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# FUNDAMENTAL ANALYSIS A–Z

What a company is really worth — statements, earnings, and value in plain words.

Alpha Academy · Team Alpha Trading

# Fundamental Analysis A–Z: What a Company Is Really Worth

Imagine two lemonade stands for sale on your street. Both are priced at $10,000. One is busy every day, owns its cart outright, and has cash saved in the bank. The other is slow, owes money to three people, and barely covers its costs. Same price — but they are NOT worth the same amount. Learning to tell the difference is what this chapter teaches.

That skill has a name: **fundamental analysis**. It means studying a company's actual business — how much money it makes, how much it owes, how fast it is growing — to judge what the company is really worth, instead of just watching its stock price jump around.

After this chapter, you will be able to read the three basic financial reports every public company must publish, understand the numbers investors talk about most, and run a simple quality checklist before considering any stock for the long term.

> **NOTE**
> This chapter is education only, not financial advice. Fundamental analysis helps you understand a business. It cannot tell you the day to buy, and it never guarantees a profit.

## Price Is Not the Same as Worth

A stock's **price** is simply what the last buyer paid for it. It changes every second the market is open, pushed around by news, fear, and excitement.

A company's **value** — what the business is truly worth — changes much more slowly. It depends on real things: the money the business earns, what it owns, what it owes, and how likely it is to keep earning in the future.

It works like buying a house: the asking price is just a hope. The real value depends on the house's condition and what similar homes actually sell for. Smart buyers study the house, not the price tag.

> **RULE**
> Price is what you pay. Value is what you get. Fundamental analysis is how you study the "what you get" part.

When price and value drift far apart, opportunities and dangers appear. A wonderful company can be a bad buy if the price is silly-high. A struggling company can look "cheap" and still be a trap, because its value is shrinking.

## The Three Financial Statements, Translated

Every public company must publish three reports, usually four times a year. Together they tell the whole money story of the business:

- The **income statement** is the company's paycheck report. Over a period of time (usually three months), it shows how much money came in and how much was left after all the bills.
- The **balance sheet** is a snapshot — a photo taken on one single day. It shows everything the company owns, everything it owes, and what is left over for the owners.

- The **cash flow statement** tracks the actual cash moving in and out of the company's bank account — real money, not accounting math.

Let's meet a fictional company: **BrightWheel Toys**, a maker of ride-on toys for kids. Its numbers work exactly like a real company's.

### BrightWheel's Income Statement (one year)

- **Revenue** (total sales): $10,000,000 — customers paid BrightWheel $10 million for toys.
- **Cost of goods sold**: $6,000,000 — the plastic, wheels, and factory labor to make the toys.
- **Gross profit**: $4,000,000 — what is left after making the product ($10M − $6M).
- **Operating expenses**: $2,500,000 — rent, office salaries, advertising, insurance.
- **Net income** (the final profit, often just called **earnings**): $1,500,000 — the bottom line after everything.

> **TIP**
> "Top line" means revenue; "bottom line" means net income — the last line of the paycheck report. "Grew the top line" means sales went up; "the bottom line shrank" means profit went down.

### BrightWheel's Balance Sheet (one day)

- **Assets** (what it owns): $8,000,000 — factory, inventory of toys, and cash in the bank.
- **Liabilities** (what it owes): $3,000,000 — a bank loan and bills owed to suppliers.
- **Equity** (what is left for the owners): $5,000,000 — because $8M owned − $3M owed = $5M left over.

> **RULE**
> Assets = Liabilities + Equity. Always. If a company owns $8 million and owes $3 million, the owners' slice is worth $5 million on paper. This one equation is the whole balance sheet.

### BrightWheel's Cash Flow (one year)

BrightWheel's profit was $1.5 million, but its bank account only grew by $900,000. Why? Because it spent $600,000 cash on new delivery trucks and machines. Profit is an opinion shaped by accounting rules; cash is a fact. A company can show a profit on paper and still run out of cash — and companies die from running out of cash, not from running out of accounting profit.

## Earnings and EPS: The Score Everyone Watches

**Earnings** is another word for net income — the company's final profit for a period. But a giant company and a tiny one cannot be compared by total profit alone, so investors divide the profit by the number of shares. That gives **EPS — earnings per share**: how much profit belongs to each single share of stock.

The math is simple: **EPS = Net Income ÷ Shares Outstanding**. **Shares outstanding** means the total number of shares that exist.

BrightWheel earned $1,500,000 and has 1,000,000 shares. So **EPS = $1,500,000 ÷ 1,000,000 = $1.50**. Every share you own "earned" $1.50 of profit this year.

Four times a year, companies announce their earnings in what traders call **earnings season**. Analysts (professionals who study companies for big firms) publish estimates of what they expect EPS to be. Reporting above the estimate is an **earnings beat**; below it is a **miss**. Prices often jump on beats and drop

on misses — more on that in the chapter on what moves markets.

## Revenue Growth: Is the Pie Getting Bigger?

Profit matters, but so does growth. **Revenue growth** tells you whether a company's sales are expanding or shrinking compared with the same period a year earlier.

If BrightWheel sold $10 million of toys this year and $8 million last year, its revenue grew by 25%: ($10M – $8M) ÷ $8M = 0.25, or 25%.

Why compare with a year earlier instead of last quarter? Because many businesses are seasonal. Toy sales explode before the holidays and sleep in February. Comparing this December to last December is fair; comparing December to February is not.

A company whose sales grow year after year is usually winning customers. A company with shrinking sales has a problem cost-cutting can only fix for so long — you cannot cut your way to growth forever.

## Profit Margins: How Much of Each Dollar Survives

A **margin** is a percentage: out of every dollar of sales, how much survives to a certain level of profit. Three margins cover almost everything a beginner needs:

- **Gross margin** = gross profit ÷ revenue. BrightWheel: $4M ÷ $10M = 40%. Out of every $1 of sales, 40 cents survives after making the product.
- **Operating margin** = operating profit ÷ revenue. This is what survives after running the business day to day, too.
- **Net margin** = net income ÷ revenue. BrightWheel: $1.5M ÷ $10M = 15%. Out of every $1, the company keeps 15 cents as final profit.

Margins let you compare companies of different sizes fairly. A grocery chain might keep only 2 cents per dollar but sell billions of dollars of food; a software company might keep 30 cents. Neither is automatically better — but if a company's margins keep shrinking year after year, something is wrong: competition is squeezing it, or its costs are running away.

## The P/E Ratio: The Price Tag on Profits

The most famous number in investing is the **P/E ratio** — price divided by earnings. It answers one question: "How many dollars am I paying for each $1 of yearly profit?"

**P/E = Share Price ÷ EPS**

BrightWheel's stock trades at $30 per share, and its EPS is $1.50. So **P/E = $30 ÷ $1.50 = 20**. Investors are paying $20 for every $1 of BrightWheel's yearly profit.

A worked example: if a stock costs $100 and the company earns $5 per share per year, the P/E is 20. If another stock costs $100 but earns only $2 per share, its P/E is 50 — you pay much more per dollar of profit, usually because buyers expect that profit to grow fast.

### The Limits of P/E — Read This Carefully

- A high P/E is not automatically bad, and a low P/E is not automatically a bargain. A low P/E often means the market expects the company's profits to shrink — the stock is cheap for a reason.

- P/E is useless for companies with no profit — if EPS is negative, the ratio is meaningless. Many young companies lose money on purpose while they expand.
- P/E only makes sense compared with something: the same company in past years, or similar companies in the same industry. A P/E of 15 might be expensive for a slow utility company and cheap for a fast-growing software firm.
- One strange year can poison the number. A one-time gain or loss can make EPS look amazing or terrible for a single year. Check several years.

> **RISK**
> Beginners love hunting for "low P/E bargains." Many of the lowest P/E stocks are companies in real trouble — dying businesses the market is pricing for decline. Cheap can get cheaper. The ratio is a question, not an answer.

## Debt: Borrowed Money, in Plain Words

**Debt** is money a company has borrowed and must pay back, usually with **interest** (a fee charged for borrowing, like rent on money).

Some debt is normal and even smart — a growing company might borrow cheaply to build a factory that earns far more than the interest costs. Debt becomes dangerous when payments are heavy compared with the money the business brings in. Think of a person: a small car payment on a good salary is fine. Five maxed-out credit cards on a tiny salary is a crisis waiting for one bad week.

A quick beginner check: compare total debt with the cash the company holds and the profit it earns each year. If a company owes many years' worth of profits and has little cash, one bad year can threaten its survival. Companies with more cash than debt are called **net cash** companies, and they sleep well at night.

## Free Cash Flow: The Money That Is Truly Free

**Free cash flow** is the cash left over after a company pays all its bills AND buys the equipment it needs to keep running. One line: it is the real, spendable money the business generated — cash it could hand back to owners, save, or reinvest without hurting itself.

Investors love free cash flow because, unlike accounting profit, it is very hard to fake. Cash either arrived in the bank account or it did not.

## Dividends and Buybacks: Getting Money Back

Profitable companies with extra cash return some of it to shareholders (the owners — including you, if you own shares) in two ways:

- A **dividend** is a cash payment a company sends its shareholders — like a small thank-you check for owning the stock. If a stock pays a $2 yearly dividend and trades at $50, its **dividend yield** (dividend ÷ price) is 4%. Dividends are never guaranteed; a troubled company can cut or cancel them.
- A **buyback** (or share repurchase) is when a company buys its own shares back and retires them. Fewer shares remain, so each remaining share owns a bigger slice of the same company — like cutting a pizza into 8 slices instead of 10.

Both return value, just differently: dividends hand you cash directly; buybacks quietly grow your ownership percentage.

## Moats and Quality: Why Some Companies Stay Winners

A **moat** is whatever protects a company from competitors — named after the water-filled ditch around a castle. Plain-word examples:

- A brand people trust and pay extra for, year after year.
- A product that is painful to switch away from, because all your data, habits, or equipment already live there.
- Being the biggest, so the company can buy supplies cheaper than any rival.
- Legal protection, like a patent on a medicine no one else may copy until it expires.

Strong moats protect high margins for years; without one, competitors copy the product and crush its prices. Always ask: "What stops someone else from doing exactly this, cheaper?" If the honest answer is "nothing," be careful.

## How Beginners Actually Use This: The Quality Checklist

You do not need a finance degree. Before considering any long-term stock purchase, walk through this table honestly. One "no" does not always disqualify a company — several should slow you down.

| Check | What you are really asking |
|---|---|
| Revenue growth | Have sales grown over the last 3–5 years? |
| Profits | Is the company actually profitable, most years? |
| Margins | Are margins steady or improving, not collapsing? |
| Free cash flow | Does it generate real cash, not just paper profit? |
| Debt | Could it survive a bad year without panic? |
| Moat | Is there a real reason competitors cannot copy it? |
| Price | Is the P/E reasonable next to its own history and rivals? |
| Understanding | Can you explain in one sentence how it makes money? |

> **TIP**
> Every number in this chapter is free. Companies file these reports with the SEC (the US agency that oversees markets), and brokers and finance websites show them on each stock's "financials" page. You never need to pay a guru to see them.

## The Honest Limits of Fundamental Analysis

Here is the truth this chapter owes you: fundamental analysis has real limits.

First, it tells you nothing about timing. A stock can be overpriced and keep climbing for years, or underpriced and keep sinking. The market can disagree with your homework for a long time.

Second — and this matters most — **a great company can still be a bad buy**. If everyone already knows a company is wonderful, its price may assume perfection for the next decade. Then even good news disappoints, and buyers who paid the silly price lose money on a perfectly fine business. Paying too much for quality is one of the most common ways careful investors still lose.

Third, these reports describe the past, not the future. Your job is to judge — humbly — whether the story continues.

That is why patient investors combine two skills: fundamentals to decide WHAT is worth owning, and price discipline to decide what it is worth paying.

## Common Beginner Mistakes

- Buying a stock only because its P/E is low, without asking WHY it is low.
- Looking at one quarter of earnings instead of several years of history.
- Confusing a great product with a great investment — the price you pay still matters.
- Ignoring debt because the company's ads and story feel exciting.
- Falling in love with a company and refusing to see margins shrinking or sales stalling.
- Believing a dividend is guaranteed. It is not — it can be cut at any time.

## Chapter Summary

- Fundamental analysis means judging what a company is really worth from its business results, not its daily price swings. Price is what you pay; value is what you get — and they are often different.
- The income statement is the paycheck report; the balance sheet is the snapshot of what is owned and owed (Assets = Liabilities + Equity); the cash flow statement tracks real money in and out.
- EPS is net income divided by shares outstanding — the profit belonging to one share.
- Revenue growth shows whether sales are expanding; margins show how much of each sales dollar survives as profit.
- The P/E ratio is price ÷ EPS — how much you pay for $1 of yearly profit. It is a comparison tool with real limits, not a bargain detector.
- Debt is fine in moderation and dangerous when payments dwarf earnings and cash. Free cash flow is the real spendable cash a business generates after maintaining itself.
- Companies return cash through dividends (direct payments) and buybacks (shrinking the share count so your slice grows).
- Moats — brands, switching pain, size, patents — protect profits from competitors.
- Even a great company is a bad buy at a silly price.

## Check Yourself

1. In plain words, what is the difference between a stock's price and a company's value?
2. A company earns $2,000,000 and has 500,000 shares outstanding. What is its EPS?
3. That same company's stock trades at $60. What is its P/E ratio?
4. Which of the three statements tracks real cash moving in and out, and why does that matter?
5. Name two ways a profitable company can return cash to its shareholders.

Answers: 1) Price is what the last buyer paid and changes every second; value is what the business is truly worth based on its earnings, assets, debts, and future — it changes slowly. 2) EPS = $2,000,000 ÷ 500,000 = $4.00 per share. 3) P/E = $60 ÷ $4 = 15. 4) The cash flow statement — because companies die from running out of cash, not accounting profit, and cash is hard to fake. 5) Dividends (cash payments to shareholders) and buybacks (the company repurchases shares, so each remaining share owns a bigger slice).

> **RULE**
> Study the business first and the price second — and never pay a silly price, even for a wonderful company.