RISK, RETURN, AND THE COST OF CAPITAL

Putting It All Together as the WACC

James P. Weston
Professor of Finance
The Jones School, Rice University

COST OF CAPITAL

Simple Balance Sheet

Stuff	Debt (R_d) ✓
(WACC)	Equity (R_e) ✓

COST OF CAPITAL

$$\text{WACC} = \frac{\text{Equity}}{\text{Equity} + \text{Debt}} R_e + \frac{\text{Debt}}{\text{Equity} + \text{Debt}} (1 - t) R_d$$

- Cost of capital for the firm
- Balances debt and equity

WACC: AN EXAMPLE

Example:

The equity value of Target is about $40B.

They have roughly 15B in long-term debt.

They pay a 35% corporate tax rate.

Their beta is 0.6.

Assume treasury rates are 2.5% and the equity premium is 5.5%.

They are A-rated with a quality spread of 120bps.

Estimate Target’s cost of capital.

WACC: SUMMARY

- Firm's cost of capital → WACC
- Weighted average of debt and equity
- Debt receives tax shield