Governance, Executive Compensation and Excessive Risk in the Financial Services Industry

May 28, 2010
Competition over Talent

• People are the competitive assets
  – 50% of revenue payout rule of investment banks
  – “Talent” can walk out the door.

• Capital intensity is relatively low compared to manufacturing
  – Entry is relatively easy in many sectors

• Banks and financial institutions make their money off leverage: risk management is central to their business.
  – Failure and consolidation are common.
Banking consolidation

Total Number of Banks Reporting to the FDIC

Number of Small Banks Reporting to FDIC

Total Assets Grew – Fewer and Bigger Banks
Assets moved to high risk consumer loans
Banks Assets and Crisis
Pay for Performance by Equity has been important for financial firms....

Source: Balachandran, Kogut, and Harnal, 2010
Our Conference

Did bad governance explain why financial firms take on too much risk?

Did executive pay lead to excessive risk taking?
Did executive pay cause excessive risk in financial institutions? –Balachandran, Kogut, Harnal

• 117 Financial Institutions with panel data between 1995 and 2008

• 2008 provides the primary exogenous shock, but other years are also ‘mini stress tests’, e.g. 2000.

• Standard Altman model to predict default failed us because all the firm shown to default

• Solution was to estimate the probability or risk of default.
Problem statement

To calculate the default probability measures

<table>
<thead>
<tr>
<th>Known</th>
<th>Unknown</th>
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<tbody>
<tr>
<td>Equity data</td>
<td>Asset Prices</td>
</tr>
<tr>
<td>Liabilities data</td>
<td>Parameters for Asset price process and asset volatility process</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>Probability of default</td>
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</tbody>
</table>
Seeing problem graphically

Whether the company defaults or not depends on the Net Asset BV of company at $T$. 

\[ \text{Net Asset BV} = \text{Asset BV} - \text{Debt Book Value} \]

At $t = 0$, the initial asset book value is compared to the debt book value to determine if the company defaults. If the net asset book value is below the debt book value, the company is considered to default.
Seeing problem graphically

Company defaults

Final Equity BV is zero
Results

Probability of default JPM

Equity Smoothened liability
Results

Probability of default
WFC

Equity
Smoothened liability
Results

Probability of default
GS

Equity
Smoothened liability
Risk

Risk (Wells Fargo)  Risk (Goldman)  Risk (JPMorgan)

Cds

CDS (Wells Fargo)  CDS (Goldman)  CDS (JPMorgan)
Econometric Problem: Endogeneity and Persistence
Fundamental result: pay for performance leads to excessive risk

**Primary Result**

- Dynamic Panel Analysis, using a Bond-Blundell estimation (GSM with lagged instruments)
- **Equity-linked pay increases excessive risk**
- **Non-equity: significant and negative sign – cash reduces risk**

**Robustness**

- Endogenize Equity Pay: no change
- Use Equity Pay as instrument: no change
- Consider New CEO as a new contract/less wealth: not significant and equity pay results hold
- Drop 2008: results attenuated – thus the interpretation of stress testing compensation incentives
- Unreported: pay slice of CEO (measure of CEO power/greed) has no effect; cannot detect meaningful board effects, e.g. outside directors, Gompers index, board interlocks.
Standard Theory: Puzzles

What is the effect of compensation incentives on someone who is very wealthy and has high income?

Why did top CEOs often keep their wealth undiversified and invested in their companies?

What was the role of overconfidence?
Alternatives to Paulson

1. Bebchuk Plan: Long-term debt is converted into equity, shareholders have the option to redeem the equity at the value of the debt. No external valuation required; no government intervention.

2. Incentivizing managers:
   1. they are required to be paid in debt and equity and thus are sensitive to the costs of default risk.
   2. Options must be expensed, discouraged, etc...

3. Principle-based regulation that says
   1. No incentives for excessive risk taking
   2. Compatible payment with risk management controls
   3. Strong culture of governance to oversee and enforce prudent risk.

4. And many more suggestions....
Conclusions

• Compensation matters to risk taking

• Pay for performance does not make sense when
  – There is moral hazard for executives and shareholders
  – Top executives are very rich
  – Stock prices depart from fundamentals and are dangerous pro-cyclical influences on behaviors

• Why such risks were taken might be explained by rational calculations that went bad, or by other motivations, such as overconfidence or contagion