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Traditional Versus Shadow Banking

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"If you owe your bank a hundred pounds, you have a problem. But if you owe a million, it has."
—John Maynard Keynes

Borrowing and lending is an important feature of a well-functioning economy. Individuals use credit—money lent by an individual or financial institution—to buy homes, go to college, and make general purchases. Firms use credit as start-up money and to buy property, build plants, and purchase equipment. A significant amount of credit is available through the traditional banking system that matches borrowers and lenders. There is also a parallel system, often referred to as "shadow banking," that performs a similar function but through specialized financial institutions. This shadow system operates outside many of the rules and regulations placed on traditional banks, hence the "shadow" designation. To better understand shadow banking, it is helpful to first understand borrowing, lending, and credit in general.

Borrowing and lending can take place either directly or indirectly. Direct finance occurs when funds move directly from a lender to a borrower—there is no middleman. If you have ever lent money to a friend, then you have engaged in direct lending. This type of exchange often proves difficult because lenders and borrowers need to match up, which can require substantial work for both parties. For example, investors need to first find a borrower, then assess (and continue to monitor) the borrower's creditworthiness, write a contract, and accept payments—a costly process. This process has largely been streamlined through the development of organized financial exchanges.

A second form of lending is termed indirect finance. In this case, funds are channeled indirectly through a third party—or intermediary—such as a bank, in a process called financial intermediation. The most well-known form of financial intermediation is traditional banking, which occurs as follows: (i) Savers store excess funds as deposits in banks. (ii) Banks are required to keep only a fraction of their deposits on hand as reserves.[1] (iii) Banks use the excess reserves to provide loans to borrowers in what is known as a *fractional reserve banking system*. Typically, traditional banking takes place under one roof in commercial banks or thrifts (i.e., savings and loan associations, credit unions, and savings banks).

Intermediaries perform two major roles. First, they are the *brokers* that match borrowers and lenders. The ultimate lenders, bank depositors, need not seek out borrowers when an intermediary is involved. Instead, banks implicitly match borrowers and lenders by taking deposits and making loans. Second, when banks take deposits and make loans they perform a *qualitative asset transformation* (QAT). That is, banks take deposits, which are liquid and can be withdrawn on demand, and turn them into loans, which are less liquid and generally have long maturities and are paid back to the lender over time.[2]

Indirect finance also has several other advantages over direct finance. Banks are highly specialized in monitoring and assessing the creditworthiness of borrowers because of their superior information gathering. They are also able to make large loans because they can pool large numbers of deposits. In addition, banks allow savers to have more diversified holdings. By keeping funds on deposit at banks, savers essentially loan small amounts to a large number of borrowers across different industries and geographic areas. One loan default[3] is unlikely to affect depositors substantially.

Banks are subject to regulation to ensure soundness of the financial system. For example, banks are legally required to hold a certain amount of *capital*, the difference between what a bank owns (its assets) and its obligations (its liabilities).[4] This regulation is aimed at ensuring stability in the banking system by requiring banks to have a cushion against losses. Banks are also supported in the form of deposit insurance, which guarantees individual accounts up to $250,000 in the event of bank failure. Further, the Federal Reserve may assist banks as a lender of last resort. Healthy banks that need short-term funding can borrow from the Fed's *discount window*, which provides an added cushion. These safeguards are in place to prevent bank runs, a situation where depositors simultaneously withdraw funds, precipitating a bank's collapse.

Because regulation is costly, a shadow industry has risen for *regulatory arbitrage*—that is, the circumvention of regulation. Shadow banking performs the same function as traditional banking; it channels money from lenders to borrowers. However, the process is different and more complex. In this parallel system, borrowers still obtain mortgages, credit cards, and student loans from financial institutions. In contrast to traditional banking, however, in shadow banking loans are not funded or serviced by deposits. Instead, the loan originator sells the loans to another financial institution, which pools the loans with many others. These loan pools are *securitized* in a multistep process; that is, various financial instruments are created from the underlying loan payments.

For example, let's consider one possible scenario: A finance company specializing in residential home loans extends 100 mortgages to borrowers and subsequently sells the loans to another financial intermediary. This second intermediary takes the 100 newly acquired loans and combines them with another 900 mortgages. These 1,000 mortgages are pooled together and *securities*—financial instruments—are created. These financial instruments are then issued (sold) to the public (investors) who are paid interest on their investment. The value of these instruments is derived from the monthly payments of the underlying mortgage pool, and the instruments lose value if the mortgagees default. In this system, loans are not funded by deposits at banks. Instead, loans are generally funded by repurchase agreements (repos) and money market mutual fund (MMMF) investments. This funding is short in maturity and generally liquid, so it is conceptually similar to bank deposits.

The securitization process is conducted through chains of financial institutions, such as financial holding companies, investment banks, and government-sponsored enterprises such as Freddie Mac and Fannie Mae. Although shadow banking reduces the cost of intermediation, it does not offer the safeguards of traditional banking. Thus, the shadow banking system is more vulnerable to runs, but instead of individuals withdrawing their deposits, investors stop extending the short-term funding that shadow banks rely on.

Both the traditional and shadow banking systems match lenders and borrowers and use short-term, liquid funding to supply long-term loans that are less liquid. As illustrated, the latter system includes many more steps and often involves several institutions. The risks and regulations differ for each system, but both play an important role and perform a crucial task for the economy. ■

NOTES

[1] Here, "savers" refers to any entity storing money in a bank. Savers may be households, businesses, nonprofits, or governments.

[2] "Liquidity" refers to the ease with which something can be converted into cash. "Maturity" refers to the length of time until the last payment due date of a loan.

[3] Default occurs when a borrower is unable to repay the lender.

[4] Bank capital requirements are slightly complicated, using "risk-weighted" assets in determining the necessary capital banks must hold.

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