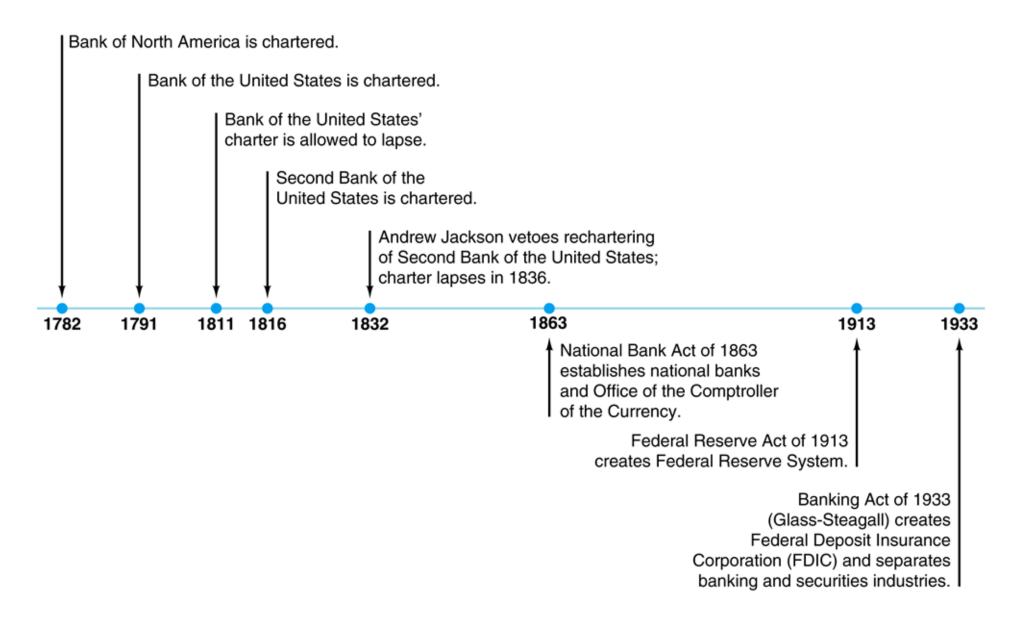
## **Evolution of the Banking Industry in US**

Before 1863
No national currency existed.
All commercial banks are chartered by the state government. Banknotes are redeemable for species.
1791-1836, both Bank of the United States and the Second Bank of the United States have elements of a
private bank and a central bank.
1836-1863, Free banking era. Banking regulations were extremely lax in many states. New reports
suggested fraud, bank failure, wildcat banking were widespread.
1863 National Bank Act
Create a new system of federally chartered banks (national banks), supervised by Office of the
Comptroller of the Currency (OCC).
Impose taxes on banknotes issued by state chartered banks (state banks).
State banks devised <b>checkable demand deposits</b> for the source of funds and survived.
A dual banking system (state banks chartered by state governments and national banks chartered by
federal government)



1863-1913
5 major bank panics
1913 Federal Reserve Act
create Federal Reserve System (FRS)
National banks are required to become members of FRS
State banks can choose to be members of FRS
1927 McFadden Act
Forbid interstate branch banking (repealed by Riegle-Neal Act 1994 (effective 1997))
Many small banks survived. Lack of competition.
1929-1933
the Great Depression
Around 9000 banks failed.
1933 Banking Act (Glass-Steagall Act, repealed by GLB Act 1999)  _Separate commercial banking and underwriting  _Create Federal Deposit Insurance Corporation (FDIC)

#### **Multiple Regulatory Agencies**

- Office of the Comptroller of the Currency—national banks
- Federal Reserve and state banking authorities—state banks that are members of the Federal Reserve System
- Federal Reserve also regulates bank holding companies
- FDIC—insured state banks that are not the Federal Reserve System members
- State banking authorities—state banks without FDIC insurance

# Financial Innovations as Responses to Changes in the Financial Environment

A change in the financial environment stimulate innovations by financial institutions
Rise of the Shadow Banking System
Responses to changes in demand and supply conditions
Avoidance of regulations

#### Responses to Demand for New Financial Products: Interest Rate Volatility

(1%-3.5% in 1970 to 4%-11.5% in 1980s)

- 1. Adjustable-rate mortgages
  - ◆ Flexible interest rates raise bank profits when rates rise
  - ◆ Lower initial interest rates make them attractive to home buyers
- 2. Financial Derivatives
  - ◆ To hedge interest rate risk, devise a new type of contracts (standardized contracts) that buy or sell on a specific future date at a pre-set price on existing securities
  - ◆ Chicago Board of Trade 1975

**Responses to Changes in Supply Conditions: Information Technology** (lower costs to devise new financial products and investors are easier to acquire information)

- 1. Bank credit and debit cards
  - ◆ Improved computer technology lowers the transaction costs
- 2. Electronic banking
  - ◆ ATM, Home banking
- 3. Junk bonds If it is easier to screen good from bad firms and to assess risk precisely, investors are more willing to purchase bonds issued by less well-known corporations that have a low credit ratings.
- 4. Commercial paper market
- 5. Securitization

#### **Avoidance of Regulations: Loophole Mining**

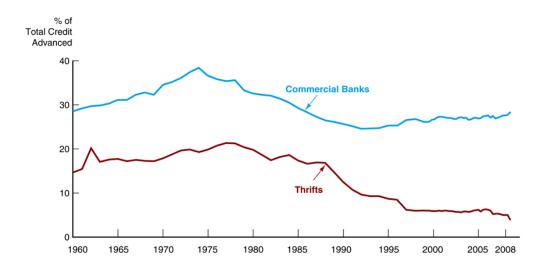
- 1. Reserve requirements act as a tax on deposits
  - ◆ Sweep accounts
- 2. Restrictions on interest paid on deposits (Regulation Q) led to disintermediation
  - Money market mutual funds and Repos

#### Financial Innovation and the Decline of Traditional Banking

- As a source of funds for borrowers, market share has fallen
- Share of total financial intermediary assets has fallen, but there was no decline in overall profitability
- Decline in cost advantages in acquiring funds (liabilities)
  - Rising inflation led to rise in interest rates and disintermediation
  - ◆ Low-cost source of funds are available for banks, checkable deposits declined in importance
- Decline in income advantages on uses of funds (assets)
  - ◆ Alternative sources of finances are available for firms
  - ◆ Information technology has lowered transaction costs for other financial institutions, increasing competition

#### Banks' Responses

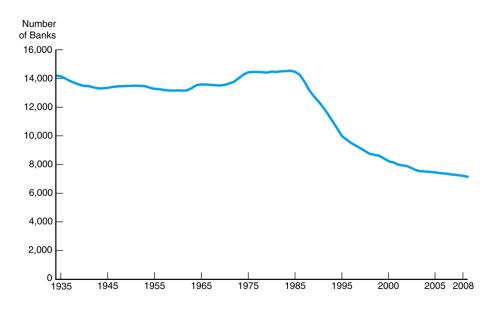
- Expand into new and riskier areas of lending
  - ◆ Commercial real estate loans
  - Leveraged buyouts and Corporate takeovers
- Pursue off-balance-sheet activities: Non-interest income



## Structure of the U.S. Commercial Banking Industry

#### **Branching Restriction**

- McFadden Act 1927 and state branching regulations prohibited branching across state lines and forced all national banks to conform to the branching regulations of the state in which they were located
- Bank holding companies and automated teller machines (ATMs) are responses to these regulations
- Bank Holding Co. Act 1956 defined a bank to be **taking deposits and making loans** (This leads to creation of non-bank banks which take deposits or make loans only. The loophole was closed by the Competitive Equality Banking Act of 1987)



Assets	Number of Banks	Share of Banks (%)	Share of Assets Held (%)	
Less than \$100 million	2,882	40.3	1.9	
\$100 million-\$1 billion	3,755	52.6	11.4	
\$1 billion-\$10 billion	425	6.0	12.8	
More than \$10 billion	84	1.2	73.9	
Total	7,146	100.00	100.00	
Source: www2.fdic.gov/qbp/2008sep/cb4.html.				

#### Bank Consolidation – see handouts for details

### Separation of the Banking and Other Financial Service Industries

- 1. Glass-Steagall Act of 1933
  - ◆ Prohibited commercial banks from underwriting corporate securities or engaging in brokerage activities (firewall)
  - ◆ In 1987 Fed used a loophole in Section 20 of the Act to allow affiliates of approved commercial banks to underwrite securities as long as the revenue did not exceed a specified amount. The firewall started to crumble.
- 2. Gramm-Leach-Bliley (GLB) Financial Services Modernization Act of 1999
  - ◆ Abolishes Glass-Steagall
  - ◆ States regulate insurance activities
  - ◆ SEC keeps oversight of securities activities
  - ◆ Office of the Comptroller of the Currency regulates bank subsidiaries engaged in securities underwriting
  - ◆ Federal Reserve oversees bank holding companies

#### **Other Types of Banking Firm Organizations**

- 1. Universal banking
  - ◆ Commercial banks provide banking, securities, real estate, and insurance services
  - ◆ Germany, Netherlands, Switzerland
- 2. British-style universal banking
  - ◆ May engage in security underwriting
  - ◆ UK, Canada, Australia
    - Separate legal subsidiaries are common
    - Bank equity holdings of firms are less common
    - Few combinations of banking and insurance firms
- 3. Legal separation of banking and other financial service industries
  - ◆ Allowed to hold substantial equity stakes in firms
  - ◆ Japan

Bank	Assets (U.S. \$ millions)
1. The Royal Bank of Scotland Group plc, UK	3,782,880.00
2. Deutsche Bank AG, Germany	2,953,727.00
3. BNP Paribas SA, France	2,477,272.00
4. Barclays PLC, UK	2,442,996.00
5. Credit Agricole SA, France	2,067,577.00
6. UBS AG, Switzerland	2,007,224.00
7. Societe Generale, France	1,566,904.00
8 ABN AMRO Holding NV, Netherlands	1,498,849.00
9. ING Bank NV, Netherlands	1,453,382.00
10. The Bank of Tokyo-Mitsubishi UFJ Ltd, Japan	1,362,598.00
Source: http://topforeignstocks.com/2008/07/25/the-top-10-banks-in-t	the-world-2008/.