Abstract—Fundamental changes in the Russian economy, toughening competition and business conditions necessitate the search for qualitatively new, based on scientific concepts, approaches to the management of enterprise finances. In this regard, one of the priority tasks is the improvement of financial management and activation of one of its most important functions—financial planning at the enterprise. The paper considers financial planning as one of the main elements of the corporate governance system. The paper presents stages of financial planning process and assessment of the created value for shareholders and recommendations for the financial plan to realize. The paper indicates the necessity of creating a planning system, which with the greatest efficiency will ensure the implementation of a strategy to increase its investment attractiveness.

Keywords—financial planning; forecast of invested capital; organization of the planning process; ensuring business continuity

I. INTRODUCTION

In modern conditions of market economy development, internal companies have to work in a changing external environment, as a rule, in conditions of uncertainty. The expansion of the market, the integration of the Russian economy into the world economic community necessitate the solution of the problem of improving the efficiency of enterprise management. In conditions of limited financial and material resources, we can accomplish this task with the help of reliable information and analytical support for the implementation of planning, control and management decision-making functions.

The need to maintain flexibility and adaptability, the ability to take adequate actions in a changing world become for the business the basis for maintaining its competitiveness and survival.

Financial planning as a tool for organizing and coordinating the management of an enterprise ensures the development of an action program from the beginning to its completion. Without planning, it is impossible to ensure coordinated work of all departments of the organization, determine the need for resources, monitor the process of achieving goals and stimulate the labor activity of employees. Financial planning gradually becomes a matter of not only top managers, but also involves other specialists and line managers in this process.

The issue of improving financial planning continues to be relevant in both foreign and Russian practice. Of particular relevance is the development of optimal management methods in Russian modern conditions of intensified competition, the continuing instability of economic development, the intensification of integration processes.

We cannot use planning methods adopted in a centralized economy in the context of Russian economy integration into the system of global economic relations. The effective functioning of the enterprise and the management of its financial resources is possible only if there is a financial planning system that meets the requirements of a modern market economy. It is logical to assume that this system should take into account the modern experience of industrialized countries.
Thus, the functioning of enterprises in the conditions of macroeconomic instability is a prerequisite of focusing on the problems of organizing financial planning, since the economic condition of enterprises and, accordingly, the economic development of the country depends on this.

Russian scientists such as M.M. Alekseeva [1], I.T. Balabanova [2], I.A. Blanka [3], V.V. Bocharova [4], O.B. Veretennikova [5], V.M. Vlasova [6], V.V. Kovalev [7], G.N. Kutsuri [8], O.N Likhacheva [9], L.H. Pavlova [10], G.B Polyak [11], B.M. Sabanti [12], M.V. Romanovsky [13], E.S. Stoyanova [14], N.Kh. Tokayev [15], A.D. Sheremeta, E.V. Negasheva [16], K.V. Schiborsch [17] study features of financial planning and its individual aspects in the Russian economy.

At the same time, up to date, specifics of financial planning of business entities were of less attention, and there is no agreement on the definition of its essence and content, the complex formation and functioning. There are not enough publications including practical issues of organizing and improving financial planning in the corporate governance system.

II. METHODS

Financial planning as a process of practical activity usually includes several stages, the main purposes of which are as follows:

- formulating the composition of the upcoming planned problems, defining the system of expected dangers or expected development possibilities of the enterprise or company;
- justification for the proposed strategies, goals and objectives that the company plans to carry out in the coming period, the planning of the desired future;
- planning of the main means to achieve the goals and objectives, the choice or creation of the necessary tools to approach the desired future;
- determining the need for resources, planning the volume and structure of necessary resources and timing;
- implementation of the developed plans and monitoring them [18].

Certain assumptions of the future connect with financial planning.

Financial planning is the base of forecasting process of the main production, commercial, investment and financial indicators.

At the initial stage of financial planning, the company formulates financial goals and objectives, the degree of its compliance with the current financial condition, and then lists sequence of actions to achieve the goals.

The choice of goals depends on coordinated actions and ideas for the future of the company of all participants in the strategic planning process, the management of the company and its owners.

At the stage of strategic planning, the company analyzes the impact of internal and external factors affecting production processes, general trends in the development of economic processes, possible reserves for increasing production efficiency. Qualitative and quantitative indicators of the company form the vision of how to achieve the goals.

The next step is specification of strategic objectives in the medium-term perspective, carried out simulations of the future state of the enterprise taking into account the strategic plans. For this, the company formulates indicators of investment and production activity; identifies the need for financing, ways of attracting capital and actions to achieve strategic indicators for independent business units within the company; detail indicators for individual functional divisions. In the future, the company forms operational plans for the implementation of the tasks formulated and communicates to specific performers. Here we study the course of the operational implementation of the plan, negative factors affecting it, ways to eliminate them, which ultimately ensures the validity of management decisions and increases their effectiveness [19].

Due to the unstable development of the economy, constantly changing macroeconomic forecasts used in the development of indicators of the strategic goals of the enterprise, the financial planning system provides for a procedure for adjusting target indicators.

All processes and stages of financial planning depend on each other. They form a specific planning system.

The implementation of the set tasks in the framework of the planning process is in Figure 1.

### Fig. 1. Organization of the financial planning process

1. Analytical unit. Analytical support of the planning process involves the development of methodologies that determine the formulation of development goals and calculation of indicators for evaluating the effectiveness of its activities, analyze the economic activities of an enterprise, as well as the principles for the formation of planning tasks.

2. Information unit. Planning is the base for analytical and factual information. There are two types of information in planning: internal and external. Internal arises in the systems of accounting, planning and management and reflects in different periods of time targets and performance data of the company.
External information concerns the state of the market and competitors, interest rate projections, inflation rates, exchange rates and prices, state tax policy, and the political situation in the country.

3. Organizational unit. There is a clear understanding of the process, their rights and obligations in the implementation of planning procedures, as well as the organization of the document flow, which assigns a set of planning and reporting forms to all participants in the process.

4. Software and hardware unit. Regardless of the types of plans used in enterprises, the solution of such problems involves the use of appropriate types of application programs. Currently, software products of both foreign and Russian manufacturers are used. In general, similar in function, these products differ in their design solutions. One of the modern tools is Project Expert, which is a set of functional models that are grouped into thematic sections that allow the manager solve the tasks assigned to him.

Traditionally, the main responsibility for organizing planning processes refers to top-level managers. However, the modern ideology of planning involves the participation of other employees in this process.

To formulate a planning system, a necessary element is not only the development of methodological tools, but also the presence in the company of basic internal regulatory organizational and administrative documents and the determination of the order of organizational procedures.

Planning regulations include the following information:
- dates for each stage;
- responsible departments and individuals at each stage of the planning process;
- required incoming and outgoing documents;
- conditions under which the implementation of any procedures is possible [20].

Often, a single planning statement includes the documents describing the methodology of the system. Functional planning services in companies are to divide into independent units subordinated to the financial director. The hierarchy of governing planning process is in Fig. 2.

![Fig. 2. The hierarchy of governing planning process](image)

The central element of the planning apparatus is the planning department, whose functions include developing forward-looking and current plans, coordinating them with production departments, adjusting and refining the planned indicators, monitoring their implementation and systematically analyzing the work of the company and departments.

The operational current planning and control services perform the functions of planning in the production units.

The development of planning regulations requires the passage of several stages.

The first stage involves an analysis of the organizational structure. During this stage, tasks and functions of the units are carefully to set in the existing organizational structure; functions are shared with responsible persons. Thus, the elimination of duplicating functions in various divisions is achieved, the need for securing responsibilities for the relevant divisions that are absent at the time of the analysis is clarified, the possibility of identifying a structural division engaged in a specific type of activity is being justified.

The second stage is to identify those who affect the movement of funds and material resources, securing responsibility for the use of resources. For this, it is necessary to conduct an analysis of the company’s document flow.

The third stage of the planning process is to monitor and control the execution of the plan. For this purpose, planned and actual values of indicators, alternatives with regard to flexibility are of great importance [21].

The fourth stage is the distribution of responsibility for planning, accounting, monitoring and analyzing the financial performance of a company and its divisions. Here a hierarchy of responsibilities appears.

Proper organization of financial planning contributes to a more efficient allocation of resources and ensures control over the effectiveness of their use.

III. RESULTS

One of the most important tasks of financial planning is to ensure business continuity, taking into account the limited available or available resources, as well as the efficient use of all types of resources and capital, which will maximize the market value of the company and the welfare of its owners.

To measure the value created by specialists, several indicators have been proposed that are identical in their economic essence but differ in calculation methods. Despite the existing differences in the methods of calculation, they are to base on the fundamental law of a market economy, which states that an enterprise creates value only when its revenues exceed the cost of capital.

Among the most famous models used by analysts, there is a model of Economic Value Added patented by consulting company SternStewart & Co (EVA):

$$EVA = NOPAT_t - WACC \times IC_{t-1},$$

where NOPAT – net operating profit after tax for the period t; $IC_{t-1}$ – invested capital at the beginning of the period; WACC – average price of capital.

This model is based on the concept of “economic” profit, and the determination of the final performance criteria is based
on the information contained in the financial statements. A feature of the model is a significant departure from the indicators of the standard financial statements and the correlation with the market value of the company recorded at stock quotes.

Based on the obtained targets, we determine the amount of invested capital:

\[ IC = E + D \]  

(2)

where \( E \) – equity; \( D \) – borrowed capital.

**TABLE 1. FORECAST OF INVESTED CAPITAL, MLN RUBLES**

<table>
<thead>
<tr>
<th>Indicator name</th>
<th>2017</th>
<th>Planning period, year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2019</td>
</tr>
<tr>
<td>Equity (E)</td>
<td>124205</td>
<td>106435</td>
</tr>
<tr>
<td>Borrowed capital (debt)</td>
<td>30570</td>
<td>330068</td>
</tr>
<tr>
<td>Invested capital (IC)</td>
<td>427775</td>
<td>436503</td>
</tr>
</tbody>
</table>

The key idea underlying the model of economic value added is to account for the payment of all elements of capital, both borrowed and own. In this regard, to obtain an indicator that diagnoses the creation of value, a payment for the use of all capital involved must be deducted from the operating post-tax profit. This fee is the product of the value of the invested capital and the average value of cost of capital in relative terms:

\[ \text{Capital charge} = WACC \times IC_{t-1} \]  

(3)

The weighted average cost of capital (WACC) is determined by the formula:

\[ WACC = W_E k_E + W_D k_D (1 - T) \]  

(4)

where \( W_E, W_D \) – share of equity and borrowed capital (debt) respectively; \( k_E, k_D \) – cost of equity and borrowed capital (debt), expressed as an interest rate; \( T \) – income tax rate.

In Table 2 we will present the initial data for determining the structure of the invested capital of PAO “MTS” in the planning period.

The weighted average cost of borrowed capital of PAO “MTS” is 8.4% per annum. To determine the cost of equity, we use the model CAPM:

\[ k_E = R_F + \beta_S(R_M - R_F) \]  

(5)

where \( R_F \) – risk free interest rate; \( R_M \) – average market rate of return; \( \beta_S \) – systematic risk measure of this class of securities.

As a risk free rate \( R_F \), the yield of government bonds with a short maturity is usually used, the value of which on 23.09.2018 is 8.75%.

**TABLE 2. INPUT DATA FOR DETERMINING THE STRUCTURE OF THE ORGANIZATION INVESTED CAPITAL.**

<table>
<thead>
<tr>
<th>Indicator name</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min rubles</td>
<td>Ud. weight</td>
<td>Min rubles</td>
<td>Ud. weight</td>
</tr>
</tbody>
</table>

**TABLE 3. VALUES OF THE ZERO-COUPON YIELD CURVE FOR GOVERNMENT BONDS ON SEPTEMBER 23, 2018, % PER ANNUM**

<table>
<thead>
<tr>
<th>Repayment term, years</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>10</th>
<th>20</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.09.2018</td>
<td>7.44</td>
<td>7.86</td>
<td>8.13</td>
<td>8.46</td>
<td>8.74</td>
<td>8.78</td>
<td>8.75</td>
</tr>
</tbody>
</table>

The base risk premium determined by analysts is at 9.3%, and represents the difference between the averages calculated yield of MSCI Russia index over 11 years and the yield of Eurobonds Russia 42.

The adjusted coefficient beta (\( \beta \)) equals 1.13. Based on these conditions, we calculate the cost of equity of PAO “MTS”:

\[ k_E = 8.75\% + 1.13 \times 9.3 = 19.3\% \]

Thus, the weighted average cost of capital of PAO “MTS” equals to:

- the company’s operating after-tax profit should exceed the pay for equity and borrowed capital;
- return on invested capital in a company must exceed the cost of capital: \( \text{ROIC} > \text{WACC} \).

The difference (\( \text{ROIC} - \text{WACC} \)) is called the efficiency spread and is a key indicator of business value growth.

On the basis of the obtained data, we will determine the return on capital; the spread of efficiency, the economic value added of PAO “MTS”, the calculations will be presented in Table 4.

The positive dynamics of economic value added (EVA) of PAO “MTS” for the analyzed period characterizes the effective use of capital in the planned period and the created value for shareholders.

Another criterion for evaluating the compiled financial plan can be considered the P/E multiplier (price /earnings), which demonstrates the company’s investment attractiveness.

To calculate the P/E multiplier, the market valuation of the company or one share as of the analyzed date appears in the numerator, and net profit according to financial accounting and reporting standards is in the denominator:

\[ P = \frac{\text{market price of shares} \times \text{number of shares}}{\text{earnings}} = \frac{\text{share price}}{\text{earnings per share}}, \]  

(6)
TABLE 4. DYNAMICS OF ECONOMIC VALUE ADDED (EVA) OF THE ORGANIZATION, MLN RUBLES

<table>
<thead>
<tr>
<th>Indicator name</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating profit (NOPATI), mln rubles</td>
<td>101631</td>
<td>103630</td>
<td>105549</td>
<td>107422</td>
</tr>
<tr>
<td>Invested capital (IC), mln rubles</td>
<td>427775</td>
<td>436503</td>
<td>448445</td>
<td>461201</td>
</tr>
<tr>
<td>Return on capital (ROIC), %</td>
<td>23.76</td>
<td>23.74</td>
<td>23.54</td>
<td>23.29</td>
</tr>
<tr>
<td>Required return on equity (WACC), %</td>
<td>10.37</td>
<td>9.74</td>
<td>9.35</td>
<td>9.35</td>
</tr>
<tr>
<td>Costs for capital (IC_{t+1} x WACC), mln rubles</td>
<td>44411</td>
<td>42515</td>
<td>40813</td>
<td>41930</td>
</tr>
<tr>
<td>Economic Value Added (EVA), mln rubles</td>
<td>57220</td>
<td>61115</td>
<td>64736</td>
<td>65492</td>
</tr>
</tbody>
</table>

In the case of the use of forecasted earnings, the notation using the adjustments P0 / E1B is:

$$P_0 = \frac{f}{E_t}$$

We define the P/E multiplier for PAO “MTS”, the calculations will be presented in Table 5.

TABLE 5. BASELINE DATA FOR CALCULATING THE P/E MULTIPLIER

<table>
<thead>
<tr>
<th>Indicator name</th>
<th>2017</th>
<th>Planning period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share price at the end of the year, rubles</td>
<td>248.8</td>
<td>2018 2019 2020</td>
</tr>
<tr>
<td>Net profit, mln. ruble</td>
<td>56590</td>
<td>56530 56918</td>
</tr>
<tr>
<td>Weighted average number of ordinary shares, mln pieces</td>
<td>1998.4</td>
<td>1998.4 1998.4</td>
</tr>
<tr>
<td>Earnings per share, rubles</td>
<td>28.3</td>
<td>28.3 28.5</td>
</tr>
<tr>
<td>the P/E multiplier</td>
<td>8.88</td>
<td>8.79 8.73</td>
</tr>
</tbody>
</table>

The data in Table 5 indicates that the investor was able to pay 28.3 rubles for the profit unit of PAO “MTS” in 2017, and 29 rubles in 2020, the P/E multiplier indicates that the number of years for which the company's shares will pay off decreases. The dynamics of these indicators show an increase in the investment attractiveness of the company. Thus, the developed financial plan of PAO “MTS” can be ready for implementation.

IV. DISCUSSION

Financial forecasting in the corporate governance system is based on external and internal factors. Each organization, taking into account this vector and its own potential, can determine strategic development benchmarks. The algorithm for forecasting key parameters of a financial plan presented in the study, a detailed description of the process of developing and estimating the value created are of practical importance in achieving efficient use of all types of resources and capital, which will maximize the company's market value and the welfare of its owners.

In order to improve the financial planning of PAO “MTS”, we offer:

- to create objective prerequisites for reducing the time to develop a system of interrelated plans;
- to ensure an increase in the accuracy and reliability of calculations through the use of modern planning tools and proven methods and algorithms;
- to justify the parameters of the balanced development of all elements of the planning object;
- to take into account the forecasted fluctuations of factors affecting production efficiency, at the same time introduce a method of situational planning, which allows taking into account changes in key factors, analyze the final results of planning, assess risks and determine the best action rate;
- to provide a logical and algorithmic interconnection of strategic, current and operational plans and the possibility of substantiating alternative development options both for the company as a whole and for individual structural divisions of the business entity;
- to prove optimal levels of reserves and insurance reserves;
- to increase the responsiveness of the control subsystem to deviations from the optimal development trajectory;
- to control the execution of the plan, use the flexible planning procedure, which allows an objective assessment of the resources efficiency involved in the activities of the enterprise.

The implementation of these recommendations will provide the necessary level of efficiency of financial planning processes, which let the company achieve the key objectives.

V. CONCLUSION

According to the results of the study, financial planning is a relevant financial management mechanism in the corporate governance system, which allows minimizing the uncertainty of the market environment and its negative consequences. Properly organized financial planning helps the company to develop, to gain new positions in the market, to draw up and implement concepts for the production of new goods and services, which allows an economic entity increasing the market value.

For the purpose of a more in-depth study of the content of financial planning, we studied the organization of this process in the system of corporate governance. At the same time, its stages, elements, regulation and functions of planning units were defined. The effectiveness of the implementation of the developed financial plan can be achieved only under the condition of consistency of actions and a clear delineation of the areas of responsibility of each functional unit.

The development of a financial plan is on the base of quantitative financial indicators that take into account the factors of the external and internal environment, and on the quality parameters influence the resulting indicator of the corporation's business performance. The methodological toolset proposed in the study makes it possible to substantiate the economic feasibility of using resources and assess the effectiveness of this management decision.
References