CEO PAY LEVELS

RESEARCH SPOTLIGHT

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KEY CONCEPTS

CEO compensation is a highly controversial subject.

Two theories exist to explain current levels of pay in the U.S.

1. Optimal contracting.

   – CEO compensation is awarded through an efficient process, driven by competitive market forces.

   – Boards negotiate pay through an arms-length negotiation in the best interest of the shareholders.

   – Pay differentials between the CEO and senior executives provide incentive for managers to perform by offering large rewards in the event of promotion ("tournament theory").

KEY CONCEPTS

2. Rent extraction.

   – CEO compensation is not the result of an efficient economic process.
   – CEOs exert influence over boards to extract compensation in excess of what would be awarded in a competitive market.
   – Large pay differentials between the CEO and senior executives are indicative of rent-seeking behavior.

Research evidence is mixed but generally favors the optimal contracting view of CEO compensation.

CEO PAY LEVELS

- Gabaix and Landier (2008) develop an economic model to examine the relation between CEO pay and company size.
- Sample: S&P 500 companies, 1971-2004.
- Find that changes in CEO pay are almost entirely explained by changes in company size.
- Six-fold increase in company size 1980-2003 led to six-fold increase in pay.

Conclusion: Company size is the largest determinant of CEO pay levels.

> "In our equilibrium model, the best CEOs manage the largest firms, as this maximizes their impact and economic efficiency."

CEO PAY LEVELS

- Kaplan and Rauh (2010) examine compensation trends among CEOs and other highly paid professionals.
- Sample includes four groups of professionals, 1994-2004.
  1. CEOs of S&P 1500 firms.
  2. Investment bankers, hedge fund managers, and private equity managers.
  3. Lawyers.
  4. Professional athletes and celebrities.
- Find that growth in CEO pay is consistent with growth in other pay groups.

Conclusion: CEO pay is driven by market forces.

"The evidence is more consistent with theories of skill-biased technological change, superstars, greater scale, and their interaction."

CEO PAY LEVELS

- Frydman and Jenter (2010) conduct a comprehensive review of the academic research on CEO compensation.
- Sample: U.S. public companies, 1930s through 2005.
- Observe two distinct trends:
  - Pre-1970s: low pay, little dispersion across firms, moderate pay-for-performance.
  - 1970s-2005: large pay growth, more dispersion, closer pay-for-performance.
- Find support for two explanations:
  - Optimal contracting: competitive market forces set CEO pay
  - Rent extraction: CEO influence over board allows CEOs to extract excessive pay.

Conclusion: Pay is potentially driven by both market forces and CEO power.

CEO PAY LEVELS

- Murphy (2012) conducts an extensive review of historical trends in CEO compensation.
- Sample: U.S. public companies, 1930s through 2010.
- Finds that CEO compensation size and structure are heavily influenced by regulatory and tax-law changes.
- Government rules directly impact the relative attractiveness of cash, stock options, restricted stock, and performance-based awards in CEO pay.

Conclusion: CEO pay is shaped by tax, accounting, and legislative rules.

"Government intervention has been both a response to and a major driver of time trends in executive compensation over the past century."

CEO PAY AND GOVERNANCE QUALITY

- Core, Holthausen, and Larcker (1999) examine the relations between CEO compensation, governance quality, and performance.
- Sample: 205 firms, 1982-1984.
- Find that:
  - CEO pay levels are inversely related to several measures of board oversight (independence, outside representation, and external block ownership).
  - Companies that award excess pay underperform over subsequent 1-, 3-, and 5-year periods (ROA and stock price).

Conclusion: Poor governance negatively impacts pay and performance.

"Overall, our results suggest that firms with weaker governance structures have greater agency problems; that CEOs at firms with greater agency problems receive greater compensation; and that firms with greater agency problems perform worse."

PAY DIFFERENTIAL BETWEEN CEO AND OTHER EXECUTIVES

- Kale, Reis, and Venkateswaran (2009) examine the relation between pay differentials in the C-suite and firm performance.
- Sample: S&P 1500 companies, 1993-2004.
- Hypothesize that large pay differentials provide incentive for senior managers to perform and earn promotion ("tournament theory").
- Find that gaps between CEO and senior executive pay are positively correlated with performance (measured as ROA and Tobin's Q).

Conclusion: Large pay differentials reflect economic incentives.

"Our analysis indicates that a rank-order tournament that provides promotion incentives to mangers is an important incentive mechanism for motivating corporate managers."

PAY DIFFERENTIAL BETWEEN CEO AND OTHER EXECUTIVES

- Bebchuk, Cremers, and Peyer (2011) study the relation between pay differentials and governance quality.
- Sample: 2,015 companies, 3,256 CEOs, 1993-2004.
- Evaluate the relation between "pay slice" (the fraction of aggregate pay for top five named executive officers that is paid to the CEO) and various outcomes.
- Find that "pay slice" is negatively associated with firm value (Tobin's Q) and positively associated with governance problems.

Conclusion: Large pay differentials reflect CEO rent extraction.

> "Excess [pay slice]… reflects rents captured by the CEO and can be viewed as a product of agency (governance) problems."

PAY DIFFERENTIAL BETWEEN CEO AND OTHER EXECUTIVES

- Kini and Williams (2012) study the relation between pay differentials and risk.
- Sample: 19,333 firm-year observations, 1994-2009.
- Hypothesize that higher pay gaps between the CEO and senior executives give senior executives greater incentive to take risk in order to increase their chance of promotion.
- Find that pay differentials are positively associated with firm risk (measured by leverage, operating focus, and R&D investment).

Conclusion: Large pay differentials increase firm risk.

> "While the design of a promotion-based incentive system can be employed to induce senior executives to expend greater effort, it can also be used to shape the amount of risk taken by them."

PEER GROUPS AND CEO PAY

- Bizjak, Lemmon, and Naveen (2008) study whether firms selectively include companies in their peer group to inflate CEO pay.
- Sample: 15,329 firm-year observations, 1992-2005.
- Find that:
  - CEOs paid below median receive larger increases than CEOs paid above median.
  - CEOs with short tenure and better performance receive larger pay increases.
  - CEOs with larger pay increases face higher rates of turnover.
  - No evidence that large pay increases are associated with poor governance quality.

Conclusion: Peer groups are used to set competitive pay.

> "Benchmarking is a practical and efficient mechanism used to gauge the market wage necessary to retain valuable human capital."

PEER GROUPS AND CEO PAY

- Faulkender and Yang (2010) also study the impact of peer-group selection on CEO compensation.
- Sample: 657 companies, 2006-2007.
  - First year the SEC required that companies disclose peer group.
- Find that:
  - Companies choose peers with above-average CEO pay (controlling for all else).
  - This effect is stronger in firms where CEO has more power (i.e., CEO is chairman or is long-tenured) and where directors are busy serving on multiple boards.

Conclusion: Peer groups are selected to inflate pay.

> "Compensation committees seem to be endorsing compensation peer groups that include companies with higher CEO compensation… possibly because such peer companies enable justification of the higher level of their CEO pay."

COMPENSATION CONSULTANTS AND CEO PAY

- Conyon, Peck, and Sadler (2009) examine whether the use of compensation consultants lead to higher CEO pay.
  - Sample: 400 U.S. companies, 2006; 231 U.K. companies, 2003.
  - Find that CEO pay is higher in companies that use a consultant but no evidence that higher pay is due to conflicts of interest.
- Cadman, Carter, and Hillegeist (2010) also examine the use of compensation consultants.
  - Sample: 755 S&P 1500 companies, 2006.
  - Find no evidence that conflicts lead to higher pay or lower pay-for-performance sensitivities.

Conclusion: Compensation consultants do not inflate CEO pay.

COMPENSATION CONSULTANTS AND CEO PAY

- Murphy and Sardino (2010) examine whether CEO pay is higher when the consultant is retained by management or by the board.
  - Sample: 1,341 companies, 2006.
  - Find (unexpectedly) that CEO pay is higher when the consultant is hired by the *board*.
- Chu, Faase, and Rau (2014) also examine the relation between CEO pay and the appointment decision.
  - Sample: 1,051 companies, 2006-2012.
  - Find that CEO pay is 12.9% lower among firms where compensation consultant is retained solely by the board.

Conclusion: Uncertain whether compensation consultants are subject to CEO influence.

COMPENSATION CONSULTANTS AND CEO PAY

- Armstrong, Ittner, and Larcker (2012) study the associations between compensation consultants, CEO pay, and governance quality.
- Sample: 2,110 companies, 2006.
- Find that CEO pay is higher in firms with weaker governance (measured by several board attributes) and that firms with weaker governance are more likely to use compensation consultants.
- Find no evidence that pay levels differ after controlling for differences in governance quality.

Conclusion: CEO pay levels are influenced by governance, not consultants.

> "Using propensity scoring methods to match firms on both economic and governance characteristics, we find no significant pay differences in consultant users and non-users."

CONCLUSION

- Research evidence on CEO compensation suggests that pay is generally set through an efficient economic process; however, situations exist where poor governance leads to rent extraction.
- Large pay differentials between the CEO and senior managers generally reflect economic incentives to perform.
- Research on peer group selection provides limited evidence that the choice of peer group members are used to inflate pay.
- Research generally does not show that CEOs benefit by receiving inflated pay from compensation consultants.
- Shareholders should evaluate CEO pay contracts within the context of the company's strategy, performance, and governance structure.

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