

# Fundamental & technical analysis

Fundamental analysis and technical analysis are two distinct methods used by investors and analysts to evaluate and make decisions about investments, particularly in financial markets like stocks, bonds, and commodities. Here's a closer look at each approach:

## Fundamental Analysis:

Fundamental analysis involves examining the intrinsic value of an asset by analyzing various fundamental factors related to the asset and the entity issuing it. These factors typically include:

**Financial Statements:** Reviewing financial statements such as income statements, balance sheets, and cash flow statements to assess a company's financial health, profitability, and overall financial performance.

**Earnings and Revenue:** Analyzing a company's earnings growth, revenue trends, and profitability ratios (e.g., price-to-earnings ratio, profit margins) to determine its financial strength and growth potential.

**Management and Leadership:** Evaluating the quality of a company's management team, including their experience, track record, and decision-making capabilities.

**Industry and Market Analysis:** Assessing the industry in which the company operates, market dynamics, competitive landscape, and potential growth prospects.

**Macroeconomic Factors:** Considering broader economic indicators such as interest rates, inflation, and overall market conditions that may impact the investment.

**Valuation Metrics:** Using various valuation methods (e.g., discounted cash flow analysis, price-to-book ratio) to estimate the intrinsic value of the asset and determine whether it is overvalued or undervalued.

Fundamental analysis seeks to identify assets (such as stocks) that are trading at prices significantly different from their intrinsic value, with the belief that market prices will eventually converge with the asset's true value. Fundamental analysts often take a long-term perspective and are considered value investors.

## Technical Analysis:

Technical analysis, in contrast, focuses on analyzing historical price and volume data and using various technical indicators to predict future price movements. Key elements of technical analysis include:

**Price Charts:** Examining price charts, including patterns, trends, and support/resistance levels, to identify potential buy or sell signals.

**Technical Indicators:** Utilizing indicators like moving averages, relative strength index (RSI), and MACD to generate trading signals and gauge market sentiment.

**Volume Analysis:** Analyzing trading volume to assess the strength of price movements and confirm trends.

**Pattern Recognition:** Identifying common chart patterns such as head and shoulders, double tops/bottoms, and flags to predict potential price reversals or continuations.

Technical analysts believe that historical price and volume data contain valuable information about future price movements, and they use this data to make trading decisions. Technical analysis is often associated with short- to medium-term trading and is used by traders seeking to profit from short-term price fluctuations.

In summary, fundamental analysis primarily evaluates the intrinsic value of an asset based on fundamental factors, while technical analysis relies on historical price and volume data and technical indicators to forecast future price movements. Investors and traders may choose one or both of these methods, depending on their investment goals, time horizon, and personal preferences. Additionally, some market participants argue that the effectiveness of each approach can vary depending on market conditions and asset classes

## **Fundamental analysis**

Fundamental analysis is a method used to evaluate the intrinsic value of an asset, such as a stock, bond, currency, or commodity, by analyzing various fundamental factors related to that asset and the entity issuing it. The goal of fundamental analysis is to determine whether an asset is overvalued or undervalued and make informed investment decisions based on its true worth. Here are the key components and principles of fundamental analysis:

**Financial Statements:**

Fundamental analysts examine the financial statements of the entity associated with the asset, typically a company in the case of stocks. The key financial statements include:

**Income Statement:** This provides information on a company's revenues, expenses, and net income over a specific period, revealing its profitability.

**Balance Sheet:** The balance sheet details a company's assets, liabilities, and shareholders' equity at a given point in time, reflecting its financial position.

**Cash Flow Statement:** This shows the inflows and outflows of cash from operating, investing, and financing activities, helping to assess a company's liquidity and cash management.

**Earnings and Revenue Analysis:**

Fundamental analysts scrutinize a company's earnings growth and revenue trends. Consistent growth in earnings and revenues can be a sign of a healthy and well-performing business.

**Valuation Metrics:**

Various valuation metrics are used to estimate the fair value of an asset. Common metrics include:

**Price-to-Earnings (P/E) Ratio:** Compares a stock's current market price to its earnings per share (EPS). A higher P/E ratio may indicate a higher valuation.

**Price-to-Book (P/B) Ratio:** Compares a stock's market price to its book value per share, which is based on its net assets. A lower P/B ratio may suggest a better value.

**Dividend Yield:** Calculates the annual dividend income relative to the stock's price. A higher yield can be attractive to income-seeking investors.

**Management and Leadership:**

Evaluating the quality of a company's management team is essential. This includes assessing the CEO's leadership, the board of directors, and their track record in making sound strategic decisions.

**Industry and Market Analysis:**

Understanding the industry in which the company operates and analyzing market dynamics, competitive landscape, and potential growth prospects are crucial factors in fundamental analysis.

**Macroeconomic Factors:**

Broader economic indicators, such as interest rates, inflation, and overall market conditions, can impact the performance of the asset and should be considered.

**Qualitative Factors:**

Beyond the quantitative data, fundamental analysts may also evaluate qualitative factors, such as a company's brand strength, market reputation, and competitive advantages.

**Investor Sentiment:**

Market sentiment and perceptions about the asset can also influence its value. For instance, positive news or negative rumors can impact an asset's price.

The fundamental analysis process aims to estimate the intrinsic value of an asset, comparing it to its current market price. If the intrinsic value is higher than the market price, the asset may be considered undervalued, suggesting a potential investment opportunity. Conversely, if the intrinsic value is lower than the market price, the asset may be overvalued, indicating a potential sell or shorting opportunity.

Fundamental analysis is commonly used by long-term investors, including value investors, who seek assets that are trading below their intrinsic value. It provides a comprehensive assessment of an asset's health, growth prospects, and financial stability, helping investors make informed decisions based on the underlying fundamentals of the asset and the entity issuing it.

## **Economic Analysis**

Economic analysis refers to the process of examining and evaluating economic data, trends, and factors to gain insights into various aspects of an economy. It plays a crucial role in decision-making for governments, businesses, policymakers, and individuals. Economic analysis encompasses a wide range of topics and methodologies, and it can be broadly categorized into two main types: macroeconomic analysis and microeconomic analysis.

## 1. Macroeconomic Analysis:

Macroeconomic analysis focuses on the overall performance and behavior of an entire economy or a large economic system. It explores broad economic indicators and aggregates, including:

**Gross Domestic Product (GDP):** GDP measures the total value of all goods and services produced within a country's borders within a specific time period. Macroeconomists use GDP to assess the overall health and growth of an economy.

**Inflation:** Inflation is the rate at which the general price level of goods and services rises, leading to a decrease in the purchasing power of a currency. Economists analyze inflation to gauge its impact on consumer behavior and the economy.

**Unemployment:** The unemployment rate indicates the percentage of the labor force that is jobless and actively seeking employment. It is a key indicator of labor market conditions.

**Interest Rates:** Central banks often set interest rates as part of their monetary policy. Changes in interest rates can influence borrowing costs, consumer spending, and investment.

**Government Fiscal Policy:** This includes government spending, taxation, and budget deficits or surpluses. Macroeconomic analysis assesses how government policies impact the economy.

**Exchange Rates:** The value of a nation's currency relative to other currencies affects international trade and foreign investment. Macroeconomists study exchange rates to understand their impact on an economy's trade balance.

**Economic Growth and Business Cycles:** Analyzing economic growth trends and identifying phases of the business cycle, such as recessions and expansions, is a fundamental aspect of macroeconomic analysis.

**Monetary Policy:** Central banks use monetary policy tools, like adjusting interest rates and money supply, to influence an economy's money and credit conditions. Macroeconomists study these policies and their effects.

## 2. Microeconomic Analysis:

Microeconomic analysis delves into the behavior of individual firms, consumers, industries, and markets within an economy. Key topics and concepts include:

**Supply and Demand:** Microeconomists study the interaction between supply (the quantity of a good or service producers are willing to offer) and demand (the quantity consumers are willing to purchase) to determine prices and quantities in specific markets.

**Market Structures:** Different industries exhibit various market structures, such as perfect competition, monopolistic competition, oligopoly, and monopoly. Microeconomic analysis assesses market power and its implications for pricing and competition.

**Consumer Behavior:** Understanding how consumers make decisions, including factors like preferences, utility, and budget constraints, is crucial for businesses and policymakers.

**Firm Behavior:** Microeconomic analysis examines how firms set prices, make production decisions, and compete in the marketplace.

**Market Failure:** Economists study situations where markets do not efficiently allocate resources, leading to market failures. Examples include externalities, public goods, and asymmetric information.

**Cost-Benefit Analysis:** This technique is used to assess the advantages and disadvantages of policy decisions or investment projects by comparing their costs and benefits.

**Elasticity:** Elasticity measures the responsiveness of supply or demand to changes in price or income. It is essential for pricing strategies and tax policy analysis.

**Production and Efficiency:** Economists analyze production processes and efficiency to determine how resources are allocated in the production of goods and services.

Economic analysis is valuable for a wide range of purposes, including making investment decisions, formulating government policies, understanding market dynamics, forecasting economic trends, and evaluating the impact of economic events and policy changes. It provides a systematic framework for studying and interpreting economic phenomena, allowing stakeholders to make informed choices and decisions based on economic principles and data.

## **Industry Analysis**

Industry analysis is a process of examining and evaluating the structure, dynamics, and key factors influencing a particular industry or sector of the economy. It plays a crucial role in various business and investment decisions, including market entry, investment strategies, and business planning. Industry analysis provides insights into the opportunities, threats, and competitive forces at play within a specific industry. Here are the key components and steps involved in industry analysis:

### **1. Industry Definition and Classification:**

Begin by defining the industry or sector you intend to analyze. Industries can be broadly defined or highly specialized, so it's essential to clearly specify the scope of your analysis. Industries are often categorized based on the products or services they provide.

### **2. Market Size and Growth:**

Assess the current size of the market within the industry and its historical growth trends. This information helps identify the market's potential and attractiveness. Market size can be measured in terms of revenue, units sold, or other relevant metrics.

### 3. Market Trends and Drivers:

Identify the key trends and drivers that are shaping the industry. This includes technological advancements, changes in consumer preferences, regulatory developments, and macroeconomic factors that impact the demand for industry products or services.

### 4. Competitive Analysis:

Examine the competitive landscape within the industry. Identify major competitors, their market shares, strengths, weaknesses, and strategies. Assess the level of rivalry and the barriers to entry for new entrants.

### 5. SWOT Analysis:

Conduct a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) to systematically evaluate the internal and external factors affecting the industry. This analysis helps identify areas of advantage and areas that need improvement.

### 6. Industry Concentration:

Determine the degree of industry concentration, which refers to how market share is distributed among companies within the industry. Concentrated industries may have a few dominant players, while fragmented industries have numerous smaller competitors.

### 7. Regulatory Environment:

Understand the regulatory framework governing the industry. Regulations can have a significant impact on business operations, market entry, and compliance requirements.

### 8. Customer Analysis:

Analyze the demographics and behaviors of industry customers. Understand their needs, preferences, and buying behavior. Customer analysis helps in tailoring products or services to meet market demand.

### 9. Supplier Analysis:

Assess the suppliers within the industry. Understand their bargaining power, reliability, and the potential impact of supply chain disruptions on industry operations.

### 10. Threat Analysis:

- Identify potential threats to the industry, including competitive threats, substitution threats (products or services that could replace those in the industry), and external threats (economic downturns, political instability, etc.).

### 11. Industry Life Cycle:

- Determine where the industry stands in its life cycle. Industries typically go through stages including introduction, growth, maturity, and decline. Understanding the stage can inform strategic decisions.

#### 12. Emerging Opportunities:

- Look for emerging opportunities within the industry, such as untapped market segments, innovative technologies, or new business models that could lead to growth.

#### 13. Future Outlook:

- Provide an assessment of the industry's future prospects. This may involve making forecasts based on current trends and factors that could shape the industry's trajectory.

#### 14. Investment and Business Strategy:

- Based on your analysis, develop strategies for businesses or investors looking to operate in the industry. This may include recommendations for market entry, diversification, cost management, and differentiation.

Industry analysis is an ongoing process as market conditions and competitive dynamics can change over time. It is a valuable tool for businesses seeking growth opportunities and investors looking to make informed investment decisions within a specific sector.

## Company Analysis

Company analysis, also known as corporate analysis or company research, is the process of evaluating a specific company to gain a comprehensive understanding of its financial health, operations, performance, and overall business prospects. This analysis is crucial for various stakeholders, including investors, financial analysts, business professionals, and competitors. Here are the key components and steps involved in conducting a company analysis:

#### 1. Business Overview:

Begin with an overview of the company, including its name, headquarters, industry, and a brief description of its core business activities. Identify the company's mission, vision, and values if available.

#### 2. Company History:

Provide a historical perspective on the company's evolution, including significant milestones, mergers, acquisitions, and key developments that have shaped its trajectory.

#### 3. Industry and Market Analysis:

Assess the industry in which the company operates, including market trends, growth prospects, competitive dynamics, and the company's position within the industry.

#### 4. Financial Performance:

Analyze the company's financial statements, including the income statement, balance sheet, and cash flow statement. Key financial metrics to evaluate include revenue, net income, profitability ratios (e.g., profit margin), liquidity ratios, and solvency ratios.

#### 5. Key Financial Ratios:

Calculate and analyze important financial ratios, such as:

Liquidity Ratios: Current ratio, quick ratio.

Profitability Ratios: Return on assets (ROA), return on equity (ROE), gross margin, and operating margin.

Solvency Ratios: Debt-to-equity ratio, interest coverage ratio.

#### 6. Market Positioning:

Determine the company's market share, competitive advantage, and positioning within its industry. Assess the company's strengths, weaknesses, opportunities, and threats (SWOT analysis).

#### 7. Competitive Analysis:

Identify the company's main competitors and analyze their strengths, weaknesses, strategies, and market share. Evaluate the competitive landscape and the company's competitive positioning.

#### 8. Management and Leadership:

Evaluate the leadership team, including the CEO and key executives. Consider their experience, qualifications, track record, and the effectiveness of their leadership.

#### 9. Products and Services:

Describe the company's product or service portfolio. Highlight any innovative or unique offerings and discuss their significance in the market.

#### 10. Customers and Markets:

- Analyze the company's customer base, including key customers, segments, and geographic markets served. Assess customer loyalty and the company's marketing strategies.

#### 11. Supply Chain and Suppliers:

- Examine the company's supply chain, including its suppliers, supply chain efficiency, and potential risks related to sourcing.

#### 12. Regulatory Environment:

- Consider the regulatory environment in which the company operates. Evaluate compliance with industry-specific regulations and potential regulatory risks.

#### 13. ESG (Environmental, Social, and Governance) Factors:

- Assess the company's performance and initiatives related to environmental sustainability, social responsibility, and corporate governance.

#### 14. Recent Developments:

- Review recent news, events, and developments related to the company. This includes earnings reports, acquisitions, partnerships, and legal matters.

#### 15. Future Outlook:

- Provide an analysis of the company's future prospects, growth opportunities, and potential challenges. Consider emerging trends and how they may impact the company.

#### 16. Investment or Business Strategy:

- Based on your analysis, make recommendations for investors or business professionals. This may include investment decisions, strategic initiatives, or areas for improvement.

#### 17. Risks and Mitigations:

- Identify and assess potential risks that could affect the company's operations or financial performance. Discuss strategies or mitigation measures to address these risks.

Company analysis is an ongoing process, and it can be conducted for various purposes, including investment research, due diligence in mergers and acquisitions, competitive intelligence, and strategic planning. Accurate and thorough company analysis is essential for making well-informed decisions and mitigating risks associated with investments or business partnerships.

## **Technical Analysis: Dow's Technique**

"Dow's Theory" is a fundamental concept in technical analysis that was formulated by Charles Dow, the co-founder of Dow Jones & Company and the Wall Street Journal. Dow's Theory laid the groundwork for modern technical analysis and is still widely followed by technical analysts today. This theory consists of several key principles and concepts, often referred to as Dow's Techniques:

#### The Market Discounts Everything:

According to Dow, all information and factors affecting a stock or market are already reflected in its price. This principle suggests that all known information, both public and private, is instantly factored into a security's price.

#### Three Phases of Market Trends:

Dow identified three primary phases of market trends:

- a. **Primary Trend:** This is the long-term trend that can last for years and represents the overall direction of the market. It can be bullish (upward), bearish (downward), or sideways (range-bound).
- b. **Secondary Reaction:** These are shorter-term price movements that run counter to the primary trend, usually lasting several weeks to a few months. They are considered corrections or pullbacks.
- c. **Daily Fluctuations:** These are the short-term, day-to-day price movements that occur within the secondary reaction. They are often driven by market noise, news, or sentiment.

#### Confirmation Principle:

Dow believed that trends in the Dow Jones Industrial Average (DJIA) should be confirmed by trends in the Dow Jones Transportation Average (DJTA). In other words, for a bullish trend in the stock market to be valid, both the DJIA and DJTA should be in agreement.

#### Volume Should Confirm the Trend:

Dow emphasized that trading volume should confirm the direction of the trend. For example, during an uptrend, increasing volume should accompany rising prices, and during a downtrend, increasing volume should accompany falling prices.

#### Trends Persist Until Reversed:

Dow's Theory assumes that trends persist until there is clear evidence of a reversal. It does not attempt to predict when a trend will change but instead relies on confirmation signals.

**Averages Discount Everything:**

Dow believed that stock market averages (such as the DJIA) represent the collective wisdom of investors and reflect all available information about the market. Therefore, analyzing these averages can provide valuable insights.

**Non-Confirmation:**

Dow considered non-confirmation between the DJIA and DJTA as a bearish signal. If one index is making new highs or lows while the other fails to follow suit, it could indicate a potential reversal in the trend.

**Trends Should Be Confirmed by Volume:**

Dow's Theory suggests that trends are more reliable when they are accompanied by strong volume. A lack of volume support for a price move could indicate weakness in the trend. Dow's Theory serves as the foundation for many technical analysis principles and techniques used today. Traders and analysts use these principles to assess market trends, make investment decisions, and identify potential reversals. However, it's important to note that Dow's Theory is a qualitative and subjective approach to market analysis, and it should be used in conjunction with other tools and techniques for a comprehensive view of market dynamics.

## **Assumptions**

**The Market Discounts Everything:**

This is a fundamental assumption of Dow's Theory. It asserts that all information, news, events, and factors affecting a market or security are already reflected in its price. In other words, the current market price incorporates and reflects everything known or knowable about the asset at any given moment.

**Price Movements Follow Trends:**

Dow's Theory assumes that prices do not move randomly but rather tend to follow trends. These trends can be categorized into primary trends, secondary trends, and daily fluctuations. The theory focuses on identifying and understanding these trends.

**Primary Trends Are the Most Important:**

The theory places the greatest emphasis on primary trends, which are the long-term trends that can last for extended periods, often years. These trends represent the overall direction of the market or asset and are considered the most significant.

**Markets Have Three Phases:**

Dow's Theory recognizes that markets go through three primary phases:

- a. **Accumulation Phase:** This is the initial phase where informed investors start accumulating positions in an asset, typically at the end of a bear market.
- b. **Public Participation Phase:** As prices rise and the public becomes aware of the asset's potential, a broader range of investors enters the market.

c. Distribution Phase: In this phase, informed investors begin selling their positions to the less informed public. Prices peak, and a bear market ensues.

Volume Confirms Trends:

The theory emphasizes that trading volume should confirm the direction of the price trend. In an uptrend, increasing volume should accompany rising prices, while in a downtrend, increasing volume should accompany falling prices. A lack of volume confirmation can signal potential weakness in the trend.

Indexes Reflect the Market:

Dow's Theory relies on the analysis of stock market indexes, particularly the Dow Jones Industrial Average (DJIA) and the Dow Jones Transportation Average (DJTA). Changes in these indexes are seen as reflections of broader market sentiment and trends.

Indexes Should Confirm Each Other:

For a trend to be considered valid, Dow's Theory suggests that both the DJIA and DJTA should confirm each other's trends. In other words, if the DJIA is in an uptrend, the DJTA should also be in an uptrend to provide confirmation.

Trends Persist Until Reversed:

The theory assumes that trends persist until there is clear evidence of a reversal. It does not attempt to predict when a trend will change but instead relies on confirmation signals to identify reversals.

Non-Confirmation Can Be a Warning Sign:

Dow's Theory considers non-confirmation between the DJIA and DJTA as a bearish signal. If one index is making new highs or lows while the other fails to follow suit, it could indicate a potential reversal in the trend.

These assumptions form the foundation of Dow's Theory and guide the way technical analysts interpret market behavior. While the theory has its critics and limitations, it remains a valuable tool for those who use technical analysis to make trading and investment decisions. It provides a framework for understanding market trends, identifying potential reversals, and assessing the overall health of financial markets.