

Over the past few decades, financial intermediation and leverage in the United States shifted away from the traditional realm of regulated commercial banks and toward a broad array of other financial institutions. These include brokerages, consumer and mortgage finance firms, insurers, investment organizations (such as hedge funds and private equity firms¹), money market mutual funds (MMMFs), and even bank-created asset-management firms, such as “special investment vehicles” (SIVs).

Collectively, these other intermediaries have come to be known as the *shadow banking* system, because they provide services that compete with or substitute for those supplied by commercial banks. Most important, the liabilities of banks are deposits, while the liabilities of shadow banks are not deposits. In addition, the leverage and risk-taking of shadow banks can be less transparent than that of commercial banks.

Financial innovation sped the shift to shadow banking and was, in turn, stimulated by it. Already in the 1970s, broadening securities markets lowered the cost of direct finance (such as issuing bonds or equities) compared to traditional bank loans. Plunging information costs in the 1980s and 1990s made it possible for an expanding universe of investors to learn about the risks of borrowers, ranging from companies to households. The range of new investors encouraged the development of a dizzying array of new instruments, particularly over the past decade, that could spread risk more widely and efficiently, but also permit greater risk-taking.

Regulatory behavior also encouraged the transition. Until the financial crisis of 2007-09, regulators focused their greatest attention on commercial banks, in part because they judged that such oversight would limit risks from shadow banking. However, competitive forces naturally encouraged a shift of intermediation away from the costly regulated sector to less regulated or even to unregulated areas. Competition from less regulated intermediaries also boosted banks’ largest costs – namely, for talented personnel.

Government policy sometimes spurred financial innovation and shadow banking unintentionally. One example was the rise of MMMFs in the late 1970s (see Chapter 13, footnote 3). While market interest rates rose to reflect rising inflation, federal law at the time capped the interest rate that banks could pay on deposits. So depositors shifted their funds from banks to MMMFs that paid higher rates.

Commercial banks often complained about unfair competition from other providers of financial services, and regulators gradually relaxed the restrictions on

¹ Hedge funds (defined in Chapter 13) are private, largely unregulated, investment partnerships that bring together small groups of people who meet certain (high) wealth requirements. Private equity funds are investment pools that typically make investments directly into private companies.

commercial bank activity from around 1980. When, in the late 1990s, Congress ended the legal separation of commercial banking and brokerage activity that had prevailed since the Great Depression, much of the effect was to codify a relaxation of rules that already had taken place (see Chapter 13 discussion of the creation of Citigroup, page 301).

Yet, the shift toward shadow banking accelerated over the past decade as competition drove intermediaries to cut costs and shift financial risks where they could be most easily held. New profit opportunities also spurred change, as financial institutions moved to finance the housing boom in several countries and to facilitate the flow of capital around the globe from countries with large excess savings (such as China, Japan and oil-producing nations) to those with large demand for credit, particularly the United States.

Leverage and Shadow Banking. Over time, the development of shadow banking permitted a sizable increase of leverage in the financial system, making it more vulnerable to shocks.² Some financial institutions, such as brokerages, were more leveraged than commercial banks. Their leverage ratios (measured as total assets divided by net worth) sometimes exceeded thirty, compared to about ten or twelve for commercial banks. Since shadow banks were growing faster than commercial banks, leverage in the financial system as a whole rose.

Government rules contributed to the rise of leverage. For example, in 2004, the Securities and Exchange Commission that supervised brokers authorized changes that resulted in a sizable increase of broker leverage. To compete, commercial banks sometimes utilized SIVs and comparable arrangements that allowed them to shift assets off their balance sheet and avoid costly regulatory requirements. Overall leverage rose, but it was less obvious and more difficult to monitor.

Rapid growth in some new financial instruments vastly increased the possibilities for leverage and risk-taking in a concealed way. Derivatives – options, futures and the like – allow investors to transfer risks at low cost. Organized derivative markets have existed since the sixteenth century, and have a record of promoting efficient risk spreading. However, the meteoric rise after 2000 of customized derivatives that do not trade in open markets (so-called *over the counter*, or OTC, derivatives) permitted some large, highly-leveraged intermediaries to take massive risks that were unknown to the investors and institutions with whom they were trading and to the regulators who were supposed to be watching them. Had these institutions been allowed to fail during the financial crisis, there would have been a cascade of failures of their trading partners that could have undermined the entire financial system.

Effects of the Crisis. The financial crisis has prompted an extraordinary transformation of the financial system, and particularly of shadow banking. During

² See the Chapter 3 module: Leverage.

one fateful week in September 2008, the largest U.S. brokerages failed, merged or converted themselves into commercial banks in order to have access to public support and reliable funding. In the same month, investors lost confidence in MMMFs, and began mass withdrawals that did not stop until the U.S. government issued a blanket guarantee. Over the past two years, many SIVs failed or were re-absorbed by the commercial banks that created them. And while few hedge funds failed, many chose to shrink or close as investors fled. As a result, the volume of assets held by private intermediaries plunged.

The future of the shadow banking system remains highly uncertain, but the scope for leverage is likely to be significantly lower than in the years before the financial crisis. The U.S. Treasury is encouraging Congress to widen supervision to any financial institution that could, by its risk-taking, pose a threat to the financial system. Already, government has tightened rules for off-balance-sheet activities of banks. The Treasury also aims to standardize a large portion of OTC derivatives and shift their trading to public exchanges where risks can be monitored. Tightened rules for remaining customized derivatives could also reduce the potential for shadow banking leverage and risk-taking.