MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
WEST UKRAINIAN NATIONAL UNIVERSITY
FACULTY OF ECONOMICS AND MANAGEMENT

Department of Economics and Economic Theory

Methodological recommendations

for studying the course

“Fundamentals of Financial Forecasting and Risk Management”

Degree of higher education: Bachelor
Branch of knowledge: 05 Social and behavioral sciences
Specialty: 051 Economics
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PURPOSE AND TASKS OF THE COURSE "FUNDAMENTALS OF FINANCIAL FORECASTING AND RISK MANAGEMENT"

Purpose of the course

The primary purpose of the course "Fundamentals of Financial Forecasting and Risk Management" is to provide students with a comprehensive understanding of financial forecasting techniques and risk management strategies. This course aims to equip students with the knowledge and skills necessary to analyze financial data, predict future financial conditions, and develop effective risk management frameworks. Through this course, students will learn to make informed decisions that enhance the financial stability and growth of organizations.

Tasks of the course

Tasks of the course are to introduce students to the basic concepts and methods used in financial forecasting, teach them how to analyze historical financial data to identify trends and patterns, provide training on various forecasting models, including time-series analysis, regression models, and qualitative forecasting techniques.

Essential task of the course is to understand the fundamentals of risk management. In order to provide this task it is necessary to familiarize students with the principles of risk management, including the identification, assessment, and prioritization of risks, explain different types of risks (market risk, credit risk, operational risk, etc.) and the impact they have on organizations, provide students with strategies for mitigating risks and managing uncertainty in financial planning.

Practical case studies and applications are important task of the course, so that it is necessary to provide practical, hands-on experience through case studies and projects that simulate real-world financial forecasting and risk management scenarios, encourage critical thinking and problem-solving skills by analyzing case studies involving different industries and market conditions, foster collaboration and teamwork through group projects and presentations that highlight the application of forecasting and risk management concepts.

As a result of studying the course "Fundamentals of Financial Forecasting and Risk Management" students should *know*:

– fundamental principles and methodologies of financial forecasting, including different types of forecasts (short-term, medium-term, and long-term);

– key concepts in risk management, such as risk identification, risk assessment, risk mitigation, and risk control;

– various types of financial risks, including market risk, credit risk, liquidity risk, operational risk, and strategic risk;

– the factors that contribute to each type of risk and how they can impact an organization's financial health;

– how to apply different forecasting techniques, such as time-series analysis, moving averages, exponential smoothing, regression analysis, and scenario planning;

– be familiar with both qualitative and quantitative forecasting models and understand their appropriate applications in different financial contexts;

– various risk management strategies, including diversification, hedging, insurance, and the use of financial derivatives;

– how to analyze financial data using statistical tools and software to detect trends, patterns, and anomalies that could affect future financial performance;

– be capable of interpreting financial statements and other financial documents to assess an organization's risk profile;

– the latest technological tools and software used for financial forecasting and risk management;

– the impact of emerging technologies like artificial intelligence, machine learning, and big data analytics on forecasting accuracy and risk management efficiency;

– how to present complex financial information clearly and concisely, using visual aids such as charts, graphs, and dashboards.

As a result of studying the course "Fundamentals of Financial Forecasting and Risk Management" students *should be able to:*

– construct financial forecasts using various techniques, such as time-series analysis, regression models, and scenario planning;

– apply both qualitative and quantitative methods to forecast financial performance indicators, including revenues, expenses, cash flows, and profitability;

– analyze financial data effectively;

– gather, organize, and analyze financial data from various sources to identify trends, patterns, and potential risks;

– identify and evaluate different types of financial risks (market, credit, liquidity, operational, etc.) that can affect an organization;

– develop and implement risk management strategies, such as hedging, diversification, insurance, and contingency planning, to mitigate identified risks;

– create comprehensive risk management plans;

– design risk management frameworks that include risk assessment, risk prioritization, risk response planning, and risk monitoring;

– use specialized financial forecasting software and tools to enhance the accuracy and efficiency of financial predictions;

– leverage emerging technologies such as artificial intelligence, machine learning, and big data analytics to improve risk management processes;

– communicate financial insights to stakeholders;

– evaluate the impact of external factors on financial forecasts;

– assess the potential impact of macroeconomic factors, industry trends, and market dynamics on an organization's financial outlook;

– demonstrate flexibility in adapting financial forecasting models and risk management strategies in response to new information and changing market conditions.

CONTENT OF THE COURSE “FUNDAMENTALS OF FINANCIAL FORECASTING AND RISK MANAGEMENT”

Content module 1
Fundamentals of Financial Forecasting

Theme 1: Introduction to Financial Forecasting

The essence of financial forecasting. Definition and importance. Applications in business decision-making. Importance in financial decision-making. Role of forecasting in various sectors (e.g., banking, investment, corporate finance).

Fundamentals of financial asset management. Explanation of financial assets and their categories (stocks, bonds, derivatives, etc.).

Overview of financial statements. Income statement, balance sheet, and cash flow statement. Financial statements and data analysis. Understanding and analyzing financial statements (balance sheet, income statement, cash flow statement, etc.). Interrelationships between financial statements. Financial ratio analysis and its relevance in forecasting and risk assessment.

Types of financial forecasting. Short-term vs. long-term forecasting.

Common forecasting models and methods. Qualitative vs. quantitative forecasting methods.

Literature: 1-12.

Theme 2: Data Collection and Analysis for Forecasting

Identifying key financial data sources. Internal data: historical financial statements, budgets. External data: market trends, economic indicators.

Data cleaning and preparation. Ensuring data accuracy and consistency. Adjusting for anomalies and outliers.

Financial ratios and indicators. Understanding and calculating key financial ratios. Using ratios for predictive analysis.

Literature: 1-12.

Theme 3: Forecasting Revenue and Sales

Techniques for revenue forecasting. Time series analysis. Regression analysis. Market research and trend analysis.

Forecasting sales volume and prices. Demand forecasting techniques. Price elasticity and its impact on sales forecasts

Scenario analysis and sensitivity analysis. Creating different scenarios based on varying assumptions. Analyzing the sensitivity of forecasts to changes in key variables.

Literature: 1-12.

Theme 4: Cash Flow Forecasting

Importance of cash flow forecasting. Differences between cash flow and profit forecasting. Cash flow forecasting in strategic planning and liquidity management.

Methods for forecasting cash flows. Direct vs. indirect cash flow forecasting. Cash flow modeling techniques.

Building a cash flow forecast. Projecting operating, investing, and financing cash flows. Incorporating seasonal and cyclical patterns.

Literature: 1-12.

Theme 5: Profit and Loss Forecasting

Understanding profit forecasting. Linking sales forecasts to profit forecasts. Identifying key drivers of profitability

Techniques for forecasting profits. Contribution margin analysis. Break-even analysis.

Cost behavior and its impact on profits. Fixed vs. variable costs. Forecasting cost of goods sold (COGS) and operating expenses.

Literature: 1-12.

Theme 6: Forecasting Changes in the Balance Sheet

Balance sheet structure and dynamics. Key components of the balance sheet. How balance sheet items are interrelated with income and cash flow statements

Forecasting balance sheet accounts. Assets: inventory, receivables, fixed assets. Liabilities: payables, debt. Equity: retained earnings, stock issues.

Forecasting capital expenditures and depreciation. Projecting future capital needs and asset replacement. Impact of depreciation on the balance sheet and income statement.

Literature: 1-12.

Content module 2
Fundamentals of Risk Management

Theme 7. Introduction to risk management

Approaches to define a risk. Definitions of risk. Nature of risk. Types of risks. Risk description. Inherent level of risk. Risk classification systems. Risk likelihood and magnitude.

Impact of risk on organizations. Level of risk. Impact of hazard risks. Attachment of risks. Risk and reward. Attitudes to risk. Risk and triggers.

Types of risks. Timescale of risk impact. Manage uncertainty risks. Mitigate hazard risks. Minimize compliance risks.

Scope of risk management. The essence and origin of risk management. Importance of risk management. Development of risk management. Specialist areas of risk management. 8Rs and 4Ts of (hazard) risk management. Enterprise risk management. Levels of risk management sophistication.

Principles of risk management. Risk management objectives. Importance of risk management. Implementing risk management.

Literature: 1-12.

Theme 8. Approaches to risk management

Risk management standards. The risk management process. Risk management standards. Risk management context. Components of the RM context. COSO ERM framework. Features of risk management standards.

Establishing the context. Components of risk management context: external and internal contexts. Designing a risk register.

Enterprise risk management. Enterprise-wide approach. Definitions of enterprise risk management. Benefits of enterprise risk management. ERM and business continuity. Successful implementation of ERM.

Alternative approaches to manage the risk. Changing face of risk management. Managing emerging risks.

Literature: 1-12.

Theme 9. Risk assessment

Importance of risk assessment. Approaches to risk assessment. Advantages and disadvantages of risk assessment. Risk assessment techniques. Nature of the risk matrix. Risk perception. Attitude to risk.

Risk classification systems. Short-, medium- and long-term risks. Firm risk scorecard. PESTLE risk classification system. Compliance, hazard, control and opportunity.

Risk analysis and evaluation. Application of a risk matrix. Personal risk matrix. Inherent and current level of risk. Benchmark tests for risk significance. 4ts of hazard risk response. Risk significance. Risk capacity.

Loss control. Risk likelihood. Risk magnitude. Hazard risks. Loss prevention. Damage limitation. Cost containment.

Defining the upside of risk. Opportunity assessment. Risk matrix for opportunities and hazards. Riskiness index. Financial component of the firm risk scorecard. Infrastructure component of the firm risk scorecard.

The essence of risk management. Benefits of risk management. Features of risk management. Marketplace component of the Firm risk scorecard.

Literature: 1-12.

Theme 10. Risk response

The 4ts of hazard response: tolerate, treat, transfer and terminate. Description of the 4Ts of hazard response. Risk matrix and the 4Ts of hazard management. Key dependencies and significant risks. Strategic risk response. Risk versus reward in strategy.

Risk control techniques. Types of controls. Types of controls for hazard risks. Description of types of hazard controls. The hierarchy of hazard controls. Hazard risk zones. Preventive controls. Corrective controls. Directive controls. Detective controls.

Insurance and risk transfer. Importance of insurance. History of insurance. Types of insurance. Evaluation of insurance needs. Purchase of insurance. Captive insurance companies. Role of captive insurance companies.

Business continuity management. Business continuity standards. Disaster recovery timeline and costs. Model for business continuity planning. Key activities in business continuity planning. Successful business continuity. Business impact analysis (BIA). Business continuity and ERM.

Literature: 1-12.

Theme 11. Risk strategy

Core business processes. Dynamic business models. Business development model. Types of business processes. Strategy and tactics. Effective and efficient operations. Ensuring compliance.

Reputation and the business model. Components of the business model. Risk Management and the business model. Reputation and corporate governance. Corporate social responsibility and risk management. Supply chain and ethical trading. Importance of reputation. Components of reputation. Mapping the components of reputation. Threats to reputation.

Risk management context. Architecture, strategy and protocols. Risk management framework.

Risk management responsibilities. Allocation of responsibilities. Range of responsibilities. Statutory responsibilities of management. Role of the risk manager. Risk architecture for a large corporation. Risk committees. Responsibilities of the risk management committee.

Control of selected hazard risks. Cost of risk controls. Illustration of control effect (control effect map). Cost-effective controls. Risk and reward decisions. Control of financial risks. Control of infrastructure risks. IT security. HR risks. Control of reputational risks. Control of marketplace risks. Regulatory risks.

Literature: 1-12.

Theme 12. Risk culture

Risk-aware culture. Styles of risk management. Achieving successful enterprise risk management. Defining risk culture. Implementation barriers and actions. Risk-aware culture. Measuring risk culture. Four levels of risk maturity. Risk maturity models. Risk maturity matrix.

Importance of risk appetite nature of risk appetite. Risk appetite and the risk matrix. Risk appetite, exposure and capacity. Risk and uncertainty. Risk exposure and risk capacity. Risk appetite statements. Risk appetite for a manufacturing organization. Risk appetite and lifestyle decisions.

Risk training and communication. Consistent response to risk. Risk training and risk culture. Risk management training. Risk information and communication. Risk communication guidelines. Risk information on an intranet. Risk management information systems (RMIS).

Risk practitioner competencies. Competency frameworks. Range of skills. People skills for risk management practitioners. Analytical skills.

Literature: 1-12.

Theme 13. Risk governance

Corporate governance model. Corporate governance. Principles of corporate governance. Corporate governance framework. Corporate governance for a bank. Corporate governance for a government agency. Evaluation of board performance.

Stakeholder expectations. Range of stakeholders. Data for shareholders. Stakeholders and core processes. Importance of core processes. Stakeholders and strategy. Stakeholders and tactics.

Operational risk management. Operational risk. Definition of operational risk. Basel II and Basel III. ORM principles (Basel II). Measurement of operational risk. Operational risk for a bank. Operational risk in financial and industrial companies.

Project risk management. Introduction to project risk management. Development of project risk management. Uncertainty in projects. Risk matrix to represent project risks. Project lifecycle. Decreasing uncertainty during the project. Opportunity in projects. Project risk analysis and management.

Supply chain management. Importance of the supply chain. Scope of the supply chain. Strategic partnerships. Joint ventures.

Outsourcing of operations. Risks associated with outsourcing. Scope of outsourcing contracts. Benefits of outsourcing.

Literature: 1-12.

Theme 14. Financial Forecasting for State Protection during the War: An Analysis of Ukraine’s Strategies

Importance of financial forecasting in protecting the state during periods of uncertainty. The role of financial forecasting in ensuring state protection and stability during the wartime. Overview of the current conflict situation in Ukraine.

Ukraine’s financial forecasting during the conflict. Historical Background: Overview of Ukraine’s financial situation before and during the war. Examination of the forecasting models and methods employed by Ukraine. Adapting financial forecasting to wartime conditions. Challenges and limitations: unique difficulties in forecasting during war. Data scarcity and high volatility. Adjustments to traditional forecasting methods to account for wartime uncertainties. Modified techniques for financial forecasting.

Strategic implications of financial forecasting in wartime. Impact on state protection: how accurate forecasting supports national security and economic stability.

Influence of forecasting on policy and strategic decisions in Ukraine. Key takeaways from Ukraine’s experience with financial forecasting in conflict. Recommendations for improving forecasting methods under similar conditions.

Forecasting innovations. Emerging trends and technologies that could enhance financial forecasting in wartime. Suggestions for future strategies and improvements in forecasting practices.

Literature: 1-12.

Theme 15. Risk Management for State Protection in Wartime: The Case of Ukraine

Importance of risk management in maintaining state protection and stability during conflict. Overview of Ukraine's geopolitical situation and the impact of war and uncertainty on the state.

Risk management in wartime conditions. Specific risks associated with wartime (e.g., infrastructure damage, economic disruption, security threats). Risk identification: techniques for identifying and categorizing risks in a conflict scenario. Risk assessment: methods for assessing the impact and likelihood of identified risks. Risk mitigation: strategies and tools for mitigating risks in a wartime environment.

Ukraine's risk management strategies during the conflict. Examination of Ukraine's risk management framework and policies during the conflict. Risk management measures: analysis of specific measures taken to address risks, including economic, security, and humanitarian aspects.

Impact of international support on risk management. International aid: role of international assistance and support in risk management efforts. Collaborations: how partnerships with international organizations and allies contribute to risk mitigation. Insights from international risk management practices and their relevance to Ukraine's situation.

Effective risk management strategies in wartime conditions. Emerging trends and technologies that could enhance risk management practices. Strategic recommendations for improving risk management frameworks. Importance of risk management in ensuring state protection and stability during wartime.

Literature: 1-12.

PRACTICAL LESSONS ON THE COURSE “FUNDAMENTALS OF FINANCIAL FORECASTING AND RISK MANAGEMENT”

Practical lesson No 1

Theme 1: Introduction to Financial Forecasting

Purpose: *to provide a foundational understanding of the principles and techniques used to predict future financial outcomes. It aims to equip individuals with the knowledge needed to begin analyzing financial data and making informed projections.*

Discussion questions:

1. The essence of financial forecasting.
2. Fundamentals of financial asset management.
3. Overview of financial statements.
4. Types of financial forecasting.
5. Common forecasting models and methods.

Literature: 1-12.

Key terms and concepts

Financial forecasting. Balance sheet. Income statement. Cash flow statement. Revenue projections. Expense projections. Short-term forecasting. Long-term forecasting. Uncertainty and risk. Qualitative forecasting. Quantitative forecasting. Time series analysis. Regression analysis. Trend analysis. Scenario analysis. Historical data. Market trends. Assumptions and estimates. Sensitivity analysis. Economic indicators. Financial models. Spreadsheet analysis. Statistical software. Forecasting software. Forecasting accuracy. External factors. Data reliability. Bias in forecasting. Changing market conditions.

Questions for students’ knowledge assessment

1. What is financial forecasting, and why is it important?
2. What are the key components of financial forecasting?
3. Differentiate between short-term and long-term forecasting.
4. What are the main financial statements used in forecasting?
5. How do qualitative and quantitative forecasting methods differ?
6. What role does historical data play in financial forecasting?
7. Explain the importance of assumptions in forecasting models.
8. What are some common forecasting techniques?
9. What tools and software are commonly used for financial forecasting?
10. Identify challenges and limitations in financial forecasting.
11. How does sensitivity analysis improve forecasting accuracy?
12. How do external factors impact financial forecasting?
13. Describe a scenario where forecasting errors could impact business decisions.
14. Develop a simple financial forecast using basic spreadsheet tools.
15. Analyze a real-world case study of financial forecasting in a company.

Practical lesson No 2

Theme 2: Data Collection and Analysis for Forecasting

Purpose: *to gather and interpret data that will inform revenue and sales predictions. This involves systematically collecting relevant data from various sources, analyzing it to identify patterns and trends, and using statistical and analytical techniques to generate accurate forecasts.*

Discussion questions:

1. Key financial data sources.
2. Data cleaning and preparation.
3. Financial ratios and indicators.

Literature: 1-12.

Key terms and concepts

Data collection. Data analysis. Financial data sources. Internal data. External data. Historical financial statements. Budgets. Market trends. Economic indicators. Data cleaning. Data preparation. Data accuracy. Data consistency. Anomalies and outliers. Data adjustment. Financial ratios. Liquidity ratios. Profitability ratios. Solvency ratios. Efficiency ratios. Market ratios. Ratio analysis. Predictive analysis. Trend identification. Benchmarking.

Questions for students' knowledge assessment

1. What are the main sources of financial data for forecasting?
2. Differentiate between internal and external financial data sources.
3. Why is historical financial data important for forecasting?
4. How do market trends and economic indicators influence financial forecasting?
5. What are the steps involved in data cleaning and preparation?
6. How can data accuracy and consistency be ensured?
7. What techniques are used to adjust for anomalies and outliers in data?
8. Define financial ratios and explain their importance in forecasting.
9. How are liquidity, profitability, and solvency ratios calculated?
10. How can financial ratios be used for predictive analysis?
11. What are common challenges in financial data collection and analysis?
12. Explain the role of benchmarking in financial forecasting.
13. Conduct a simple data cleaning exercise using a sample financial dataset.
14. Analyze a real-world financial statement and extract key ratios.
15. Compare financial ratio trends of two companies in the same industry.

Practical lesson No 3

Theme 3: Forecasting Revenue and Sales

Purpose: *to predict future financial performance based on current and historical data. This involves analyzing trends, market conditions, and other relevant factors to make informed estimates about future revenue and sales.*

Discussion questions:
1. Techniques for revenue forecasting.
2. Forecasting sales volume and prices.
3. Scenario analysis and sensitivity analysis.

Literature: 1-12.

Key terms and concepts

Revenue forecasting. Sales forecasting. Time series analysis. Regression analysis. Market research. Trend analysis. Demand forecasting. Price forecasting. Price elasticity. Price sensitivity. Sales volume forecasting. Historical sales data. Seasonal trends. Cyclical trends. External market factors. Scenario analysis. Sensitivity analysis. Assumption-based forecasting. Forecasting models. Quantitative forecasting methods. Qualitative forecasting methods. Statistical forecasting. Predictive analytics. Revenue growth projections. Risk assessment in forecasting.

Questions for students' knowledge assessment

1. What are the main techniques for revenue forecasting?
2. How does time series analysis help in forecasting revenue?
3. Explain the role of regression analysis in sales forecasting.
4. What is the importance of market research in revenue forecasting?
5. How can trend analysis be used to predict future sales?
6. What are the key factors influencing demand forecasting?
7. How does price elasticity affect sales forecasts?
8. What methods can be used to forecast sales volume?
9. Explain the impact of seasonal and cyclical trends on sales forecasting.
10. What is scenario analysis, and how is it applied in forecasting?
11. How does sensitivity analysis help in financial forecasting?
12. What are the key assumptions made in revenue forecasting?
13. How can forecasting models help businesses plan for future revenue?
14. Conduct a simple revenue forecasting exercise using historical sales data.
15. Compare different forecasting techniques and their effectiveness in predicting revenue.

Practical lesson No 4

Theme 4: Cash Flow Forecasting

Purpose: *to predict the inflows and outflows of cash within an organization over a specific period. This theme aims to help businesses understand their future liquidity positions, ensuring they have enough cash to meet their obligations, such as paying bills, salaries, and investing in opportunities.*

Discussion questions:
1. Importance of cash flow forecasting.
2. Methods for forecasting cash flows.
3. Building a cash flow forecast.

Literature: 1-12.

Key terms and concepts

Cash flow forecasting. Cash flow vs. profit forecasting. Liquidity management. Strategic planning. Operating cash flow. Investing cash flow. Financing cash flow. Direct cash flow forecasting. Indirect cash flow forecasting. Cash flow modeling. Free cash flow. Cash flow statements. Cash flow projections. Working capital management. Seasonal cash flow patterns. Cyclical cash flow trends. Forecasting assumptions. Sensitivity analysis. Scenario analysis. Cash flow risk assessment.

Questions for students' knowledge assessment

1. Why is cash flow forecasting important for businesses?
2. How does cash flow forecasting differ from profit forecasting?
3. What role does cash flow forecasting play in liquidity management?
4. How does cash flow forecasting contribute to strategic planning?
5. What are the key components of a cash flow forecast?
6. What is the difference between direct and indirect cash flow forecasting?
7. Explain different cash flow modeling techniques.
8. How do you project operating, investing, and financing cash flows?
9. Why is it important to incorporate seasonal and cyclical patterns into cash flow forecasting?
10. What are the advantages and disadvantages of different cash flow forecasting methods?
11. How can sensitivity analysis improve cash flow forecasting accuracy?
12. What are the common risks in cash flow forecasting, and how can they be managed?
13. How does working capital impact cash flow forecasting?
14. Create a basic cash flow forecast using sample financial data.
15. Analyze a real-world case where cash flow forecasting affected business decision-making.

Practical lesson No 5

Theme 5: Profit and Loss Forecasting

Purpose: *to predict an organization's future profitability by estimating its revenues and expenses over a specific period. This theme aims to provide insights into expected financial performance, allowing businesses to plan effectively, set realistic financial goals, and make strategic decisions.*

Discussion questions:

1. Understanding profit forecasting.
2. Techniques for forecasting profits.
3. Cost behavior and its impact on profits.

Literature: 1-12.

Key terms and concepts

Profit forecasting. Sales forecasting. Profit and loss statement. Revenue projections. Cost projections. Key profitability drivers. Gross profit. Operating profit. Net profit. Contribution margin. Break-even analysis. Fixed costs. Variable costs. Mixed costs. Cost behavior analysis. Cost of goods sold. Operating expenses. EBITDA (earnings before interest, taxes, depreciation, and amortization). Profit margins. Forecasting models. Sensitivity analysis. Scenario analysis. Budgeting and forecasting. Risk assessment in profit forecasting.

Questions for students' knowledge assessment

1. What is profit forecasting, and why is it important?
2. How does sales forecasting relate to profit forecasting?
3. What are the key drivers of profitability?
4. How do revenue and cost projections influence profit forecasts?
5. What is contribution margin analysis, and how is it used in profit forecasting?
6. Explain the concept of break-even analysis.
7. How do fixed and variable costs impact profitability?
8. What is the role of cost behavior analysis in forecasting profits?
9. How do you forecast the cost of goods sold (COGS)?
10. What are the main components of a profit and loss statement?
11. What forecasting models can be used to predict profits?
12. How does sensitivity analysis improve profit forecasting accuracy?
13. What are the risks associated with profit forecasting?
14. Create a basic profit forecast using sample financial data.
15. Analyze a real-world case where profit forecasting influenced business strategy.

Practical lesson No 6

Theme 6: Forecasting Changes in the Balance Sheet

Purpose: *to understand and predict how future financial activities will impact an organization's balance sheet. This theme focuses on projecting the potential changes in assets, liabilities, and equity over a certain period based on various factors like market conditions, business operations, investments, and financing activities.*

Discussion questions:

1. Balance sheet structure and dynamics.
2. Forecasting balance sheet accounts.
3. Forecasting capital expenditures and depreciation.

Literature: 1-12.

Key terms and concepts

Balance sheet. Assets. Liabilities. Equity. Income statement. Cash flow statement. Interrelationship of financial statements. Balance sheet dynamics. Inventory forecasting. Accounts receivable forecasting. Fixed assets forecasting. Accounts payable forecasting.

Debt forecasting. Retained earnings projection. stock issues and equity changes. Capital expenditures. Depreciation forecasting. Asset replacement planning. Depreciation methods (straight-line, declining balance). Impact of depreciation on financial statements. Working capital management. Leverage and debt management. Financial ratios for balance sheet analysis. Forecasting models for balance sheet accounts.

Questions for students' knowledge assessment

1. What are the key components of a balance sheet?
2. How do the balance sheet, income statement, and cash flow statement interrelate?
3. Why is forecasting balance sheet changes important for financial planning?
4. How can assets be forecasted, including inventory, receivables, and fixed assets?
5. What methods are used to forecast liabilities, including payables and debt?
6. How do equity changes, such as retained earnings and stock issues, impact the balance sheet?
7. What factors influence capital expenditure forecasts?
8. How does depreciation affect both the balance sheet and income statement?
9. What are the different methods of calculating depreciation?
10. How can companies project their future capital needs?
11. What role does working capital management play in balance sheet forecasting?
12. How do financial ratios help analyze and predict balance sheet trends?
13. What are the key risks in forecasting balance sheet accounts?
14. Create a basic forecast for a company's assets and liabilities.
15. Analyze how a company's balance sheet is affected by changes in capital expenditures and debt financing.

Practical lesson No 7

Theme 7. Introduction to risk management

Purpose: *to provide a foundational understanding of risk management concepts, principles, and practices. It aims to introduce the basic terminology, processes, and objectives of risk management, helping individuals and organizations recognize the importance of proactively identifying and addressing risks.*

Discussion questions:

1. Approaches to define a risk. Types of risks.
2. Impact of risk on organizations.
3. Principles of risk management.

Literature: 1-12.

Key terms and concepts

Risk definition. Nature of risk. Types of risk. Risk description. Inherent level of risk. Risk classification systems. Risk likelihood and magnitude. Level of risk. Impact of *risk on organizations. Hazard risks. Attachment of risks. Risk and reward. Attitudes to risk. Risk triggers. Timescale of risk impact. Managing uncertainty risks. Mitigating hazard risks. Minimizing compliance risks. Scope of risk management. Essence and origin of risk management. Importance of risk management. Development of risk management. Specialist areas of risk management. 8Rs of risk management. 4Ts of risk management. Enterprise risk management (ERM). Levels of risk management sophistication. Principles of risk management. Risk management objectives. Implementing risk management. Risk assessment techniques. Risk mitigation strategies. Risk monitoring and review.*

Questions for students' knowledge assessment

1. What is the definition of risk in a business context?
2. How can risks be classified?
3. What are the key components of risk description?
4. What is the difference between inherent and residual risk?
5. How is risk likelihood and magnitude assessed?
6. What are the different types of risks organizations face?
7. How do hazard risks impact an organization?
8. What is the relationship between risk and reward?
9. How do attitudes to risk influence decision-making?
10. What are risk triggers, and how do they affect risk management?
11. How can organizations manage uncertainty risks?
12. What strategies can be used to mitigate hazard risks?
13. How do compliance risks impact business operations?
14. What is the scope of risk management?
15. Why is risk management important for organizations?
16. How has risk management evolved over time?
17. What are the key principles of risk management?
18. Explain the 8Rs and 4Ts of (hazard) risk management.
19. What is Enterprise Risk Management (ERM), and why is it important?
20. How can organizations implement an effective risk management strategy?

Practical lesson No 8

Theme 8. Approaches to risk management

Purpose: *to explore and understand the various methods and strategies used to identify, assess, mitigate, and monitor risks. It aims to provide insights into different frameworks, tools, and best practices that organizations can use to effectively manage risks and ensure resilience against potential threats. This theme helps in selecting the most suitable risk management approach based on the specific context, objectives, and risk appetite of an organization or project.*

Discussion questions:

1. Risk management standards.
2. Components of risk management context.

3. Enterprise risk management.
4. Alternative approaches to manage the risk.

Literature: 1-12.

Key terms and concepts

Risk management standards. Risk management process. Risk management context. Components of RM context. ERM framework. Features of risk management standards. Establishing the context. External context. Internal context. Risk Register. Enterprise risk management (ERM). Enterprise-wide approach. Definitions of ERM. Benefits of ERM. ERM and business continuity. Successful implementation of ERM. Alternative approaches to risk management. Changing face of risk management. Managing emerging risks.

Questions for students' knowledge assessment:

1. What are the key components of the risk management context?
2. Define the COSO ERM framework and explain its significance in risk management.
3. How do external and internal contexts influence the risk management process?
4. What is a risk register, and why is it important in risk management?
5. Explain the concept of enterprise risk management (ERM) and its benefits.
6. How does ERM contribute to business continuity?
7. What is the enterprise-wide approach to risk management, and how does it differ from traditional approaches?
8. What are some successful implementation strategies for ERM?
9. What are alternative approaches to risk management, and when should they be considered?
10. How is the risk management landscape evolving, and what are emerging risks that organizations need to manage?
11. How does establishing the context help in the risk management process?
12. What are the features of risk management standards, and why are they important?
13. What role does a risk register play in the ERM framework?
14. Discuss the changing face of risk management and its impact on business strategy.
15. How does risk management contribute to the identification and management of emerging risks?

Practical lesson No 9

Theme 9. Risk assessment

Purpose: *to identify, analyze, and evaluate potential risks that could impact an organization, project, or activity. It helps in understanding the likelihood and consequences of different risks, allowing for better decision-making, planning, and mitigation strategies to minimize negative outcomes.*

Discussion questions:

1. Importance of risk assessment and main approaches.
2. Risk classification systems.
3. Risk analysis and evaluation.
4. Loss control.
5. The essence of risk management.

Literature: 1-12.

Key terms and concepts

Risk assessment. Approaches to risk assessment. Advantages and disadvantages of risk assessment. Risk assessment techniques. Nature of the risk matrix. Risk perception. Attitude to risk. Risk classification systems. Short-, medium-, and long-term risks. Firm risk scorecard. Pestle risk classification system. Compliance, hazard, control, and opportunity. Risk analysis and evaluation. Application of a risk matrix. Personal risk matrix. Inherent and current level of risk. Benchmark tests for risk significance. 4Ts of hazard risk response. Risk significance. Risk capacity. Loss control. Risk likelihood. Risk magnitude. Hazard risks. Loss prevention. Damage limitation. Cost containment. Defining the upside of risk. Opportunity assessment. Risk matrix for opportunities and hazards. Riskiness index. Financial component of the firm risk scorecard. Infrastructure component of the firm risk scorecard. Essence of risk management. Benefits of risk management. Features of risk management. Marketplace component of the firm risk scorecard.

Questions for students' knowledge assessment

1. What are the advantages and disadvantages of conducting a risk assessment?
2. Describe different approaches to risk assessment.
3. What techniques are commonly used in risk assessment?
4. How is a risk matrix applied in risk analysis?
5. Explain the nature of the risk matrix and its role in risk management.
6. How do risk perception and attitude toward risk influence decision-making?
7. What are the different risk classification systems, and how do they differ?
8. How do short-, medium-, and long-term risks impact risk assessment?
9. What is a firm risk scorecard, and how is it used in risk assessment?
10. Describe the PESTLE risk classification system and its application.
11. How do compliance, hazard, control, and opportunity affect risk assessment?
12. How do you analyze and evaluate risk using a risk matrix?
13. What is the significance of the inherent and current levels of risk in risk assessment?
14. Explain the 4Ts of hazard risk response and how they are applied.
15. What is risk significance, and how do you assess it in risk management?
16. How do risk capacity and risk likelihood influence risk assessment outcomes?
17. What are hazard risks, and how are they managed through loss control?
18. How does loss prevention contribute to risk management?

19. What strategies are used for damage limitation and cost containment in risk management?

20. How do you define the upside of risk and assess opportunities within risk management?

21. What is the risk matrix for opportunities and hazards, and how is it applied?

22. What is the riskiness index, and how does it relate to the overall risk assessment process?

23. How does the financial component of the firm risk scorecard affect risk management?

24. What role does infrastructure play in the firm risk scorecard?

25. What is the essence of risk management, and what benefits does it offer to businesses?

26. How does the marketplace component of the firm risk scorecard help evaluate risks?

Practical lesson No 10

Theme 10. Risk response

Purpose: *to develop and implement strategies and actions to effectively address and manage risks that have been identified and assessed.*

Discussion questions:

1. The 4ts of hazard response: tolerate, treat, transfer and terminate.
2. Risk control techniques.
3. Insurance and risk transfer.
4. Business continuity management.

Literature: 1-12.

Key terms and concepts

The 4Ts of hazard response: tolerate, treat, transfer, terminate. Description of the 4Ts of hazard response. Risk matrix and the 4Ts of hazard management. Key dependencies and significant risk. Strategic risk response. Risk vs reward in strategy. Risk control techniques. Types of controls. Types of controls for hazard risks. Description of types of hazard controls. Hierarchy of hazard controls. Hazard risk zones. Preventive controls. Corrective controls. Directive controls. Detective controls. Insurance and risk transfer. Importance of insurance. History of insurance. Types of insurance. Evaluation of insurance needs. Purchase of insurance. Captive insurance companies. Role of captive insurance companies. Business continuity management. Business continuity standards. Disaster recovery timeline and costs. Model for business Continuity planning. Key activities in business continuity planning. Successful business continuity. Business impact analysis (BIA). Business continuity and ERM.

Questions for students' knowledge assessment:

1. What are the 4Ts of hazard response, and how are they applied in risk management?

2. How does a risk matrix relate to the 4Ts of hazard management?
3. What are the key dependencies and significant risks in risk response planning?
4. Explain the concept of strategic risk response and its importance in decision-making.
5. How do risk and reward interact in strategy formulation?
6. What are the different risk control techniques used in hazard management?
7. Describe the types of controls used for managing hazard risks.
8. What is the hierarchy of hazard controls, and why is it important?
9. How are hazard risk zones identified, and how do they influence risk management?
10. What are preventive, corrective, directive, and detective controls in risk management?
11. How does insurance play a role in risk transfer, and why is it important?
12. What is the history of insurance, and how has it evolved in risk management?
13. What are the different types of insurance used in business, and how do they serve different needs?
14. How do you evaluate insurance needs within an organization?
15. What is the process for purchasing insurance, and what factors should be considered?
16. What are captive insurance companies, and what role do they play in risk management?
17. How do captive insurance companies differ from traditional insurance providers?
18. What is business continuity management, and why is it critical for organizations?
19. Describe the business continuity standards that organizations should follow.
20. What factors affect the disaster recovery timeline and associated costs?
21. What is the model for business continuity planning, and what are its key components?
22. What are the key activities involved in business continuity planning?
23. What factors contribute to the success of business continuity efforts?
24. What is a business impact analysis (BIA), and how is it conducted in business continuity planning?
25. How does business continuity relate to enterprise risk management (ERM)?

Practical lesson No 11
Theme 11. Risk strategy

Purpose: *to develop a comprehensive approach for identifying, assessing, and managing risks in alignment with an organization's or state's overall objectives and goals.*

Discussion questions:

1. Core business processes.
2. Reputation and the business model.

3. Risk management context.
4. Risk management responsibilities.
5. Control of selected hazard risks.

Literature: 1-12.

Key terms and concepts

Core business processes. Dynamic business models. Business development model. Types of business processes. Strategy and tactics. Effective and efficient operations. Ensuring compliance. Reputation and the business model. Components of the business model. Risk management and the business model. Reputation and corporate governance. Corporate social responsibility and risk management. Supply chain and ethical trading. Importance of reputation. Components of reputation. Mapping the components of reputation. Threats to reputation. Risk management context. Architecture, strategy, and protocols. Risk management framework. Risk management responsibilities. Allocation of responsibilities. Range of responsibilities. Statutory responsibilities of management. Role of the risk manager. Risk architecture for a large corporation. Risk committees. Responsibilities of the risk management committee. Control of selected hazard risks. Cost of risk controls. Illustration of control effect (control effect map). Cost-effective controls. Risk and reward decisions. Control of financial risks. Control of infrastructure risks. IT security. HR risks. Control of reputational risks. Control of marketplace risks. Regulatory risks.

Questions for students' knowledge assessment

1. What are core business processes, and how do they influence risk strategy?
2. How do dynamic business models impact risk management strategies?
3. Describe the different types of business processes and their relevance to risk strategy.
4. What is the difference between strategy and tactics in the context of risk management?
5. How do effective and efficient operations contribute to successful risk management?
6. Why is ensuring compliance important in risk strategy, and how is it achieved?
7. How does reputation affect a business model, and what role does it play in risk management?
8. What are the components of a business model, and how are they related to risk management?
9. How does corporate governance influence risk management, particularly regarding reputation?
10. What is the role of corporate social responsibility in managing risk?
11. How does supply chain and ethical trading affect a business's reputation and risk profile?
12. Why is reputation considered a critical asset in risk management?

13. How do you map the components of reputation, and why is this important in risk management?

14. What are the common threats to reputation, and how can they be mitigated?

15. How does the risk management context shape a company's strategy and operations?

16. What are the key components of risk management architecture, strategy, and protocols?

17. Explain the role and responsibilities of management in risk management.

18. How is responsibility for risk management allocated within an organization?

19. What statutory responsibilities do management have concerning risk management?

20. What is the role of the risk manager in an organization, and how does it relate to risk strategy?

21. How is risk architecture designed for a large corporation, and what does it include?

22. What are the responsibilities of a risk management committee, and how does it function?

23. How are hazard risks controlled, and what are the associated costs of risk controls?

24. How do you illustrate the control effect of risk management strategies?

25. What makes a control cost-effective, and how is this determined in risk management?

26. How do risk and reward decisions affect overall business strategy and risk management?

27. How are financial risks controlled, and what strategies are used for this?

28. What specific strategies are employed to control infrastructure risks?

29. How does IT security play a role in controlling risks in an organization?

30. What HR risks should organizations consider in their risk strategy?

31. How are reputational risks controlled, and what tools are used to manage them?

32. What marketplace risks do businesses face, and how are they controlled?

33. How do regulatory risks impact businesses, and what strategies are used to mitigate them?

Practical lesson No 12

Theme 12. Risk culture

Purpose: *to explore and emphasize the importance of fostering a shared mindset, attitudes, and behaviors within an organization or state that influence how risks are identified, understood, communicated, and managed. It focuses on creating an environment where risk awareness is integrated into daily activities, decision-making, and strategic planning, thereby enhancing the overall effectiveness of risk management practices.*

Discussion questions:

1. Risk-aware culture.
2. Risk appetite and the risk matrix.
3. Risk training and communication.
4. Risk practitioner competencies.

Literature: 1-12.

Key terms and concepts

Risk-aware culture. Styles of risk management. Achieving successful enterprise risk management. Defining risk culture. Implementation barriers and actions. Measuring risk culture. Four levels of risk maturity. Risk maturity models. Risk maturity matrix. Importance of risk appetite. Nature of risk appetite. Risk appetite and the risk matrix. Risk appetite, exposure, and capacity. Risk and uncertainty. Risk exposure and risk capacity. Risk appetite statements. Risk appetite for a manufacturing organization. Risk appetite and lifestyle decisions. Risk training and communication. Consistent response to risk. Risk training and risk culture. Risk management training. Risk information and communication. Risk communication guidelines. Risk information on an intranet. Risk management information systems (RMIS). Risk practitioner competencies. Competency frameworks. Range of skills. People skills for risk management practitioners. Analytical skills.

Questions for students' knowledge assessment:

1. What is a risk-aware culture, and how does it contribute to enterprise risk management?
2. Describe the different styles of risk management and how they influence organizational behavior.
3. How can organizations achieve successful enterprise risk management?
4. What is meant by "risk culture," and why is it important in risk management?
5. What are some common barriers to implementing a risk-aware culture, and how can they be overcome?
6. How do you measure risk culture within an organization?
7. What are the four levels of risk maturity, and how do they impact risk management practices?
8. Explain the concept of a risk maturity model and how it can be used to assess an organization's risk culture.
9. What is a risk maturity matrix, and how does it help organizations improve risk management?
10. Why is understanding risk appetite important in risk management?
11. What is the relationship between risk appetite and the risk matrix?
12. How does risk appetite relate to risk exposure and capacity?
13. What is the difference between risk and uncertainty, and how are they managed in organizations?

14. How do risk exposure and risk capacity influence decision-making and risk appetite?

15. What are risk appetite statements, and how should they be formulated in an organization?

16. How does risk appetite vary for different types of organizations, such as manufacturing?

17. How does risk appetite influence lifestyle decisions and personal risk management?

18. What role does risk training play in creating a risk-aware culture?

19. How do organizations ensure a consistent response to risk across different departments?

20. How does risk training contribute to the development of a risk culture within an organization?

21. What are the key components of risk management training for employees?

22. How should risk information be communicated within an organization to ensure effective risk management?

23. What are the guidelines for effective risk communication in a corporate environment?

24. How does risk information on an intranet contribute to the overall risk management process?

25. What is a Risk Management Information System (RMIS), and how does it support decision-making?

26. What competencies are essential for risk practitioners, and how can they be developed?

27. How do competency frameworks help in assessing and improving risk management capabilities?

28. What range of skills are required for effective risk management practice?

29. Why are people skills important for risk management practitioners?

30. How do analytical skills contribute to the effectiveness of risk management decisions?

Practical lesson No 13

Theme 13. Risk governance

Purpose: *to provide a comprehensive framework for understanding how risks are managed, controlled, and mitigated at the highest levels of an organization or state. It focuses on the processes, structures, and mechanisms that are put in place to ensure that risks are effectively identified, assessed, and managed, aligning with the overall strategic objectives and ensuring resilience against potential threats.*

Discussion questions:

1. Principles of corporate governance.
2. Stakeholder expectations.
3. Operational risk management.
4. Project risk management.

5. Supply chain management.
6. Outsourcing of operations. Risks associated with outsourcing.

Literature: 1-12.

Key terms and concepts

Corporate governance model. Corporate governance. Principles of corporate governance. Corporate governance framework. Corporate governance for a bank. Corporate governance for a government agency. Evaluation of board performance. Stakeholder expectations. Range of stakeholders. Data for shareholders. Stakeholders and core processes. Importance of core processes. Stakeholders and strategy. Stakeholders and tactics. Operational risk management (ORM). Operational risk. Definition of operational risk. Basel II. Basel III. ORM principles (basel II). Measurement of operational risk. Operational risk for a bank. Operational risk in financial and industrial companies. Project risk management. Introduction to project risk management. Development of project risk management. Uncertainty in projects. Risk matrix to represent project risks. Project lifecycle. Decreasing uncertainty during the project. opportunity in projects. Project risk analysis and management. Supply chain management. Importance of the supply chain. Scope of the supply chain. Strategic partnerships. Joint ventures. Outsourcing of operations. Risks associated with outsourcing. Scope of outsourcing contracts. Benefits of outsourcing.

Questions for students' knowledge assessment

1. What are the key principles of corporate governance, and how do they guide business practices?

2. How does a corporate governance framework differ for a bank compared to a government agency?

3. What are the methods used to evaluate the performance of a corporate board?

4. Who are the key stakeholders in an organization, and what are their expectations?

5. How do stakeholders influence core processes, strategy, and tactics in a company?

6. Why is Operational Risk Management (ORM) important, and what is its role in corporate governance?

7. How is operational risk defined, and how does it differ across industries?

8. What is the significance of Basel II and Basel III in managing operational risks in banks?

9. How are operational risks measured, and what tools are used in the process?

10. How does operational risk in a bank differ from operational risk in financial and industrial companies?

11. What is project risk management, and why is it critical to project success?

13. What is the role of uncertainty in projects, and how is it managed using risk matrices?

14. How does decreasing uncertainty contribute to project risk management?

15. How do opportunities in projects relate to risk, and how can they be managed effectively?

16. What is involved in project risk analysis, and how is it applied throughout the project?

17. Why is supply chain management crucial for businesses, and how does it impact operational risk?

18. What are the risks associated with outsourcing operations, and how can they be mitigated?

19. What are the primary benefits of outsourcing, and how does it contribute to risk management?

Practical lesson No 14

Theme 14. Financial Forecasting for State Protection during the War: an Analysis of Ukraine's Strategies

Purpose: *to examine how financial forecasting techniques can be utilized to support state protection and stability in the context of war, with a specific focus on Ukraine.*

Discussion questions:

1. Importance of financial forecasting in protecting the state during periods of uncertainty.
2. Ukraine's financial forecasting during the conflict.
3. Forecasting innovations.

Literature: 1-12.

Key terms and concepts

Financial forecasting in protecting the state during periods of uncertainty. Role of Financial forecasting in ensuring state protection and stability during wartime. Overview of the current conflict situation in Ukraine. Financial forecasting during the conflict. Forecasting models. Adapting financial forecasting to wartime conditions. Challenges and limitations in wartime forecasting. Data scarcity and high volatility in wartime. Adjustments to traditional forecasting methods to account for wartime uncertainties. Modified techniques for financial forecasting. Strategic implications of financial forecasting in wartime. Impact on state protection. Influence of forecasting on policy and strategic decisions in Ukraine. Forecasting innovations. Emerging trends and technologies enhancing financial forecasting in wartime. Future strategies and improvements in forecasting practices.

Questions for students' knowledge assessment

1. Why is financial forecasting crucial for state protection during periods of uncertainty and conflict?

2. How does financial forecasting contribute to ensuring state protection and stability during wartime?

3. Provide an overview of the current conflict situation in Ukraine and its impact on financial forecasting.

4. What was Ukraine's financial situation before and during the conflict, and how did it affect forecasting practices?

5. What forecasting models and methods were employed by Ukraine during the conflict, and how effective were they?

6. How did Ukraine adapt its financial forecasting practices to address the unique challenges of wartime conditions?

7. What are some of the main challenges and limitations of financial forecasting during war?

8. How does data scarcity and high volatility complicate financial forecasting in wartime?

9. How were traditional forecasting methods adjusted to account for the uncertainties and disruptions caused by war?

10. What modified techniques for financial forecasting were used in Ukraine's wartime context?

11. What are the strategic implications of financial forecasting in wartime for national security and economic stability?

12. How does accurate financial forecasting impact decisions related to state protection during conflict?

13. How has forecasting influenced policy and strategic decisions in Ukraine during the war?

14. What key lessons can be learned from Ukraine's experience with financial forecasting in the context of war?

15. What recommendations would you give for improving financial forecasting methods during wartime?

Practical lesson No 15

Theme 15. Risk Management for State Protection in Wartime: the Case of Ukraine

Purpose: *to explore how risk management principles and practices can be applied to ensure the security and stability of a state during periods of conflict and uncertainty.*

Discussion questions:

1. Risk management in wartime conditions.
2. Ukraine's risk management strategies during the conflict.
3. Impact of international support on risk management.
4. Effective risk management strategies in wartime conditions.

Literature: 1-12.

Key terms and concepts

Risk management. State protection. Stability during conflict. Overview of Ukraine's geopolitical situation. Impact of war and uncertainty on the state. Risk management in wartime conditions. Specific risks associated with wartime:

infrastructure damage, economic disruption, security threats. Risk identification techniques in conflict scenarios. Risk assessment methods in wartime. Risk mitigation strategies in wartime. Ukraine's risk management strategies during the conflict. Ukraine's risk management framework and policies. Risk management measures: economic, security, and humanitarian aspects. Impact of international support on risk management. International aid and assistance in risk management efforts. Collaborations with international organizations and allies. Insights from international risk management practices. Effective risk management strategies in wartime.

Questions for students' knowledge assessment:

1. Why is risk management critical for maintaining state protection and stability during conflict?
2. How does Ukraine's geopolitical situation impact its state protection and risk management during wartime?
3. What are the specific risks associated with wartime, and how do they differ from peacetime risks?
4. How do you identify and categorize risks in a conflict scenario like the ongoing war in Ukraine?
5. What methods are used to assess the impact and likelihood of identified risks in a wartime context?
6. What strategies and tools are employed to mitigate risks during wartime in Ukraine?
7. How has Ukraine's risk management framework evolved during the conflict, and what policies have been implemented?
8. What are the key risk management measures that Ukraine has taken to address economic, security, and humanitarian risks?
9. How does international support contribute to Ukraine's risk management efforts during the conflict?
10. In what ways have collaborations with international organizations and allies enhanced Ukraine's risk mitigation strategies?
11. What insights can be drawn from international risk management practices that are relevant to Ukraine's situation?
12. What are some of the most effective risk management strategies employed in wartime conditions, and how can they be adapted?
13. How can emerging trends and technologies improve risk management practices in a conflict scenario like Ukraine's?
14. What strategic recommendations can be made to improve Ukraine's risk management frameworks during the ongoing conflict?
15. How does effective risk management ensure state protection and stability in wartime situations like that in Ukraine?

INDEPENDENT STUDENTS' WORK

Completing the tasks for independent work of students is one of the most important stages of studying the course "Fundamentals of Financial Forecasting and Risk Management" and a mandatory structural element of credit from this course.

The purpose of independent work in the course "Fundamentals of Financial Forecasting and Risk Management" is to develop students' ability to apply theoretical concepts in real-world scenarios, enhance critical thinking and problem-solving skills, and foster a deep understanding of financial forecasting and risk management techniques. Independent work allows students to explore topics in greater depth, analyze data, and practice forecasting and risk assessment methodologies, preparing them for professional roles in finance.

Tasks for independent students' work:

1. Research assignments: investigate current trends in financial forecasting and risk management. Write a report discussing the latest tools and techniques used in the industry, and how they can be applied to various financial scenarios.

2. **Data analysis projects**: analyze a given financial dataset to forecast future trends. Use statistical software or Excel to build predictive models and assess their accuracy.

3. **Case studies**: review and analyze real-world cases where financial forecasting and risk management played a critical role. Discuss the methods used and the outcomes achieved, and suggest alternative strategies.

4. Risk assessment exercises: conduct a comprehensive risk assessment for a hypothetical or real company. Identify potential financial risks, evaluate their likelihood and impact, and propose mitigation strategies.

5. Simulation exercises: use simulation software to model different financial scenarios and assess the impact of various risk factors. Interpret the results to make informed decisions about risk management strategies.

6. Group discussions and presentations: participate in group discussions on selected topics and present findings on different forecasting models and risk management strategies, highlighting their strengths and weaknesses.

7. Literature review: perform a literature review on a specific topic related to financial forecasting or risk management. Summarize the key findings and discuss how they contribute to the field.

8. Portfolio management exercise: develop and manage a simulated investment portfolio, applying forecasting techniques to predict market trends and manage risk. Regularly update the portfolio based on new data and assess its performance.

By engaging in these tasks, students will gain practical experience and a deeper understanding of financial forecasting and risk management concepts.

TRAINING ON COURSE “FUNDAMENTALS OF FINANCIAL FORECASTING AND RISK MANAGEMENT”

The training in the course "Fundamentals of Financial Forecasting and Risk Management" focuses on equipping students with the foundational skills and knowledge needed to effectively forecast financial trends and manage financial risks. The course covers a range of quantitative and qualitative forecasting methods, risk assessment techniques, and tools used in the financial industry. Through a combination of theoretical knowledge and practical exercises, students learn to analyze financial data, build predictive models, and apply risk management strategies to various financial contexts.

The primary purpose of the training is to prepare students to:

– gain a comprehensive understanding of different financial forecasting methods and their applications, enabling students to predict market trends, financial performance, and economic conditions with greater accuracy;

– develop risk management skills, it means learn how to identify, assess, and mitigate various types of financial risks (e.g., market, credit, operational, and liquidity risks);

– improve data analysis skills through practical exercises involving statistical software, financial modeling, and scenario analysis. This helps students develop the ability to interpret complex financial data and make informed decisions;

– provide hands-on experience through case studies, simulations, and projects that mirror real-world financial situations. This prepares students for professional roles where they must apply forecasting and risk management techniques effectively;

– equip students with the necessary skills to pursue careers in financial analysis, investment management, risk management, and other related fields, where forecasting and risk assessment are critical components of decision-making.

Overall, the training aims to build a solid foundation in financial forecasting and risk management, preparing students for the complexities and challenges of the financial industry.

Training tasks:

1. Financial crisis simulation:

Task: Simulate a financial crisis scenario using historical data (e.g., the 2008 financial crisis). Students must use various forecasting models to predict the impact on different sectors (e.g., banking, real estate, consumer goods) and propose risk management strategies to mitigate losses.

Objective: Understand the dynamic nature of financial crises and practice applying forecasting and risk management strategies under stress conditions.

2. Predictive analytics challenge:

Task: Use machine learning techniques (e.g., linear regression, decision trees) to forecast a company’s future stock prices based on historical data and macroeconomic indicators. Evaluate the model’s accuracy and refine it to improve predictions.

Objective: Introduce students to the use of advanced predictive analytics in financial forecasting and enhance their data handling and model-building skills.

3. Interactive risk management game:

Task: Develop an interactive game where students manage a virtual investment portfolio. They must make real-time decisions based on simulated market news, economic indicators, and random events. The goal is to maximize returns while managing risk.

Objective: Teach students how to balance risk and return in a dynamic and uncertain market environment.

4. Scenario planning workshop:

Task: Conduct a workshop where students work in groups to develop multiple future scenarios for a multinational corporation based on current global economic trends. They must present their scenarios, forecasts, and risk mitigation plans to the class.

Objective: Encourage collaborative learning, strategic thinking, and the application of scenario planning in risk management.

5. Real-time data analysis project:

Task: Students are given access to live financial data feeds (e.g., stock prices, interest rates, economic indicators) and must build a real-time forecasting model. They need to update their forecasts and adjust risk strategies based on the latest data.

Objective: Develop the ability to work with real-time data and make quick, informed decisions in a fast-paced environment.

6. Industry-specific risk assessment:

Task: Choose a specific industry (e.g., technology, healthcare, energy) and conduct a comprehensive risk assessment. Identify unique risks faced by companies in this industry and propose tailored forecasting models and risk management strategies.

Objective: Apply forecasting and risk management principles to a specific industry context, understanding the unique factors and challenges involved.

These tasks are designed to be engaging and practical, allowing students to apply theoretical knowledge to real-world situations, enhancing their understanding and skills in financial forecasting and risk management.

ASSESSMENT TOOLS AND METHODS FOR DEMONSTRATING THE RESULTS OF STUDY

In the process of study the course "Fundamentals of Financial Forecasting and Risk Management" the following methods of evaluation of students' work are used:

- standard tests;
- current poll;
- modular testing and poll;
- scoring unit testing and interviews;
- evaluation of performance of integrated practical individual task;
- presentations of results of students' researches;
- credit;
- other.

CRITERIA, FORMS OF ONGOING AND FINAL CONTROL

The final score (on a 100-point scale) the discipline " Fundamentals of Financial Forecasting and Risk Management " is defined as a weighted average, depending on the proportion of each component of test credit.

Module 1		Module 2		Module 3	Module 4
20 %	20 %	20 %	20 %	5 %	15 %
Current assessment	Modular control 1	Current assessment	Modular control 2	Training	Independent students' work
The grade for the current assessment is defined as the arithmetic average of the grades received during classes (6 topics - from 3 to 6 grades)	The grade for Modular control 1 is given on the basis of the completion of modular work on topics 1–6 (testing, theoretical questions, tasks)	The grade for the current assessment is defined as the arithmetic average of the grades received during classes (9 topics - from 6 to 9 grades)	The grade for Modular control 2 is given on the basis of the completion of modular work on topics 7–15 (testing, theoretical questions, tasks)	The grade for the training is defined as the arithmetic average of the grades received for completing the tasks during the training	Evaluation of the task of independent work of students

Scale of marking:

For scale of WUNU	For national scale	For ESCT scale
90 – 100	Excellent	**A** (excellent)
85 – 89	Well	**B** (very well)
75 – 84		**C** (well)
65 –74	Satisfactory	**D** (satisfactory)
60 – 64		**E** (adequately)
35 – 59	Unsatisfactory	**FX** (unsatisfactory with possibility of repeated passing)
1 – 34		F (unsatisfactory without possibility of repeated passing)

RECOMMENDED LITERATURE

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Навчально-методичне видання

Chyrak Iryna

Methodological recommendations

for studying the course

“Fundamentals of Financial Forecasting and Risk Management”

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