The Real Effects of Financial Markets

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Overview

- Markets have fluctuated dramatically in the last few years. Should policymakers care?
  - Clearly markets have redistributional effects, but do they affect total surplus?
- Morck, Shleifer, and Vishny (1990): financial markets are a “side-show”
- Logical that primary markets have real effects
- This paper: even secondary financial markets can have real effects
  - Contracting
  - Learning

The Contracting Channel

- Manager are tied to the stock price (why?)
  - Stock and option compensation
  - Takeovers or threat of firing
  - Reputation
- Baumol (1965), Fishman and Hagerty (1989): ↑financial market efficiency →↑extent to which managers' actions are reflected in prices. Increases alignment
  - Holmstrom and Tirole (1993): additional benefit as ↑sensitivity of contract to the price

The Contracting Channel (cont'd)

- Can apply to other decision makers: Faure-Grimaud and Gromb (2004)

The Contracting Channel: Implications

- Blockholders can exert governance even if they lack control rights
  - Traditional theories: governance through voice/intervention (Shleifer and Vishny (1986), Burkart et al. (1997), Maug (1998), Kahn and Winton (1998), Bolton and von Thadden (1998))
  - New theories: governance through exit/trading (Admati and Pfleiderer (2009), Edmans (2009), Edmans and Manso 2011))
    - Why does this role have to be played by blockholders?

The Contracting Channel: Implications (cont'd)

- Real effects of financial markets implies a new way of thinking about blockholders
  - Affect financial markets rather than exert control
- Stock liquidity improves blockholder governance by encouraging
  - Aggressive trading
    - Fully offset by camouflage in a Kyle (1985) model
  - Information acquisition
  - Block formation

The Contracting Channel: Implications (cont'd)

- Evidence on effect of liquidity:
  - Fang, Noe, and Tice (2009): liquidity improves firm value
  - Bharath, Jayaraman, and Nagar (2013): particularly for firms with blockholders
  - Edmans, Fang, and Zur (2013): encourages blockholder formation and affects governance mechanism
  - Roosenboom, Schlingemann , and Vasconcelos (2013): reduces voice, increases exit in M&A setting

The Learning Channel

- Managers learn decision-relevant information from the stock market
  - Hayek (1945): market aggregates views of millions of investors
  - While manager may be more informed about internal factors, optimal decisions also depend on external factors
- Can apply to decision-makers other than the manager

The Learning Channel (cont'd)

- Many early theories treat firm value as exogenous to the trading process
  - Grossman and Stiglitz (1980), Hellwig (1980), Admati (1985), Glosten and Milgrom (1985), Kyle (1985)
- Insider trading literature: Allowing IT means insiders' information is incorporated into prices, but discourages outsiders from trading
  - Fishman and Hagerty (1992), Leland (1992), Khanna, Slezak, and Bradley (1994), Bernhardt, Hollifield, and Hughson (1995)

The Learning Channel: Implications

- Uninformed speculators may engage in manipulative short-selling: Goldstein and Guembel (2008)
  - Khanna and Mathews (2012): blockholders can counter
- Limits to arbitrage: Edmans, Goldstein, and Jiang (2013)
- Financial market runs due to strategic complementarities: Goldstein, Ozdenoren, and Yuan (2012)

The Learning Channel: Implications (cont'd)

- Information-based trade: Bond and Eraslan (2010)
- Optimal disclosure policy: Bond and Goldstein (2012), Gao and Liang (2013)
- Security design: Fulghieri and Lukin (2001)
- Information acquisition incentives: Dow, Goldstein, and Guembel (2011)
- Bank regulation: Bond, Goldstein, and Prescott (2010)

Empirical Evidence

- Luo (2005): probability of M&A completion depends on market reaction
- Kau, Linck, and Rubin (2008): learning is more likely when governance is high
- Chen, Goldstein, and Jiang (2007): sensitivity of investment to Q is higher when price is more informative
  - Bakke and Whited (2010): continues to hold when correcting for measurement error in Q

Empirical Evidence (cont'd)

- Durnev, Morck, and Yeung (2004): price informativeness is positively related to efficiency of real investment
- Kang and Liu (2008): strength of incentives is increasing in price informativeness
- Ferreira, Ferreira, and Raposo (2011): negative relation between price informativeness and board independence
- Edmans, Goldstein, and Jiang (2011): prices affect takeovers

Conclusion

- Secondary financial markets can have real effects even though they do not involve direct transfers of capital
  - Contracting
  - Learning

Areas for Future Research

- Theoretical: incorporate more complex features of informed trading models into a theory of firm behavior
  - Multiple trading rounds, informed traders have liquidity shocks, front-running
- Empirical: effect of financial markets on firm behavior
  - Regulatory changes (e.g. short-sale bans): Grullon, Michenaud, and Weston (2013)
  - Peer stock prices: Foucault and Frésard (2013)

Advice For PhD Students

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Choosing A Research Topic

- It must excite you
- Be motivated by the question
  - Not a dataset or an identification strategy
- Go for breadth / bandwidth
  - Focusing on specific settings / institutional details is fine, but only if linked to a broad question (external validity)
- Question should be non-obvious
  - Change the reader's prior. What is the null hypothesis?
- Make an incremental contribution over and above existing research (broadly interpreted)
  - Given existing papers A, B, and C, could we have already predicted your result?

The Writing

- The most important part of research, not just the final step in the research process
  - A prof's job is the creation *and dissemination* of knowledge
- Ensure the paper is very clear to an outsider
- Be precise
  - "We show that leverage affects firm policies / the coefficient on leverage is significant" *(what direction? which policies?)*
  - "Passive investors behave differently from activists" *(how?)*
  - "The results are weaker in specification (5)" *(describe spec^{n})*
  - Theory papers: specify model clearly
  - Empirical papers: define terms clearly, and be consistent
- Write, rewrite, re-rewrite, re-re-rewrite

The Title

- Be concise:
  - Bad: ~~A Multiplicative Model of Optimal~~ CEO Incentives in Market Equilibrium
  - Risk and the CEO Market: Why Do Some Large Firms Hire Highly-Paid, Low-Talent CEOs? -> The Effect of Risk on the CEO Market
  - Good: Misvaluing Innovation; Collateral Pricing; Credit Cycles; Debt Dynamics; Dynamic Risk Management; Inefficient Investment Waves
- Be precise:
  - Bad: Blockholder Trading, Market Efficiency, and Managerial Myopia
  - Avoid: Does X matter?
- Avoid straw men:
  - Are all Xs the same?
  - Is X one-size-fits-all?

The Introduction

- Should be fully self-contained
- Do not meander between your paper and past lit.
- Theory:
  - Explain all of the model's key inputs, results, and intuition behind the results
  - Be easily accessible to a non-theorist
- Empirics:
  - State the hypotheses clearly: what is your paper testing?
  - Be very clear about identification strategy, including IVs
  - Economic significance. Abstract should contain one number
- Both:
  - Motivate the question
  - Acknowledge limitations

Conference Presentations

- Get the audience interested in reading your paper – or, better still, be so clear they don't need to
- Have few slides and present them very clearly
  - You don't need to present every result in the paper
  - It's fine to repeat critical intuition more than once
- Transitions between slides
- Theory:
  - Specify the model clearly. Explain intuition behind your main result – what economic forces are captured in the equation
- Empirics:
  - State the hypotheses clearly: what is your paper testing?
  - Be very clear about identification strategy, including IVs

Dealing With Failure

- You're in very good company
- Almost no-one is a jerk on purpose
  - Referees (discussants) are experts whose opinions are trusted by editors (session chairs), and volunteer their time
  - They read your paper more carefully than almost anyone, and are often right. If they are wrong, it is usually your fault
  - "The referee didn't read the paper" – you didn't induce them
- Take all comments (referee, discussant, volunteer) seriously and don't be defensive
- Remember why you wrote the paper
  - The most important referee is you
- This is a great job, and it's essentially the same regardless of what school you're at