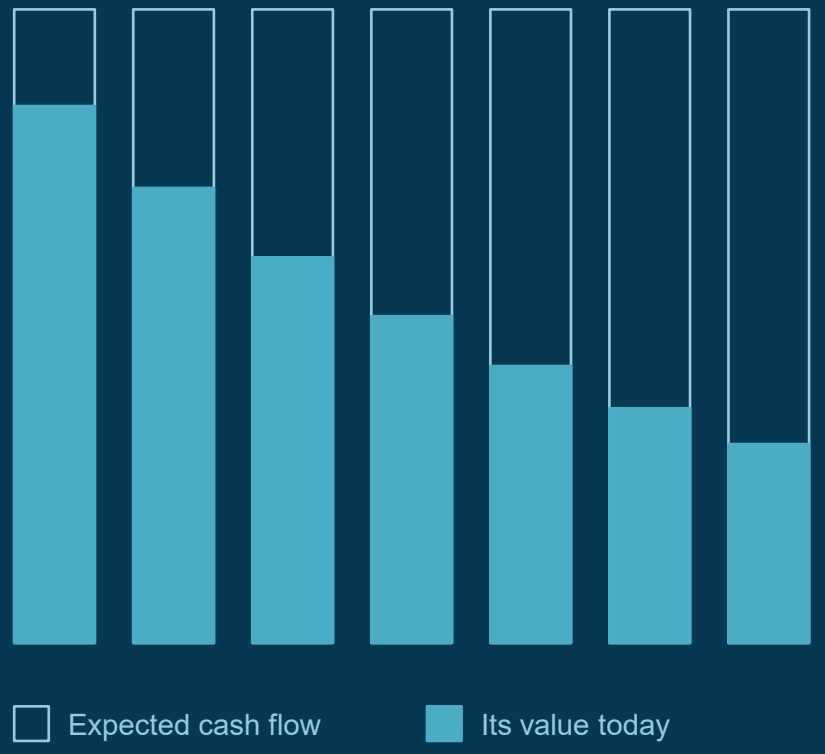
CFA RESEARCH CHALLENGE 2026-27

Valuation: A Practical Guide

Mustavi Zaman Khan, CFA
Head of Research
EDGE Research & Consulting Limited

21 November 2026



What we will cover

From what valuation is, to building a financial model, to stress-testing it before the judges do.

01

Valuation basics

- What is valuation?
- How to approach a valuation exercise

02

Types of valuation

- Absolute valuation
- Relative valuation
- Asset-based models

03

Developing a financial model

- Revenue
- Margins and operating income
- Other income statement elements
- Key schedules
- Discount rate

04

Scrutinizing a financial model

- Model validation and integrity checks
- Common mistakes

What is valuation?

Any asset is typically valued based on the cash flows you expect from it.

The convention

Forecast future cash flows → **Discount them at an appropriate rate of return** → **Arrive at the value of the asset today**

$$\text{Value}_0 = \Sigma \ CF_t \div (1 + r)^t$$

CF_t = cash flow expected in year t; r = appropriate rate of return

This is done via a financial model.

A financial model MUST be

01 Functional

Internally consistent and free of errors: the statements link and the balance sheet balances.

02 Defensible

Assumptions are coherent and backed by evidence you can explain when questioned.

How to approach a valuation exercise

Work through four steps in order. The first is the one most often underemphasized.

STEP 1

Understand the business, its management, and its environment

UNDEREMPHASIZED

STEP 2

Decide on the appropriate valuation method

STEP 3

Design a financial model that incorporates your assumptions

STEP 4

Run sanity checks

> **Investing is an information game.**
> To beat the market, you have to understand what the market does not.

A model typically involves these sheets:

Drivers → Output: IS, BS, CFS → Valuation

Output = Income Statement, Balance Sheet, and Cash Flow Statement

Tip: align year-columns across all sheets.

Absolute valuation

Discount a forecast stream of cash flows. Choose the stream that best reflects what the company can return to its owners.

	Method	What you discount and the value it gives	Appropriate when
1	**Dividend Discount Model (DDM)**	Expected dividends, at the cost of equity → equity value	Dividends reflect earnings capacity: mature companies with a stable, established payout policy
2. Free Cash Flow (FCF) models			
2a	**Free Cash Flow to Firm (FCFF)**	Cash flow available to all capital providers, at WACC → enterprise value; less net debt → equity value	Dividends do not reflect earnings capacity; leverage is high or the capital structure is changing; FCFE is negative
2b	**Free Cash Flow to Equity (FCFE)**	Cash flow left for shareholders after debt flows, at the cost of equity → equity value	Dividends do not reflect earnings capacity, and the capital structure is stable
3	**Residual Income Model**	Book value today, plus the present value of earnings above the required return on equity → equity value	Value depends on how capital is used (e.g., banks); dividends are absent or FCF is negative for years; accounting is reliable

Note: WACC = weighted average cost of capital. Net debt (negative when the company holds net cash) is measured as at the valuation date.

Relative valuation

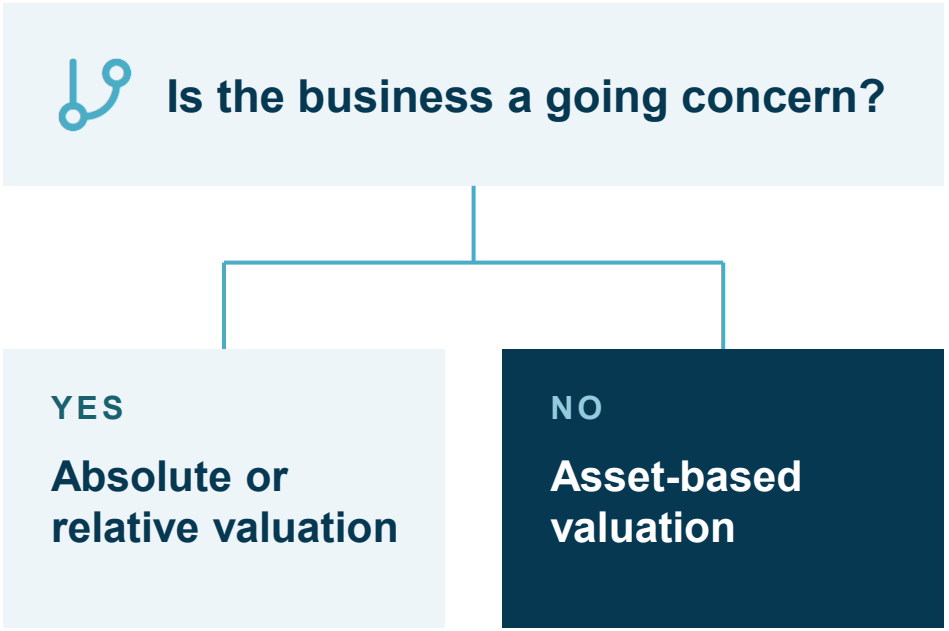
Appropriate when cash flows cannot be reliably forecast, or when suitable peers exist, with compatible reporting (accounting standards, fiscal year-ends, and definitions) so like is compared with like.

Multiple	Typically used for	Why it fits
Price-to-Earnings (P/E)	Mature, consistently profitable companies (e.g., FMCG, pharmaceuticals)	Earnings are stable and drive what shareholders receive
Price-to-Book (P/B)	Banks, NBFIs, and insurers	Balance sheets are mostly financial assets carried close to market value
Price-to-Sales (P/S)	Early-stage or loss-making firms; cyclicals at trough earnings	Sales stay positive even when earnings are negative or depressed
EV/EBITDA	Peers with different capital intensity or leverage (e.g., cement, telecom, power)	Measured before depreciation and interest, so differences in D&A and debt drop out
Dividend yield	Mature, high-payout companies (e.g., utilities)	Directly compares the cash return investors receive
Operating multiples (EV/tonne, EV/MW, EV/subscriber)	Cement, power, and telecom	Values capacity or customers when earnings are distorted

Note: EV = enterprise value (market capitalization plus net debt). Pair EV with metrics that belong to all capital providers (sales, EBITDA), and price with equity-level metrics (earnings, book value).

Asset-based models

Employed when the business is not a going concern: value comes from what its assets would fetch, not from future cash flows.



Typical cases: liquidation, winding up, or a business being broken up for its assets.

How it works

01 **Start from the asset register**
Asset registers are typically necessary for this

02 **Restate each asset at realizable value**
What it would fetch in a sale or liquidation, not its book value

03 **Deduct all liabilities**
Including the costs of selling the assets

04 **Arrive at net asset value**
The value attributable to shareholders

EDGE RESEARCH

Revenue

Revenue will typically form the heart of your forecasts. The better your understanding of the six areas below, the more robust your model will be.

The business's core offerings

What it sells, to whom, and how much each line contributes

Growth drivers

Is growth coming from price, volume, or both?

Consumer demography and consumption patterns

Who buys, how often, and how that is changing

Other macro factors

Business-cycle exposure, sectoral status, and influence of regulators

Capacity situation

Can existing capacity deliver the volumes you forecast?

Market share status

Higher existing share means less runway, and vice versa

Build realistic limits into your forecasts. A mature company typically gains little market share in later years, and hence may carry a lower P/E than it did 10 years ago.

Margins and operating income

Margins depend on how far the company can pass on, or control, its costs. You will need to assess:

01 **Degree of import dependence**
How exposed costs are to imported inputs and the exchange rate

02 **Pricing power**
Whether the company can pass cost increases on to customers

03 **Cost flexibility**
Variable vs fixed; discretionary vs non-discretionary

04 **Company- or sector-specific cost structures**
e.g., pharmaceuticals, telco, tobacco

Tips

- Use judgement on what should be tagged to revenue and what should be forecast independently.
- Do not waste time on line items that are insignificant. You can group them for forecasting purposes.

Other income statement elements

These vary from company to company. Some examples:

01

Investment income

Interest and dividends on cash and investments; tie it to the balances on the balance sheet

02

Debt servicing costs

Interest on borrowings, driven by the loan schedule

03

Tax rate considerations

Effective vs statutory rate, tax incentives, and announced rate changes

04

Income from associates

Share of profit from companies in which the business holds significant stakes

05

Non-recurring events

e.g., vaccine fees, divestment proceeds. Keep them out of recurring earnings and the terminal year

Key schedules

Schedules carry most of the balance sheet and feed the income statement, so build them with care.

01 Asset schedule

Opening assets + capex − disposals − depreciation = closing assets

- **Capex forecasts are especially important and should be aligned with management's plans**
- Check that capacity supports the volumes in your revenue forecast

02 Working capital schedule

a. Identify operating assets and liabilities

b. Derive inventory, receivable, and payable days, and calculate the cash conversion cycle

c. Compare with historical trends and industry benchmarks

Cash conversion cycle = inventory days + receivable days − payable days

03 Loan schedule

Opening debt + drawdowns − repayments = closing debt

- Interest expense = average debt × cost of debt
- Keep cost of debt assumptions consistent across the model

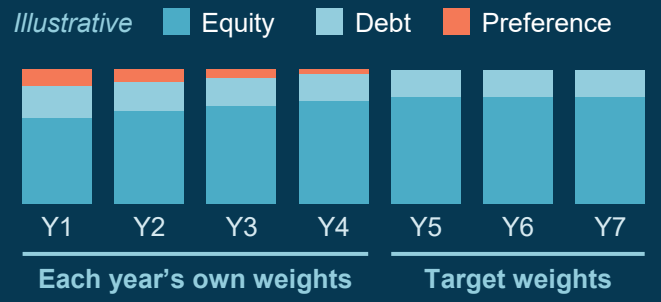
The discount rate

Discount at WACC = $E/V \times K_e + D/V \times K_d \times (1 - t) + P/V \times K_p$, where $V = E + D + P$

Component	Approach	How to estimate it
1. Cost of equity	**a. CAPM**	Risk-free rate + beta × equity risk premium
	b. Build-up method	Risk-free rate + equity risk premium + size or company-specific premium
	c. Customized	Adjust for risks the standard models miss, and justify each adjustment
2. Cost of debt	**a. Effective cost of debt**	Interest expense ÷ average interest-bearing debt
	b. Use after-tax value	Cost of debt × (1 − tax rate), since interest is tax-deductible
3. Cost of other capital sources	**e.g., convertible preference shares**	Price each source at its own required return; it typically sits between the cost of debt and the cost of equity

TIP

Equity and debt only: use a target capital structure, as it reflects the long-run financing mix; current weights may be temporary.
Exception: if other elements (e.g., preference shares) change the mix within your explicit forecast, use each year's own weights, then the target once it stabilizes.
Year-specific rates: compound them when discounting, i.e., each year's discount factor = previous year's factor ÷ (1 + that year's WACC).



EDGE RESEARCH

Model validation and integrity checks

Run these checks before you trust a single output.

- **The balance sheet balances in every forecast year**
- No year shows a negative cash balance
- Debt balances are not ballooning
- Implied margins and other ratios (profitability, payout, etc.) connect with reality
- The date of target price estimation is correct

Why cash should be the plug

Each balance sheet forecast is either a source or a use of cash. If the model is built correctly, the cash balance is the balancing figure.

SOURCES	USES
↑ Liabilities	↑ Non-cash assets
↑ Equity	↓ Liabilities
↓ Non-cash assets	Dividends paid

↓

= Cash balance (the plug)

Common mistakes

Errors that undermine an otherwise strong model, and are easy to avoid.

Incoherent assumptions	Examples: aggressive share gains with flat sales and marketing costs; cash, debt, and dividend forecasts that do not fit together; D&A out of step with capex; right-of-use assets not tracking lease liabilities.
Unrealistic or incorrect terminal year and discount rate assumptions	Examples: terminal growth above long-run nominal GDP growth; book value of equity in the WACC weights; a beta that cannot be reconciled with the business or its peers.
Leaving out non-operating assets that generate income	Examples: investment assets and stakes in associates. FCFF values the operations only, so add these assets separately to reach equity value (unless their income is already in FCFF).
Unrealistic cost of debt assumptions	Example: a cost of debt below the risk-free rate (Rd < Rf). A company normally borrows at a spread over the government, so cross-check with its actual and current borrowing rates.

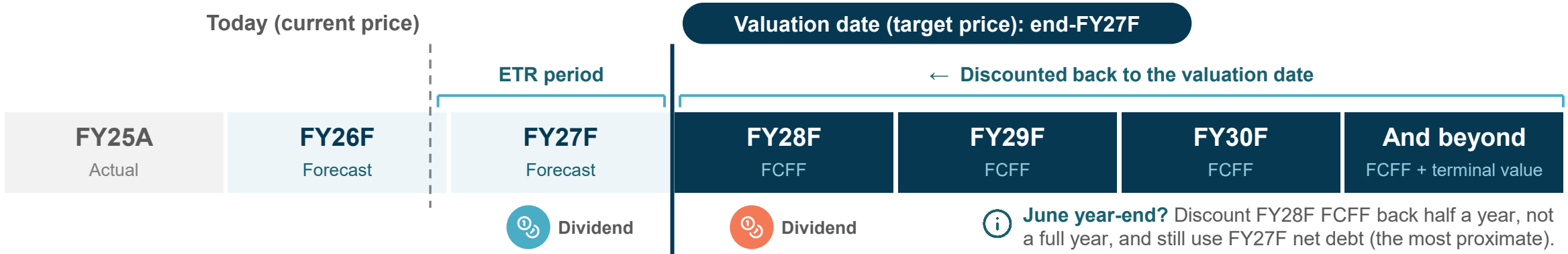
Common mistakes (continued)

More errors to avoid. The last two are worked through in the appendix.

Not factoring in company-specific risks	Examples: regulatory risk for a tobacco company (via a company-specific risk premium); a discount on surplus cash that may not reach shareholders. Justify each adjustment and count each risk once.
Misunderstanding "Risks to Investment Thesis"	List what would prove your thesis wrong, not generic macro risks. Your thesis rests on pillars; highlight only the specific developments that would break them (for a buy, what could trigger a sell, and vice versa).
Double counting FCFF by using the wrong net debt figure SEE APPENDIX	Each year's free cash flow ends up in that year's closing cash. Counting next year's cash flow and also using next year's net debt counts the same money twice, so use net debt as at the valuation date.
Incorrectly incorporating the dividend yield SEE APPENDIX	If net debt is measured after a dividend paid before the valuation date, add that dividend yield to the expected total return, but never add dividends from years whose FCFFs are already incorporated in the valuation.

Avoiding double counting at the valuation date

Illustrative: target price set at the end of FY27F (e.g., 31 December 2027, assuming a December year-end).



Up to the valuation date

- **Net debt at end-FY27F:** subtract it to get equity value. It already reflects FY27F's FCFF, so do not discount that FCFF again.
- **Dividend paid in FY27F:** already reflected in FY27F net debt, so add it to the expected total return (ETR) as a dividend yield.

After the valuation date

- **Value:** discount FCFFs from FY28F onwards, plus terminal value, back to end-FY27F to get enterprise value.
- **Avoid:** using FY28F FCFF together with FY28F's closing net debt. That cash would be counted twice.
- **Avoid:** adding dividends paid from FY28F onwards to ETR. They come from FCFFs already in the value.

Equity value (end-FY27F) = PV of FCFFs from FY28F onwards − net debt at end-FY27F
ETR = (target price ÷ current price − 1) + yield on dividends paid during the ETR period

CFA RESEARCH CHALLENGE 2026-27

Thank you

Questions and discussion

Mustavi Zaman Khan, CFA
Head of Research, EDGE Research & Consulting Limited