

Understanding basics of “Fundamental analysis”



TRADING TERMINAL.COM
FROM BEAR BULL TRADERS

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Fundamental analysis

Fundamental analysis is analysis that is used mostly by investors to determine the real intrinsic, market value of a stock.

The real, intrinsic value of the shares of a stock may be different than currently priced at the market exchange. The discrepancy is then being used to make profits.

For day and swing traders, **Fundamental analysis (or components of it)** will be significant in **selecting the “stocks-in-play”** that will be traded that day, which will fit the and then yield highest profits.



Fundamental analysis

Fundamental analysis will delve into the company's records, reports, assets, earnings capabilities and how influential are they in their sector or industry.

Fundamental analysis is used to determine if stock price will move up or down significantly over time as a result of companies' growth and performance.



Fundamental analysis

Fundamental analysis underlies the so called buy-and-hold investment approach.

Fundamental analysis is an *analytical skill* focused on the current and past financial health and growth potential of the company. These data will then be assessed and compared with the currently traded price at the market exchange.



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Fundamental analysis is an *analytical skill* focused on the current and past financial health and growth potential of the company. These data will then be assessed and compared with the currently traded price at the market exchange.

NOTE:

Fundamental analysis ignores some external influences like short-term market trend or sentiment, which is based on current on-line perception of the company.



Fundamental analysis

Fundamental analysts are basically on a hunt for different stocks that are currently priced in the market exchange **below** or **above** their **“fair” (real) value**.

Investments based on **Fundamental analysis** do not care about short-term up-down price fluctuations...

Note:
Warren Buffet is one of the most famous fundamental analysts.



Fundamental analysis: **buying** an undervalued stock

If **fundamental analyst** discovers a stock whose shares are being traded at price **below** its “Fair” price, they will initiate or recommend **buying** those shares.

This stock will be labeled by fundamental analyst as being **undervalued** at the currently traded price.



Fundamental analysis: **selling** an overvalued stock

If **fundamental analyst** discovers a stock whose shares are being traded at price **above** its “Fair” price, they will initiate or recommend **selling** those shares.

This stock will be labeled by fundamental analyst as being **overvalued** at the currently traded price.



What does fundamental analysis include?

Fundamental analysis includes analysis of:

- 1) Financial and economic data of the company.
- 2) All books of the company.
- 3) Market position (influence).
- 4) Management team.
- 5) Governance.
- 6) Responsibility.
- 7) Macroeconomic effects (e.g. interest rates, inflation, economic growth).

Briefly, fundamental analysis includes anything that can affect the companies value...



Fundamental analysis

Fundamental analysis is commonly performed in this order:

- 1) Evaluation of the **overall state of the economy and market**.
- 2) Evaluation of the **overall strength of the specific industry and sector**.
- 3) Evaluation of the **overall financial performances of the company**.

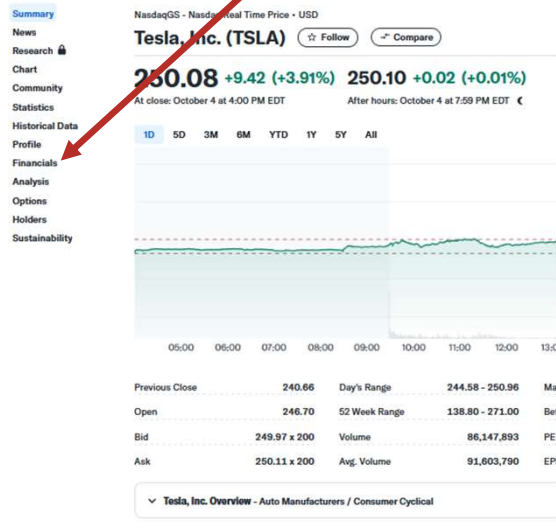
IMPORTANT CONCEPT TO NOTE AND REMEMBER HERE:

If overall economy, market, industry and sector are weak, there is **higher probability** that the price of shares of a stock **will not move** as much it would be expected based on the overall financial performances of the company.

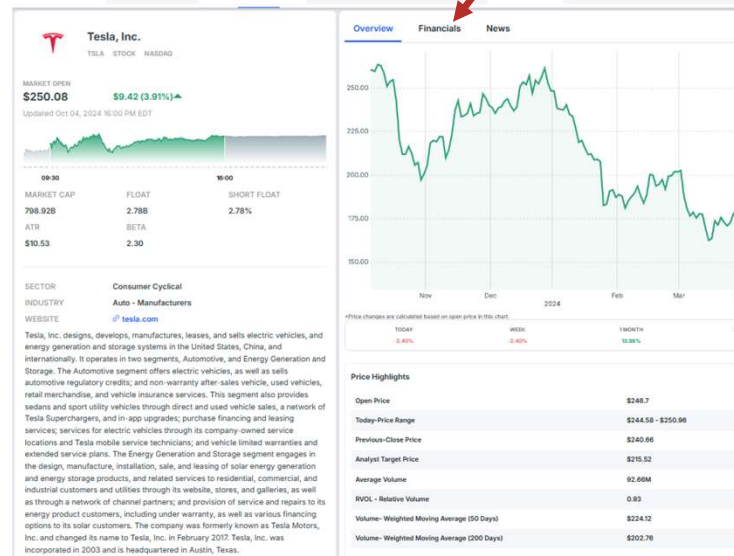


Fundamental analysis

Fundamental analysis is based on publicly available financial statements from any company issuing the stock either on their website or through on-line financial data providers (e.g. at Yahoo finance – click “Financials” tab; at Trading terminal – click “Financials” Tab).



<https://finance.yahoo.com/quote/TSLA/>



<https://tradingterminal.com/fundamental/TSLA>

Fundamental analysis

Fundamental analysis is focused on delving into financial statements.

There are several subparts to financial statements (“Financials”) of a company, such as:

- 1) **Income statement.**
- 2) **Balance sheet statement.**
- 3) **Cash flow statement.**

NasdaqGS - Nasdaq Real Time Price · USD

Tesla, Inc. (TSLA) ☆ Follow ⇄ Compare

250.08 +9.42 (+3.91%) **250.10** +0.02 (+0.01%)

At close: October 4 at 4:00 PM EDT After hours: October 4 at 7:59 PM EDT

Income Statement Balance Sheet Cash Flow

<https://finance.yahoo.com/quote/TSLA/financials/>

Fundamental analysis: Income statement

All numbers in thousands

Breakdown	TTM	Annual Quarterly				Download	Expand All
		12/31/2023	12/31/2022	12/31/2021	12/31/2020		
∨ Total Revenue	95,318,000	96,773,000	81,462,000	53,823,000	31,536,000		
Cost of Revenue	78,428,000	79,113,000	60,609,000	40,217,000	24,906,000		
Gross Profit	16,890,000	17,660,000	20,853,000	13,606,000	6,630,000		
∨ Operating Expense	9,664,000	8,769,000	7,021,000	7,110,000	4,636,000		
Operating Income	7,226,000	8,891,000	13,832,000	6,496,000	1,994,000		
∨ Net Non Operating Interest In...	1,052,000	910,000	106,000	-315,000	-718,000		
∨ Other Income Expense	-602,000	172,000	-219,000	162,000	-122,000		
Pretax Income	7,676,000	9,973,000	13,719,000	6,343,000	1,154,000		
Tax Provision	-4,783,000	-5,001,000	1,132,000	699,000	292,000		
∨ Net Income Common Stockh...	12,390,000	14,999,000	12,583,000	5,524,000	690,000		
Average Dilution Earnings	--	--	1,000	9,000	--		
Diluted NI Available to Com Stoc...	12,390,000	14,999,000	12,584,000	5,533,000	690,000		
Basic EPS	3.91	4.73	4.02	1.87	0.25		
Diluted EPS	3.56	4.31	3.62	1.63	0.21		
Basic Average Shares	3,184,500	3,173,500	3,130,000	2,959,000	2,880,000		
Diluted Average Shares	3,490,000	3,482,750	3,475,000	3,386,000	2,880,000		
Total Operating Income as Repor...	6,604,000	8,891,000	13,656,000	6,523,000	-1,994,000		
Rent Expense Supplemental	1,111,000	1,268,000	1,509,000	978,000	563,000		
Total Expenses	88,092,000	87,882,000	67,630,000	47,327,000	29,542,000		
Net Income from Continuing & D...	12,390,000	14,999,000	12,583,000	5,524,000	721,000		
Normalized Income	12,881,380	14,999,000	12,744,920	5,499,970	721,000		
Interest Income	1,313,000	1,066,000	297,000	56,000	30,000		
Interest Expense	261,000	156,000	191,000	371,000	748,000		
Net Interest Income	1,052,000	910,000	106,000	-315,000	-718,000		
EBIT	7,937,000	10,129,000	13,910,000	6,714,000	1,902,000		
EBITDA	12,928,000	14,796,000	17,657,000	9,625,000	4,224,000		
Reconciled Cost of Revenue	78,428,000	79,113,000	60,609,000	40,217,000	24,906,000		
Reconciled Depreciation	4,991,000	4,667,000	3,747,000	2,911,000	2,322,000		
Net Income from Continuing Op...	12,390,000	14,999,000	12,583,000	5,524,000	721,000		
Total Unusual Items Excluding G...	-622,000	--	-176,000	27,000	--		
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Normalized EBITDA	13,550,000	14,796,000	17,833,000	9,598,000	4,224,000		
Tax Rate for Calcs	0	0	0	0	0		
Tax Effect of Unusual Items	-130,620	--	-14,080	2,970	--		

There are annual (once a year) and Quarterly (4x a year) financial statements provided by the publicly traded companies.

Fundamental analysis: Income statement

All numbers in thousands

Annual Quarterly Download Expand All

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Earnings per share (EPS) on the **Income statement** shows how much income did a company make per each share of its stock.

EPS is a **used by many, many investors to estimate companies' value** as it in its core measures the profitability of the company.

Higher EPS is better, as it indicates the greater company value; the more profitable company is to be!

Fundamental analysis

Fundamental analysis is based on financials, such as *income statement*, ***balance sheet***, and ***cash flow*** statements.

Income Statement **Balance Sheet** Cash Flow Dividends

All numbers in thousands

Annual Quarterly Download

Breakdown	12/31/2023	12/31/2022	12/31/2021	12/31/2020	12/31/2019
∨ Total Assets	106,618,000	82,338,000	62,131,000	52,148,000	--
∨ Total Liabilities Net Minority I...	43,009,000	36,440,000	30,548,000	28,469,000	--
∨ Total Equity Gross Minority In...	63,609,000	45,898,000	31,583,000	23,679,000	--
Total Capitalization	65,316,000	45,733,000	34,443,000	30,738,000	--
Common Stock Equity	62,634,000	44,704,000	30,189,000	22,225,000	--
Capital Lease Obligations	4,916,000	3,703,000	3,531,000	3,008,000	--
Net Tangible Assets	62,019,000	44,111,000	28,472,000	21,705,000	--
Working Capital	20,868,000	14,208,000	7,395,000	12,469,000	--
Invested Capital	67,291,000	46,749,000	35,531,000	32,496,000	--
Tangible Book Value	62,019,000	44,111,000	28,472,000	21,705,000	--
Total Debt	9,573,000	5,748,000	8,873,000	13,279,000	--
Net Debt	--	--	--	--	5,533,000
Share Issued	3,185,000	3,164,000	3,099,000	2,880,000	--
Ordinary Shares Number	3,185,000	3,164,000	3,099,000	2,880,000	--

Income Statement Balance Sheet **Cash Flow** Dividends

All numbers in thousands

Annual Quarterly Download

Breakdown	TTM	12/31/2023	12/31/2022	12/31/2021	12/31/2020
∨ Operating Cash Flow	11,532,000	13,256,000	14,724,000	11,497,000	5,943,000
∨ Investing Cash Flow	-17,875,000	-15,584,000	-11,973,000	-7,868,000	-3,132,000
∨ Financing Cash Flow	5,886,000	2,589,000	-3,527,000	-5,203,000	9,973,000
∨ End Cash Position	15,422,000	17,189,000	16,924,000	18,144,000	19,901,000
Income Tax Paid Supplemental ...	--	1,119,000	1,203,000	561,000	115,000
Interest Paid Supplemental Data	--	126,000	152,000	266,000	444,000
Capital Expenditure	-9,815,000	-8,899,000	-7,172,000	-8,014,000	-3,242,000
Issuance of Capital Stock	--	--	--	--	12,269,000
Issuance of Debt	7,826,000	3,931,000	--	8,883,000	9,713,000
Repayment of Debt	-2,478,000	-1,815,000	-3,866,000	-14,615,000	-12,201,000
Free Cash Flow	1,717,000	4,357,000	7,552,000	3,483,000	2,701,000

Fundamental analysis

Fundamental analysis is usually divided into **qualitative** and **quantitative** to assess financial health and fair value of the company.

Quantitative fundamental analysis uses numbers and ratios from financial reports, such as:

- 1) Earnings per share.
- 2) Revenue growth.
- 3) Debt-to-equity ratio.
- 4) Return on equity.
- 5) Margins.

Qualitative fundamental analysis uses other non-numerical factors, such as:

- 1) Management quality.
- 2) Market position.
- 3) Industry trends.
- 4) Brand recognition.
- 5) Customer satisfaction.
- 6) Company culture and ethics.

Fundamental analysis

Example of one of the approaches to the fundamental analysis:

- 1) **Gather financial data:** income statement, balance sheet, and cash flow statement.
- 2) **Analyze financial statements:** revenue growth, earnings per share, debt-to-equity ratio, and others.
- 3) **Asses how competitive is the company:** market share, brand recognition, and what new products are offered.
- 4) **Evaluate the management team** leading the company.
- 5) **Determine the fair value** of the company based on the above four (e.g. estimate the future cash flow).
- 6) **Compare the fair value with the current market price.** Determine if it is **undervalued**, **overvalued**, or in line.
- 7) **Make an informed decision** on your investment (buy, sell, hold).

Fundamental analysis: ratios

Fundamental analysis is based on the belief that the real "fair" value of the company is not defined by their absolute values for individual financial items BUT rather by **ratios** (and/or relationship) between different financial numbers on the statements.

Some commonly used ratios in the fundamental analysis are:

1) Liquidity ratio indicates company's ability to pay its short-term debts and obligations.

2) Profitability ratios indicate company's ability and efficiency to generate profits.

3) Debt ratios indicate company's ability to manage debt obligations.

4) Efficiency ratios indicate company's ability to use assets and resources to generate sales .

IMPORTANT NOTE:

When using **fundamental analysis** ratios for informed investment decisions, you need to compare them with other companies in its other peers or industry averages to know where does this company stand.

Fundamental analysis: **Liquidity ratios**

Liquidity ratio indicates company's **ability to pay** its short-term **debts** and **obligations**.

A) Current liquidity ratio (CLR): divide current assets with current liabilities.

More than 1.5 is healthy. Please note that too high may be a problem too.

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

B) Quick liquidity ratio (QLR): divide (current assets minus inventory) with (current liabilities).

More than 1.0 is healthy.

$$QLR = \frac{(\text{Current assets} - \text{Inventory})}{\text{Current liabilities}}$$

Fundamental analysis: Profitability ratios

Profitability ratio: company's ability to generate profits from its operations.

A) Return on investment (ROI): measures the profitability of assets!

Divide (the initial cost minus its final value) with (the cost of investment). Multiply by 100.

The higher the number, the better.

$$ROI = \frac{\text{Initial cost} - \text{Final value}}{\text{Cost of Investment}}$$

B) Gross profit margin (GPM): percentage of net sales that exceeds the cost of assets sold.

This is the gross profit of the company after removing the business costs.

Divide (the net sales minus cost of goods sold) with (net sales).

$$GPM = \frac{\text{Net sales} - \text{Cost of goods sold}}{\text{Net sales}}$$

Fundamental analysis: **Debt ratio**

Debt ratio: company's level of debt and its ability to manage that debt.

A) Debt ratio (DR): divide total debt with total assets.

If the ratio is **more than 1** (or higher than 100%) - this means **company has more debt than assets** (and vice versa). Is this good? No.

$$DR = \frac{\text{Total debt}}{\text{Total assets}}$$

B) Debt-to-equity (D/E) ratios: divide total debt with total shareholders equity.

If ratio is **less than 1**, company **has more equity than debt** (and vice versa). Is this good? Yes.

$$D/E = \frac{\text{Total debt}}{\text{Total shareholders equity}}$$

C) Interest coverage ratio (ICR): divide Earnings before interest and taxes (with) Interest expenses.

Ratio more than 1, company generates more than it has to pay (and vice versa). Is this good? Yes.

$$ICR = \frac{\text{(Earnings before interest and taxes)}}{\text{Interest expenses}}$$

Fundamental analysis: **Efficiency ratios**

Efficiency ratio: company's ability to use its assets to generate sales and profits.

A) Inventory turnover ratio (ITR): rate of how many times a company sells and replaces its inventory over a specific period of time.

Divide Cost of goods sold (with) Average inventory.

The higher it is, the better, indicating strong sales.

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

B) Asset inventory ratio (AIR): company's efficiency in using assets to generate sales.

Divide Revenue (with) Average total assets.

The higher it is, the better, indicating efficient usage of assets to generate sales.

$$AIR = \frac{\text{Revenue}}{\text{Average Total assets}}$$

Fundamental analysis: **Advantages and disadvantages.**

Properly executed **Fundamental analysis** will provide an in-depth insight into company's financials.

Advantages of fundamental analysis: long-term focus and possibility of compounding, informed decision making, better risk management, identifying undervalued companies, avoiding emotional in moment decisions, in-depth analysis, possible superior returns, lower stress and emotional decisions, reduced trading costs and tax benefits. *It is comprehensive and based on past evidence approach.*

Limitations of fundamental analysis: subjective approach, time lag based on past performances, limited scope, possible inaccurate financial data, market risk and movement, possible inactivity of the investment, inflexibility of cash flow. Limited scope of analysis.



Fundamental analysis: **Valuation types**

Fundamental analysis can use variety of different ways to get to the "*fair value*".

Two examples of approaches that can be used for valuation in fundamental analysis are:

1) *Intrinsic valuation*

2) *Relative valuation*



Fundamental analysis: **Intrinsic valuation**

Intrinsic valuation is a measure of what a company is worth based on a technique using its own fundamental characteristics, and it has its own variations.

Example 1: Discounted cash flow (DCF) method is a way to estimate the fair present value of a company's future cash flows.

Example 2: Net asset value (NAV) method is a way to estimate the present fair value of a company that is based on its net assets.

Intrinsic value is different than current market price.



Fundamental analysis: **Relative valuation**

Relative valuation is a valuation approach where company's value is **compared to its competitors or industry peers**.

Example 1: Price-to earning (P/E) ratio method: compares a company's share price to its earnings per share.

Example 2: Price-to-book (P/B) ratio method: compares company's share price to its book value.

Example 3: Price-to-sale (P/S) ratio method: compares company's market cap to total sales.



Fundamental analysis: **Relative valuation**

Example of one of the relative value approaches in fundamental analysis:

- 1) Identify comparable companies within the sector and industry.**
- 2) Choose relevant to your strategy fundamental financial benchmarks: P/E, P/B, P/S ratios.**
- 3) Calculate financial benchmarks for all companies (normalize the data).**
- 4) Compare your company to the financial benchmarks.**
- 5) Consider market position, growth prospects, and macroeconomics.**

Summary

1) Fundamental analysis is a skill to define the real “fair” value of the stock and discover if share prices are **undervalued** or **overvalued** for the stock. This analysis creates **buy-and-hold** investment opportunities.

2) Fundamental analysis focuses on company's assets and earnings capabilities.

3) Fundamental analysis uses different benchmarks and ratios from financial reports like income statement, balance sheet, and cash flow to determine financial health of a company that issued particular stock, and guide us to the real value of the company.

4) Fundamental analysis, particularly its components, can be used for focused selection of stocks-in-play that will have larger moves and will fit the trading strategies. There is know fact out there, **“you are as good as stocks you are investing in or trading”**.

FINAL NOTE: We will discuss more on how to select best stocks-in-play for different trading strategies. Understanding fundamentals and its components discussed in this lecture will be of big help.