Too Big Too Fail (TBTF)
The Center for Latin American Issues at the George Washington University
Bond Rating Agencies

**Moody’s (1, 2, 3)**

- **Aaa**: Best Quality
- **Aa**: High Quality
- **A**: Upper Medium
- **Baa**: Medium Grade
- **Ba**: Speculative Elements
- **B**: Lack Desirable Investment Quality
- **C**: Extremely Poor Prospects; May be in Default

**S&P (+, -)**

- **AAA**: Extremely Strong Capacity
- **AA**: Very Strong Capacity
- **A**: Strong Capacity
- **BBB**: Adequate Capacity
- **BB**: Uncertainties Could Lead to Default
- **B**: Vulnerable
- **D**: In Default
Studies of Bank Bond Ratings

- Higher Grade
  - High Capital
  - High ROA
  - Low Earnings Variability
  - Large Companies
  - Low Risk Portfolio
  - Capable Management
Why is Size Useful?

- TBTF Protection
- Achieve Economies of Scale
- Obtain Diversification by Product and Location
- Retain Better Management
- Implement Superior Risk Management
Recent “Failures”

- AIG
- Bank United
- Bear Stearns
- Chrysler
- Citibank
- Downey
- Fannie & Freddie
- GM (US Auto) & GMAC
- Indy Mac
- Lehman Brothers
- WAMU
- Wachovia
- Who is next this Friday?
Resultant Governmental Actions

• US Treasury invests in low-cost preferred stock (US $250 billion)
• FDIC raises deposit insurance limit and guarantees bank debt (US $400 billion)
• Federal Reserve provides long-term loans and purchases securities (US $2 trillion)
Integrative Analysis
Too Much Debt!

**Economic Value Creation**
Good: Return on Equity > Cost of Equity
Bad: Cost of Equity > Return on Equity

**Cost of Equity**
Varies between 8% and 20% for most firms

\[
\text{ROE} = \text{Leverage Multiplier} \times \text{ROA}
\]
\[
\text{Net Income} \div \text{Equity} = \text{Asset} \div \text{Equity} \times \text{Net Income} \div \text{Assets}
\]

\[
\text{ROA} = \text{Turnover} \times \text{Net Profit Margin}
\]
\[
\text{NI} \div \text{Asset} = \text{Revenue} \div \text{Asset} \times \text{Net Income} \div \text{Revenue}
\]
Risk, Leverage and Liquidity
Too Much Short term Debt!

- High-grade Firms
  - Less Debt Financing
  - Stable and High Cash Flow
  - Borrow Short-term Debt to Avoid Liquidity Premium in Yield Curve

- Low-grade Firms
  - More Debt Financing
  - Unstable Cash Flow
  - Borrow Long-term to Avoid Liquidity Crisis
“Ignored the Five C’s of Credit”

- **Loan Purpose Analysis**
  - Amount, Use and Term of Request?
  - **Character** of Debtor is Key

- **Loan Repayment Analysis**
  - Sources of Repayment?
  - **Capacity and Capital** Important

- **Loan Structure Analysis**
  - Pricing, Collateral and Conditions?
  - **Structure** is Function of Risk

- **Loan Monitoring Analysis**
  - Timely Payment and Conditions Satisfied?
  - **Systems and Review** Critical
Empirical Analysis of Recent U.S. Bank Failures

• Leading Causes
  – High problem loans to capital and ALLL
  – Large losses
    • High provision
    • Losses on securities
  – High non current loans
  – Portfolio concentration in high risk ADC loans
  – Low capital
  – High non core funding

• Other Factors
  – Quick growth followed by shrinkage
  – Large Dividends and Repurchase Programs
  – High yield assets
Housing Crisis Culprits

- Central bank
- Unregulated mortgage brokers
- Bank risk managers
- Bank management and board of directors
- Credit rating agencies
- Bank regulators
- Investors seeking high yield without recognition of risk
- Federal government efforts to support affordable housing
Regulatory Implications

- Strict loan underwriting
- Tighter supervision and regulatory sanctions
- Higher FDIC insurance
- Higher capital requirements
  - Counter-cyclical capital rules
  - Mandatory conversion of Tier II capital to equity
- More attention to liquidity and concentration
- Evaluation of TBTF and scope of permissible activities
- Congressional confusion about future regulatory structure