WACC & Corporate Cost of Capital Master Cheat Sheet

Weighted Average Cost of Capital, CAPM Equity Hurdle, After-Tax Debt & Optimal Structure

1. THE MASTER WACC FORMULA

WACC = (E/V × Re) + [D/V × Rd × (1 – Tc)] + (P/V × Rp)

Where **V = E + D + P** (Total Market Value of Capital Structure), **Tc = Corporate Marginal Tax Rate**.

2. COMPONENT COST CALCULATIONS

Capital Component	Valuation Formula	Key Corporate Finance Rule
Cost of Debt (Rd × [1 – Tc])	**After-Tax Debt Cost = Pre-Tax Yield × (1 – Tc)**	Interest is tax-deductible; creates a corporate tax shield lowering net debt cost.
Cost of Equity (Re) via CAPM	**Re = Rf + β × (Rm – Rf)**	Rf = Risk-free rate (US Treasuries), β = Systematic equity risk, (Rm – Rf) = Equity risk premium.
Cost of Equity (Re) via DDM	**Re = (D1 / P0) + g**	Gordon Growth Model: D1 = next dividend, P0 = stock price, g = constant dividend growth.
Cost of Preferred Stock (Rp)	**Rp = Preferred Dividend (Dp) / Market Price (Pp)**	Preferred dividends are not tax deductible; no tax adjustment factor is applied.

3. HURDLE RATE USAGE IN CAPITAL BUDGETING

- **NPV > 0:** Discount future cash flows at WACC; if NPV is positive, accept project.
- **IRR > WACC:** Project internal rate of return exceeds cost of capital; creates shareholder value.