

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL  
SCIENCES OF UKRAINE**

**Faculty of Agrarian Management**

**METHODICAL INSTRUCTIONS**

**For possessing Lecture Material and fulfillment of Individual Work  
in the course “Finance of Enterprises” (compulsory component of  
Educational Program 075 “Marketing”)**

for students of specialty 075 "Marketing"

educational degree "Bachelor"

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**METHODICAL INSTRUCTIONS FOR POSSESSING LECTURE MATERIAL  
AND FULFILLMENT INDIVIDUAL WORK IN THE COURSE “FINANCE OF  
ENTERPRISES” (COMPULSORY COMPONENT OF EDUCATIONAL  
PROGRAM 075 “MARKETING”) for students of specialty 075 "Marketing"  
educational degree "Bachelor"**

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## INTRODUCTION

The **purpose of teaching the discipline “Finance of Enterprises”** is to provide students with fundamental theoretical and practical knowledge about the organization of financial activities of enterprises, the peculiarities of the formation of financial resources, mastering methods of assessing the financial condition of enterprises and financial planning.

The **objectives of studying the discipline “Finance of Enterprises”** are to study the essence and functions of enterprise finance, financial resources and sources of their formation; organization of enterprise finances; acquisition of financial calculation skills; mastering the methods of financial planning; assessment of financial condition, rehabilitation of enterprises.

### **Acquisition of competencies:**

**Integral (IC):** Ability to solve complex specialized tasks and practical problems in the field of marketing activity or in the learning process, which involves application of relevant theories and methods and it is characterized by complexity and uncertainty of conditions.

### **General competencies (GC):**

GC 5. Determination and perseverance in relation to the stated tasks and assumed responsibilities.

GC 14. The ability to act socially responsibly and consciously.

SC 8. Ability to develop marketing providing of business development in conditions of uncertainty.

SC 14. Ability to suggest improvements regarding functions of marketing activity.

SC 15. Ability to theoretical generalization and practical use of marketing tools for the purpose of solving business problems and for raising of effectiveness of the functioning of business entities activity.

### **Program learning outcomes (PLO):**

PLO 13. to be responsible for the results of your activities, demonstrate entrepreneurial and managerial skills initiatives

PLO 19. Evaluate and analyze the state and patterns of development of the international environment.

## LECTURE MATERIAL

### Topic 1. Fundamentals of Finance of Enterprises

#### *Content*

#### *1.1. Introduction to Finance of Enterprises*

#### *1.2. Tasks of Financial Manager*

#### *1.3. Forms of Business Organization*

#### *1.4. Formation of financial resources of the enterprise*

### 1.1. Introduction to Finance of Enterprises

Finance of enterprises is the subfield of finance that deals with how corporations address funding sources, capital structuring, accounting, and investment decisions.

Finance of enterprises has three main areas of concern: capital budgeting, capital structure and working capital management. The goal of financial management within business finance is to make decisions that increase the value of the company's equity.

Even if you are not planning a finance career, having basic knowledge is essential. If you are interested in marketing you need to know finance to understand how to get the greatest payoff from marketing expenditures. On top of this the finance industry also needs marketers that have sufficient knowledge of what is going on.

There are four areas within finance: corporate finance, investments, financial institutions and international finance.

- Activities that support business operations (financial stability, budgeting)
- Long and short term activities (how to invest money)

#### 1. Corporate Finance

#### 2. Investments:

- Buying and Selling Securities
- Trading rules and regulations

Deals with financial assets such as stocks and bonds. This area deals with questions such as what determines the price of a share? What are the potential risks related to the investment? What is the best mixture of types of assets to hold?

3. **Financial Institutions:** businesses that deal primarily in financial matters (banks, insurance companies, credit unions)

4. **International Finance.**

- Companies with operations in multiple countries
- Foreign governments and currency issues

The three pillars of corporate finance

No matter what type of business you start, you would have to answer the following questions:

1. What **long term investments** should you make? For example, what lines of business will you be in, and what sort of buildings, machine and equipment would you need?

2. Where will you get the **long-term financing** to pay for your investment? Will you bring in other owners, or will you borrow the money?

3. How will you manage your everyday financial activities, such as collecting from customers and paying suppliers? (i.e. **liquidity**)

Broadly speaking, **corporate finance** is the study of ways to answer these questions.

**Investment: what do you need to start a firm?**

Capital budgeting

Capital budgeting — the process of planning and managing a firm's long-term investments.

In capital budgeting, the financial manager tries to identify investment opportunities that are worth more to the firm than they cost to acquire. This means that the value of the cash flow generated by an asset exceeds the cost of that asset. Evaluating the size, timing and risk of future cash flows is the essence of capital budgeting. For example, the decision for Metro to open up another store would be an important capital budgeting decision.

**Financing**

Cash invested in assets must be matched by an equal amount of cash raised by financing, as shown on the figure to the left.

The balance figure represents that both accounts need to be balanced appropriately.

Capital structure

Capital structure — the mixture of long-term debt and equity maintained by a firm.

The second question that needs to be answered concerns ways in which the firm obtains and manages the long-term financing it needs to support its long-term investments. The **financial manager** needs to consider how much it should borrow (debt and equity) and what the least expensive sources of funds are. In addition to that, he/she need to decide exactly how and where to raise the money.

### **Liquidity**

Liquidity — the availability of cash. Having sufficient cash to meet your obligations. Working capital management

Working capital — a firm's short-term assets and liabilities.

Managing the firm's working capital is a day-to-day activity which ensures that the firm has sufficient resources to continue its operations and avoid costly interruptions. The **financial manager** should answer questions like:

- How much cash and inventory should we keep on hand?
- Should we sell on credit, and if so, what terms will we offer, and to whom will we extend them?
- How will we obtain any needed short-term financing?

### **1.2. Tasks of Financial Manager**

A striking feature of large corporations is that the owners (shareholders) are not usually directly involved in making business decisions, especially on a day-to-day basis. Instead, the corporation employs managers to represent the owners' interests and make decisions on their behalf. In a large corporation the financial manager would be in charge of answering the three questions raised earlier.

The financial management function is usually associated with a top officer of the firm, such as a finance director (FD) or chief financial officer (CFO).



Business finance (or Corporate Finance) is concerned with the following questions:

1. What long-term investments should you take on?
2. Where will you get the long-term finance to pay for the investments?
3. How will you manage your everyday financial activities?

The Chief Financial Officer (CFO) coordinates the activities of the controller (responsible for the accounting, tax payments and management information systems) and the treasurer (managing the cash and credit, financial planning and capital expenditures).

Typical company reporting structure:

- The finance director (chief financial officer) coordinates the activities of the treasurer and the controller
- The controller's office handles cost and financial accounting, tax payments and management information systems
- The treasurer's office is responsible for managing the firm's cash and credit, its financial planning, and its capital expenditures

Difference between finance and accounting functions: the accounting function takes all the financial information and data that arises as a result of ongoing business activities, and presents this in ways that allow management to assess the performance and risk of their firm (financial accounting) and make informed decisions on future corporate activity (management accounting).

Responsibilities of a financial manager:

- Maximise value from cash:
- Buy assets that earn more cash than they cost
- Choose long-term investments that increase firm value
- Raise cheap external financing
- Ensure efficient tax policy

### 1.3. Forms of Business Organization

There are three different legal forms of business organization:

1. Sole proprietorship — a business owned by a single individual. The owner keeps all benefits but has also unlimited liability for business debts. Similarly, there is no distinction between personal and business income, so all income is taxed as personal income. The life of the sole proprietorship is limited by the owner's life span and ownership is difficult to transfer because it requires the sale of the entire business to a new owner.

2. Partnership — a business formed by two or more individuals or entities. In a general partnership, all the partner share in gains or losses and have unlimited liability for the debts. The partnership agreement defines the division.

3. Corporation — a business created as a distinct legal entity composed of one or more individuals or entities. In a limited partnership, one or more general partners with unlimited liability run the business but the limited partners do not actively participate. Their liability is limited to the amount that the partner contributed.

Partnerships are easy and inexpensive to form, all income is taxes as personal income and the amount of equity that can be raised is limited to the partners' combined wealth. Having a written agreement is very important for a partnership.

The disadvantages are: Double taxation: the corporation must pay taxes but the stockholders who receive dividends also pay income tax. More expensive and complicated to form.

Table 1.1

#### Legal forms of business organization

Sole Proprietorship	Partnership	Limited Corporation
<ul style="list-style-type: none"> <li>Owned and managed by one person</li> <li>Very easy to form</li> <li>Profits taxed as personal income</li> <li>Unlimited liability</li> </ul>	<ul style="list-style-type: none"> <li>Easy to form</li> <li>Requires a partnership agreement</li> <li>Limited and unlimited partners</li> </ul>	<ul style="list-style-type: none"> <li>Articles and memorandum of incorporation required — i.e. more complicated than other forms of business organization</li> <li>Limited liability</li> </ul>

<ul style="list-style-type: none"> <li>• Life of company linked to life of owner</li> <li>• Amount of funding is limited by owner's personal wealth and limited options of capital</li> </ul>	<ul style="list-style-type: none"> <li>• Partnership is terminated when a partner dies or leaves the firm</li> <li>• Difficult to raise cash</li> <li>• Profits taxed as personal income</li> <li>• Controlled by general partners <ul style="list-style-type: none"> <li>— sometimes votes are required on major business decisions</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Profits taxed at corporate tax rate</li> <li>• Board of directors</li> <li>• Life of company is hypothetically unlimited</li> </ul>
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Memorandum of Association — the rules by which the corporation is organized.

For example the memorandum describes how directors are elected.

Articles of Incorporation:

- Name of the corporation
- Business purpose
- Number of shares that the corporate is authorized to issue with a statement of limitations and rights of different classes of shares
- Nature of the rights granted to shareholders
- Number of members of the initial board of directors

Table 1.2

### Comparative characteristics of Partnership and Corporation

	Partnership	Corporation
<b>Liquidity and marketability</b>	Restricted trading	Traded easily, sometimes on exchange
<b>Voting rights</b>	Partners have control	Each share gives a voting right
<b>Taxation</b>	Profits taxed at personal tax rate	Profits taxed at corporate tax rate
<b>Reinvestment and dividend payout</b>	All profits allocated to partners	Total freedom in dividend decisions
<b>Liability</b>	General Partners have unlimited liability	Shareholders have limited liability

Continuity of existence	Limited life	Unlimited life
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#### 1.4. Formation of financial resources of the enterprise

Financial resources of business entities are one of the fundamental concepts in the structure of corporate finance. They are always in monetary form, accumulating in nature, and reflect the formation and use of various funds of the enterprise, income, profit and various forms of enterprise liabilities.

The size, condition and structure of financial resources depend on the financing of business entities of the process of extended reproduction, fulfillment of financial obligations to the budget, banks, insurance organizations, socio-economic and technological development of the enterprise as a whole. A sufficient number of financial resources, their effective use determine the financial well-being, solvency, liquidity, financial stability of business entities, which determines a thorough study of processes of formation and use of financial resources – the basis of financial support for economic activity of enterprises.

The financial encyclopedia defines financial resources as a set of funds of cash, which are formed during the distribution and redistribution of aggregate social product and national income and are in the possession of the state, local governments, enterprises, organizations of different forms of ownership; financial resources of enterprises are at the disposal of enterprises, including cash funds, currency values, securities, as well as part of funds used in non-security form.

Financial resources – funds available to an enterprise to carry out its financial, economic, investment activities and fulfill certain obligations.

It is important that financial resources are a material embodiment of financial relations at the level of business entities, they include all monetary funds and that part of cash funds used by the enterprise in non-security form (Figure 1). The ability to perform the function of payment instrument and the level of liquidity of assets are the decisive signs of their belonging to financial resources.

In general, financial resources of business entities are used to purchase fixed assets, intangible assets, inventories for production of goods or services, payment of wages, taxes, lease, insurance payments, etc.

The analysis of various classification features of financial resources of business entities in economic literature makes it possible to divide funds, available to the enterprise, according to two signs: by type and composition, and by sources of their origin (formation). The financial resources of enterprises have the following properties: they have a stage of formation; reflect property; have formative sources and purposes of uses; the structure of financial resources of the enterprise depends on the sources of formation and directions of use.

Financial characteristics of financial resources of business entities include:

–object of financial management (financial resources are the central element and the object of influence of financial management);

–source of income (act separately from other factors of production, their use is provided by the formation of cash flows of the enterprise in financial and investment links of activity, and accumulated financial resources are used to finance investments for the purpose of long-term income receipt);

–source of risk (the higher the level of income, the higher the level of risk);

–source of repayment of financial liabilities (accounts payable and receivables may arise before the state, owners, creditors and investors and they should be repaid for what they use financial resources).

The formation and use of financial resources of business entities are influenced by various factors – internal (directly related to the activity of an individual enterprise) and external (directly not related to the activity of enterprise, but affect it) (Table 1).

Main factors of formation of financial resources of the enterprise:

Internal factors:

- level of perfection of financial structure of the enterprise;
- linking the marketing strategy to the production strategy;
- quality of organization of financial resources management;
- selection of market segments according to production capabilities;

- quality of financial, management and business accounting;
- implementation of pricing policy, based on the cost of production, finding ways to reduce them;

- establishment of work with intermediary organizations.

External factors:

- inflation;
- rising prices for resources;
- change of political course of government bodies;
- financial and tax legislation;
- level of financial market development;
- welfare of the country and state of economy as a whole.

Business entities' own financial resources are characterized by the ease of attracting and the absence of additional costs (interest payment), which contributes to the financial stability and the solvency of the enterprise. At the same time, equity of economic entities has certain disadvantages: limited volume of attraction and opportunities for significant expansion of financial, operating and investment activities in the conditions of favorable market conditions; inability to increase the return on equity at the expense of borrowed funds. Therefore, the enterprise that uses only its own financial resources has the highest financial sustainability, but does not use the financial opportunities to increase the return on invested capital through additional borrowing and restricts the pace of its own development.

The sources of borrowed financial resources of business entities are bank and commercial loans, financial leasing, bonded loans and payables. Borrowed financial resources of the enterprise have quite wide possibilities of attraction, especially in case of high credit rating, availability of collateral or guarantee of the guarantor; provide for the growth of financial potential in terms the assets are expanded and the pace of growth of economic activity is increased; ability to contribute to the growth of financial profitability.

At the same time, the use of borrowed financial resources by the enterprise has disadvantages: their use is associated with a high dependence of the cost of borrowed

financial resources on fluctuations of financial market conditions; risk of financial stability and loss of solvency; complexity of the procedure of raising funds (especially in large amounts). An enterprise that uses borrowed financial resources has a higher financial potential for development, but it generates financial and bankruptcy risk, which grows in the process of increasing the proportion of borrowed funds.

## **Topic 2. Cash receipts of enterprises and profit generation**

### *Content*

#### *2.1. The essence of cash settlements of enterprises*

#### *2.2. Cash flow and objectives of cash flow statement*

#### *2.3. Profit formation*

### **2.1. The essence of cash settlements of enterprises**

Business entities in their activities make cash settlements with other enterprises, organizations and individuals. These calculations are related to the payment for purchased goods, work performed, services provided, transfer of taxes, payment of wages, and more.

Cash payments can be made in cash and non-cash forms. In practice, most payments are made by transferring funds from the current account of the company in the bank, without the participation of cash.

Non-cash settlements in the national currency on the territory of Ukraine are carried out on the basis of the Instruction on non-cash settlements in Ukraine in the national currency № 22 of 21.01.2004.

Non-cash settlements are transfers of a certain amount of funds from payers' accounts to recipients' accounts, as well as transfers by banks on behalf of enterprises and individuals of funds deposited in cash at the bank's cash desk to recipients' accounts. These calculations are performed by the bank on the basis of settlement documents on paper or in electronic form.

Enterprises also make their payments in cash, subject to current restrictions.

Cash settlements - cash payments of enterprises (entrepreneurs) and individuals for sold products (goods, work performed, services provided), as well as for transactions that are not directly related to the sale of products (goods, works, servants) and other property.

Enterprises make cash payments among themselves and with individuals (citizens of Ukraine, foreigners, stateless persons who do not conduct business activities) through the cash register both at the expense of cash proceeds and at the expense of funds received from banks. These calculations are also made by transferring cash to pay the relevant payments.

All cash received at the box office must be accounted for in a timely manner (on the day of receipt of cash) and in full. Due to the need to accelerate the circulation of cash and their timely receipt at the cash desks of banks for enterprises engaged in cash transactions in national currency, set the cash limit and deadlines for delivery of cash proceeds (cash).

Cash comprises cash in hand and demand deposits with banks.

Cash equivalents means short-term highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value. An investment normally qualifies as cash equivalents only when it has a short maturity, of say, three months or less from the date of acquisition.

Investments in shares are excluded from cash equivalents unless they are in substantial cash equivalents. For example, preference shares of a company acquired shortly before their specific redemption date, provided there is only insignificant risk of failure of the company to repay the amount at maturity. Similarly, short-term marketable securities which can be readily converted into cash are treated as cash equivalents and is liquidable immediately without considerable change in value.

## **2.2 Cash flow and objectives of cash flow statement**

The summary of cash transactions (receipts and payments) during an accounting period is called Cash Flow Statement.

Meaning of Cash Flow



Cash flows are inflows (i.e. receipts) and outflows (i.e. payments) of cash and cash equivalents.

### Types of Cash Flow

The cash flows generated through various activities are classified as

1. Operating cash flow.
2. Investing cash flow.
3. Financing cash flow.

### Operating Activities

Operating activities are accounting items which indicates the money a company brings in from ongoing, regular business activities, such as manufacturing and selling goods or providing a service. Cash flow from operating activities does not include long-term capital or investment costs. It does include earnings before interest and taxes plus depreciation minus taxes.

These are both normal and core daily activities within a business that generate cash inflows and outflows which includes:

- Cash received from customers
- Cash paid to suppliers of goods and services
- Cash paid to employees

### Reporting of Cash flow from operating activities

It can be derived either from direct method or indirect method.

#### Direct method:

In this method, gross receipts and gross payments of cash are disclosed.

**Table 2.1**

### Direct method

<b>Direct Method</b>	
Cash receipts from customers	XX
Cash paid to suppliers	XX
Cash paid to employees	XX
Cash paid for other operating expenses	XX
Cash generated from operation	XX
Income tax paid	XX
<b>Net cash from operating activities</b>	<b>XX</b>

**Indirect method:**

In this method, profit and loss account is adjusted for the effects of transaction of non-cash and non-operating nature.

Cash flow statement of listed companies shall be presented only under the indirect method

**Table 2.2****Indirect method**

Retained Earning	XX
Add: Dividend paid	XX
Income Tax	XX
Net Profit Before Tax	XX
Add: Depreciation	XX
Loss on sale of Asset/Investment	XX
Interest Paid	XX
Provision for Bad debts	XX
Less: Interest/ Dividend Received	XX
Profit on sale of Asset/ Investment	XX
<b>Funds from operations</b>	<b>XX</b>
Add: Decrease in Current Asset	XX
Add: Increase in Current Liabilities	XX
Less: Increase in Current Asset	XX
Less: Decrease in Current Liabilities	XX
Cash generated from operation	XX
Income Tax Paid	XX
<b>Net Cash flow from operating activities</b>	<b>XX</b>

**CASH FLOW FROM INVESTING ACTIVITIES**

Investing activities are items on the cash flow statement that reports the aggregate change in a company's cash position resulting from any gains (or losses) from investments in the financial markets and operating subsidiaries, and changes resulting from amounts spent on investments in capital assets such as plant and equipment.

These involves activities like the purchase and disposal of non-current assets such as; property, plant and equipment, intangible assets, and long-term investments.

**Examples of such cash flows include:**

- Proceeds on sale of non-current assets

- Cash used on purchase of non-current assets
- Investment income received (not accrued)

### **CASH FLOW FROM FINANCING ACTIVITIES**

Those activities that result in changes in size and composition of owner's capital and borrowing of the organization.

It includes receipts from issuing shares, debentures, bonds, borrowing and payment of borrowed amount, loan etc.

A category in a company's cash flow statement that accounts for external activities that allow a firm to raise capital and repay investors, such as issuing cash dividends, adding or changing loans or issuing more stock. Cash flow from financing activities shows investors the company's financial strength. A company that frequently turns to new debt or equity for cash, for example, could have problems if the capital markets become less liquid.

#### **Financing Activities Example:**

- Issue of equity shares / Buy back of equity shares.
- Issue/ Redemption of preference shares.
- Issue / redemption of debentures.
- Long term loan / payment thereof.
- Dividend / interest paid.

#### **The objectives of cash flow statement are:**

1. To ascertain the sources from activities (i.e., operating/investing/financing activities) from which cash and cash equivalents were generated by an enterprise.
2. To ascertain the uses by activities (i.e., operating/investing/financing activities) for which cash and cash equivalents were used by an enterprise.
3. To ascertain the net change in cash or cash equivalents indicating the difference between sources and uses from or by the three activities between the dates of two Balance Sheets.

### **PURPOSES OF CASH FLOW STATEMENT**

1. To forecast future cash flows.

2. To evaluate management decisions.
3. To determine the ability to pay dividends to stockholders' and payments to creditors.
4. To show the relationship of net income to the business's cash flows.

### **IMPORTANCE OF CASH FLOW STATEMENT**

1. To identify the sources from where cash inflows have arisen within a particular period and also shows the various activities where in the cash was utilized.
2. To provide proper cash planning and maintaining a proper matching between cash inflows and outflows.
3. To shows efficiency of a firm in generating cash inflows from its regular operations.
4. To report the amount of cash used during the period in various long-term investing activities, such as purchase of fixed assets.
5. To report the amount of cash received during the period through various financing activities, such as issue of shares, debentures and raising long-term loan.

### **2.3. Profit formation**

Corporate profit is the money left over after a corporation pays all of its expenses. All of the money collected by a corporation during the reporting period from services rendered or sales of a product is considered top-line revenue. From revenue, a company will pay its expenses. Money left after expenses are paid is considered to be the company's profit.

Income statement — financial statement summarizing a firm's performance over a period of time.

The income statement measures performance over some period of time, usually a quarter, six months or a year. The income statement equation is:

Net income (profit for the year) = revenues — expenses

Contents of income statement

- The first thing reported in an income statement would usually be revenue and expenses from the firm's principal operations

- Subsequent parts include, among other things, financing expenses such as interest paid.
- Taxes paid are reported separately as well for example
- The last item to be included is net income (the so-called both line)
- Net income is often expressed on a per-share basis and called earnings per share (EPS)

### **The essence of Gross, Operating, and Net Profit**

The first level of profitability is **gross profit**, which is sales minus the cost of goods sold. Sales are the first line item on the income statement, and the cost of goods sold (COGS) is generally listed just below it. For example, if Company A has \$100,000 in sales and a COGS of \$60,000, it means the gross profit is \$40,000, or \$100,000 minus \$60,000. Divide gross profit by sales for the gross profit margin, which is 40%, or \$40,000 divided by \$100,000.

$$\text{Gross Profit} = \text{Total Sales} - \text{COGs}$$

The second level of profitability is **operating profit**, which is calculated by deducting operating expenses from gross profit. Gross profit looks at profitability after direct expenses, and operating profit looks at profitability after operating expenses. These are things like selling, general, and administrative costs (SG&A). If Company A has \$20,000 in operating expenses, the operating profit is \$40,000 minus \$20,000, equaling \$20,000. Divide operating profit by sales for the operating profit margin, which is 20%.

$$\text{Operating Profit} = \text{Gross Profit} - \text{Operating Expenses}$$

$$\text{Operating Profit Margin} = \text{Operating Profit} / \text{Total Sales}$$

The third level of profitability is **net profit**, which is the income left over after all expenses, including taxes and interest, have been paid. If interest is \$5,000 and taxes are another \$5,000, net profit is calculated by deducting both of these from operating profit. In the example of Company A, the answer is \$20,000 minus \$10,000, which equals \$10,000. Divide net profit by sales for the net profit margin, which is 10%.

$$\text{Net Profit} = \text{Operating Profit} - (\text{Taxes} + \text{Interest})$$

The three major types of profit are gross profit, operating profit, and net profit--all of which can be found on the income statement. Each profit type gives analysts more information about a company's performance, especially when it's compared to other competitors and time periods.

### **Topic 3. Taxation**

#### *Content*

#### ***3.1 Tax essence. Tax functions. Principles of taxation***

#### ***3.2 Classification of taxation objects***

#### ***3.3 Overview of main tax rates***

#### ***3.4 Business taxation***

#### ***3.5 Simplified (unified) tax regime***

#### ***3.6 Indirect taxes***

#### **3.1 Tax essence. Tax functions. Principles of taxation**

Tax system is the basis of state finances and general fund of monetary resources of the state in all countries of the world. A necessity of tax system existence is stipulated by nature of the state, assignment of which is to execute all social tasks and functions.

According to the Tax Code tax is obligatory payment to the budget of the proper level that is produced from the payers of tax in accordance with this Code.

Complex of national and local taxes and fees (obligatory payments) to the budgets and to the state objective funds which are produced according to the Tax Code make the system of taxation.

During establishment of tax it's necessary to determine following elements: payers of tax object of taxation base of taxation, rate of tax, order of tax calculation tax period term and order of tax payment term and order of report presentation of tax calculation and tax payment.

There are national and local taxes and fees in Ukraine. National taxes and fees are obligatory payment for all territory of Ukraine.

**Nation-wide taxes:**

- Corporate profit tax (CPT)
- Value added tax (VAT)
- Personal income tax
- State duty
- Land tax
- Excise duty
- Customs duty
- Tax for the use of natural resources
- Tax on car owners
- Other minor taxes

**Local taxes:**

- Municipal tax
- Advertising tax
- Local symbols use tax
- Other minor taxes

Taxes are used to finance government services and activities. Governments at all levels—local, state, and national—require people and businesses to pay taxes. Governments use the tax revenue to pay the cost of police and fire protection, health programs, schools, roads, national defense, and many other public services. They are the basic source of the state budgets profits in the modern developed countries.

Tax mechanism is the aggregate of legal forms and methods of management activity in relation to methodology of taxes calculation, penalty of taxes, and realization of tax discipline control. One of the tax adjusting instruments is a tax deductions such as exception, discounts and tax credit.

Exception is a situation when some taxation objects are eliminated under taxation. Exceptions are used when the state is interested in financing some kinds of economic activity and takes some part of profit or other income for this.

Discounts are form of tax deductions connected with taxpayer expenses.

Tax credit is a form of tax deductions when the tax object is accrued tax amount but not incomes or expenses of taxpayers. This deduction is used as reducing tax amount, reducing tax rate or payments delaying to the budgets.

The tax legislation of Ukraine is based on the following principles:

1) the taxation universality (everyone who is a taxpayer in relation with the adopted laws has to pay taxes)

2) all payers equality according to the law, prevention of any tax discrimination manifestations. It means equal approach to all taxpayers regardless of social, racial, national, religious affiliation, the form of the legal person property, the citizenship of the physical person or the location of payers.

3) fiscal sufficiency means taxes and tax collections are established considering equation of budget incomes and expenses

4) social justice means taxes and tax collections are established according to solvency of taxpayers

5) profitability of the taxation means receipts of taxes and tax collections establishment exceeds their administration expenses

6) stability means changes of any tax and tax collection elements can't be brought later than for six months from the beginning of fiscal year in which new rules will operate. Taxes and tax collections, their rates, and also tax deductions can't change within a fiscal year.

7) uniformity and convenience of tax payment means terms of tax and tax collection payment are established according to the necessity of timely receipt of income budget for realization expenses and convenience of their payment by payers. The unique approach for tax and collection establishment is determination of all obligatory tax elements at legislative level.



### 3.2 Classification of taxation objects

Totality of taxation objects may be divided as follows:

1. Revenue (profit, wages).
2. Property (real estate, luxury items, etc.).
3. Transfer of property (inheritance, donation, sales transactions).
4. Consumption (consumer goods and services).
5. Import and export of goods abroad.

Depending on the signs of groups taxes are classified as follows:

1. By correlation of tax rate and income: proportional, progressive, regressive and extraordinary.

Fixed tax rate, regardless of the income level, is typical for the proportional tax (profit tax).

The tax is progressive, if tax rates growth according to income increase (tax on individuals' income).

Regressive tax is characterized by decrease in the average tax rate reasonably to income increase. For example, if part of income is deposited into savings, the value added tax is regressive, as the share of income to pay the tax in the price of consumer goods will decrease relative to total income.

Extraordinary taxes are set in special situations: war, natural disasters, etc. (fee to the Fund for the implementation of measures to eliminate the consequences of the Chernobyl disaster and social protection).

2. By level of fiscal management: national and local.

According to the Tax Code national taxes and fees (mandatory payments):

- income tax;
- tax on individuals' income;
- Value Added Tax;
- excise tax;
- fee for the first registration of the vehicle;
- environmental tax;

- rent for transportation of oil and oil products by oil pipelines and oil product pipelines, pipeline transit of natural gas and ammonia through the territory of Ukraine;

- fee for use of mineral resources;
- land tax;
- fee for the use of radio frequency resource of Ukraine;
- fee for special use of water;
- fee for special use forest resources;
- fixed agricultural tax;
- fee for the development of viticulture, horticulture and hop growing;
- duty;
- fee as a surcharge to the current tariff for electricity and heat, except electricity generated by qualified cogeneration system;
- fee as a surcharge to the existing natural gas tariff for consumers of all forms of ownership.

Local taxes include:

- tax on real property other than land;
- single tax.

Local fees include:

- fee for certain types of business;
- fee for parking vehicles;
- tourist fee.

Depending on the economic impact on taxpayers taxes are divided on direct and indirect. The basis of tax distribution on direct and indirect is the theoretical possibility of their relaying on consumer of goods (works, services).

Payers of direct taxes are those legal entities or individuals, who receive income (profits, wages), have the property.

Indirect tax payers, according to State legislation, are entities which sell goods (works, services). They are responsible for the timely payment of tax. But the actual payer (carrier of tax) is a person who consumes goods (works, services) pays the price, which includes tax (VAT , excise duties).

### 3. By the subjects of taxation: taxes for legal entities and taxes for individuals.

### 3.3 Overview of main tax rates

**Table 3.1**

#### **Main tax rates**

<b>Corporate Income Tax (CIT)</b>	<b>Tax rate</b>
General tax rate	18%
Small enterprises (certain criteria should be met)	0%
Insurance companies	0%, 3%
Non-residents' income:	
Insurance payments	0%, 4%, 12%
Freight	6%
Interest, dividends, royalty, engineering income, rent, sale of property etc.	15%
Production and/or distribution of advertising	20%
Profit of a Controlled foreign company (from 2022)	18%
Lottery	30%
<b>Value Added Tax (VAT)</b>	
Standard tax rate (supply of goods / services with the place of supply within the territory of Ukraine)	20%
Supply of certain types of agricultural products	14%
Supply of medicines and medical products	7%
Supply of services in relation with a show of performances, cinematic premieres, films, cultural and artistic events, conducting excursions	7%
Supply of hotel services	7%
Export of goods and services, certain other services	0%
<b>Personal Income Tax (PIT)</b>	
Standard tax rate (both for residents and non-residents)	18%
Royalty income	
Interest income	18%
Dividends:	
on shares / corporate rights of the resident issuers (CIT payers)	5%
on preferred shares, equivalent to salary payments	18%
on shares / investment certificates paid by joint investment institutions	9%
on shares / corporate rights paid by non-resident issuers	9%
on shares / corporate rights paid by resident issuers (non-payers of CIT)	9%
Prizes / awards (including winnings in a lottery) payable to residents and non-residents	18%

Profit of a Controlled foreign company (from 2022)	18%, 9%
<b>Real estate transactions – individuals</b>	
Sale of house, apartment, or their parts, etc (one item per year) if owned by a taxpayer for longer than 3 years before disposal	0%
Sale of more than 1 real estate item per year	5%
Sale of real estate objects by non-resident individual	18%
<b>Military fee (MF)</b>	
Income subject to Personal Income Tax	1.5%
<b>State Social Insurance Contribution</b>	
Employment-related income and remuneration under civil law agreements payable to individuals	22%
For people with disabilities	8.41%
<b>Simplified (unified) tax regime</b>	
	up to 10% of the minimum amount of cost of living (approx. USD 8 in 2021)
<b>I group</b>	
<b>II group</b>	up to 20% of minimum salary (approx. USD 42 in 2021)
	3% of gross income (for VAT payers)
<b>III group</b>	5% of gross income (for VAT non-payers)
	0.19-6.33% of the normative monetary value of the area of
<b>IV group</b>	agricultural lands and/or water resources

### 3.4 Business taxation

Corporate income tax (CIT) CIT payers – residents

CIT payers are legal entities that operate in Ukraine and abroad, except for:

- I. legal entities using the simplified tax regime;
- II. organizations financed by the State and local authorities;
- III. charity funds, non-governmental organizations, political parties, pension funds and other non-profit organizations.

However, the organizations of the second and third groups are CIT-exempt only if they are included in the State Register of Non-Profit Organizations.

Branches and separate units of a company do not qualify as independent taxpayers. CIT for all branches is calculated and paid by the parent company.

#### **CIT payers – non-residents**

The list of non-residents that are subject to CIT includes the following:

legal entities – non-residents that receive income from Ukrainian sources (except for institutions and organizations with diplomatic privilege or immunity under international treaties);

Non-residents who carry out economic activity on the territory of Ukraine through a permanent establishment. A non-resident shall be registered with the controlling body at the location of its permanent establishment before the beginning of its economic activity through such a PE. A non-resident who commenced its economic activity through its permanent establishment before registration with the controlling body is considered to be tax-evading and the income received by it is considered to be hidden from taxation.

### **Tax base**

Tax base is Net Profit Before Tax (NPBT) as per accounting records according to either Ukrainian accounting standards or International Financial Reporting Standards (IFRS), adjusted for tax differences defined in the Tax Code of Ukraine.

NPBT is adjusted for the tax differences. Major differences affecting financial profit (loss) before tax include:

- depreciation of non-current assets;
- provisions for incurred and probable expenses (excluding provision for unused vacations and payroll related payments);
- differences related to financing transactions (thin capitalisation rules); transfer pricing adjustments;
- deductibility restriction for certain payments to non-residents; transactions with not-for-profit organizations;
- other differences.

Deduction of depreciation expenses associated with non-production fixed assets and non-production intangible assets has been disallowed. Non-production assets are defined as assets which are not used in the taxpayer's business activity. Depreciation is also not accrued at the time of modernization, reconstruction, completion, retrofitting and conservation of fixed assets.

### Tax losses

Tax losses may be carried forward for an indefinite period but may not be carried backwards. Restrictions on the amount of tax losses allowed for tax deduction were imposed in particular prior tax periods.

Generally, the reporting period is a calendar quarter. Agricultural producers can choose an annual reporting period that begins from July 1 of current year and finishes on June 30 next year.

Annual tax (reporting) period is set for the following taxpayers: newly established companies; agricultural producers; taxpayers, whose annual revenue for the previous year does not exceed UAH 40 million.

### **Taxation of individual entrepreneur's income**

Individual entrepreneurs may be taxed either under the general or simplified tax regime.

#### **General taxation system for individual entrepreneur**

The taxable base is net income, which is the difference between overall taxable income (in monetary and non-monetary form) and business expenses, supported with relevant documentation. The tax rate is 18%.

If an individual entrepreneur receives income other than from business activities within the types of activities chosen by him/her (registered in the unified register), those types of income shall be taxed according to the general rules of Taxation of Individuals.

Individual entrepreneurs shall pay advance tax payments that are calculated on a self-assessment basis per each calendar quarter and shall be paid to the state budget by the 20th of the month following the reporting quarter.

### **3.5 Simplified (unified) tax regime**

Individual or legal entity that meets certain legal requirements can choose the simplified tax regime. Simplified tax regime provides for a simplified accounting and reporting.

There are groups of simplified tax payers: private entrepreneurs only – I and II group; legal entities and private entrepreneurs – III group.

**Table 3.2****I – III groups of simplified tax payers**

	<b>I group</b>	<b>II group</b>	<b>III group</b>
<b>Maximum annual income</b>	UAH 1,002 million	UAH 5,004 million	UAH 7,002 million
<b>Maximum number of employees</b>	0	from 0 to 10	without limits
<b>Permitted activities</b>	retail sale of goods on markets; domestic services	services rendered to single tax payers and/or to individuals; production and/or sale of goods; restaurant industry	without limits
<b>VAT</b>	does not apply	does not apply	may register as a VAT payer
<b>Rates</b>	up to 10% of monthly cost of living (UAH 227 in 2021)	up to 20% of minimum monthly salary (UAH 1 200 in 2021)	3% of income + VAT or 5% of income (excl. VAT)
<b>Payment</b>	Monthly advanced contributions		Quarterly

**3.6 Indirect taxes****Value Added Tax (VAT)**

VAT is an indirect tax that is included in the price of goods (services) and is paid by the buyer, but transferred to the state budget by the supplier (tax agent).

**Taxpayers** are residents, both individual persons and legal entities, which operate in Ukraine (including a permanent establishment of non-resident) and persons that import goods into the customs territory of Ukraine.

VAT is also paid by the persons that are receiving consulting, engineering, legal, advertising and other services from non-resident with place of supply within the customs territory of Ukraine.

**VAT base** is determined as contractual value of goods or services, but not lower than the purchase price (or lower than market prices) of such goods/services or book value of fixed assets. The taxable amount shall include all state taxes, with some exceptions.

For imported goods, the tax base is contractual value, but not lower than customs value of the goods (that includes import duties and excise tax).

There are three **VAT rates** – standard (20%), reduced (14%, 7%) and zero (0%). Zero tax rate applies to export of goods and export-related services, etc.

14% VAT rate applies to supply or import to the customs territory of Ukraine of certain types of agricultural products, including: cattle, milk, wheat, malt, corn, sugar-beet, linseed, rape, sunflower seeds, etc.

7% tax rate applies to:

- supply of medicines and medical equipment and their import into the customs territory of Ukraine;
- supply of services related to demonstration of performances, cinematic premieres, films, cultural and artistic events, conducting excursions;
- supply of hotel services.

The taxpayer reduces the amount of “output” VAT accrued during the reporting period by the amount of “input” VAT paid to its suppliers supported by VAT invoices received from them or by the import customs declaration.

VAT invoice is electronically formed by the supplier (counterparty) for each supply and shall be registered in the tax authority database.

Reverse-charge mechanism applies to services received from non-residents (if the place of supply is the customs territory of Ukraine). This mechanism implies self-assessment of 20% VAT by the Ukrainian recipient of services in the tax period (month) of their receipt. In the same tax period the recipient is entitled to credit input VAT which effectively results in no VAT payment in the relevant tax period. The reverse-charge mechanism does not apply if a non-resident service provider has a permanent establishment registered as a VAT payer in Ukraine. In this case, the representative office is in charge of assessing VAT liabilities, offsetting them against the input VAT, and transferring the positive difference to the state budget.

Ukrainian tax authorities are entitled to suspend a taxpayer’s right to register VAT invoices and adjustments to the registered VAT invoices if a transaction meets the criteria for suspicious transactions.



## VAT refund

Taxpayers are entitled to claim the amount of excessive VAT paid to be refunded from the state budget.

**VAT return** should be submitted only in electronic form.

The tax is paid on the basis of the result for the reporting period, which is a calendar month. VAT returns are submitted to the tax authorities within 20 calendar days following the end of each reporting month.

Negative difference between the amount of output VAT (charged on taxable supplies) and input VAT (paid on taxable purchases) represents the amount of VAT refund.

### Electronic system of VAT administration

The system provides that the payable VAT amounts are accumulated at the respective taxpayers' accounts at the State Fiscal Service of Ukraine. The system also provides a special order of funds spending from this account. All taxpayers' transactions that have an impact on VAT records shall be registered in the electronic database of the State Fiscal Service of Ukraine.

## **Excise tax (ET)**

ET is an indirect tax on consumption of excisable goods (products) that is included in the price of such goods (products).

### Excisable goods include:

- spirit and alcohol;
- tobacco and tobacco products;
- cars, car-trailers, motorbikes and other vehicles for freight; electricity;
- fuel.

ET payers are mainly manufacturers and importers of excisable goods, retailers selling the above products, as well as those that sell fuel.

**The object** of excise tax is the sale of excisable goods (products), as well as their import into the customs territory of Ukraine. The object of taxation is also volume and value of lost excise goods due to the taxpayer's fault.

There is a wide range of transactions that are not subject to ET or are exempt from ET, e.g., transactions on export of excisable goods (products) by the taxpayer from the customs territory of Ukraine.

**Tax base** differs depending on the applicable rates:

- o ad valorem (relative) rate – a percentage of the value of goods. It applies to electricity;

- o specific (absolute) rate – is fixed amount per unit in kg, litre, cm<sup>3</sup>, items, etc. It is applicable to ethyl spirit, alcoholic beverages, petroleum products, vehicles and fuel;

- o combined rate – both percentage of the value of goods and fixed amount per sold unit of goods (products). It applies to tobacco and tobacco products.

Absolute excise tax rates are reviewed annually taking into account consumer price index, producer of industrial production price index and prices of industrial products producers.

Tax liability on excisable goods (products) produced in the customs territory of Ukraine arise on the date when the product is sold by producer, and in case of import of excisable goods (products) to the customs territory of Ukraine – on the date of their customs clearance.

The tax is paid by ET payers on a monthly basis based on the volume of taxable sales. For alcoholic beverages containing ethyl ET is payable upon acquisition of the ET stamps.

For imported excisable goods (except for ET stamped products) tax is paid before or on the day of submission of customs declaration. Importers of excisable stamped goods pay excise tax when buying ET stamps (with additional payment as of the date of tax return submission, if necessary).

There are certain ET peculiarities set forth for alcoholic beverages and tobacco products. Obligatory condition for the sale of such excisable goods is that they should

contain ET stamp. In order to ensure completeness of the excise tax liabilities payment, there are excise warehouses created within the company's premises which produce such products.

## **Topic. 4 The Time Value of Money**

### *Content*

#### *4.1 Future Value and Compounding*

#### *4.2 Present Value and Discounting*

### **4.1 Future Value and Compounding**

The time value of money refers to the fact that a dollar in hand today is worth more than a dollar promised at some time in the future. On a dollar you earn today you can earn interest while waiting. For a given rate of return, the value at some point in the future of an investment made today can be determined by the future value of that investment. The current worth of a future cash flow, on the other hand, can be determined for a given rate of return by calculating the present value of the cash flow involved.

The future value is the amount of money an investment will grow over some period of time at some given interest rate.

Future value (FV) is the amount an investment is worth after one or more periods.



**Fig. 4.1 Future Value**

So:

$$V_1 = V_0 (1 + r)$$

Where  $V_1$  is the value after 1 period;  $r$  is the interest/discount rate for one period.

\*One period = one year

Example

What is the future value for an investment for more than one period at a compound interest rate of 10%?

$$£100 \longrightarrow £110 \longrightarrow £121 \longrightarrow £133.10$$

$$+ £10 \quad + £11 \quad + £12.10$$

Where:

$$£100 \times 1.10 = £110$$

$$£110 - £100 = £10 \text{ (interest you earn in period)}$$

$$£110 \times 1.10 = £100 \times 1.10^2 = £121$$

$$£121 - £110 = £11 \text{ (interest you earn in period)}$$

$$£121 \times 1.10 = £100 \times 1.10^3 = £133.10$$

$$£133.10 - £121 = £12.10 \text{ (interest you earn in period)}$$

Investing for more than one period

Compounding — the process of accumulating interest on an investment over time to earn more interest.

Interest on interest — interest earned on the reinvestment of previous interest payments.

Simple interest — interest earned only on the original principal amount invested.

Compound interest — interest earned on both the initial principal and the interest reinvested from prior periods.

In general:

$$V_t = V_0 \times (1 + r)^t$$

Where  $V_t$  is the value after  $t$  periods;  $r$  is the interest/discount rate for one period.

We call  $V_t$  the FUTURE VALUE at the end of  $t$  periods of compound interest  $r$ .

We call  $V_0$  the PRESENT VALUE at the start of the time period being considered.

The formula:

$$FV = PV \times (1+r)^t$$

#### **4.2 Present Value and Discounting**

The present value (PV) is defined as the current value of future cash flows discounted at the appropriate discount rate. It is the inverse of future value. Instead of compounding, we discount back to the present.

$$\text{Present Value} = 1/(1+r)^t$$

The quantity in brackets is often called the discount factor, therefore we call the rate the discount rate. It can also be called the present value interest factor (PVIF). We use the term discounted cash flow (DCF) valuation when we determine the present value of a future cash flow.

As the length of time until payment grows, present values decline. Also, for a given length of time, the higher the discount rate is, the lower is the present value. This means that present values and account rates are inversely related.

Whereas future values deal with how much will our investment today be worth in the future, with present values the focus is on determining how much to invest now to have a certain amount in the future. There exist tables that give you present value factors, just as they exist for future values.

### **Topic 5. Assessment of the financial condition of the enterprise**

#### ***Content***

##### ***5.1 The role of financial analysis***

##### ***5.2 Balance sheet***

##### ***5.3 The Income Statement (Statement of Profit and Loss and Consolidated Income)***

##### ***5.4 Ratio Analysis***

##### ***5.5 Using Financial Statement Information***

## 5.1 The role of financial analysis

Financial analysis (also referred to as financial statement analysis or accounting analysis) refers to an assessment of the viability, stability and profitability of a business, sub-business or project.

It is performed by professionals who prepare reports using ratios that make use of information taken from financial statements and other reports. These reports are usually presented to top management as one of their bases in making business decision.

- Continue or discontinue its main operation or part of its business;
- Make or purchase certain materials in the manufacture of its product;
- Acquire or rent/lease certain machineries and equipment in the production of its goods;
- Issue stocks or negotiate for a bank loan to increase its working capital;
- Make decisions regarding investing or lending capital;
- Other decisions that allow management to make an informed selection on various alternatives in the conduct of its business.

Financial analysts often assess the firm's:

1. Profitability - its ability to earn income and sustain growth in both short-term and long-term. A company's degree of profitability is usually based on the income statement, which reports on the company's results of operations;

2. Solvency - its ability to pay its obligation to creditors and other third parties in the long-term;

3. Liquidity - its ability to maintain positive cash flow, while satisfying immediate obligations;

Both 2 and 3 are based on the company's balance sheet, which indicates the financial condition of a business as of a given point in time.

4. Stability- the firm's ability to remain in business in the long run, without having to sustain significant losses in the conduct of its business. Assessing a company's stability requires the use of both the income statement and the balance sheet, as well as other financial and non-financial indicators.

Financial analysts often compare financial ratios (of solvency, profitability, growth, etc.):

- Past Performance - Across historical time periods for the same firm (the last 5 years for example);
- Future Performance - Using historical figures and certain mathematical and statistical techniques, including present and future values, This extrapolation method is the main source of errors in financial analysis as past statistics can be poor predictors of future prospects;
- Comparative Performance - Comparison between similar firms.

These ratios are calculated by dividing a (group of) account balance(s), taken from the balance sheet and / or the income statement, by another, for example :

Net income / equity = return on equity (ROE)

Net income / total assets = return on assets (ROA)

Stock price / earnings per share = P/E ratio

Comparing financial ratios is merely one way of conducting financial analysis.

Financial analysts can also use percentage analysis which involves reducing a series of figures as a percentage of some base amount. For example, a group of items can be expressed as a percentage of net income. When proportionate changes in the same figure over a given time period expressed as a percentage is known as horizontal analysis. Vertical or common-size analysis, reduces all items on a statement to a “common size” as a percentage of some base value which assists in comparability with other companies of different sizes. As a result, all Income Statement items are divided by Sales, and all Balance Sheet items are divided by Total Assets.

Another method is comparative analysis. This provides a better way to determine trends. Comparative analysis presents the same information for two or more time periods and is presented side-by-side to allow for easy analysis.

Every year, a company will release its annual report. In addition to information relating to the performance and activities of the firm over the previous year, the annual report presents three financial statements:

- The statement of financial position (balance sheet)

- The income statement
- The statement of cash flows

Who reads the annual reports and why?

- Investors: corporate governance information on how the company is being run and its performance (primary purpose)
- Agency relationships:
  - Type I Agency relationship: shareholders v management
  - Type II Agency relationship: dominant/controlling shareholder versus shareholders with smaller ownership stakes
- Suppliers: short-term solvency
- Lenders: longer-term solvency
- Potential investors: performance, growth potential
- Government: growth, performance, solvency, potential tax revenues
- Analysts/advisors: performance, solvency, growth, risk
- Competitors: trends in performance

## **5.2 Balance sheet**

A statement of a company's assets, liabilities, and stockholder equity at a given period of time, such as the end of a quarter or year. A balance sheet is a record of what a company has and how it has come to have it. A balance sheet is divided into two main sections, one that records assets and one that records liabilities and stockholder equity. The assets should generally equal the liabilities and stockholder equity because the latter two are how the company paid for its assets. Examples of items recorded as assets include accounts receivable and property, plants, and equipment. Examples of liabilities include accounts payable and long-term bonds.

A balance sheet is a statement of a company's financial position at a particular moment in time. This financial report shows the two sides of a company's financial situation -- what it owns and what it owes.



What the company owns, called its assets, is always equal to the combined value of what the company owes, called its liabilities, and the value of its shareholders' equity. Expressed as an equation, a company's balance sheets shows:

$$\text{Assets} = \text{Liabilities} + \text{Shareholder Value.}$$

If the company were to dissolve, then its debts would be paid, and any assets that remained would be distributed to the shareholders as their equity. Bankruptcy occurs in situations where there is nothing left to distribute to the shareholders, and the company balance sheet is in fact unbalanced because the company owes more than it owns.

Income statement (also referred as profit and loss statement (P&L), statement of financial performance, earnings statement, operating statement or statement of operations) is a company's financial statement that indicates how the revenue (money received from the sale of products and services before expenses are taken out, also known as the "top line") is transformed into the net income (the result after all revenues and expenses have been accounted for, also known as the "bottom line"). It displays the revenues recognized for a specific period, and the cost and expenses charged against these revenues, including write-offs (e.g., depreciation and amortization of various assets) and taxes. The purpose of the income statement is to show managers and investors whether the company made or lost money during the period being reported.

The important thing to remember about an income statement is that it represents a period of time. This contrasts with the balance sheet, which represents a single moment in time.

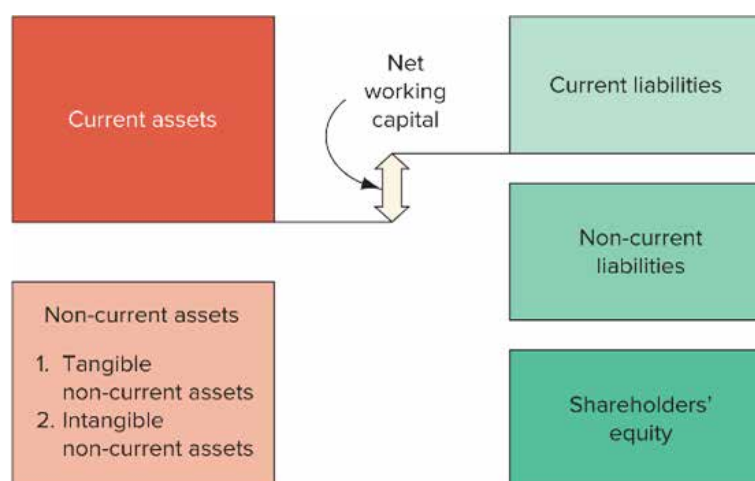
Charitable organizations that are required to publish financial statements do not produce an income statement. Instead, they produce a similar statement that reflects funding sources compared against program expenses, administrative costs, and other operating commitments. This statement is commonly referred to as the statement of

activities. Revenues and expenses are further categorized in the statement of activities by the donor restrictions on the funds received and expended.

The income statement can be prepared in one of two methods. The Single Step income statement takes a simpler approach, totaling revenues and subtracting expenses to find the bottom line. The more complex Multi-Step income statement (as the name implies) takes several steps to find the bottom line, starting with the gross profit. It then calculates operating expenses and, when deducted from the gross profit, yields income from operations. Adding to income from operations is the difference of other revenues and other expenses. When combined with income from operations, this yields income before taxes. The final step is to deduct taxes, which finally produces the net income for the period measured.

Statement of financial position (balance sheet) — financial statement showing a firm's accounting value on a particular date.

The statement of financial position is a snapshot of the firm. It is a convenient means of organising and summarising what a firm owns (its assets), what the firm owes (its liabilities), and the difference between the two (the firm's equity) at a given point in time. The figure below demonstrates how the statement of financial position is constructed.



**Fig. 5.1 Assets of the firm**

The left side lists the assets of the firm, and the right side lists the liabilities and equity. Left side: total value of assets.

Assets are classified as either current or non-current.

### Non-current assets (or fixed assets)

- A non-current asset has a relatively long life (12+ months)
- It can be either tangible, e.g. a truck or computer, or intangible, e.g. a

trademark or patent

### Current assets

- A current asset has a life of less than 1 year, meaning the asset will convert to cash within 12 months
- For example, inventory would normally be purchased and sold within a year and is thus classified as a current asset
- Cash itself is a current asset
- Trade receivables (money owed to the firm by its customers) are also current assets
- Liabilities and owners' equity: the right side

The firm's liabilities are the first thing listed on the right side of the statement of financial position. They are classified as either current or non-current:

### Current liabilities:

- Like current assets, they have a life of less than one year (and hence must be paid within the year)
- Usually listed before non-current liabilities
- Trade payables (money the firm owes to its suppliers) are an example of a current liability

### Non-current liabilities:

- A debt that is not due in the coming year is classified as a non-current liability e.g. a loan that needs to be paid off in 5 years
- Bond and bondholders is used generically to refer to long-term debt and long-term creditors

Owners' equity. The difference between the total value of the assets (current and non-current) and the total value of the liabilities (current and non-current) is the shareholder's equity (or ordinary equity or owners' equity)

This feature of the statement of financial position is intended to reflect the fact that if the firm were to sell all of its assets and use the money to pay off its debts, then whatever residual value remained would belong to the shareholders. So, the balance sheet ‘balances’ because the value of the left side always equals to the value on the right side. That is, the value of the firm’s assets is equal to the sum of its liabilities and shareholder’s equity:

$$\text{NCA} + \text{CA} = \text{CL} + \text{NCL} + \text{E} \text{ (Assets = Liabilities + Shareholders' equity)}$$

Examples

Lecture example 1: a company has total assets of £170, current liabilities of £30, non-current liabilities of £50. What is its equity?

$$\text{NCA} + \text{CA} = \text{CL} + \text{NCL} + \text{E}$$

$$170 = 30 + 50 + x$$

$$170 = 80 + x$$

$$90 = x$$

Net working capital

Net working capital — current assets less current liabilities.

Net working capital is positive when current assets exceed current liabilities. It is important to ensure that net working capital is positive. Positive net working capital means that enough cash will be available to pay off liabilities arising. This is not always true however, as it depends on the industry.

### **5.3 The Income Statement (Statement of Profit and Loss and Consolidated Income)**

Income statement — financial statement summarising a firm’s performance over a period of time

The income statement measures performance over some period of time, usually a quarter, six months or a year. The income statement equation is:

$$\text{Net income (profit for the year)} = \text{revenues} - \text{expenses}$$

If you think of the statement of financial position as a snapshot, then you can think of the income statement as a video recording covering the period between before and after pictures

Notes:

- Profit for the year is the same as net income.
- Profit before interest and tax can also be seen in certain income statements
- EBIT can also be seen, which is earnings before interest and tax

Contents of income statement

- The first thing reported in an income statement would usually be revenue and expenses from the firm's principal operations
- Subsequent parts include, among other things, financing expenses such as interest paid.
- Taxes paid are reported separately as well for example
- The last item to be included is net income (the so-called bottom line)

Net income is often expressed on a per-share basis and called earnings per share (EPS)

Cash Flow Statement

Operating cash flow — cash generated from a firm's normal business activities.

Total cash flow — the total of cash flow from operating activities, investing activities and financing activities.

Cash flow is the most important item to take from financial statements. It is NOT the same as net income. By cash flow we mean the difference between the cash that came in and the cash that went out.

Cash flows that arise because of the firm's core operations are known as operating cash flow/activities. When a company buys or sells a warehouse, this is a long-term investment that will span many years, and a cash flow of this type relates to the firm's long-term investing activities. Finally, if a firm raises cash in the form of equity or debt, the cash flow would be part of its financing activities. Any cash flow that occurs can be identified as one of these three components:

Total cash flow

- = Cash flow from operating activities
- + Cash flow from investing activities
- + Cash flow from financing activities

Below is a comprehensive example of a statement of cash flows.

Operating cash flow — cash generated from a firm's normal business activities.

Total cash flow — the total of cash flow from operating activities, investing activities and financing activities.

- Interest received for example, is in investing activities
- Dividends paid for example is in financing activities

#### Cash flow from operating activities

Operating cash flow refers to the cash flow that results from the firm's day to day activities of producing and selling. Certain aspects are not included in this, for example:

- Expenses associated with the firm's financing of its assets or the purchase of buildings are not included
  - Depreciation is also not included
  - Interest is not included

Operating cash flow is an important number because it tells us on a basic level whether a firm's cash inflows from its business operations are sufficient to cover its everyday cash outflows. Hence, a negative operating cash flow is a bad sign.

The only 'financial' exception that can be entered into the section is when we are considering the accounts of a financial institution, such as a bank, where interest payments and receipts relate directly to operating income. Also, taxes are included because they are paid in cash.

#### Cash flow from investing activities

Cash flow from investing activities is cash generated or expended from a firm's long-term investments. It is the money spent on non-current assets less money received from the sale of non-current assets. Examples of entries that go in this section include:

- PPE (property, plant and equipment)

- Interest received

Cash flow from investing activities can be positive if the firm sold off more assets than it purchased.

#### Cash flow from financing activities

Cash flow from financing activities is cash generated or expended as a result of its debt and equity choices. The last major component of a firm's cash flow comes from any actions it has taken during the year to raise cash from investors. The company may also have paid back outstanding borrowings, or repurchased its own shares. Cash flow from financing activities can be substantial.

#### Net cash flow

Given the figures we've come up with, we're ready to calculate cash flow for the firm. The total cash flow is found by adding the cash flow from operating activities, to the cash flows from investing and financing activities.

**Table 5.1**

### Cash Flow of Enterprise

Cash Inflows	Cash Outflows
Operational Activity :	
o from sale of goods and services; o in form of revenues from crediting (interest) and securities (dividends).	o payments to suppliers for goods and services; o salaries payments; o interest payments for credits; o tax payments.
Investments Activity:	
o assets sale; o debts sale; o interest and dividends sale.	o real assets purchase; o finance investments; o debts purchase.
Finance Activity:	
o debt obtaining; o Statutory capital sale, obtaining interest and dividends.	o credit repayment (body of the credit); o dividends returning; o purchase of personal stocks.

Ways Companies Can Augment Reported Cash Flow. These methods include:

- Sales - Sell the receivables to a factor for instant cash. (leading)
- Inventory - Don't pay your suppliers for an additional few weeks at period end. (lagging)

- Sales Commissions - Management can form a separate company and act as its agent. The book of business can then be purchased quarterly as an investment.
- Wages - Remunerate with stock options.
- Maintenance - Contract with the predecessor company that you prepay five years worth for them to continue doing the work
- Equipment Leases - Buy it
- Rent - Buy the property (sale and lease back, for example).
- Oil Exploration costs - Replace reserves by buying another company's.
- Research & Development.
- Consulting Fees - Pay in shares from treasury since usually to parties.
- Interest - Issue convertible debt where the conversion rate changes with the unpaid interest.
- Taxes.

#### 5.4 Ratio Analysis

Financial ratios — relationships determined from a firm's financial information and used for comparison purposes.

One of the main ways to understand how healthy a company is and how well it has performed is to carry out a ratio analysis and compare them to the ones of competitors. There are many types of ratios:

1. Liquidity ratios
2. Financial leverage ratios
3. Turnover ratios
4. Profitability ratios
5. Market value ratios

##### 1. Liquidity ratios/short-term solvency ratios

These are intended to provide information about the firm's liquidity, and these ratios are sometimes called *liquidity measures*. The primary concern is **the firm's ability to pay its bills over the short run without undue stress**. They focus on current assets and current liabilities. Liquidity ratios are particularly interesting to short-term creditors.



The higher the liquidity ratio:

- The more liquid/solvent the company is in the short-term
- Less risk of financial distress in the short-term

The 'norm' will vary by industry. For example, a supermarket chain will have low accounts receivable (because customers pay for goods before leaving the store) but high accounts payable and inventories.

Current ratio (coverage) =  $\frac{\text{current assets}}{\text{current liabilities}}$

Inventory is often the most illiquid current asset. Relatively large inventories are often sign of short-term trouble. The firm may have overestimated sales, and overbought or overproduced as a result. In this case, the firm may have a substantial portion of its liquidity tied up in slow-moving inventory.

## 2. Financial leverage/long-term solvency ratios

Long-term solvency ratios are intended to address **the firm's long-term ability to meet its obligations**, or, more generally, its financial leverage.

The *lower* the debt ratio or debt-equity ratio and the *higher* the equity multiplier or interest cover ratios:

- The more liquid/solvent the company is in the long-term
- Less risk of financial distress in the long-term

These ratios are of particular interest to banks and other potential bond investors or when bidding for a long-term contract.

Total debt ratio =  $\frac{\text{total assets} - \text{total equity}}{\text{total assets}}$

The total debt ratio takes into account all debts of all maturities to all creditors.

Debt-equity ratio =  $\frac{\text{total debt}}{\text{total equity}}$

Equity multiplier =  $\frac{\text{total assets}}{\text{total equity}}$

Interest cover ratio/times interest earned ratio

Interest cover ratio =  $\frac{\text{EBIT}}{\text{interest}}$

Operating profit is also known as *earnings before interest and taxes* (EBIT). As the name suggests, this ratio measures how well a company has its interest obligations covered, and it is often called the *interest coverage ratio*.

Cash coverage ratio =  $(\text{EBIT} + \text{depreciation})/\text{interest}$

The 'EBITDA' (earnings before interest, taxes, depreciation and amortization)

or

'EBITD' (earnings before interest, taxes and depreciation) is a basic measure of the firm's ability to generate cash from operations, and it is frequently used as a measure of cash flow available to meet financial obligations.

### 3. Turnover ratios/asset utilization ratios

The ratios in this section can all be interpreted as measures of turnover. What they are intended to describe is **how efficiently or intensively a firm uses its assets to generate sales.**

*Inventory and asset turnover:*

- As long as we are not running out of stock and thereby foregoing sales, the *higher* this is, the more efficiently we are managing inventory

*Receivables and inventory days*

- The *lower* this is, the lower the cash tied up in receivables/inventory and the quicker customers pay/inventory is sold

Inventory turnover =  $\frac{\text{cost of goods sold}}{\text{inventory}}$

Days' sales in inventory =  $\frac{365 \text{ days}}{\text{inventory turnover}}$

If we know the inventory turnover, we can immediately figure out how long it took us to turn it over on average.

Receivables turnover =  $\frac{\text{sales}}{\text{trade receivables}}$

This ratio allows us to see how fast we collect on our sales. However, this ratio may make more sense if we convert it to days:

Days' sales in receivables =  $\frac{365 \text{ days}}{\text{receivables turnover}}$

Sometimes this ratio is also called the *average collection period (ACP)*.

Total asset turnover =  $\frac{\text{sales}}{\text{total assets}}$

### 4. Profitability ratios

In one form or another, they are intended to measure **how efficiently a firm uses its assets and manages its operations.** The focus in this group is net income.

Profit margin =  $\frac{\text{net income}}{\text{sales}}$

A relatively high profit margin is obviously desirable. This situation corresponds to low expense ratios relative to sales. However, we hasten to add that other things are often not equal. For example, lowering our sales price will usually increase unit volume, but will normally cause profit margins to shrink. Total profit (or more important, operating cash flow) may go up or down; so, the fact that margins are smaller isn't necessarily bad.

However, high volume companies can be profitable with small profit margins.

Return on assets (ROA) =  $\frac{\text{net income}}{\text{total assets}}$

ROA is a measure of profit per unit cash of assets. ROA varies according to industry

Return on equity (ROE) =  $\frac{\text{net income}}{\text{total equity}}$

ROE is a measure of how the shareholders fared during the year. Because benefiting shareholders is our goal, ROE is the true bottom-line measure of performance in an accounting sense.

#### 5. Market value ratios

This final group of measures is based, in part, on information not necessarily contained in financial statements — the market price per share of equity. They measure the long term success of the company and shareholders value/returns.

Earnings per share =  $\frac{\text{earnings (=net income)}}{\text{shares in issue}}$

This ratio measures return per share to shareholders.

Price-earnings (P/E) ratio =  $\frac{\text{price per share}}{\text{earnings per share}}$

The P/E ratio is simply net income divided by the number of shares. This measures how much investors are willing to pay per unit (e.g. per GBP 1 or EUR 1) of current earnings. Higher P/E can indicate expectation of strong future growth.

Market-to-book ratio =  $\frac{\text{market value per share}}{\text{book value per share}}$

This gives an indication of how successful the company has been over time in creating value for its shareholders. In a loose sense, this compares the market value of the firm's investments with their cost. A value less than 1 could mean that the firm has not been successful overall in creating value for its shareholders. This ratio focuses on historical costs, which are less relevant however.

PEG ratio =  $\frac{\text{P/E ratio}}{\text{earnings growth rate}}$

This gives an indication of whether shares are under-valued (PEG > 1) or over-valued (PEG < 1) against projected growth rates.

Tobin's Q =  $\frac{\text{market value of firm's assets (=debt+equity)}}{\text{replacement cost of firm's assets}}$ . This is the market value of the firm's assets divided by their replacement cost. Firms with high Q ratios tend to be those with attractive investment opportunities or significant competitive advantages (or both).

Q ratios are difficult to calculate with accuracy, because estimating the replacement cost of a firm's assets is not an easy task. Also, market values for a firm's debt are often unobservable.

*Note:* firm value is located as equity plus debt value this time.

**Table 5.2**

**Ratios**

Ratios	Calculation
	<b>Liquidity ratios</b>
Current ratio	Current assets / current debt
Acid-test ratio	(Current assets – inventory) / current debt
Net working capital	Current assets – current debt
	<b>Debt ratios</b>
Debt-to-Equity Ratio	Total debt / Shareholders' equity (net worth)
Debt-to-Total-Assets Ratio	Total debt / Total assets
Long-Term-Debt-to-Total-Capitalization Ratio	Long-Term Debt / Total Capitalization (Total Capitalization = Shareholders' Equity + Long-Term Debt)
	<b>Coverage ratios</b>
Interest Coverage Ratio	Earning before interest and taxes (EBIT) / interests
	<b>Activity Ratios</b>
Receivable Turnover (RT) Ratio	Credit sale / accounts receivable
Receivable Turnover in days (RTD) (average receivable period)	365 (360) / RT Ratio
Inventory Turnover (IT) Ratio	Cost of goods / volume of inventory
Inventory Turnover in days (ITD)	365 (360) / IT Ratio
Payable Turnover (PT) Ratio	Purchase in credit / accounts payable
Payable Turnover in days (PTD) (average payable period)	365 (360) / PT Ratio
Negotiability of Assets Ratio	Total sale / total assets
Operating cycle	ITD + RTD

Cash cycle	Operating cycle – PTD or ITD + RTD –PTD
	<b><i>Profitability Ratios</i></b>
Profitability in Relation to Sale (Gross Profit Margin)	Gross Income (or Revenue minus Cost of goods) / Sale Volume
Profitability in Relation to Sale (Net Profit Margin)	Net Profit / Sale Volume
Profitability in Relation to Investment – Rate to return of investment or to assets (ROI or ROA)	Net Profit / Volume of Assets
Profitability in Relation to Equity - Rate to return of Equity (ROE)	Net Profit / Private Capital
Joint Stock Capital Coefficient or Revenue Multiplier	Assets / Private Capital

## 5.5 Using Financial Statement Information

Time trend analysis — looks at the same ratio over a number of years.

- Peer group analysis — compares ratio with similar firms/companies in the same industry.
- Inappropriate peers — some companies operate in several industries and have different accounting standards.
- Benchmarking analysis — you may want to compare your firm with similar firms of the industry
- Sources of information — financial websites e.g. Yahoo, Finance, Reuters etc. Company accounts can be downloaded from their websites.

Problems with financial statement analysis

- There is no underlying theory to help us identify which quantities to look at or guide us in establishing benchmarks
- There is not much help in terms of financial guidance for making judgements about value and risk e.g. we can't say which ratios matter the most
- Differences between financial statements outside of Europe makes it hard to compare financial statements with companies that are across national borders
- Different firms use different accounting procedures
- Different firms end their fiscal years at different times
- Firms in seasonal businesses will have difficulty comparing statements because of fluctuations throughout the year.

## **Topic 6. Financial planning**

### ***Content***

#### ***6.1 The essence of financial planning***

#### ***6.2 The main objectives of financial planning***

#### ***6.3 Important warning in financial planning***

### **6.1 The essence of financial planning**

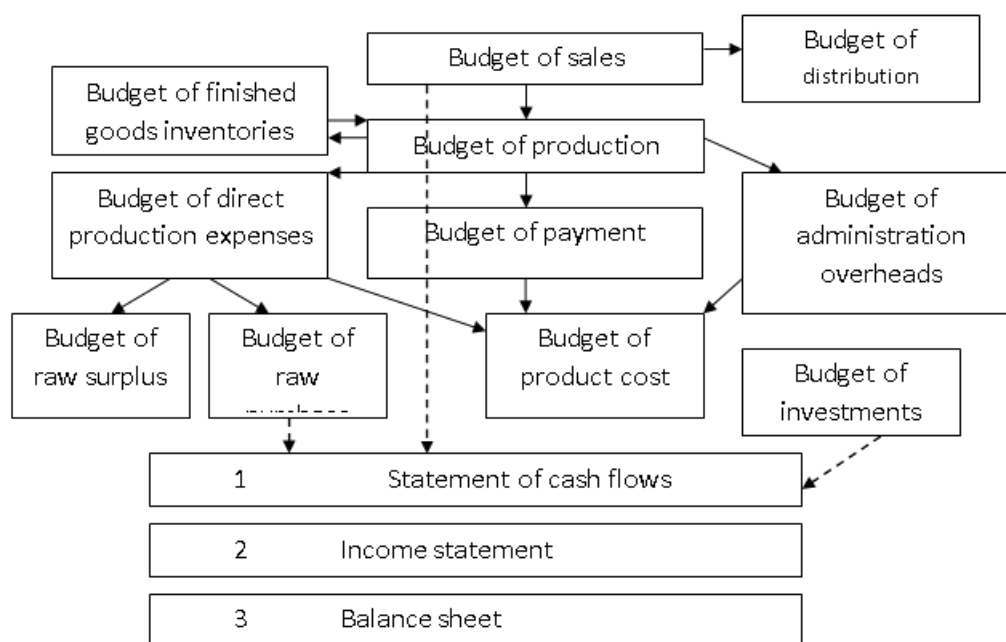
Financial planning is a process of setting objectives, assessing assets and resources, estimating future financial needs, and making plans to achieve monetary goals. Many elements may be involved in financial planning, including investing, asset allocation, and risk management. Tax, retirement, and estate planning are typically included as well.

Financial planning plays a starring role in helping individuals get the most out of their money. Careful planning can help individuals and couples set priorities and work steadily towards long-term goals. It may also provide protection against the unexpected, by helping individuals prepare for things such as unexpected illness or loss of income.

In general usage, a financial plan can be a budget, a plan for spending and saving future income. This plan allocates future income to various types of expenses, such as rent or utilities, and also reserves some income for short-term and long-term savings. A financial plan can also be an investment plan, which allocates savings to various assets or projects expected to produce future income, such as a new business or product line, shares in an existing business, or real estate.

In business, a financial plan can refer to the three primary financial statements (balance sheet, income statement, and cash flow statement) created within a business plan. Financial forecast or financial plan can also refer to an annual projection of income and expenses for a company, division or department. A financial plan can also be an estimation of cash needs and a decision on how to raise the cash, such as through borrowing or issuing additional shares in a company.

While a financial plan refers to estimating future income, expenses and assets, a financing plan or finance plan usually refers to the means by which cash will be acquired to cover future expenses, for instance through earning, borrowing or using saved cash.



**Fig.6.1 The algorithm of financial planning**

In general, **financial planning** is the substantiation of plans in the field of financial activity of the enterprise, which relate to the creation, distribution and use of financial resources.

A **financial plan** is a document that is the result of financial planning, reflecting the provision of the enterprise with the necessary financial resources and aimed at maintaining the efficiency of its financial activities in the planning period.

The purpose of the enterprise's financial plan is to substantiate the planned amount of financial resources, sources of their formation and directions of use.

A financial plan is a structural element of a system of plans. The plan system has its own hierarchy.

1. Mission of the enterprise
2. Corporate (corporate) strategy
3. Production strategy; financial strategy; marketing strategy; HR management strategy; innovative strategy; other functional strategies.

Details of the company's goals, which are defined by functional strategies, are carried out during the development of long-term, current and operational plans. That is, each functional plan, including the financial plan, is detailed in term plans.

Prospective (long-term) financial plan - determines the directions and methods of realizing the company's strategic goals in the field of financial activity and forms tasks and parameters for the current financial plan.

Current financial plan – Specifies the indicators of the long-term financial plan, determines the sources of financing, the structure of income and expenses, the structure of assets and liabilities, focuses on ensuring the constant solvency of the enterprise and creating a basis for justifying the operational financial plan.

Operational financial plan (enterprise budget or budgeting) – specification of indicators of the current financial plan to the level of planned tasks for direct executors.

There are different methods of justifying the financial plan of the enterprise:

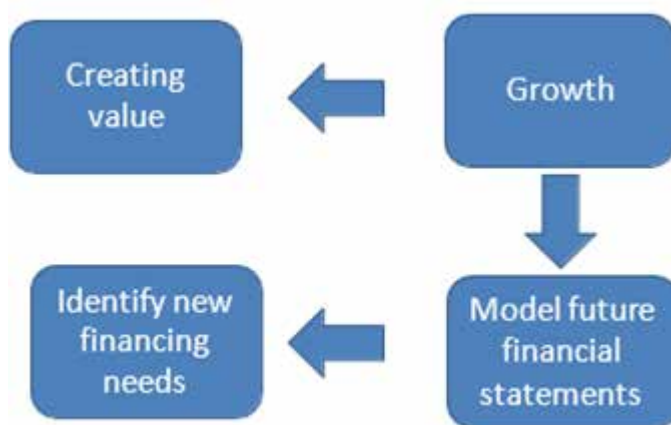
1. balance sheet;
2. normative;
3. computational and analytical;
4. optimization;
5. economic and mathematical;
6. economic and statistical.

The validity of the choice of planning methods is one of the important factors of the quality of the developed planning documents and the level of efficiency of the business entity as a whole.

## **6.2 The main objectives of financial planning**

A lack of effective long-range planning is a commonly reason for financial distress and loss.





**Fig. 6.2 Creating value**

Financial planning helps to plan for the future and helps to establish guidelines for change and growth in a firm. An example would be looking at the consequences of a growth strategy by modelling financial statements

Thanks to financial planning it is possible to:

- Examine interactions— the financial plan must make explicit the linkages between investment proposals for the different operating activities of the firm and its available financing choices. In other words, if the firm is planning on expanding and undertaking new investments and projects, where will the financing be obtained to pay for this activity?
- Explore options — the financial plan allows the firm to develop, analyse and compare many different scenarios in a consistent way. Various investment and financing options can be explored, and their impact on the firm’s shareholders can be evaluated. Questions concerning the firm’s future lines of business and optimal financing arrangements are addressed. Options such as marketing new products or closing plans might be evaluated.
- Avoid surprises — financial planning should identify what may happen to the firm if different events take place. In particular, it should address what actions the firm will take if things go seriously wrong or errors are made.
- Ensure feasibility and internal consistency — at times, the linkages between the business’ various goals and different aspects of the business are difficult to see. A

financial plan makes these linkages explicit and imposes a unified structure for reconciling goals and objectives, hence the goals are made consistent and feasible.

The initial indicators of the income and expenditure plan are:

1. revenue from the sale of products - this indicator is the production program of the enterprise;
2. minimum amount of revenue - calculation of the break-even point;
3. reserve of financial strength (threshold of profitability, margin of safety);
4. target amount of revenue.
5. the possible volume of product sales;
6. calculation of the volume of indirect taxes;
7. calculation of production cost of sold products;
8. determination of management and sales costs;
9. determination of gross profit;
10. determination of profit from operating activities;
11. determination of profit (loss) from ordinary activities before taxation;
12. determination of the net profit (loss) of the enterprise.

Plan of receipt and use of funds

The purpose of the plan is to determine the volume and sources of the formation of financial resources, their distribution among all areas of financial activity to ensure the solvency of the enterprise during the planned period.

Approximate form of the plan: form No. 3 of the cash flow report serves.

The movement of funds is carried out in three main directions:

1. flow of funds (income - expenses) from operational activities;
2. from investment activities;
3. from financial activities.

And also considers the balance of funds at the beginning of the period; the effect of exchange rate changes on the balance of funds; balance of funds at the end of the period.

A payment calendar is an operational financial planning tool that details the flow of cash.

Balance sheet of the enterprise. The purpose of developing a balance sheet is to assess the company's need for certain types of assets and determine possible sources of their financing.

Therefore, the financial plan in the process of functioning of the enterprise is a documentary basis for determining the target orientations of the implementation of financial activities in the future and the directions of their achievement.

### **6.3 Important warning in financial planning**

Financial planning models do not always ask the right questions. A primary reason is that they tend to rely on accounting relationships and not financial relationships.

In particular, the three basic elements of the firm value tend to get left out — cash flow size, risk and timing. Because of this, financial planning models sometimes do not produce meaningful clues about what strategies will lead to increases in value. Instead, they divert the user's attention to questions concerning the debt-equity ratio and firm growth for example.

Additionally, financial models are often too simple. The ones being used are accounting based models at heart, which are useful for pointing out inconsistencies and reminding us of financial needs, but they offer little guidance concerning what needs to be done about these problems.

Lastly, financial planning is an iterative process. Plans are created, examined and modified over and over, and processed by different parties in different departments, where employees all have different plans on how to reach a certain goal. The final plan therefore will contain different goals in different areas, and also satisfy many constraints. Hence, such a plan doesn't need to be a dispassionate assessment of what we think the future will bring, but instead a means of reconciling the planned activities of different groups and a way of setting common goals for the future.

## **Topic 7. Financial rehabilitation of enterprise**

### *Content*

#### *7.1 The financial condition of the enterprise*

#### *7.2. The Effect of Financial Leverage*

#### *7.3 The Bankruptcy Process*

#### *7.4 Financial rehabilitation of agricultural enterprises*

### **7.1 The financial condition of the enterprise**

The financial condition of the enterprise is a complex concept that reveals the result of the interaction of all elements of the system of financial relations of the enterprise, is determined by a set of production and economic factors and is characterized by a system of indicators that reflect the availability, placement and use of financial resources.

The purpose of the analysis of the financial state of the enterprise:

1. - to evaluate the previous activity of the enterprise:
- 2 - to prepare the information necessary for further forecasting of its financial state.

The goal is realized on the basis of solving the following tasks:

- Determination of the financial state of the enterprise at the time of the study;
- Determination of trends and regularities in the development of the enterprise for the period under study;
- Identification of problem areas that negatively affect the financial condition of the enterprise;
- Identification of reserves that the company can use to improve its financial condition.

The main elements that determine the financial condition of the enterprise

**Liquidity** of assets is their ability to turn into ready means of payment without loss of book value, which ensures the appropriate level of solvency of the enterprise.

**Solvency** of the enterprise is its ability to settle its financial obligations on time and in full.

**Financial stability** is a characteristic of the stability of the company's financial condition, which is ensured by a high rate of equity capital in the total amount of capital.

The **business activity** of the enterprise is characterized by indicators of turnover of assets and capital.

The **profitability** of the enterprise is characterized by its ability to generate profit in the process of economic and financial activity.

### **Methods of diagnosing the financial state of the enterprise**

The system for analyzing the company's financial condition consists of the following basic elements:

- Horizontal (trend) analysis
- Vertical (structural) analysis
- Comparative (spatial) analysis
- Analysis of financial ratios (R-analysis)
- Integral (factor) analysis

To diagnose the financial condition in financial analysis, various models are used, which make it possible to structure and identify the relationships between the main indicators.

**Table 7.1**

### **Classification of models**

<b>Classification criterion</b>	<b>Models of diagnostics of the financial state of the enterprise</b>
Depending on the purpose of management	<ul style="list-style-type: none"> <li>- Analytical (descriptive) models</li> <li>- Optimization models</li> <li>- Simulation models</li> <li>- Stochastic models</li> </ul>
By time criterion	<ul style="list-style-type: none"> <li>- Static models</li> <li>- Dynamic models</li> </ul>
By functional belonging	<ul style="list-style-type: none"> <li>- Deterministic</li> <li>- Non-deterministic</li> </ul>
Depending on the degree of aggregation	<ul style="list-style-type: none"> <li>- Aggregated (combined)</li> <li>- detailed</li> </ul>
According to the possibility of rationing	<ul style="list-style-type: none"> <li>- Normative</li> <li>- Irregular</li> </ul>
Depending on the type of deterministic model	<ul style="list-style-type: none"> <li>- Additive (algebraic sum of model indicators)</li> </ul>

	<ul style="list-style-type: none"> <li>- Multiplicative (product of model indicators)</li> <li>- Multiples (ratio of model indicators)</li> <li>- Mixed (combination of the above models)</li> </ul>
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Therefore, the systematic control of the company's financial condition allows us to quickly identify negative aspects of the company's work and take measures to eliminate them in a timely manner.

## 7.2 The Effect of Financial Leverage

The effect of financial leverage depends on the company's EBIT (earning before interest and taxes). When EBIT is relatively high, leverage is beneficial. Leverage increases the returns to shareholders, as measured by both ROE and EPS (earning per share). However, shareholders are exposed to more risk since EPS and ROE are much more sensitive to changes in EBIT.

The more debt financing a firm uses in its capital structure, the more financial leverage it employs. Financial leverage acts to magnify the gains and losses to shareholders.

Long-term solvency ratios are intended to address the firm's long-term ability to meet its obligations, or, more generally, its financial leverage.

The lower the debt ratio of debt-equity ratio and the higher the equity multiplier or interest cover ratios:

- The more liquid/solvent the company is in the long-term
- Less risk of financial distress in the long-term

These ratios are of particular interest to banks and other potential bond investors or when bidding for a long-term contract.

$$\text{Total debt ratio} = (\text{total assets} - \text{total equity}) / \text{total assets}$$

The total debt ratio takes into account all debts of all maturities to all creditors.

$$\text{Debt-equity ratio} = \text{total debt} / \text{total equity}$$

$$\text{Equity multiplier} = \text{total assets} / \text{total equity}$$

$$\text{Interest cover ratio} = \text{EBIT} / \text{interest}$$

Operating profit is also known as earnings before interest and taxes (EBIT). As the name suggests, this ratio measures how well a company has its interest obligations covered, and it is often called the interest coverage ratio.

$$\text{Cash coverage ratio} = (\text{EBIT} + \text{depreciation})/\text{interest}$$

A problem with the TIE ratio is that it is based on operating profit, which is not really a measure of cash available to pay interest. The reason is that depreciation and other non-cash expenses have been deducted out. Because interest is definitely a cash outflow (to creditors), one way to define the cash coverage ratio is like above.

The 'EBITDA' (earnings before interest, taxes, depreciation and amortization) or 'EBITD' (earnings before interest, taxes and depreciation) is a basic measure of the firm's ability to generate cash from operations, and it is frequently used as a measure of cash flow available to meet financial obligations.

### **7.3 The Bankruptcy Process**

Debt financing increases the risk of financial distress. Firms that cannot or choose not to make contractually required payments to creditors have two basic options: liquidation or reorganization.

The consequences of using debt is the possibility of financial distress. Financial distress can be defined in several ways:

1. Business failure: typically used when the business has terminated with a loss to creditors
2. Legal bankruptcy: firms or creditors bring petitions to a federal court for bankruptcy.
3. Technical insolvency: a firm is unable to meet its financial obligations
4. Accounting insolvency: firms with negative net worth on the books, when total liabilities exceed the value of total assets.

Firms who cannot pay creditors have two options: liquidation or reorganization. Liquidation means termination of the firm as a going concern and involves selling off the assets of the firm. Reorganization is the keeping the firm open as a going concern and involves issuing new securities to replace old securities.

A liquidation involves the following steps:

(1) a petition is filed in federal court by the corporation (voluntary) or by creditors (involuntary),

(2) a trustee is elected to take over the assets and attempt to liquidate them,

(3) the proceeds are distributed among the creditors when the administration costs are paid,

(4) any remaining proceeds will go to the shareholders.

The rules in the distribution of the proceeds of the liquidation is a reflection of the absolute priority rule (APR):

1. Administrative expenses associated with the bankruptcy
2. Other expenses arising after the filing
3. Wages, salaries, commissions
4. Contributions to employee benefit plans
5. Consumer claims
6. Government tax claims
7. Unsecured creditors
8. Preferred stockholders
9. Common stockholders

Secured creditors are entitled to the proceeds from the sale of the secured property. If the cash generated is insufficient they join with the unsecured creditors in dividing the remaining liquidating value. If the secured property is liquidated for sufficient proceeds, the net proceeds are used to pay the unsecured creditors.

In real life, the APR is frequently not followed and the priority of payment is up to negotiation.

The typical sequence in reorganization is:

(1) voluntary/involuntary petition is filed,

(2) a federal judge approves/denies the petition,

(3) the corporation continues to run the business in most cases,

(4) the corporation submits a reorganization plan,

(5) creditors are divided into classes and when the majority accepts the plan, the class agrees,



(6) after acceptance by creditors the plan is confirmed by court,

(7) payments in cash, property and securities are made to creditors and shareholders and

(8) for a fixed length of time, the firm operates according to the provisions of the reorganization plan.

Sometimes, going into bankruptcy is a valuable option. Creditors often have to wait until the outcome of the bankruptcy to find out how much they will get paid, which gives the firm time to evaluate its option.

Even some bankruptcy filings are strategic actions intended to improve a firm's competitive position.

Expected future losses or expected insolvency in the future may be reasons to file for bankruptcy.

Firms can avoid bankruptcy filings by trying to work with the creditors to which the firm has defaulted on their contract. Voluntary arrangement to restructure can be and often are made. This may involve extension, which postpones the date of payment, or composition, which allows a reduced payment.

### Bankruptcy Costs

One limit to the amount of debt a firm might use comes in the form of bankruptcy costs. As the debt-equity ratio rises, so too does the probability that the firm will be unable to pay its bondholders what was promised to them.

In principle, a firm is bankrupt when the value of its asset equal the value of its debt and the value of equity is then zero. Stockholders turn over control of the firm to the bondholders. However, this comes at a cost. The direct costs are those directly associated with bankruptcy and include the legal and administrative expenses.

Bankruptcy is expensive and the cost of avoiding a bankruptcy filing incurred by a firm in financial distress are called the indirect bankruptcy costs. A firm in financial distress has problems in meeting its debt obligations. The financial distress costs are the indirect and direct costs associated with going bankrupt or experiencing financial distress.

Stockholders have a strong incentive to avoid a bankruptcy filing because they generally lose all of their investment. Bondholders, on the other hand, want their money and are more concerned with protecting the value of the firm's assets and seek for bankruptcy. The battle has major impacts on the firm; employees leave, valuable investments are not taken etcetera. These are the indirect costs of bankruptcy.

#### **7.4 Financial rehabilitation of agricultural enterprises**

The goal of financial rehabilitation is to cover current losses, to restore and maintains liquidity and solvency of enterprises, to improve the structure of current assets and to raise the financial funds which are essential for providing industrial rehabilitation.

Financial rehabilitation of agricultural enterprises be examined as restoration of paying capacity, coverage of losses, formation of the financial potential for the growth on the basis of ecologization of production technologies, preservation of high-quality parameters of agrosystem.

Carrying out rehabilitation of agricultural enterprises should be connected with land protection as a means of agricultural production and natural resource. The firm basis for rational land use in agriculture would be formed when proving rehabilitation of agricultural enterprises with regard to ecological ingredient.

Anti-crisis management is one of the functional directions of the enterprise's management. This is a constant process of determination of the signs of crisis phenomena and realization of the grand plan aimed at their inadmissible spreading.

So, the crucial stage in anti-crisis management is external and internal environment rating of enterprise. In this regard, there is a need to carry out the qualitative effective analysis of the financial state which is the indicator of enterprise's capability to operate profitably at the market.

Determination of indications of enterprise state's becoming worse enables to prevent enterprise from going bankrupt and find the optimal ways of increasing financial stability. So, the analysis of the financial state of enterprise is essential stage in anti-crisis management.

Generalization and systematization of indicators which are used to foresee the crisis phenomena at the enterprise enable to distinguish the following groups:

- indicators of profitability;
- indicators of business activity;
- indicators of liquidity and solvency;
- indicators of financial stability.

But, the obtained results of the financial analysis unable to give a definite answer concerning possibility of enterprise's bankruptcy, because some indicators are reliable only in usual financial situation, the other – in critical zone. Hence, there is a need for creation of a specific combination of indicators and analysis of the obtained model.

The Ukrainian scientists created the two-factor model of calculation of bankruptcy probability for agricultural enterprises, which operate in the terms of economic instability. This model calculated bankruptcy probability with its own value of coefficients. It was assumed that the fact of bankruptcy would be determined by value of the indicators:

- 1) capital turn-over ratio (correlation between current assets and short-term liabilities);
- 2) financial reliance ratio (correlation between borrowed and invested resource and the total cost of assets);
- 3) absolute liquidity ratio (correlation between money, its equivalent and sum of payment at a fixed date).

The first index shows financial stability, the second one – financial reliance; both of them describe the quantitative side of factor indication.

The third index describes enterprise's capacity to take liabilities and is accepted as an effective indication.

It is obvious that under the other equal conditions the higher capital turn-over ratio is, the lower financial reliance ratio is, the less bankruptcy probability is. And on the contrary, enterprise is likely to go bankrupt with low capital turn-over ratio and high financial reliance ratio. If absolute liquidity ratio is equal to zero, enterprise is

going to become bankrupt. The situation is getting worse by the fact that it can't be managed to use overdue debts for complying with sanctions. Besides, considerable doubt exists as to possibility of quick and profitable realization of property, represented by worn-out means of production. In this plan the main task of financial service of enterprise should be financial rating and bankruptcy preventing without waiting for reorganization.

The scientists made bankruptcy model, adapted for agricultural enterprises. The following formula was obtained as a result of computer processing of original information:

$$Z = -1,3496 - 0,6183R1 + 0,6867R2$$

where:

R1 – capital turn-over ratio,

R2 – financial reliance ratio.

If  $Z = 0$ , we have equation of discriminant limit.

For enterprises where  $Z = 0$ , bankruptcy probability is equal to 50%.

If  $Z < 0$ , bankruptcy probability is less than 50% and is coming down along with  $Z$ .

If  $Z > 0$ , bankruptcy probability is more that 50% and is increasing along with

## TASKS FOR INDIVIDUAL WORK OF STUDENTS

### I. Practical Cases

#### Case 1.

Task: solve the case and make conclusions.

In the reporting period, products worth UAH 240,000 were produced with a total cost of UAH 182,000;

balances in warehouses of finished products at the beginning of the year equal UAH 20,000 at the end of the year they decreased by 9%;

During the year, the products of the farm were sold in the amount of 18 000 hryvnias. At a cost price of UAH 15.8 thousand;

received money in the form of paid fines in the amount of 3.8 000 hryvnias;

losses from non-realization operations in the amount of UAH 3.95 000;

repaid % for a bank loan in the amount of UAH 2.2 000;

repaid arrears for energy in the amount of UAH 8.3 thousand.

Profit is taxed at the rate of 18%

***Calculate the size of the consumption fund and the accumulation fund of the enterprise, if they are formed in a ratio of 3:1***

#### Case 2.

Task: classify according to the activity of the enterprise incoming and outgoing cash flows, determine Cash Flow.

Data about enterprise activity:

Cash flow indices	Ukrainian Hryvna
Income from sales	80
Payment of counterparty invoices	320
Debt repayment	70
Other income from operating activities	50
Payment of taxes	105
Payment of cash dividends	120
Financing of capital investments	250

Income from investment activities	200
Mobilization of financial resources	90
Payment of interest on loans	5

### Case 3.

Task: It is necessary to define future value of investments and the amount of compound interest for the whole period of investing. Conditions:

Initial value of investments (P) = 100 thousands grn;

Discounted rate of return (i) = 12 %;

Investment period (n) = 3 years.

### Case 4.

Task: It is necessary to define present value of money in three years. Conditions:

Future value = 100 thousands grn;

Discounted rate of return (i) = 12 %;

Investment period (n) = 3 years.

### Case 5.

Task: Consider the time factor when developing a project

a) What is the present value of \$1000 in 6 years if  $r = 12\%$

b) What is the present value of \$1,000 in 12 years if  $r = 12\%$

Make conclusions.

### Case 6.

Using the following information, complete the balance sheet:

Long-term debt-to-equity – 0.5

Total assets turnover – 2.5

Average collection period – 18 days

Inventory turnover – 9 times

Gross profit margin – 10%

Acid-test ratio – 1

Assume a 360 day year and all sales on credit.

Balance sheet:

title	year	title	year
Cash		Notes and payables	100 000
Accounts receivable		Long-term debt	
Inventory		Common stock	100 000
Plant and equipment		Retained earnings	100 000
<b>Total Assets</b>		<b>Total liability and shareholders' equity</b>	

### Case 7.

Task: find the totals of cash flow from operations, cash flow from financing, cash flow from investments. Make conclusions.

Description	Amount (\$) totals (\$)
Cash flow from operations	
Sales (paid in cash)	+30
Materials	-10
Labour	-10
Cash flow from financing	
Incoming loan	+50
Loan repayment	-5
Taxes	-5
Cash flow from investments	
Purchased capital	-10
Total	

### Case 7.

The net cash flow only provides a limited amount of information. Compare, for example, the cash flows over three years of two companies. Make conclusions.

	Company A			Company B		
	Year 1	Year 2	year 3	Year 1	Year 2	year 3
Cash flow from operations	+20M	+21M	+22M	+10M	+11M	+12M
Cash flow from financing	+5M	+5M	+5M	+5M	+5M	+5M
Cash flow from investment	-15M	-15M	-15M	0M	0M	0M
Net cash flow	+10M	+11M	+12M	+15M	+16M	+17M

## II. Tests for possessing theoretical material

1. The obligatory payment to the budget of the proper level is:

- A) tax
- B) credit
- C) insurance payment
- D) dividends

2. How many groups are divided into simplified (unified) tax regime:

- A) 4
- B) 3
- C) 2
- D) 5

3. CASH IN STATEMENT OF LEGAL ENTITIES CONSIST OF:

- A) Cash in hand
- B) Demand deposits in banks
- C) Cash equivalents
- D) All of them

4. SHORT-TERM, HIGHLY LIQUID INVESTMENTS, READILY CONVERTIBLE INTO CASH, IS CALLED:

- A) Cash equivalents



- B) Demand deposit
- C) Cash in hand
- D) None of them

5. AMOUNTS READILY AVAILABLE TO PAY OFF DEBT OR TO USE IN OPERATIONS, IS CALLED:

- A) bank deposits
- B) currency and coins
- C) commercial paper
- D) treasure bills

6. THE SUMMARY OF CASH TRANSACTIONS DURING AN ACCOUNTING PERIOD, IS CALLED:

- A) Evaluation of profit
- B) Balance sheet
- C) Cash flow statement
- D) None of them

7. DEFINE THE TYPES OF CASH FLOW:

- A) Operating cash flow
- B) Investing cash flow
- C) Financing cash flow
- D) All of them

8. CASH RECEIVED FROM CUSTOMERS BELONG TO:

- A) Operating cash flow
- B) Investing cash flow
- C) Financing cash flow
- D) none of them

9. CASH USED ON PURCHASE OF NON-CURRENT ASSETS BELONG TO:

- A) Operating cash flow
- B) Investing cash flow
- C) Financing cash flow
- D) none of them

10. ISSUE OF PREFERENCE SHARES BELONG TO:

- A) Operating cash flow
- B) Investing cash flow
- C) Financing cash flow
- D) none of them

11. THE FIRST LEVEL OF PROFITABILITY, WHICH IS CALCULATED AS SALES MINUS THE COST OF GOODS SOLD, IS CALLED:

- A) Corporate profit
- B) Gross profit
- C) Cash flow
- D) Net profit

12. Local tax include:

- A) excise duty
- B) unified tax
- C) value added tax
- D) all of them

13. THE THIRD LEVEL OF PROFITABILITY WHICH IS CALCULATED AS OPERATING PROFIT MINUS TAXES AND INTERESTS, IS CALLED:

- A) Corporate profit
- B) Gross profit
- C) Cash flow
- D) Net profit

14. CASH PAID TO EMPLOYEES BELONG TO:

- A) Operating cash flow
- B) Investing cash flow
- C) Financing cash flow
- D) none of them

15. DEFINE THE PURPOSES OF CASH FLOWS STATEMENTS:

- A) Forecast future cash flows.
- B) Evaluate management decisions.

C) Determine the ability to pay dividends to stockholders'

D) All of them

16. When the amount earned on a deposit has become part of the principal at the end of a specified time period the concept is called:

A) discount interest

B) compound interest

C) primary interest

D) future value

17. The future value of \$100 received today and deposited at 6 percent for four years is:

A) \$126

B) \$ 79

C) \$140

D) \$116

18. As the interest rate increases for any given period, the future value interest factor will:

A) decrease

B) increase

C) remain unchanged

D) move toward 1

19. The future value of \$200 received today and deposited at 8 percent for three years is:

A) \$348

B) \$252

C) \$158

D) \$200

20. The amount of money that would have to be invested today at a given interest rate over a specified period in order to equal a future amount is called:

A) future value

B) present value

C) future value interest factor

D) present value interest factor

21. Time-value of money is based on the belief that a dollar that will be received at some future date is worth more than a dollar today.

A) true

B) false

22. Interest earned on a given deposit that has become part of the principal at the end of a specified period is called compound interest.

A) true

B) false

23. State tax include:

A) corporate income tax

B) value added tax

C) excise duty

D) all of them

24. For a given interest rate, the future value of \$100 increases with the passage of time. Thus, the longer the period of time, the greater the future value.

A) true

B) false

25. WHAT INDICATOR CHARACTERIZES THE PROFITABILITY ON ASSETS:

A) profit to cost;

B) profit to sales

C) profit to equity

D) profit to fixed and working capital.

26. The ratio that shows how much short-term debt can be repaid immediately is called the ratio:

A) coverage;

B) quick liquidity;

C) absolute liquidity.

D) none of them

27. Indicators that characterize the degree of profitability of shares are the coefficients:

A) profitability;

B) market activity;

C) business activity

D) capital structure

28. Indicator comparing results and costs are the coefficients:

A) solvency

B) profitability

C) business activity

D) liquidity

29. The financial condition of the enterprise depends on:

A) study of the results of economic activity of the enterprise

B) financial policy of the enterprise

C) efficient use of financial resources

D) the results of production, financial and economic activities of the enterprise

30. Analysis of financial and economic condition does not cover:

A) production and economic activities

B) analysis of markets

C) financial condition

31. Current assets include:

A) fixed assets

B) cash

C) funds

D) creditors

32. The obligations of the enterprise include:

A) retained earnings

B) trade receivables

C) bank loans

D) depreciation of fixed assets

33. The obligations of the enterprise include:

A) trade payable

B) share capital

C) trade receivables

D) financial investments

34. The functions of the tax include:

A) distribution and control

B) fiscal and regulatory

C) emission and control

D) all of them

35. Current trade receivables relate to:

A) obligations

B) non-current assets

C) current assets

D) equity

36. Define the main objectives of financial planning:

A) Avoid the financial surprises

B) Attract new investments

C) Explore the optimal financing arrangements

D) All of them

37. The amount of cash paid out to shareholders divided by net income, is called:

A) Retention ratio

B) Dividend payout ratio

C) Total debt ratio

D) Equity multiplier

38. The percentage of income that retain in business, is called:

A) Retention ratio

B) Dividend payout ratio

C) Total debt ratio

D) Equity multiplier

39. Retention ratio plus dividend payout ratio equals:

A) 0

B) 60%

C) 1

D) 10

40. Select sources for new financing of enterprise:

A) Reducing the dividend

B) Short-term borrowing

C) Issuing shares

D) All of them

41. The maximum growth rate that can be financed solely by retained earnings, not using external financing, is called:

A) Internal growth rate (IGR)

B) Return on assets (ROA)

C) Sustainable growth rate (SGR)

D) Retention ratio (b)

42. The maximum growth rate we can achieve without taking out any new external equity financing while maintaining a constant debt-equity ratio, is called:

A) Internal growth rate (IGR)

B) Return on assets (ROA)

C) Sustainable growth rate (SGR)

D) Retention ratio (b)

43. Note the determinants of the growth:

A) Profit margin

B) Total asset turnover

C) Equity multiplier

D) All of them

44. Increasing of this indicator reduces the growth:

A) Profit margin

- B) Equity multiplier
  - C) Dividend payout
  - D) Total asset turnover
45. They are the subjects of tax relations:
- A) individuals
  - B) legal entities
  - C) tax services
  - D) all of them
46. Identify weaknesses of financial planning:
- A) Financial models are often too simple
  - B) Financial planning is an iterative process
  - C) Influence of inflation and instability of the national currency exchange rate
  - D) All of them
47. The effect of financial leverage depends on:
- A) Earning before interest and taxes
  - B) Production cost
  - C) Marketing plan
  - D) All of them
48. Financial leverage increases the returns to:
- A) Suppliers
  - B) Marketing agent
  - C) Shareholders
  - D) All of them
49. The ratios of financial leverage show:
- A) Long-term solvency of the company
  - B) Assets turnover
  - C) Profit margin
  - D) All of them
50. Identify the indicator that characterizes the ratio of total assets to total equity:
- A) Quick liquidity



- B) Equity multiplier
- C) Profit margin
- D) Return on assets (ROA)

51. Identify the indicator that characterizes the ratio of net income to total assets:

- A) Quick liquidity
- B) Equity multiplier
- C) Profit margin
- D) Return on assets (ROA)

52. Identify the indicator that characterizes the ratio of net income to total equity:

- A) Quick liquidity
- B) Equity multiplier
- C) Profit margin
- D) Return on equity (ROE)

53. Define the type of financial distress of the company:

- A) Legal bankruptcy
- B) Technical insolvency
- C) Accounting insolvency
- D) All of them

54. What doesn't belong to goals of financial rehabilitation:

- A) Cover current losses of the company
- B) Maintain liquidity and solvency
- C) Formation of marketing plan
- D) Raise financial funds

55. Formation of an effective strategy for the recovery of the company, is called:

- A) Marketing plan
- B) Business plan
- C) Anti-crisis management
- D) None of them

56. Indirect taxes include:

- A) VAT, duty, excise tax

- B) unified tax, duty
- C) environmental tax, excise tax
- D) none of them

57. The internal factors of the financial crisis at the enterprise include:

- A) A high level of inflation
- B) Instability of economic and tax legislation
- C) Deficit in funding
- D) Increasing competition in the industry

58. What types of payments belong to direct taxes:

- A) excise tax
- B) duty
- C) corporate income tax
- D) VAT

59. Tax period established by:

- A) Tax Code of Ukraine
- B) Law of Ukraine on the State Budget
- C) Constitution of Ukraine
- D) The Civil Code of Ukraine

60. The tax legislation of Ukraine is based on the principles:

- A) the taxation universality
- B) fiscal sufficiency
- C) social justice
- D) all of them

### **III. Control questions for individual preparation**

1. What is the essence of economic (analytical) method of profit planning?
2. What is the essence of the method of direct calculation of profit planning from sales.
3. What is the essence of the strategy of financial rehabilitation?
4. In which case are payment claims used?
5. Types of bank accounts and the procedure for opening them.
6. Types of enterprise restructuring.
7. Types of sanctions for violation of settlement and payment discipline.
8. Revenue from sales of products and factors that affect it.
9. The impact of the state of settlement discipline on sales revenue.
10. Define the excise tax and what is the mechanism of its payment to the budget.
11. Define the cash flow of the enterprise.
12. Define normalized and non-normalized current assets, working capital and working capital.
13. Define the operating, investment and financial activities of the enterprise.
14. Define the essence of current assets, name their composition and structure.
15. Define the nature of taxes and the tax system. The main functions of taxes.
16. Define the essence of profit. What profit indicators do you know?
17. Define fixed, adjustable, free, indicative prices.
18. Give the classification of taxes by form of taxation, by economic content, by the level of government agencies that set taxes, by direction of use.
19. Describe the acceptance and aval lending to enterprises.
20. Describe the depreciation and amortization of fixed assets.
21. Describe the classification of loans.
22. Describe the classification of financial resources of the enterprise.
23. Describe the leasing lending.
24. Describe the main methods used in financial planning.
25. Describe the main financial sources of rehabilitation of the enterprise.
26. Describe the corporate income tax: who are the taxpayers.

27. Sources of working capital of the enterprise.
28. Sources of formation of financial resources of enterprises.
29. Income of the enterprise from financial transactions and other ordinary activities.
30. The economic essence of the cash equivalent?
31. The economic essence of the land tax. Base and rates of taxation for land plots.
32. According to which scheme is distributed and used the company's profits?
33. The content of financial work at the enterprise. Tasks and goals of enterprise financial management.
34. Information support for assessing the financial condition of enterprises
35. The mechanism of distribution of profits of the enterprise. Use of net profit of the enterprise.
36. The mechanism of profit generation from sales.
37. Give examples of enterprise income from equity participation and other financial income.
38. List the types of bank accounts in foreign currency.
39. List the types of bank accounts in national currency.
40. List the national taxes and fees.
41. List and explain the essence of the basic principles of organization of enterprise finance.
42. List the classification of working capital depending on the participation in the cycle, the methods of planning and sources of formation.
43. List the classification of prices depending on the types of economic activity.
44. List the methods of planning sales revenue.
45. List the local taxes and fees.
46. List the areas of assessment of the financial condition of the enterprise.
47. List the main stages of bank lending.
48. List the main indicators of the financial condition of enterprises.
49. List the indicators of the use of current assets and calculate them.

50. List the indicators of profitability of the enterprise and show the algorithm for their calculation.
51. List the components of the wholesale price of the enterprise or producer prices.
52. The need and methods for determining the need for working capital.
53. The need and importance of assessing the financial condition of enterprises.
54. Operational control over the receipt of sales revenue.
55. Organization and scope of checks.
56. Basic methods of calculating profitability.
57. Describe the operations with promissory notes.
58. Describe the calculations using letters of credit.
59. Describe the calculations of payment requests-orders.
60. Describe the calculations of payment orders.
61. Describe the characteristics and composition of cash receipts of enterprises.
62. Planning of profit from sales by the consolidated method of direct accounting.
63. Planning of profit from sales based on the cost of hryvnia products.
64. Tax on vehicle owners.
65. Value added tax, its essence and payment mechanism.
66. Land tax, its essence and payment mechanism
67. Indicators of the state and use of working capital of the enterprise.
68. The concept of funds, cash and financial resources.
69. The concept of liquidity and solvency of the enterprise and indicators that characterize them.
70. The concept of profitability and indicators that characterize it.
71. The concept of insurance stock and its calculation.
72. The concept of technological stock and its calculation.
73. The concept of transport stock and its calculation.
74. The concept, nature and place of corporate finance in the financial system.
75. The procedure for deducting enterprises to state trust funds.
76. The order of cash transactions.
77. Explain the difference between financial and operating leases.

78. Explain the nature and purpose of public lending.
79. Explain the nature and need for corporate lending.
80. Explain the essence and principles of bank lending to enterprises.
81. Principles and conditions of short-term bank lending to business entities.
82. The procedure for determining the debtor bankrupt and its liquidation.
83. Discover the economic essence of the rehabilitation of the enterprise.

## DETERMINATION OF STUDENTS' RATING

Assessment of student knowledge is on a 100-point scale and is translated into national assessments according to “Regulations on examinations and tests in NUBiP of Ukraine” (order of entry into force of 26.04.2023 Protocol № 10)

<b>Student rating, points</b>	<b>National assessment based on the results of thecompileation</b>	
	<b>exams</b>	<b>credits</b>
<b>90-100</b>	<b>Excellent</b>	<b>Credited</b>
<b>74-89</b>	<b>Good</b>	
<b>60-73</b>	<b>Satisfactory</b>	
<b>0-59</b>	<b>Unsatisfactory</b>	<b>Not credited</b>

To determine the rating of the student (listener) for mastering the discipline RDIS (up to 100 points) the obtained rating for certification (up to 30 points) is added to the rating of the student (listener) for academic work Rew (up to 70 points): RDIS = Rew + RAT.

## RECOMMENDED SOURCES OF INFORMATION

### Main

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3. Walid B. Financing Enterprises. Australia. Pearson, 2016. URL: <https://www.scribd.com/document/521357940/3b-NEW-Financing-Enterprises-200910-TEXTBOOK-2nd-Edn-New>
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### Additional

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