Executive Compensation and Bank Risk

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Session Papers

- Bankers' Pay Structure and Risk
  - *John Thanassoulis, University of Oxford*

- CEO Bonus Compensation and Bank Default Risk: Evidence from the US and Europe
  - *Jens Hagendorff, The University of Edinburgh*
  - *Francesco Vallascas, University of Leeds*

- Nonlinear Incentives and Mortgage Officers' Decisions
  - *Konstantinos Tzioumis, Office of the Comptroller of the Currency*
  - *Matthew Gee, University of Chicago*

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Context:
Proposed Rule Regulating Compensation

- Inappropriate Risks that May Lead to a Material Financial Loss. Accordingly, this prohibition will apply only to those incentive-based compensation arrangements for individual covered persons, or groups of covered persons, whose activities may expose the covered financial institution to a material financial loss. Such covered persons include:

- Proposed Rule prohibits a covered financial institution from establishing or maintaining any types of incentive compensation arrangements, or any feature of any such arrangements, for these covered persons or groups of covered persons, that could lead to a material financial loss to the covered financial institution. Exception to this rule include
  - Balances risk and financial rewards, for example by using deferral of payments, risk adjustment of awards, longer performance periods, or reduced sensitivity to short-term performance;
  - Is compatible with effective controls and risk management; and
  - Is supported by strong corporate governance

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Bankers' Pay Structure and Risk

John Thanassoulis

Bankers' Pay Structure and Risk

- Bankers are hired to make loans
  - They have to be induced to exert effort
  - They may or may not be skilled
  - They may risk shift if they are not skilled
  - They prefer earlier compensation to later

- Banks compete for bankers with a 3-part compensation contract
  - Salary
  - First period bonus
  - Second period bonus

Bankers' Pay Structure and Risk

- The optimal compensation structure will:
  - Use bonus pay to induce effort
  - Defer bonus compensation to minimize risk shifting
- However, competition across banks will:
  - Reduce deferred compensation as bankers are more impatient than banks
  - Risk shifting may be an equilibrium outcome

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Bankers' Pay Structure and Risk

- The market failures:
  - Banks do not fully internalize the cost of the risk shifting
  - Banks do not internalize the externality generated be competing for bankers that induces the risk shifting

- Potential Solution
  - Regulation that limits the set of potential compensation contracts:

    Require deferral of performance compensation

    OR

    Allow claw-backs

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Bankers' Pay Structure and Risk Comments

- Realistic setting
- Straightforward explanation of the market failure
- Posits a role for compensation regulation
- Challenge to the author: Add a section that explicitly uses the model to demonstrate that regulated deferral solves the moral hazard problem

CEO Bonus Compensation and Bank Default Risk: Evidence from the US and Europe

Jens Hagendorff
Francesco Vallascas

CEO Bonus Compensation and Bank Default Risk: Evidence from the US and Europe

- The Question: Does bonus pay incentivize or mitigate risk?

- The Analysis: Examine the relationship between Distance to Default (DD) and CEO Bonus payments in a partial adjustment framework:

$$\mathrm{DD}_{i,t} = (1-\lambda)\mathrm{DD}_{i,t-1} + \lambda\left(\gamma \mathrm{BONUS}_{i,t-1} + \beta \mathbf{X}_{i,t-1} + B_i\right) + \varepsilon_{i,t}$$

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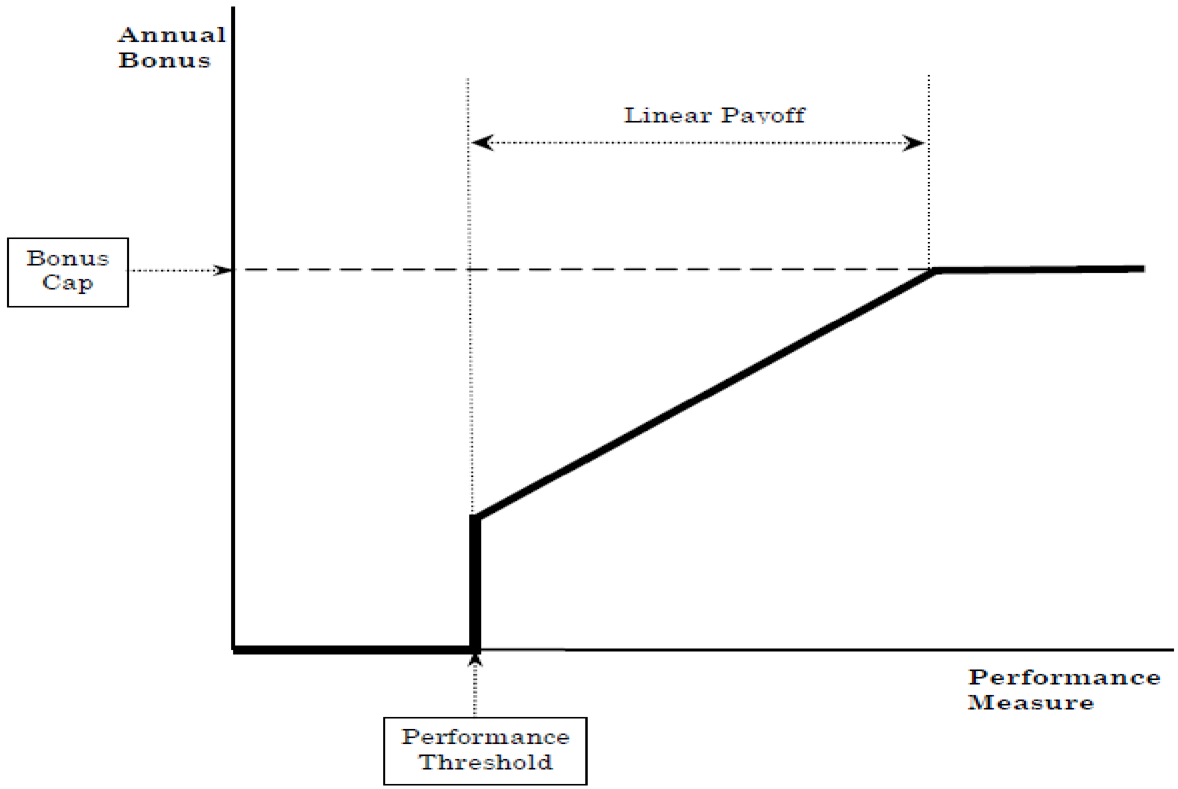
CEO Bonus Compensation and Bank Default Risk: Evidence from the US and Europe

Figure 1: A 'Typical' Bonus Function



Adapted from Murphy (2000)

CEO Bonus Compensation and Bank Default Risk: Evidence from the US and Europe

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Regression Results						
DD_{t-1}	**0.535*** **	**0.531*** **	**0.543*** **	**0.546*** **	**0.538*** **	**0.539*** **
	(9.06)	**(10.54)**	**(9.34)**	**(10.67)**	**(10.15)**	**(10.27)**
$LGBONUS_{t-1}$	**0.073*** **	**0.058*** **			**0.055*** **	
	(3.47)	**(2.83)**			**(2.71)**	
$RELBONUS_{t-1}$			**0.721*** **	**0.527** **		**0.568** **
			(2.89)	**(2.22)**		**(2.15)**
$LEVERAGE_{t-1}$	**-8.897*** **	**-10.246** **	**-7.524** **	**-10.278*** **	-2.289	-2.559
	(2.68)	**(2.31)**	**(2.35)**	**(2.72)**	(0.37)	(0.55)
ROA_{t-1}	21.032	**26.161* **	23.544	**27.375* **	19.085	28.603
	(1.27)	**(1.82)**	(1.37)	**(1.75)**	(0.73)	(1.10)
$CHARTER_{t-1}$	**-0.150* **	-0.123	**-0.175** **	-0.133	-0.126	-0.158
	(1.70)	(1.49)	**(1.98)**	(1.64)	(1.07)	(1.44)
$NONINTSHARE_{t-1}$	**-0.754*** **	**-0.802** **	**-0.828*** **	**-0.814** **	**-0.782** **	**-0.878** **
	(2.64)	**(2.47)**	**(2.81)**	**(2.52)**	**(2.40)**	**(2.41)**
$SIZE_{t-1}$	**0.131*** **	**0.134*** **	**0.131*** **	**0.138*** **	**0.112*** **	**0.112*** **
	(3.23)	**(3.79)**	**(3.14)**	**(4.26)**	**(2.78)**	**(3.20)**
$INDEP_{t-1}$					-0.122	-0.106
					(0.85)	(0.68)
$DUALITY_{t-1}$					0.332	0.365
					(0.84)	(0.95)
AGE_{t-1}					0.207	0.227
					(0.66)	(0.79)

CEO Bonus Compensation and Bank Default Risk: Evidence from the US and Europe

Sub-sample analysis:

- At higher risk banks, the relationship flips:
  - CEO bonus is negatively related to DD. Greater bonuses are associated with greater risk taking.
- The relationship is more pronounced in the United States

CEO Bonus Compensation and Bank Default Risk: Evidence from the US and Europe

Comments:

- The paper uses realized bonus; the concern is bonus structure
- In the data, we observe deferred equity compensation versus immediate cash bonus payments. We do not observe deferred bonuses or bonuses with clawback provisions.
  - Do the results refute deferral or do they refute the use of equity compensation?
- Does 162(m) alter what bonus compensation means in the US versus Europe?

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Nonlinear Incentives and Mortgage Officers' Decisions

Konstantinos Tzioumis
Matthew Gee

Nonlinear Incentives and Mortgage Officers' Decisions

- Mortgage loan officers have a monthly bonus payment structure similar to that of CEOs in the previous paper
  - Fixed bonus amount / job retention for meeting minimum threshold of loan originations
  - Linearly increasing bonus compensation after the minimum has been met
  - No cap on the bonus

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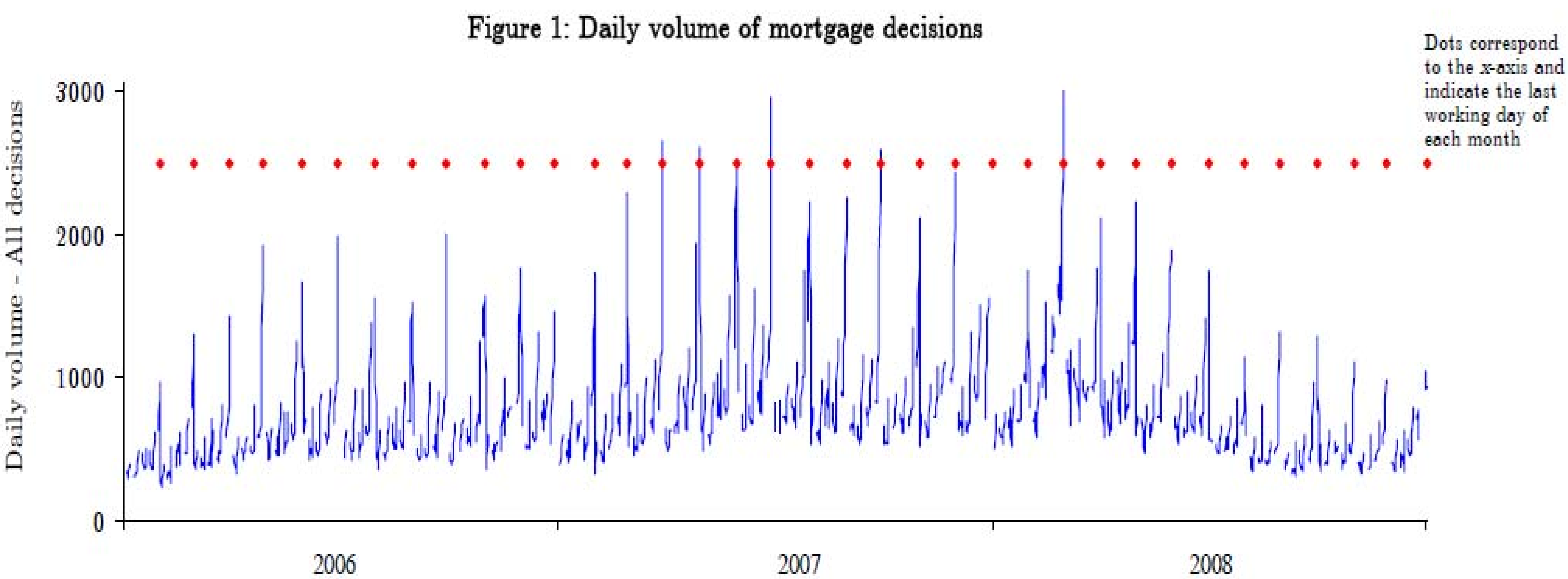
Nonlinear Incentives and Mortgage Officers' Decisions

Questions of the paper:

- How does this structure alter daily performance within the month?
- Is the difference within the month due to differences in effort, loan quality, or pricing?
- What is the effect on delinquency rates?

Nonlinear Incentives and Mortgage Officers' Decisions



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Nonlinear Incentives and Mortgage Officers' Decisions

- Distribution of approvals highly skewed towards the end of the month
  - Processing times decline
  - Loans are more marginal
- Loans approved at the end of the month have higher delinquency rates
- What are the implications of such bonus structure when aggregated within and then across financial institutions?

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Nonlinear Incentives and Mortgage Officers' Decisions

Comments:

- Great data!!

- Can the authors increase the linkage between the loans that are ex-ante weaker that are approved at the end of the month and those that are defaulted on?
  - Predict approval using the early part of the month
  - Is it the negative residual loans approved at the end of the month that default?

- How would you advise banks (and regulators) alter their incentive compensation structure
  - Is removing non-linearities sufficient?
  - How do we feasibly incorporate loan quality?

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Executive Compensation and Bank Risk

- As the ultimate backstop of banks, they FDIC has a legitimate role in mitigating the risk of banks
- If compensation structure incentivizes risk-taking, the FDIC must identify such inducements and potentially regulate them
- These three papers identify potential sources of compensation risk
- All three papers point to the important role that deferral and claw-back provisions may play in addressing excessive risk taking
  - This is the area where I believe regulators should focus

Executive Compensation and Bank Risk

- I encourage the FDIC to proceed with the implementation of a rule along the lines proposed earlier this year that either:
  - Incorporates compensation structure into deposit insurance pricing (preferred)
  - Outright regulates compensation structure
- Recognize that the focus should not be on regulating pay level, rather regulating pay structure
  - Performance metrics must relate to improved bank solvency and not incentivize excessive risk
  - Pay should either be deferred or claw-back provisions must exist to incentivize long-term performance

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