явищ в сучасній економіці, а держава, шляхом реалізації відповідної політики, має усі важелі вправити це.

**Keywords:** costs; marginal costs; marginality; economic behavior; transaction costs.

**Ключові слова:** витрати; граничні витрати; маржиналізм; економічна поведінка; трансакційні витрати.

**Formulation of the problem.** As you know, the marginal paradigm in the economy in the XXI century is better known as a set of categories that treat the value of goods as a result of conscious attitude of the business entity to the economic benefits. The fundamental difference between the marginalist approach and the provisions of the classical political economy in the study of market processes is that it is based on the emphasis on demand and consumption, rather than production and labor costs. The history of marginalism demonstrates its commitment to methods of quantifying the results of management based on tools of differential calculus, such as partial derivatives on individual factors of production. Such tools allow to consider the influence of one of the factors of production remain unchanged all the others, that is, the principle of "ceteris paribus". In the use of private derivatives by economists as instruments for measuring movement and the dynamics of economic processes, it is possible to "blame" the significant successes of the interdisciplinary approach - the combination of achievements in mathematics, physics, sociology, psychology, statistics and other sciences [1].

**Analysis of recent research and publications.** Particular criticism of opponents of the marginal approach were: a certain contradiction and limitation of the canonical marginal approach, often a lack of communication or a complete rupture of mathematical and economic sense in many mathematical models, and especially - methodological subjectivism. Of course, all this and many other shortcomings had a deterrent effect on the practical application of marginalism in real economic practice. The traditional model of micro theory on real data are often not amenable to empirical testing. And, for example, the ability of methods of differential mathematics to connect streaming and fixed economic processes with each other, to identify mutual transitions from dynamics to statics and back remained in the shadows, were unclaimed and undervalued. A whole galaxy of well-known theoretical economists question the quantitative estimation of limit values. Nobel laureate F. Machlup believes that the idea of marginalism is not

applicable in business practice and asks the question, "whether the marginal analysis theory is untenable and should not abandon it, especially in the theory of prices?"[3, c. 74].

In his book "Mathematical Economics" B. Lancaster focuses on the difficulties in the application of marginal analysis:" for many years, theoretical economists worried that the administration of firms does not think of marginal terms. This situation is due to the confusion between the optimization conditions and the effective methods of calculation of immediate solutions" [4, c. 29].

When working with textbooks on microeconomics, which offer numerous schedules and calculations are offered, the question arises whether real prices for market economy goods are actually set at the level of marginal costs [2, c.461-463]. There are doubts about the mathematical form of the formulas involved in the sections on microeconomics, when the dimensions of the right and left parts of the equations clearly do not coincide [5, c. 272; 6; 7].

**The main purpose of the article** is a theoretical substantiation of the necessity and possibility of using the main provisions of the theory of marginalism as the basis of the economic behavior of business entities.

**The main results of the research.** Contradictory of margin paradigm and its numerous reservations, restrictions and simplifications do not allow to extend it massively to real business entities.

Logical inconsistency is hidden not in the approach proposed by the classics of marginalism, but in the way of interpretation of marginal values and methods of their measurement. Traditional explanation of marginal costs as extra costs for an additional unit of output  $MC=\Delta C/\Delta Q$  are often deciphered as  $MC = (C_2-C_1)/(Q_2-Q_1)$ , where  $C_2$  – costs (costs are not yet outgoings!) of the reporting period,  $C_1$  – costs of the previous period, respectively  $Q_2$ , and  $Q_1$  – volumes of output of goods of the same periods.

The application of this approach to the calculation of marginal costs requires numerous simplifications or leads to significant unsolvable difficulties. Firstly, when calculating MC by quarters, months, years for the same company, the results do not coincide and do not combine, secondly, there are negative values that can not correspond to the nature of the first derivative in economic processes, thirdly, according to the laws of maths, increments should decrease, and they rather grow.

That is why the first proposal to the theory of marginalism arose: the quantities with which practical economists work in the calculation of real data are already incremental, and the specific increments are marginal values. Then all tools of marginalism can be applied not to conditional objects and firms, and to any real subject of managing, using data of its real functioning, relying on real changes of function depending on small change of argument. When, for the purpose of calculating the cost price and forming producer prices, divide the costs of a particular period by the number of issues of the same period, then receive additional costs for an additional unit of production, that is, the margin value.

What used to be called average for a given cost period is actually the rate of change in total costs - the first derivative. Then what is the average outgoings? Averages are diverse, say mathematics. That's right. Marginists used different average values. Unlike arithmetic averages, the specific increments are related to the average outgoings AC in an analytical way. AC can be derived from the values of the outgoings function MS, which vary with time and are the first derivative. Since marginal outgoings are specific, they are arithmetically average in their own way, for example, for 1 day, for 1 month, for 1 year, etc., so that the increment of outgoings and output corresponds to the same period, and the observation periods were continuous in time. Since annual statistics are available from the official statistics of the company, we construct MC and AC curves for annual values. Although other periods can be used to access enterprise information, there are no fundamental limitations in the system model (SMPF). Our system model is represented by a graph of the intersection of MS and AC curves or a system of three equations and has all the features of the production function [8].

Integral average outgoings of AC are not very interested in a particular commodity producer, because they express the interests of the society, which require to minimize this commodity producer's consumption of all resources, since all resources are essentially public and all are limited for the existence of mankind. Average outgoings reflect on socially necessary costs for the production of this product from this manufacturer. They would significantly restrict, restrain, restrict, hinder the daily activities of any manufacturer, prompting him to constantly look for the best ways to replace resources. Such concerns about the minimum level of costs are very troublesome, difficult, and in a state of monopoly without them it is possible to do, because the monopolist can include in the price of his goods any amount of resources spent, and the consumer from hopelessness will have to pay all this. It is not interesting for a monopolist to know his cost-effective level of socially necessary minimum outgoings. Our society has not yet matured to the understanding of the necessity to carry out these calculations, especially when the governmental authorities do not always seek to act in the interests of society.

Isn't there too much idealism if marginalism is reduced to the connection of economics with psychology, and a real business entity – to an individual ordinary person? In this sense, the real subject of the economy will never correspond to the basic paradigm of mathematical analysis and the laws of differential calculation. Simplification in the interpretation of marginal methods is the notion that marginalists have linked economics and psychology.

In fact, the unrecognized (not identified) since then, the multidimensional and multi-factor processes of economic behavior has called just psychology, instead of clarifying the essence of real subjects of the economy and real processes of economic exchange. The motivation of any person and any business entity is based not so much on the laws of psychology as on the economic laws of benefit and usefulness. But much more important how to interpret the concepts of limits, what to take in the empirical basis of measurement processes. The concepts of "limit" and "ultimate"

in Russian have two meanings: 1) ordinary and 2) mathematical. Usually, the "limit" is understood as a border that is not desirable to overcome, a barrier that cannot be crossed. A mathematical limit is a function in which the increment of an argument tends to a certain value. Economic growth of output of goods has a minimum of one unit of goods, and the additional outgoings it is correct to call it not ultimate, and marginal.

The real subject of economic processes (producer or consumer, or both) is often not an individual, but an organizational unit – a firm (enterprise), although all decisions in any enterprise are made by specific people. If these people connect functions of the owner and the manager (the supervisor, the director, the president), it is possible to identify the person with the business entity. But it happens much less likely than other state – physical differentiation, spatial separation of subjects and, respectively, powers of the owner and the manager, the user, the consumer. Economic behavior in market processes is estimated not by individuals, but by their roles. Therefore, there is a multidimensional of economic processes.

In the practice of market relations, supply and demand cannot be considered only at the level of subjective perception by an individual economic entity. The person is presented as a direct consumer. The creator of the goods is the firm, the collective, the organization. There is not a final consumption of the production entity. Consumption of the firm consists in using resources for further commodity transformations as a means of production [6].

The lack of final consumption in the commodity producer substantially changes his attitude to the commodity, to its price, to motivation of using, to qualitative characteristics. The attitude is expressed by the category of elasticity. The elasticity of demand for the price is significantly reduced. The different attitude to the price is expressed in the different amount of the transaction outgoings that are ready, agree to cover the production consumer. Elasticity is then reflected in the agreement to pay higher prices, in the costs of negotiating, in the ability to take opportunistic costs, which is associated with accepting insurance risks, agreeing to pay penalties, and with them "gifts", representation costs.

The end user tries to refrain from such expenses, the elasticity of demand at a price is much higher. When goods are commodities of mass demand and the first necessity, and their production is most often carried out by monopolists, then end consumers have no opportunity to refuse on the goods. The profitability of such goods for the population and for industrial purposes cannot be the same in principle due to the different amount of transaction outgoings that are formed in the process of buying a product (note, not in the process of consumption!). The transformation outgoings may be the same, but not the transactional. In real profitability of sales it would be necessary to consider both those, and others. There is an interesting and urgent problem of cross-subsidization, which in scientific terms is not even set, although at the domestic level has overgrown with myths and distorted interpretations.

Human-consumer and industrial consumer goods are very different in characteristics of the powers. They have a different attitude to outgoings and, accordingly, a different position of the equilibrium point of supply and demand. Goods of final consumption and goods of production purposes have different values of transaction outgoings. This should be taken into account in the pricing of dual-use goods, that is, goods are used in both final consumption by the population and in industrial consumption as a means of production. The prices of such goods cannot initially be the same for the population and for businesses – gas, water, electricity, heat, gasoline, goods of infrastructure monopolies.

The real subject of economic processes can fall into several institutional roles – producer, seller, buyer, consumer. Each role in the commodity exchange can be personalized by different persons, which results in a variety of commodity procedures and forms of goods. They can exist in parallel, in series and in the other variations. This reality of behavior can be recorded through the clarification of transactional links in the process of selling goods. Transaction costs add their part to the total expenses, but do not add to the cost, the prices of goods are significantly affected, and the socially necessary outgoings – sometimes, and only in part of the costs of transportation, packaging, storage. But these operations are the logical continuation of production operations and actions.

A real business entity always acts in different coordinates and in different nested (conjugated) systems. For example, a particular person (director) makes decisions in the interests of a particular company, and a separate company as a business entity is obtained as an integral, not a simple sum of the interests of other participants in the company.

Further, the real interaction of several firms in the same market leads to the integral emergence of the market price of the goods, which is perceived by a particular buyer. The conjugation of the interests of the integral seller and the integral (not specific) buyer, user, intermediary, distributor, operator, finally, the consumer, is subjected to the laws of marginal increments, marginal utility, which is opened the marginalists of the XIX century. Here, the step of increments is always really decreased – either the demand is saturated, or the satisfaction of an individual subject, a particular person is realized. The desire for the limit is always associated with a decrease in the size of the step, with such reductions should be many, and the size of the steps should tend to zero – says maths [7].

The multidimensionality of the business entity breaks up into a multitude of roles, and even interconnected by multidimensional relationships. That's where the basis for mathematical analysis, limit values, regularities of integral and differential calculus. The ultimate (better - marginal) values help to link the conjugate systems, carry out the transition from one to the another. In one system, the phenomenon under study is described by marginal values, but in another, the conjugate system, the same phenomenon is described by mean values, which can be simultaneously marginal for a system of a more complex order.

Marginalists saw the limit in relation to static, volatile, but not current processes. Is it possible to change without movement? Change, but not move? Yeah, depends on the measurement system. If one of the paired systems is unchanged and the other is subject to change. There are very serious reasons for such changes in any economic system – the existence of two types of resources (constant and variable). Marginalists justified the limit of costs and revenues for

the situation of transferring the entire cost of the initial fixed capital, that is, for the production system as a whole, considered as a reserve. In fact, fixed capital is transferred gradually, not all at once, but in parts, forming a single system of measuring fixed costs that does not coincide with the system of measuring variable costs, depending on the increase in the volume of output. In real economic activity there is a flow of costs of two types having different coordinate systems and methods of reference. After all, they are formed integrally, which is expressed in the existence of the average outgoings per unit of output. Such average outgoings do not coincide with the average costs calculated in the usual way in relation to the current unit costs per unit of output in the current period. They cannot coincide precisely by the nature of the integration of the aggregate outgoings of two different methods of measurement.

The grouping of concepts in this attitude is not contrived. All accountants are faced with the problems of accounting for costs and turning them into expenses. For example, not all purchased resources and assets that have money spent are then used in the production process, and if used, they are used in different periods. Therefore, the costs need to be increased by 1) the amount of losses, 2) the numerous possible risks, 3) the likely penalties, 4) the non-recurring (bad) receivables [8, p. 107].

In addition, there are always costs of internal resources in the form of increasing skills, managerial skill, the ability to guess the market conditions, the quality of forecasting and the effectiveness of advertising - these resources are always implicit, indivisible and immaterial. On their size, costs differ from expenses. Expenses in full, taking into account the different types of imputed expenses, constitute outgoings that include both operational and transactional elements.

The distinction between the concepts of costs and expenditures came very close the authors T.Negl, R.Holden, G.Fandel, D.Khongren, S.Golov in the work on management accounting. However, no one has yet applied political economic interpretation from the standpoint of the institutional expression of the interests of the various participants in the exchange in relation to these concepts.

The political economic differentiation of costs from expenditures and outgoings leads to a new interpretation of phenomena and categories of market value. The market is the interaction between people about the exchange of goods on the basis of equivalent proportion of their value. The cost is such a set of all obvious and implicit socially necessary outgoings for the creation and sale of goods, which corresponds to the interests of society and the rational allocation of public resources.

Value-based exchange presupposes a balance between the seller and the buyer, provided that public rationality in the allocation of all resources is not violated. The economic equilibrium consists in equivalence, coincidence of interests of all participants of each act of an exchange [9].

Market exchange ideally presupposes equality and balance between the interests of the three parties to any exchange act, reflecting on schedules and models of perfect competition. However, in fact, market exchange is carried out not in the conditions of perfect competition, but under the rule of the laws of imperfect competition, the defining feature of which is the combination of competitive and monopolistic elements of power in a greater or lesser rate.

Economic theory has not yet paid attention to the laws of imperfect competition, although applied economic trends actively support the desire for efficiency, based on maximizing the "economic profit", the excess network over normal profit in the form of monopoly rent. All modern theories of competition and views on competitiveness are based on maximizing the benefits of business entities, without taking into account the interests of other parties to the exchange. Theories of efficiency in the interests of society or the total buyer have not yet been proposed. Although the problems of ecology about the violation of public interests in the distribution of public resources have already reminded strongly about themselves.

From the standpoint of marginalism, price, cost and value are not synonymous, one-ordinal interchangeable entities, as each of these words has its own strict meaning, and the corresponding phenomena – their boundaries, its content, a kind of immanent content.

Cost is a key problem of market attitudes. Only in connection with the value dimension (explicit or implicit) market attitudes actually arise. The Genesis of the phenomenon of value is accompanied by the development of not only forms of exchange (from natural to monetary, then - to virtual), but also in the form of participants, in compliance with its main principle of communication – equivalence. By changing the forms of the parties involved, K. Marx substantiated the formation approach, with the division in history of 5 socio-economic formations. The criterion for the development of Marx was the principle of turning the form of extra labor into the added value. Logically, the movement of additional labor had to be completed by its social form of creation (with the help of universal labor, that is, the public in all its elements, at all stages of manifestation) and appropriation (compliance with the principle of equivalence without the need for its measurement).

It turns out that the market in an imperfect form can ignore the cost, not to notice it, to hide the cost far deep into the phenomenon, away from visibility, visible manifestation, from the real practice of management. Ignoring the phenomenon of value does not mean abandoning it. The seller is not profitable to bring the cost out, as it limits the monopoly rent and claims to maximize profits. And buyers and society do not have methodological, conceptual grounds for identification and measurement of value as a phenomenon. The current arguments about the composition and motivation of participants in market relations, the marginal method of identifying the cost along with the price of any product provide a theoretical basis for the direct calculation of the value of any tangible or intangible goods.

Subjective behavior of the consumer, which is emphasized by theorists of the XIX century, is not due to randomness of needs and unpredictability of desires and motives of an individual, but is determined by 1) the ability of the consumer to choose a product or refuse to consume it at all, 2) the ability to replace one need with another, but most

importantly – 3) the balance of supply and demand. This balance means making a decision in the act of buying and selling of any goods.

What does the equilibrium of supply-demand mean? It reflects on the intersection at some point of the two curves – market demand D and market supply MC. Curve D characterizes the function of dependence between the market volume (Q) release of this product and the price (P) is dominated in this market manufacturer. This means that the value of demand can vary according to the prices dictated by the dominant firm. But the demand curve may shift to the right and left, which would mean a change not in the magnitude of the demand (the ratio of output and price), but in the change in the nature of the function (f) of demand  $D = f(Q, P)$  under the pressure of the commodity producer.

Nevertheless, regardless of changes in the value or function of demand, equilibrium "Supply=Demand" plays a determining role in the market, in which the value function of the commodity is dominated, established by the producer (seller). That is why the theory of market prices and values has always paid more attention to the costs of the producer, arguing that what is more important – the embodied expenses of working time and labor, embodied in the cost, or the ratio of market conditions and imposed by monopoly supply consumption. The producer dictates the price, and the consumer only has the opportunity to choose from a narrow range of opportunities – this is the result of consumer subjectivism and psychology. Especially evident and obvious is such state in markets with imperfectly competitive organization, and we have it in overwhelming majority. Consequently, the market equilibrium is determined primarily by the interests of the producer (seller) and its ability to impose prices, transaction outgoings, purchase conditions, etc. Subjectivism and psychologism in the behavior of the consumer is reduced to the choice of an option that is dictated not even by the manufacturer, but by the seller. The theory of market prices can be reduced to the capabilities of the seller, who focuses on the level of MC and is interested in imposing a price in accordance with a profitable function of demand for himself.

In such an imposed, controlled equilibrium, the seller's interest comes first, especially in all variants of imperfectly competitive equilibrium. Thus, the theory of utility will have to be reduced to the theory of monopoly prices, and the producer MC will have to be supplemented with the seller's transaction outgoings.

**Conclusions.** So, the modern understanding of incremental values in the accounting system of real enterprises allowed us to see the empirical basis for constructing for any real organization the curves MC and AC, the intersection of which leads to the production function in a systemic form. It turned out that the system model of the production function not only allows you to overcome the gap in the flow values from the spare, but contains implicitly the key relation of the market economy - value. The relationship between value, price, marginal outgoings and financial coefficients (which are the second and third derivative function to value) will allow a new interpretation of financial relations, namely: the connection of the real sector of the economy with the financial, commodity market-with monetary, stock, mortgage, debt markets. Probably, it is the price gap from the values that forms the source of economic disequilibrium and crisis phenomena in the modern economy.

## References.

1. Blaug M. (2003), *Economic thought in retrospect*. 5th ed. – 670 p.
2. Campbell R. McConnell, Stanley L. Brue, Sean M. Flynn. (2009) *Economics: Principles, Problems and Policies* [The Economics: principles, problems and politics]. 18th ed, INFRA-M, M., Russia, 917 p.
3. Mahlup F. (2000) *Theories of the firm: marginalist, behavioral and managerial* [Theories of the firm: marginalistic, behavioral and managerial]. // *Milestones of economic thought. In 2 tons. Theory of the company* / Pod red. V. M. Galperin. – SPb., p. 73-92.
4. Lancaster K. (1972) *Mathematical economics* [Mathematical Economics]. Pod red. D. B. Yudin. «Sov. Radio», M., Russia, 464 p.
5. Sio K. (2000) *Management Economics* [Managerial Economics], 7th ed Publ. INFRA-M, M., Russia, 668 p.
6. Malenve E. (1985) *Lectures on microeconomic analysis* [Lectures on microeconomic analysis] / Per. Z franc. Kh. A. Atakshiyeva. Под ред. K. D. Bagrinovsky. Fizmatlit, M., Russia, 390 p.
7. Galperin V.M., Ignatiev S.I., Morgunov V.I. (1998) *Microeconomics* [Microeconomics] / Pod red. V. M. Galperin. Econ. shkola, SPb, Russia, 503 p.
8. Malakhova N.B. (2009) *Mikroekonomiczna teoriia vyrabnytstva ta vytrat* [Microeconomic theory of production and costs], KhNUE, Kharkov, Ukraine. – 157 p.
9. Steven R. Marginalism / The Library of Economics and Liberty, available at: <https://www.econlib.org/library/Enc/Marginalism.html> (Accessed 16 Feb 2019).
10. Sanchez D. Mises on Marginalism / Mises Institute: Austrian Economics, Freedom, and Peace, available at: <https://mises.org/library/mises-marginalism> (Accessed 18 Feb 2019).

## Література.

1. Blaug M. Economic thought in retrospect. 5th ed. 2003. – 670 p.
2. Макконелл К. Р., Брю С. Л., Флинн Ш. М. Экономикс: принципы, проблемы и политика. Пер. с англ. 18-ого изд. – М.: ИНФРМА-М, 2015. – 1028 с.
3. Махлуп Ф. Теории фирмы: маржиналистские, бихевиористские и управленческие // Вехи экономической мысли. В 2-х т. Теория фирмы. / Под ред. В. М. Гальперина. – СПб., 2000. – С.73-92.
4. Ланкастер К. Математическая экономика. Пер. с англ. Под ред. Д. Б. Юдина. – М.: Изд-во «Сов. Радио», 1972. – 464 с.

5. Сио К. Управленческая экономика. Изд-е 7. – М.: ИНФРА-М, 2000. – 668 с.
6. Маленво Э. Лекции по микроэкономическому анализу / Пер. с фр. Х. А. Атакшиева. Под ред. К. Д. Багриновского – М.: Физматлит, 1985. – 390 с.
7. Гальперин В. М., Игнатьев С. И., Моргунов В. И. Микроэкономика: в 2-х т. / Под ред. В. М. Гальперина. – СПб: Экон. школа, 1994. – Т.1. – 349 с.; Т.2. – 1998. – 503 с.
8. Малахова Н.Б. Мікроекономічна теорія виробництва та витрат. – Харків, ХНЕУ, 2009. – 157 с.
9. Steven R. Marginalism / The Library of Economics and Liberty [Електронний ресурс]. – Режим доступу: [<https://www.econlib.org/library/Enc/Marginalism.html>]
10. Sanchez D. Mises on Marginalism / Mises Institute: Austrian Economics, Freedom, and Peace [Електронний ресурс]. – Режим доступу: [<https://mises.org/library/mises-marginalism>]

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