MODEL OF DECISION-MAKING ON THE BASIS OF EXPECTATIONS OF SHAREHOLDERS AND PORTFOLIO INVESTORS

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Abstract
The purpose of the joint-stock company functioning is to increase shareholders wealth. Therefore management aimed to increasing of value of the company is very important. Russian companies started to practice Value-Based Management. Process is complicated by absence of sufficient experience of Value-Based Management at the Russian companies. Accordingly, there is no enough of researches in the field of methodology of Value-Based Management for the Russian market.
In this paper methodical recommendations about investment on the basis of expectations of shareholders and portfolio investors are offered.
Activity of the company is estimated not only by the results of its financial statements, but also by price of its shares. Good analytical indicators don't promote automatically to share price increase. Therefore it is necessary to give particular attention to relations with investors.
In the Russian practice not enough attention is given to this question. In the paper the model of decision-making on the basis of expectations of shareholders and portfolio investors is offered. It allows to solve important dilemma: to direct money to dividend payout or to investment projects? It shows which decision allows to increase shareholders wealth and also shows how the stock price will react to made decisions.
According to the model, decisions are accepted depending on a balance of four indicators: weighted average cost of capital, actual profitability of investments, expected investment profitability, required investment profitability.

Keywords: Value-Based Management, WACC, expected profitability, investments, share price.

INTRODUCTION
Criterion of profits maximization is not able to fully take into account such factors as the risk and uncertainty [1]. At the same time increasing the value of the company to its owners, increasing their wealth, reflects the sum of all the elements and development factors of the company.
The purpose of the joint-stock company functioning is to increase shareholders wealth. That’s very important. High profits can be carried out at the expense of long-term goals of the company (so, for example, investments in research and development will reduce short-term profits, but will pay off in the future). Neglect this aspect quite characteristic of emerging markets.
Value-based management (VBM), which purpose is increasing of value of the company, allows to find the optimal combination of long and short term goals [2].
After the first wave of the global financial crisis a lot of metallurgical companies in Russia drew attention to VBM. Process is complicated by absence of sufficient experience of Value-Based Management at the Russian companies. Accordingly, there is no enough of researches in the field of methodology of Value-Based Management for the Russian market [3].
So how to increase the wealth of shareholders? Let us consider one of the aspects.
1. ANALYSIS OF EXPECTATIONS OF SHAREHOLDERS AND PORTFOLIO INVESTORS

Activity of the company is estimated not only by the results of its financial statements, but also by price of its shares. Good analytical indicators don’t promote automatically to increasing of share price. Therefore it is necessary to give particular attention to relations with investors.

1.1. The question

The dividend policy plays a major role. How the management of the company answers the question “To direct money to dividend payout or to investment projects?” affects the growth and fall of share price, shareholder wealth, following the company’s long-term goals [4].

This question is a stumbling block for many managers. A lot of research has been devoted to this issue, but a clear answer was not given.

One of the most interesting research, in our opinion, is the work of Tom Copeland and Aaron Dolgoff “Outperform with Expectations-Based Management” [5].

1.2 Answer of Expectations-Based Management

Tom Copeland and Aaron Dolgoff propose to take into account the expectations of shareholders and portfolio investors. This kind of management is named Expectations-Based Management (EBM).

Their empirical research indicates that there is little or no correlation between EVA, earnings growth and the return to shareholders. But EBM is strongly relation with shareholder returns.

In this research is proposed to take the decision of investments/dividends on the basis of the balance of weighted average cost of capital, actual profitability of investments, and expected by stock market return on an investment (Fig. 1).

![Fig. 1. EBM and investment](image)

“In each cell are the effects of management decisions on shareholders’ wealth (lower right) and on the stock price (upper left). Start with a company whose actual performance is greater than expected (cells 1 and 2). Its stock price will go up, ΔS > 0. This is regardless of its weighted average cost of capital (WACC). Whether the result puts the firm in cell 1 or cell 2 depends on whether it earns an actual return on invested capital, A(R), that is greater than the cost of capital (WACC ). If A(R) < WACC but is greater than expected, then A(R) > E(R), and the firm will experience an increasing stock price. Investment with A(R) > WACC increases shareholder wealth (cell 1). But if it is in cell 2, where it earns less than the cost of capital (i.e. A(R) < WACC ), it should return the cash to shareholders instead of investing, because they can earn the cost of capital—a rate greater than A(R). We call cell 2 the overinvestment challenge because when E(R) < A(R) < WACC the
stock price will go up when the company invests because A(R) > E(R), but shareholders will be worse off because the company invested when A(R) < WACC.

Cells 3 and 4 are the opposite. In cell 3, expectations are not met, A(R) < E(R), and investment earns less than the cost of capital A(R) < WACC; consequently, the stock price goes down and shareholders are better off if the firm does not invest. Cell 4 we call the underinvestment challenge. The firm is expected to earn more than it actually does—i.e., A(R) < E(R)—therefore the share price will fall. Yet it should still invest because shareholders can earn A(R) > WACC, which is better than the WACC (what they can earn on their own). Yes, the share price will fall, but shareholders are better off than the next best alternative, which is not investing and returning the cash to them” [5].

Tom Copeland and Aaron Dolgoff offer an interesting solution. However, in our opinion, the combination of the proposed three indicators does not provide an exhaustive description of the situation. WACC is taken as an indicator of the minimum required rate of return. But in this case it doesn’t take into account the views of management at the required rate of return, that is, does not take into account of accepted risk and the required risk premium.

1 PROPOSED MODEL OF DECISION-MAKING ON THE BASIS OF EXPECTATIONS OF SHAREHOLDERS AND PORTFOLIO INVESTORS

Proposed in the paper our model of decision-making on the basis of expectations of shareholders and portfolio investors (Tab. 1), allows:

- to answer the question "To direct money to dividend payout or to investment projects?";
- to forecast the behavior of the share price;
- to analyze the conformity of existing market strategy to investor's expectations and to the goals of changing the share price of the company;
- to take into account the accepted risks and the required risk premium.

Tab. 1.: The model of decision-making on the basis of expectations of shareholders and portfolio investors

<table>
<thead>
<tr>
<th>Balance of indicators</th>
<th>Increasing shareholders wealth carried out at the expense of:</th>
<th>Share price</th>
</tr>
</thead>
<tbody>
<tr>
<td>WACC &lt; R_{act} &gt; R_{exp} &gt; R_{req}</td>
<td>Investments</td>
<td>Growth</td>
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<tr>
<td></td>
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<td></td>
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<tr>
<td>WACC &lt; R_{act} &lt; R_{exp} &lt; R_{req}</td>
<td>Disinvestment</td>
<td>Fall</td>
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<tr>
<td>WACC &lt; R_{act} &lt; R_{exp} &gt; R_{req}</td>
<td>Investments</td>
<td>Speculative fall</td>
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<tr>
<td>R_{act} &gt; R_{req}</td>
<td></td>
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</tr>
<tr>
<td>WACC &gt; R_{act} &gt; R_{exp} &gt; R_{req}</td>
<td>Dividends</td>
<td>Growth</td>
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</table>
According to the model, decisions are accepted depending on a balance of four indicators:

- weighted average cost of capital,
- actual profitability of investments,
- expected investment profitability,
- required investment profitability.

1) WACC – Weighted Average Cost of Capital
\[
WACC = K_s \cdot W_s + K_d \cdot W_d \cdot (1 - T) + K_p \cdot W_p, \]
where
- \(K_s\) - the cost of equity;
- \(W_s\) - weight of equity;
- \(K_d\) - cost of debt;
- \(W_d\) - weight of debt;
- \(T\) - corporate tax rate;
- \(K_p\) - cost of preferred stock;
- \(W_p\) - weight of preferred stock.

2) \(R_{act}\) – actual profitability of investments
To calculate \(R_{act}\) we can use ROIC
\[
R_{act} = ROIC \]
\[
ROIC = \frac{NOPLAT}{InvestedCapital}, \]
where
- \(NOPLAT\) – Net Operating Profit Less Adjusted Taxes;
- \(InvestedCapital\) – Invested Capital.

3) \(R_{exp}\) – the expected return on an investment
For calculation \(R_{exp}\) can be used formula
\[
R_{exp} = D/P_0 + q, \]
where
- \(D\) – dividend;
- \(P_0\) – share price;
- \(Q\) – dividend growth.

4) \(R_{req}\) – required return on invested capital
We propose using the CAPM formula. But the value of \(R_{req}\) can also be determined by management based on size of the accepted risk and the required risk premium.
\[
R_{req} = CAPM \]
\[
CAPM = R_f + \beta_i \cdot (R_m - R_f), \]
where
- \(R_f\) – the rate of return for a risk-free security;
- \(R_m\) – the return rate of a market benchmark;
- \((R_m - R_f)\) – risk premium;
- \(\beta_i\) – beta of the company’s shares.

CONCLUSIONS
The model of decision-making on the basis of expectations of shareholders and portfolio investors allows to make a decision about the investing or payment of dividends, and forecast the behaviour of the share price, what is one of the key moments in the process of increasing shareholder wealth.

LITERATURE