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Capital structure

Moral hazard and adverse selection

- Capital structure encompasses the decision on the financing of a company or specific investment
- The decision concerns whether additional funds are obtained from equity or a loan
- Such decisions are made by managers and their motivations are to maximize their own utility, not the company value (moral hazard)
- Managers might also have better information than outside shareholders or lenders about the company or the investment, which they might exploit (adverse selection)

Conveying information

- While the company holds better information, this information cannot be reliably communicated as verification as difficult as obtaining the information itself
- Disclosing more information to investors might undermine a company's competitive position
- Companies might resort to indicators that can reliably convey the information
- The incentives must be such that positive information cannot be mimicked by companies holding negative information
- One way for companies to convey this information is through their choice of debt and equity to finance investments

Debt and equity costs

- Equity and debt are both sources of funds for companies, but as they attract different risks, their costs to companies are different
- With loan rates usually lower than stock returns, it suggests that loans are cheaper
- We could therefore expect debt to me more attractive than equity when financing companies
- Having lower financing costs with debt should increase the value of the firm


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The irrelevance of capital structure decisions

Financing choices do not matter

- The way a company is financed does not affect the value of companies
- While the cost of equity increases the more debt is taken on, the lower proportion of equity ensures the weighted average cost of capital remains constant

? Why are the equity costs increasing as the debt level rises?

! If the total investment remains constant, the total risk will remain the same; but this risk falls mainly on the equity holders, of which there are less and less, increasing their risk, for which they require compensation

Delegated decision-making

- Decisions in companies are made by managers, not equity holders directly
- Managers have their own incentives to exert effort while managing companies
- We will see how financing decisions affect their choice of effort and then indirectly the value of the company

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Moral hazard in capital structure decisions

Effort and risk-taking are affected by debt levels

- Raising equity dilutes the equity stake of managers and reduces their incentives to exert effort, making debt preferable
- Due to limited liability, debt has also the property to induce managers to seek riskier investments if these are financed by debt

? Managers often only hold small stakes in large companies, is the dilution of profits a main concern for them?

! This statement is not true for smaller companies, but for larger companies the dilution might be the voting rights of positively inclined shareholders that allow managers to pursue their own agenda

Adverse selection from raising equity

- Companies have a better knowledge of their own value due to having access to better information
- This can lead to adverse selection in that they can sell over-valued equity to raise funds
- We will see how companies seek to signal the high value of their company by using debt


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Adverse selection and financing choices

Using debt shows a company having a high value

- If the information asymmetry between companies and investors is not too extreme, using debt can convey a high value and using equity a low value of the company
- The choice of financing sources can convey information about the type of company

? If a company raises equity, does this always indicate it has no confidence in its own value?

! Lenders might not be willing to provide loans, not because they disagree with the assessment of the company, but they might have their own restrictions on risk-taking or reserve requirements

Information about investments

- Companies are in a better position than outside investors to assess investments they are conducting
- This information can not easily be conveyed, but we will see how the use of high levels of debt signals confidence in their investment
- By using debt, companies can provide information to the market that cannot otherwise be provided credibly

Signalling through raising debt

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Using high debt levels to signal confidence

- Using a high level of debt a company can set itself apart from companies that would not be able to repay such debt due to them being of lower quality
- The incentive for this behaviour arises from the remuneration of managers, who consider the market assessment of an investment, and not only its true value

? Will taking on high levels of debt always signal confidence in the prospects of the company?

! Equity holders might not be willing to provide additional funds, it is more time consuming raising equity, and dilution of stakes by managers are also to be considered

Summary

- Using debt has the property of accumulating the surplus with a small number of equity holders
- This induces managers to exert high efforts to increase the surplus accumulating for them, but it also signals confidence in the prospects of the company

? Is taking on debt always positive for equity holders?

! Companies are also becoming more risky with higher leverage as the volatility of equity increases, but also the shifting towards more risky investments, offsetting some positive aspects

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