Money and Banking
ECON3303

Lecture 12: Banking Industry: Structure and Competition

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Historical Development of the Banking System

• Bank of North America chartered in 1782
• Controversy over the chartering of banks.
• National Bank Act of 1863 creates a new banking system of federally chartered banks
  – Office of the Comptroller of the Currency
  – Dual banking system
• Federal Reserve System is created in 1913.
Figure 1. Time Line of the Early History of Commercial Banking in the United States

- Bank of North America is chartered.
- Bank of the United States is chartered.
- Bank of the United States' charter is allowed to lapse.
- Second Bank of the United States is chartered.
- Andrew Jackson vetoes rechartering of Second Bank of the United States; charter lapses in 1836.
- Federal Reserve Act of 1913 creates Federal Reserve System.
- Banking Act of 1933 (Glass-Steagall) creates Federal Deposit Insurance Corporation (FDIC) and separates banking and securities industries.
Primary Supervisory Responsibility of Bank Regulatory Agencies

• Federal Reserve and state banking authorities: state banks that are members of the Federal Reserve System.

• Fed also regulates bank holding companies.

• FDIC: insured state banks that are not Fed members.

• State banking authorities: state banks without FDIC insurance.
Financial Innovation and the Growth of the “Shadow Banking System”

• Financial innovation is driven by the desire to earn profits

• A change in the financial environment will stimulate a search by financial institutions for innovations that are likely to be profitable
  – Financial engineering
Responses to Changes in Demand Conditions: Interest Rate Volatility

• Adjustable-rate mortgages
  – Flexible interest rates keep profits high when rates rise
  – Lower initial interest rates make them attractive to home buyers

• Financial Derivatives
  – Ability to hedge interest rate risk
  – Payoffs are linked to previously issued (i.e. derived from) securities.
Responses to Changes in Supply Conditions: Information Technology

- Bank credit and debit cards
  - Improved computer technology lowers transaction costs
- Electronic banking
  - ATM, home banking, ABM and virtual banking
- Junk bonds
- Commercial paper market
Responses to Changes in Supply Conditions: Information Technology (cont’d)

• Securitization
  – To transform otherwise illiquid financial assets into marketable capital market securities.
  – Securitization played an especially prominent role in the development of the subprime mortgage market in the mid 2000s.
Avoidance of Existing Regulations: Loophole Mining

• Reserve requirements act as a tax on deposits

• Restrictions on interest paid on deposits led to disintermediation

• Money market mutual funds

• Sweep accounts
Financial Innovation and the Decline of Traditional Banking

- As a source of funds for borrowers, market share has fallen.
- Commercial banks’ share of total financial intermediary assets has fallen.
- No decline in overall profitability.
- Increase in income from off-balance-sheet activities.
Figure 2. Bank Share of Total Nonfinancial Borrowing, 1960–2011
Financial Innovation and the Decline of Traditional Banking (cont’d)

• Decline in cost advantages in acquiring funds (liabilities)
  – Rising inflation led to rise in interest rates and disintermediation
  – Low-cost source of funds, checkable deposits, declined in importance

• Decline in income advantages on uses of funds (assets)
  – Information technology has decreased need for banks to finance short-term credit needs or to issue loans
  – 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
  – Corporate takeovers and leveraged buyouts

• Pursue off-balance-sheet activities
  – Non-interest income
  – Concerns about risk
Structure of the U.S. Commercial Banking Industry

• Restrictions on branching
  – McFadden Act and state branching regulations.

• Response to ranching restrictions
  – Bank holding companies.
  – Automated teller machines.
Table 1. Size Distribution of Insured Commercial Banks, March 30, 2011

<table>
<thead>
<tr>
<th>Assets</th>
<th>Number of Banks</th>
<th>Share of Banks (%)</th>
<th>Share of Assets Held (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $100 million</td>
<td>2,328</td>
<td>35.7</td>
<td>1.9</td>
</tr>
<tr>
<td>$100 million–$1 billion</td>
<td>3,693</td>
<td>56.6</td>
<td>11.5</td>
</tr>
<tr>
<td>$1 billion–$10 billion</td>
<td>423</td>
<td>6.5</td>
<td>12.8</td>
</tr>
<tr>
<td>More than $10 billion</td>
<td>86</td>
<td>1.3</td>
<td>73.9</td>
</tr>
<tr>
<td>Total</td>
<td>6,530</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 2. Ten Largest U.S. Banks, December 30, 2010

<table>
<thead>
<tr>
<th>Bank</th>
<th>Assets ($ millions)</th>
<th>Share of All Commercial Bank Assets (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. J.P. Morgan Chase</td>
<td>1,723,460</td>
<td>15.14</td>
</tr>
<tr>
<td>2. Bank of America Corp.</td>
<td>1,451,387</td>
<td>13.75</td>
</tr>
<tr>
<td>3. Citibank</td>
<td>1,161,359</td>
<td>10.20</td>
</tr>
<tr>
<td>4. Wells Fargo</td>
<td>1,093,030</td>
<td>9.60</td>
</tr>
<tr>
<td>5. U.S. Bank</td>
<td>305,969</td>
<td>2.69</td>
</tr>
<tr>
<td>6. PNC</td>
<td>251,221</td>
<td>2.21</td>
</tr>
<tr>
<td>7. Bank of NY Mellon</td>
<td>200,249</td>
<td>1.70</td>
</tr>
<tr>
<td>8. HSBC USA</td>
<td>197,545</td>
<td>1.69</td>
</tr>
<tr>
<td>9. FIA Card Service</td>
<td>188,639</td>
<td>1.66</td>
</tr>
<tr>
<td>10. TD Bank</td>
<td>175,145</td>
<td>1.54</td>
</tr>
<tr>
<td>Total</td>
<td>6,743,005</td>
<td>59.25</td>
</tr>
</tbody>
</table>

Bank Consolidation and Nationwide Banking

• The number of banks has declined over the last 25 years
  – Bank failures and consolidation.
  – Economies of scale and scope from information technology.

• Results may be not only a smaller number of banks but a shift in assets to much larger banks.
Benefits and Costs of Bank Consolidation

• Benefits
  – Increased competition, driving inefficient banks out of business
  – Increased efficiency also from economies of scale and scope
  – Lower probability of bank failure from more diversified portfolios

• Costs
  – Elimination of community banks may lead to less lending to small business
  – Banks expanding into new areas may take increased risks and fail
Figure 3. Number of Insured Commercial Banks in the United States, 1934–2010
Separation of the Banking and Other Financial Service Industries

• Erosion of Glass-Steagall Act
  – Prohibited commercial banks from underwriting corporate securities or engaging in brokerage activities
  – Section 20 loophole was allowed by the Federal Reserve enabling affiliates of approved commercial banks to underwrite securities as long as the revenue did not exceed a specified amount
  – U.S. Supreme Court validated the Fed’s action in 1988
Separation of the Banking and Other Financial Service Industries (cont’d)

• Gramm-Leach-Bliley 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
Separation of Banking and Other Financial Services Industries Throughout the World

• Universal banking
  – No separation between banking and securities industries

• British-style universal banking
  – May engage in security underwriting
    • Separate legal subsidiaries are common
    • Bank equity holdings of commercial firms are less common
    • Few combinations of banking and insurance firms
Separation of Banking and Other Financial Services Industries Throughout the World (cont’d)

• Some legal separation
  – Allowed to hold substantial equity stakes in commercial firms but holding companies are illegal
Thrift Industry: Regulation and Structure

- **Savings and Loan Associations**
  - Chartered by the federal government or by states
  - Most are members of Federal Home Loan Bank System (FHLBS)
  - Deposit insurance provided by Savings Association Insurance Fund (SAIF), part of FDIC
  - Regulated by the Office of Thrift Supervision

- **Mutual Savings Banks**
  - Approximately half are chartered by states
  - Regulated by state in which they are located
  - Deposit insurance provided by FDIC or state insurance
Thrift Industry: Regulation and Structure (cont’d)

• Credit Unions
  – Tax-exempt
  – Chartered by federal government or by states
  – Regulated by the National Credit Union Administration (NCUA)
  – Deposit insurance provided by National Credit Union Share Insurance Fund (NCUSIF)
International Banking

• Rapid growth
  – Growth in international trade and multinational corporations
  – Global investment banking is very profitable
  – Ability to tap into the Eurodollar market
Eurodollar Market

• Dollar-denominated deposits held in banks outside of the U.S.
• Most widely used currency in international trade
• Offshore deposits not subject to regulations
• Important source of funds for U.S. banks
Structure of U.S. Banking Overseas

- Shell operation
- Edge Act corporation
- International banking facilities (IBFs)
  - Not subject to regulation and taxes
  - May not make loans to domestic residents
Foreign Banks in the U.S.

• Agency office of the foreign bank
  – Can lend and transfer fund in the U.S.
  – Cannot accept deposits from domestic residents
  – Not subject to regulations

• Subsidiary U.S. bank
  – Subject to U.S. regulations
  – Owned by a foreign bank
Foreign Banks in the U.S. (cont’d)

- Branch of a foreign bank
  - May open branches only in state designated as home state or in state that allow entry of out-of-state banks
  - Limited-service may be allowed in any other state

- Subject to the International Banking Act of 1978

- Basel Accord (1988)
  - Example of international coordination of bank regulation
  - Sets minimum capital requirements for banks
Table 3. Ten Largest Banks in the World, 2011

<table>
<thead>
<tr>
<th>Bank</th>
<th>Assets (U.S. $ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. BNP Paribas SA, France</td>
<td>2,675,627</td>
</tr>
<tr>
<td>2. Deutsche Bank AG, Germany</td>
<td>2,551,727</td>
</tr>
<tr>
<td>3. Barclays PLC, UK</td>
<td>2,326,004</td>
</tr>
<tr>
<td>4. Credit Agricole SA, France</td>
<td>2,133,810</td>
</tr>
<tr>
<td>5. Industrial and Commercial Bank of China, China</td>
<td>2,043,861</td>
</tr>
<tr>
<td>6. The Royal Bank of Scotland Group PLC, UK</td>
<td>2,020,790</td>
</tr>
<tr>
<td>7. The Bank of Tokyo-Mitsubishi UFJ Ltd, Japan</td>
<td>1,644,768</td>
</tr>
<tr>
<td>8. China Construction Bank Corp, China</td>
<td>1,641,683</td>
</tr>
<tr>
<td>9. JP Morgan-Chase NA, US</td>
<td>1,621,621</td>
</tr>
<tr>
<td>10. Bank Santander, Spain</td>
<td>1,590,560</td>
</tr>
</tbody>
</table>