Credit Risk Transfer and Bank Lending

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There are two ways a bank can lay off credit risk:

1. **Outright sale of the loan**
2. **Use synthetic securities**

A Credit Default Swap:
- **Protection seller:** who receives a fixed payment
- **Protection buyer:** receives a payment conditional on default

- In 2007, the value of the loan sales market:
- Whereas, CDS swap market
• In what way are the two ways of laying off credit risk equivalent?

• We focus specifically on control rights.

• In a loan sale, the purchaser usually gets control rights, whereas with a credit default swap even though the originating bank has no economic stake in default, they retain control rights.
Why Control Rights are valuable

- Banks can monitor a project and decrease the default probability
- Originating bank is better informed about the value of monitoring
- Communicates information about a project through actions of selling loans or buying insurance
• Characterize equilibria which differ by information content of market transactions:
  ① If CDS and Loan sales markets are active then there is on average inefficient (too little) monitoring.
    ① Therefore default probabilities are too high.
    ② Loan sales prices are less informative and therefore ex post outcomes are more volatile.
  ② If Only Loan Sales markets are active then there is on average inefficient (too much) monitoring.

• Logic of the model suggests that banks strictly prefer to select equilibria which give them the best payoff ex ante
• $t = 0$ The loan is originated, pays off $R^l$ in the good state and $C$ otherwise.

• $t = 1$ The bank finds out
  • if the loan is better than it thought: $p + \Delta$
  • If it has an outside opportunity and values laid off credit risk at $\beta(R^l - C)$

• $t = 2$ There is a loan sale market and a credit default swap market

• $t = 3$ The owner of the loan can monitor for a fixed cost. Monitoring ↑ success probability to $p + \Delta$ from $p$, else no effect.

• $t = 4$ Everything pays off
Going into the market, there are four types of banks: ones who know that the project is good/not and ones that need to sell/not.

The decision to sell depends on the price that a bank can get.

A seller of protection knows that a bank that buys protection will never monitor.

A bank that buys the loan may monitor if it is sufficiently likely that monitoring adds value.

If a bank that buys the loan monitors then he will value it at the post monitoring value - cost of monitoring.
What can happen

- If both the CDS and Loan Sales market are active, then there is complete pooling and all banks lay off credit risk.
- If only loan sales market are active then either all banks with a need to release regulatory capital sell loans.
- Or, if only loan sales markets are active then only one bank with a need to release regulatory capital sells loans.
• If both the CDS and loan sales markets are active, then the banks that buy loans do not monitor. There is thus inefficient monitoring and default probabilities are too high.

• If all banks who need to release regulatory capital sell loans, then there is inefficient monitoring (too much) because the banks buying the loans can’t distinguish between the types of loans.

• If only one type of bank sells loans then some banks who should shed credit risk don’t (inefficient allocation of capital).
Conclusion

• Control rights can have value but the fact that a bank wants to assign them changes their value.
• Even though the Cash flows on CDS and loan sales appear to be equivalent, ownership and what the owner knows (because it informs monitoring) matter.
• While no one ex post prefers the CDS market, ex ante the equilibria can be ranked as there is a tradeoff between monitoring efficiency and efficient use of regulatory capital.