Revision Lecture

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Advanced Financial Economics 2020

Roadmap

1. Corporate Finance
2. Asset Pricing
3. Conclusion

L3: Modigliani & Miller

- A benchmark regarding capital structure and firm value.
- What's the best way to finance a new project?
- If there are no financial frictions $\Rightarrow$ capital structure doesn't matter.

  $\Longleftrightarrow$ If capital structure matters $\Rightarrow$ there are financial frictions.
- What are these financial frictions?
- Identifying these frictions is the real contribution of this theorem.

L4: Capital Market Incompleteness and Imperfections

- Risk averse investors dislike uncertainty.
- Complete asset markets allow investors to insure themselves against all permissible states of nature in the future.
- Incomplete markets makes it harder for these investors to insure themselves.
- Firms can create value by helping "insure" their investors.
- Market imperfections just mess things and make it harder to trade.

L5: Taxes

- The tax code makes debt advantageous relative to equity.
- Interest deductions are tax deductible.
- If this is the only friction, firms should borrow as much as possible and repurchase shares.

L6: Bankruptcy Costs

- If bankruptcy is costly, then we can get an interior solution for optimal borrowing.
- Ex-ante versus ex-post.
- The lenders pass the expected value of these costs onto the firm.
- How does the form of the bankruptcy cost function affect the optimal solution?

L7: Agency Conflicts

- Typical assumption is that a firm's manager will act in the best interests of the owners.
- What if the manager gets some private benefit from actions that conflict with the interest of the owners?
- Contracts need to be designed to align the incentives better.
- A firm with cash wouldn't need necessarily to raise external financing. When the conflict is particularly pronounced, this firm would have higher value than one that issues new financing.

L8: Information Asymmetry

- Sometimes the insiders of a firm have more information than outsiders.
- This can impede their ability to raise external financing.
- If external financiers believe a firm to be of inferior quality, markets can break-down (lemons problem).
- Again, firms that need not raise external financing can end up with a higher value.

L9: Empirical Literature in Corporate Finance

- What evidence have researchers found regarding the importance of these frictions?
- Taxes: most compelling evidence is tax reform experiment in 1986. Lower corporate tax rate lead to less borrowing.
- Bankruptcy costs: firms with more tangible assets borrow more.
- Agency: again firms with more tangible assets borrow more. May indicate that firms with fewer agency issues increase borrowing.
- Information asymmetry: mixed evidence.

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L10: Consumption-Based Asset Pricing

- Asset pricing is all about the stochastic discount factor and Euler equations.
- Euler equation: it equates the marginal cost and benefit of holding another unit of an asset.
- Marginal cost: the foregone consumption at t to save more. Marginal benefit: the marginal benefit of extra consumption at $t+1$.

L11: Portfolio Choice

- Say an investor has some funds to put into some assets.
- How would you best allocate the funds?
- Special utility function (quadratic) that makes it all about the risk-return tradeoff.
- What's the story when we don't have quadratic utility?

L12: Equilibrium Asset Pricing

- So far, we've micro-founded the demand for an arbitrary asset.
- How do we pin-down the price in general equilibrium?
- Specify the supply. Then the price clears the market for the security.
- The market rewards risk in terms of covariance of an asset's return with the return on aggregate consumption in CCAPM.
- Covariance with a market portfolio in regular CAPM.

L13: Asset Pricing Bubbles

- An asset's fundamental value equals the expected discounted value of its future dividends.
- Discounting using what object? The SDF.
- Asset pricing bubbles exist when its price is above fundamental value.
- These can persist in our framework when agents all expect the price to keep going up in the future.

L14: Factor Models

- Starts of with the CAPM.
- From there, researchers have thought about other aggregate factors that predict asset returns.
- Famous examples: 3 factor model, 5 factor model.

L15: Empirical Literature in Asset Pricing

- Equity premium puzzle.
- The model doesn't reasonably fit the data.
- Fixes: messing with preferences.

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Summary

- Good luck!