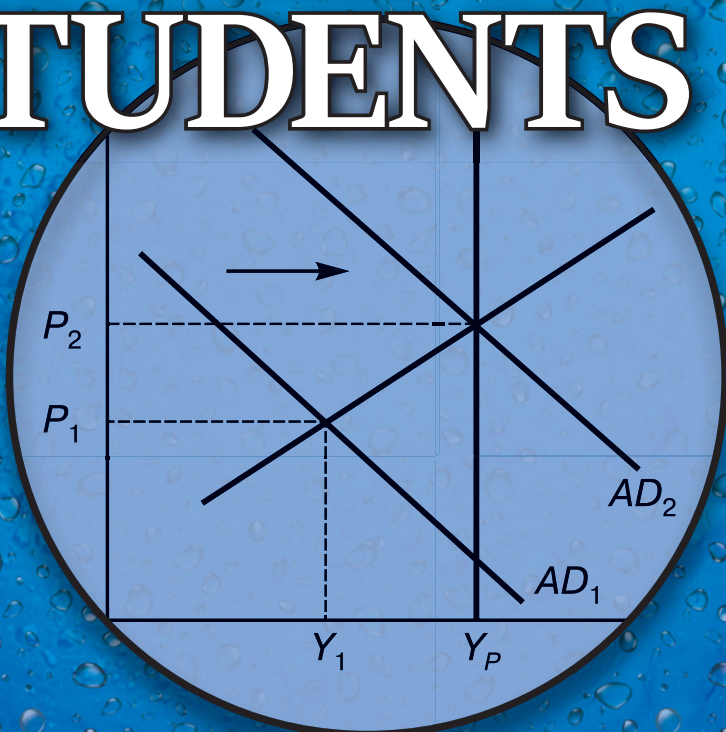




СЕЧЕНОВСКИЙ  
УНИВЕРСИТЕТ

Федеральное государственное автономное образовательное учреждение высшего образования Первый Московский государственный медицинский университет имени И.М. Сеченова Министерства здравоохранения Российской Федерации (Сеченовский Университет)

# ECONOMICS for MEDICAL STUDENTS



# **Economics for Medical Students**



СЕЧЕНОВСКИЙ  
УНИВЕРСИТЕТ

Федеральное государственное автономное образовательное  
учреждение высшего образования Первый Московский  
государственный медицинский университет имени И.М. Сеченова  
Министерства здравоохранения Российской Федерации  
(Сеченовский Университет)

# ECONOMICS FOR MEDICAL STUDENTS

**Textbook**

**Under the general editorship of Economic Sciences,  
prof. Y. V. Fedorova**

---

# ЭКОНОМИКА ДЛЯ МЕДИКОВ

**Учебник**

**Под общей редакцией доктора экономических наук,  
профессора Ю. В. Федоровой**

Рекомендовано

Координационным советом по области образования  
«Здравоохранение и медицинские науки» в качестве  
учебника для использования в образовательных  
учреждениях, реализующих основные профессиональные  
образовательные программы высшего образования  
уровня специалитета по направлениям  
подготовки 31.05.01 Лечебное дело,  
31.05.03 Стоматология



Москва  
Лаборатория знаний

Рецензенты: зав. кафедрой экономики и управления здравоохранением и фармацией ГБОУ ВПО «Саратовский государственный медицинский университет им. В.И. Разумовского», д-р мед. наук, проф. *И. Г. Новокрещенова*; проф. кафедры управления и экономики здравоохранения ИПО Красноярского государственного медицинского университета им. проф. В. Ф. Войно-Ясенецкого Минздрава России, д-р экон. наук *А. С. Ямщиков*

Авторы: *Борщева Наталья Леонидовна*, канд. экон. наук, доцент кафедры экономики и менеджмента (гл. 5); *Кирикуца Елена Геннадьевна*, канд. экон. наук, доцент кафедры экономики и менеджмента (гл. 3, 4); *Павлова Алина Сергеевна*, ассистент кафедры экономики и менеджмента (гл. 7, 8); *Погребинская Екатерина Александровна*, д-р экон. наук, проф. кафедры экономики и менеджмента (гл. 6, 11); *Федорова Юлия Вячеславовна*, д-р экон. наук, проф., зав. кафедрой экономики и менеджмента Первого МГМУ им. И. М. Сеченова (гл. 1, общая редакция); *Федоров Егор Андреевич*, канд. экон. наук, доцент кафедры экономики и менеджмента (гл. 2, глоссарий); *Черезова Яна Алексеевна*, канд. экон. наук, доцент кафедры экономики и менеджмента (гл. 9, 10)

**Economics for Medical Students** : textbook = Экономика для Э40 медиков : учебник. – М. : Лаборатория знаний, 2022. – 256 с. : ил.

ISBN 978-5-00101-389-1

This textbook is devoted to the fundamental issues of economics and the basics of the development of economic thinking of students and fully meets the requirements of the Federal State Educational Standards of Higher Education for the group of specialties «Healthcare». In the textbook, economic concepts, categories, patterns of economic development, logic and efficiency of economic processes, principles of making optimal economic decisions, microeconomic and macroeconomic foundations of the functioning and interaction of economic entities are considered in a complex.

To activate the independent work of students, their creative attitude to the subject, control questions are given after each topic.

A glossary is provided at the end of the textbook. The textbook can be used as a source of theoretical material, and as a practical guide for independent work.

The textbook is intended for students studying in medical specialties in English.

Данный учебник посвящен фундаментальным вопросам экономики и основам развития экономического мышления студентов и полностью соответствует требованиям Федеральных государственных образовательных стандартов высшего образования (2020) по группе специальностей «Здравоохранение». В учебнике в комплексе рассмотрены экономические понятия, категории, закономерности экономического развития, логика и эффективность экономических процессов, принципы принятия оптимальных экономических решений, микроэкономические и макроэкономические основы функционирования и взаимодействия субъектов экономики.

Для активизации самостоятельной работы студентов, их творческого отношения к предмету после каждой темы даны контрольные вопросы. В конце учебника представлен глоссарий. Учебник можно использовать как источник теоретического материала и как практическое пособие для самостоятельной работы.

Учебник предназначен для студентов, обучающихся по медицинским специальностям на английском языке.

УДК 33:111(075.8)  
ББК 65.495я73

ISBN 978-5-00101-389-1

© ФГАОУ ВО Первый МГМУ им. И. М. Сеченова Минздрава России (Сеченовский Университет), 2021  
© Лаборатория знаний, 2022

# CONTENTS

## INTRODUCTION 9

### UNIT 1

#### SUBJECT AND METHODOLOGY OF ECONOMICS 13

The Subject, Functions, and Methods of Economic Science 13

Why Is It Important to Study Economics? 16

The Method of Economics 19

Cautions and Pitfalls to Straight Thinking 22

Basic Economic Terms: Wants and Resources 24

The Three Basic Economic Questions 27

Types of Economic Systems and Their Answers to the Fundamental Questions 28

### UNIT 2

#### MARKET ANALYSIS: DEMAND, SUPPLY, PRICES 33

Market 33

Law of Demand. Determinants of Demand 34

Law of Supply. Determinants of Supply 37

Market Equilibrium and the Price Mechanism 40

The Elasticity of Demand and Elasticity of Supply 42

### UNIT 3

#### CONSUMER BEHAVIOUR THEORY 51

Diminishing Marginal Demand Law 52

Consumer Equilibrium 55

Consumer Surplus 56

Consumer Behaviour Theory	58
Consumer Budget Constraint	59
Indifference Curves	62
Analyzing Consumer Equilibrium Using The Budget Line and Indifference Curves	64

#### **UNIT 4** **ENTERPRISE 67**

Enterprise's Role in a Market Economy	67
Types of Enterprises	70

#### **UNIT 5** **THE FOUNDATIONS OF PRODUCER DECISION MAKING 73**

Production in the Short Run and the Long Run	73
Explicit Costs and Implicit Costs	75
Revenue and Profit	84

#### **UNIT 6** **COMPETITION THEORY 87**

The Essence of Competition	87
Types, Sorts, and Methods of Competition	89
Models of Market Structures	91

#### **UNIT 7** **FACTORS MARKETS 107**

Features of Supply and Demand in the Market of Factors of Production	107
Capital and Capital Asset Markets	110
Capital Interest and Its Role in Economic Development	113
The Labour Market and Its Features	115
Wage	119
Land Market and Rental Relations	124

**UNIT 8****PATTERNS OF FUNCTIONING OF THE NATIONAL ECONOMY 129**

Macroeconomics 129

National Economy 131

System of National Accounts 133

Main Macroeconomic Indicators, Methods of Their Calculation 138

Aggregate Demand and Aggregate Supply 143

Economic Growth 148

**UNIT 9****MAJOR MACROECONOMIC PROBLEMS 153**

The Business Cycle 153

Inflation 163

Unemployment 171

How Inflation and Unemployment Are Related 175

**UNIT 10****MARKET ECONOMY REGULATION 181**

The Changing Role of the State in the Economy 181

Fiscal Policy 188

Monetary Policy 192

Antitrust Policy 195

Social Policy 196

**UNIT 11****INTERNATIONAL ASPECTS OF ECONOMIC DEVELOPMENT 201**

Modern World Economy: Concept, Structure, Subjects, Development Trends 201

International Trade in the Global Economy 204

The Global Market for Capital and Labour 210

The International Monetary and Financial System 218

**GLOSSARY 223****REFERENCES 252**

# INTRODUCTION

Today, the need for economic knowledge is great at all levels—from the state to various market institutions, from legislative to executive governing bodies, from academic economists to medical students.

The federal project “Export of Education” is aimed at increasing by 2024 the number of foreigners studying in organizations carrying out education for higher education programs to 425 thousand people through infrastructure development, implementation of state support for the development of the export of Russian education, increasing the demand and competitiveness of Russian education. Russian medical teaching is traditionally in demand among international students.

The main task of the textbook is to form a modern type of economic thinking and behaviour among multicultural students studying in Russia in medical specialties based on the knowledge about the structure and functions of a market economy, the logic, and efficiency of economic processes, the principles of making optimal economic decisions, the legal and ethical foundations of the functioning and interaction of economic subjects.

The creation of this textbook is caused by the need to acquaint students not only with fundamental economic concepts but also with modern theories of real directions that have been formed at present in economics. This approach is necessary to improve the structure of teaching economic disciplines in medical schools.



The implementation of this approach has led to some features that distinguish this textbook from a large number of educational economic literature.

Firstly, a feature of this textbook is the specificity of teaching economics for students of medical universities, presenting the material in a simple and accessible form, with specific situations illustrating the significance of the theoretical provisions of economic theory, which makes it possible to use them for analysis concerning health care. This approach is designed to guide students to independently understand the problems of the economy in general and the economics of health care in particular.

Secondly, the textbook was written in the context of the modernization of the healthcare and education sectors. The principal place in modernization is occupied by the issues of improving the quality of medical education. Today, there is a growing tendency to involve doctors of all specialties and nurses in the management of health care resources, who must have extensive knowledge in the field of economics. An essential role in the training of modern-level specialists belongs to the textbook, which allows students, future specialists, to systematize knowledge and independently understand economic problems and propose solutions. The authors of the book set themselves the task of improving the quality of teaching economic disciplines for students of medical universities.

Thirdly, in the textbook, the general theoretical aspects of economic problems are complemented by their functional analysis using graphs. This provides a scientific understanding of economic phenomena and laws, allows students to comprehend economic practice critically, identify the principles of rational management, scientifically substantiate the economic and social policy of the state.

Fourthly, this textbook can be called targeted since it is intended for students of medical universities, where economic training has a certain specificity, includes fewer hours of study and a greater focus on practical problems. To activate the independent work of students, their creative attitude to

the subject, control questions are given after each topic. The textbook can be used as a source of theoretical material and a practical guide for independent work.

The tutorial is organized in a logical sequence. All topics can be conditionally divided into several parts. The first part of the textbook includes tasks about the subject and method of economic science, the formation, and development of economic theory, the main directions of modern world economic thought.

The second part includes tasks that reveal the general foundations of a market economy, the mechanism of market functioning. The third part is related to the characteristics of economic processes at the micro-level. The fourth part is devoted to macroeconomic problems, the national economy as a whole, the content of the state's economic and social policy.

The material presented in the textbook complies with federal state educational standards for higher education.

The textbook was prepared by the Department of Economics and Management of the First Moscow State University I. M. Sechenov (Sechenov University).

# UNIT 1

---

## SUBJECT AND METHODOLOGY OF ECONOMICS

*The subject, functions, and methods of economic science. Basic economic terms: wants and resources. The main issues of the economy. The economic system of society: subjects and objects.*

### The Subject, Functions, and Methods of Economic Science

Economic activity is immanent to human society. People to live are to produce goods using resources. Before goods are consumed they are to be distributed and, in many cases, exchanged. Producing, distributing, exchanging, and consuming, people behave according to their self-interests and are engaged in economic relations.

Every science has its field of study or its subject matter. The subject tells us what we study. The vision of the subject of economic theory has been continuously changing through time.

In its early days, economic theory had been developed as the political economy of wealth. Scientists concentrated on the search for the sources of national wealth. Mercantilists focused on trade as the primary source of wealth. The classical political economy turned towards production. Yet

there was a principal distinction between the position of the physiocracy and the English classical school. Physiocrats (F. Quesnay) emphasized the role of agriculture and considered only agricultural production as the source of wealth. As to the English classics (A. Smith, D. Ricardo), they stressed the dominating role of industrial production and the accumulation of capital. Ricardo also paid great attention to the distribution of wealth.

A bit separately, there stands the position of a French economist Jean Sismondi. He considered the growth of national wealth not in absolute terms only but relative to the growth of the population and the size of consumption. He emphasized the role of consumption as the determinant of production and distribution.

It should be noticed that some economists shared the view on political economy as a science about national wealth and national economy even in the XIX–XX centuries (V. Rosher, K. Buchner – Germany).

Different from the political economy of wealth, Marxism represents the political economy of labour. Marxism says that economic theory does not study production per se or growth and distribution of wealth. The subject of economic theory is the type of economic relations that people are engaged in while producing, distributing, exchanging, and consuming goods and services. Economic relations form economic systems. According to Marxism, political economy studies the laws of the genesis, evolution, and economic systems change. Marxism as a theory is a highly logical system of categories that describes the capitalist system from the position of the working class. The whole theoretical construction is based on the labour theory of value and the theory of surplus-value. At the end of the XIX century, there happened a radical turnover in the economic paradigm. Before, scientists were interested in the causal analysis, trying to answer such questions as “What is value and what is the price? What is the capital and what is profit?” etc. The new generation of economists (mainly neoclassical schools) wanted to know how to make capital and profit grow. Instead of

the theory of value, there was developed a theory of price. Mathematical methods: graphs, marginal notions, differentiation were used to find the optimal price and output, maximize profit, and minimize costs. The economic analysis became not causal but functional, pursuing rather pragmatic aims. Political economy acquired a new name—economics—to show that it has nothing to do with political and ideological issues. A new paradigm, speaking frankly, was not free from ideology. That was the ideology of the bourgeoisie.

A new definition of the subject of economic theory was given by A. Marshall. According to him, economics studies the normal activity of human society; it studies wealth and an individual: incentives to action and motives to counteraction. Marshall stresses the behavioural character of economics. If Marxism spoke about big social groups (classes), their economic interests, and behaviour, Marshall would pay attention to an individual consumer and an individual producer. Economics had to explain the motives of rational individual behaviour in the situation of scarce resources.

Contrary to the microeconomic analysis of Marshall, the Keynesian paradigm focused on the macroeconomic issues and the economic role of the government. The theory was not only abstract but included prescriptions for government economic policy.

The monetarist paradigm concentrated on money and monetary policy. Institutionalism studies a broad set of institutes that characterize psychological, ethical, juridical, technological, social phenomena.

Despite a wide variety of economic schools and different views on economic theory, there is a certain mainstream. It refers to economics and defines it as studying how individuals and societies choose to use the scarce resources that nature and previous generations have provided.

This definition is not the single one. In the famous textbook “Economics” by P. Samuelson, there are at least eight definitions of the subject of economics.

To sum up, let us say that whatever the definition of its subject is, economics helps to understand different economic systems and people's economic behaviour within those systems.

## Why Is It Important to Study Economics?

Economics influences our daily life. Every other moment we confront lots of economic problems, and we are faced with the necessity of making economic decisions of our own. So, we study economics to understand society better. You cannot hope to understand how a society functions without basic knowledge of its economy. It is not surprising that many scientists, such as Adam Smith, David Ricardo, Karl Marx, John M. Keynes, and others tried to make sense out of what was happening in society. Who was building factories and why? What determined the level of wages paid to workers? What would happen in the future, and what should happen?

So, the study of economics is an essential part of the study of society.

We also need economics to understand world affairs. Some countries are rich and some poor; some of them are industrially developed and some not. Why is it so? What are the trends in international trade and capital flows? What is an exchange rate, and what are its determinants? Economics help to answer these questions.

It is also essential to study economics because it is the basis of all other economic sciences. It is impossible to study finance, accounting, insurance, banking, etc., without learning the basic economic categories. Moreover, some noneconomic sciences have developed their economic sub-branches: economic geography, economic sociology, economic history, econometrics, etc.

It is necessary to study economic theory because it is a sort of methodology. Economic theory teaches how to learn society in general and interpret economic and social

phenomena; economics gives a set of instruments for humanitarian studies.

Economic theory is critical as a basis of economic policy. Government policy can hardly be efficient if not based on a good economic doctrine. A proper theory can help to encourage economic growth and solve economic problems. Thus, the Keynesian concept was actively and successfully implemented in the post-war period (1950–the 1960s) to recover and restructure the European economies.

We need economics to be an informed voter. When we participate in the political process, we are voting on issues that require a basic understanding of economics. For example, what will be the results of the price liberalization, if the national economy is highly monopolistic? Should the government squeeze inflation to encourage production or should it stimulate production to stop inflation? It is essential that people would vote consciously.

Last but not least is the necessity to study economics to learn a way of thinking. First, one should realize the basic concepts of economics. The critical problem is the problem of scarcity and choice. We are limited in time: there are only 24 hours in a day. Every given sum of money is limited. Economic resources are limited as well. You cannot have everything at the moment, so you are to make a choice. You cannot eat an apple and still have it. If you attend a lecture, you miss the possibility going to a cinema, or playing football, or working at a factory at the same time. If you spend all your daily income on cakes, you cannot buy books that day. If a nation uses a certain quantity of metal to produce a tractor, it cannot use that same metal to make a tank. Thus, people are forced to make choices.

“Scarcity” and “choice” are the keywords in the definition of economics as a science. Economics is behavioural science. It studies how people make choices.

How do people make choices? Economics suggests that people behave rationally and that their choices are reasonable. Rationality means that possible costs and benefits are

compared. Making his choice, an individual wants to maximize his benefits and minimize his losses.

It is essential to understand that everyone is seeking better profit opportunities. So, there is competition. As a result, profit opportunities are eliminated almost instantaneously. Such an economy is called an efficient market. The common language way of expressing the concept of efficient markets is “there is no such a thing as a free lunch”. There is a story about two people walking along, one an economist, one not. The non-economist sees a five hundred rouble bill on the sidewalk and says, “There is a five hundred rouble bill on the sidewalk”. The economist replies, “That is not possible. If there were, somebody would already have picked it up”.

Summarizing all above, one can say that we should study economic theory because it is:

- a humanitarian and behavioural science;
- a methodology;
- a basis of all other economic sciences;
- a basis of economic policy;
- a basis of the economic way of thinking.

Economics is a surprisingly broad discipline. It has deep roots in social philosophy and has many special fields of inquiry. These include economic history, international economics, public economics, urban economics, econometrics, industrial organizations, comparative economic systems, labour economics, financial economics, environmental economics, the history of economic thought, etc.

There are two major divisions of economics: microeconomics and macroeconomics.

**Microeconomics** look at the individual unit – the household, the firm, the industry. Microeconomics examines the functioning and the decisions that individual businesses and consumers make.

**Macroeconomics** looks at the whole, the aggregate. It concerns the national economy in general. Macroeconomics examines the factors that determine the national output, national product, national income, national employment, etc.



For example, microeconomics deals with how many cars are produced and how much steel is produced; macroeconomics describes the total industrial output. Microeconomics calculate the optimal number of employees in a firm, or the number of doctors in a nation (it refers to a single industry—medical services), while macroeconomics tells the total employment and unemployment level in the national market.

## The Method of Economics

The method of science says how its subject is studied. The method includes the instruments, tools, and devices to do theoretical research.

In economic studies, scientists use positive and normative approaches, descriptive and abstract methods, inductive and deductive reasoning, analysis and synthesis, verbal and mathematical models.

A positive approach or positive economics attempts to understand behaviour and the operation of economic systems without making judgments about whether the outcomes are good or bad. It strives to describe what exists and how it works. It says what it is.

The statement “Unemployment rate reached 5% last year” is positive because it just describes the unemployment rate being as high as 5%. No attitude is shown to this fact, and no prescription is made.

Normative economics looks at the outcomes of the economic behaviour and asks if they are good or bad and whether the results can be made better. Normative economics involves judgments and prescriptions for preferred courses of action. It says what should be. Most normative questions involve positive questions.

The statement “Government should create new working places, as the unemployment level is too high” is normative. Undoubtedly, the author disapproves of the situation in

the labour market and wants the government to take active measures against unemployment.

Positive economics is often divided into descriptive economics and economic theory.

Descriptive economics is the compilation of data that describes phenomena and facts. Such data appear in the Statistical Abstract (or Statistical Yearbook) of a nation.

The economic theory attempts to generalize about data and interpret them.

Descriptive and theoretical methods are very similar to the historical and logical methods, correspondingly. For example, if a scientist describes the development of capitalism in England, saying what and when happened, that will be a historical description. It fulfils a crucial role as it shows all the specific characteristics of that process in a particular country. But if one wants to describe the typical features and general trends of the development of capitalism, then the logical method is to be used. The logical method should cut off all national peculiarities and focus on the essential and immanent features, whether England, Germany, or the US. The analytical approach does not pay attention to nonsignificant details but emphasizes the quintessence.

A formal statement of a theory is called a model. The model can be in a verbal form that is just described with words. Today economic models are primarily developed in a mathematical form. Modern economics is often criticized for the excessive formalization of the economic theory. All models simplify reality by stripping part of it. They are abstract. Scientific abstraction is a vital important instrument of research. Critics often point to abstraction as a weakness. Most economists, however, see abstraction as real strength. The easiest way to see how abstraction can be helpful is to think of a map. Like maps, economic models are abstractions that strip away detail to expose only those aspects of behaviour important to the question being asked. The principle that irrelevant detail should be cut away is called the principle of Ockham's razor after the fourteenth-century philosopher William of Ockham.

Using abstractions, be careful not to oversimplify, especially when a theory is to help formulate actual government policy. Politicians and economists should remember about the political and social reality.

Scientific research involves analysis and synthesis. In chemistry, biology, physics, scientists can split the object they study into parts and investigate each fragment separately. In economics, such splitting can be done only in mind with the help of abstraction. The mental splitting of a phenomenon into elements to see what it is made of is called analysis. The analysis helps to separate one structural part from all others, distinguish one factor from all other factors that influence the process, and study it separately. Doing this, we use the device of *ceteris paribus*, or “all else equal”, or “other things being the same”. This is the central assumption used in economics. Without that assumption, it is impossible to make any serious analysis, as it is impossible to understand the role of all the factors at one time or the nature of all structural components of a complicated system simultaneously.

As a result of the analysis, economists get abstract partial knowledge. But the reality is much richer. So, synthesis is applied to get the complete mental picture of reality. Synthesis is the act of combining separate things or ideas into a comprehensive whole. Abstract partial pieces of knowledge are combined. As a result, economic knowledge becomes more realistic and more trustworthy.

The process of developing a theory is based on induction and deduction. Induction is the process of observing regular patterns from raw data and drawing generalizations from them. The backward movement is called deduction. The deductive method begins with hypotheses which are then tested against real-world facts. Sherlock Holmes was a great master of deduction.

To test a theory actual facts, natural scientists use experiments widely. While controlled experiments are complicated in economics, social scientists use other ways to do this. One of the easiest is to observe the behaviour of groups of similar

people under different circumstances. Sometimes the effects of separate factors can also be identified statistically.

Induction and deduction, analysis, and synthesis are known since Aristoteles; these methods form the basics of the so-called formal logic. Many generations of economists used methods on formal logic.

Dialectical logic is also known since the ancient past (Zenon, Aristoteles, Plato). A great contribution to dialectics was made by Decartes, Spinoza, Rousseau, Diderot. Dialectics reached its peak in the workings of G. W. Hegel (German philosopher, 1770–1831). Dialectics was first applied to economic research by K. Marx. Marx developed materialistic dialectics and applied them to study economic systems and human society in general. The dialectical logic uses a system approach and considers all the phenomena in their inter-relationship and development. Development happens due to the internal (immanent) contradictions of a system that lead through quantitative changes to a new quality (new phenomenon). From this perspective, an economic system is studied in its genesis, evolution, transition to a new quality, or a new economic system. Dialectical logic played a significant role in the development of economic theory.

## Cautions and Pitfalls to Straight Thinking

Scientific research in general and economic thinking, in particular, is not simple and easy. People often make logical mistakes or attempt to think straight. Below the most typical pitfalls are described.

**The fallacy of composition.** Once there was a well-known saying in the USA: “What is good for General Motors is good for America”. That is a typical example of a logical mistake called the fallacy of composition. It is assumed that what is true for a part (a single company) is necessarily true for the whole. But that is not correct.

Consider some examples. Strengthening the rouble against the dollar is good for importers as imported goods become

relatively cheaper in terms of roubles. Still, it is not correct to conclude that a strong rouble is good for all the nation. A strong rouble makes Russian exports more expensive to foreigners and undermines Russian goods' international competitiveness. The second illustration: if a profit tax is increased, it is good for the federal budget, but it is bad for producers. Vice versa, a low-profit tax encourages firms to invest and expand, but the budget revenues will decrease, and budget expenditures will be cut.

So, what is true for an individual or part is not necessarily true for the group or whole. Theories seem to work well when applied to individuals or households often break down when applied to the whole.

“After this, therefore because of this” fallacy. Theories often make statements about cause and effect. It can be quite tempting to look at two events in sequence and assume that the first caused the second to happen. This is not always the case. This common error is called “The post hoc, ergo proper hoc”, or “after this, therefore because of this” fallacy. This logical error can be illustrated with the following joke. A meteorologist predicts rain in the afternoon. His friend does not believe that and argues that the sun is so bright and there is not a single cloud in the sky. The meteorologist replies: “It will certainly rain because I forgot to take an umbrella, my son goes to a picnic with his class, my wife appointed a five-o'clock tea in the garden”. The keyword that helps to understand the logical error is “because”. The rain is not the result of forgetting an umbrella. Nor the rain can be caused by having tea in the garden. There is no cause-effect relationship between a picnic and rain, even if it starts raining after one goes out-of-doors.

**Correlation and causation.** Very close to the “post hoc” fallacy is the often-erroneous link between correlation and causation. Two variables are said to be correlated if one of them changes when the other one changes. But correlation does not mean causation. The two events or two variables may not be linked as cause and effect at all. For example, big cities have high crime rates and also have lots of schools.

This textbook is devoted to the fundamental issues of economics and the basics of the development of economic thinking of students and fully meets the requirements of the Federal State Educational Standards of Higher Education for the group of specialties «Healthcare». In the textbook, economic concepts, categories, patterns of economic development, logic and efficiency of economic processes, principles of making optimal economic decisions, microeconomic and macroeconomic foundations of the functioning and interaction of economic entities are considered in a complex.

To activate the independent work of students, their creative attitude to the subject, control questions are given after each topic.

A glossary is provided at the end of the textbook. The textbook can be used as a source of theoretical material, and as a practical guide for independent work.

The textbook is intended for students studying in medical specialties in English.

---

Данный учебник посвящен фундаментальным вопросам экономики и основам развития экономического мышления студентов и полностью соответствует требованиям Федеральных государственных образовательных стандартов высшего образования (2020) по группе специальностей «Здравоохранение». В учебнике в комплексе рассмотрены экономические понятия, категории, закономерности экономического развития, логика и эффективность экономических процессов, принципы принятия оптимальных экономических решений, микроэкономические и макроэкономические основы функционирования и взаимодействия субъектов экономики.

Для активизации самостоятельной работы студентов, их творческого отношения к предмету после каждой темы даны контрольные вопросы. В конце учебника представлен глоссарий. Учебник можно использовать как источник теоретического материала и как практическое пособие для самостоятельной работы.

Учебник предназначен для студентов, обучающихся по медицинским специальностям на английском языке.