An Overview of Behavioral Corporate Finance

Based on Baker, Ruback, Wurgler (2005)

Malcolm Baker

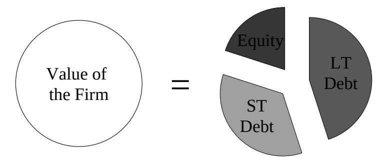
November 2005

Two perspectives

- **Irrational investors approach**
  - Studies how *rational* managers act in the presence of *irrational* investors
- **Irrational managers approach**
  - Studies how *irrational* managers act in the presence of *rational* investors

Modigliani and Miller

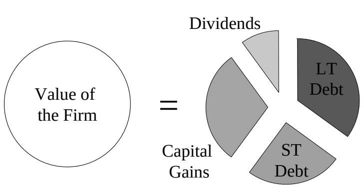
- **Modigiliani and Miller (1961) and Stiglitz (1973) show that financial policy is irrelevant in perfect markets**



Overview Theory Empirical Challenges Evidence Open Questions

Modigliani and Miller

- **Modigiliani and Miller (1961) and Stiglitz (1973) show that financial policy is irrelevant in perfect markets**

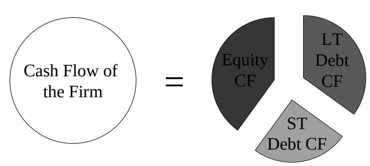


- **Also:** Convertible/straight debt, preferred/common, …

Overview Theory Empirical Challenges Evidence Open Questions

Modigliani and Miller

- **Part 1:** The cash flow of the firm is independent of financial structure in perfect markets



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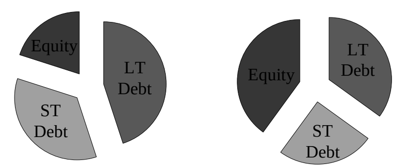
Modigliani and Miller

- **Part 2:** The law of one price



Firm A Firm B

Corporate finance

- **Markets are not perfect**
- **This tells us where to look for a theory of capital structure or dividend policy**
  - Taxes
  - Bankruptcy costs
  - Asymmetric information
  - Agency
  - Inefficient markets
  - Managerial behavior

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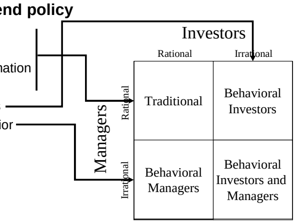


Irrational investors

- **Current price is $100**
- **Long-run value is only $50**
- ***N* shares outstanding**

- **What can the CFO do?**
  - Issue n new shares at $100 and keep the proceeds in cash… Long-run price per share is $(50N + 100n)/(N+n) > 50$
- **Existing, long-run shareholders gain:** For them, the alternative was $50
- **New, long-run shareholders lose:** They paid $100 for shares destined to go down

Irrational investors: Building blocks

1. **Irrational investors**
2. ***Combined with* limits to arbitrage**
3. ***And* 'smart' managers**

Irrational managers

- **How good a driver are you?**
  Above or below average

- **People are optimistic about outcomes**
  - That they believe they can control
  - To which they are highly committed
- **Optimistic managers**
  - **Underinvestment:** Stock as undervalued, avoid external finance
  - **Overinvestment:** Of internal resources

Irrational managers: Building blocks

1. **Irrational managers**
2. ***Combined with* limits to corporate governance**

Irrational investors

- **To test this, we generally need a proxy for mispricing**

1. ***Ex ante* measures**
2. ***Ex post* measures**

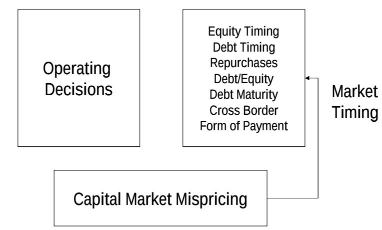
Irrational managers

- **To test this, we need a proxy for behavioral bias**

1. **Survey**
2. **Revealed bias**

Market timing

- **How *rational* managers act in the presence of *irrational* investors**



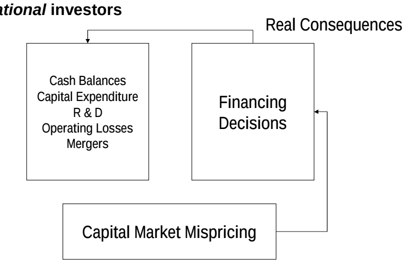
Market timing

- **How *rational* managers act in the presence of *irrational* investors**

- **Survey**
- **Firm Decisions**
- **Financing 'Waves'**
- **Capital Structure Outcomes**

Real consequences

- **How *rational* managers act in the presence of *irrational* investors**



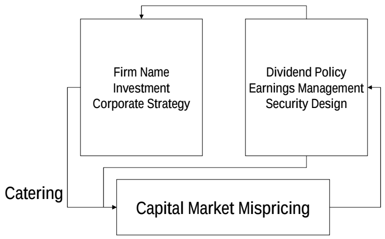
Real consequences

- **How *rational* managers act in the presence of *irrational* investors**

- **Firm Decisions**
- **Market-wide Investment**

Catering

- **How *rational* managers act in the presence of *irrational* investors**



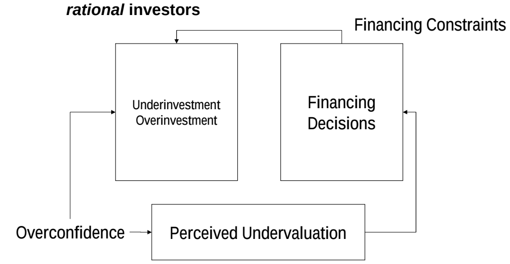
Catering

- **How *rational* managers act in the presence of *irrational* investors**

- **Survey**
- **Firm Decisions**
- **Fads in Corporate Finance**

Investment

- **How *irrational* managers act in the presence of *rational* investors**



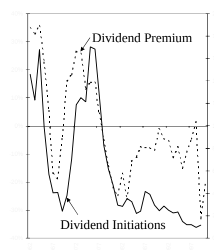
Investment

- **How *irrational* managers act in the presence of *rational* investors**

- **Survey**
- **Cash flow and investment**
- **Mergers and acquisitions**
- **Financial contracting**

Example: Dividend policy

- **Why do firms initiate dividends?**
- **Result:** Firms tend to initiate dividends when payers as a group trade at a premium to nonpayers
  - 4 measures of the "dividend premium"
  - **Broadest:** Relative market-to-book ratio
  - **Dependent variable:** Rate of initiation, omission



source: Baker and Wurgler (2003)

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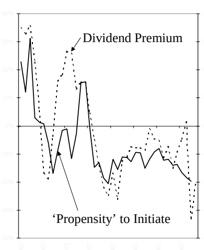

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Example: Dividend policy

1. **Omissions**
2. **Aggregate proxy for growth opportunities**
3. **Firm-level controls**
   – Controls for distribution as well as mean
4. **Repurchases, payout ratio, dividend yield**
5. **Oil and Gas**
6. **Citizens' Utilities Premium, Future Returns**

Open questions

- **Are the real consequences and zero sum transfers that arise because of market inefficiency and managerial bias big or small?**
- **To what extent can features of financial contracts can be understood as responses to assorted behavioral biases?**
- **What should governance look like in inefficient markets? With biased managers?**

Conclusions

- **Managers appear to take advantage of market inefficiencies**
  – Particularly when deciding which securities to issue
- **Managers also appear to be prone to decision-making biases**
  – These affect important decisions such as investment and M&A
- **Behavioral finance identifies both opportunities and pitfalls for corporate managers**