Six Factors That Explain Executive Pay

April 7, 2009

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Introduction

- Almost 90% of the variation in top management pay levels can be explained by six factors: responsibility, risk, performance, pay inflation, industry pay differentials and company pay differentials:
  - Responsibility and risk explain 75% of top management pay variation, while
  - Performance, pay inflation, industry pay differentials and company pay differentials explain an additional 14%.
- Our analysis is based on data from S&P's Execucomp database: pay data for 25,026 executives in 2,618 companies over the years 1992-2008.
- Key insights from the analysis include:
  - Equity compensation risk has been richly rewarded: on average, top executives have received $8 of equity for every $1 of cash compensation foregone.
  - Performance (shareholder return and profitability) only explains 12% of pay variation controlling for responsibility and risk.
    - On average, a 10% increase in earnings and stock price increases pay by 2.9%, 0.9% from the earnings increase and 2.0% from the stock price increase.
    - A 10% increase in stock price increases pay by 2.0% when out-performance is 10% and by 1.6% when out-performance is 0%.
    - The modest impact of performance is consistent with the very limited use of fixed share grant guidelines for equity compensation.

Introduction (continued)

- Key insights from the analysis include (continued):
  - Controlling for responsibility and risk, top management compensation has increased 3.2% a year on average since 1992. This means that shareholders are paying 70% more than they did in 1992 for the same management responsibility.
  - Company pay policies are very significant and explain 38% of the pay variation remaining after controlling for responsibility, risk, performance, pay inflation and industry differentials.
- The analysis raises several key questions for companies and investors:
  - Should performance account for more than 12% of pay variation?
  - Should a 10% increase in earnings and stock price increase pay by more than 2.9%?
  - Should earnings performance or relative shareholder return have a bigger impact than absolute shareholder return?
  - Should companies follow fixed share guidelines for equity compensation to increase the performance sensitivity of equity compensation?
  - Should companies use peer group average pay to set compensation targets if the companies in the peer group have very different pay policies?

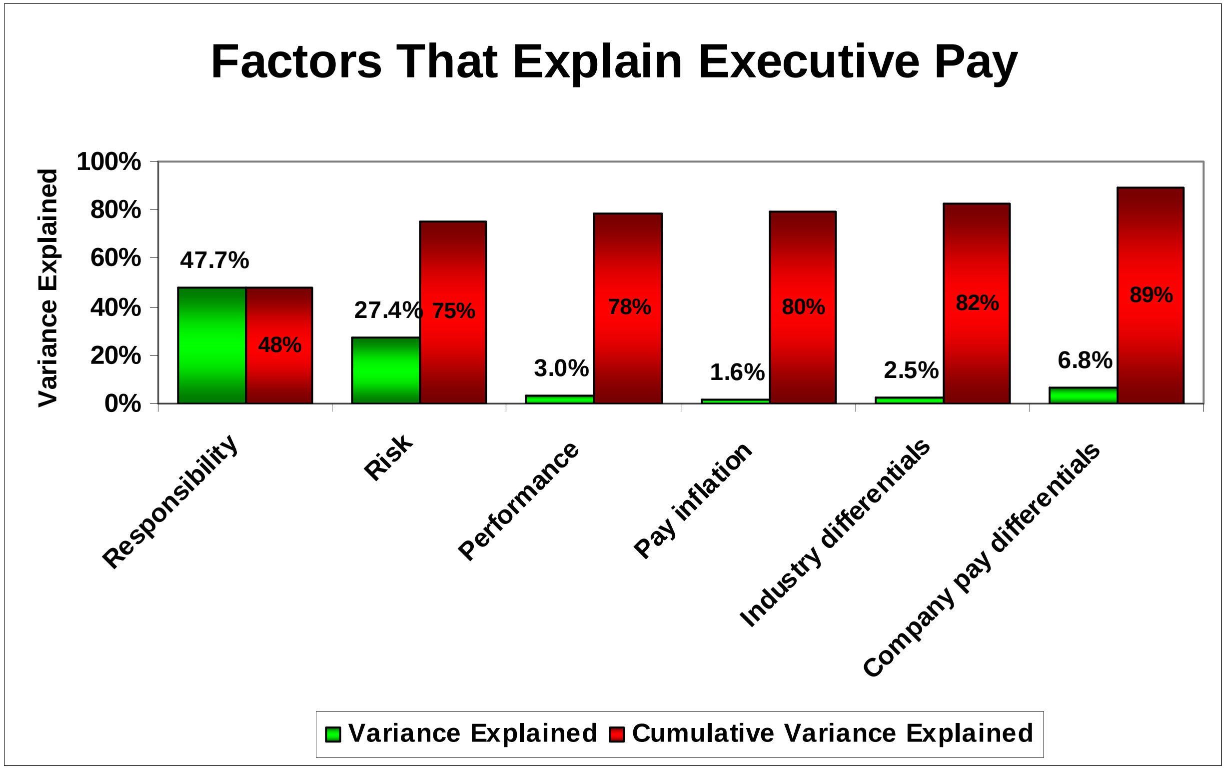
Our executive pay analysis is based on compensation data reported in S&P's Execucomp database

- Our analysis is based on data from Standard & Poor's Execucomp database:
  - Data for top five executives
  - In S&P 1500 companies (= S&P 500 + Mid Cap 400 + Small Cap 600)
  - For the years 1992-2008
- Our measure of total compensation =
  - \+ base salary
  - \+ annual bonus
  - \+ grant date value of multi-year performance cash grants
  - \+ grant date value of stock grants
  - \+ grant date Black-Scholes value of stock options
- Our total compensation measure excludes "other" compensation (perquisites and non-qualified benefits).
- Reported top 5 executives are excluded from our analysis if they have partial year compensation data or corporate performance or risk data is not available.

Six factors explain almost 90% of the variance in top management pay levels over the period 1992-2008

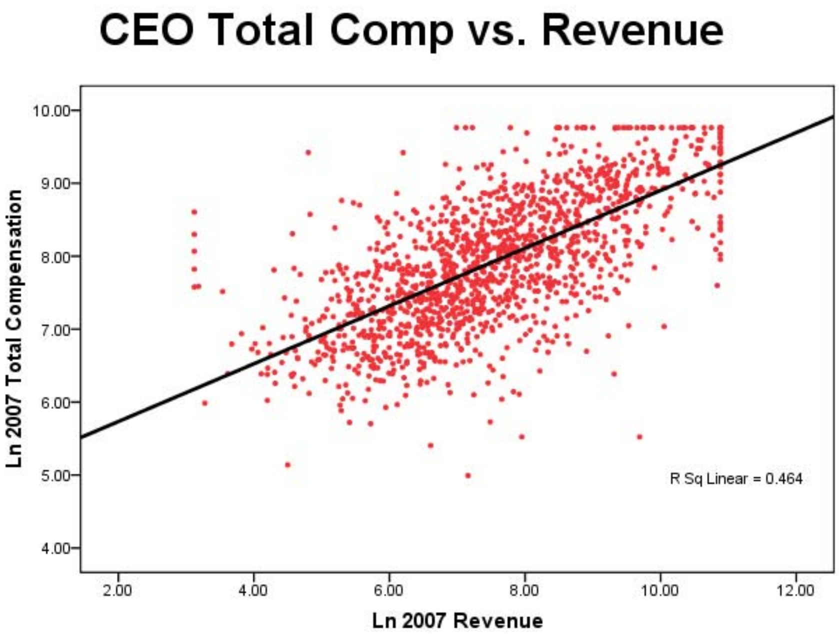
- Responsibility
  - Company revenue size
  - Position (CEO) or pay rank
- Compensation and company risk
  - Percent equity compensation
  - Stock volatility
- Company performance
  - EBITDA (standardized by prior year revenue)
  - Percent of pay at risk x 1 year relative shareholder return
  - Percent of pay at risk x 1 year shareholder return
  - Percent of pay at risk x 3 year shareholder return
  - Percent of pay at risk x 5 year shareholder return
- Pay inflation
  - The increase in top management compensation for constant revenue responsibility
- Industry pay differentials
- Company pay differentials

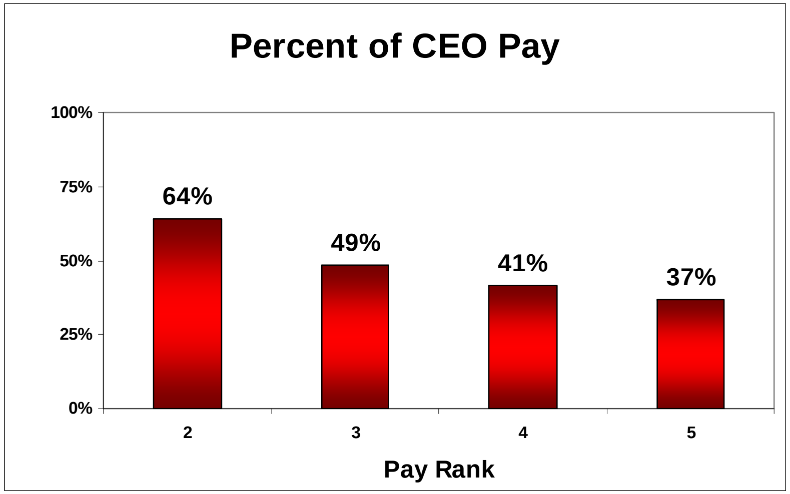
Responsibility explains 48% of pay variance, risk 27% and four other factors 14%



Based on 1992-2008 pay data for top 5 executives reported in Standard & Poor's Execucomp database. Sample is 2,618 companies reporting 95,476 executive-years of pay data. Industry differentials are based on the 24 industry groups in the Global Industry Classification Standard (GICS).

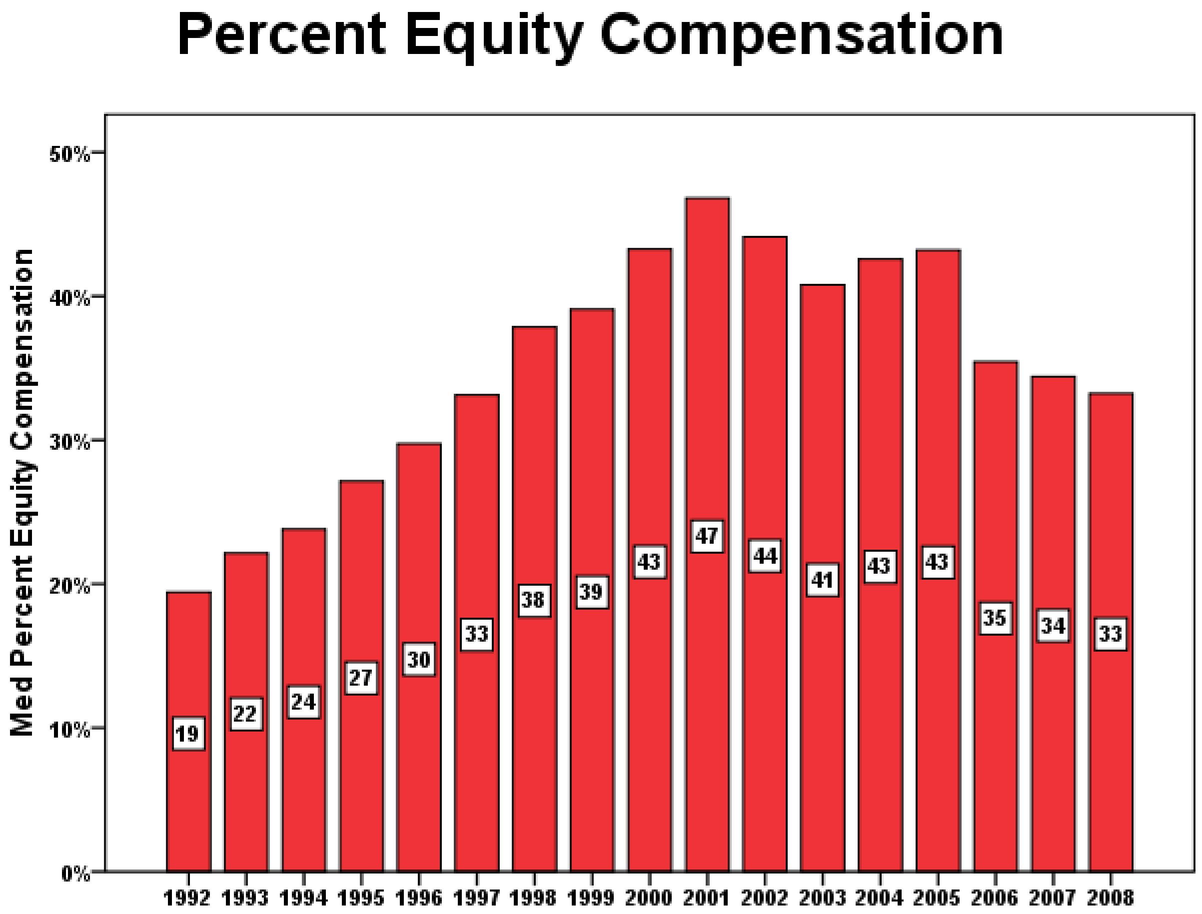
Revenue responsibility and position/pay rank explain 48% of top 5 pay variation



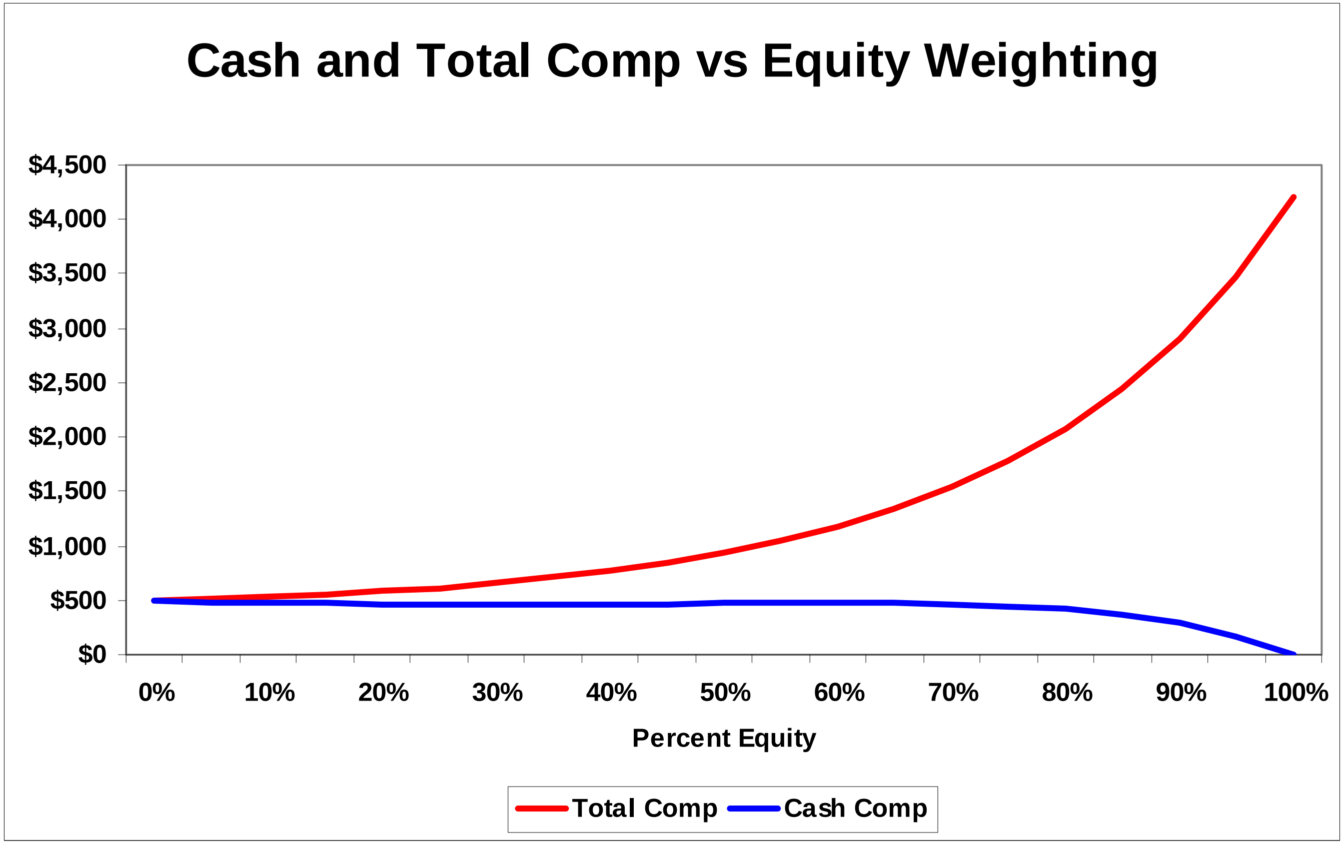


On average, a doubling in revenue increases top management pay by 26%. Revenue explains 46% of the variation in CEO total compensation for 2007 (as shown in the scatterplot), but across all years and all top 5 jobs, revenue only explains 32% of the variation in total compensation. Compensation and all explanatory variables are truncated at the 1st and 99th percentiles to limit the impact of extreme cases.

Percent equity compensation peaked in 2001

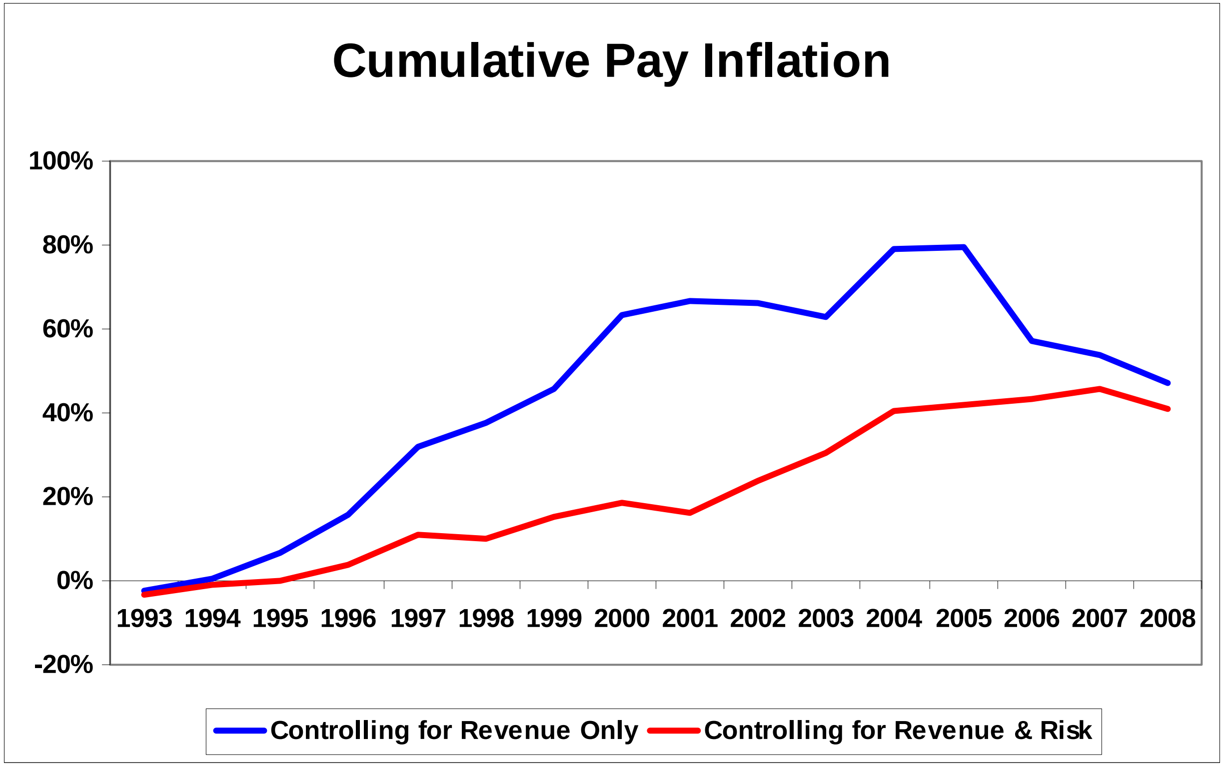


Higher equity comp causes pay inflation because executives have been richly rewarded for taking equity in lieu of cash



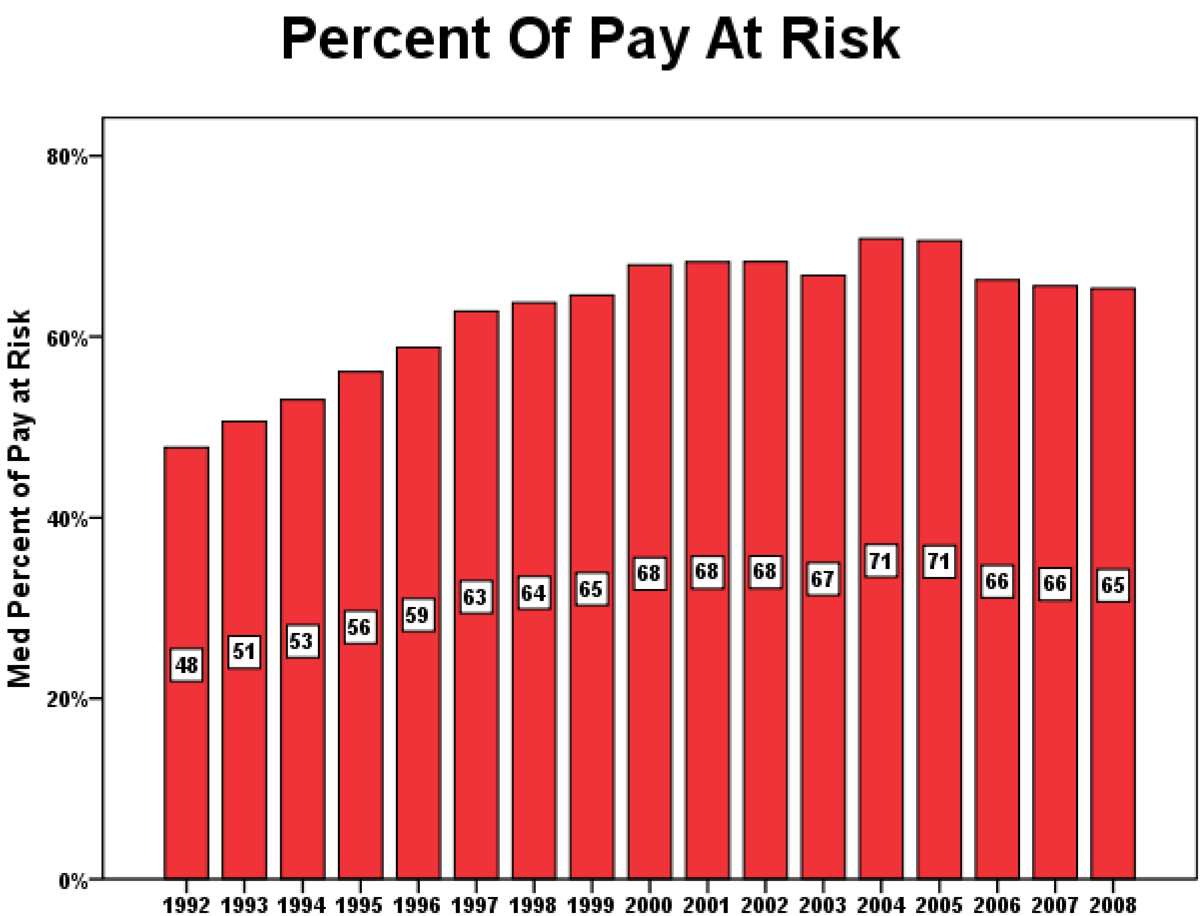
We measure the impact of pay risk on pay level by using percent equity comp to predict pay level. We find that compensation risk is richly rewarded: $8 of equity for each $1 of cash foregone. Company risk is very modestly rewarded: an increase of one standard deviation in stock volatility increases pay by only 3%.

Pay inflation *controlling for revenue* was 6.3% a year through 2000 but this was largely compensation for higher pay risk



Pay inflation of 6.3% a year controlling for revenue means that investors were paying 6.3% more each year for the same management responsibility. Controlling for market enterprise value, pay inflation was 5.5% a year through 2000.

Percent of pay at risk has held steady despite the decline in percent equity compensation



Percent of pay at risk = 1 – (base salary/total compensation)

Performance has a modest impact on pay and pay inflation has raised the shareholder cost of management compensation

- For a top 5 executive with an average percent of pay at risk (65%), a 10% increase in earnings and stock price increases total compensation by 2.9%:
  - 2.0% from the 10% increase in stock price, and
  - 0.9% from the 10% increase in earnings.
- A 10% increase in stock price increases total compensation by:
  - 2.0% when it is out-performance of 10%, and
  - 1.6% when it is out-performance of 0%.
- Pay inflation, controlling for responsibility, risk, performance, industry pay differentials and company pay differentials, has averaged 3.2% per year since 1992.
  - This implies that executives running a $1 billion revenue company in 2009 are paid 70% more than they were in 1992.
  - Holding market enterprise value constant (instead of revenue), pay inflation from 1992 to 2009 is 57%.

Performance has a modest impact on pay because few companies follow fixed share grant guidelines

- The correlation of pay and performance would be 100% if:
  - Companies started with the same pay (controlling for size),
  - Had the same initial percent of pay at risk, and
  - Limited their incentive compensation to an annual stock grant of a fixed number of shares.
- If we assume that all shares are held to the end of a five year measurement period, there will also be a perfect correlation between five year realized pay and performance.
- If incentive compensation is an annual option grant of a fixed number of shares:
  - There will be a perfect correlation between grant date pay and performance, and
  - A high, but not perfect, correlation between five year realized pay and performance (the correlation is not perfect due to exercise price differences and out of the money outcomes).
- In the Execucomp database we can find 55,002 cases of three consecutive option grants. The number of option grant shares:
  - Is the same in all three years less than 5% of the time.
  - Is within 10% of the three year average shares only 12% of the time.

11 of the 24 GICS industry groups have pay premiums of 10%+ or pay discounts of -10% or less

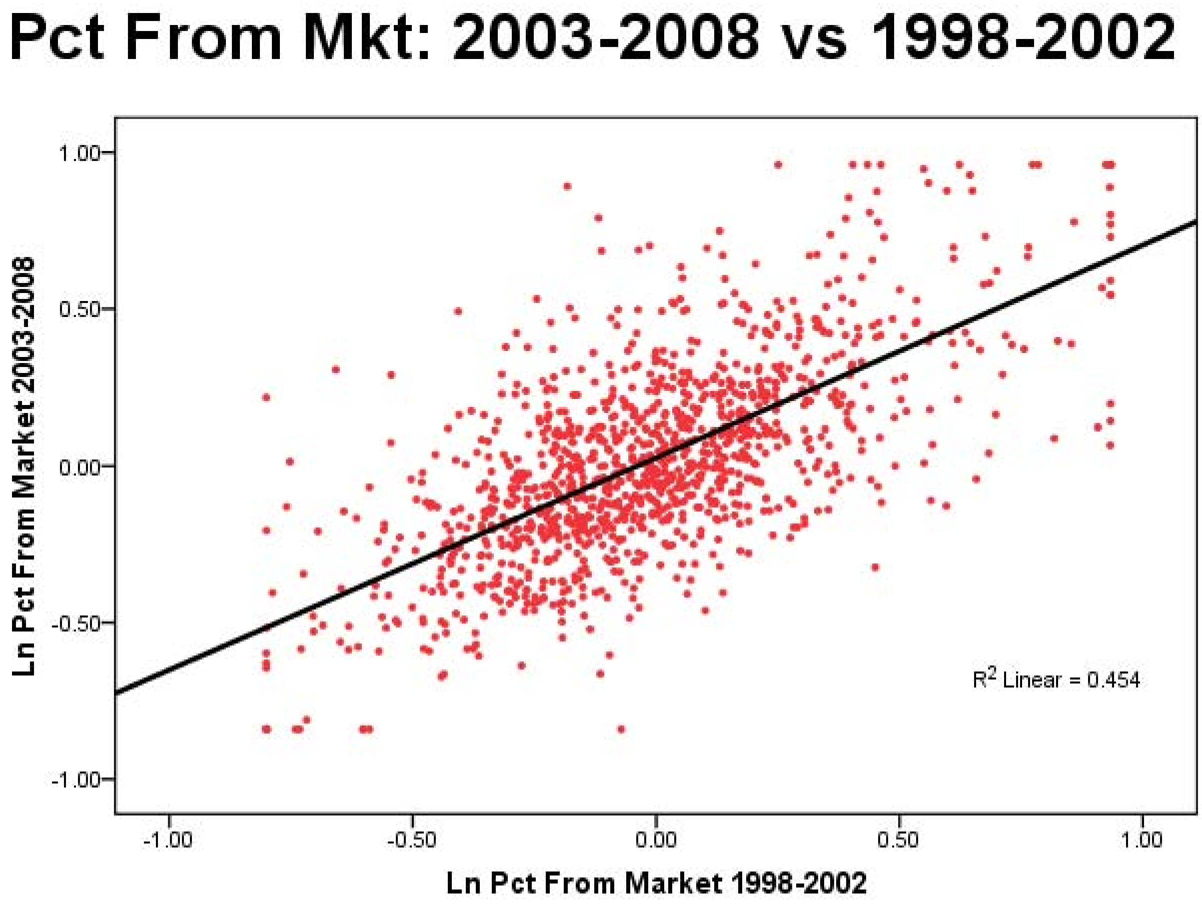
GICS Industry Group	Average Pay Premium
Diversified Financials	81%
Media	35%
Pharm., Biotech. & Life Sciences	16%
Consumer Durables & Apparel	15%
Software & Services	14%
Household & Personal Products	13%
Insurance	12%
Consumer Services	8%
Food Beverage & Tobacco	5%
Banks	4%
Semiconductor Equipment	3%
Health Care Equipment & Services	-2%
Technology Hardware & Equipment	-3%
Commercial & Professional Services	-3%
Telecommunications Services	-4%
Materials	-7%
Retailing	-8%
Energy	-9%
Real Estate	-11%
Transportation	-20%
Utilities	-26%
Food & Staples Retailing	-32%

Industries not shown have no statistically significant pay premium

Company pay policies have a very significant impact on pay

- If one executive at a company is paid well, it's very likely that other executives at the company are also paid well.
- Once we control for responsibility, risk, performance, pay inflation and industry differentials, company pay policies explain 38% of the remaining variation in pay.
- Company pay policies are very persistent in time:
  - Average percent from market in 1998-2002 explains 45% of the variation in average percent from market in 2003-2008.
  - A company with a pay premium of +20% in 1998-2002 has an expected pay premium of +16% in 2003-2008.
- Since company pay policies are different and persistent:
  - Peer group average pay is often a poor proxy for individual peer company pay, and
  - Targeting pay at the average of an inconsistent peer group is not a sensible compensation strategy because it:
    - Doesn't provide high enough pay to retain executives recruited by the high paying members of the peer group, but
    - Pays more than necessary to retain executives recruited by the low paying members of the peer group.

Company pay policies are very persistent across time



Steve O’Byrne and Shareholder Value Advisors

- Stephen F. O’Byrne
  - President of Shareholder Value Advisors since 1998
  - Senior Vice President, Stern Stewart & Co., 1992-1998
  - Consultant and Principal, Towers Perrin, 1979-1992
- Shareholder Value Advisors is a consulting firm that:
  - Helps companies increase shareholder value through better performance measurement, incentive compensation and valuation analysis, and
  - Has a strong commitment to research and writing:
    - EVA and Value-Based Management by Professor S. David Young of INSEAD and O’Byrne (McGraw-Hill 2001)
    - Top Management Incentives and Company Performance, O’Byrne and Young, *Journal of Applied Corporate Finance* (Winter 2005)
    - Why Executive Pay Is Failing, O’Byrne and Young, *Harvard Business Review* (June 2006)
    - The Incentive Problem Behind The Financial Crisis, O’Byrne and Young, *NACD Directorship* (February/March 2009)
    - What Investors Need to Know About Executive Pay, O’Byrne and Young, www.valueadvisors.com (2009)