







# Current Trends in Economic Research: Methodology and Practice

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**Abstract.** Digitalization of the economy and the rapid development of automation systems of various business processes at the macro and micro levels actualize the issues of applying the most modern methods of research during the analysis of economic processes and assessment of individual economic entities, as well as industries, regional or national economies. Despite the possibility of using a wide range of solutions for this purpose, any programs will be based on traditional research methods adjusted to the current economic realities. The article provides an overview of the main methods of economic research. There are examples of symbiosis of several types of methodologies from different fields of knowledge, as well as practical examples of the use of several methods in order to achieve specific economic objectives.

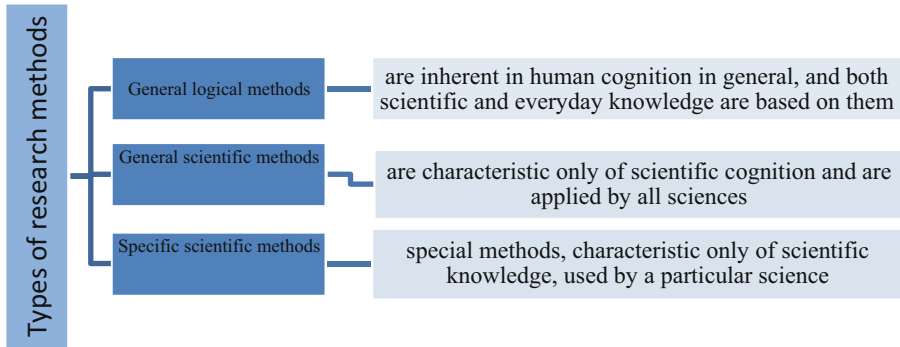
**Keywords:** Methodological analysis · Expert assessments · Economic research algorithm · Economic observation

## 1 Introduction

Any economic research is based not on the use of isolated methods, but on the use of a system, the feasibility of which is confirmed not only by theoretical conclusions, but also by practical results. It is often the case that effective research methods come precisely from practical developments in the field of theoretical study. The specific object and subject of observation are determined depending on the goals and objectives of the research. That is why the diversity of economic objects (regions of the country, individual enterprises, industries, population, etc.) determines a large number of existing research methods.

## 2 Methods

Each of those allows you to achieve certain goals set at the beginning of the study. Methodological analysis of the scientific process allows us to distinguish three types of research methods, the classification of which is shown in Fig. 1:



**Fig. 1.** Types of economic research methods.

General logical methods of knowledge include methods such as analysis, synthesis, abstraction, generalization, induction, deduction, analogy, modeling [1]. If we talk about the peculiarities of the methodology of economic research, their most popular tool is analysis.

### 3 Results and Discussion

The analysis is a mental or real dissection of a whole subject or object into its component parts. The procedure of economic analysis is widespread in economics. This procedure assesses the financial and economic condition of the enterprise using, for example, methods of horizontal and vertical analysis of the balance sheet, a system of financial ratios, calculating productivity, the state of fixed assets, etc. [2]. Here is an example of such an analysis using the horizontal analysis of Svyaznoy Chain LLC financial results report for 2019–2020 (Table 1).

**Table 1.** Horizontal analysis of the statement of financial results of Svyaznoy Chain LLC.

Indices	2020	2019	Changes	
	Thousand rubles	Thousand rubles	Thousand rubles	Growth rate, %
1	2	3	4	5
Revenue	95 394 059	48 322 328	47 071 731	197.4
Cost of sales	70 310 145	32 771 371	37 538 774	2.1 times growth
Gross profit (loss)	25 083 914	15 550 957	9 532 957	161.3
Administrative expenses	26 779 754	16 723 759	10 055 995	160.1

*(continued)*

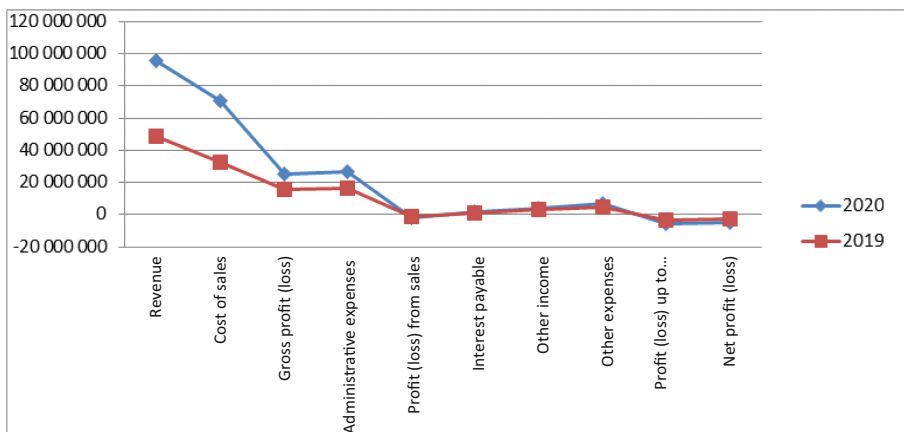
**Table 1.** (continued)

Indices	2020	2019	Changes	
	Thousand rubles	Thousand rubles	Thousand rubles	Growth rate, %
Profit (loss) from sales	-1 695 840	-1 172 802	523 038	The loss increased by 44.6%
Interest receivable	858 676	497 449	361 227	172.6
Interest payable	1 647 933	954 447	693 486	172.7
Other income	3 772 428	3 121 513	650 915	120.9
Other expenses	7 079 435	4 620 585	2 458 850	153.2
Profit before taxation	-5 792 104	-3 128 872	2 663 232	The loss increased by 85.1%
Current income tax	-	-		-
Change in deferred tax liabilities	15 920	28 102	-12 182	56.7
Change in deferred tax assets	961 841	337 339	624 502	2.9 times growth
Other	84 494	88 369	-172 863	95,6
Net profit	-4 898 837	-2 675 062	-2 223 775	The loss increased by 83.1%

The changes reflected in the statement of financial results of Svyaznoy Chain LLC are shown in Fig. 2. From this, we can conclude that the company incurred even greater losses in 2020 than in 2019. The final financial result is a loss of 4.8 billion rubles, which is 83% higher than the loss in 2019. It should be noted that a similar situation has been observed in the company since 2015, when the company's profit amounted to 1.5 billion rubles. Since then, the company has never achieved a positive financial result. Also since 2015, the market value of the company has been falling. If in 2015 it was 11 billion rubles, in 2020 it will be only 3.6 billion rubles.

This example shows us the relevance of economic research by applying economic analysis methods:

- even an outside expert can assess the situation, since the information needed for the study is publicly available;
- in a short period of time you can conduct a full-fledged research to identify strengths and weaknesses in the economic activity of the enterprise;



**Fig. 2.** Changes in financial indicators of Svyaznoy Chain LLC in 2019–2020.

- economic analysis forms the basis for economic monitoring, which allows non-stop tracking of the economic situation in the enterprise and making timely management decisions.

Synthesis is an inverse procedure to analysis, involving the mental or real connection of previously isolated parts of an object or object into a single whole. In economic research, it is most often an interdisciplinary synthesis. Economic theory is expanding into psychology, sociology, law, or vice versa, when economic science borrows methods from other sciences to solve its own problems. Abstraction is another method of economic research. It involves the distraction from a number of properties and relations of the object under study with the allocation of the properties and relations of interest to the researcher. A classic example of economic abstraction is the concepts of perfect competition or pure monopoly, which are often used in economic theory.

Generalization is a method of thinking, as a result of which common properties and features of objects are established. New research methods appear very often in economics, which combine several traditional techniques. A striking example is the method of expert evaluations. This is one of the most popular methods of economic research in recent decades.

Methods of expert evaluations are procedures aimed at the analysis of the problem and the selection of its solution by specialists. Such a system is used if we are talking about a very complex problem, which cannot be solved independently due to various factors. So, for example, it could be a lack of information, low skills, etc. In this case, experts come to the rescue. The solutions proposed by them on the basis of the arguments presented are called methods of expert evaluation. This analysis allows you to identify possible options for business development under different scenarios. Using this methodology, the company can get optimal results as quickly as possible and without unnecessary costs.

Expert evaluation as a method of research can be divided into two types which are the method of collective work of experts, as well as the method aimed at obtaining an individual approach from each of them. Here is a practical example of the method of

expert evaluations. Suppose an airline needs to compare the parameters of different types of aircraft. To do this, let us make a table listing these types and common parameters and their weight (Table 2).

**Table 2.** Example of expert evaluation [3].

N	Parameters	Weight	A	B	C	D	E	F
1	A1	X	10	9	2	5	3	3
2	B1	Y1	9	8	3	5	6	1
3	C1	Z1	8	7	1	7	8	3
Amount								

Next, you will need to write in each of the aircraft type categories (A, B, C, D, E, F) weights (X, Y, Z) according to the parameters (A1, B1, C1). All objects can be rated on a ten-point scale. To calculate the total, multiply the weight by the points. As a result of the calculations, we get the highest sum, which means the highest efficiency of any option.

Next, the evaluation will be carried out by experts, each of whom will analyze a particular object according to all the criteria presented. The data obtained will be recorded in a summary table in order to then come to a consensus.

Induction is the process of deducing a general statement from a series of particular statements, from single facts. Deduction is the process of reasoning, the opposite of induction, going from the general to the particular or less general. The methods of induction and deduction are widely used in economic science. Analogy is a method of cognition in which, based on the similarity of objects in some attributes, a conclusion is made about their similarity in other attributes. Economic analogy is an assumption about the presence of a feature in the studied economic object on the basis of similarity, existing in other features, with an ideal or material analogue of this object. A particular case of analogy is extrapolation. Extrapolation refers to the extension of provisions or conclusions made with respect to any part of objects or phenomena to the totality of these objects or phenomena. Economic extrapolation is most often used in statistical calculations and appears as a spread of established past trends to a future period. Modeling is the study of an object (the original) by creating and studying its copy (model), which replaces the original from certain aspects of interest to the researcher. In the context of economic research, economic and mathematical modeling is of particular interest. This is a type of symbolic modeling, the purpose of which is a mathematically formalized description of economic objects, processes and phenomena [4].

Let us consider an example of the use of a set of general logical methods in the enterprise. For example, the task is to carry out a study of the competitive market of industry. To do this, it is necessary to follow a certain algorithm of research, which includes the stages and methods described below in Table 3.

General scientific research methods can be divided into two main groups: empirical research methods and theoretical research methods. The latter include idealization,

**Table 3.** Algorithm of economic research with an indication of the methods used (by the example of the study of the competitive market). *Source:* Compiled by the authors on the basis of [5].

Name of the stage	Description	Methods used
Definition of objectives	Gathering information is a time-consuming activity. It will require the mobilization of financial and human resources. Therefore, it is necessary to determine which indicators will be taken into account when preparing a new sales strategy	Description, generalization, synthesis
Indication of the boundaries of the research	It can take a long time to review a niche, but you can save time if you specify a sample of companies to monitor. The study of competitors allows you to know their profits, production volume, characteristics of work, the customer base	Modeling
Setting the time interval	Evaluation is ongoing to ensure that the data is up-to-date. The manager's task is to specify the term that will be optimal for the task and at the same time provide the necessary resources of the company. For example, a comparative study of a competitor's products can be carried out briefly to meet targets and in detail, even with sales forecasts for several years	Modeling, comparison
Preparation of positioning	The experience of colleagues becomes an indispensable tool when a firm brings a product to market or changes its own approach to promotion. For example, if it is known that in the footwear trade in the region most buyers prefer leather goods, then it is better to go to them with such an offer	Analogy

*(continued)*

**Table 3.** (continued)

Name of the stage	Description	Methods used
Planning	The study of competitors will allow the commercial department to forecast volumes for the new period, taking into account the potential for sales	Economic extrapolation
Pricing	The cost of the product to the end consumer determines the demand for it and the amount of net profit. To make it balanced, it is worth taking into account the situation in the industry and assess similar proposals of other organizations	Induction
Development of the product	The goal of any startup is to create a product that is superior to other options and in demand by the majority of the population. A comprehensive review of the existing range, looking for strengths and weaknesses, will help to create it	SWOT analysis

formalization, axiomatic method, hypothetico-deductive method, method of ascending from the abstract to the concrete, historical and logical research methods [6]. Empirical methods relate to those techniques that are the content of practice or its direct result: observation, description, measurement, experiment.

Economic surveillance is a specific type of social observation, which systematically and purposefully collects primary information about various economic events. One form of economic surveillance is economic monitoring. A continuation of economic observation is description. This is the method by which the results obtained during the analysis are processed and reduced to a perceptible form. For example, drawing up an annual report on the work of the company with an explanatory note describing the changes that have occurred in the financial statements of the company are the most common examples of the use of descriptive method in economic research.

Another method named economic measurement is used most often in statistical studies, which can be carried out both at the macro- and micro-level. Those natural, labor and value units are measured. Here is an example of the joint application of general logical and empirical methods. For example, Table 4 shows the factors that, according to the management of trade organizations, significantly limit the activities of their companies. In carrying out such a study, three types of methods were used

simultaneously such as expert evaluations (allow to identify factors limiting the activities of the enterprise), economic measurements (allow to make these evaluations statistically reliable and quantifiable), description (provides information in tabular form, convenient for further analysis) and comparison (the information presented over the years allows to analyze the significance of each factor and to identify how the situation has changed over the past five years in the context of each factor) [7].

The application of the above set of methods allows us to conclude that their leaders in the 4th quarter of 2020 indicated insufficient solvent demand of the population as the main factor limiting the activity of their trade organizations (56% of the respondents). Also, if we analyze the dynamics of restrictive factors for the development of trade since 2006. This factor is the only one of them that every year more and more entrepreneurs point to.

**Table 4.** Factors limiting the activities of retailers (% of the number of respondents). *Source:* Compiled by the author according to [8].

Year	Effective demand failure	Lack of funding	High rent	High transportation costs	High competition	High level of taxes
2016	57	32	27	24	71	49
2017	54	28	28	21	67	46
2018	50	26	27	21	65	44
2019	56	28	30	22	71	48
2020	56	28	29	21	68	45

Another method is the economic experiment. The economic experiment is interpreted as a scientific test of the effectiveness of certain theoretical provisions or economic activities in individual enterprises, economic activities or the entire economy. The purpose of an economic experiment is often to confirm the correctness of a certain hypothesis, put forward on the basis of the study of empirical facts or theoretical provisions.

## 4 Conclusion

Thus, a comprehensive study of the techniques of economic research shows that empirical methods provide an insight into an economic object or process through a scientific fact, while theoretical methods of research to a greater extent study the world of ideal objects. The problem of correlation of empirical and theoretical research methods is solved in the process of their practical application.

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