

Financial structure:

Equity (Shareholders funds)

loan capital (borrowed capital) (Non-current liabilities + current liabilities)

In the course of formation of optimal financial structure it is necessary to calculate a number of financial performance (indicators of debt level):

1. *Factor of the general debt:*

$$\frac{\text{Liabilities (Non current liabilities + current liabilities)}}{\text{Passive balance (Total shareh.funds \& liab.) sources of funds}} \leq \frac{2}{3}$$

$$\frac{\text{liabilities (Non current liabilities + current liabilities)}}{\text{Shareholders funds}} \leq 2$$

2. *Factor of long-term debt:*

$$\frac{\text{Non - current liabilities (long - term debt)}}{\text{Permanent capital}} \leq \frac{1}{2}$$

Permanent capital = own capital (Shareholders funds) + Non-current liabilities

$$\frac{\text{Non - current liabilities (long - term debt)}}{\text{Shareholders funds}} \leq 1$$

The effect of a financial leverage represents positive or negative result which is received by the economic agent as a result of use of the loan capital, and is calculated according to the following formula:

$$\text{EFL} = \frac{\text{borrowed capital (Non current liabilities + current liabilities)}}{\text{own capital (Shareholders funds)}} * (\text{Re} - \text{D})$$

D - the cost of debt capital (cost of credit)

Re-Economic rentability is characterised by efficiency of the means used in the process of production, despite the fact it is own or loan means.

$$\text{Re} = \frac{\text{EBIT (profit before tax)}}{\text{Total assets}} * 100\%$$

* Value of this indicator can be and negative.

Definition of level of dividend payments on one common stock is carried out on the following formula:

$$UDV = (FDV - VD) / K_{p.a.}$$

- UDV - level of dividend payments
- FDV-fund of dividend payments
- VD - payment of dividends to owners of preference stocks.
- $K_{p.a}$ -number of common stocks

Indicators of the technical condition, movement and efficiency of the fixed assets use.

1. The indicators that define the technical condition of fixed assets:

- The amortization factor - shows the degree of deterioration of fixed assets at the beginning and the end of the year and it is determined by a formula:

$$\underline{Af} = A/Si$$

- Factor of the validity:

$$Fv = 1 - \underline{Af}$$

2. The indicators that define the movement of fixed assets:

- The factor of leaving - shows which part of fixed assets has left within the reporting period, and it is defined by the relation of cost of the left fixed assets to their cost for the beginning of the reporting period.

$$Fl = Sd-Si$$

- The factor of updating - shows in what measure fixed assets have been updated within the reporting period, and it is defined by the relation of cost of the fixed assets placed in operation to their cost for the end of period.

$$F1 = Si/Sf$$

3. The indicators that define the efficiency of use of fixed assets:

- capital productivity - characterises the correlation of the realisation of production volume or the production volume for 1 MDL of the production fixed assets.

$$Cp = \text{Income}/Sfa$$

- The capital intensity - characterises the average cost of fixed assets which is the share of 1 MDL production realisation (return of capital productivity).

$$C_i = S_{fa} / \text{Income}$$

- The capital-labor ratio - reflects the degree of guarantee of fixed assets for workers.

$$CIR = S_{fa} / N_w$$

- Profitability of fixed assets - reflects the profit size of fixed assets for 1 MDL.

$$R = EBIT / S_{mf} * 100\%$$

Duration of an operational cycle is determined by the following formula:

$$OS = M (\text{period of turnover } CT) + MS + FG + R (CP)$$

OS - operating cycle (days),

M - money,

MS - material stocks,

FG - finished goods,

R - receivables,

PT - period of turnover

CP - collection period.

Indicators of the current assets efficiency use.

1. Turnover Ratio:

$$R_t = \text{sales income} / \text{current assets}$$

2. Duration of one turnover in days:

$$D_d = D (\text{number of days in the period } 365) / R_t$$

It shows the number of days during which the current assets are all the stages of the circuit.

3. The load factor of current assets:

$$F_l = \text{current assets} / \text{sales income}$$

It characterizes the current assets attributable to one leu sales.

As a result of the turnover is calculated the amount of savings and the release of funds or the amount of overspending (freezing) of funds.

For this deviation turnover in days must be multiplied by the actual sale of a day.

$$E = (Dd 1 - Dd 0) * \text{sales income} / D (360/365)$$

The priority indicators of profitability are:

1. Return on assets (economic) - reflects a synthesis enterprise results in terms of efficiency of use of his property, and is calculated as follows:

$$ROA = \text{Taxable profit (profit before tax)} / \text{assets}$$

In Moldova this value should be at least 10-15%. Thus, the results of the annual activities of the company must secure for each MDL value of the property at least 10-15 ban profit.

2. Return on equity (own capital) (financial rentability) - shows how much each brings MDL invested in equity, reflects the degree of self-funding enterprise.

$$ROE = \text{Net profit (loss)} / \text{own capital}$$

3. ROI (return on investment) - shows the number of currency units required the company to produce one unit of monetary gain. Determined by the formula:

$$ROA = \text{Net profit (loss)} / \text{assets}$$

Indicators for assessing the profitability of sales:

1) Return (rentability) on gross profit margin (gross profit margin) - shows the share of gross profit in the amount of sales of the enterprise and is calculated as follows:

$$R_g = \text{Gross profit (loss)} / \text{sales income}$$

2) Return on operating profit (operating margin) - shows the share of the operating profit in the volume of sales and is calculated as follows:

$$R_g = \text{Operating profit (loss)} / \text{sales income}$$

3) Return on net profit (return on sales) - shows the share of net profit in the amount of sales:

$$R_{np} = \text{Net profit (loss)} / \text{sales income}$$

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

How many times inventory is created and sold during the period.

$$\text{Receivables turnover} = \frac{\text{Total revenue}}{\text{Average receivables}}$$

How many times accounts receivable are created and collected during the period.

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

The extent to which total assets create revenues during the period.

$$\text{Working capital turnover} = \frac{\text{Total revenue}}{\text{Average working capital}}$$

The efficiency of putting working capital to work

$$\text{Number of days of inventory} = \frac{\text{Inventory}}{\text{Average day's cost of goods sold}} = \frac{365}{\text{Inventory turnover}}$$

Average time it takes to create and sell inventory.

$$\text{Number of days of receivables} = \frac{\text{Receivables}}{\text{Average day's revenues}} = \frac{365}{\text{Receivables turnover}}$$

Average time it takes to collect on accounts receivable.

$$\text{Number of days of payables} = \frac{\text{Accounts payable}}{\text{Average day's purchases}} = \frac{365}{\text{Accounts payable turnover}}$$

Average time it takes to pay suppliers.

Liquidity

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Ability to satisfy current liabilities using current assets.

$$\text{Quick ratio} = \frac{\text{Cash} + \text{Short-term investments} + \text{Receivables}}{\text{Current liabilities}}$$

Ability to satisfy current liabilities using the most liquid of current assets.

$$\text{Cash ratio} = \frac{\text{Cash} + \text{Short-term investments}}{\text{Current liabilities}}$$

Ability to satisfy current liabilities using only cash and cash equivalents.

Solvency ratios

Component-Percentage Solvency Ratios	Debt-to-assets ratio = $\frac{\text{Total debt}}{\text{Total assets}}$	Proportion of assets financed with debt.
	Long-term debt-to-assets ratio = $\frac{\text{Long-term debt}}{\text{Total assets}}$	Proportion of assets financed with long-term debt.
	Debt-to-equity ratio = $\frac{\text{Total debt}}{\text{Total shareholders' equity}}$	Debt financing relative to equity financing.
	Financial leverage = $\frac{\text{Total assets}}{\text{Total shareholders' equity}}$	Reliance on debt financing.
Coverage Ratios	Interest coverage ratio = $\frac{\text{EBIT}}{\text{Interest payments}}$	Ability to satisfy interest obligations.
	Fixed charge coverage ratio = $\frac{\text{EBIT} + \text{Lease payments}}{\text{Interest payments} + \text{Lease payments}}$	Ability to satisfy interest and lease obligations.
	Cash flow coverage ratio = $\frac{\text{CFO} + \text{Interest payments} + \text{Tax payments}}{\text{Interest payments}}$	Ability to satisfy interest obligations with cash flows.
	Cash-flow-to-debt ratio = $\frac{\text{CFO}}{\text{Total debt}}$	Length of time needed to pay off debt with cash flows.

Profitability Ratios: Returns

Return ratios compare a measure of profit with the investment that produces the profit:

$$\text{Operating return on assets} = \frac{\text{Operating income}}{\text{Average total assets}}$$

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Average total assets}}$$

$$\text{Return on total capital} = \frac{\text{Net income}}{\text{Average interest-bearing debt} + \text{Average total equity}}$$

$$\text{Return on equity} = \frac{\text{Net income}}{\text{Average shareholders' equity}}$$

$$\text{Operating return on assets} = \frac{\text{Operating income}}{\text{Average total assets}}$$