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## FINANCIAL PLANNING IN THE MANAGEMENT OF THE INDUSTRIAL ENTERPRISE

**Introduction.** Strengthening the responsibility of enterprises for the timeliness of all calculations raises the question of the availability of well-founded financial plans and methods of their calculations.

**Problem.** Ensuring timely settlements with the financial and credit system, employees, suppliers, fulfillment of basic financial tasks and achieving a stable financial condition requires a scientific organization of financial planning at every enterprise.

**The aim** of the article is to strengthen the scientific validity of financial planning at industrial enterprises, which will contribute to the adoption of effective management decisions.

**Methods.** A set of methods and approaches are applied: dialectical, synthesis, balance.

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## ФІНАНСОВЕ ПЛАНУВАННЯ В УПРАВЛІННІ ПРОМИСЛОВИМ ПІДПРИЄМСТВОМ

**Вступ.** Посилення відповідальності підприємств за своєчасністю здійснення всіх розрахунків гостро ставить питання про наявність обґрунтованих фінансових планів та методики їх розрахунків.

**Проблема.** Забезпечення своєчасних розрахунків з фінансовою, кредитною системою, своїми працівниками, постачальниками, виконання основних фінансових завдань та досягнення сталого фінансового стану вимагає наукової організації фінансового планування на кожному підприємстві.

**Мета** статті – посилення наукової обґрунтованості фінансового планування на промислових підприємствах, що сприятиме прийняттю ефективних управлінських рішень.

**Методи.** Застосовано сукупність методів та підходів: діалектичний, синтезу, балансовий.



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**Results.** An attempt was made to reveal theoretical and practical issues regarding the procedure for calculating the financial plan, separate recommendations were developed for its preparation and ensuring balance.

**Conclusions.** On a specific example it was developed the financial plan of an industrial enterprise, the procedure for balancing income and expenses and it was shown the determining the volume of loans as a tool for eliminating the shortage of cash. Further areas of improvement of the financial plan are the development of tax planning methods.

**Keywords:** financial plan, income and expenditure balance, cash-flow.

**JEL Classification:** E9; H3.

**Результати дослідження.** Розкрито теоретичні та практичні питання щодо порядку розрахунку фінансового плану, розроблено окремі рекомендації щодо його складання та забезпечення збалансованості.

**Висновки.** На конкретному прикладі розроблено фінансовий план промислового підприємства, показано порядок збалансування між доходами та витратами, визначення обсягу кредитів як інструменту усунення дефіциту грошових коштів. Подальші напрямки удосконалення фінансового плану полягають у розробленні методики податкового планування.

**Ключові слова:** фінансовий план, баланс доходів та витрат, грошові потоки.

**Introduction.** Strengthening the responsibility of enterprises for the timeliness of all calculations actualizes the issue of having sound financial plans. How economically justified the financial plan will be drawn up and how it will be executed depends largely on the financial situation of enterprises, the timeliness of salary payments, the fulfillment of obligations in terms of settlements with suppliers and payments to the budget, financing in the full amount of capital investments, creation in the necessary amounts reserve funds. The management decisions are made on the basis of the financial plan, in particular regarding the volume and terms of lending to enterprises, the implementation of capital repairs, revision of contracts regarding payment terms for products, etc. In fact, the quality of the enterprise's business plan and the influence of finance on all aspects of its production and economic activity largely depend on the quality of the development of financial plans.

**Problem.** Ensuring timely settlements with the financial and credit system, its employees, suppliers requires a scientific organization of financial planning at every enterprise. Only in this case it is possible to maneuver rationally the monetary resources, balance income and expenses, and have an active influence of financial instruments on production. The solution to this issue will be facilitated by the development of the form of the financial plan and the methodology of its preparation.

**Analysis of recent research and publications.** The theoretical and practical principles of developing financial plans are devoted to the works of I. Blank, G. Sytnyk, S. Kalambet, O. Bilousova, H. Semenov, V. Buhai, A. Semenova, A. Buhai, T. Holovko, N. Kovalchuk, A. Mykhailiuk and others. Among earlier foreign studies it should be noted the works of L. Hitman, L. Rue, M. Erhard, E. Brigham, and S. Schwenk [1–4]. As it was noted by M. Erhard and E. Brigham, strategic plans help to effectively manage financial resources [3, p. 127]. However, not all issues of this complex problem have been studied completely.

In the works of V. Stepura, V. Rudyk, L. Dokienko, O. Nestor, L. Tiesheva, T. Zhukova, N. Kovalchuk [5–11] and others there is no procedure for calculating individual items of the financial plan, their relationship with other plans of the enterprise, determining the need for loans. The principles of building and functioning of the financial planning system at the enterprise were developed by V. Rudyka and D. Shpirna [6], they are contradictory and incomplete. Among the defined principles, there is no principle of balance, availability of reserves. In the works of V. Rudyk [6], V. Varenyk, and G. Nikolaicheva [12], there is no analysis of the mechanism of balancing financial plans, assessment of their quality in terms of ensuring the adequacy of financial resources. The statement about the purpose of the financial plan is false. Thus, clause 3 of Order No. 205 states that the financial plan should ensure an increase in the indicators of the profitability of the enterprise, assets and equity compared to the planned and forecasted indicators for the current year [13]. However this contradicts the theory of the financial plan. On the basis of the financial plan it is impossible to determine the profitability of the enterprise and its own capital. The main purpose of the financial plan is to check the correspondence between income and expenditure of financial resources.

Mistakes were made during the formation of elements of the financial plan developed for economic entities of the state sector of the economy [13]. In fact, the form of the financial plan largely duplicates form No. 2 "Report on financial results". A number of revenues are not included in the composition of income, in particular, advance payments, value added tax, etc. The inclusion of the indicator "cost of sold products (goods, works, services)" in the financial plan is erroneous. This contradicts the theory of financial planning, since only a part of the costs is included in the cost price. Costs for the formation of production stocks, finished products, etc. are not included in the cost price. In addition, amortization deductions are part of the cost price. But amortization does not cause a real outflow of cash, so it is not included in the financial plan. Thus, there are still many "white spots" in financial planning, and there is room for its further improvement.

**The aim** of the article is to strengthen the scientific validity of financial planning at industrial enterprises, its stability and continuity over time, which will make it possible to make effective management decisions.

**Methods.** During the development of the financial plan, not only special value indicators are used, but also specific methods: standard, balance sheet, ratio. The initial data when drawing up a financial plan are: contracts for the supply of products, cost estimates for production and sale of products, estimates for the maintenance of non-production areas, tax rates, interest on loans, etc.

**Results.** Financial plan (FP) (balance of income and expenses of the enterprise) is a system of indicators characterizing the comparison of income and receipts of funds of the enterprise with expenses and deductions, as well as payments of the enterprise to the budget with appropriations received from the budget. The balance of income and expenses is a synthesizing section of the business plan, it reflects the results of all its other sections in value

terms. All aspects of the production, economic and financial activity of the enterprise are reflected in the FP: the main activity, capital construction, capital repair, all types of auxiliary works, non-production sphere. In the process of developing the FP it was established the amount of funds, methods of mobilizing financial resources and financing expenses, and the ratio between own and borrowed funds.

FP is based on the cost form of the movement of material resources (capital) of the enterprise and uses only cost indicators. At the same time, the flow of money in the financial institution does not completely coincide with the flow of material resources. The specifics of the preparation of the FP is that it does not contain a value reflection of those material resources that are not related to the opposite movement of cash (flows). At the same time, financial planning includes all distribution processes related to the formation and distribution of funds.

The FP of the enterprise includes: drawing up perspective, current and operational financial plans, developing and bringing to the structural divisions (branches) individual financial indicators and monitoring their implementation. The form of financial statements at industrial enterprises is the balance of income and expenses which reflects the results of their economic activities, the relationships of enterprises with the budget, banks, other enterprises and organizations, as well as with workers and employees.

In order to build a balance sheet of income and expenses, the enterprise additionally prepares: a plan for the production and sale of commercial products; an estimate of production costs; estimate of administrative expenses and sales expenses; capital investment and capital repair plan; cost estimate for research and development works, cost estimate for personnel training; tax payment plan (tax planning); loan repayment schedule (plan). These types of plans are the basis for drawing up the company's financial plan. Let's consider the order of its assembly.

The method of drawing up the balance of income and expenses of an industrial enterprise. The financial plan (balance of income and expenses of the enterprise) reflects all income and expenses of the enterprise and consists of four subdivisions: income and receipts; expenses and deductions; relations with the budget; relations with the credit system. In each of the sections, the main articles are provided, the list of which changes and is supplemented, based on the specifics of the production and economic activity of the enterprises and the tasks to be solved in the planned period. There is a close connection between the FP sections, because each type of expenditure is covered by certain sources.

The first section "Income and inflow of funds" consists of the following elements: balances of funds at the beginning of the year in the cash register and on current accounts; income from the sale of products (goods, works, services); Other operating income; income from financial and investment activities; deferred income; other income and resources of the enterprise (proceeds from the sale of abandoned property; income from housing

and communal services; under contracts for scientific and research works; income from construction work; from parents for the maintenance of daycare centers; other income).

The main part of the income and receipts of the industrial enterprise is the income from the sale of products. Therefore, we will consider in more detail the procedure for determining this article of the FP. The article "Income from the sale of products" includes sums of money from the sale of products, goods, works or services, taking into account the discounts provided, the return of previously sold goods and indirect taxes and fees (value added tax, excise duty, etc.). Income from the sale of products includes all cash receipts that will be received by the company during the planned period, regardless of the volume of product deliveries. Income from the sale of products can be divided into two parts: income from the sale of products of the reporting period; income from the sale of products of past periods. The cost of products sold by barter is not included in the composition of income

Income from the sale of products of the reporting period includes receipts for products produced and sold and for which the company received funds from buyers. The basis for determining income from the sale of products of the reporting period is the terms of contracts.

Income from the sale of products (goods, works, services) of past periods includes the amount of repayment of receivables for sold products. Revenue volumes are planned in accordance with the terms of the contracts, and in their absence – in the total volume according to the data of the reporting period.

An example of calculating income from product sales is given in *Table 1*.

*Table 1*

**The procedure for calculating income from the sale of products**

Indexes	January	February
Sales volume, pcs.	93	111
Sale price, hryvnias per unit.	2 700	2 700
Revenues from sales, hryvnias	251 100	299 700
Buyers' debt at the beginning of the period, hryvnias	–	50 220
Income from sales, hryvnias:		
products of the reporting period	200 880	239 760
products of the past period	–	50 052.4
Total cash receipts, hryvnias	200 880	289 980
Buyers' debt at the end of the period, hryvnias	50 220	59 940

*Source:* compiled by the authors.

As can be seen from the data in the *table. 1*, the income from the sale of products will be attributed to the FP: in January 200,880 UAH, in February – 289,980 UAH. These amounts correspond to cash receipts from the sale of products. As part of income from the sale of products, it is advisable to distinguish the main products, the production of which the company specializes in and the secondary products.

"*Other operating income*" includes other income from the enterprise's operational activities in the reporting period, except income (revenue) from the sale of products (goods, works, services).

*Revenues from financial and investment activities* include company revenues received from financial and investment activities. They include: income from equity participation; other financial income; other income. Equity income includes income from investments made in associated, subsidiary or joint ventures and accounted for using the equity method. Other financial income includes income arising in the course of the company's financial activities, in particular dividends, interest and other income from financial activities, which are not recorded in account 72 "Income from equity participation".

*Deferred income* includes the amounts of income received in the reporting period, which are subject to inclusion in income in future reporting periods. In fact, these revenues belong to advance payments and are not included in the income when determining the financial result.

*Other incomes* include incomes that arise in the course of activity, but are not related to the operational and financial activities of the enterprise: incomes from the non-production sphere (fees for a dormitory, parents' contributions to the maintenance of kindergartens, etc.).

The list of incomes, which are included in the section "Incomes and receipts of funds", is given in the *Table 2*.

The second section "Expenses and deductions" includes all monetary expenses of the planned year for production purposes, including wages as well as expenses for financing the non-production sphere. The following expenses and deductions are provided for in the expenditure part of the financial plan.

*Table 2*

### Composition of the section of the financial plan "Income and inflow of funds"

Type of income	Composition of income
Income from the sale of products	Income from the sale of products (goods, works, services) of the reporting period; income from the sale of products (goods, works, services) of past periods
Other operating rooms income	Income from the sale of foreign currency; income from the sale of other current assets (except financial investments); income from operating lease of assets; income from the operational exchange rate difference for operations in foreign currency; amounts of fines, fines, penalties and other sanctions for violation of economic contracts, which are recognized by the debtor or in respect of which decisions of the court or commercial court have been received on their collection; income from write-off of payables for which the statute of limitations has expired; reimbursement of previously written-off assets (receipts of debts written off as bad); sums of free circulating assets and subsidies received; other income from operating activities
Income from financial and investment activity	Income from equity participation (income from investments in associated enterprises, income from joint activities, income from investments in subsidiaries); other financial income (dividends received, interest received, other income from financial transactions)
Deferred income	Prepayment amounts for products (goods, works, services); income in the form of received advance payments for leased fixed assets and other non-current assets (advance lease payments), proceeds from the sale of tickets of transport and theater and entertainment enterprises
Other income	Income from contracts for research works; income from construction works; incomes of housing and communal services; income from parents for the maintenance of kindergartens, etc

*Source:* compiled by the authors.

*Costs related to the main activity (costs for the production of products).* Production costs include all costs of primary and secondary production, which are related to the production and sale of products, as well as external services. Costs are determined in the estimate without depreciation deductions<sup>1</sup>, payroll taxes<sup>2</sup>, intra-factory turnover and the cost of the side services. The amount of expenses is determined on the basis of the data of the estimate of production costs for the planned period, taking into account the adjustment.

*Administrative costs and sales costs (non-production costs).* Administrative expenses include expenses related to the management and maintenance of the enterprise. Sales costs include costs related to the sale (realisation, sale) of products, goods, works and services. Sales costs, in turn, can be divided into three types – costs for packaging and sorting, costs for storing finished products and the so-called net costs of circulation.

*Expenditures on capital investments,* which include costs for the acquisition or production (creation) of tangible and intangible non-current assets.

*Expenses for financial investments,* which include expenses for the purchase of certain types of financial assets (units, shares, bonds, deposits in banks, etc.).

*Costs for research, training, and development of new technology.*

*Expenses for meeting the cultural and household needs of the team* (maintenance of kindergartens, nurseries, camps, sports clubs, covering losses of housing and communal services).

The list of expenses that are included in the section "Expenses and deductions" is given in the *Table 3*.

The excess of income over expenses is shown in the balance of income and expenses of the enterprise after Chapter II "Expenses and Deductions".

*Table 3*

**Composition of the section of the financial plan "Expenses and deductions"**

Type of expenses	Composition of expenses
For the production of goods	Material costs (costs of raw materials and materials; costs of purchased semi-finished products and components; fuel and energy costs; costs of packaging and packaging materials; costs of building materials; costs of spare parts; other material costs); labour costs (basic and additional wages); other expenses
Administrative	Expenses for the maintenance of administrative and managerial personnel, expenses for their business trips, expenses for the maintenance of fixed assets (costs associated with the use of their own service vehicles; costs for renting service vehicles), other non-current material assets for general purposes (rental, repair, utilities), security, legal, insurance, auditing, transportation services, postal and telegraph services, office expenses

<sup>1</sup> Depreciation is excluded from the cost estimate for the production of depreciation due to the fact that the turnover of fixed assets in physical and value terms does not coincide. Depreciation deductions, which are included in production and circulation costs, are one of the components of the cost price of manufactured products. After its implementation, the sums of money, which express the value of the worn-out part of fixed assets, are returned to the enterprise and can be used in the future for the purpose of their partial (repair) or full (purchase, construction) compensation. That is, there are no direct receipts and expenditures of monetary funds in the amount of depreciation deductions.

<sup>2</sup> According to the legislation of Ukraine, payroll taxes include: personal income tax, military levy, a single contribution to mandatory social insurance. The exclusion of payroll taxes is explained by the fact that these taxes are included in the third section of the financial plan "Relationships with the budget". Including them would result in a recalculation

*End of the Table 3*

Type of expenses	Composition of expenses
For sale	Expenses for packaging materials, transportation of products and goods under the contract, marketing and advertising expenses, expenses for wages and commissions to salespeople, trade agents, employees of the sales department, repair and maintenance of fixed assets, other non-current assets used to support the sale of products, goods, works, and services
Capital investments	Capital construction (expenses on construction and installation works); acquisition of fixed assets (equipment, both assembled and unassembled, vehicles, etc.); acquisition of other non-current tangible assets; acquisition of intangible assets (acquisition of rights to use natural resources and property, software and databases, rights to commercial designations, industrial property objects, copyright and related rights, patents, licences, concessions, etc.)
Financial investments	Purchase of stocks, securities, units, shares, etc.
To maintain the non-production sector	Salary, heating, costs of materials, electricity, and other resources related to the maintenance of non-production areas of the enterprise

Source: compiled by the authors.

In the third section of the FS "Relationships with the budget" (the composition is shown in *Table 4*), on the one hand, there are reflected all types of payments to the budget, including taxes on employees and financial sanctions that are paid into budget income (income tax, tax on added value, single tax, excise tax, environmental tax, single contribution to mandatory state social insurance, etc.), and on the other hand, the above mentioned are in the form of appropriations from the budget (state capital investments, loan interest compensation, budget subsidies, etc. ). The procedure for calculating and payment terms for individual taxes is carried out in accordance with the tax legislation of Ukraine.

*Table 4*

**Composition of the section of the financial plan 'Relations with the budget**

Payments to the budget	Allocation from the budget.
I. National taxes: 1. Corporate income tax. 2. Personal income tax. 3. Value-added tax. 4. Excise tax. 5. Environmental tax. 6. Royalty. 7. Customs duties II. Local taxes and fees: 1. Property tax. 2. Single tax. 3. Parking fee. 4. Tourist tax III. Military fee. IV. Single contribution for mandatory state social insurance. V. Financial sanctions for violations of tax legislation (penalties, fines). VI. Other taxes, fees, and payments	I. Targeted budget financing: 1. Capital investments. 2. Current expenses (already incurred or future) II. Direct and targeted budget subsidies. III. Preferential lending: 1. Provision of loans. 2. Partial compensation of interest rates for loans provided for the implementation of entrepreneurship projects IV. Preferential subsidising. V. Financial support for the implementation of energy-saving and environmentally friendly technologies. VI. Other types of state support
Total payments to the budget	Total budget appropriations

Source: compiled by the authors.



Considering the procedure for calculating basic taxes (*Table 5*). The summary of relations with the budget (state and local) is defined as the difference between payments to the budget and appropriations from the budget and is shown at the end of Chapter III "Relations with the budget".

Tax payment terms determined in accordance with the Tax Code of Ukraine. For example, in 2023, a group 3 company pays a single tax in May (22.05), August (21.08), November (20.11) and February (19.02). The deficit or surplus of funds received is balanced by mutual relations with banks.

The fourth section "Relationships with the credit system" provides the data of obtaining loans in the established order (long- and short-term), as well as repayment of loans. The amount of repayment of long-term and short-term loans is established taking into account the arrears on loans at the beginning of the planned period, their repayment terms, as well as the future receipt of new loans and the establishment of repayment terms for them.

*Table 5*

**Procedure for calculating tax liabilities when paying basic taxes**

Tax	Calculation formula	Designation	Data source
personal income tax ( $\Pi\Delta\Phi O$ )	$\Pi\Delta\Phi O = \Phi_{3m} \cdot \frac{C_{\Pi\Delta\Phi O}}{100}$	$\Phi_{3m}$ – planned salary fund $C_{\Pi\Delta\Phi O}$ – tax rate (18%)	Labour plan
Single contribution for mandatory state social insurance ( $\epsilon CB$ )	$\epsilon CB = \Phi_{3m} \cdot \frac{C_{\epsilon CB}}{100}$	$C_{\epsilon CB}$ – tax rate for mandatory state social insurance (22%)	
Tax on profit ( $\Pi_{np}$ )	$\Pi_{np} = \Pi \cdot C_n$	$\Pi$ – profit before taxation $C_n$ – income tax rate (18%)	Profit plan
Value Added Tax (VAT) ( $\Pi\Delta B$ )	$\Pi\Delta B = \Pi B - \Pi K$	$\Pi B$ – Tax liability $\Pi K$ – tax credit	Production program; cost estimate; investment plan
Unified Tax Group 3 is not a value-added tax payer ( $\epsilon \Pi$ )	$\epsilon \Pi = \mathcal{D} \cdot \frac{5}{100}$	$\mathcal{D}$ – income included in the tax base; 5 – tax rate	Production program

*Source:* compiled by the author.

The difference between loan payments and the amount of loans received determines the sum of financial relations with banks and is reflected in the fourth section – "Relationships with the credit system".

Financial statements of enterprises are compiled for the year with a breakdown by quarters (months). All parts of the balance sheet, as well as the main indicators given in the summary, are organically interconnected.

The content and structure of the enterprise's balance of income and expenses can be illustrated by the example of "Vertical" LLC (*Table 6*). The company is a single taxpayer of group 3 (not a VAT payer) and specialises in production of electrical equipment.

Table 6

## Balance of income and expenses LLC "Vertikal", hryvnias

Line No	Cash flow balance indicator	Mounth											
		1	2	3	4	5	6	7	8	9	10	11	12
<b>1</b>	<b>I. Income and receipt of funds</b>	<b>250800</b>	<b>299404</b>	<b>380281</b>	<b>446791</b>	<b>469915</b>	<b>439190</b>	<b>463898</b>	<b>487485</b>	<b>410638</b>	<b>388614</b>	<b>407084</b>	<b>366357</b>
1	Cash balance at the beginning of the period	45000	9424	29988	141021	159548	156168	146974	168178	27223	66333	60474	54415
2	Receipts of funds	205800	289980	350293	305770	310367	283022	316924	319307	383415	322281	346610	311942
3	Funds received from its main operating activities	200800	289980	347093	305770	310367	283022	316924	319307	383415	322281	346610	311942
4	Revenue from the sale of products (row 5 + row 6), including:	200800	289980	347093	305770	310367	283022	316924	319307	383415	322281	346610	311942
5	from the realisation of the current period	200800	239760	287153	246480	248770	220172	261882	253837	319965	259790	251650	248780
6	from the realisation of the previous period		50220	59940	59290	61597	62850	55042	65470	63450	62491	94960	63162
7	Other operating income	5000		3200									
<b>8</b>	<b>II. Expenses and deductions (row 9 + row 13 + row 18 + row 22)</b>	<b>216680</b>	<b>215340</b>	<b>240257</b>	<b>232654</b>	<b>225140</b>	<b>239388</b>	<b>239700</b>	<b>491107</b>	<b>235479</b>	<b>228490</b>	<b>225181</b>	<b>216356</b>
9	Payments for the main activity (row 11+row 12):	128980	132140	132057	139954	141940	156188	156500	153407	152279	145290	141981	133156
10	materials	32600	34500	38750	46820	32860	41678	40250	38621	39574	38265	32523	29657
11	semi-finished products	25840	28650	24500	22860	37800	48640	42400	44500	41840	44100	48000	42450
12	salary	70540	68990	68807	70274	71280	65870	73850	70286	70865	62925	61458	61049
13	Administrative expenses:	66000	61500	61500	66000	61500	61500	61500	66000	61500	61500	61500	61500
14	maintenance of buildings and structures	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000
15	salaries of administrative and management personnel	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000
16	communication costs	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
17	business travel expenses	4500			4500				4500				

End of the Table 6

Line No	Cash flow balance indicator	Mounth												
		1	2	3	4	5	6	7	8	9	10	11	12	
18	Selling expenses:	21700	21700	21700	26700	21700	21700	21700	21700	21700	21700	21700	21700	21700
19	delivery by own transport	500	500	500	500	500	500	500	500	500	500	500	500	500
20	salary of employees of the sales department	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200
21	the cost of vehicle repairment				5000									
22	Expenses for investment activities:			25000					250000					
23	purchase of equipment			15000										
24	payment for installation services			10000										
25	capital repair of the building								250000					
26	<b>III. Relations with the budget (row 27 - row31)</b>	<b>54696</b>	<b>54076</b>	<b>-997</b>	<b>54590</b>	<b>88607</b>	<b>52828</b>	<b>56020</b>	<b>89154</b>	<b>54826</b>	<b>51650</b>	<b>85488</b>	<b>50900</b>	
27	Taxes (row 28+ row 29+ row 30+ row 31):	54696	54076	54003	54590	88607	52828	56020	89154	54826	51650	85488	50900	
28	single tax					33615			34560			34425		
29	single social contribution	30083	29742	29702	30024	30246	29055	30811	30027	30154	28408	28085	27995	
30	income tax	24613	24334	24301	24565	24746	23773	25209	24567	24672	23243	22978	22905	
31	target-based budgeting			55000										
33	<b>IV. Relations with the credit system (p. 34-p. 36)</b>	<b>30000</b>							<b>120000</b>	<b>-54000</b>	<b>-48000</b>	<b>-42000</b>	<b>-36000</b>	
34	Total received credits	30000							120000					
35	Short-term loans	30000							120000					
36	Total repayment of loans and interest for the use of loans:		36000							54000	48000	42000	36000	
37	repayment of short-term loans		30000							30000	30000	30000	30000	
38	interest payment		6000							24000	18000	12000	6000	
39	<b>Surplus (+), deficit (-) of cash</b>	<b>9424</b>	<b>29988</b>	<b>141021</b>	<b>159548</b>	<b>156168</b>	<b>146974</b>	<b>168178</b>	<b>27223</b>	<b>66333</b>	<b>60474</b>	<b>54415</b>	<b>63101</b>	

Source: compiled by the author.

As evidenced by the data of the FP (see *Table 6*), in general, for all months of the planning period, revenues exceed expenses and deductions, that is, the financial plan is balanced in terms of expenses and revenues. In some months, there was observed a shortage of financial resources, which was covered by short- and long-term loans. In particular, in January, the company will have a deficit of financial resources in the amount of UAH 20.576. To cover it, the company will need to take a short-term loan in the amount of UAH 30.000. This measure taken will make it possible to fully finance expenses and ensure a certain reserve of money (9424 UAH).

With the help of credit planning, there is carried out a mutual connection of income and expenses and there is ensured a coverage of the deficit of financial resources (*Table 7*). The need for a bank loan for production purposes and its repayment are determined by comparing the income part of the plan with the expenditure part for each month (quarter). The amount of the excess of expenses over the receipts of funds for a particular period determines the size of the loan required for the corresponding month (quarter), and the excess of income over expenses – the amount of loan repayment.

Table 7

#### Calculation of credit needs (UAH)

Indexes	Mounth					
	7	8	9	10	11	12
Balance of funds at the beginning of the year (quarter)	146974	168178	27223	66333	60474	54415
Receipt of funds	316924	319307	383415	322281	346610	311942
Expenses	295720	580261	290305	280140	310669	267256
Exceeding income over expenses	168178					
Exceeding expenses over income		92777	120333	108474	96415	99101
Credit needed		120000				
Loan repayment			54000	48000	42000	36000
Balance of funds at the end of the year		27223	66333	60474	54415	63101

Source: compiled by the author.

In the given example, spending of funds in August exceeded their receipts by UAH 92.777. In addition, at the end of the month, a minimum balance of funds required is provided within the amount that must be in the current account and in the cash register of the enterprise. For the enterprise, this amount is estimated at UAH 27.2 thousand. In general, in this way, it is determined that in July there will be a need for a short-term loan in the amount of UAH 120.000.

To determine the costs of repaying and servicing loans, draw up an appropriate schedule (plan) (*Table 8*).

Table 8

#### Loan repayment schedule (UAH)\*

Mounth	Loan amount at the beginning of the month	Repayment of the principal amount of the loan	Payment of interest	Repayment amount and interest payment**	The balance of the loan at the end of the term
1	120000	30000	24000	54000	90000
2	90000	30000	18000	48000	60000
3	60000	30000	12000	42000	30000
4	30000	30000	6000	36000	0

\*Lending terms: loan amount – UAH 120.000, loan term – 4 months, interest rate – 20%.

\*\*In addition to loan repayment and interest payments, the amount of expenses also includes other payments, in particular, cash service fees, loan insurance, etc.

Source: compiled by the authors.

At the same time, the FP of an industrial enterprise must contain the necessary financial reserves. The purpose of the financial reserve is to ensure the financial stability of enterprises during the period of temporary deterioration of production and financial indicators. Their availability makes it possible to cover unplanned expenses arising in the process of production and sale of products, or to compensate for a reduction in income for any reason.

**Conclusions.** There is developed the content of the main articles of the financial plan of an industrial enterprise, for example, the financial plan of a specific industrial enterprise, the procedure for balancing income and expenses, determining the amount of loans as a tool for eliminating the shortage of cash is shown. There is a form of FP with distribution of totals by month which can be recommended for medium and large enterprises. The development of certain issues of the financial planning methodology will partially contribute to the successful solution of tasks in the field of planning improvement and management decision-making. Further improvement of financial planning requires the development of a tax calendar, which will make it possible to transfer payments to the budget and extrabudgetary funds in a timely manner. One of the main areas of improvement of financial planning should be the consideration of financial risks.

**Conflict of interest.** The authors certify that they have no financial or non-financial interest in the subject matter or materials discussed in this manuscript; the authors have no association with state bodies, any organizations or commercial entities having a financial interest in or financial conflict with the subject matter or research presented in the manuscript.

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