Value Investing

Week 2: Management & Corporate Finance

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Recap of Last Class

- Value investing
- Growth
- Competitive Advantages
- Economies of Scale
- Scale Economies Shared

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Roadmap of This Week's Class

1. Roles of Management
2. Capital Structure Issues
3. Capital Allocation
4. Operations Management
5. Strategy

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1. Roles of Management

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3 Jobs of a CEO

1. Capital Structure & Corporate Finance
2. Operations Management
3. Investor Relations

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2. Capital Structure & Corporate Finance

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Effect of Corporate Taxes

- Debt financing provides a tax advantage for corporations
- Interest on debt is tax deductible, while dividends and retained earnings are not
- Thus, corporation can save on taxes by exchanging equity for debt.

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Example

EBIT	$1000	EBIT	$1000
Interest Expense	0	Interest Expense	400
Pretax Income	1000	Pretax Income	600
Taxes	340	Taxes	204
Net Income (After Tax)	$ 660	Net Income (After Tax)	$ 396

- Equity holders now get 396 each year and debt holders get a total of 400
- Total of 796, compared to 660 when the firm was not levered.
- 136$ of value has been created, due to a reduction in taxes of $136.
- Tax savings have been created from 400$ of interest expense tax deduction. (0.34*400 = 136)

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Converting Increase in Cash Flows to Increase in Value

- $PV\ (DTS) = T_c * D * r_D\ /\ r_D\ = T_c * D$
- *Tc = corporate tax rate*
- *D = debt*
- R_D = *cost of debt*
- **assuming firm expects to borrow permanently*

Overall Tax Advantage of Debt

- We are assuming that the debt issued by the firm was low enough that the firm would be paying taxes and enjoy the full amount of tax shields in the future.
- But as the firm issues more debt, it becomes less likely that the firm will be able to receive the full tax shields because the interest expense eats into the firm's operating profits.

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Incentive Problems

- Given the tax advantage of debt, companies *should* have more leverage than what we observe today.
- The explanation can be found in incentive problems and signaling.

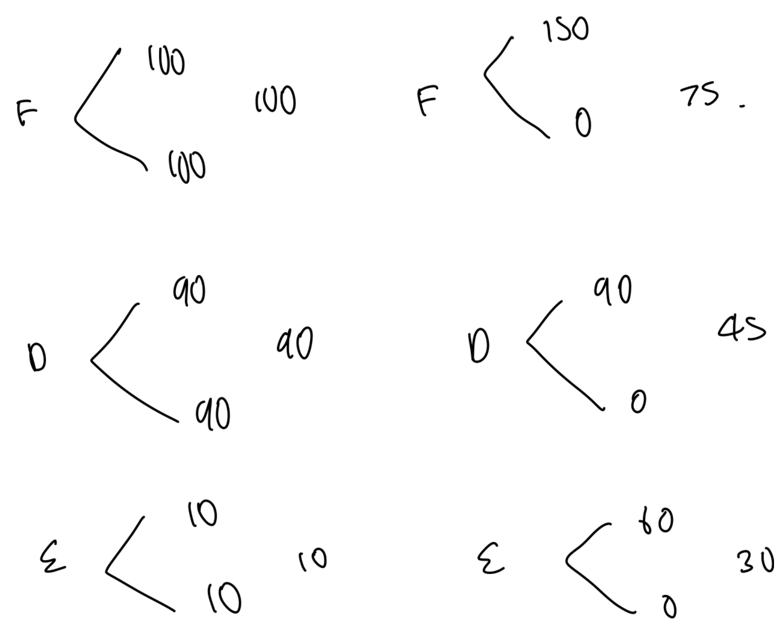
Agency Costs of Debt – Risk Shifting

- Managers have control over the investments undertaken by the firm. When debt represents a substantial part of the firm's capital structure, managers can use their power to choose riskier projects and thus expropriate from debt holders.

Example

- Assume project that generates $100 next period with 100% probability. Financed with:
  - Debt = $90
  - Equity = $10
- Another project becomes available: $150 with 50% probability and 0 with 50% probability.
  - This project is inferior; PV = 75 (150*50%) as opposed to 100 (100*100%)

	Current Investment	Risky Investment
Debt	90	45
Equity	10	30
Total	100	75



Value of Equity (Management) has increased!
Management benefits – 20, at the expense of debt holders – 45
Deadweight loss of 25.
In conclusion: Debt results in inefficient behavior that reduces value of firm.

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Agency Costs of Debt – Debt Overhang

- Opposite of previous issue: good investments arise that are low in risk may help debt holders more than equity holders. Consequently, highly levered firms may not undertake good, low risk investment opportunities if financing for them must come from investors junior to existing debtholders.

Example

- Currently: Project that generates 200 with 50% probability and 100 with 50% probability.
  - Face value of debt: 150
  - Market value of debt: 125 = (.5*150+.5*100)
  - Market value of equity: 25 = (0.5*50+0)
  - Total value of firm: 150
- New investment that requires financing of 50 today that generates 60 tomorrow.
  - Now let's examine what happens when the 50 is financed through debt or equity:

Current:

F	200	100	150
D	150	100	125
E	50	0	25

Equity:

F	260	160	210
D	150	150	150
E	110	10	60 - 50 = 10.

Debt:

F	260	160	210
D	150	150	150
J	90	10	50
E	20	0	10

As long as the funding must come from investors junior to the existing debt holders, the value of the existing equity position will be reduced from 25 to 10. Consequently, this attractive project will not be undertaken – despite the fact it should. Hence, debt may incentivize managers to underinvest in good projects.

Agency Costs of Equity

1. Diminished managerial ownership
   1. Effectively, reducing their wealth's sensitivity to the wealth of the firm.
2. Free Cash Flow to the firm is increased
   1. Debt forces cash flow generated by the firm to be disgorged to investors
   2. More cash under discretion of selfish managers

Mitigating Agency Costs

- Agency Costs of Equity
  - Concentrated shareholders
  - Board of directors
  - Executive compensation packages
  - Threat of takeover – firms with high cash flow more attractive candidate for LBOs
  - Reputation
- Agency Costs of Debt
  - Restrict issuance of additional debt
    - Leverage ratio, interest coverage, tangible assets to long-term debt
  - Restrict dividends
  - Restrict disposition of assets (reducing collateral)
    - Secured debt, mandates for maintaining assets, restrictions on asset sales

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3. Capital Allocation

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Capital Allocation

- Centralize
- Concentrate in areas with highest returns and core competencies
- Expansion / M&A / Dividends / Repurchases / Pay down debt
- Current financial results are often the result of prior investments

Dividend Policy

- Not paying out dividends → investors are compensated via capital gains
- Dividends are taxed at income tax rate (higher), therefore tax disadvantaged
  - But dividends reduce the need for selling shares, reducing transaction fees (not enough to overcome first problem)
- So why dividends?
  - Positive signaling
  - Except for high growth firms which may need additional capital to fund growth, dividends / increasing dividends send positive signal because maintaining dividends is costly (dividends are **sticky**).
    - Dividends increase stock price, but reducing dividends will likely lead to greater loss than gain from paying out dividends in the first place.

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Special Dividends

- Open market repurchases:
  - Taxed less, but takes a longer time
  - For most cases most efficient unless shares are overpriced
  - Remaining shareholders post-repurchase now own higher share of the firm's equity
- Dutch auction
  - Takes less time than an open market repurchase
  - Less expensive than fixed price tender
  - More expensive than an open market repurchase
- Fixed price tender
  - For when management wants to buy shares quickly but is looking to send the most positive signal possible
    - Most expensive (works by paying % premium on current stock pric)

4. Operations Management

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Operations Management

- Cost focused
  - Lavish and expensive headquarters
  - Get the *feel* for management
- Decentralized operations
  - Eliminate bureaucracy
    - Decisions made by those closest to the problem
  - Yet make sure that goals are being maintained
  - Learn from customers – shared economies of scale
  - Mustn't be afraid to shrink operations – size often brings sluggishness
  - Leverage is to be used, but carefully
  - "If it ain't broke, continuously improve it"

5. Strategy

Strategy

- "A leader's most important responsibility is identifying the biggest challenges to forward progress & devising a coherent/cohesive approach to overcoming them"
  - Diagnose Issue
  - Guiding Policy
    - Exploit Competitive Advantages
  - Set of Coherent Actions
- Deliberate strategy
  - Good strategy / bad strategy
- Emergent strategy
  - Result of day-to-day operations
  - Value / culture

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Great management in complex industry < mid management in simple industry.

- Peter Lynch

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