Governance, risk management, and risk-taking in banks

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The question

- What is the role of risk management in a bank where management maximizes shareholder wealth?
- Role is understood broadly. It includes function, organization, power, expenditures, and tools.
Why is the question important?

• Investors: How do we know that the role of risk management in a bank is such that shareholder wealth is maximized?

• Regulators: Does risk management have to be regulated to perform tasks that are valuable from the perspective of the regulators but are not performed if management maximizes shareholder wealth?

• Regulators: What are the implications of risk management regulation for the functioning of the risk management function?
Risk-taking and bank value

• The starting point for the analysis is that risk has different implications for different banks.

• Suppose that a bank just makes loans and is financed with equity.

• In this case, all that matters is that the loans have a positive NPV.

• To a first approximation, the risk of the loan portfolio is not relevant to the value of the bank.
When does risk management create value for banks

- When banks have leverage.
- DeAngelo-Stulz: Banks create wealth from producing low risk liquid liabilities.
- Hence: They have to manage the risk of assets so they can produce more low risk liquid liabilities.
- A highly risky bank can only produce a small amount of low risk liquid liabilities.
Why does RM value creation differ across banks?

• Consider two banks: One makes its money mostly from its deposit franchise, the other has a small deposit franchise and makes its money from transaction businesses.

• These banks have very different optimal levels of risk.

• Note: The optimal level of risk from the perspective of shareholders is not in general the optimal level of risk from the perspective of society. I don’t address this issue here.
Costs of having the wrong amount of risk

- Too little risk means that the bank is not taking full advantage of its capabilities. It is turning down positive NPV projects.

- Too much risk means that the bank is losing business because it is too risky.
Role of risk management

• Suppose the relation between risk and value is known and concave: there is a risk level that maximizes shareholder wealth.

• If the CEO can pick this level costlessly, the problem is solved absent agency problems.

• In a real world bank, there is a coordination problem: risk taking is the result of the activities of the employees of the bank. Hence, the CEO cannot pick the risk without a coordination device.

• The risk management organization is that coordination device.
Risk management’s coordination role

• To perform its coordination role, risk management is required to identify, measure, aggregate, and monitor risks within the bank.

• Though it is called risk management, it is a bit of a misnomer.

• Ultimately, the CEO, not the CRO, manages the risk of the bank.

• With decentralized risk taking, four problems have to be addressed:
  – Agency problem
  – Bad risk problem
  – Measurement problem
  – Risk governance problem
Agency problem

- The CEO can target an amount of risk that differs from the one that maximizes shareholder wealth.
- There is much concern among observers that the CEO will choose too much risk.
- Yet, neither theory nor empirical work shows that there is a widespread issue of CEOs taking too much risk from the perspective of shareholders.
- CEOs have incentives to take too little risk, not too much.
• Empirical evidence shows generally that banks with better governance performed worse during the crisis, not better.

• Beltratti/Stulz; Fahlenbrach/Stulz; other references in paper.

• This is because banks with better governance had more risk and hence were more exposed to unexpected shocks.
Good risks versus bad risks

• Good risks are positive NPV projects on a stand-alone basis.

• A bank may not be able to take all good risks because doing so would make the bank too risky.

• Bad risks are zero or negative NPV projects. Taking them destroys shareholder wealth.

• Within the bank, there are incentives to take risks that do not create value or to ignore such risks.

• A trader can gain by entering a trade that is expected to destroy shareholder wealth – the so-called trader option.

• The head of a business unit may ignore risks to fatten the bottom line. For instance, the fact that employees mis-sell products may be ignored because intervening would decrease revenue in the short run.
Risk management and bad risks

• If all risks were costlessly observed and measured, the task of risk management would be simple.

• In practice, it is costly to observe and measure risks.

• Hence, firms can invest only limited resources in observing and measuring risks. There will be risks that are unknown and unmeasured.
Different banks optimally invest differently in risk management

• Consider Bank Safe. For that bank, too much risk is costly but too little risk does not have much of a cost. Such a bank will optimally opt for conservative risk management.

• Consider Bank Risky. It loses much if it has the wrong amount of risk, so there are strong incentives to get exactly the right amount of risk.
Risk measurement

• The amount of risk is firm-wide.

• Technology to measure firm-wide risk is underdeveloped.

• Business risk is often ignored.

• Basel #whatever ignores business risks and ALM risks.

• Aggregation problem.

- Multi-tiered
- Integrated Risk Framework

1. Firm’s financial targets
2. Risk Appetite
3. Risk Equity
4. Risk Limits

- Portfolio Limits
- Single Transaction Limits
- Concentration Limit
- Country Limits

Risk Limits

- Risk Appetite Limits
  - The overall limit is driven by Risk Appetite which is approved by the Executive Committee.
  - Limits are set by Risk Management in conjunction with the business heads.
  - Limits are cascaded down to the divisions and businesses.

- Credit Limits
  - All counterparties are given internal ratings.
  - Every counterparty has a limit which is subdivided into product limits
    - no diversification benefit is given to any counterparty across products
  - The largest counterparties by industry, region and product are reviewed on a quarterly basis.
  - All counterparties rated below “A” are formally reviewed on an annual basis
Issues with limits

• We don’t have a theory of limits.

• Whenever things go wrong at a bank, the response is more limits and more granular limits.

• There is an optimal level of granularity.

• As limits become more granular, the bank gives up more positive NPV projects and reduces the probability of large losses for the activity to which the limit applies.
More on limits

• Limits can’t control risks that are not observed and are not measured by risk management.

• Limits can’t control risks where risk management is not allowed to put limits.

• Banks don’t put limits on strategic risks.
Example

• October 2007: a consortium led by RBS takes over ABN Amro in a deal valued $98.5 billion.

• Succeeded by outbidding Barclays.

• Investment banker: “There is stuff in here we can’t even value.” Goodwin: “Stop being such a bean counter.”

• “RBS credit traders (...) were horrified at what they found.”
Good risk management: A misconception

• With good risk management, there will be material losses.
  – Downside of risk taking that is value creating.
  – It is not feasible and not economically sensible to eliminate all bad risks.
  – It is not feasible and not economically sensible to monitor risks in such a way that material losses are not possible.

• Good risk management is about insuring that the firm does not have more risk and not less than is optimal.
Limits can’t be enough

• Can’t put limits on risks you don’t measure and don’t know. Limits can be gamed.

• Others tools to make risk management more effective:
  – Risk governance
  – Incentives
  – Culture
Risk governance

• Two issues: independence, CRO reporting.
• Both independence and CRO reporting involve tradeoffs.
• To perform its responsibilities well, risk management faces a considerable tension:
  – If it is too close to the businesses, its assessments can become biased.
  – If it is too remote from the businesses, it does not know what is going on and can’t help manage risk.
• Cop, consultant, or teammate?
Incentives

• Performance evaluation must account for risk.
• Economic capital approach makes it possible to do that.
• However, incentives have obvious limitations: they can’t adjust for risks that the risk manager does not observe and measure.
• Risk-based incentives fail when risk is mis-measured.
What is culture?

• Frequent definition:

“a system of shared values (that define what is important) and norms that define appropriate attitudes and behaviors for organizational members (how to feel and behave)”
Culture and risk

- How people view risk
- How people interact with risk managers
- How the organization deals with bad news
- How the organization is willing to look under the hood of businesses that are highly profitable
- How quickly top management learns about the change in risk
Processes versus culture

• Processes and organigrams can’t solve the problem.

• Not everything can be written down.

• Processes do not remove the impact of behavioral biases and conflicts of interest.

• Also, processes can be ignored or slow-walked.
Key cultural attributes to focus on?

• Written culture statements do not have much impact if any.
• Trust – empirical work shows its importance and that it is PRICED.
• Each risk is owned but firm risk is owned by everybody.
• Openness to risk discussions – upwards and laterally.
• Broken window policing.
Conclusion

• Measuring the risk of known positions is a small part of risk management, but most academic research focuses on that part.

• The other parts are risk governance, incentives, culture.

• We need research on the other parts, but there are obstacles to conducting such research as data is lacking.