



Did Poor Incentives Cause the Financial Crisis? Should Incentives and Pay Be Regulated?

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Two Questions:

- Did poorly designed top executive compensation at financial firms fuel the financial crisis?
- Should financial sector pay practices be regulated?

My Answers:

- Did poorly designed top executive compensation at financial firms fuel the financial crisis?
 - No evidence that pay practices at the top played a significant role.
 - Particularly relative to other factors.
- Should financial sector pay practices be regulated?
 - 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.



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), Greenspan (2010).
 - » “Capital Glut.”
 - » Emerging markets and developing countries have lots of \$ relative to investment needs.

- Accommodative regulatory policy? See Calomiris (2009) and Greenspan (2010).
 - 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 knowingly 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.
 - Does not include losses in option value which were also large.

- 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 at least \$100 million on 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 1920s when most banks / investment banks were partnerships with little short-term compensation.
 - » Goldman Sachs created a leveraged equity investment vehicle funded with 1/2 of Goldman's equity capital.
 - » Goldman almost failed in 1930 despite partnership incentives.
 - » Why did Goldman do it? According to Walter Sachs:
 - Goldman wanted “to conquer the world.”
 - In late 1980s / early 1990s with different pay structures.
 - » Citi almost failed then as well.
 - Financial crisis in 1873 precipitated / exacerbated by leveraged stock bets by individuals / partnerships.

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.
 - » Many 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:
 - being able to inflict pain on equity and debt investors without freezing the system.
 - 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

- Did poorly designed top executive compensation at financial firms fuel the financial crisis?
 - Compensation does not appear to have played a significant role, particularly relative to other factors.

- What does this mean for regulation?
 - More regulation of top bank executive pay:
 - » will not avert the next crisis; and
 - » has negative unintended consequences.

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



Thank you.

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