

Banking Industry: Structure and Competition

This lecture examines the historical trends and the overall structure of the banking industry.

Historical Development of the Banking System

- A. Bank of North America (chartered in 1782) was the first modern commercial bank in the U.S.
- B. An early controversy was whether the federal government or the state governments should charter banks.
 - 1. First Bank of the United States was chartered in 1791.
 - a. This bank had elements of both a private bank and a central bank.
 - b. Its charter was not renewed in 1811.

2. Second Bank of the United States
 - a. The Second Bank was chartered in 1816 because of abuses by state banks and the need to raise funds during the War of 1812.
 - b. The Second Bank was not rechartered in 1836.
3. Prior to 1863, the states chartered all of the banks.
 - a. No national currency
 - b. Banks issued banknotes (currency circulated by banks and redeemable for goods).
 - c. Many banks failed because regulation and oversight of the banking industry was very lax.
4. National Banking Act of 1863
 - a. Created a new system of federally-chartered banks.

- b. This act taxed banknotes issued by state banks in an effort to drive those banks out of business.
- c. State banks stayed in business by acquiring funds via deposits.
- d. The result is the U.S. has a dual banking system, where some banks are chartered by the federal government (national banks) and some banks are chartered by the states (state banks).

5. Banking industry changes in the 1900s

- a. The Federal Reserve (a central bank) was created in 1913 after the Banking Panic of 1907.
- b. The FDIC was formed in 1933 to prevent future deposit losses after 9,000 banks failed between 1930 and 1933.
- c. Glass-Steagall Act of 1933 (repealed in 1999) separated commercial banking from investment banking.

6. Multiple regulatory agencies

- a. The Comptroller of the Currency regulates national banks.
- b. The Federal Reserve regulates both state banks that are members of the Fed and bank holding companies (companies that own more than one bank).
- c. The FDIC regulates state banks that are not members of the Fed but carry FDIC deposit insurance.

Financial Innovation and the Shadow Banking System

- A. Financial institutions developed new products (financial innovation) that both met the needs of their customers and was profitable to the financial institutions.
- B. Three motivations to financially innovate
 - 1. Responding to changes in demand
 - a. Adjustable rate mortgages (created in 1975)
 - i. They reduce interest-rate risk to the financial institution by having the mortgage rate adjust to changes in a base interest rate (ex., the interest rate on a 6-month Treasury bill).
 - ii. This instrument is attractive to some people because the initial interest rate is often lower than on a fixed interest-rate mortgage.

- b. Financial derivatives (created in 1975).
 - i. A futures contract is when a seller agrees to sell a standardized commodity to a buyer on a certain future date at a pre-specified price.
 - ii. Financial derivatives are futures contracts in financial instruments.
 - iii. This instrument is used by investors and financial institutions to reduce their interest-rate risk.

2. Responding to changes in supply

- a. Advances in information technology have impacted changes in supply in two ways.
 - i. It has lowered the cost of processing transactions.
 - ii. It is easier for people to acquire information.

b. Credit and debit cards

- i. A credit card extends the purchaser a loan. Profits for the financial institution are generated from both interest on that loan and payments by stores on those purchases.
- ii. Credit cards first appeared after WWII but gained much wider use in the 1960s when improved computer technology lowered the cost of processing credit card transactions.
- iii. A debit card immediately deducts a purchase from a bank account. Profits for the financial institution are generated entirely from payments by stores on those purchases.

- c. Electronic banking
 - i. Automated teller machine (ATM) is a machine that enables customers to get cash, make deposits, and transfer balances.
 - ii. Home banking is an electronic banking facility that allows customers to link up with the bank via their tablets, smart phones, or personal computers.
 - iii. Virtual bank is a bank that exists online only and does not have any physical branches.
- d. The advent of information technology made it easier for consumers to acquire information on less-well-known firms with lower credit ratings. That information made it easier for those firms to sell longer-term bonds (i.e., junk bonds).

e. Information technology also made it easier for firms to sell commercial paper (short-term corporate debt). The development of money market mutual funds provided companies a market in which to sell this product.

3. Avoidance of existing regulations

a. Two particular bank regulations have driven financial innovation

i. Reserve requirements forced banks to hold a fraction of their checking deposits as reserves. The Fed began paying interest on all reserves in 2008. Reserve requirements were eliminated in 2020.

ii. Prior to 1980, restrictions on interest rates paid on bank deposits prevented checking deposits from paying interest (business accounts still cannot), while CDs could not pay above a specified interest rate (5.25 to 5.5% in the 1970s).

- b. Money market mutual funds were introduced in the 1970s as an alternative to checking accounts. These accounts have check-writing privileges but were not subject to reserve requirements and restrictions on interest rates.
- c. Sweep accounts are used each night by banks to avoid interest rate restrictions by moving funds out of non-interest earning business checking accounts into interest earning overnight securities.

C. Securitization and the shadow banking system

- 1. Securitization is the process of bundling, otherwise, small and illiquid assets (ex., mortgages, and car loans) into marketable securities.

2. The 4 steps of the securitization process (a fee is earned at each step)
 - a. The loan originator (ex., a mortgage broker) arranges the loan for the servicer.
 - b. The servicer collects the loan payments but sells the loan to a bundler.
 - c. The bundler combines the loan with other like loans and then presents a portfolio of loans to a distributor.
 - d. The distributor designs a security around that portfolio of loans and then sells that security to customers.
3. The subprime mortgage market (mortgages to customers with less-than-stellar credit) developed in the 2000s as a result of securitization. Subprime mortgage lending was a key factor that led to the 2008 financial crisis.

D. Financial innovation and the decline of traditional banking

1. Traditional banking makes long-term loans by taking on short-term deposits.
2. Decline in cost advantages of acquiring funds
 - a. Prior to 1980, banks were limited on the interest rate they could pay on deposits.
 - b. In the late 1960s, rising inflation encouraged depositors to pull money out of banks and put it into new instruments with higher returns.
 - c. When interest rate ceilings were eliminated in the early 1980s, banks could compete for deposits but that pushed up their costs and reduced their profits.

3. Decline in income advantages on uses of funds
 - a. Innovations such as commercial paper, securitization, and junk bonds caused the demand for bank funds to fall.
 - b. Banks provided 40% of funds for nonfinancial borrowers in 1974, but that number fell to 27% in 2014.
4. Banks responded to those higher costs and the lower demand by seeking out new lines of business.
 - a. Banks have expanded into new and riskier areas of lending.
 - b. Banks have pursued new off-balance-sheet activities that are profitable but expose the banks to more risk.

Why Does the U.S. Have So Many Commercial Banks?

- A. McFadden Act of 1927 effectively prohibited banks from branching out across state lines.
- B. Banks used two financial innovations to circumvent those restrictions on branch banking.
 1. Bank holding companies were formed, so a single company could own multiple banks in more than one state.
 2. The development of ATMs, which are not considered bank branches, enabled banks to provide customers with more services over a wider geographic area.

Bank Consolidation and Nationwide Banking

- A. In the 1970s and 1980s, reciprocal regional compacts among groups of states allowed one bank to own another bank in a different state in the compact area.
- B. Two reasons why banks wanted to expand across state lines.
 1. Multistate banking meant that banks could diversify their loan portfolio, which reduced their risks that a negative shock to a particular region would substantially damage a bank's financial health.
 2. Improved computer and web technology was very applicable to the banking industry but had large upfront costs. By getting bigger, the banks could take advantage of these economies of scale and reduce their per-unit costs.

- C. Bank consolidation had two key consequences.
1. Financial intermediaries became more alike as they encroached on each other's territories.
 2. Consolidation resulted in the development of large complex financial intermediaries.
- D. The Riegle-Neal Act of 1994 effectively established nationwide banking by eliminating the restriction on interstate banking.

- E. Is bank consolidation (and nationwide banking) a good thing?
1. There is no evidence that bank consolidation is eliminating small banks (community banks).
 2. There are several advantages to bank consolidation.
 - a. Nationwide banking increases competition, which increases the efficiency of the banking sector.
 - b. Larger bank organizations can take advantage of the economies of scale from the advancements in information technology.
 - c. Larger banks have a more diverse loan portfolio, so they are less susceptible to negative shocks that hit certain sectors of the economy or regions of the country.

The Separation of Banking and Other Financial Service Industries

- A. The Glass-Steagall Act of 1933 separated banking from other financial services like securities, insurance, and real estate.
- B. Erosion of the Glass-Steagall Act
 1. The development of money market mutual funds enabled brokerage firms to provide deposit instruments.
 2. In 1987, the Federal Reserve allowed banking affiliates to underwrite securities, as long as revenues did not exceed a certain amount.
 3. The Gramm-Leach-Bliley Act of 1999 repealed the Glass-Steagall Act and allowed financial institutions to operate both commercial and investment banks.
 4. Throughout the 2000s, banking organizations became larger and more complex. This process accelerated during and after the 2008 financial crisis.

Thrift Industry

A. Savings and Loan (S&Ls) Associations

1. They can be chartered by either the federal or state governments.
2. Prior to the early 1980s, S&Ls focused mainly on providing home mortgages.
3. Since then, S&Ls have engaged in many of the same businesses as commercial banks.

B. Mutual savings banks are similar to S&Ls, except they are jointly owned by depositors.

C. Credit unions are small cooperative, tax-exempt lending institutions organized around a particular group of individuals.