

An Overview of Behavioral Corporate Finance

Based on Baker, Ruback, Wurgler (2005)

Malcolm Baker
November 2005

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Two perspectives

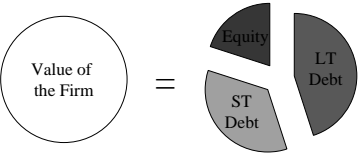
- **Irrational investors approach**
 - Studies how *rational* managers act in the presence of *irrational* investors
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Overview Theory Empirical Challenges Evidence Open Questions

Modigliani and Miller

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

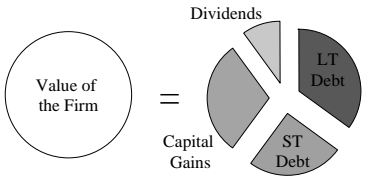


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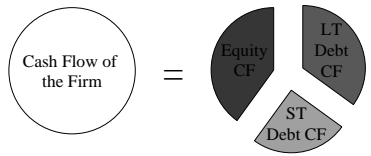
- **Also:** Convertible/straight debt, preferred/common, ...

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Modigliani and Miller

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

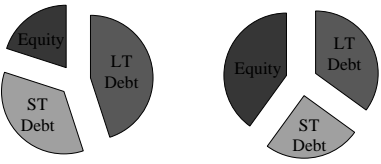


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Modigliani and Miller

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



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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

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Irrational investors: Building blocks

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

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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

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Irrational managers: Building blocks

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

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Irrational investors

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

- Ex ante measures
- Ex post measures

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Irrational managers

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

- Survey
- Revealed bias

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Market timing

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

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Market timing

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

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

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Real consequences

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

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Real consequences

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

- Firm Decisions
- Market-wide Investment

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Overview Theory Empirical Challenges Evidence Open Questions

Catering

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

The diagram illustrates the concept of catering. At the top, 'Catering' is shown as a central concept. Below it, two boxes represent 'Firm Name Investment' (including Corporate Strategy) and 'Dividend Policy' (including Earnings Management and Security Design). Arrows point from these two boxes down to a box labeled 'Capital Market Mispricing'. A feedback arrow points from 'Capital Market Mispricing' back up to 'Catering'.

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Catering

- How *rational* managers act in the presence of *irrational* investors
- Survey
- Firm Decisions
- Fads in Corporate Finance

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Overview Theory Empirical Challenges Evidence Open Questions

Investment

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

The diagram illustrates investment behavior. At the top, 'Financing Constraints' is shown. Below it, two boxes represent 'Underinvestment/Overinvestment' and 'Financing Decisions'. Arrows point from these boxes down to a box labeled 'Perceived Undervaluation'. A feedback arrow points from 'Perceived Undervaluation' back up to 'Financing Constraints'. A box labeled 'Overconfidence' has an arrow pointing to 'Perceived Undervaluation'.

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Investment

- How *irrational* managers act in the presence of *rational* investors
- Survey
- Cash flow and investment
- Mergers and acquisitions
- Financial contracting

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Overview Theory Empirical Challenges Evidence Open Questions

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

The graph plots 'Dividend Premium' (dotted line) and 'Dividend Initiations' (solid line) over time. The premium line shows significant peaks and troughs, while the initiation line shows a general upward trend. A horizontal line is drawn at the level of the premium line.

source: Baker and Wurgler (2003)

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Overview	Theory	Empirical Challenges	Evidence	Open Questions
Example: Dividend policy				
<ol style="list-style-type: none"> 1. Omissions 2. Aggregate proxy for growth opportunities 3. Firm-level controls <ul style="list-style-type: none"> – Controls for distribution as well as mean 4. Repurchases, payout ratio, dividend yield 5. Oil and Gas 6. Citizens' Utilities Premium, Future Returns 				
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Overview	Theory	Empirical Challenges	Evidence	Open Questions
Open questions				
<ul style="list-style-type: none"> • 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? 				
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Overview	Theory	Empirical Challenges	Evidence	Open Questions
Conclusions				
<ul style="list-style-type: none"> • Managers appear to take advantage of market inefficiencies <ul style="list-style-type: none"> – Particularly when deciding which securities to issue • Managers also appear to be prone to decision-making biases <ul style="list-style-type: none"> – These affect important decisions such as investment and M&A • Behavioral finance identifies both opportunities and pitfalls for corporate managers 				
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