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:

  » 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..

  » “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 \( \frac{1}{2} \) 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 the 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.
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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