



NATIONAL DEVELOPMENT GOALS: INNOVATION FRAMEWORK

Monograph



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Monograph is devoted to the research of theoretical and practical aspects of institutional basis of national innovation based development issues. Different methodic approaches and economic mechanisms to provide innovation development at the regional, national and international levels are considered. Scientifically based recommendations to achieve economic, financial, social and ecological aims of the national development are given.

Keywords: institutions, national development, innovation activities, human capital, strategy, international economic relations, innovation policy, management, economic mechanisms.

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8. RESEARCH OF CONDITIONS OF TAX PLANNING OF THE INDUSTRIAL ENTERPRISE

8.1 Tax planning as a structural element of the general planning of economic activity of enterprises

In modern scientific views, taxes, along with the traditional, is given the role of a cost measure of the state and efficiency of the relationship between the enterprise and the institutional environment. Planning tax transaction costs allows the company to prevent many difficult situations in this regard and partially eliminate the negative effects of uncertainty and variability of the institutional environment.

Improving the planning of tax transaction costs in the enterprise in the context of recognizing taxes as a type of transaction costs is a way to increase the efficiency of the enterprise. Planning of tax transaction costs at the enterprise provides the owners of capital and management of the enterprise with the necessary information, which fully characterizes the impact of the tax system on the internal and external environment of the enterprise and allows to make more informed management decisions.

First, it should be noted that:

1. Taxes are an integral part of the enterprise's transactional institutional costs.

2. When planning tax payments, a number of methods are used that are adequate in a given situation, and these are the same methods that calculate all the negative financial flows of the enterprise, so tax planning methods easily fit into the mechanism of calculating financial plans. Therefore, tax planning is considered an integral part of financial planning of the enterprise.

3. Tax planning should not end with the calculation of the tax burden according to one method or another, because the tax burden indicator itself is not informative enough to make financial decisions. He must further participate in the calculation of the institutional burden of the enterprise both in retrospect and in the future – in the calculation of the relationship between the «price of obedience to the law» and «price of illegality», which are important indicators of financial policy.

As a result, short-term and medium-term financial planning in the enterprise should allow the formalization of these relationships in the company's

plans and allow the calculation of the strength and direction of the impact of the initial controlled factors of the financial system on these ratios. It is necessary to calculate the coefficients of sensitivity of the resulting financial indicators to the financial decisions, including tax, in order to conduct an analysis according to the formula «what if». To this end, the financial plan of the enterprise must be improved so that it turned from reactive to inactive and made it possible to predict the price and size of the impact of certain tax decisions not only on the financial result of the enterprise but also on the total cost of its relationship with the environment.

Based on the above, the initial hypothesis for the study in this section will be considered as follows: the ideology and methodology of short-term financial planning does not allow to obtain certain numerical characteristics of financial management processes in the enterprise, which would allow targeted multivariate management of these processes.

Analyzing the basic theoretical provisions and definitions of financial planning, it becomes clear that most scholars perceive financial planning as a part of financial management, but do not perceive it as a tool of strategic management that would reconcile the financial relations of external and internal environment. This thesis is confirmed by such aggregated opinions of scientists:

1. «The purpose of financial planning is to determine the total needs of the enterprise in such a number of financial resources to ensure financing of production expansion, fulfillment of financial and credit obligations to the budget, banks, etc., solving social problems and financial incentives for employees. Besides, financial planning helps to prevent excessive and unplanned costs of inventory and financial resources as for certain types of activities and for capacity in general» says V.A. Goremykin¹.

2. Prof. E.A. Utkin² agrees with him and notes: «The object of financial planning is income and accumulation, their formation and distribution, relations with the financial and credit system, funds, their formation and use, capital investments and current assets, planning their volumes and sources of funding, definition of sources of financing of social and cultural and household spheres of the enterprise».

3. D. Hahn generally agrees that «financial planning is based on the

¹ Goremykin, V.A., Bugulov, E. R., & Bogomolov, A. Ye. (2000). *Planirovaniye na predpriyatii* [Planning at the enterprise]. Moscow: Informatsionno-izdatelskiy dom «Filin», Rilant [in Russian].

² Utkin, E.A. (Eds.). (1998). *Strategicheskoye planirovaniye* [Strategic planning]. Moscow: Tandem [in Russian].

production indicators of the plan, the sales plan of products and services, the plan of capital investments and the development of the social sphere. But he adds: «... the main stages (stages) of financial planning are as follows:

- analysis of receipts and expenditures of financial resources by their types and in general for the previous reporting period;
- drafting a financial plan for the planned year;
- consideration and approval of financial plans;
- implementation of financial plans»¹.

That is, at the first stage of financial planning, as it should be understood, all financial flows, including taxes, are analyzed, but among the types of plans on which financial planning is based, the tax plan is not mentioned.

4. The main differences between the generally accepted essence of financial planning and the characteristics that, in our opinion, should belong to him, begin in the most defined concept of «financial planning». Let's take only some definitions of known scientists, which are summarized in Table 8.1, for research.

Table 8.1. Approaches to defining financial planning

Definition	Author
Financial planning is the determination of the amount of income of the relevant types of financial resources (profit, depreciation, etc.) and their distribution by areas of use in the planned year (period of time).	I.A. Blank ²
Financial planning is the planning of all income and areas of spending money to ensure the development of the enterprise. Financial planning is carried out by performing financial calculations and drawing up plans of different content and purpose, depending on the tasks and objects of planning.	A.M. Podderohin ³
Financial planning is a type of management activity aimed at determining the required amount of financial resources, their optimal distribution and use for the purpose of financial stability of the business entity. Financial planning is directly related to the planning of production activities of the enterprise. All financial indicators are based on indicators of production volume, product range, production cost.	V.V. Kovalov ⁴

¹ Hahn, D. (1997). Planirovaniye i kontrol: kontseptsiya kontrollinga. [PuK – Wertorientierte Controllingkonzepte] (A.A. Turchak, L.G Golovach, M.L. Lukashevich, Trans). Moscow: Finansy i statistika [in Russian].

² Blank, I.A. (2000). Upravleniye aktivami [Asset Management]. Kyiv: “Nika-Tsentr” [in Ukrainian].

³ Podderohin, A.M. (Eds.). (2005). Finansovyy menedzhment [Financial management]. Kyiv: KNEU [in Russian].

⁴ Kovalev, V.V. (1999). Vvedeniye v finansovyy menedzhment [Introduction to Financial Management]. Moscow: Finansy i statistika [in Russian].

A.M. Podderohin draws attention to the fact that «the system of planning and finance management of the enterprise must ensure the fulfillment of a certain strategic goal. Usually focus on one of three goals:

- survival of the enterprise (ensuring financial balance);
- making a profit;
- economic growth of the enterprise»¹.

Today in Ukraine, most companies in financial management cannot effectively implement the chosen global goal, because management decisions are made in response to current problems, i.e. the so-called reactive form of management is used, which creates a number of contradictions: between business interests and fiscal interests; the interests of production and the interests of financial services, etc. Therefore, the viability of the enterprise in the external environment is rarely a guide to financial planning². Analysis of the opinions, presented in Table 8.1, confirms this. Financial planning, both short-term and long-term, is based on the principle of balancing cash flows. If these flows are balanced, the financial planning procedure is considered completed and it is time to implement the plans and control their implementation.

However, it is not always advisable to critically evaluate and compare the amounts of cash flows and their nature. Below we will try to prove that it is impossible in the conditions of the existing generally accepted technique of financial planning.

The organization of financial planning in the enterprise depends on the tasks facing it. A.I. Ilin, who expresses a common opinion, asserts that «the main objectives of financial planning in the enterprise are:

- providing the necessary financial resources for production, investment and financial activities;
- identifying ways to effectively invest capital, assessing the degree of rationality of its use;
- identification of internal reserves to increase profits through the economic use of cash;
- establishing rational financial relations with the budget, banks and counterparties;

¹Podderohin, A.M. (Eds.). (2005). *Finansovyy menedzhment* [Financial management]. Kyiv: KNEU [in Russian].

²Kakhovska, O. V. (2006). *Udoskonalennya planuvannya vyrobnychikh zatrat metalurhiynoho pidpryemstva*. [Improving the planning of production costs of the metallurgical enterprise]. Candidate's thesis. Alchevsk [in Ukrainian].

- observance of interests of shareholders and other investors;
- control over the financial condition, solvency and creditworthiness of the enterprise»¹.

There is a reference to the establishment of rational financial relations with the budget, banks and counterparties, which probably involves minimizing the cost of relations with the institutional environment, which also includes taxes. However, it is necessary to check whether there is a methodological possibility to establish these most rational institutional relations in the framework of the procedure of financial planning in an industrial enterprise.

An important aspect of studying the procedure of financial planning in an industrial enterprise is the division of planning into current and future.

Current financial planning is «implementation» planning, it is considered as an integral part of the long-term plan and is a concretization of its indicators. Obviously, any economic activity, because it is managed at a conscious level, presupposes the existence of some plan. However, planning actions can be regular (carried out as a sequence of formalized business processes), or be vague wishes that arise under the influence of the current situation².

«The system of current planning of financial activities is based on the developed financial strategy and financial policy on certain aspects of financial activities. This type of planning is to develop specific current financial plans that allow the company to determine all sources of funding for its development, to form the structure of its income and expenses, to ensure constant solvency, as well as to determine the structure of assets and liabilities of the enterprise at the end of the planned period»³.

The current financial planning of economic activity of the enterprise consists of the development of three registers: the cash flow plan, the profit and loss statement plan, the balance sheet plan.

The current financial plan is drawn up for a period of one year. This is due to the fact that during the year, mainly seasonal fluctuations in market conditions are equalized. In addition, such a time period meets the legal requirements for determining the reporting period.

The annual financial plan is broken down quarterly or monthly, because

¹ Ilyin, A.I. (Eds.). (2000). Takticheskoye planirovaniye [Tactical planning]. Minsk: OOO “Novoye znanie” [in Russian].

² Kovalev, V.V. (1999). Vvedeniye v finansovyy menedzhment [Introduction to Financial Management]. Moscow: Finansy i statistika [in Russian].

³ Popov, V.M., & Lyapunov, S.I. (Eds.). (2001). Biznes-planirovaniye [Business planning]. Moscow: Finansy i statistika [in Russian].

during the year the need for cash can change significantly and in any quarter (month) there may be a lack of financial resources. In addition, the division of the annual plan into short periods of time allows you to track the synchronicity of inflows and outflows of funds and eliminate cash gaps¹.

The authors of the textbook believe that: «The current financial plan is based on data on:

- financial strategy of the enterprise;
- results of financial analysis for the previous year;
- planned volumes of production and sales, as well as other economic indicators of operating activities of the enterprise;
- system of expenses standards of separate resources, developed at the enterprise;
- the current taxation system;
- current depreciation policy;
- interest rates on the deposit and credit markets, etc.»².

The process of current financial planning is actually a financing plan, which is drawn up for the year with a breakdown by quarter.

In order to control the receipt of actual revenue on the current account and the expenditure of available financial resources, the company needs operational planning, which complements the current one. This is due to the fact that the financing of planned activities should be carried out at the expense of funds earned by the enterprise, which requires daily effective control over the formation and use of financial resources³.

Author A.M. Podderohin notes that the operational plan is necessary to ensure the financial success of the enterprise. Therefore, when compiling it is necessary to use objective information about trends in economic development in the field of enterprise, inflation, possible changes in technology and organization of the production process.

Operational financial planning includes both the compilation and execution of the payment calendar, the calculation of the need for short-term credit and cash plan.

¹ Boridina, Ye.I., Golikova, Yu.S., Kolchina, N.V., & Smirnova, Z.M. (2000). *Finansy predpriyatiy*. [Business finance]. Moscow: Banki i birzhi, UNITI [in Russian].

² Hridchina, M.V., Zahozhay V.B. & Osipchuk L.L. (2004). *Finansy (teoretychni osnovy)* [Finance (theoretical foundations)] (2nd ed., rev.). Kyiv: MAUP [in Ukrainian].

³ Hridchina, M.V., Zahozhay V.B. & Osipchuk L.L. (2004). *Finansy (teoretychni osnovy)* [Finance (theoretical foundations)] (2nd ed., rev.). Kyiv: MAUP [in Ukrainian].

Perspective financial planning determines the most important indicators, proportions and rates of expanded reproduction, is the main form of realization of the goals of the enterprise¹.

M.V. Hridchina believes that «long-term financial planning in modern conditions covers a period of one to three years. Long-term financial planning includes the development of financial strategy of the enterprise and financial forecasting. Development of financial strategy is a special area of financial planning, it must be consistent with goals and directions, formulated by the general strategy»².

Thus, the definitions of the financial planning types also do not specify the possibility and methodology of consolidating the planned transaction tax payments with the general current financial plan.

According to the aggregate definition of a number of scientists¹⁷, the process of financial planning consists of several stages. At the first stage there is an analysis of financial indicators for the previous period. To do this, use information from the main financial statements of enterprises: balance sheet, income statement, statement of cash flows. These documents are important for financial planning, as they contain data for analysis and calculation of financial performance of the enterprise, as well as serve as a basis for forecasting.

At the second stage is the preparation of basic forecast documents, such as balance sheet forecast, income statement, cash flows, which relate to long-term financial plans and are included in the structure of a scientifically sound consolidated plan of the enterprise³.

At the third stage there is a clarification and specification of indicators of forecast financial documents by drawing up current financial plans⁴.

At the fourth stage, operational financial planning is carried out. The process of financial planning is completed by the practical implementation of plans and control over their execution⁵.

An important part of the study is the study of methodological approaches to the procedures for forming a set of financial plans of enterprises, which also

¹ Podderohin, A.M. (Eds.). (2005). *Finansovyy menedzhment* [Financial management]. Kyiv: KNEU [in Russian].

² Hridchina, M.V., Zahozhay V.B. & Osipchuk L.L. (2004). *Finansy (teoretychni osnovy)* [Finance (theoretical foundations)] (2nd ed., rev.). Kyiv: MAUP [in Ukrainian].

³ Balabanov, I.T. (1995). *Osnovy finansovogo menedzhmenta. Kak upravlyat kapitalom?* [Fundamentals of financial management. How to manage money?]. Moscow: *Finansy i statistika* [in Russian].

⁴ Blank, I.A. (2000). *Upravleniye aktivami* [Asset Management]. Kyiv: "Nika-Tsentr" [in Ukrainian].

⁵ Ilyin, A.I. (Eds.). (2000). *Takticheskoye planirovaniye* [Tactical planning]. Minsk: OOO "Novoye znanie" [in Russian].

include tax and investment plans. Based on the study of literature sources, we can identify the main methods and models of formation of the enterprise's financial plan, used in modern practice¹⁵:

1. Synchronous production, investment and financial planning based on common models;

2. Methods based on the use of econometric regression models – the method of proportional dependence of financial plan indicators on sales (the method of «percentage of sales»), methods of regression analysis, forecasting method (planning) based on multifactor regression models;

3. Stochastic models of financial decision making;

4. Budget planning;

5. Specialized models of forecasting and planning.

According to the author¹, these groups of models can be divided into 3 classes: deterministic planning and balance models (1, 4, 5); statistical models (2); stochastic models (15).

The method of synchronous production, investment and financial planning is based on combining into a single model of planning production, investment and financial activities. These models, along with cost indicators, contain natural and time parameters and allow simultaneous development: product program and production plan, investment plan (capital investment) and external financing plan, overall results based on the most effective combination of profit and cost of capital²⁰.

Among the general models of synchronous planning there are 2 types: analytical models of decision-making based on the use of linear or mixed integer programming and simulation models built in the form of simple or complex systems of equations. Consider the models of synchronous production-investment and investment-financial planning, which belong to the type of analytical models of synchronous planning²⁰.

The author states: «Popp's model was developed specifically to address the problem of strategic and medium-term planning. This model is a model of production and investment planning, but maximizing the cost of capital, as a target function of the model, allows to take into account the impact of strategic measures on financial flows. This fact allows to use it as a basis for creation of

¹ Poltieva, I.A. (2004). Modelirovaniye protsessov finansovogo planirovaniya na predpriyatiyakh v usloviyakh neopredelennosti [Modeling of financial planning processes at enterprises in conditions of uncertainty] Candidate's thesis. Donetsk [in Russian].

the general model of synchronous production and financial planning, having expanded it so that in the process of optimization, a plan of investments in production facilities was formed under the condition of guaranteed liquidity, a plan of financing was formed by attracting borrowed capital, as well as changes in share capital by issuing shares and equity at the expense of profit.

Dynamic models of synchronous investment and financial planning are designed for simultaneous planning of investment and financial programs with given financial resources and the availability of financing alternatives. They use the method of determining the value of capital as the sum of all discounted at a single interest rate at a given point in time cash inflows and outflows arising from investment and financial activities»²⁰.

A one-step dynamic model of synchronous investment and financial planning was proposed by G. Albach¹. As a target function of the model, the total cost of capital of investment and financial programs was used, which was subject to maximization.

The multilevel dynamic model of synchronous investment and financial planning proposed by R. Hux and R. Weigartner²¹ helps to eliminate the assumptions about the independence of investment objects and objects of financing, as well as some contradictions in the circumstances adopted in relation to the target function. The target function of the model is the final value of the property, which is a positive balance of payments at the last moment of the planning period that is taken into account. To model the financial plan in this model it is necessary to enter the block of production planning. Accordingly, it is necessary to introduce the flow of net payments for operating activities, and among the restrictions – the conditions of production and marketing, as well as restrictions on liquidity. As an objective function of the model, it is necessary to maximize the total cost of production capital, investment and financial programs as the sum of all discounted at a single interest rate at a certain point in time revenues and payments from various activities²⁰.

«However, the greatest difficulty in implementing the model is not the solution itself, but data collection – forecasts of net payments for operating, investing and financing activities. To increase the accuracy of forecasts, we can

¹ Shelobaev, S.I. (2000). *Matematicheskiye metody i modeli v ekonomike, finansakh, biznese* [Mathematical methods and models in economics, finance, business]. Moscow: UNITI-DANA [in Russian].

offer a review of typical models of income flows¹ and their impact on the target function of the model: models of the flow of constant, conditionally constant income, income that changes linearly, exponential income flow», – believes author².

Methods based on the use of econometric regression models. The use of methods combined in this group is based on two characteristics of the enterprise – the relationship and inertia. The characteristics of the relationship follow from the definition of the enterprise as a system characterized by the interaction of its individual elements. This means that the indicators change in dynamics in a coordinated manner, despite the fact that many indicators are not interconnected by functional dependencies. Inertia means that given the stable technological processes, internal and external connections in the system, there can be no sharp deviations from the key quantitative characteristics. But this group of methods has the advantage of simplicity, so it is often used in practice, especially in conditions of insufficient information.

Stochastic models of decision making. Under conditions of uncertainty, one of the main methodological directions in the development of economic planning is the introduction of the factor of incompleteness and uncertainty of information using stochastic models that use random variables. In the theory of optimal planning, the problems of modeling the adaptability of plans and economic parameters that coordinate them, their adaptability to additional information received in the process of implementing the plan become relevant. Modeling the adaptability of the financial plan using stochastic models is an urgent task today, as author asserts²³.

Staging a stochastic model is a non-trivial task. To the possible forms of such setting (linear – nonlinear, in statics – in dynamics, and so on) is added a significant number of problems associated with the reflection of the indeterminacy of the modeled objects²³.

The method of budget planning refers to the methods of operational financial planning. «Today, from the point of view of the practice of improving the process of financial planning in enterprises, the most widespread is the introduction of budget planning (budgeting). Budget planning (budgeting) is a

¹ Ennuste, Yu.A., & Matin, A.V. (1989). Stokhasticheskiye ekonomicheskiye modeli adaptivnogo planirovaniya i problemy ikh koordinatsii [Stochastic economic models of adaptive planning and problems of their coordination]. Moscow: Nauka [in Russian].

² Poltjeva, I.A. (2004). Modelirovaniye protsessov finansovogo planirovaniya na predpriyatiyakh v usloviyakh neopredelennosti [Modeling of financial planning processes at enterprises in conditions of uncertainty] Candidate's thesis. Donetsk [in Russian].

process, adapted to market conditions, of enterprise planning by developing interconnected budgets at different levels and control over their implementation»¹.

This method is widely used in Western practice, there are also positive assessments in its implementation in domestic enterprises. This is due to its built-in control system, which allows you to monitor daily budget execution, cash flow and current performance.

Analyzing the main groups of models used in the process of financial planning at different levels, according to the author ² it should be noted the following: «Statistical models are based only on internal information of the object, they do not take into account external information relevant to development Deterministic planning models are abstracted from incompleteness, uncertainty of information and inertia of economic development, they do not reflect the adaptability of planning indicators. Stochastic optimization models are stripped of these shortcomings and can remove the uncertainty factors of the environment, but in financial planning are used in a simplified form as solving more adequate and more complex models is very challenging.

The analyzed models are specialized for one of the selected levels of planning (strategic, tactical or operational). Based on the specifics of the financial planning tasks in conditions of uncertainty, there is a need to develop a set of models for forming a financial plan based on the association within a systematic approach of expert methodology and promising economic and mathematical methods»³.

In the literature on financial planning in enterprises two schemes of work organization on drawing up plans are usually distinguished: the method of break-down (top – down) and the method of build-up (bottom – up). According to the break-down method, work on making plans begins «from above», i.e. the management of the enterprise defines the purposes and tasks, targets on profit in particular. Then these indicators, in a more detailed form, as you move to lower levels of the enterprise structure, are included in the plans of departments. The

¹ Poukok, M.A., & Taylor, A.C. (1999). *Finansovoye planirovaniye i kontrol* [Financial planning and control]. Moscow: INFRA–M [in Russian].

² Kakhovska, O. V. (2006). *Udoskonalennya planuvannya vyrobnychikh zatrat metalurhiynoho pidpryyemstva*. [Improving the planning of production costs of the metallurgical enterprise]. Candidate's thesis. Alchevsk [in Ukrainian].

³ Kakhovska, O. V. (2006). *Udoskonalennya planuvannya vyrobnychikh zatrat metalurhiynoho pidpryyemstva*. [Improving the planning of production costs of the metallurgical enterprise]. Candidate's thesis. Alchevsk [in Ukrainian].

build-up method does the opposite. For example, the calculation of sales indicators begins with individual sales units, and then the company's head of the sales department brings these indicators into a single financial plan, which can later become an integral part of the overall plan of the enterprise. The break-down and build-up methods are two opposites. In practice, it is not advisable to use only one of these methods.

The financial plan consists of several specific documents that are interrelated in terms of indicators contained in them.

There are several options for developing a financial plan. According to one of them, the documents include:

- sales forecast;
- balance of cash expenditures and revenues;
- table of income and expenses;
- projected balance of assets and liabilities of the enterprise;
- calculation of break-even point¹.

I.A. Blank notes the importance of forecasting sales volumes as the initial stage of financial planning: «The forecast of sales volumes is not accidentally included in the financial plan and is in the first place. The source of the vast majority of financial resources is still sales revenue, which will include almost all future expenditures of the enterprise. If the forecast of sales volumes is made in physical units, there is an opportunity, by changing the price, to calculate financial indicators in several ways. But more often it happens that when making a sales forecast, the price of products, even for a short future, but is already determined»².

In most cases, the sales forecast is made for several years ahead. For example, it may be as follows: data for the first year is given monthly and is more accurate and reliable, as prospective buyers are well known and supply contracts have already been concluded with them. Data for the second year is given quarterly. The third year – one annual amount. Taking into account the forecast sales amounts, raw materials and equipment are purchased, wages are paid, and taxes are paid. The amount of all these costs should be such as to obtain the expected amount of profit, taking into account the capital invested in production.

¹ Kolass, B. (1997). *Upravleniye finansovoy deyatelnosti predpriyatiya. Problemy, kontseptsii i metody*. [Financial management of an enterprise. Problems, concepts and methods]. (Ya. V. Sokolov, Trans). Moscow: Financy, UNITI [in Russian].

² Blank, I.A. (2000). *Upravleniye aktivami [Asset Management]*. Kyiv: “Nika-Tsentr” [in Ukrainian].

8.2 Research of the enterprise's tax and general financial plan consolidation conditions

The most important document of the financial plan is the balance of cash expenditures and revenues, which has another name – cash flow balance. The purpose of its compilation is to achieve synchronicity of receipt and expenditure of funds or, in other words, to achieve the required level of liquidity of assets of the future enterprise. Since liquidity is determined by a value at a certain date, it is desirable that the data of the cash expenditures and receipts balance is given over short periods of time. When lengthening the time intervals, the value of the information presented in this document decreases, even if it is reliable¹.

The cash flow balance is in the form of a table, which displays data on the availability of cash at the beginning of the period, receipt and expenditure of funds during the period, and the calculation completes with data on the availability of cash at the end of the period.

For analytical purposes, the table can be supplemented with information on receivables and payables, the amount of bad debts, inventories, which is reflected in other sections of the financial plan. Data and the result of balancing cash flows must be associated with the actions of the enterprise to form its own working capital. Lack of working capital and its immobilization is the cause of the situation when at the right time the company does not have the required amount of money.

The next document (register) of current financial planning is the annual cash flow plan, which is actually the financing plan. It is made for a year with a breakdown by quarters. This plan can be made by two methods:

the direct method is based on the calculation of cash inflows and outflows, thus summing up the balance sheets for three types of enterprise activities: basic, investment, financial;

the indirect method is based on the consistent adjustment of net income due to changes in the assets of the enterprise. The initial element of this method is profit².

The calculation in the form of a table of income and expenses shows how the company's profit will be formed. Profit from the sale of marketable products

¹ Blank, I.A. (2000). *Upravleniye aktivami* [Asset Management]. Kyiv: “Nika-Tsentr” [in Ukrainian].

² Balabanov, I.T. (1995). *Osnovy finansovogo menedzhmenta. Kak upravlyat kapitalom?* [Fundamentals of financial management. How to manage money?]. Moscow: Finansy i statistika [in Russian].

is the main component of the gross profit of the enterprise. Consider the proposed in the scientific literature methods of its planning³⁰.

The direct calculation method is the most common. It is usually used when a range of products is small. In the most general form, profit is the difference between price and cost, but when calculating the planned amount of profit, it is necessary to specify the volume of products from which this profit is expected. Profit on commodity production is planned on the basis of cost estimates for production and sales, which determines the cost of commodity production of the planned period¹.

The projected balance of assets and liabilities of the enterprise should be made on the start and end dates of the planned period. This document has a structure that corresponds to the balance sheet of the enterprise and characterizes the size and composition of assets of the enterprise. These data are of interest to investors and commercial banks, which are approached by an entrepreneur who is going to finance the acquisition of these assets.

When compiling the balance of assets and liabilities, «plug method», recommended by foreign economists², can be used. As known, in economic calculations in planning and forecasting, priority is given to assets and expenses. The sources of their formation and financing are formed after them. The difference between the planned assets and the already existing sources of their formation is called «plug». If it has a negative value, it can be knocked out with the help of additional external financing: the issuance of securities or loans. If the forecast is that own sources and borrowed funds, already involved in the circulation, will be more than sufficient for the formation of productive assets, a positive plug is formed, which is eliminated by repaying borrowed funds, and excess own funds can be invested in securities³².

The final section of the financial plan provides a calculation of the conditions for achieving break-even point and analyzes other financial indicators. Profit maximization is the main goal of financial management, and one of the approaches to its achievement is to compare sales revenue not with total costs, but with variable fixed costs. The difference in the ratio between fixed and variable costs leads to the fact that changes in production and related sales revenue in different ways affect the change in profit.

¹ Goremykin, V.A., Bugulov, E. R., & Bogomolov, A. Ye. (2000). *Planirovaniye na predpriyatii* [Planning at the enterprise]. Moscow: Informatsionno-izdatelskiy dom «Filin», Rilant [in Russian].

² Poukok, M.A., & Taylor, A.C. (1999). *Finansovoye planirovaniye i kontrol* [Financial planning and control]. Moscow: INFRA-M [in Russian].

If we turn to the question of the chronology of the procedure of short-term planning in an industrial enterprise, this chronology is in the form of a diagram, according to several scientists, includes the following steps:

1. Financial and economic analysis (block 1).
2. Formation of the production program (blocks 2.1-2.6).
3. Calculation of enterprise budgets (block 3).
4. Financial planning (block 4.1-4.3).
5. Evaluation of the financial planning results (block 5).

The diagram, in addition to the functional blocks of which it consists, shows the sequence of consolidation of financial plans into a general system of plans of the enterprise. In the opinion of these scientists, the sequence of consolidation of certain types of plans into a general system of plans of an industrial enterprise should look like in Fig. 8.1.

However, many foreign scientists do not agree with this variant of the sequence¹.

The main feature of this approach is that budgeting in this case is perceived solely as a tool of financial planning: first, the formation of the production program is carried out, and then the calculation of enterprise budgets, based on which calculations of forecast financial results and forecast balance are made. In this case, it is unclear what is included in the budget calculation unit, while the consolidated budget of the enterprise² includes the operating part, consisting of sales and production programs, and the financial part, consisting of the calculation of financial results, balance sheet and calculation of cash flows (Fig. 8.1). In this case, the production program is calculated separately (block 2), calculations of the financial result, balance sheet and cash flow – separately (block 4). In the third block, either only the sales program remains, or the calculation of all parts of the operating budget is duplicated in the budgets. The authors of the scheme do not specify this point. Therefore, this procedure requires clarification and improvement.

One of the main substantive categories of the current financial planning procedure is planning methods. Planning methods are specific ways and methods of calculating indicators.

¹ Hahn, D. (1997). *Planirovaniye i kontrol: kontsepsiya kontrollinga*. [PuK – Wertorientierte Controllingkonzepte] (A.A. Turchak, L.G. Golovach, M.L. Lukashevich, Trans). Moscow: *Finansy i statistika* [in Russian].

² Hahn, D. (1997). *Planirovaniye i kontrol: kontsepsiya kontrollinga*. [PuK – Wertorientierte Controllingkonzepte] (A.A. Turchak, L.G. Golovach, M.L. Lukashevich, Trans). Moscow: *Finansy i statistika* [in Russian].

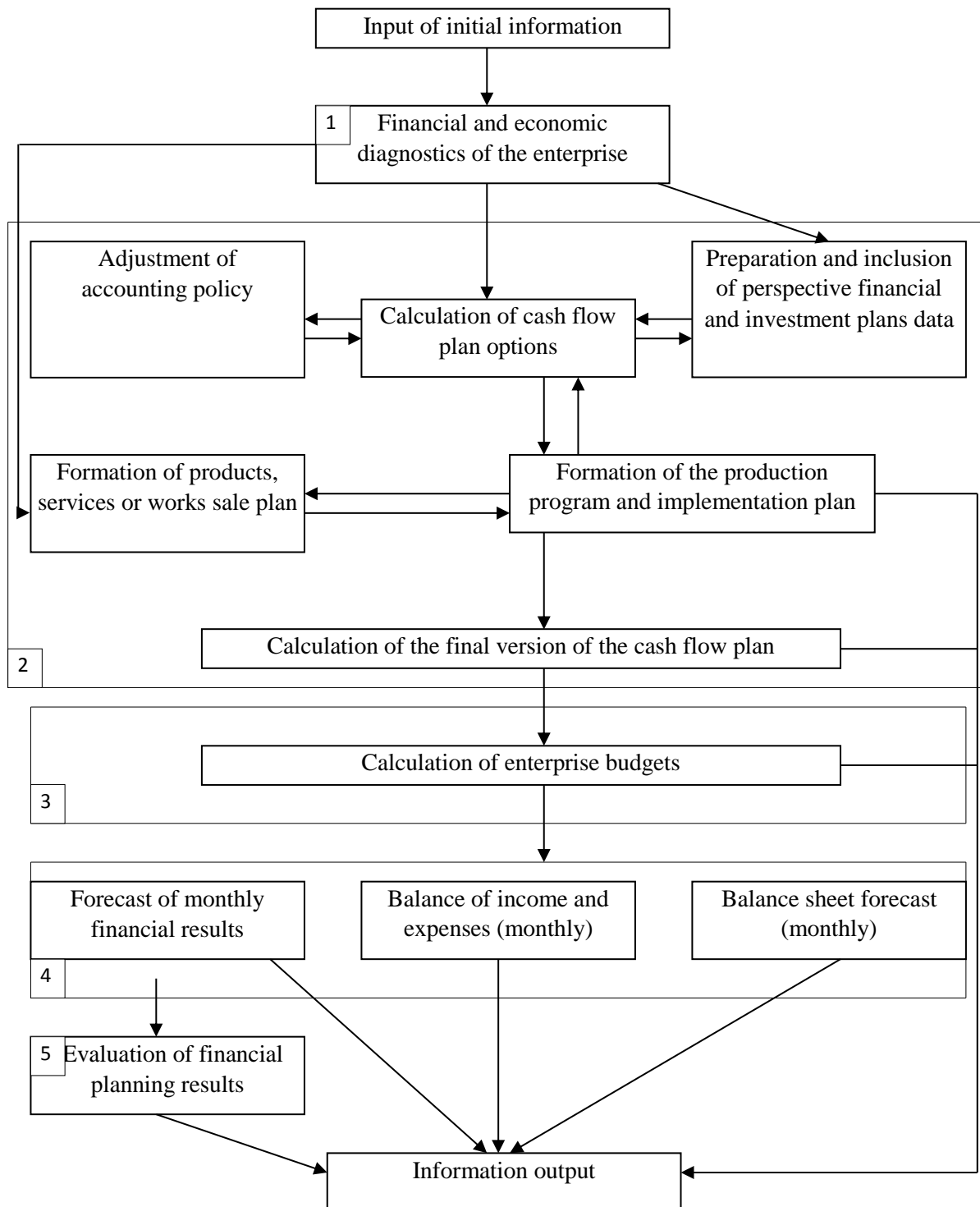


Fig. 8.1. The implementation scheme of an industrial enterprise's current financial planning^{1,2,3,4,1,2}

¹ Blank, I.A. (2000). Upravleniye aktivami [Asset Management]. Kyiv: "Nika-Tsentr" [in Ukrainian].

² Goremykin, V.A., Bugulov, E. R., & Bogomolov, A. Ye. (2000). Planirovaniye na predpriyatii [Planning at the enterprise]. Moscow: Informatsionno-izdatelskiy dom «Filin», Rilant [in Russian].

³ Kovalev, V.V. (1999). Vvedeniye v finansovyy menedzhment [Introduction to Financial Management]. Moscow: Finansy i statistika [in Russian].

⁴ Kolchina, N.V., Polyak, G.B., & Pavlova, I.P. (1998). Finansy predpriyatiy [Business finance]. Moscow: Finansy, UNITI [in Russian].

It is noted: «Naturally, there are no universal recipes that could be used with equal success in different companies. But there are methods that can be used to build enterprise management systems. They are a formalized set of concepts and processes that allow you to create a description of how the company must work, and have a purely constructive nature, i.e. they can be perceived as a set of instructions (algorithm)»³.

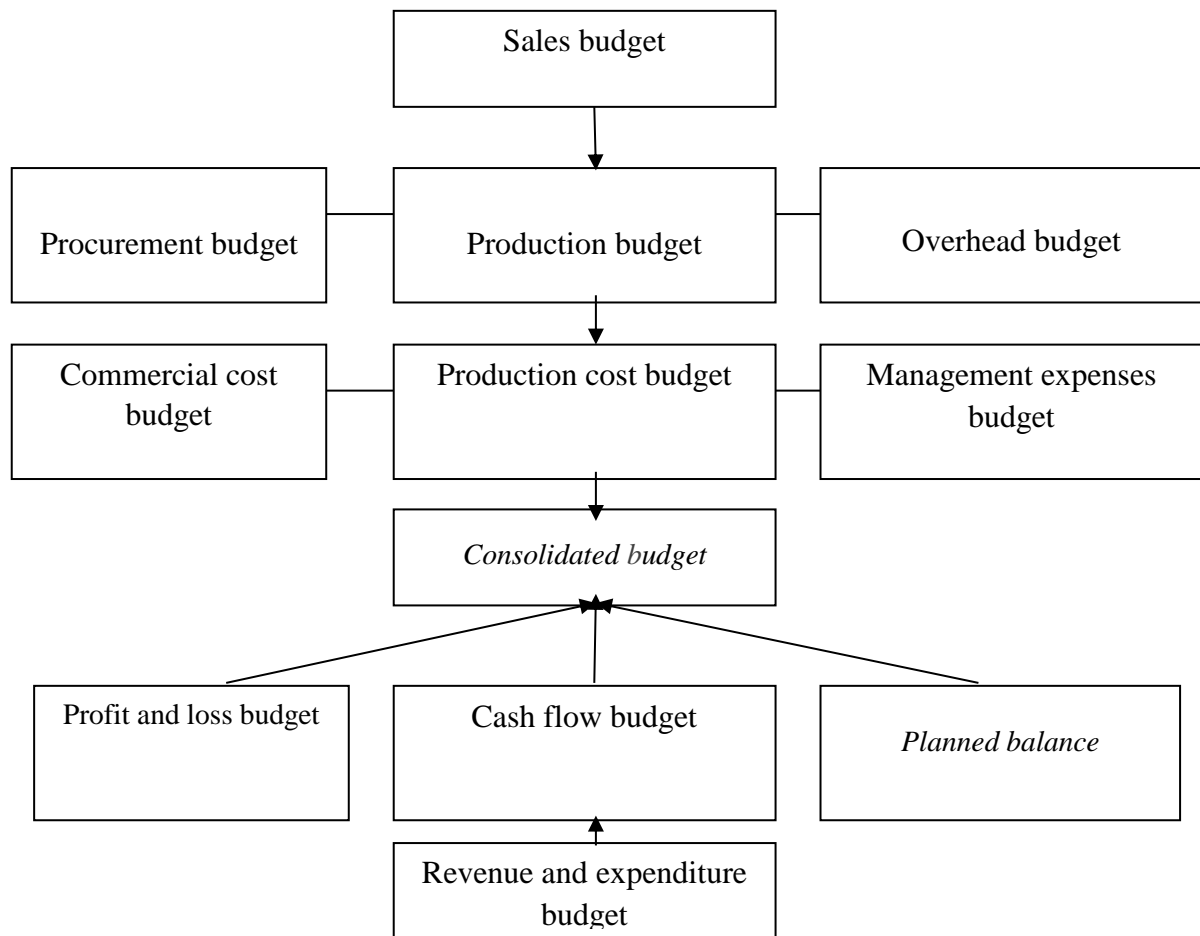


Fig. 8.2. The composition of an industrial enterprise's budgets⁴⁰

In the practice of financial planning, the following methods are used:

- economic analysis,
- normative,

¹ Hridchina, M.V., Zahozhay V.B. & Osipchuk L.L. (2004). *Finansy (teoretychni osnovy)* [Finance (theoretical foundations)] (2nd ed., rev.). Kyiv: MAUP [in Ukrainian].

² Podderohin, A.M. (Eds.). (2005). *Finansovyy menedzhment* [Financial management]. Kyiv: KNEU [in Russian].

³ Hridchina, M.V., Zahozhay V.B. & Osipchuk L.L. (2004). *Finansy (teoretychni osnovy)* [Finance (theoretical foundations)] (2nd ed., rev.). Kyiv: MAUP [in Ukrainian].

- balance calculations,
- cash flows,
- multivariate method,
- economic and mathematical modeling.

The method of economic analysis is used to determine the basic patterns, trends in the movement of natural and value indicators, internal reserves of the enterprise¹.

The essence of the normative method is that on the basis of pre-established norms and technical and economic standards, the business entity's need for financial resources and their sources is calculated. Standards can be set by the state in the form of a special regulatory or legislative framework – rates of taxes and fees, depreciation rates and other standards. Standards of the enterprise itself are standards developed directly at the enterprise and used by it to regulate production and economic activities, control over the use of financial resources, etc.

The use of the method of balance calculations to determine the future need for funds is based on the forecast of receipts and expenditures on the main balance sheet items at a certain date in the future³⁷.

The method of cash flows is universal in the preparation of financial plans and serves as a tool for forecasting the size and timing of the receipt of the necessary financial resources (Fig. 8.3). The theory of cash flow forecasting is based on the expectation of receipt of funds on a certain date and budgeting of all costs and expenses. This method provides much more useful information than the balance sheet method³⁷.

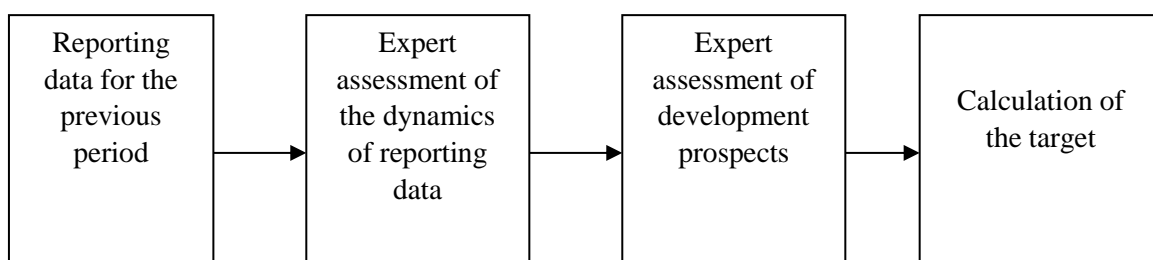


Fig. 8.3. Scheme of cash flows planning method⁴²

The multivariate method of calculations is to develop alternatives to

¹ Ennuste, Yu.A., & Matin, A.V. (1989). Stokhasticheskiye ekonomicheskiye modeli adaptivnogo planirovaniya i problemy ikh koordinatsii [Stochastic economic models of adaptive planning and problems of their coordination]. Moscow: Nauka [in Russian].

planned calculations, in order to choose the optimal one, and the selection criteria may be different. For example, in one option the ongoing decline in production, inflation of the national currency may be taken into account, and in another – rising interest rates and, consequently, slowing global economic growth and lower product prices¹.

Methods of economic and mathematical modeling allow to quantify the relationship between financial indicators and the main factors that determine them (Fig. 8.4).

Finally, it should be noted that formalized models of financial planning have two groups of disadvantages:

- in the course of modeling several variants of plans can, and in fact must be built or developed, and it is impossible to determine which of them is better by formalized criteria;
- any financial model only simplifies the relationship between economic indicators².

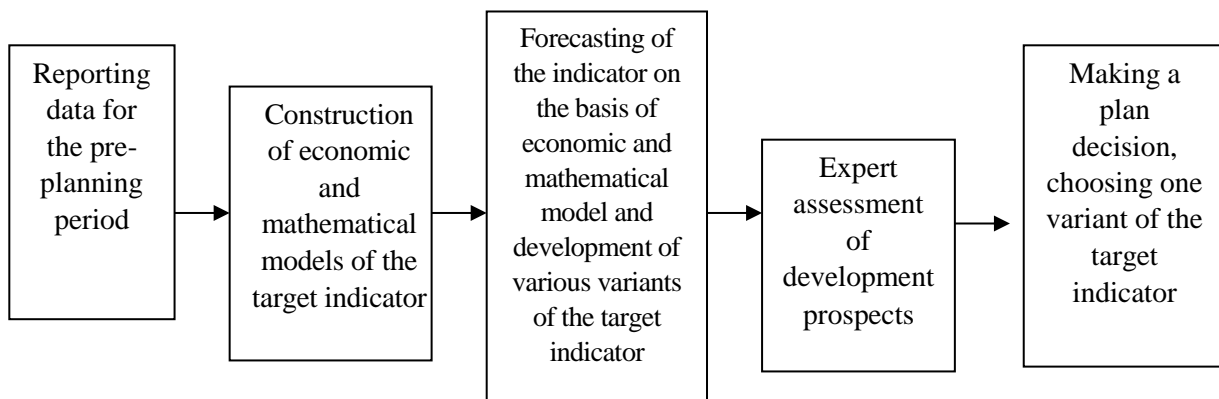


Fig. 8.4. The process of developing a target indicator using EMM methods³

These theses indicate that rigidly determined and unambiguous decisions in the planned work basically cannot be. Therefore, it is very rare to achieve

¹ Poltieva, I.A. (2004). Modelirovaniye protsessov finansovogo planirovaniya na predpriyatiyakh v usloviyakh neopredelennosti [Modeling of financial planning processes at enterprises in conditions of uncertainty] Candidate's thesis. Donetsk [in Russian].

² Hahn, D. (1997). Planirovaniye i kontrol: kontsepsiya kontrollinga. [PuK – Wertorientierte Controllingkonzepte] (A.A. Turchak, L.G Golovach, M.L. Lukashevich, Trans). Moscow: Finansy i statistika [in Russian].

³ Ennuste, Yu.A., & Matin, A.V. (1989). Stokhasticheskiye ekonomicheskiye modeli adaptivnogo planirovaniya i problemy ikh koordinatsii [Stochastic economic models of adaptive planning and problems of their coordination]. Moscow: Nauka [in Russian].

absolute success, firstly, in structuring and detailing the planned work, and secondly, in trying to get clear formalized targets and assessments of the planned nature.

The methods used in financial planning are essentially the same as in tax planning. Moreover, in the theoretical study it is difficult to establish what is the primary area of application of these methods – whether financial planning or tax. Therefore, in further research, we will proceed from the principle that the basis of planning different financial indicators, including tax, are the same methods of preparing target indicators.

As for the place of tax planning in the general scheme of industrial enterprise's financial planning, the study found the following. First, there is no clear position in the special literature on this issue that the tax plan is an independent branch of the financial plan, which is adjacent to it either at the entrance to the calculations (for the scheme in Fig. 8.1), or in the course of ancillary calculations (blocks 1-3 in Fig. 8.1), or when calculating performance indicators (blocks 4-5 in Fig. 8.1). Or the tax plan dissolves within the above blocks. Second, the study failed to establish in what mathematical way the indicators of strategic tax plans are assimilated into the current financial plan. Third, it is not established how the degree of tax and institutional burden of the enterprise affects the method of financial planning. The above aspects are not fully explored due to the limited sample of special literature involved in this study – special literature is not numerous. In addition, the opinion of the author is confirmed by the opinion of V.A. Goremykin, who conducted research with similar goals and summarizes: «... the place of tax planning in the system of financial plans is uncertain given both the scope of its application and the «recipe» of its use. Tax planning is highly dependent on the characteristics of the organization, where it is carried out. This significantly inhibits its popularization»¹.

As conclusion to this section it is necessary to emphasize the following.

One of the main tasks of financial planning at the enterprise are:

– determination of financial relations with state agencies, banking structures and other organizations regarding payments and redistribution of funds. The main solution to this problem is to ensure the priority of payments to the budgets of different levels, determining the optimal size of loans in working

¹ Goremykin, V.A., Bugulov, E. R., & Bogomolov, A. Ye. (2000). Planirovaniye na predpriyatii [Planning at the enterprise]. Moscow: Informatsionno-izdatelskiy dom «Filin», Rilant [in Russian].

capital, in financing capital investments, measures of technical progress, etc.;

- creation of methodical conditions for ensuring the heredity of indicators, their mutual connection;

- establishment of financial control over the implementation of the indicators adopted in the plan.

Thus, the methodology of financial planning in general and its component – tax planning, should provide simple and clear tools for solving these problems.

To solve mentioned problems, this study identifies the following areas.

The procedure that links strategic and operational financial planning should be the calculation of the planned rational institutional burden of the enterprise, which includes the calculation of the tax burden. This calculation is preceded by a justification of the rationality criteria of this relationship. The results of the calculations should be a set of indicators that have a tendency to sensitive analysis.

Based on a certain level of institutional burden of the enterprise, it is necessary to calculate the optimal level of tax burden of the enterprise, the criterion of optimality of which is to minimize the institutional burden as a whole. This level of tax burden should be included in the financial plan of the enterprise as one of the main criteria for optimizing the plan.

It is necessary to develop a set of rules for choosing certain methods of calculation in tax planning depending on the degree of tax burden, as well as to determine the degree of consolidation of the tax plan with the overall financial plan of the enterprise depending on the degree of tax burden.

A mechanism should be developed to integrate strategic indicators that characterize the level of institutional and tax burden of the enterprise into the current financial plan as a criterion for its optimization.

NATIONAL DEVELOPMENT GOALS: INNOVATION FRAMEWORK

Monograph

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