RISK, RETURN, AND THE COST OF CAPITAL

Credit Rating and Quality Spreads

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WHAT MAKES DEBT RISKY?

Rate of return = risk free rate

+ risk premium

- Default
- Recovery in default

MEASURING RISK FOR DEBT

- Will the debt default?
  - Maturity
  - Cash on hand/ Capital cushion
  - Debt level
  - Profitability
  - Economic conditions
  - Ability to raise capital

MEASURING RISK FOR DEBT

- Can I recover my money in default?
  - Physical capital / Tangibility
  - Marketability
  - Transportability

CREDIT RATING AGENCIES

- Banks and credit rating agencies
- Estimate default/recovery
- Assign a classification (credit score)
- This gives a risk premium!

AVERAGE YIELDS ON DEBT (R_d)

Example from October 2015
Average US Corporate Bond Yields

Rating	1 yr	5 yr	10 yr	20 yr
US Treasury	0.2%	1.4%	2.0%	2.5%
AAA	0.4%	1.9%	2.8%	3.7%
AA	0.5%	2.0%	3.3%	4.0%
A	0.7%	2.2%	3.5%	4.2%
BBB	1.2%	2.9%	4.6%	5.2%
BB	2.0%	4.8%	5.7%	6.1%

SUMMARY

- Risky debt earns a premium
- Default and recovery are the source of risk
- Credit scores and rating help determine how risky debt is