

Chapter 11 – Screening, Monitoring and Free Riding

Chapter 11 teaches us the importance of *screening* credit risks to limit adverse selection and of *monitoring* the recipients of funds to limit moral hazard.¹ Insufficient screening and monitoring contributed importantly to the financial crisis of 2007-09. While far less damaging to the economy or financial system, the Madoff scandal of 2008 presents a spectacular failure of monitoring. Both episodes highlight the central role of asymmetric information in intermediation. Both cases also show how *free riding*² leads to insufficient screening or monitoring.

The financial crisis. The crisis of 2007-09 revealed an extraordinary range of screening and monitoring failures in the securitization of subprime mortgages. The problems started with the initial selection of subprime borrowers and continued throughout the stages of securitization all the way to the investors who purchased complex, collateralized debt obligations (CDOs) supported by subprime mortgage-backed securities (MBS).³ Without these information failures, the financial crisis that we experienced would not have occurred.

In the years running up to the crisis, mortgage lenders reduced their costly screening of borrowers in order to increase their lending and profit. By reducing screening, they saved costs directly and they also expanded the range of potential borrowers so that they could boost the number of loans. With costs reduced, more loans mean higher profits if – as usually occurred – the mortgage lenders quickly sold the new loans to other intermediaries who would securitize them.

Reduced screening meant that lenders made an increasing share of home loans without documentation of borrowers' wealth, income or employment. This decline in lending standards resulted in a large volume of riskier loans. When housing prices began to fall in 2006, mortgage defaults soared.

Further along in the securitization process, issuers of MBS and CDOs did not screen the original mortgage lenders or monitor their lending practices sufficiently to prevent the decline of lending standards. Had they wished to encourage better lending practices, they might have required that the mortgage lenders demonstrate a high level of net worth and invest a substantial portion of it in the loans that they

¹ As defined in the glossary, adverse selection is the problem of distinguishing a good risk from a bad one before making a loan or providing insurance, while moral hazard is the risk that a borrower or someone who is insured will behave in a way that is not in the interest of the lender or insurer. Both are caused by asymmetric information.

² As defined in the glossary, a free rider is someone who doesn't pay the cost but still gets the benefit of a good or service.

³ Subprime mortgages are loans that do not meet the standard for a prime mortgage that qualifies for a government guarantee. A CDO is a security that returns a stream of payments from the assets that make up its collateral. For details on these instruments, see the Chapter 7 modules: Subprime Mortgages and Structured Products. For an understanding of securitization, see the Chapter 6 module: Securitization and the Chapter 7 module: When Securitization Goes Awry.

sold. Chapter 11 (Table 11.3) highlights this approach as a standard means of limiting both adverse selection and moral hazard. Instead, MBS issuers sought mortgages in large quantities that could be packaged into MBS and later into CDOs, the distribution of which paid handsomely. Stringent screening or monitoring of originators by the issuers and distributors of MBS likely would have slowed securitization and limited the short-run profit.

When lending standards decline, you might think of the securitization process as a game of “hot potato.” Each of the actors in the game wants to pass along the risky loans – the hot potato – quickly while it’s still possible. The game ends when defaults soar. Whoever gets stuck with the loans at that stage loses.

In theory, private collection of information about the riskiness of the loans might have slowed or stopped the hot potato game at an early stage. Yet, rating agencies that specialize in such information collection did not slow the game. They advised MBS and CDO issuers about how to package the MBS in ways that could obtain the highest ratings for the resulting CDOs. Rating agencies also generally failed to account for the increased riskiness of the underlying loans. Instead, they awarded their highest ratings to an extraordinarily large share of CDOs that were backed by risky subprime MBS. The agencies apparently had little incentive to spend resources to screen the underlying loans or the lenders adequately.

At the final stage of securitization, many investors relied on the assessment of the rating agencies when they purchased CDOs. The complexity of the CDOs made it difficult for investors to screen the underlying assets, but they could have chosen not to purchase large volumes of CDOs that were too complex to assess and lacked a track record of safety. Rather than undertake their own costly screening efforts, CDO investors often behaved like free riders who could benefit from the screening that others had undertaken.

In fact, many participants in the securitization process appeared to free ride, so that overall screening was insufficient to prevent widespread MBS defaults. Implicitly, the participants in the process acted as if the ultimate collateral – the price of houses – would always be adequate to contain the damage from adverse selection. Had housing prices risen indefinitely, as many appeared to assume, the collateral would help protect against such damage. However, when housing prices and the value of the collateral started to plunge, the effects of adverse selection threatened the financial system as a whole.

Government monitoring of financial intermediaries also failed (Chapter 14 will explore the role of government in overseeing a financial system). Government rule changes over the past decade contributed to the rise of leverage in the U.S. financial system, but did not lead to closer or broader scrutiny (see the Chapter 3 module: Leverage). Officials responsible for their oversight still believed that some firms – such as Bear Stearns and Lehman – had ample net worth even when they failed. Officials who allowed large intermediaries to shift assets temporarily off their

balance sheet did not foresee how this would boost systemic risk (see the Chapter 3 module: Shadow Banking). Finally, and most dramatically, weak oversight of some large intermediaries – such as AIG – failed to uncover concentrations of risk that eventually threatened to topple the financial system.⁴

The Madoff Scandal

“There was an abject failure by the regulatory agencies we entrust as our watchdog.”
Whistleblower in the Madoff scandal, Congressional Testimony, February 4, 2009.

Fraud is the most extreme version of moral hazard. Even within this class, the fraud perpetrated by Bernard (“Bernie”) Madoff is astonishing in several ways. First, thousands of investors lost billions of dollars, making it among the largest scams in history.⁵ Second, the swindle was enduring: Prosecutors claim that it began in the 1980s and continued until the end of 2008. Third, some of the investors were well-experienced in matters of finance. The investors included wealthy individuals, charities, universities and financial firms from many countries.

Yet, Madoff’s fraud apparently was nothing more than a classic *Ponzi scheme*, named after Charles Ponzi, who conducted a similar sting about a century ago in the United States. In a Ponzi scheme, an intermediary collects funds from new investors, but instead of investing them, uses the funds to pay off earlier investors. The attractive returns received by the early investors foster a perception that the manager is a success. This perceived success then attracts new funds, allowing the scheme to continue. Money has to flow in at least as fast as it flows out. When that flow reverses, the fraud will unravel. Then, when there are no further inflows from new investors, the final investors become big losers. They are the suckers in the con game.

⁴ Ineffective private monitoring contributed in other ways to the financial crisis. For example, financial institutions usually monitor their trading partners in order to limit losses if the counterparty is unable to pay. However, the rise of over-the-counter derivatives helped some intermediaries conceal the risks that they were taking, even from their counterparties (see the Chapter 9 module : Credit Default Swaps and the Financial Crisis). Partly as a result, intermediaries were uncertain about which of their counterparties faced large losses from MBS and CDOs. This uncertainty contributed to a seizing up of key markets for liquidity, such as the interbank lending market, that deepened and broadened the crisis.

⁵ The losses have been estimated as high as \$65 billion, but this figure includes the false earnings reported on the initial investments. According to the government’s sentencing memorandum, the net cash investments in the Madoff fund since 1995 were about \$13 billion (<http://www.usdoj.gov/usao/nys/madoff/20090626sentencingmemorandumfiled.pdf>).

Ponzi schemes existed long before Charles Ponzi and have resurfaced frequently after him. At times, the losses in such frauds have been so broad and large as to affect nations as a whole. How do such frauds succeed again and again at different times in different places? How can they last so long and become so damaging?

The answer is that there is a failure to monitor the behavior of the managers who are receiving the investment funds (e.g. Madoff or Ponzi). Such monitoring is costly, even though the costs are small compared to the ultimate damage. The appearance of satisfied early investors discourages new (or existing) investors' willingness to pay such costs. And many investors assume that others – those that invested earlier and government agencies – have already done the monitoring needed.

Critical to the success of a Ponzi scheme is the appearance of public respectability. Here, Bernie Madoff was a master at burnishing his reputation in the public eye. He had been the chairman of both a major stock exchange (NASDAQ – see Chapter 8) and of the largest organization of U.S. securities dealers (NASD). In addition, he was a well-known philanthropist. What better way to make people think you are rich and successful than to give money away?

All of this encouraged clients to trust Bernie. His firm's record of paying attractive returns also encouraged them to rely on him. These investors did not monitor the details of Madoff's investment practices. They also did not require, in contrast with the practice of some investment advisors, that their funds be held by an independent *custodian* – a financial institution that specializes in the safekeeping of securities. In a sense, they did not “kick the tires” to see if the Madoff car would collapse.

The U.S. government agency responsible for overseeing the Madoff firm also failed to monitor effectively. One whistleblower – cited at the start of this section – warned the oversight agency about possible fraud as early as 2000. The warning was repeated several times over the following years. When the agency eventually investigated for other reasons in 2006, it still failed to detect the fraud. The end of the swindle came in 2008 because the financial crisis had prompted too many withdrawals for Madoff to satisfy. Had the crisis not occurred, the scam might still be going on today.

With the benefit of hindsight, it is difficult to see why the Madoff scheme endured for so long. There were red flags that could have warned investors or government agencies of a problem. Madoff himself believed that detection was inevitable. Yet, everyone apparently assumed that someone else was monitoring, so they could enjoy the *free ride*. The scam is a painful reminder that there is no such free ride in a financial system.