METHODOLOGICAL ASPECTS OF THE STUDY OF THE RESOURCE POTENTIAL OF PENSION PROVISION AS AN OBJECT OF MODELING AND FORECASTING

ASPECTOS METODOLÓGICOS DO ESTUDO DO POTENCIAL DE RECURSOS DA PREVISÃO PREVENTIVA COMO OBJETO DE MODELAGEM E PREVISÃO

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Resumo. O artigo trata dos aspectos metodológicos do estudo do potencial de recursos da provisão previdenciária como objeto de modelagem e previsão. Nota-se que o potencial de recursos, os parâmetros de sua condição tornam-se fatores no desenvolvimento de uma política estatal promissora para o desenvolvimento do sistema previdenciário, e o uso de uma abordagem sistemática é um passo necessário na análise estratégica, modelagem e longo prazo. previsão de prazo. É fundamentada a posição de que o funcionamento do sistema de pensões em condições políticas, socioeconómicas e demográficas difíceis, a necessidade urgente de resolver um conjunto de problemas para a implementação da função alvo do sistema de pensões actualiza a necessidade de utilizar um conjunto de métodos de modelagem e previsão, tanto de obrigações previdenciárias quanto de prêmios de seguros. São divulgadas as características de conteúdo do potencial de recursos da provisão previdenciária como objeto de modelagem, incluindo seu estado, comportamento, individualidade, limites do objeto, que servem como informações iniciais na construção e estudo dos modelos. São revelados os níveis de relações e conexões do potencial de recursos, que unem características espaciais e temporais. O esquema conceitual da metodologia de previsão do potencial de recursos do sistema previdenciário do Estado é fundamentado e os princípios metodológicos de previsão do potencial dos recursos previdenciários são formulados.

Palavras-chave: potencial de recursos do sistema previdenciário, provisão previdenciária, sistema previdenciário estatal, modelagem e previsão, princípios metodológicos de previsão do potencial dos recursos previdenciários.

Abstract. The article deals with the methodological aspects of the study of the resource potential of pension provision as an object of modeling and forecasting. It is noted that the resource potential, the parameters of its condition become factors in the development of a promising state policy for the development of the pension system, and the use of a systematic approach is a necessary step in strategic analysis, modeling and long-term forecasting. The position is substantiated that the functioning of the pension system in difficult political, socio-economic and demographic conditions, the urgent need to solve a set of problems for the implementation of the target function of the pension system actualizes the need to use a set of modeling and forecasting methods, both pension obligations and insurance premiums. The content characteristics of the resource potential of pension provision as an object of modeling are disclosed, including its state, behavior, individuality, boundaries of the object, which serve as initial information in the construction and study of models. The levels of relations and connections of the resource potential, which unite spatial and temporal characteristics, are revealed. The conceptual scheme of the methodology for forecasting the resource potential of the state pension system is substantiated and the methodological principles for forecasting the potential of pension resources are formulated.

Keywords: resource potential of the pension system, pension provision, state pension system, modeling and forecasting, methodological principles of forecasting the potential of pension resources.

INTRODUCTION

At present, a negative trend has begun to develop in the functioning of the pension provision system. The situation is such that the limited resources of the pension provision system against the background of the growing number of citizens of retirement age is one of the main problems that not only our country, but practically all countries in the world are facing today. As we have seen above, each country is struggling with this phenomenon and solving the related problems by its own methods and means. The imbalance between revenues and expenditures of the pension fund in Russia also disturbs the stability of this system. In addition, it determines the focus of pension provision on fighting poverty rather than on creating a decent lifestyle for the bulk of the population with pensioner status, as is the case in states with socialized market economies.

The results of functioning of the pension provision system and pension services are largely determined by the resource potential, which the pension fund has, as well as the efficiency of its use. It is, on the one hand, the basis for increasing the welfare of citizens who have completed their labor activity, as well as that category of citizens who have lost the breadwinner, large families, recipients of maternity capital and others in accordance with the legislation. On the other hand, the resource potential of pension provision is the basis for ensuring the sustainability and balance of the pension system. In turn, the pace of development of the resource potential of this sphere is largely determined by the peculiarities of its formation and use.

The society of the 21st century is facing the mass aging of the population, this characteristic along with other changes in the socio-economic environment such as the increase in the migration of villagers to cities and globalization has caused serious challenges in the social security systems of many countries, so that the growth of pension expenses for The public sector in some developing countries has led to a serious financial threat and the reforms of the pension system have become an inevitable necessity. Russia is also among the countries that are facing similar problems such as the aging of the population and the increase in medical expenses. . Demographic statistics of almost all countries show the trend of population aging. In Russia, the country's census statistics confirm the same trend. It should be noted that the aging of the population will create an important change in the demographic structure of Iran, so that with the current trend of life expectancy, it is predicted that they will live together completely, of which only two generations will work and produce and cover all the expenses of five generations. They will be in charge of the aforementioned. This is why retirement and social security have been recognized and referred to as a right for the people and a duty for the government. According to studies (Donoso, et al., 2022), the social security organization's budget deficit will reach half of the government's general budget in the coming years; For this reason, in the process of developing the country's development plan, the issue of pension funds and especially their financial issues, along with the environmental crisis, lack of water and unemployment, have been raised as the main problems facing the country in the coming years.

In a favorable situation, the social security system as well as the well-functioning pension system is the main element of any modern society. A country whose welfare system cannot or does not want to gain the comprehensive confidence of its people should not expect them to be optimistic about the future. Therefore, measures that increase people's trust in the welfare and social security system, on the one hand, practically stabilize and strengthen the economy, and on the other hand, provide the authority of governments. Pension systems and related programs in many countries are the most important means of responding to the responsibility of providing and guaranteeing a minimum standard of living for the elderly. Almost all pension programs, in terms of scope and structure, go far beyond the type of government measures whose purpose is only to provide some kind of "security" to guarantee the minimum standard of living; But for effective policy making in the field of pension system, a more comprehensive picture of the current situation is needed. So far, various formulations of the problems ahead have been presented in published studies and reports; But here the researcher is trying to design appropriate policies for the development of the social security pension system with a future research approach in the social security organization.

Foresight is one of the right tools to move on the waves of uncertainty, and choosing the right method is one of the most important points required for the success of foresight. Futurism, 1 research in the future, 2 futurism 3 or futurology 4 is a systematic, interdisciplinary and comprehensive study of social and technological progress and other environmental trends, which is often aimed at investigating how people will live and work in the future. Predictive techniques, such as Forecasting can be used, but contemporary futures researchers emphasize the importance of systematic exploration of alternatives. In general, it can be considered a branch of social sciences and an extension to the field of history. Futurism (colloquially called "the future" by many in the field) seeks to understand what is likely to continue and what can plausibly change. Therefore, part of this discipline seeks to make a systematic and pattern-based understanding of the past and present, and explore the possibility of future events and trends.

MATERIALS AND METHODS

Since we have defined the resource potential of pension provision as a set of probabilistic opportunities that it contains, they can be attracted in the long term to solve the key dual task of system development. The economic literature interprets this task as achievement of more complete provision of pension rights of citizens with money, their growth and creation of conditions of stability and equilibrium of the pension system.

Thus, resource potential, parameters of its condition become factors of elaboration of perspective state policy of development of pension provision system in the country. In this regard, T.L. Skripchenko writes that "the development of the resource potential of the organization is a necessary condition for the sustainable functioning of not only the pension system, but also the economic system of the country as a whole" (Skripchenko, 2009; Jamalpour & Derabi, 2023).

It should be emphasized that in the process of economic research the resource potential of organizations is used as a quantitative assessment of objects, processes and phenomena. This is due to the fact that it characterizes not only the current state of the objects, processes, phenomena under study, but also, as N.A. Martynova notes, "represents the totality of funds, reserves, sources available, which can be mobilized, brought into action, used to achieve the goal" (Martynova, 2019).

At the same time, resource potential characterizes not only quantitative but also qualitative side of studied objects, processes, phenomena. Qualitative characteristics are formed under the influence of the following properties of pension resources:

- they have the target character of payments to the population;
- reflect the distribution and collateral characteristics;
- have transparency of formation and expenditure;
- reflect the degree of dependence on the federal budget;
- degree of fulfillment of the target function of the pension fund.

Therefore, analysis of the effectiveness of the use of available resource potential in the activities of pension security agencies is carried out, as N.A. Martynova notes in her publication, by methods of "comparison of quantitative indicators in dynamics, calculation of the structure and indicators of qualitative use of resources to assess the possibility and rationality of the use of its assets" (Martynova, 2019).

Currently, most scientists and practitioners are beginning to realize that it is necessary not just to use a particular set of evaluation methods, but to apply a systematic and comprehensive approach to the study and evaluation of the resource potential of this sphere. The use of a systematic approach is a necessary stage of strategic analysis, modeling, and prospective forecasting.

The importance of such an approach in the study of the category "resource potential of pension provision" is also confirmed by the fact that the goals and tasks that are set for the future are determined not only by the available monetary resources of the pension fund, but by the resource potential as a whole and its elements. It contains not only possibilities of quantitative increase of monetary resources as the basis of pension provision and provision of state pension services, but also increase of qualitative characteristics of all constituent resources, which, accordingly, leads to improvement of pension services, pension services and increase of sustainability of the pension system.

But as practice shows, the fact of deficit or surplus of the resource potential of pension provision is not an unambiguous manifestation of the pension system sustainability problem. The same applies to the total amount of transfers from the federal budget. Exploring the problems of balance and sustainability of the pension system in Russia, M.L. Sedova reveals features of these phenomena in domestic pension provision and concludes that "the relevance of studying the sustainability of the pension system is not related to long-term commitments arising from sources of financing the Pension Fund budget deficit. It is related to pension obligations formed on the basis of the entire period of accrual and payment of insurance contributions" (Sedova, 2018; Farhud & Mojahed, 2022; Shariati et al., 2013).

Assessing the current reform of the pension system, M.L. Sedova adds that "raising the retirement age is not the only and unambiguous measure to strengthen the financial stability of the pension system, other measures are possible, correcting the effect of internal factors of its development (Sedova, 2018).

Indeed, there is an opinion that the decision to raise the retirement age was made without proper in-depth scientific study and evaluation of the prospects of this measure under the influence of the experience of other, economically developed countries, but without taking into account the specific conditions of Russian reality.

Therefore, the functioning of the pension system in difficult political, socio-economic and demographic conditions, the urgent need to solve a set of problems to implement the target function of the pension system actualize the need to use a set of methods for modeling and forecasting, both pension liabilities and insurance premiums.

RESULTS

By studying the resource potential on the basis of these methods, it is possible to determine what opportunities there are for effective solution of urgent problems. At the same time, when identifying opportunities and the probability of their use, it should be borne in mind that analysis and evaluation of these opportunities should be carried out from a systemic perspective, identifying factors for solving the twofold problem of pension system development. We will consider these factors in two aspects: as factors lying on the surface of the phenomena, and as hidden, latent factors. This analysis should be supplemented by the study of interrelations and mutual influence of these factors with a view to identifying opportunities for achieving synergistic effect.

It follows that the study and justification of strategic prospects for the development of the pension system is an urgent scientific problem and a practical need. However, today leading scientists economists state the fact that in the sphere of strategic modeling and forecasting there are serious problems, which were established in the early stages of "perestroika", and under the influence of which they naturally manifest themselves today. For example, Selivanov, (2021) points this out in his publications on the results of many years of research. He writes: "today it is clear to the scientific community that the system of strategic management cannot exist without a scientifically founded system of forecasting as its organic component. However, attempts over a decade to give a scientifically based remote forecast have constantly failed. While the world science and practice in the field of forecasting and strategic management was moving forward, our country "froze" at the level of operational manual control. Now it is really not easy at all to create a powerful independent forecasting system capable of competing with similar world structures" (Jamalpour & Verma, 2022; Ferrer et al., 2022).

This methodological premise is directly relevant to the topic of our study, because it largely explains the failures in the implementation of forecasts due to their weak development, including the failure of the forecast in 2017-2019 when trying to develop forecasts until 2030 and 2035, as well as the permanent reforms of the pension system, which have lasted for decades.

For further reforms of the domestic pension provision system it is necessary to make reasonable long-term forecasts of the demographic situation in the country as a whole, forecasts of the number of working population, citizens receiving pensions, long-term forecasts of revenues and expenditures of the pension fund. The result of the obtained prognostic information should be a forecast model and, accordingly, a long-term forecast of formation and use of resource potential of the pension provision system, modeling of forecast parameters of actuarial forecast models and their use.

Being a multidimensional, multilevel and complex category, resource potential is characterized by a multitude of models, each of which solves a corresponding problem. From the point of view of methodology it is necessary to find out what attributes pension resource potential models should have. Using the materials of the Center of Excellence "Automated Control Systems and Industrial Safety" (Common features and properties of models), we can formulate the general features of these models**:**

- Each model is a set of basic components: the subject (researcher), the task set to be solved by the subject (improving the well-being of disabled citizens on the basis of achieving sustainability and balance of the resource potential of pension provision), the object-origin (the resource potential of the state pension provision system and pension services) and the way the model is reproduced. A special place is given to the problem solved by the subject, because outside the context of the problem, the model loses its meaning;
- as it was already noted to the resource potential there is a set of models, which are equally adequate, but different in content according to the problem to be solved. The models may contain the same information about the resource potential, its relations and connections, but will differ in the forms of its representation or reproduction;
- models of resource potential is always a relative, approximate reflection of it, as an object-original, but do not repeat it and in terms of information will be fundamentally poorer than the actual resource potential;
- the economic nature of pension resources determines the informational nature of object-origin models. Regardless of the economic nature, the problem to be solved and the method of implementation, each model is a set of information components about the system of resource potential and its environment and has an informational nature.

In scientific publications it is noted that "modeling objects are carriers of special, inherent only to them characteristics, which exist in time, change, reflect the internal state, are transient and can be formed, destroyed and separated. This is explained by the fact that objects do not exist in isolation, and can be influenced or themselves influence other objects" (Todortsev, 2008).

As an object of modeling, the resource potential of pension provision also possesses these characteristics - state, behavior, individuality. These characteristics of the object are used in modeling according to the set tasks, serve as initial information in construction and research of models. Thus, the state of resource potential is reflected in static and dynamic characteristics. If the first reflects a list of all properties of resource potential as an object, the second reflects the values of each of these properties.

The behavior of a modeling object reveals its interaction with other objects and shows how this interaction is reflected in the characteristics of the modeled object, that is, how its state changes. In other words, the behavior of pension resource potential reveals how it acts and reacts in one or another situation.

Individuality is such properties of the modeled object, i.e., the resource potential of the public pension provision system, which distinguish it from all other similar objects, for example, the resource potential of the private pension provision system.

In accordance with modeling methodology, this process begins with defining the boundaries of the object that is to be modeled. Such object in our study is resource potential of the pension provision system and pension services. Sometimes there is no problem with defining the boundaries of the object, but most often it is necessary for more reliability and accuracy of the forecast.

Determining the boundaries of the resource potential under study should be the initial action in its modeling, first, in order to manage this process. Second, it is necessary to determine when the modeling of the potential is complete. Third, establishing the boundaries is related to defining the parameters of resource potential as a modeling object, such as the breadth of coverage and depth of detail.

The breadth of the scope denotes the external boundaries of the modeled potential and the solution of the problem, what is included in the object of modeling and what lies outside of it. Thus, when modeling the resource potential of pension provision in accordance with the research topic, we narrow the boundaries of the research by including only the state system of pension provision and pension services in the object, leaving outside the object the resource potential of private pension funds.

The depth of detail reflects the degree of differentiation of the components of the resource potential, according to which it is necessary to determine the decomposition of functional blocks. This makes it possible to identify the context of the modeling object, determine its internal structure, basic functions, interrelationship of elements. Thus, when the boundaries of the modeling object, in our case the resource potential of pension provision, are established, it becomes clear why some elements are not included in the model.

In terms of methodology, resource potential combines spatial and temporal characteristics. Therefore, methodologically, as a system category, "resource potential" combines three levels of relations and connections simultaneously.

The first level encapsulates the historical aspect of the system approach. It consists in the fact that the resource potential has a "memory" and preserves the relations and connections of the "past", which were formed by the resource system during its formation, including the capabilities that predetermine the development and functioning of the resource potential.

The second level of relationships and relations, current, which reflects the current state, functioning and use of available opportunities for development. At the same time, current relations and relations differentiate already realized opportunities and yet unrealized ones.

The third level focuses on the future, on the future development of resource potential. associated with strategic foresight. This level lays the foundation for connections and relationships for the future, using potential opportunities as elements of future development.

The use of elements of the system approach in this case shows the qualitative difference of accumulated unrealized opportunities of development of the resource potential of pension provision at each of the considered levels. Thus, if the unrealized opportunities of the first level lead to a decrease in the performance of the state pension provision system and pension services, the current and prospective opportunities provide flexibility and maneuverability of the pension system development, its adaptability to dynamic external and internal conditions. The level of resource potential in general characterizes the studied state of the pension provision system, which is formed on the basis of close interaction of all three considered levels.

Thus, resource potential contains an integral reflection of past, current and future possibilities of its development as an economic system, satisfying at most the interests of all subjects of relations and relations

of the pension system and pension services. These points should be taken into account when modeling and forecasting resource potential. We should not forget about the historical trends of its formation and development, which have conditioned and continue to condition today's and tomorrow's characteristics and dynamics, the formed conditions of their manifestation, determined by the influence of past realized and unrealized opportunities.

Considering the methodological aspects of the study of resource potential of pension provision, it is necessary to pay attention to another of its features, which characterizes it and is significant for modeling and forecasting. It concerns dynamic properties of resource potential. Attention to this characteristic is due to the fact that many authors characterize dynamics as a change over time. At the same time, if we turn to the concept of object dynamics, which is used in the technical field of research, this process is not so straightforward. It is associated with the so-called "aftereffect" (https://www.google.ru). This is explained by the fact that the state of changes in time is determined not only by the impact on the object at the same moment, but also by previous impacts, the prehistory of the development of its state. Thus, the explanation of the dynamism of resource potential, as well as other socio-economic objects, is based on the main provisions of the system approach. Ignoring this fact not only reduces the quality of the model, but also reduces the reliability of forecasts, especially strategic.

So, the resource potential of pension provision is a multidimensional, dynamic object, which is described by a sufficiently large number of indicators, models, in its study a variety of tasks are set and solved, which determine the choice of the appropriate model for the study.

Based on the considered content of the main characteristics of resource potential of pension provision, it is possible to formulate characteristic features that define its model. It is characterized by:

- the volume and quality of the pension fund's resources;
- the ability of management to make optimal use of available pension resources;
- the level of organization of the information base of the state pension system and pension services;
- Innovative opportunities of the pension fund in updating technologies of public services, technical base of pension services;
- Harmonization of the use of distributive and cumulative principles of formation of the resource potential of pension provision and pension services according to the prevailing socio-economic conditions in the country;
- the quality of training and education of the pension fund staff to work with the population.

Thus, a model is "a simplified image of the original, inseparably linked to it, reflecting the essential properties, connections and relations of the original, this system, the study of which serves as a tool, a means of obtaining new information and (or) confirmation of already existing information about another system" (Modeling of the complex probability systems, 2011).

Various models are widely used today in socio-economic forecasting. They become an effective tool for determining the cause-and-effect relationships between socio-economic phenomena, patterns of development of objects, processes, phenomena, determining the prospects for this development for a long period. Modeling method, as a multidimensional method, acts as a forecasting technology, which, based on the reproduction of data, allows you to estimate the natural loads, the course of the object, examines its internal processes.

A resource potential prediction model can be called a model which allows to obtain information about possible states of pension resources in the future and to determine the terms and ways of achieving these states. In other words, it is a functional representation of the forecast model that adequately describes the resource potential of pension provision and is the basis for determining its future values.

The model should have a similarity with the existing object, but it should not be its full likeness, because in this case the meaning of modeling is lost. This is the main condition of predictive modeling. The main feature of distinguishing between the model and the original is the model's ability for flexible predictive change, which does not affect the original model data.

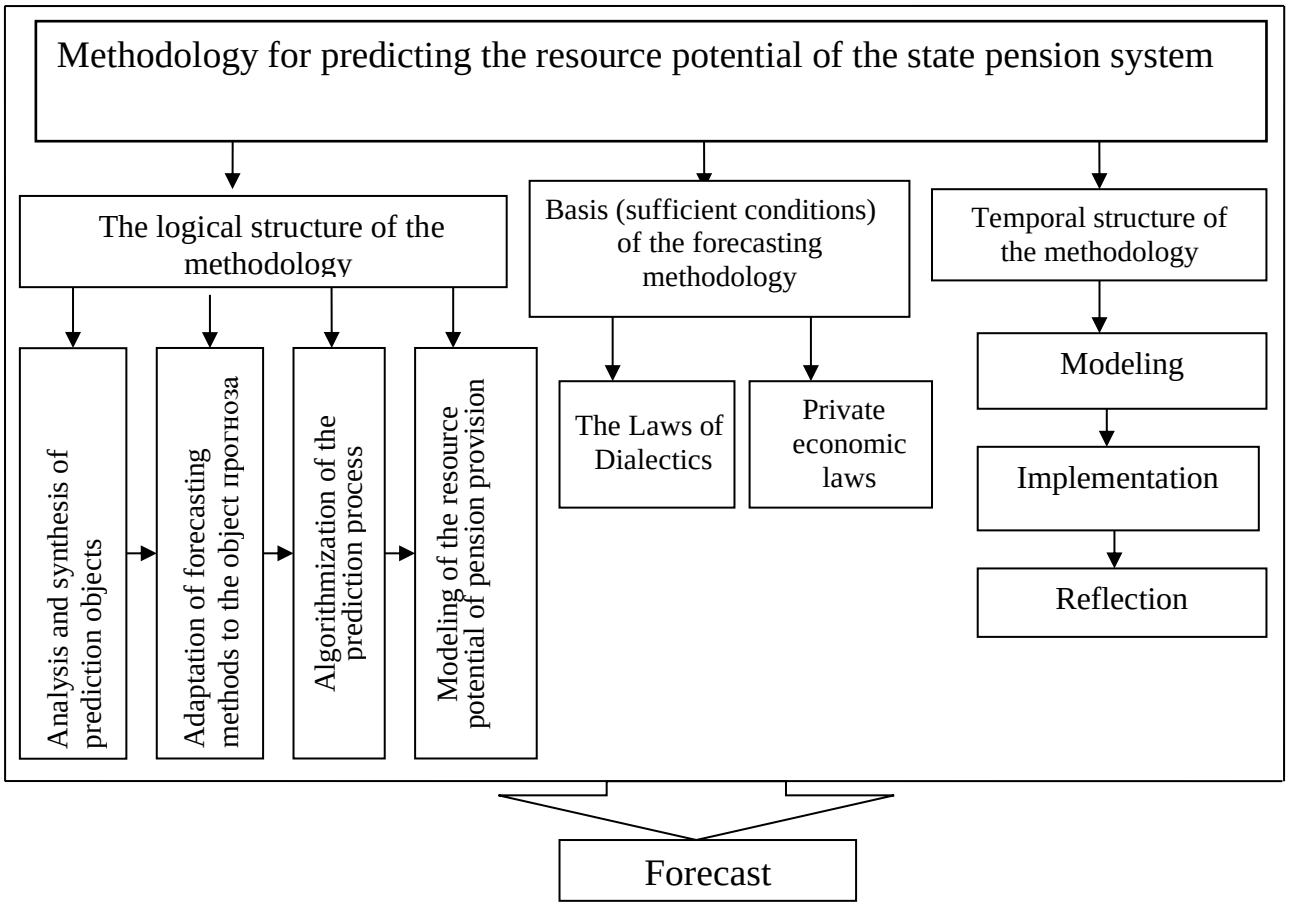

Figure 1. Conceptual scheme of the methodology for forecasting the resource potential of the state pension provision system (compiled by the authors)

Socio-economic forecasting today is becoming an increasingly popular tool for the regulation and development of socio-economic sphere. In this regard, theoretical and methodological issues of socio-economic forecasting are of particular importance. The methodology of scientific economic foresight includes a set of principles, methods and indicators used in the process of forecasting. Figure 1 presents a conceptual scheme of the methodology for forecasting the resource potential of the state pension system.

It is axiomatic in scientific methodology to assume that social processes are subject to a certain logic, and the task of cognition is reduced to the disclosure of this logic, to present it in a formal form, as certain laws (Vildanov & Derkach, 2017). In fact, the conceptual scheme of the forecasting methodology is a conceptual model of the organization of forecasting activity. It structures this activity, brings the objective basis under it, reveals the structure logical and temporal, and optimization of the structure of activity leads ultimately to the formation of a productive model and improvement of the accuracy and credibility of the prediction.

When modeling and forecasting pension resources, it should be borne in mind that the considered forecast methods should always be used in conjunction with other general scientific and special methods and interdisciplinary approach. The use of such methodology is applied to research at all levels, including such private problems of pension provision as the demographic situation in the country, employment dynamics, formation of income and expenses of resource potential of the domestic pension system, its balance and others.

The particular difficulty of modeling social processes in Russia is that "a significant part of them does not fit into the framework of previously developed schemes and requires theoretical reflection in accordance with the existing social reality (Safronova, 1999).

The methodology of forecasting, as a scientific foresight, defines a set of principles on the basis of which forecasting is carried out. The principles of forecasting encapsulate the main starting points, the idea of the theory of forecasting, and its rules. Based on the development of forecasting problems made by

Rudakova (2010), we can formulate methodological principles of forecasting the potential of pension resources:

- the principle of systematicity, which implies the study of resource potential as an object of forecasting from a systemic perspective. Attention was drawn above to the importance of using this premise. Here we will reveal its content as a set of system-elemental, system-structural, system-functional, system-integrative, system-communication and system-historical approaches in forming the forecast of resource development of the pension system;
- the principle of variant forecasts implies the development of several variants of forecasts based on the data and information in the area under study, guided by variants of the forecast background of the pension system;
- the principle of reliability determines the need for accuracy and scientific validity of predictions, which should take into account the requirements of objective economic laws and regularities;
- the principle of targeting and goal-setting includes not only the formed anticipation of the future of the pension system and the tools to achieve it, but also the set goals to be achieved in the economy and in the dynamics of pension provision. The goal in forecasting is formed as an integral, essential characteristic of forecasting activity, at the same time it acts as a forecast;
- the principle of continuity determines the need to develop an algorithm for forecasting processes in the field of pensions and at each control stage to analyze and adjust the forecast based on the results of analysis and receipt of new information;
- the principle of efficiency stipulates the need to achieve an excess of economic effect from the use of the forecast of the transformation of the pension system and pension services based on the development of resource potential over the cost of developing this forecast;
- the principle of the unity of politics and economics means that the formation of predictive trends in the dynamics of the pension system should be based on the interests of all subjects of relations of pension provision: state, society, citizens.

All considered principles of forecasting the resource potential of the state pension provision system and pension services are basic, basic and should be applied in aggregate in socio-economic forecasting. Moreover, they should be dominant both in forecasting the development of the state pension provision system and pension services and for a separate region, a separate regional branch of pension provision. This is explained by the fact that Russian regions have a certain differentiation in the level of resource potential.

One of the serious tasks of forecasting is to develop special methodological problems of forecasting for the purpose of increasing the reliability and validity of forecasts. Thus, the methodology of the interdisciplinary approach allows us to distinguish two planes of concretization of forecasting and prognostic modeling of the object.

First, it is a predictive plane of specification in which the description (descriptions) of possible or desirable states of the predicted object, solutions to the problems identified.

Secondly, it is a predictive plane (or prescriptive), which concentrates the description of the possibilities of solving the problem based on the use of identified predictive information about the future.

CONCLUSION & DISCUSSION

The considered approach in forecasting allows to distinguish such aspects of research of pension resources, their potentialities, as an object of scientific modeling and forecasting, as cognitive and managerial. Being a form of cognition, the forecast of the studied object should reflect the regularities and possible ways of development of the pension system. In this role, forecasting complements our knowledge about the object as a system and its external environment, expands the information field, provides information tools to achieve the optimal or desired state of the socio-economic system under study, allows us to identify social and economic effects on the environment.

Methodologically, of great importance is the cognitive aspect in terms of the temporal characteristics of the modeling object and the forecasting horizon. It is generally accepted that the process of predictive cognition includes only information about the future of the object. However, often the subject of predictive analysis is information about the present and even about the past of the object under study. There is an expansion of the boundaries of the object at the expense of unknown or unknowable phenomena, processes of the present and the past in order to obtain scientific knowledge from them. This approach increases the reliability and accuracy of scientific forecasting, optimizes the models used.

The need for such an approach is justified in the current practice of forecasting the pension system. We have already noted the negative experience of forecasting the development of the resource potential of pension provision and the pension system as a whole in the process of successive reforms. Attempts to provide a scientifically sound distant forecast "have failed as a result of a weak methodological platform" (Selivanov, 2021).

Thus, "the problem of scientific foresight covers the theoretical and cognitive aspect associated with the study of prediction as a function defined by the laws of dialectics, private economic and social laws and theoretical substantiation of other sciences; and the practical aspect, expressed in particular in the direct connection of prediction with planning and management" (Parsadanov & Parsadanov, 2002).

Any forecast does not exist by itself, but necessarily in the system "diagnosis - forecast - management". The forecast in this interaction acts as a "link between the assessment of the personal state of the object and the organization of means and ways of interaction with it. It is in such an interconnected chain of elements of the whole system that we can talk about prediction as the basis for the regulation of behavior and activity, achieving the desired state of the object under study and its achievement of the set task" (Pryadeho & Pryadeho, 2014).

Forecasting allows us to establish the boundaries and degree of influence of these regularities and causes on the general trend of development of the resource potential of the pension system. On this basis, the resource potential as a prognostic object will be further considered as a dynamic system. At the same time, its behavior is determined by the interaction of various objects, processes, phenomena. Thus, with a certain degree of probability we can imagine the behavior of resource potential and the pension system in the future.

Object modeling is the process of creating a model as a conceptual representation of resource potential in order to study the properties of the original object, including situation analysis, some a priori ideas about the relationships between the observed attributes and factors. While forecasting characterizes the future development of the initial object, it becomes paramount to study not what is observed, but what will be. For this purpose, the assumption is made that the current trends, current factors, past and present dependencies either remain for the period of the forecast, or they can be predetermined and take into account the change of their directions in the perspective under consideration. At the same time, research methodology predetermines the basis of interrelation of modeling and forecasting, which is to conduct modeling of initial object, in our case resource potential of pension provision, and reproduce its future characteristics in perspective with the help of created model.

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