UNIVERSITY OF NATIONAL AND WORLD ECONOMY

Approved by:

Assoc. Prof. Dr. Maria Vodenicharova - Vive Rector on research

EXAM PROGRAM

FOR DOCTORAL EXAM

IN SCIENTIFIC SPECIALTY "WORLD ECONOMY AND IER"

AT "IER AND BUSINESS" DEPARTMENT

DISCIPLINE: "INTERNATIONAL INDUSTRY MARKETS (NEW DIRECTIONS, TRENDS AND PROBLEMS)"

SECTION I INTERNATIONAL MARKETS OF AGRICULTURAL COMMODITIES – REGULARITIES, NEW DIRECTIONS, TRENDS AND PROBLEMS

1. World agriculture in the 21st century – main trends, new problems and solutions. The world food crisis and global food security. The food aid system and the World Food Programme.

2. Features of world agricultural production.

Influence of natural and climatic factors. Biological features. Features of agrarian and food cycles.

3. International markets for agricultural commodities.

Main reproductive trends in the agricultural sector of the world economy (in economic and geographical terms).

Factors of supply of agricultural goods on foreign markets.

Economic importance of agricultural production for exporting countries.

Factors (extensive and intensive) that change the demand for agricultural commodities in the world.

Analysis of the supply-demand balance by main groups of agricultural commodities during the periods 2005-2015, 2015-2019 and 2020-2023.

Volume, dynamics, commodity and geographical structure of international trade in agricultural goods.

4. Impact of scientific and technological progress on international agricultural markets.

Main directions in the development of scientific and technological progress in the agricultural and food sector. The emergence of an agricultural biotechnological industry. The commercialization of biotechnological production.

The "Green" Revolution and its positive and negative effects. The "gene" wave of NTP from the 20th to the 21st century - "a little good and more evil in one". The penetration of nanotechnologies into the agricultural and food sectors.

The rapid development of agricultural biotechnology and the development of measures to protect international and national food markets. Stages in the industrial regulation of high-tech food markets.

Organic agricultural production: potential and prospects for its development. Expanding the range of organic products, introducing certification programs, restoring ecosystems and natural biological processes for soil fertility. Sectoral aspects for identifying organic products.

5. Organizational structure of the international agricultural market. Multiplicity of market entities.

Concentration of companies from the resource agrarian sector in the late 20th and early 21st centuries as a result of mergers with industrial corporations. Vertical integration.

Classification of companies in the agricultural sector in the world by areas of activity: for the production of agricultural resources (seeds, feed, fertilizers, plant protection products and against animal diseases, equipment, packaging), agricultural enterprises, processing companies, wholesalers and retailers, warehousing and transport infrastructure.

Classification of companies in the agricultural sector by functional and product diversification – multi-profile vertically and horizontally integrated companies; enterprises operating at the same

level in the production chain, but frequently changing the object of activity; companies with narrow specialization.

Transnational corporations in international agricultural commodity markets.

SECTION II INTERNATIONAL MARKETS FOR MINERAL RAW MATERIALS AND FUELS

6. Economic importance of mineral raw materials and fuels in the world economy.

Factors of demand and supply in the international markets of mineral raw materials and fuels.

Features and main trends in international trade in mineral raw materials and fuels.

7. International energy markets and prospects for their development.

The world energy system. International markets for crude oil, natural gas, hard coal and thermal coal. Main forms and methods of trade.

8. Prices and pricing on international markets for mineral raw materials and fuels.

Types of published price information and economic characteristics of the types of published prices. Stock exchange prices – truly international and of primary representativeness.

9. International markets for ferrous and non-ferrous metals.

Status and structure of the metallurgical sector in the global economy.

Classifications of metallurgical production.

International markets for non-ferrous and rare metals. The use of rare metals in industry began in the second half of the 20th century. Since the 1950s, the development of modern industrial technologies has been unthinkable without their use. All resource- and energy-saving technologies are based on the use of rare elements - they are the basis of all supermagnetic, superlight, superhard, superheat-resistant and superstrong structural materials.

International iron and steel markets – status, trends, development prospects until 2030. Problems in the raw material supply of the global steel industry, related to changes in the system of long-term iron ore supply contracts and the transition to competitive pricing on a short-term basis.

SECTION III INTERNATIONAL MARKETS FOR MACHINERY AND EQUIPMENT

10. Economic importance of mechanical engineering in the world economy.

Reproductive structure of mechanical engineering production.

Industry structure according to the UN classification. Classification of mechanical engineering production by knowledge intensity and degree of novelty.

Company structure on the international machinery and equipment market.

Commodity structure of international trade in machinery and equipment – standard machine-building production, parts, assemblies and details; machine-building production with special purpose; complete objects of machine-technical production.

11. Peculiarities of the cyclical development of the machinery and equipment market.

Specialization and cooperation in stages of the reproduction of machines and equipment.

Factors influencing production and international trade.

Trends in the sale of mechanical engineering products on international markets.

12. Peculiarities of prices and pricing of machinery and equipment.

Export price indices of machinery and equipment; kilogram prices; consumption price; prices per unit of useful effect.

Justification of prices for standard engineering products; published reference prices and catalog prices; application of discounts and allowances depending on the terms of delivery (franking), delivery time, payment terms, the nature of the business and financial relations between the partners.

The "sliding price" clause in contracts for the supply of machinery and equipment with a long production period.

Contractual pricing of unique and specialized machine-building production. Methods for assessing the quality characteristics of machines in single or small-series execution.

13. Problems of competitiveness of mechanical engineering production.

Indicators for determining competitiveness by types of mechanical engineering production. Indicators for determining the competitiveness of mechanical engineering companies. Technical service of mechanical engineering as a competitive factor in international trade.

SECTION IV THE INTERNATIONAL TECHNOLOGY MARKET

14. Basic patterns and directions of NTP. Knowledge-intensive technologies, the object of international exchange. The peculiarities of technologies as a commodity. The role of inter-

firm trade in technologies in accelerating NTP. Sectoral, company and geographical structure of international trade in technologies.

LITERATURE:

A. BASIC

1. Bilyanski, V., V. Bozev, 2021. Economic growth as a factor for price convergence in EU member states, Economic and Social Alternatives , 1/2021.

2. Petkov, V., 2014. Types of prices and their application in international commodity markets, GorexPress Publishing House, Sofia.

3. Petkov , V., 2014. Energy Security and Energy Markets in the Black Sea Region Countries, GorexPress Publishing House, Sofia.

4. Petkov, V., 2014. The World Economy: Current Issues in Theory and Practice, GorexPress Publishing House, Sofia .

5. Gelvanovsky, M., 2018. World prices: features of modern dynamics and regularities of changes in relations, Moscow.

6 . Klinov, V. G., L.S. Revenko, T.I. Ruzhinskaya, 2012. World commodity markets and prices, "MGIMO - University" Publishing House.

7 . Klinov, V., S. Aleksandrovich, 2019. Economic Conjuncture, MGIMO, Moscow .

8 . Kondratiev, V., 2015. Industries and sectors of the global economy: features and development trends, International Relations .

9. Kuznetsova, G., 2019. Conjuncture of world commodity markets. REU, Moscow .

10. Chebotaryov. N., 2021. World commodity markets, Russian State University of Oil and Gas .

11. Allen, R., 2016. Financial Crises and Recession in the Global Economy, Fourth Edition, Elgaronline .

12. Baker, H., G. Filbeck, 2018. Commodities: Markets, Performance, and Strategies (Financial Markets and Investments).

13. Baley, R., M. Tupy, 2020. Ten Global Trends Every Smart Person Should Know: And Many Others You Will Find Interesting, Cato Institute .

14 . Bilyanski , V. , 2017. The collapse in oil markets from mid-2014 onwards – economics or politics. Economic Studies. 4/2017 .

15. Bilyanski, V., Kirova, S., 2020. Bulgaria's real convergence in the context of the potential EMU membership, Proceedings of CBU in Economics and Business Vol. 1/2020.

16. IMF. World Economic Outlook, October 2023, April 2024.

1 7. Knoop, TA, 2009. Recessions and Depressions: Understanding Business Cycles, Praeger.

1 8. Nagle, T., G. Muller, 2019. The Strategy and Tactics of Pricing: A guide to growing more profitably 6th Edition, Springer.

1 9 . OPEC, Annual Report, 2021, 2022, 2023.

20. Ramge, T., J. Schwochow, 2018. The Global Economy as You've Never Seen It: 99 Ingenious Infographics That Put It All Together, NY .

21. Simon, H., 2019. Price Management: Strategy, Analysis, Decision, Implementation, Springer.

22 . Soumaré, I., 2022. Commodity Exchanges: Concepts, Tools and Guidelines.

2 3 . Tooze, A., 2021. Shutdown: How Covid Shook the World's Economy, NY .

24. World Bank, Global Economic Prospects, January 2024 , Washington, DC.

B. ADDITIONAL

Statistical publications of international organizations

UNITED NATIONS

Monthly Bulletin of Statistics;
Industrial Commodity Statistics Yearbook
Commodity Trade Statistics;
Handbook of World Mineral Trade Statistics;
Energy Statistics Yearbook .

UNCTAD

Handbook of International Trade and Development Statistics;
Commodity Yearbook;
Commodity Price Bulletin (online only) .

FAO

Production Yearbook;
Trade Yearbook.

OECD

Main Economic Indicators (monthly) ;
Trade by Commodities (annual);
Engineering Industries in OECD member countries (annual) .

IMF

International Financial Statistics, monthly;
International Financial Statistics Yearbook.

WORLD TRADE ORGANIZATION

International Trade: Trends and Statistics ;
Harmonized System, World Customs Organization.

Electronic sources

European Commission, Internal Market, Industry, Entrepreneurship and SMEs , https://single-market-economy.ec.europa.eu/sectors_en

FAO, The State of Agricultural Commodity Markets 2022, https://www.fao.org/markets-and-trade/publications/detail/en/c/1559693/

OECD, Main Science and Technology Indicators 2024 , https://www.oecd.org/sti/msti.htm

Lecturer:

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