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MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN  
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FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION OF HIGHER  
EDUCATION

**"MOSCOW POLYTECHNIC UNIVERSITY"**  
**(MOSCOW POLYTECHNIC UNIVERSITY)**

Faculty of Economics and Management



Dean,  
Faculty of Economics and  
Management  
/A.V. Nazarenko/  
05 2022

**OPERATIONAL PROGRAM OF THE DISCIPLINE**

**Methods of Economic and Social Forecasting**

Direction of training/specialty

**42.04.01 Advertising and public relations**

**Profile/specialization**

**Innovative Marketing in Advertising**

Qualification

master

Forms of study

part-time

**Moscow, 2022**

**Developer(s):**

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## 1. Goals, objectives and planned results of training in the discipline

The purpose of mastering the discipline "Methods of Economic and Social Forecasting" is to study the main issues of the theory of statistics, macroeconomic and microeconomic statistics, the formation of skills for statistical calculations and the use of statistical analysis methods to train an economist who meets the requirements of professional standards and the Federal State Educational Standard in the direction 42.04.01 Advertising and public relations.

The main tasks of studying the discipline:

mastering the most important concepts and provisions of the general theory of statistics in the field of collecting primary statistical information, summarizing and grouping the obtained primary data and their subsequent processing by statistical analysis methods;

mastering the methodology of collecting, processing and statistical analysis of data necessary to solve the economic tasks;

getting an idea of the areas of application and the formation of skills for using the studied techniques in the practical activities of an employee of the financial service of the organization.

□ study of the most important indicators of social statistics and the methodology of their calculation.

Training in the discipline "Methods of Economic and Social Forecasting" is aimed at the formation of the following competencies among students:

Code and name of competencies	Indicators of competence achievement
OPK-5. He is able to analyze current trends in the development of media communication systems of the region, the country and the world for professional decision-making, based on the political and economic mechanisms of their functioning, legal and ethical regulations	IOPK-5.1 Knows the basic methods of solving communicative tasks, the basics of evaluating the effectiveness of the developed marketing support of innovative processes; IOPK-5.2 Is able to think creatively, economically on the issues of ongoing innovations at the enterprise, innovation processes in the country and abroad, to give a correct assessment of innovation policy measures, based on the analysis of market conditions to find innovations, new solutions, be able to apply the knowledge gained to solve practical problems of business innovation; IOPK-5.3 Is able to use modern technical means and information technologies in solving communicative tasks; IOPK-5.4 is able to use domestic and international experience in developing marketing support for innovative projects, introducing innovations, obtaining positive results with access to world markets; IOPK-5.5 Has the skills to read, understand and compile scientific, analytical, statistical reports in the field of professional activity, skills for independent, methodically correct solution of communicative tasks

## 2. The place of discipline in the structure of the educational program

The discipline belongs to the mandatory part of block B1 "Disciplines (modules)". The study of the discipline is based on the following disciplines, practical training:

- Methodology and Methods of Scientific Research in Professional Activity

The main provisions of the discipline should be used in the future when studying the following disciplines (practices):

- Finance, money circulation and credit;
- Industry economics;
- Risk assessment and analysis;
- Marketing research;
- Economic analysis
- Pre-graduate practice.
- Evaluating the Cost of Innovation

### 3 Structure and content of the discipline

The total labor intensity of the discipline is 4 credits (216 hours).

#### 3.1 Types of educational work and labor intensity

##### 3.1.1. part-time education

p/p	Type of educational work	Number of hours	Semesters	
			1	-
<b>1.</b>	Classroom classes	<b>28</b>	<b>28</b>	-
	including:			
1.1	Lectures	14	14	-
1.2	Seminars/practical classes	14	14	-
1.3	Laboratory classes	-	-	-
<b>2.</b>	Independent work	<b>188</b>	<b>188</b>	-
	including:			
2.1	Preparation for practical classes (study of lecture material)	98	98	-
2.2	Preparing for testing	45	45	-
2.3	Independent task solving	45	45	-
	Intermediate certification			
	test/ dif. test/ exam		<b>Экзамен</b>	-
	<b>Total</b>	<b>216</b>	<b>216</b>	-

#### 3.2 Thematic plan for the study of the discipline

(according to the forms of training)

##### 3.2.1. part-time education

p/p	3.2.1. part-time education	Labor intensity, hour					
		Total	Classroom work				Independent work
			Lectures	practical classes	Laboratory classes	Practical training	
1.	Introduction. General questions	24	2	2	-	-	10
2.	Forecasting within the framework of classical linear regression model	24	2	2	-	-	10
3.	Forecasting within the generalized Linear regression model (OLUM)	24	2	2	-	-	10
4.	Forecasting if available error autoregression	24	2	2	-	-	10

5.	Forecasting within the framework of a model with heteroscedasticity of residues	24	2	2	-	-	10
6.	Forecasting qualitative variables	24	1	1	-	-	10
7.	Introduction B time series analysis Fundamentals of the analysis of expert assessments	24	1	1	-	-	10
8.	Fundamentals of the analysis of expert assessments	24	1	1	-	-	10
9.	Forecasting with unknown parameters of the regression and autoregression model. Durbin procedure. The Cochrane-Orcutt iterative procedure.	24	1	1	-	-	8
<b>Total</b>		<b>216</b>	<b>14</b>	<b>14</b>	<b>-</b>	<b>-</b>	<b>188</b>

### 3.3 Content of the discipline

Topic 1. Introduction. General questions

The role of forecasting in management.

The concept of a socio-economic system.

Types of socio-economic forecasting.

Classification of socio-economic forecasting methods.

Types of models, types of data, types of forecasts.

Topic 2. Forecasting within the framework of the classical linear regression model (CLRM)

Assumptions of the CLRM. Estimation of parameters by OLS. The Gauss-Markov theorem. Fischer's theorem.

Point and interval forecasts within the framework of the CLRM for known and unknown parameters and noise dispersion.

Point and interval forecasts within the framework of the CLRM for paired regression.

The simplest trend model. The concept of a short time series.

Conditional forecasting within the framework of the CLRM.

The use of dummy variables and elasticity in forecasting.

Topic 3. Forecasting in the framework of a generalized linear regression model (FRRM)

FRRM assumptions. Generalized estimation of parameters by MNC. The theorem Aitken.

Point forecast within the framework of the FRA. The problem of constructing an interval forecast.

Optimal linear unbiased point forecast within the framework of the OLRM.

Interval forecast within the framework of FRA. Available MNC.

Topic 4. Forecasting in the presence of error autoregression

Forecasting with known parameters of the regression and autoregression model.

Properties of the point forecast. Interval forecast.

Prediction with a known parameter of the autoregression model of residuals and

unknown parameters of the regression model. Properties of the point forecast. Interval forecast.

Forecasting with unknown parameters of the regression and autoregression model.

Durbin procedure. The Cochrane-Orcutt iterative procedure.

Topic 5. \_ Forecasting within the framework of a model with heteroscedasticity of residuals

The Goldfeld-Quandt test for heteroscedasticity.

Correction of MNCs for heteroscedasticity.

Interval prediction in a model with heteroscedasticity.

Topic 6. Forecasting qualitative variables

Linear model of binary choice. Logit and probit binary choice models, their interpretation.

Forecasting a qualitative variable based on grouped data.

Identification of the binary choice model based on ungrouped data.

Topic 7. Introduction to Time Series Analysis

Components of the time series. Alignment of a series using a moving average. Simple and weighted average. Repeated smoothing. Exponential smoothing. Robust smoothing. Using orthogonal functions.

Smoothing using polynomials. Determination of weights. Edge values. The method of variable differences.

Stationary and ergodic time series. The Birkhoff-Hinchin theorem.

The effect of smoothing on the seasonal component of the series.

Merging smoothing into the seasonal component of the series. Variance, zero crossing frequency, peak frequency.

Detection of seasonal fluctuations. Additive and multiplicative seasonal indices.

Identification of a series of moving averages (Walker's method).

Topic 8. Fundamentals of the analysis of expert assessments

The essence and conditions of the use of expert assessments. The quality of the expert and the quality of the expert evaluation procedure.

Principles of group examination. The commission method versus the expert evaluation method. Methods of selection of experts.

Delphi method for forecasting.

Methods of formalization and processing of expert information. Ranking and evaluation. Collective ranking. Direct determination of ratings. Ranks

Spearman and Kendall pair correlation coefficients. The concordance coefficient, its meaning and relation to rank correlation coefficients.

Normalized estimates. Interval estimates.

The method of sequential comparisons. Weighing alternatives. The method of paired comparisons.

Analysis — of—the-structure -of-expert—rankings with concordance. Identification of expert groupings.

Ranking of experts according to the degree of difference from the general opinion. Collective ranking based on the analysis of the consistency of individual rankings.

### **3.4. Topics of seminars/practical and laboratory classes**

#### **3.4.1 Seminars/practical classes**

##### **Topic 1.**

History and development of socio-economic forecasting and management. Social and economic forecasting and management as a branch of science. Forms of social forecasting. Methods of social forecasting. Management and social institutions. The development of the sciences "sociology" and "management" as the basis for the emergence of "sociology of management". The relationship of management sociology with other branches of sociological science. The social nature of management. The difference between management and management. The content structure and essence of the sociology of management. Socio-economic levels of social modeling and forecasting.

Historical stages of the formation of social and economic forecasts. The main scientific schools of social modeling and forecasting. The formation of social forecasting as a new direction in Western social science. Problems of foresight in ancient history. The "boom of forecasts" in the XX century. Humanism and global forecasting (A. Pechcei). Theory of neoclassical humanitarian management: V. Diltey, J.G. March, P. Selznick. Empirical sociological L. Newman School. A comprehensive socio - management approach to the management of Leavitt. School of Social Systems Simon. Socio-systemic approach to the organization of management by A. Etzioni. Administrative theory of A. Fayol. The management concept of M. Follet. The theory of "human relations" by J. Mayo. Two - factor theory of motivation F. Herzberg. Theory of management styles d . McGregor. School of Leadership behavior R. Tannenbaum and W. Schmidt. R. Laikert's theory of leadership styles. The conception of the long-term effectiveness of R. Laikert.

#### **Topic 2.**

Domestic social forecasting and management. The formation of social forecasting and modeling in Russia. Theoretical foundations of various forms of forecasting and modeling. The specifics of various forms of forecasting and modeling. Social forecasting in the sociological and historical sciences. Political forecasting. Military and socio-economic forecasting. Models of social management: subordination of management, ordering of the subject and object of social management. Development of a system of subordination regulated by the distribution of rights and responsibilities in the organization. Democratic the model of social management. The law of necessary diversity and the informational aspect of the development of social systems. Structure and energy: a dynamic approach to the development of social systems. The law of strengthening regulation and the development of social management methods. Social problems in management. Power and responsibility. Hierarchy as a system social filters.

#### **Topic 3.**

Social modeling and management in cyclic theories. Foreign and domestic cyclic theories. Formation, stages of development of modern cyclic forecasting theories. Foreign cyclical theories. I.M. Rybkin's cyclic theory. The cyclical model of Russian society. Social reproduction and the modern cyclical model of Russian society. Typologies and functions of leadership. Leadership in the managerial and institutional context. The social, organizational and group cyclical context of leadership Forecasting methods in the social and economic spheres.

#### **Topic 4.**

Overview of practical methods of forecasting and design. Quantitative methods of forecasting, design, modeling. Qualitative methods of forecasting, design, modeling. Elements of correlation and regression analysis and its application in solving predictive tasks. Expert assessments. Expert methods of socio-economic forecasting. The role of qualitative methods in forecasting: their advantages and disadvantages. Scientific observation. Free and formalized the interview, the stages of its conduct and the execution of the protocol. A sociological survey in the form of a questionnaire. The constituent elements of the dynamic series (trend, cyclical, seasonal and random fluctuations). Trend calculation. Methods of heuristic forecasting. Hierarchy Analysis method Saati.

#### **Topic 5.**

Mathematical modeling in forecasting problems of social and economic systems. Forecasting economic growth. Models of regional development. The model of the income level of the population and its forecasting. Forecasting demographic processes. Indicators the level of socio-economic development of the population: the standard of living indicator , cost of living index, demographic indicator and their predictors.

### **3.4.2. Laboratory classes**

Laboratory classes in the discipline are not provided for in the curriculum.



### **3.5. Topics of course projects (term papers)**

The course project (term paper) on the discipline is not provided for in the curriculum.

## **4 Educational, methodological and informational support**

### **4.1 Regulatory documents and GOST standards**

Normative documents and GOST standards are not used in the study of the discipline.

### **4.2 Basic literature**

a) basic literature:

— Magnus Ya.R., Katyshev P.K., Peresetsky A.A. Econometrics. Initial course: Textbook M.: Publishing house "Delo" Pahxui'C 2021 ., 504 p.

—Koreeva E.B., Rostova E.P. Methods of socio-economic forecasting.

Samara electronic course: Samara State Aerospace University 2013, - 90 p.

### **4.3 Additional literature**

—Koshkin G.M. Nonparametric identification of economic systems / Study guide. Tomsk: Publishing house of NTL 2007, 308 p.

6) additional literature:

— Alekseev E.P., Chesnokova O.B., Rudchenko E.A. Scilab: Solution of engineering and mathematical problems M.: ALT Linux; BINOM 2008, 260 p.

### **4.4 Electronic educational resources**

1. Electronic educational resources in this discipline are in the process of development.

### **4.5 Licensed and freely distributed software**

1. Microsoft Office suite programs (Word, Excel, PowerPoint)

### **4.6 Modern professional databases and information reference systems**

1. SPS "ConsultantPlus: Non-commercial Internet version". - URL: <http://www.consultant.ru/online/> (accessed: 02/16/2023). – Access mode: free.

## **5 Material and technical support**

1. Lecture hall.
2. An audience for practical classes.
3. Computer class with Internet access.
4. An audience for group and individual consultations, ongoing monitoring and interim certification.
5. An audience for independent work.
6. Library, reading room.

## **6 Methodological recommendations**

## 6.1 Methodological recommendations for the teacher on the organization of training

Methodological recommendations for the teacher on the organization of training

This section of this work program is intended for novice teachers and practitioners who do not have teaching experience.

The discipline Methods of Economic and Social Forecasting forms the competence of the students of the CC-1. In the conditions of designing educational systems based on the principles of the competence approach, there has been a conceptual change in the role of the teacher, who, along with the traditional role of the knowledge carrier, performs the function of the organizer of the student's research work, consultant in the procedures for selecting, processing and interpreting information necessary for practical action and further development, which must necessarily be taken into account when conducting lectures and practical classes in the discipline " Methods of Economic and Social Forecasting "

The teaching of theoretical (lecture) material on the discipline " Methods of Economic and Social Forecasting " is carried out on the basis of interdisciplinary integration and clear interdisciplinary connections within the framework of the educational program and curriculum.

The detailed content of individual topics of the discipline " Methods of Economic and Social Forecasting " is considered in paragraph 3.3 of the work program.

Approximate variants of tasks and test tasks for the current control and a list of questions for the exam in the discipline are presented as part of the FOS for the discipline in paragraph 7 of this work program.

The list of basic and additional literature, databases and information reference systems required in the course of teaching the discipline " Methods of Economic and Social Forecasting " is given in paragraph 4 of this work program.

## 6.2 Methodological guidelines for students on the development of the discipline

Obtaining in-depth knowledge of the discipline is achieved through the active independent work of students. It is advisable to use the allocated hours to get acquainted with the educational and scientific literature on the problems of the discipline, the analysis of scientific concepts.

Within the framework of the discipline, various forms of monitoring the level of achievement by students of the declared indicators of competence development are provided.

Forms of current control – the activity of work in practical classes, testing.

The form of intermediate control in the discipline is an exam, during which the level of achievement of the declared indicators of competence development by students is assessed.

Methodological guidelines for the development of the discipline.

Lectures are conducted in accordance with the content of this work program and are a presentation of the theoretical foundations of the discipline.

Attending lectures is mandatory.

Taking notes of the lecture material is allowed both in writing and by computer.

Regular repetition of lecture notes for each section in preparation for the current forms of certification in the discipline is one of the most important types of independent work of the student during the semester, necessary for high-quality preparation for intermediate certification in the discipline.

Conducting practical classes in the discipline "Methods of Economic and Social Forecasting" is carried out in the following forms:

- a survey based on materials reviewed at lectures and studied independently according to the recommended literature;
- analysis and discussion of issues on topics, problem solving.

Attendance of practical classes and active participation in them is mandatory.

Preparation for practical classes necessarily includes the study of lecture notes and recommended literature for an adequate understanding of the conditions and method of performing tasks planned by the teacher for a specific practical lesson.

Methodological guidelines for performing various forms of extracurricular independent work

The study of the main and additional literature on the discipline is carried out on a regular basis in the context of each topic to prepare for the intermediate certification in the discipline "Methods of Economic and Social Forecasting". The list of the main and additional literature on the discipline is given in paragraph 4 of this work program.

Methodological guidelines for preparation for intermediate certification

Intermediate certification in the discipline "Methods of Economic and Social Forecasting" takes place in the form of an exam. An approximate list of questions for the exam in the discipline "Methods of Economic and Social Forecasting" and the criteria for evaluating the student's response for the purpose of evaluating the achievement of the stated indicators of competence formation are given as part of the FOS for the discipline in paragraph 7 of this work program.

The student is allowed to intermediate certification in the discipline, regardless of the results of the current progress control.

## 7 Evaluation Funds Fund

### 7.1 Methods of monitoring and evaluating learning outcomes

Code and name of competencies	Indicators of competence achievement
OPK-5. He is able to analyze current trends in the development of media communication systems of the region, the country and the world for professional decision-making, based on the political and economic mechanisms of their functioning, legal and ethical regulations	IOPK-5.1 Knows the basic methods of solving communicative tasks, the basics of evaluating the effectiveness of the developed marketing support of innovative processes; IOPK-5.2 Is able to think creatively, economically on the issues of ongoing innovations at the enterprise, innovation processes in the country and abroad, to give a correct assessment of innovation policy measures, based on the analysis of market conditions to find innovations, new solutions, be able to apply the knowledge gained to solve practical problems of business innovation; IOPK-5.3 Is able to use modern technical means and information technologies in solving communicative tasks; IOPK-5.4 is able to use domestic and international experience in developing marketing support for innovative projects, introducing innovations, obtaining positive results with access to world markets; IOPK-5.5 Has the skills to read, understand and compile scientific, analytical, statistical reports in the field of professional activity, skills for independent, methodically correct solution of communicative tasks

### 7.2 Шкала и критерии оценивания результатов обучения

#### 7.2.1. Criteria for evaluating the answer to the exam

(formation of competence of the UC-5, indicators of the IUC-5.1, IUC-5.2)

**"5" (excellent):** the student demonstrates excellent theoretical knowledge, practical skills, knows the terms, makes reasoned conclusions and generalizations, gives examples, shows fluency in monologue speech and the ability to quickly respond to clarifying questions.

**"4" (good):** the student demonstrates good theoretical knowledge, practical skills, knows the terms, makes reasoned conclusions and generalizations, gives examples, shows fluency in monologue speech, but at the same time makes insignificant mistakes that he quickly corrects independently or with minor correction by the teacher.

**"3" (satisfactory):** the student demonstrates satisfactory theoretical knowledge, shows poorly formed skills in analyzing phenomena and processes, insufficient ability to draw reasoned conclusions and give examples, shows insufficient fluency in monologue speech, terms, logic and consistency of presentation, makes mistakes that can be corrected only when corrected by a teacher.

**"2" (unsatisfactory):** the student demonstrates ignorance of the theoretical foundations of the subject, lack of practical skills, does not know how to draw reasoned conclusions and give examples, shows poor command of monologue speech, does not know the terms, shows a lack of

logic and consistency of presentation, makes mistakes that cannot be corrected when corrected by the teacher, refuses to answer additional questions.

### 7.2.2. Criteria for evaluating the student's work in practical classes

(formation of competence of the UC-5, indicators of the IUC-5.1, IUC-5.2)

**"5" (excellent):** all the tasks provided for in the practical training plan were completed, the student answered all control questions clearly and without errors, actively worked in practical classes.

**"4" (good):** all the tasks provided for in the practical training plan were completed, the student answered all the control questions with the teacher's corrective remarks, worked quite actively in practical classes.

**"3" (satisfactory):** all tasks provided for in the practical training plan were completed with the teacher's comments; the student answered all control questions with comments.

**"2" (unsatisfactory):** the student did not complete or incorrectly completed the practical tasks provided for in the practical training plan; the student answered the control questions with errors or did not answer the control questions.

### 7.2.3. Criteria for evaluating test results

(formation of competence of the UC-5, indicators of the IUC-5.1, IUC-5.2)

The test is evaluated according to the percentage of correct answers given by the student to the test questions.

The standard scale of compliance of test results with the assigned score:

- "excellent" - over 85% of correct answers;
  - "good" - from 70.1% to 85% correct answers;
  - "satisfactory" - from 55.1% to 70% of correct answers;
- from 0 to 55% of correct answers – "unsatisfactory"

**"5" (excellent):** the test taker demonstrates excellent theoretical knowledge, knows the terms and has the ability to quickly respond to test questions.

**"4" (good):** the test taker demonstrates good theoretical knowledge, knows most of the terms and has the ability to respond quickly to test questions.

**"3" (satisfactory):** the test taker demonstrates satisfactory theoretical knowledge, owns the basic terms and concepts.

**"2" (unsatisfactory):** the test taker has no theoretical knowledge, he does not know the terminology and reacts slowly to the test questions.

## 7.3 Evaluation tools

### 7.3.1. Current control

(formation of competence of the UC-5, indicators of the IUC-5.1, IUC-5.2)

#### Examples of tasks to solve in practical classes:

#### Tasks for mandatory execution:

1. Calculate the possible population of the region as of January 1, 2022, if it is known that as of January 1, 2018, 4620 thousand people lived in the region, the average annual population growth rate was 2%.
2. There are quarterly data on the actual values of the gross regional

4 product in the reporting year (den. units): in 1 sq. – 68.1, in 2 sq. – 133.5, in 3 sq. - 130.5, in 4 sq. – 72.4. It is necessary to determine the general direction of the dynamics of the gross regional product in the reporting year, if it is known that quarterly trend  
The data for four years is described by the equation  $Y=70.65 + 1.6t$  ( $t= -15, +15$ ), and the seasonality indices are equal: in 1 sq. – 68.1%; in 2 sq. – 132.2%; in 3 sq. – 127.9%; in 4 sq. – 70.3%.

### **Case**

#### **Forecasting the state of the investment climate in Russia based on a scenario approach**

The investment climate is a special subsystem in the institutional system of the economy, designed to create prerequisites for the best use of socio-economic relations in the development and scientific and technological renewal of the productive forces of society through active investment activities.

1st step. Description of the state of affairs.

The issue of the investment climate in Russia is currently coming to the fore.

The future of the Russian economy depends on its decision, perhaps more than on all other factors

. The logic is simple: to implement the whole complex of Russia's problems, economic growth is needed – at least 4-5% per year for 20 years. For this, a large-scale inflow

of investments is important, since an increase in the utilization of existing capacities will increase GDP by no

more than 8-12%. Public investment opportunities are extremely limited, and besides, their efficiency is low. Private investments are required – domestic and foreign. But for them they need to create a favorable investment climate so that Russia can compete in international capital markets and, most importantly, stop the outflow of capital from the country.

Currently, the investment climate in the country is very unfavorable: the inflow of foreign direct investment is about 5 times less than the outflow of capital. In the field of direct

investment, Russia's comparative position looks rather modest. According to the amount of foreign direct investment (FDI) per capita accumulated over the period 1989 -1998, Russia

It ranked only 21st among 25 countries of Central and Eastern Europe and the CIS. The volume

of foreign investment to GDP, even in 1997, when the inflow of FDI in the country was at its maximum,

amounted to 0.8%. Russia was in the penultimate place in the list of these countries.

From the analysis of the factors determining the investment climate in Russia, it follows that,

despite the need for a rapid and radical change, many important conditions can be created gradually over a long time. A reasonable policy is to in order to ensure a gradual, but continuous improvement of the situation. Investors should have confidence that today is better than yesterday, and tomorrow will be better than today.

2nd step. Identification of significant factors affecting the object of forecasting

The concept of "investment climate" characterizes the degree of favorability of the situation in a particular country (region, industry) in relation to investments that can be made in the country (region, industry). When assessing the investment climate, output parameters are usually used:

- capital inflow and outflow;
- the level of inflation and interest rates;
- the share of savings in GDP.

The 3rd step. Determination of input parameters characterizing the country's investment development potential and the risks of their implementation

1. The level of development and accessibility of infrastructure facilities: industrial, financial and social. Infrastructure is usually rated as clearly weak.

2. Public debt, including external debt.

3. Legislation, completeness and quality of state regulation of economic life, the degree of its liberalization. For an investor, the most important thing is the stability of the legislative

bases, compliance with legal norms and the ability to enforce them.

The laws may be better or worse, but it is possible to adapt to this, provided that they do not constantly change.

4. Protection of property rights, the level of corporate governance. Most Russian companies do not perceive the creation of investment attractiveness as a priority task. In the last 3-4 years, there have been many violations of investors' rights, especially in companies where a controlling stake belongs to one of the financial industrial groups (FPG).

5. the quality of the tax system and the level of tax burden. In fact, the tax burden is not much heavier than in most European countries. The problems lie not so much in high rates as in determining the tax base. Significant gaps in tax legislation and the inconsistency of a number of regulations create areas of legal uncertainty.

6. Corruption of power structures.

Taking into account all these factors, it can be concluded that the prospects for economic growth in

In Russia, with the current development trends, they are very doubtful. The situation can change

only a sharp increase in investment activity based on private investment.

The 4th step. Determination of indicators characterizing changes in the forecasted object

The inflow of private foreign investments in 1993-1999 amounted to about \$ 10 billion, or about 8-10% of the amount of capital exported from the country over these years. External financing:

in total, about \$25 billion has been received from the IMF and the World Bank.

The savings of the population, which form the basis of long-term investments all over the world

, are very small in Russia. Mechanisms of transformation of savings of the population into investments in

the real sphere practically "does not work".

Indicators of state accumulation, defined as the difference between public investments and budget deficits, are generally negative in the country.

It is also necessary to take into account the huge external debt of Russia, the annual cost of servicing it is at least 8-10 billion dollars – an amount approximately equal to half of all Russian investments in fixed assets. In other words, debt over the next 10 years will significantly reduce domestic sources of investment.

The devaluation of the ruble has led to a relative increase in the competitiveness of Russian goods and an active process of import substitution has begun, but there are no positive changes in the investment sphere yet.

Investments in fixed assets in 1999 amounted to 99.3% of the 1998 level, continuing

the negative trend of recent years.

The 5th step. Determination of internal and external parameters affecting the investment climate

Intra-country parameters: political stability; the degree of confidence of economic entities in the state; mechanisms of corporate governance and control; the amount of public debt;

public administration; crime and corruption; inefficiency of judicial protection in case of violation of the law; excessive tax burden; inflation and interest rates; inflation expectations of the population and organizations (firms).

External parameters: Russia's low credit rating; the situation on the global financial market and the availability of free resources; the political situation in the world; the state of the economy and

politics in the countries – the main recipients of foreign direct investment (developing economies of the western hemisphere – 50% in 1992-1997 – and the Asian continent); sentiment

heads of the IMF, IBRD, EBRD, etc.

The 6th step. Making a forecast for the near future

Implementation of a policy aimed at a steady decline in inflation and inflation expectations. Tighter control over budget revenues and expenditures is required, and the creation of a centralized treasury system for budget execution is completed as soon as possible.

The two-year deferral received by the Government of the Russian Federation for the payment of external debts should be

effectively used to restructure accumulated liabilities.

Reform of the tax system. The second part should be put into effect as soon as possible

The Tax Code of the Russian Federation, which provides for the real abolition of most turnover taxes and

narrowed the base of income tax. Taxation of individuals, payroll and profits. The resulting difference in the transfer of one currency to another needs further rationalization in order to reduce the volume of "shadow" income.

Tax and customs privileges should be reviewed and sharply reduced. We need a real strict regulation of the list of taxes that can be imposed by the subjects of the Federation and

local authorities, as well as limiting the total tax burden on these taxes.

The program of restructuring of the banking system should be implemented as soon as possible

, and the introduction of a new accounting system based on international principles should be completed. The Central Bank of the Russian Federation should henceforth refrain from issuing licenses to banks

headed by former managers of insolvent banks (as well as banks in which a large stake belongs to the owners of insolvent banks), until these banks make payments on debts. It is important to more clearly regulate the procedure for determining

the exchange rate when satisfying creditors' claims for obligations in foreign currency, accelerate the adoption of the law on guarantees of deposits of citizens.

Opportunities to attract new investments largely depend on the quality of foreign economic and customs policy. It is advisable to intensify efforts to join the World Trade Organization (WTO), as well as work on the appropriate adjustment of legislation in this area. It is necessary to simplify the procedure governing



the procedure and the number of approvals, licenses and the issuance of technical conditions for implementation

investment projects. It is necessary to accelerate the creation of free trade with the CIS countries.

Freedom to enter the market. It is necessary to develop a technology based on the principle of "one window", when it is enough for an entrepreneur to apply to one instance so that in a relatively short period of several days, he could get a permit or a clearly regulated refusal. Of course, the introduction of such a procedure will require a change in local legislation. Barriers to entry to the market should be made "transparent", so that an entrepreneur can imagine exactly how much he must invest in order to open a business.

The fight against corruption. In Russia, the most effective way to reduce corruption is to further liberalize the economy, limit the interference of officials in economic processes, and reduce the areas of administration and

regulation. In the same place where the actions of officials are necessary, they should be developed

### **Test**

1. The method of scientific foresight, based on theoretical laws and causal relationships, is called:

- a) foresight;
- b) forecast;
- c) hypothesis;
- d) prediction.

2. The necessity of interconnectedness and subordination of forecasts of the forecasting object and the forecast background and their elements, taking into account feedbacks, determines

the principle \_\_\_\_\_ forecasting:

- a) consistency;
- b) consistency;
- c) polyvariance;
- d) continuity;
- e) adequacy.

3. Generalization and systematization of information, the construction of a series of indicators to identify

trends in the development of the forecasting object and the forecast background, the development of methods and

models for their forecasting; qualitative and quantitative assessment of the patterns that have developed in

the past is carried out at the stage of:

- a) predictive orientation;
- b) predictive retrospection;
- c) prognostic diagnosis;
- d) forecast prospectus;
- e) forecast verification;
- f) forecast adjustments.

4. What information is obtained by direct observation and registration, i.e.

by direct collection and perception of data:

- a) management;

- b) informing;
- c) useful;
- d) excessive;
- e) false;
- f) semantic;
- g) primary.

5. To assess the consistency of expert opinions, the method is used:

- a) self-assessment;
- b) mutual assessments;
- c) Delphi;
- d) rank correlation;
- e) evaluation of previously performed forecasts;
- f) independent expertise.

6. The adaptive forecasting model, which is based on the study of multidimensional time series, is called:

- a) the exponential trends model;
- b) adaptive histogram model;
- c) autoregression model with variable coefficients;
- d) adaptive nonlinear model;
- e) adaptive correlation analysis;
- (e) Adaptive multiple regression.

7. The essence of adaptive forecasting methods is:

- a) adjustment of the equation parameters taking into account the influence of cyclical factors;
- b) adaptation of the model to the intuitive expectations of the researcher;
- c) adjustment of the mathematical model taking into account changes in the influence of

evolutionary

factors of the process development at the current time;

d) the construction of a mathematical forecasting model that takes into account the identified patterns of the development of the process in a retrospective time interval.

8. Equation of the form

expresses:

- a) a parabolic trend;
- b) linear trend;
- c) exponential trend;
- d) hyperbolic trend;
- e) logarithmic trend;
- f) logistics trend.

9. Which of the following methods belongs to the group of collective expert assessments:

- a) interview method;
- b) analytical method;
- c) extrapolation method;
- d) the method of writing the script;
- e) Delphi method.

10. What is the essence of the Delphi method:

- a) generalization of expert methods;
- b) in determining and assessing the probability of occurrence of an event;
- c) in determining the basic laws of the development of the object;
- d) in the evaluation of the results of the functioning of the facility by experts;

e) in the evaluation of the optimal plan drawn up by experts.

### **7.3.2. Interim certification**

(formation of competence of the UC-5, indicators of the IUC-5.1, IUC-5.2)

#### **Exam questions**

1. Theoretical foundations of economic forecasting and planning.
2. Forecasting and planning in the system of state management of economic development.
3. The historical aspect of the development of forecasting and planning.
4. Forecasting and planning in economically developed foreign countries.
5. Methods of forecasting the dynamics of economic processes.
6. Naive models.
7. Simple and moving averages.
8. Predictive extrapolation.
9. Methods for identifying the main trend in the series of dynamics.
10. Assessment of the stability of the trend of time series indicators.
11. Assessment of the adequacy of the trend and forecasting. Forecasting seasonal fluctuations.
- Adaptive forecasting methods.
12. The method of harmonic weights.
13. Exponential smoothing.
14. Adaptive discriminant analysis.
15. Brown's model.
16. Linear growth models.
17. Seasonal models.
18. Forecasting based on regression dependencies.
19. Multiple linear regression.
20. Nonlinear regression models.
21. Point forecast.
22. Interval forecast.
23. Conditional and unconditional forecasts.
24. Forecast for autocorrelation of residues.
25. Forecasting based on regression dependencies.
26. Multiple linear regression.
27. Methods of expert assessments.
28. Stages of expert assessments.
29. Classification of expert assessment methods.
30. Stages of application of expert assessments.
31. Intuitive forecasting.
32. The Delphi method.
33. Forecasting by the method of "brain attack".
34. The "PATTERN" method.
35. Forecasting of economic and social processes.
36. Basic forecasts of the development of the socio-economic system.
37. Resource and background forecasts.

38. Demographic forecast.
39. Territorial forecasts.
40. Synthesis and verification of forecasts.
41. Synthesis of formalized and intuitive methods.
42. The nature and types of verification.
43. Quantitative indicators of the quality of forecasts.
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44. Absolute, comparative and qualitative indicators of forecast accuracy.
45. Forecasting bankruptcy of enterprises.
46. Features of application of methods of forecasting bankruptcy of enterprises.
47. Classification of methods for forecasting bankruptcy of enterprises.
48. Advantages and limitations of forecasting bankruptcy of enterprises.
49. Specifics of forecasting bankruptcy of enterprises.
50. Planning methods in the development of management decisions.
51. General principles of planning, development, adoption and implementation of management decisions.
52. Portfolio of management solutions.
53. The goal tree.
54. Forecasting and its information support.