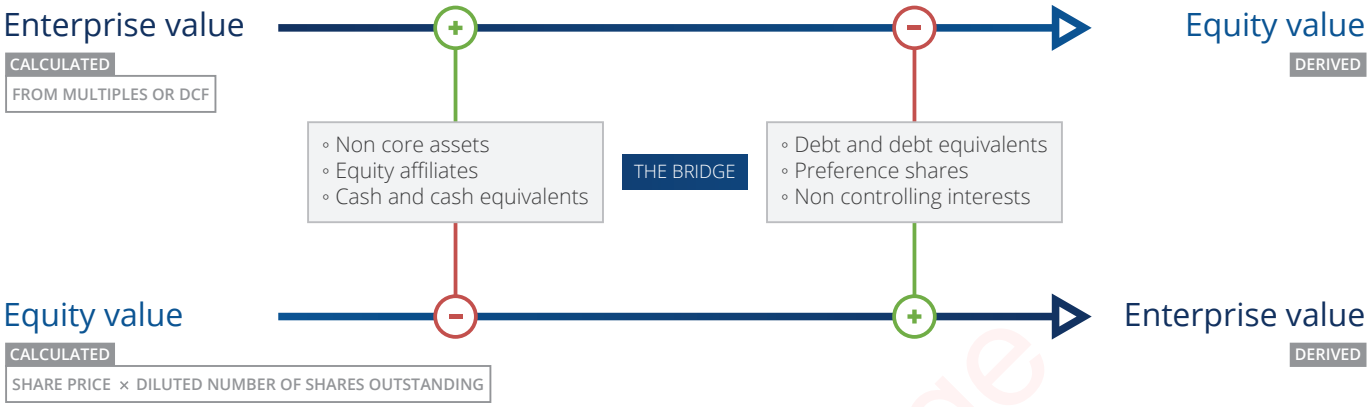
Valuation Fundamentals

FACT SHEET

Enterprise Value or Equity Value?



Key points to remember

Enterprise value

- Operating assets less operating liabilities
- Operating focus
- Unaffected by financing
- Driven by business performance

Equity value

- Total assets less total liabilities
- Ownership focus
- Affected by financing
- Driven by performance and financing

Relative Valuation

Enterprise value multiples

Uses profits available to equity and debt holders – income before financing

Main ratios
- EV / EBITDA
- EV / EBIT
- EV / Sales

Equity value multiples

Uses profits to equity holders - Net Income

Main ratios
- P/E Ratio = Price (per share) / EPS (earnings per diluted share)
- Equity Value / Book Value

Calculating the ratios

1. Calculate EV or equity value
2. Establish the value driver: EBIT, EBITDA or EPS
3. Calculate the multiple

Absolute Valuation

The main method is to calculate EV using Discounted Cash Flows (DCF)

Forecast FCF (5-10 years) › Calculate WACC › Calculate terminal value using perpetuity formula **or** multiple › Discount cash flows to today › Cross the bridge

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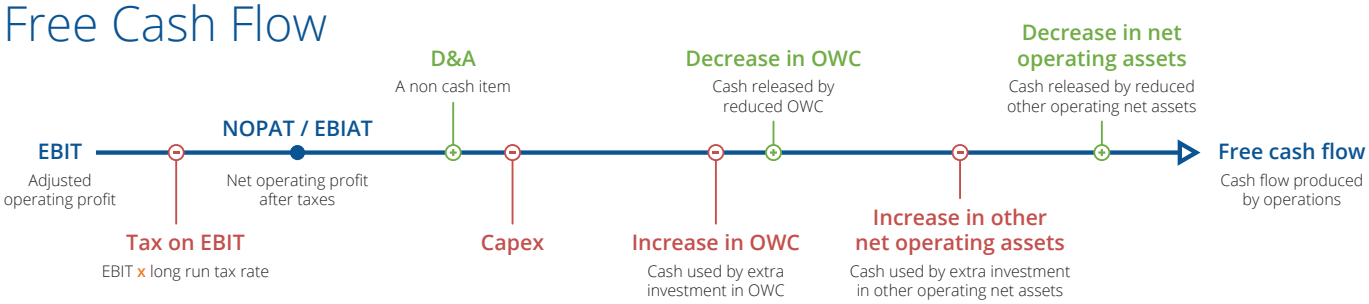
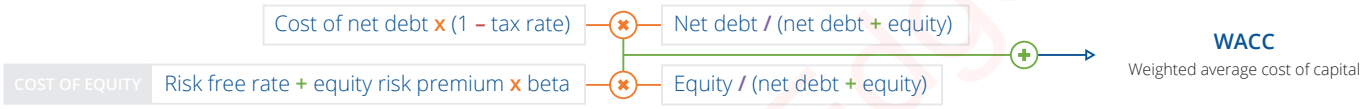
Free Cash Flow



Calculating WACC



Financial Maths Fundamental Formulas

Present value $PV = FV \times \frac{1}{(1+r)^n}$ **Future value** $FV = PV \times (1+r)^n$ **Yield** $r = \left(\frac{FV}{PV}\right)^{\left(\frac{1}{n}\right)} - 1$

Perpetuities Cash flows which never end. Can be constant or constantly growing.

Constant perpetuity value $PV = \frac{PMT}{r}$ **Constantly growing perpetuity value** $PV = \frac{PMT}{(r-g)}$

Annuities Constant or constantly growing cash flows for a **fixed period** of time.

Constant annuity value $PV = \frac{[1-(1+r)^{-n}]}{r} \times PMT$ **Growing annuity value** $PV = \frac{PMT}{(r-g)} \times \left[1 - \left\{\frac{(1+g)}{(1+r)}\right\}^n\right]$

Applying Financial Maths to a DCF Valuation

NOW	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4	PERIOD 5
	FCF 1	FCF 2	FCF 3	FCF 4	FCF 5
					TV
Discount factor	$\frac{1}{(1+WACC)^1}$	$\frac{1}{(1+WACC)^2}$	$\frac{1}{(1+WACC)^3}$	$\frac{1}{(1+WACC)^4}$	$\frac{1}{(1+WACC)^5}$
Present value	FCF x Discount factor				
Sum of PV of FCFs	FCFs 1 to 5 x Discount factor 1 to 5				
PV of TV	TV x Discount factor 5				
Enterprise value	Sum of PV of FCFs + PV of TV				