

### Detailed explanation of ratios and BPF:

The Financial Analysis takes into consideration most of the provided information, calculating up to twelve financial ratios divided into the following four groups:

- Profitability ratios
- Liquidity ratios
- Efficiency ratios
- Debt ratios

The analysis then calculates regression trends between the same ratios from consequent periods to determine predicted future results of the Subject. Each group of ratios is rated independently on a five grade scale (poor, passable, satisfactory, good and excellent). The results are shown in the “Financial rating” section of the reports, example:

- Profitability ratios **poor**
- Liquidity ratios **satisfactory**
- Efficiency ratios **poor**
- Debt ratios **good**

Additionally, when available, the regression trend value is calculated and provided in the ratios table and in the “Financial rating” section, example:

- Profitability ratios **poor but increasing**
- Liquidity ratios **satisfactory but decreasing**

The following table shows meanings of ratios used:

NAME	Type	Method of calculation	Explanation
Gross Margin	Profitability	Gross Profit / Net Sales	The higher the percentage, the more the company retains to pay for other expenses of the business.
Operating Margin	Profitability	Operating Profit / Net Sales	Measures company's operating efficiency.
Net profit Margin	Profitability	Net Profit / Net Sales	The higher percentage the better profitability of the company.
ROE (Return On Equity)	Profitability	Net Income / Shareholders Equity	Indicates how profitable a company is in relation to its equity.
ROA (Return On Assets)	Profitability	Net Income / Total Assets	Indicates how profitable a company is in relation to its assets. One of the ways to look at efficiency of company's management in a way they convert assets available into profits.
ROI (Return On Investment)	Profitability	Net Profit before Tax / Shareholders Equity	Shows benefit of investment made.
Current Ratio	Liquidity	Current Assets / Current Liabilities	Measures a company's ability to pay short-term debts. The higher the ratio the better.
Quick Ratio	Liquidity	(Current Assets – Inventories) / Current Liabilities	Measures a company's ability to pay short-term debts with its most liquid assets. The higher the ratio the better.
Asset Turnover	Efficiency	Net Sales / Total Assets	Indicates the relationship between assets and revenue. This ratio is useful to determine the amount of sales that are generated from each dollar of assets.
Inventory Turnover	Efficiency	Sales / Inventory	Shows how many times a company's inventory is sold and replaced over a period of time
Debt Ratio	Debt	Total Liabilities / Total Assets	Measures proportion of company's debts to its assets. Ratio below 60% indicates comfortable situation for the company.
Long Term Ratio	Debt	Long-Term Debt / Shareholders Equity	Helpful in determining the debt capacity of a firm for its working capital structure. Ratio below 50% indicates comfortable situation for the company.

The final financial rating analysis takes the above ratios into account and calculates the average score, which is also provided on a five grade scale. The proper language interpretation is then adjusted for the financial results. An independent scoring method is used and provided as **BPF (Bankruptcy Probability Factor)**, calculating the risk of impending bankruptcy within the next two years with over 90% certainty.

BPF incorporates several mathematical risk analysis methods including Altman's with a combination of built-in macro economical and political data that can be either country- or industry- specific. The model has been tested internally for a number of months and released to the customers after reaching desired accuracy.

Data used for calculations of BPF includes in no particular order:

- Current Assets
- Current Liabilities
- Total Assets
- Retained Earnings
- Long Term Liabilities
- Sales Turnover
- Shareholders Equity
- Operating Profit

The following table shows possible values of **BPF** and the meanings:

BPF value	Financial Rating	explanation
< 0.49	Poor	High risk of bankruptcy in the next two years – dealings on open terms are not recommended
> 0.48 & < 0.91	Passable	Some financial problems – dealings on open terms limited to small credits if at all. Although liabilities should be met, higher number of internal and external factors can affect a business and cause its insolvency.
> 0.90 & < 1.25	Satisfactory	Reasonable financial condition – dealings on open terms allowable and medium amounts possible. Liabilities should be met under normal business circumstances.
> 1.24 & < 2.85	Good	Low risk of bankruptcy in the next two years – open credit terms can be granted and liabilities should be met under most circumstances
> 2.84	Excellent	Low risk of bankruptcy in the next two years – high confidence factor when dealing on open terms