The Science of Responsible Investing

What We Do And Do Not Know About Governance

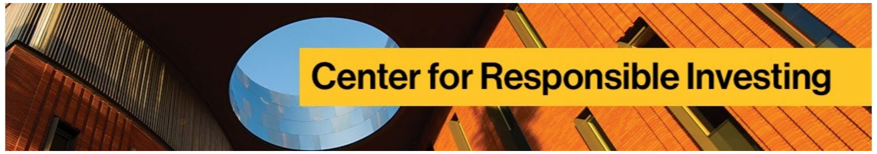
Jeff Coles

Samuel S. Stewart, Jr. Presidential Chair

March 1, 2024

THE UNIVERSITY OF UTAH

ASU Arizona State University



Background

- Research: corporate governance; corporate finance; capital markets.
- Consultant to Industry and Government.
- Expert in legal actions.
- Investment Committees (various; e.g., VGPCT, https://pipertrust.org/about-us/ , https://pipertrust.org/about-us/board-of-trustees/).
- Co-chief scientist, Incentive Lab, sold 2014 to ISS (https://www.issgovernance.com/iss-services-acquire-incentive-lab/) .
- President of Financial Management Association.

Preview

- Objectives:
  - Window into “scientific evidence, meaning methods, data, results, interpretation.
  - Selecting portfolio firms based on G? A tentative, speculative “maybe.”

- Preview
  - Why G? Why corporate governance?
  - Definition, scope of “governance.”
  - Window into typical large-sample scientific experiments. Empirically successful?
    - Illustrate with: board independence; and executive compensation.
  - Generating returns?

  - G and E,S together in executive pay? If have time.

  - Q&A.

Corporate Governance Defined

- "...the complex set of constraints that shape the ex-post bargaining over the quasi-rents generated by the firm." ?????

- "... **ways** in which suppliers of finance to corporations assure themselves of getting a return on their investment."
  - *Corporate Control:* "...the monitoring, supervision, and direction of a corporation or other business organization."

- "**Ways**" = organization design (structure, process, people, including monitoring, advising, incentives)

Corporate Governance Defined

- "...the complex set of constraints that shape the ex-post bargaining over the quasi-rents generated by the firm." ?????

- "... **ways** in which suppliers of finance to corporations assure themselves of getting a return on their investment."
  - *Corporate Control:* "...the monitoring, supervision, and direction of a corporation or other business organization."

- "**Ways**" = organization design (structure, process, people, including monitoring, advising, incentives)

Why Study/Assess Corporate Governance?

- Investors, Shareholders:
  - What is a company worth?
  - Buying shares in “good” companies?
  - How to select a fund manager?
- Executives:
  - How to position my company to perform?
  - How to maximize wealth of my investors?
- Both Plus Policy:
  - How to think about the structure of legal and regulatory institutions/rules?

Corporate Governance: Examples

- Internal Governance
  - Board of directors
  - Managerial incentives
  - Corporate charter
  - Internal control systems

- External Governance
  - Markets
  - Private sources of external oversight
  - Laws, regulation

Governance: Broad Spectrum of Issues

- 2024 ISS US Proxy Voting Guidelines (https://www.issgovernance.com/file/policy/active/americas/US-Voting-Guidelines.pdf?v=1)
- Table of Contents (TOC, 6 pages)
    - Topics and subtopics (N = 238)
        - Boards of Directors (Line items in TOC: N = 46, e.g., 16 sub-topics under “other”)
        - Audit (N = 4)
        - Shareholder Rights and Defenses (N = 27, e.g., P. Pills with 13 sub-topics)
        - Capital/Restructuring (35)
        - Compensation (N = 47)
        - Routine and Misc. (N = 6)
        - Social and Environmental Issues (N = 49)
        - Mutual Fund Proxies (N = 24)

Governance: 2024 ISS US Proxy Voting Guidelines, BoD

Governance: 2024 ISS US Proxy Voting Guidelines, Compensation

Corporate Governance: Evidence

- Again, three aspects:
  - *Structure* (e.g., independence of BoD; sensitivity of executive pay to shareholder value)
  - *Process* (e.g., recruiting and promotion systems, information sharing, compliance, reporting processes, planning processes)
  - *People* (e.g., skill sets, human capital, perspective, experience, and capabilities of decision makers)
- Typical "*Scientific*" Experiments
  - Performance on Structure (e.g., regress firm value or MTB or TSR or accounting performance on board independence)
  - Structure on Structure (e.g., Board independence on managerial PPS)
- What do we think we know (and not) and how do we know it?

Assembling Evidence: A Taxonomy

- How does firm performance depend on structure?
  - E.g. Is performance or value related to board composition or the structure of executive pay?
  - Depends on what else? Industry, size, asset tangibility, managerial human capital?
- How are different governance mechanisms related (structure on structure)?
  - E.g. If I put more outsiders on the board, do I need to give the CEO as much stock? Managerial Ownership and Board Independence
  - Depends on what else? Industry, size, asset tangibility, managerial attributes?
- Fundamental Question: **How to structure the company to maximize shareholder value?**
- Next: some "evidence."

WARNING. RED ALERT.

- The literature has struggled to provide convincing evidence of a causal association between corporate governance and firm performance and on how different governance mechanisms interact with one another.

- Empirical experiments, however, are difficult to construct…
  - If the organization form is chosen to maximize firm value, and the empirical model includes all of the exogenous factors that explain differences in the choice of governance that maximizes firm value or performance, then should observe a relation in the data between performance and structure only by accident.

Example #1: Performance (MTB) and Board Independence

- Independent (non-employee) directors as a proportion of all directors.
- Conventional wisdom: a more independent board is a better board.
- US listing requirements. 50%. Other countries have followed.
- Performance = MTB = market value of assets/book value of assets.

- Empirically:
  - Positive relation between MTB and board independence
    - Weisbach (1988), Borokhovich, Parrino, and Trapani (1996), Brickley, Coles, and Terry (1994), Byrd and Hickman (1992), and Cotter, Shivdasani, and Zenner (1997), Duchin, Matsusaka, Ozbas (2009).
  - No relation
    - Baysinger and Butler (1985), Hermalin and Weisbach (1991), and Bhagat and Black (2001).
  - Negative relation
    - Yermack (1996), Agrawal and Knoeber (1996), Coles, Daniel, and Naveen (2008), Duchin, Matsusaka, Ozbas (2009).
- Through time, better data and better experimental designs.

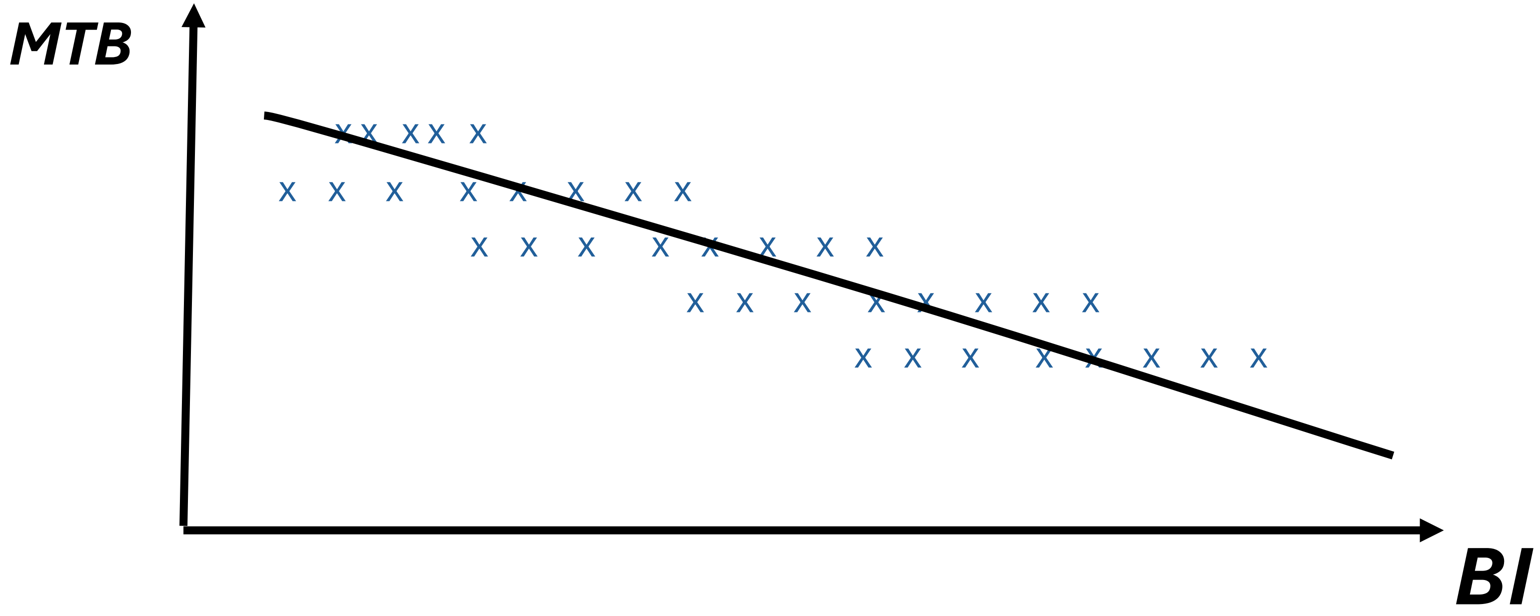
Example #1: Performance (MTB) and Board Independence

- Independent (non-employee) directors as a proportion of all directors.
- Conventional wisdom: a more independent board is a better board.
- US listing requirements. 50%. Other countries have followed.
- Performance = MTB = market value of assets/book value of assets.

- Empirically:
  - Positive relation between MTB and board independence
    - Weisbach (1988), Borokhovich, Parrino, and Trapani (1996), Brickley, **Coles**, and Terry (1994), Byrd and Hickman (1992), and Cotter, Shivdasani, and Zenner (1997), Duchin, Matsusaka, Ozbas (2009).
  - No relation
    - Baysinger and Butler (1985), Hermalin and Weisbach (1991), and Bhagat and Black (2001).
  - Negative relation
    - Yermack (1996), Agrawal and Knoeber (1996), **Coles**, Daniel, and Naveen (2008), Duchin, Matsusaka, Ozbas (2009).
- Through time, better data and better experimental designs.

Regress: MTB on board independence (BI)

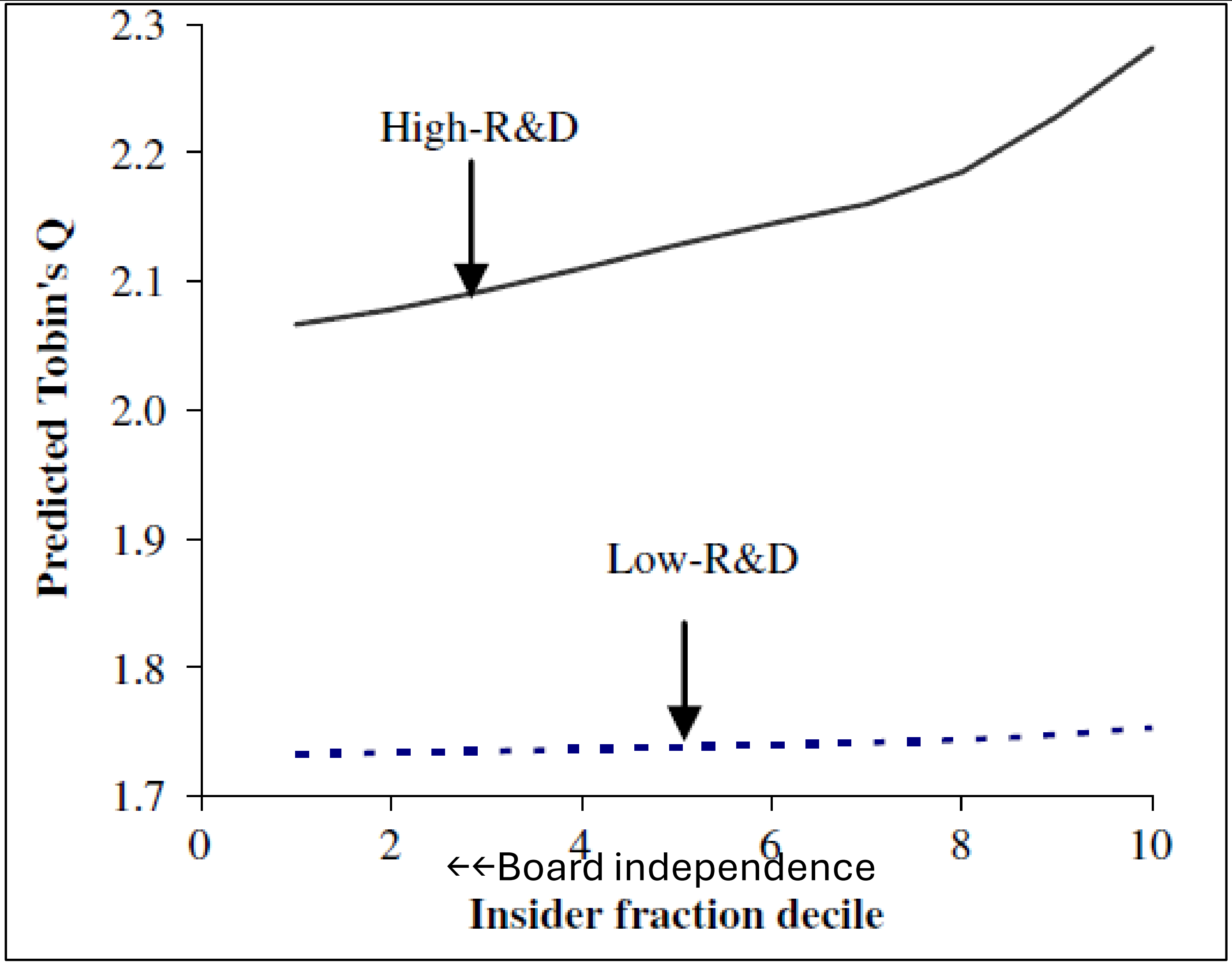
- *MTB* = 2.24 + -0.551*** x ***BI*** (…and control variables)



- Swapping one independent r for an employee director increases firm value by about $838 million on average. A lot!
- Wouldn't efficiency pressures from markets and investors have caused firms to reduce BI?

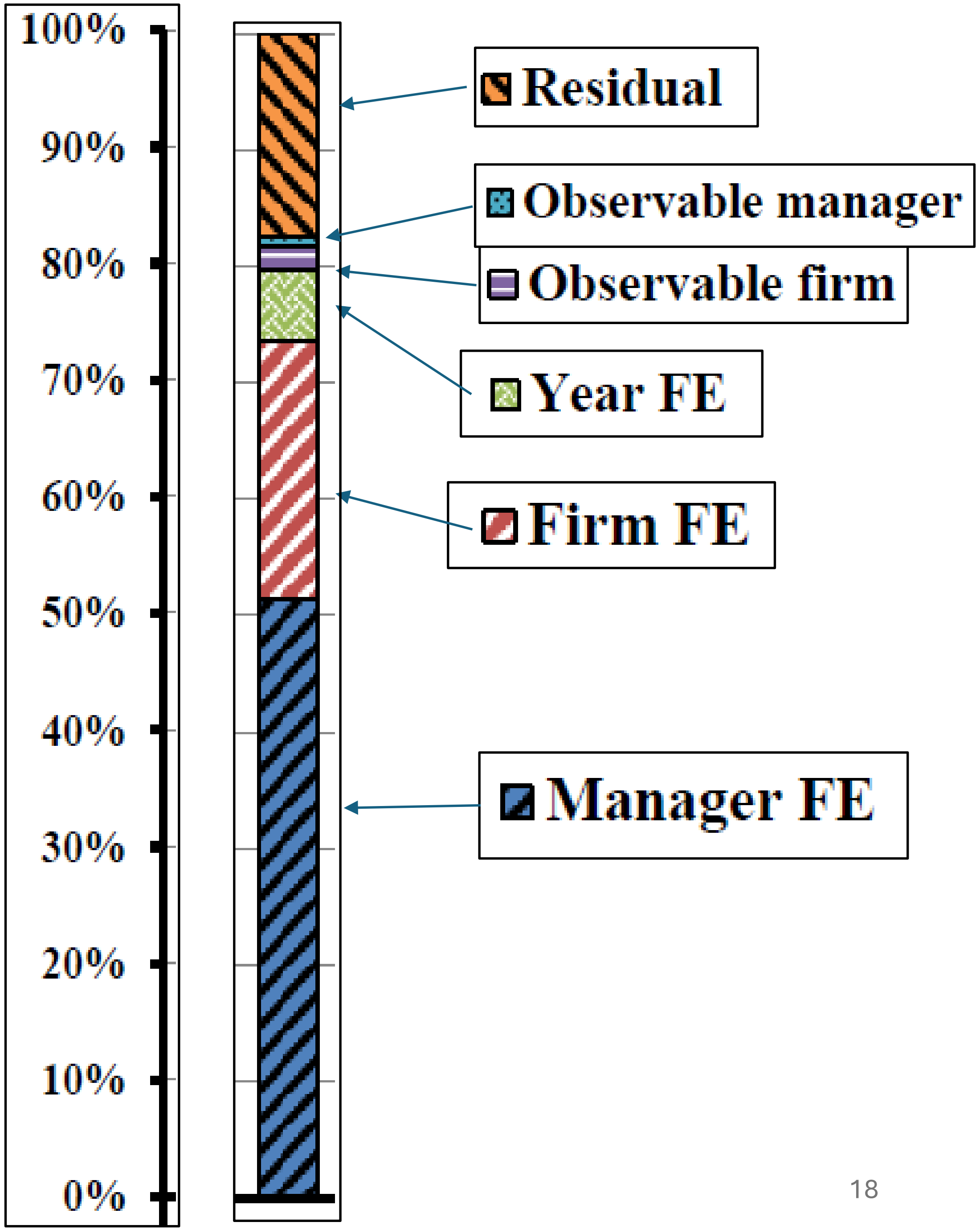
Jeffrey L. Coles
University of Utah

MTB and Board Independence: Depends on Type of Firm?



- "Explaining" Board Independence (% non-employee directors)

- Determinants/Correlates:
  - Observable firm: size, leverage, R&D, number of business segments, **industry**, analyst coverage, etc.
  - Manager observables: age, industry experience, schooling, MBA, etc.
  - Manager FE: Unmeasured manager characteristics
  - Firm FE: Firm characteristics (industry and unmeasured)
  - Year FE: macro/monetary/regulatory varying through time



Jeffrey L. Coles

- Explaining Board independence: In Numbers

Relative Importance of Components in Determining Board Independence

	$\frac{cov(BoardIndependence, component)}{var(BoardIndependence)}$	% of R^2 attributable to the component
Observable Firm Characteristics	0.022	2.63%
Observable Manager Characteristics	0.007	0.84%
Firm Fixed Effects	0.228	27.44%
Manager Fixed Effects	0.514	59.70%
Year Fixed Effects	0.060	7.22%
Residual	0.169	

Adj. R^2 = 0.750 (time+M+F FEs)

Evidence: MTB and Board Independence

- Conventional wisdom: a more independent board is a better board.
- US listing requirement. Shanghai and Shenzhen and others.

- But, *negative* relation for some types of firms/industries.
- Why don’t such firms in such industries have only employee directors (no independent directors)? Regulation? Other.

- One size does not fit all.
- The number of independent directors on the BoD increases in firm size, leverage, and number of business segments and decreases in intangibility and R&D.
- Little guidance on the implications for value!

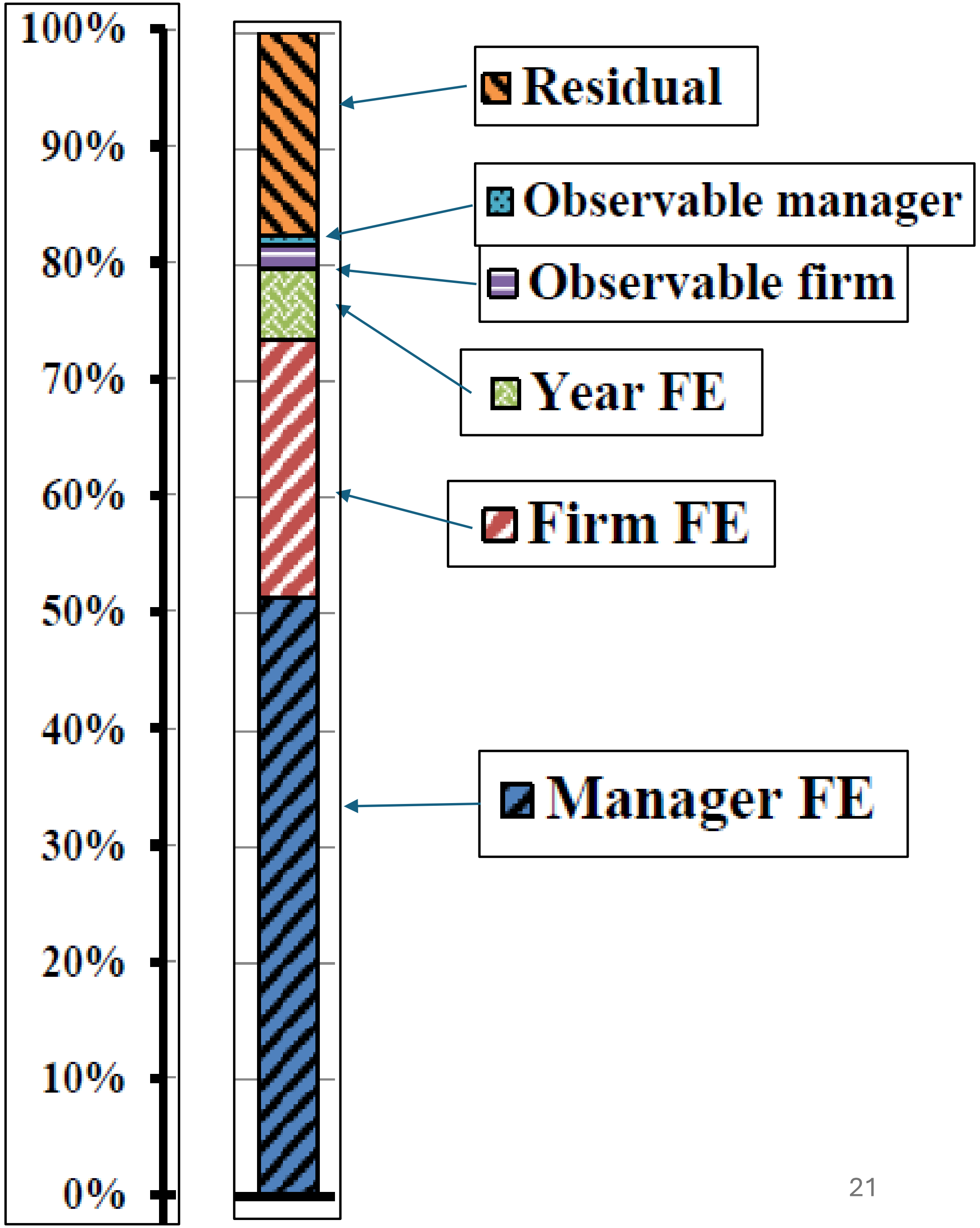
- But perhaps one size is about right for firms in the same industry?

- Explaining Board Independence (% non-employee directors)

- Determinants/Correlates:
  - Observable firm: size, leverage, R&D, number of business segments, **industry**, analyst coverage, etc.
  - Manager observables: age, industry experience, schooling, MBA, etc.
  - Manager FE: Unobserved manager characteristics
  - Firm FE: Unobserved firm characteristics
  - Year FE: macro/monetary/regulatory varying through time

- Suppose industry norms are approximately optimal. Is degree of independence consistent with industry norms? Could firm value be increased by comporting more closely with industry norms?
- Compare versus other similar firms in the same industry.
- Similar: also account for other observable firm and manager characteristics that explain departures of BI from norm.
- If there is abnormal departure from benchmark BI, check the common sense (e.g., SOX). See if there are good reasons.
- If there are not, perhaps a change in this aspect of the company would increase value. Or walk!

Jeffrey L. Coles



What to Conclude?? Firm Value and Board Independence?

- Suppose board independence is:
  - easily observed;
  - material for firm performance; and
  - it is known how BI should depend on firm and manager attributes (evidence).

- Two ways to think about firm performance and board independence.
  - 1. Hold, buy and hold, or sell.
    - Frictions or managerial discretion cause BI to be suboptimal.
    - If BI is poorly chosen, as measured by departing relative to the firm and manager attributes that seem to drive BI, will the firm perform poorly relative to firms in the same industry and product markets?
  - 2. Activism.
    - In a frictionless world, if BI mattered a lot, then investors already would have pressured the firm to adopt optimal board independence and thereby increase firm value.
    - In a world with frictions, suppose you know that BI is poorly chosen (sub-optimal), is it expensive to implement a change in BI? Does it take time? How costly? Would it be worth it? There would be a role for the activist investor to overcome frictions, change BI, and improve and capture value.

Example #2: Firm Value (MTB) and Executive Pay

- Level: Salary + annual bonus + long-term cash bonus + stock + options.

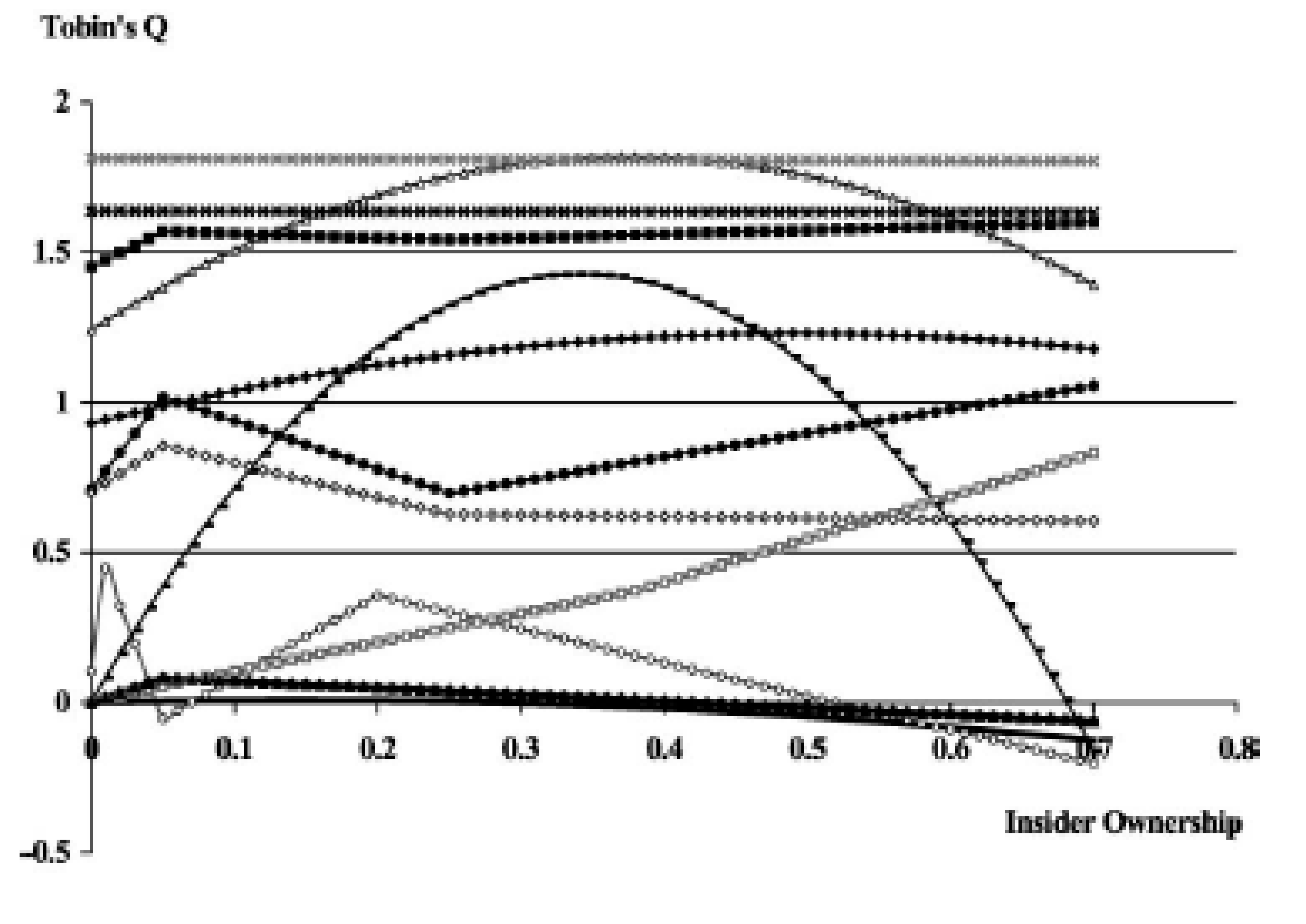
- “Delta” = WPS (wealth performance sensitivity) =
  - = Alignment of managerial incentives with shareholder interests.
  - = % change in CEO wealth for a 1% change in stock price.

- Risk incentives = “Vega”
  - = $ change in CEO wealth for a 0.01 change in standard deviation of stock returns

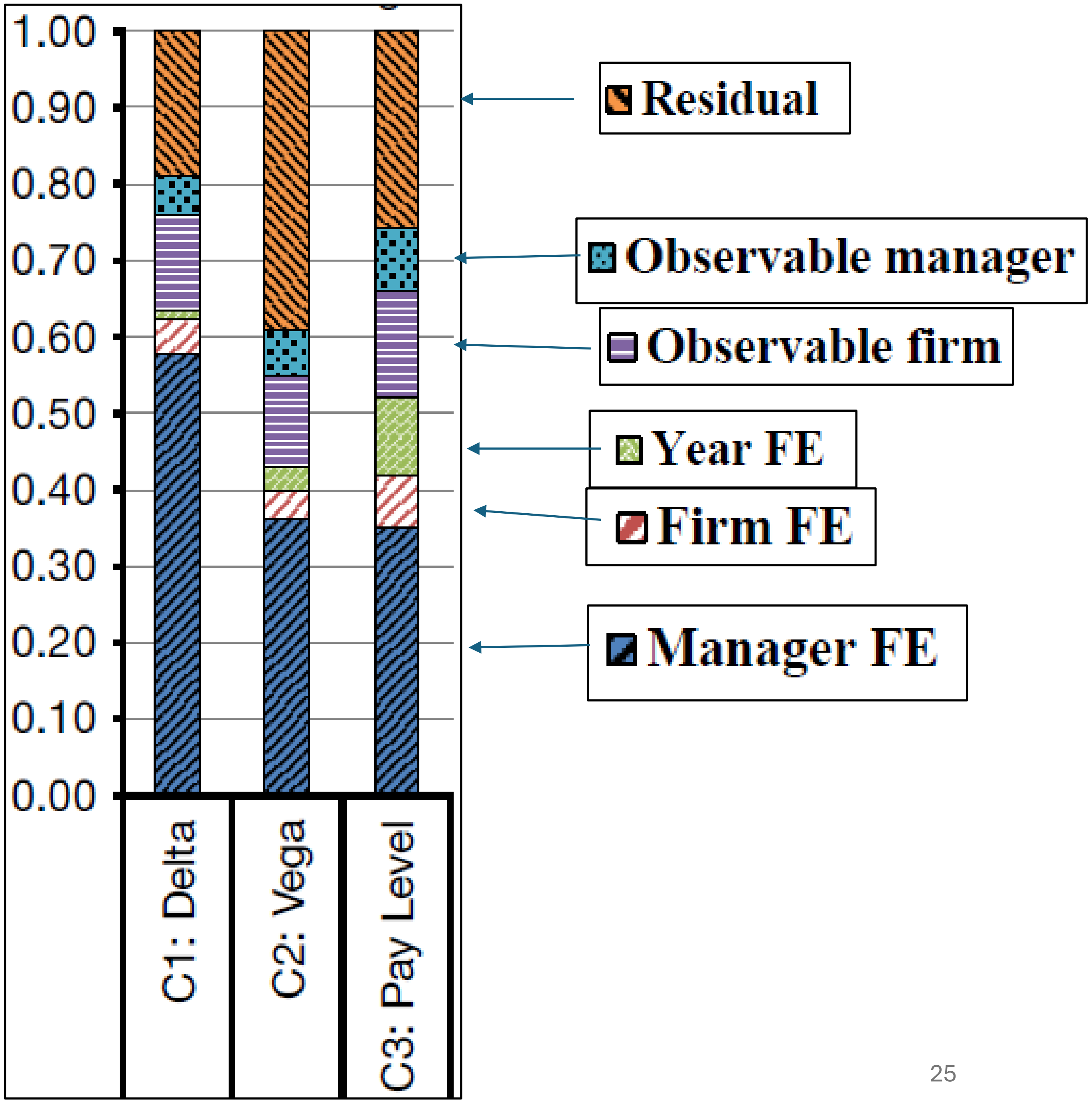
- Aside:
  - Note: seems easy, but it isn’t.
  - Note: stock and option awards can be based on time vesting or on performance-vesting schedules. Modern P-V APE Provision: Amgen 2008 Grant Schedule
  - How to measure value (level), WPS, risk incentive of pay?

- Empirically:
  - Performance in dimensions of pay: Hah!

Evidence: MTB and Managerial Compensation (WPS)
WPS = Wealth Performance Sensitivity



- Explaining Managerial Pay
  - PPS (WPS) = Delta = incentive alignment with shareholder interests
  - Vega = risk incentives
  - Level of Pay
- Determinants ...
  - Manager: education, MBA, gender, tenure, age, etc.
  - Firm: size (assets), R&D, PPE, lev., stock return, ROA, analyst coverage, firm risk, board independence, **industry**
  - Manager FE: Unobserved manager characteristics
  - Firm FE: Unobserved firm characteristics
  - Year FE: macro/monetary/regulatory varying through time



Jeffrey L. Coles

Firm Value and the Structure of Copmpensation?

- Suppose level, **WPS**, risk incentive are:
  - easily observed;
  - material for firm performance; and
  - it is known how level, PPS, and risk incentives should depend on firm and manager attributes (evidence).

- Two ways to think about firm performance and board independence.
  - 1. Hold, buy and hold, or sell.
    - Frictions or managerial discretion cause WPS to be suboptimal.
    - If WPS is poorly chosen, as measured by departing relative to the firm and manager attributes that seem to drive WPS, will the firm perform poorly relative to firms in the same industry and product markets?
  - 2. Activism.
    - In a frictionless world, if WPS mattered a lot, then investors already would have pressured the firm to adopt optimal WPS (incentive alignment) and thereby have increased firm value.
    - In a world with frictions, suppose you know that WPS is poorly chosen (sub-optimal), is it expensive to implement a change in WPS? Does it take time? How costly? Would it be worth it? There would be a role for the activist investor to overcome frictions, change WPS, and improve and capture value.

Summary: Main *Speculative* Idea

- There is little useful direct guidance from the scientific evidence on how to obtain abnormal performance based on observable G.

- One potential approach (that may well be in use by some):
  - What is normal BI or WPS for benchmark firms in the same industry and product markets, with otherwise similar firm and managerial attributes?
  - Does the firm in question depart in a significant way in WPS from this benchmark based on similar comparison firms?
  - If so, is there a plausible good reason? Yes, then no useful information that would affect the buy, hold, sell decision.
  - If not:
    - walk away from firms with materially suboptimal BI or WPS; or
    - as an activist apply pressure for a better structure for executive pay.

G&E,S. Executive Pay.

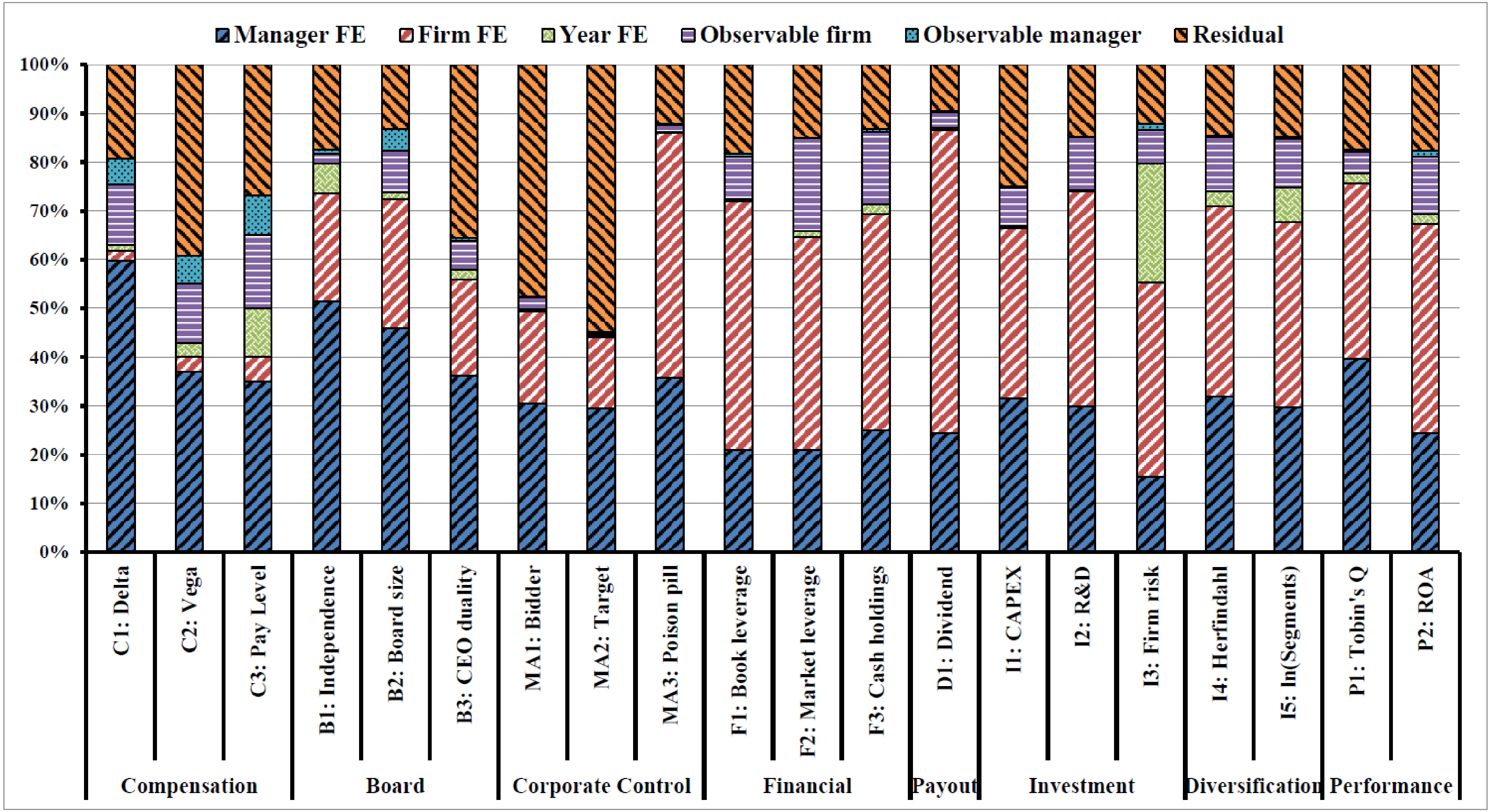
- E&S metrics in executive pay.
- In p-v provisions or cash bonus plans.
- What metrics or dimensaions? 2024 ISS US Proxy Voting Guidelines N = 49 items in TOC.

G&E,S. Executive Pay. Metric Types in Use. (ISS Incentive Lab data)

- Environment:
  - GHG Emission Reduction (carbon emission reduction, methane reduction, renewable/clean energy etc);
  - Environmental Events and Compliance (oil spill, water waste, wildfire, food waste reduction);
  - Achievement of Sustainability Index (risk reduction, supplier engagement).

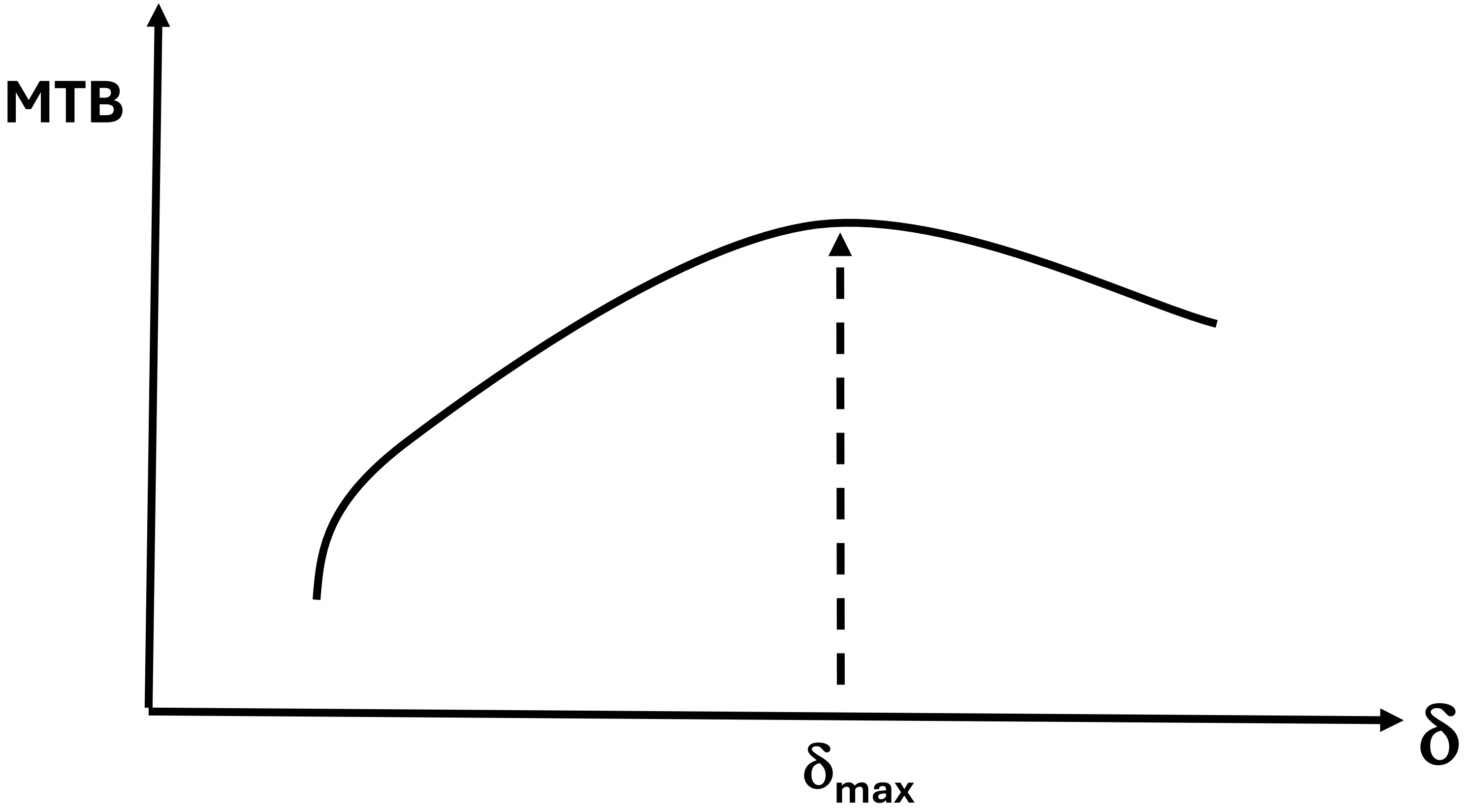
- Social:
  - Employee Safety (measured by all types of injury rate, safety training completion rate);
  - Diversity (DEI initiatives such as diversity hires in both leadership and other employees, and also supplier diversity);
  - Customer And Product Responsibility (like Customer Reliability);
  - Public Safety Response.

Empirical Assessment of Empirical Corporate Finance

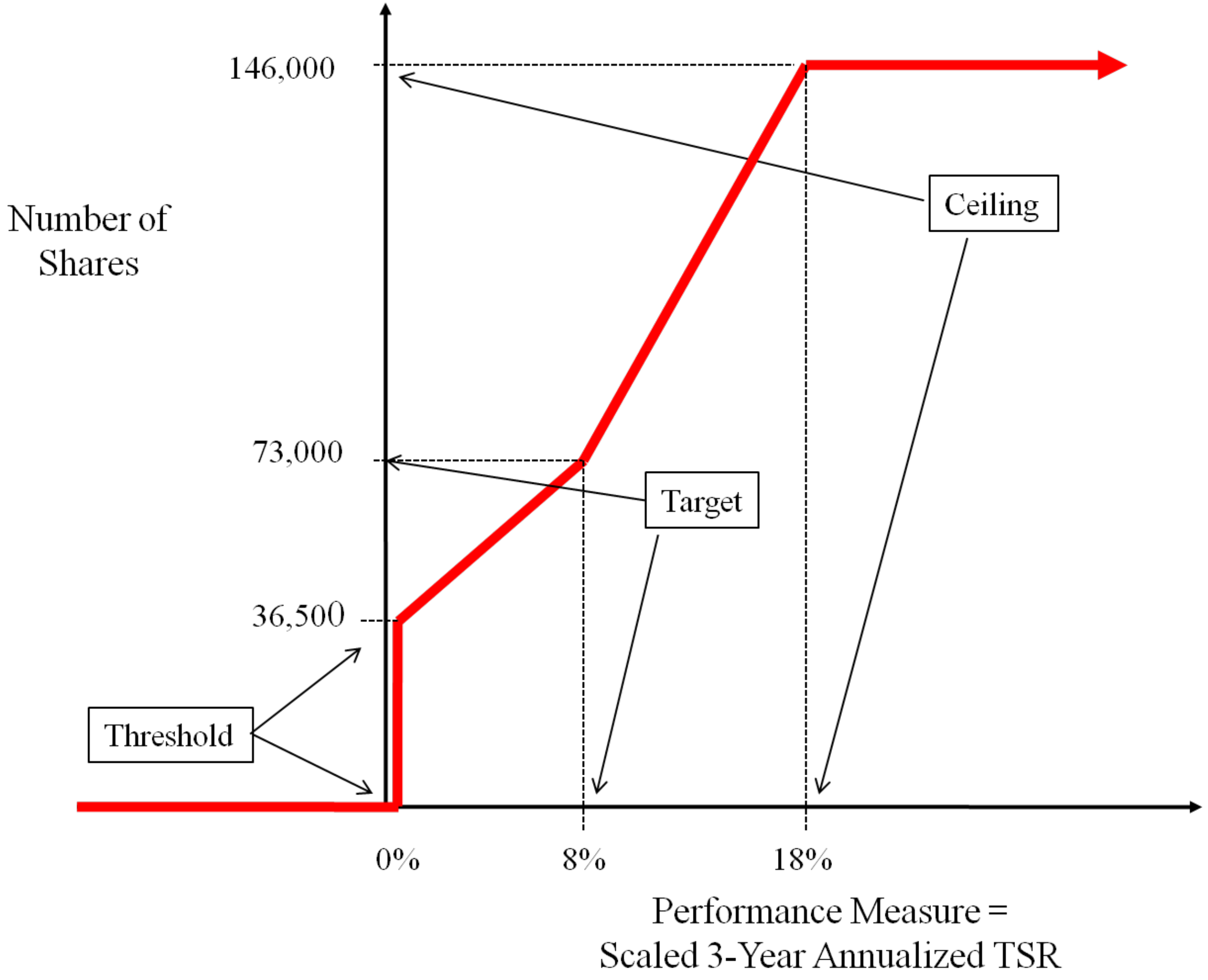


Our Data: MTB on Managerial Ownership (δ)

- MTB = 1.91 + 8.61*** x δ -21.46*** x δ^2 (+ controls)

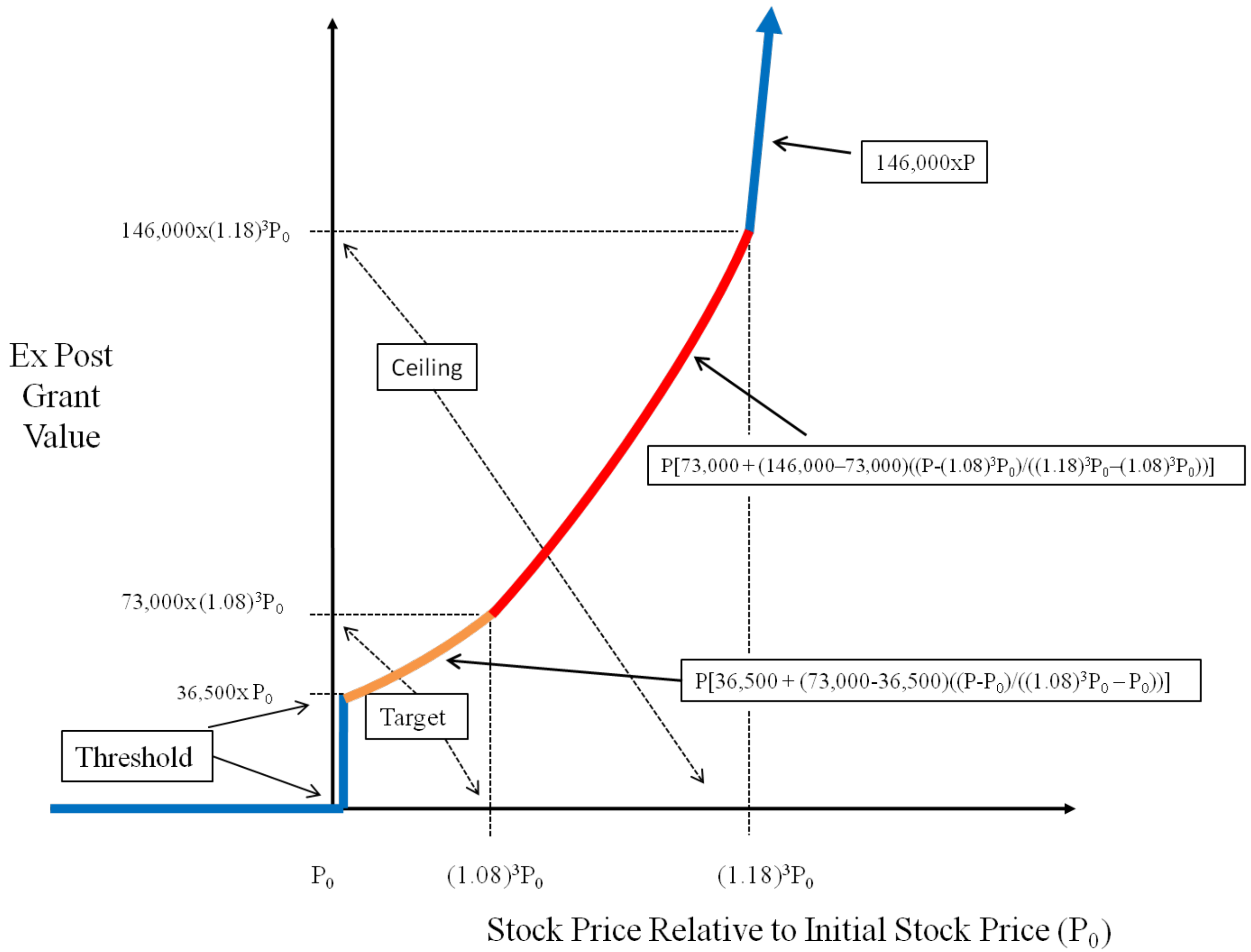


Modern P-V APE Provision: Amgen 2008
Grant Schedule



Modern P-V APE Provision: Amgen 2008

Ex Post Value

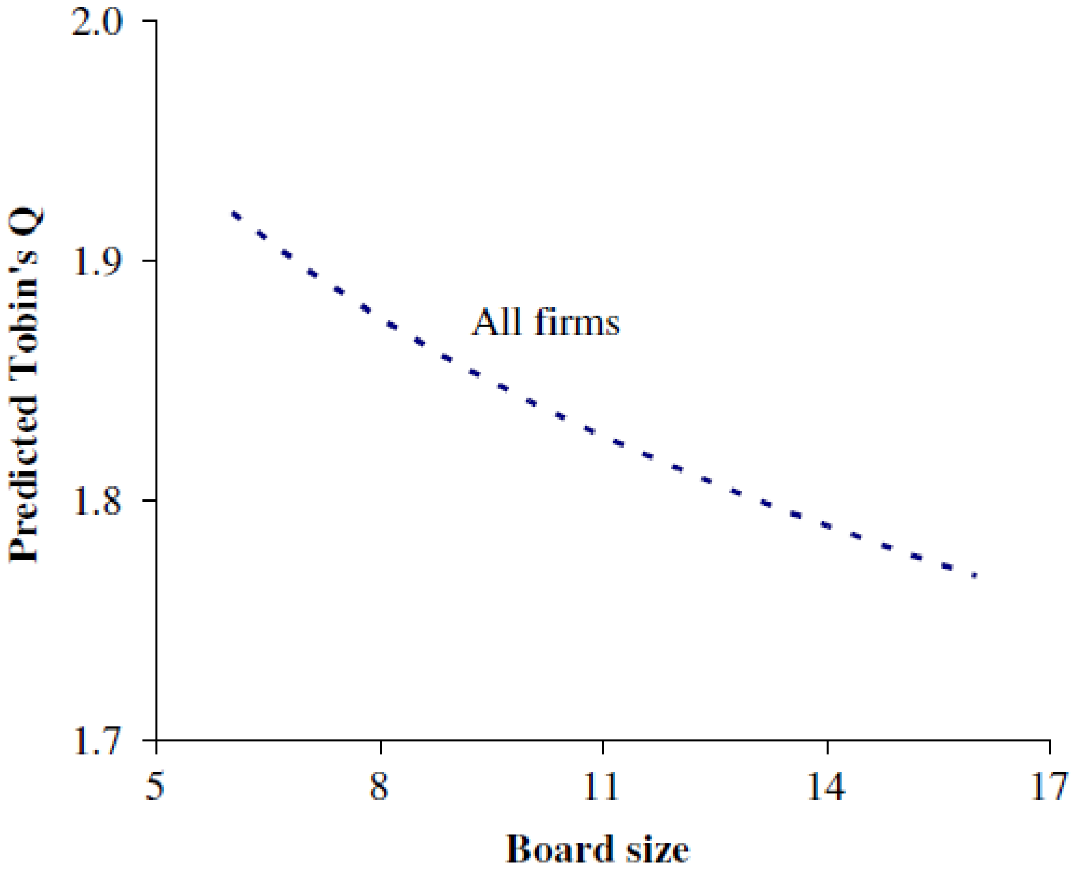


Jeffrey L. Coles

University of Utah

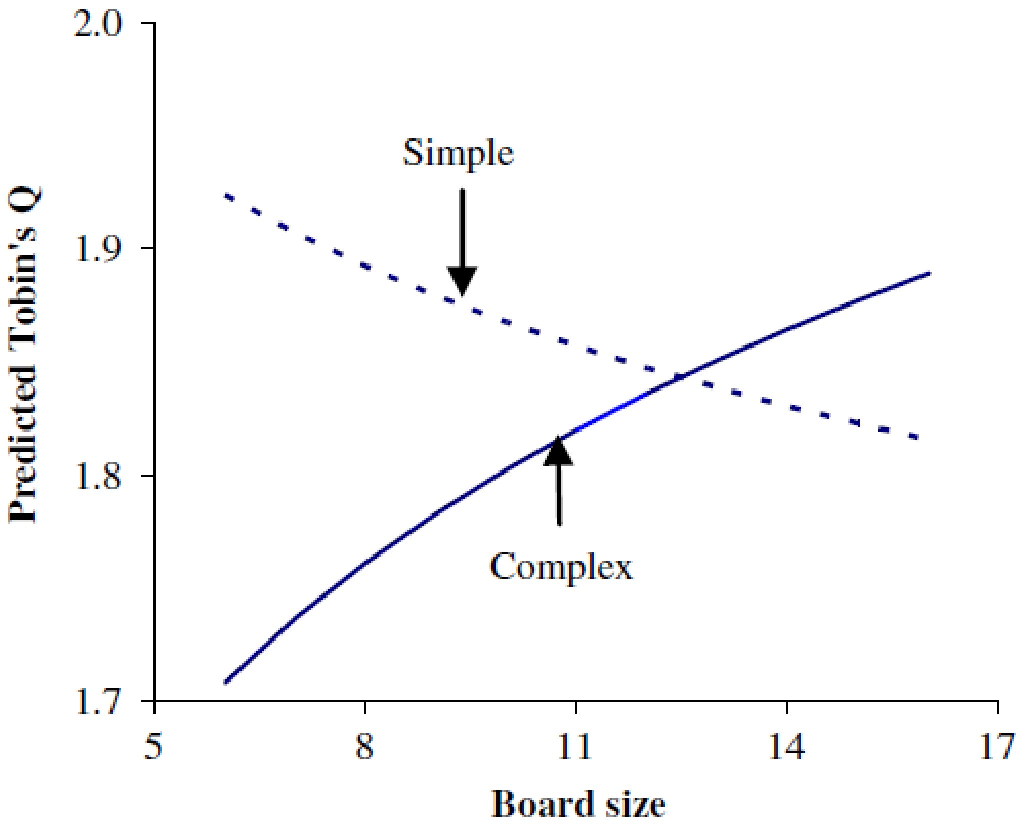
Evidence: MTB and Board Size

- Conventional wisdom: a smaller board is a better board.
- Indeed, negative relation in the data. Why don't firms shrink boards? 5?



Evidence: MTB and Board Size

- One size does not fit all.
- Complex firms (multiple product markets, larger, more leverage) versus simple firms.



Managerial Ownership and Board Independence

- Should we give CEOs more pay-for-performance sensitivity when the firm already has an effective, independent board? Complements or substitutes in organization form?

- Empirical evidence is mixed.
  - Negative relation: Denis and Sarin (1999), Baker and Gompers (2003), Shivdasani and Yermack (1999) and Coles, Daniel and Naveen (2008).
  - Positive relation: Core, Holthausen and Larcker (1999), Ryan and Wiggins (2004), Davila and Penalva (2004).