

Topics in Financial Economics: Lecture 4

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print pages 1, 5, 13, 20, 28, 35, 37, 45, 52, 58, 65

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- We derive the pecking order of getting financed.
- The theory is based on Myers and Majluf (1984).

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- The insurance fee gets higher and higher, and absorbs the risks higher and higher. Adverse Selection happens.

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- Q (10 cts): Suppose in a bust time, a firm has to reduce wage costs. It could choose between randomly sacking some employees and lowering down the wage. What should it do from the perspective of adverse selection?

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 - All firms have 100 shares outstanding. The manager works in the interest of old shareholders (e.g. he is himself holding 10% of shares).

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- namely, the old shareholders of good firms are worse off by financing the project with newly issued equity.
- The supposition that both types of firms issue equity to finance the project is wrong: Only bad firms do that. Good firms give up positive NPV projects.

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- In equilibrium: At $t = -1$, the share price is P_0 ; at $t = 1$, the share price of the firms that issue new equity jumps down to P_1 , while that of the firms that issue no equities jumps up to P_1 .

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- Intuition: Because the quality of firms is unobserved by the market, some firms are undervalued, while some are overvalued. Overvalued firms have more incentive to issue new shares, in order to exploit new shareholders for the benefit of old shareholders: The new shareholders buy the shares at prices more than are the shares actually worth. The market, however, is not stupid: It correctly infers that the issuance of new equity signals that these firms are more likely to have been overvalued; accordingly, it revalues down these firms.

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- So he gain from the transaction if *the share price does not change with the exchange offer.*

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- How about the inverse exchange: Issue equity to retire debt? Why is it very bad news?

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- Suppose firms target a fixed dividend rate (sticky dividend policy). So, debt level reflects the "cumulative requirement for external financing". How about the regularity that the leverage rate decreases with profitability?

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- Empirical evidence against it: Goyal and Frank (2003, JFE). The prediction for small firms is worse than that for large firms.