Should Top Executive Pay Be Regulated? Does it Need to Be Reformed?

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Two Questions:

- CEOs and top executives in general:
  - Is the pay process for public companies broken?
    » Do boards pay CEOs too much?
    • Is CEO pay a result of “managerial power” not market outcomes?
    » Do boards pay CEOs for performance?
    » Do we need more regulation?

- Financial sector CEOs and top executives:
  - Did poorly designed top executive compensation at financial firms fuel the financial crisis?
  - Should pay practices be regulated?
    » Feinberg (the “pay czar”) decisions in U.S.?
    » Walker recommendations in UK?
My answers:

- Do boards overpay CEOs?
  - Depends on whom you are comparing CEOs to.
  - On the whole, no.

- Is CEO pay a result of agency / managerial power?
  - CEO pay is more market and technology driven.

- Do boards pay CEOs for performance?
  - The typical CEO is paid for performance.

- Should there be more regulation of top executive pay in public companies?
  - No.
Did poorly designed top executive compensation at financial firms fuel the financial crisis?

- No evidence that pay practices played a significant role, particularly relative to other factors.
- Regulation of financial sector pay has negative unintended (or intended) consequences.
- There are more effective solutions to reduce the likelihood of the next crisis than regulating pay.
What are CEOs paid?

- Two ways to look at pay:
  - Expected or estimated. What boards give CEOs.
    » Salary + Bonus + Restricted stock +
    Expected value of options (calculated using Black-Scholes).
    » More relevant for evaluating what boards are doing.
  - Realized. What CEOs actually get.
    » Salary + Bonus + Restricted stock +
    Value of options exercised / realized.
    » More relevant for evaluating pay-for-performance.
U.S. S&P 500 CEOs

- What has happened to average CEO pay since 2000?
  - Up?
  - Flat?
  - Down?
Expected CEO Pay (inflation-adjusted)

Average & Median Total Pay (estimated or ex ante) of S&P 500 CEOs from 1993 to 2008 (in millions of 2008 $)

Source: ExecuComp, Steven Kaplan
While criticism continues as if CEO pay keeps increasing, in fact, U.S. CEO pay peaked in 2000 / 2001

- For expected pay (measure of what boards believe they have paid):
  - Average pay in 2008 is lower than it was in 1998.
  - Median pay is about the same in 2008 as in 2000.
  - Pay likely to decline again for 2009
Realized CEO Pay (inflation-adjusted)

Average & Median Total Pay (Actual) of S&P 500 CEOs from 1993 to 2008 (in millions of 2008 $)

Source: ExecuComp, Steven Kaplan
Again, U.S. CEO pay peaked in 2000 / 2001

- For realized pay:
  - Average pay peaked in 2000.
  - Median pay higher, but not comparable because of move to restricted stock instead of options.
    » Restricted stock counted as pay even if it is not vested.
Rest of world is catching up / has caught up to U.S.

- Fernandes, Murphy et al. (2008) find U.S. CEO pay premium over other countries has declined significantly from 2000 to 2006.
  - Use expected measure of pay.
  - Controlling for firm characteristics, premium drops from 187% to 43%.
  - Controlling for pay structure as well, premium drops from 52% to 12%.
In the U.S., CEOs are not the only ones who earn a lot.

- Income inequality at the top has increased substantially in last 30 years.
- Can measure CEO pay as a fraction of the very top brackets.
  - S&P 500 CEO pay to pay of all income in top 1%.

- How have CEOs fared since 2000?
  - Better than others?
  - Same?
  - Worse?
Expected CEO pay represents small fraction of top 1% incomes
And, that fraction has declined since 1993

Source: ExecuComp, Saez (2008), Steven Kaplan

Ex Ante
Similar, but more constant picture with realized pay

Total (Realized) Pay of S&P 500 CEOs to Total AGI of Top 1% of Taxpayers

Source: ExecuComp, Saez (2008), Steven Kaplan
CEOs are not the only ones who earn more / earn a lot

- Hedge funds:
  - In 2007, top 20 earned over $20 B.
  - In 2007, all 500 S&P 500 CEOs combined earned
    » $5.6 B (expected) or $7.5 B (realized).

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<th>Name</th>
<th>Earnings</th>
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<tr>
<td>John Paulson</td>
<td>$3,700</td>
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<tr>
<td>George Soros</td>
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Estimated Hedge Fund Fees ($bn)
Not to mention

- Private Equity Investors.
- Investment Bankers.
- Athletes.
- Entertainers.
VC and PE fund fees over time.

Est. Venture Capital and Private Equitr Fees ($B)
Assumes Fees are 4.0% of AUM

Source: Kaplan and Rauh (2006)
And lawyers:
- 3,000 law partners at top 20 law firms earned average of $2.4 M each in 2008.
- From 2004 to 2008, inflation-adjusted pay:
  » of partners at top 20 law firms increased 12%;
  » of S&P 500 CEOs dropped 12%.

A couple of examples from the Obama Administration
- Eric Holder (Attorney General)
  » Covington and Burling, $3.3 M in 2008.
- Thomas Donilon (NSC)
  » O’Melveny and Myers, $3.9 M in 2008.
Some corroborating data from the Forbes 400 in 2008

- Hedge fund investors: 27
- Private equity investors: 33
- Real estate investors: 29
  - Total investors: 89+
- Entrepreneurs who founded company after 1970: 77
- Entrepreneurs who founded company before 1970: 59
- Total Entrepreneurs: 136
- Non-founder CEOs / employees in Forbes 400: 9
- Non-founder CEOs / employees hired after company went public: 4
What does this mean?

- Pay increases have been systemic at the top end.
  - Other groups -- investors, athletes, lawyers, etc. have seen significant pay increases where no agency problems exist.
    » Pay is arms length / negotiated.
    » Increases are at least as large as for CEOs.
  - Hard to understand why one would conclude CEO pay increases are driven by managerial power / agency problems.

- In other words, market forces, not weak corporate governance, appear to have bid up the pay of successful individuals in many sectors.
Most recent examples: new CEOs of quasi-govt. owned AIG and RBS.

- Robert Benmosche of AIG - a package worth over $10 M.
- Stephen Hester of RBS - a package worth up to £ 9.6 M ($15 M).
Most plausible explanation:

- Technological change and greater scale increase the returns / productivity at the top end.
  - Can manage / apply talent to much greater assets / larger companies than in the past.
  - Can trade large sums much more efficiently.
  - Can access much larger audiences.
Two other ways to see the market / scale argument

1. General counsel.
   - Often partners hired away from top law firms.
   - Opportunity cost of general counsel candidates is $1 - $2 M plus.
   - Expect general counsel in S&P 500 firm to make $1 - $2 M plus.
   - Presumably, CEO job and other top exec jobs more challenging and more important for bottom line.
     » Typical S&P 500 firm has over 20,000 employees.
     » Not hard to see why median CEO of S&P 500 firm earns $8 M?

2. Consultants / expert witnesses / lawyers, etc.
   - Common to see charges of $800, $1,000 per hour or more.
   - Works out to $2 M per year +
   - Again, not hard to see why median CEO of S&P 500 firm earns $8 M?
Are CEOs Paid for Performance?

- Compare stock performance of most highly paid CEOs relative to least highly paid CEOs.
  - Look within similar sized firms (because pay increases with size).

- Realized pay is highly related to performance.
  - I.e., there is strong pay-for-performance.
Realized pay is highly related to performance. I.e., there is strong pay-for-performance.
Average Realized CEO Pay vs. S&P 500
Drop in the stock market has made this clear:
- Equilar (a leading executive pay data provider) estimated that accumulated wealth of S&P 500 CEOs dropped by 43% in the crisis.
- “There you see a very strong link with the shareholder.”
  » Alexander Cwirko-Godycki of Equilar

And, non-financial companies have done remarkably well post-crisis.
- Companies and CEOs reacted quickly and decisively.
- Incentives appear to have been effective.
Some of confusion (or obfuscation) over pay is that critics focus on expected pay rather than realized pay when they want to argue there is no pay for performance.

- Much of realized pay comes from exercise of in-the-money options and restricted stock payoffs.
  » CEOs tend to receive large payoffs when stock up substantially.

- Expected pay may be less related to stock performance.
  » But that is not the point.
  » CEOs cannot walk away with expected values.
    • Their option and restricted stock payoffs are tied to stock performance.
Summary to this point

- Pay of other talented individuals with arms-length compensation arrangements up at least as much since 1994.
  - CEO pay has gone down / been flat since 2000 / 2001.
  - CEOs occupy same or lower place in income distribution vs. 1997.

- Realized CEO pay strongly related to performance.

- Also,
  - CEO turnover up substantially.
  - CEO pay (expected) likely to decline again in 2009.
    » Most pay packages set in spring of 2009 before rally.
Internal CEO Turnover from 1970 - 2005 by sub-period
(Kaplan-Minton and Murphy-Zabojnik)
Patterns are consistent with market outcomes

- CEO pay patterns no different from those of others who are highly paid.
  - Hard to see that managerial power / agency / poor governance explains much.

- High pay likely driven by:
  - Market scale, globalization, technology.
What Does This Mean for Pay Regulation?

- Do not see the need for new / greater regulation.
  - Typical CEO does not appear overpaid.
  - For outliers / egregious examples, shareholders in the U.S. already have solutions:
    » Can propose say-on-pay resolution.
      - Interestingly, even in these “egregious” cases, most resolutions fail to get 50% of the votes.
      - In April 2008, proposals rejected for Citi, Merrill, B of A.
        - I.e., shareholders concluded pay was ok.
    » Market forces have reduced outliers and backdating.
Mandated “Say-on-Pay” would impose costs with no benefits.

- No economic benefits.
  - Already have this available in U.S.
  - After Say-on-Pay in U.K., pay went up more in U.K. than in U.S.
    From 2002 to 2007:
    - Average CEO pay up by 72% in U.K.
    - Average CEO pay up by 18% in U.S.
      - See Alissa (2009). Also, see Ferri and Maber (2008).
  - But real costs.
    - Like a physical search at the airport on everyone’s luggage even after the luggage has gone through the x-ray machine with no problems.
    - Nuisance for shareholders.
    - Nuisance for directors.
    - Greater power to unions / special interest shareholders.
Greater regulation will further increase attractiveness of alternatives for most talented executives.
- Private equity funded companies?
  » See continental Europe.
- Consulting?
- Hedge funds?
- Retirement?

Possible political benefit?
- Will not affect pay.
- Can say that pay is now monitored.
- May mute populism / worse reactions.
  » But has not stopped populism in UK.
Did poorly designed top executive compensation at financial firms fuel the financial crisis?

- What forces led to the financial crisis?
Excessive credit:

- Accommodative monetary policy. See Taylor (2009)
  » Greenspan and Fed kept interest rates low when all indications were they should have been higher.
  » Strong credit growth = Asset prices up, especially housing.
  » Similar effects in other countries.
    - Not just US – Ireland, Spain, UK..

- Global mismatch between desired savings and realized investment. See Diamond and Rajan (2009).
  » “Capital Glut.”
  » Emerging markets and developing countries have lots of $ relative to investment needs.
- Political system wanted to make housing available to more lower income borrowers (even if they could not really afford it).
  » Fannie and Freddie mandated to have 56% of loans to lower income borrowers.
- SEC allowed investment banks to take on too much leverage.

Financial innovation: Originate-to-securitize.
- Mortgages pooled together and then sold in the capital market.
- Then pools broken up into different tranches with different seniority.
- Based on past returns and housing prices, senior tranches were considered safe.
Rating agencies provided ratings that were too high.
- Just got it wrong by extrapolating historical housing prices.
- Just got it wrong by not understanding systemic risk / correlations.
- Had incentives to get it wrong because fees paid by relatively few issuers?

Accommodative incentives.
- Incentives for individuals to package loans.
  » Up front fees, annual bonuses, etc.
- Incentives for some banks to make iffy mortgage loans.
  » Annual bonuses, earnings pressure.
- Incentives to sell mortgage backed securities.
  » Annual bonuses, etc.
- Incentives for individuals to buy loans / mortgage backed securities.
  » Annual bonuses, etc.
- Poor risk management at the top.
  - CEOs and top executives of banks did not understand what was going on below.
What about top executive pay / incentives?

Poor pay practice explanation implies:

– top bank executives rewarded for short-term results with large amounts of up front cash pay;
– bank executives did not hold sufficiently large amounts of stock to align their interests with those of shareholders; and
– executives with more short-term pay and less stock ownership (and the greatest incentive to take bad and excessive risks) should have performed worse in the crisis.
Fahlenbrach and Stulz (2009) study CEO incentives at 100 large financial institutions from 2006 to 2008.

Top bank executives not overly rewarded for short-term.

– In 2006, mean CEO took home $3.6 million in cash which represented less than ½ of total pay.
  » The larger share of pay was in restricted stock and options.
– Mean CEO owned $88 million in the equity and options.
  » Equity and options 24 times cash pay.
– Unlikely up front cash provided much incentive for average CEO to take risks that would jeopardize much larger equity stakes.
CEOs were aligned with shareholders. They lost a lot in the crisis.
   » From 2006 to 2008, average CEO lost $31 million in stock value, dwarfing any gains from cash compensation.
   – The CEOs lost large amounts on their options as well.

Executives with more short-term pay did not do worse:
   – Bank CEOs with less equity did not have worse stock performance.
   – If anything, bank CEOs with more equity had worse performance.

Fahlenbrach and Stulz (2009) conclude bank “CEO incentives cannot be blamed for the credit crisis or for the performance of banks during that crisis.”
Cheng, Hong and Scheinkman (2009) find some evidence consistent with a role for risk taking.

- Financial firms that paid higher total compensation relative to their size had modestly higher stock volatility and significantly lower stock returns from 2001 to 2008.
  - But, results, driven almost entirely by insurance firms.
- Results only marginally economically and statistically significant for brokerage firms and banks.
- Results do not point to a first order effect for risk-taking on the crisis.
Several well-known CEOs had a large fraction of their net worth in company stock.

- Cayne at Bear Stearns lost almost $1 billion on Bear Stearns stock.
- Fuld at Lehman lost hundreds of millions on Lehman stock.
- Pandit at Citi and Lewis at B of A lost one hundred million on stock.
- O’Neal at Merrill lost tens, maybe hundreds of millions on Merrill stock.
Many factors, then, contributed to the financial crisis.

Pay practices, particularly those at the CEO and top executive level, do not appear to have been a meaningful part of problem.

More likely, top bank and financial executives underestimated the cumulative impact of the above factors on the risk their companies and balance sheets contained.
Should Banker Pay Be Regulated?

- Proposed pay regulations largely amount to:
  - reducing short-term cash bonus payouts;
  - increasing the use of restricted stock and options; and
  - requiring the executives to hold the restricted stock and options for a period longer than the usual four-year vesting period.
    - Bebchuk (2009) proposes seven years after vesting which would be roughly ten years after the stock awards.

- Pay regulations make sense only if:
  - poor pay practices and incentives that encouraged excessive risk taking were a first order contributor to the financial crisis; and
  - restricting those pay practices is an efficient and effective way to reduce the likelihood of the next crisis.
Right Solution?

- Poor pay practices at the top were not a major contributor to the crisis. Crisis would have happened if CEOs / top execs:
  - had been paid less.
  - had been paid all in bank equity.

- Proposed pay restrictions would not have stopped many of the CEOs and top execs from selling. They were long-term employees with stock they’d received long ago.
  - Cayne, Fuld, Lewis, Blankfein, etc.
Different pay structures did not stop past financial crises:

- In late 1980s / early 1990s with different pay structures.
  » Citi almost failed then as well.

- In early 1930s when most banks / investment banks were partnerships with little short-term compensation.
  » Goldman Sachs almost failed in 1930 despite partnership incentives.
  » Why? According to Walter Sachs:
    • Goldman wanted “to conquer the world.”
Unintended Consequences:

- High pay in finance is related to technological change and scale.
  - Talented people can now work on vastly larger amounts of money.

- Pay regulations for top bank executives counterproductive.
  - Will drive most talented elsewhere.
  - Hedge funds, private equity funds, and boutiques.

- Pay regulations likely to be inefficient -- one size fits all.
  - Even for employees who cannot take excessive risks.
    » Many investment bankers earn fees when deals are done.
      • No risk that those fees will go away later.
  - Treats all employees like mortgage traders.
Pay regulations also are susceptible to political incentives for politicians to put limits on pay rather than designing efficient or optimal pay.

- Appeal to voter anger.
- Chris Dodd’s addendum to TARP.
- Feinberg’s solution for AIG, Citi, and B of A.
- Potentially harm the institutions involved.
  - Best employees leave for unrestricted institutions.
  - Very difficult to hire in top talent.
  - 45 of 100 B of A / Merrill employees had already left by the time Feinberg gave his recommendations.
Is There a Better Solution?

- Banks' specialness does warrant a role for the government:
  - not in setting pay, but
  - in imposing effective capital requirements that reduce the value of
    the free option provided by the too-big-to-fail policy.

- A better solution would:
  - impose higher and pro-cyclical equity capital requirements; and
  - a requirement to raise contingent capital.
A Better Solution

- Typical bank is capitalized with equity, long-term debt, short-term debt, and deposits.
- Require banks to have minimum equity capital, say 10% of total capital.
  - much like currently required to do.
  - Bear Stearns, Lehman, etc. got into trouble because they had too little equity capital – far less than 10%.
  - Regulators might consider imposing pro-cyclical equity requirements
    » increasing the equity percentage in boom
    » to offset losses in the inevitable bust times.
- Require banks to issue an additional amount of capital – say 10% – as long-term debt that is forced to convert into equity if the bank and / or the banking system get into financial difficulty.

- Also, see Hart and Zingales (2009) for a different capital requirement / trigger based solution using credit default swaps.
Would have helped a lot in previous crisis.

- Regulators reluctant to push large financial institutions into bankruptcy because of the chaos caused by the Lehman bankruptcy.
  - Effectively meant that governments rescued long-term debt investors, paying the long-term debt in full when the debt should have received much less. Citi, Bear Stearns, etc.

- If contingent capital structure had been in place:
  - the long-term debt would have been forced to convert into equity;
  - long-term debt investors, not government, would have bailed out the banks and investment banks.
  - financial crisis would have been smaller, if it had occurred at all.

- This solution is also effective in reducing the potential damage done by firms that want “to conquer the world.”
Conclusion

- Are U.S. CEOs are overpaid?
  - Pay of other groups has increased substantially and by same order of magnitude as CEOs, **despite the arms-length nature of their compensation arrangements**.

- Is CEO pay a result of agency / managerial power?
  - For the most part, CEO pay is market and technology driven.

- Do boards pay CEOs for performance?
  - The typical CEO is paid for performance.
    - CEOs lost 40%+ of net worth in 2008.

- Did poorly designed top executive compensation at financial firms fuel the financial crisis?
  - They do not appear to have played a significant role, particularly relative to other factors.
What does this mean for regulation?

- More regulation of CEO pay in general likely to be ineffective, unnecessary or counterproductive.

- More regulation of top bank executive pay:
  - will not avert the next crisis; and
  - has negative unintended consequences.

- There are much better choices available to reduce the likelihood of the next crisis.
  - Pro-cyclical capital requirements.
  - Contingent capital.
Thank you.

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