Competition in the Financial Sector: Challenges for Regulation

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10 Key Issues for Policy Makers

- Do differences in the size and composition of financial sectors necessitate different regulatory regimes?
- Every country regulates banks, but what is a bank?
- How concentrated is the banking industry, and how complex are banks?
- How globalized are big banks, and what is a country’s regulatory posture toward foreign entry?
- What is the current structure of regulation?
- Should supervision be on the banks of separate industries or products/services?
- How much/what kind of activity is unregulated or lightly regulated?
- How can regulation avoid stifling innovation and competition but still promote safety and soundness?
- What characteristics of financial sectors promote effective market discipline (adequate disclosure, transparency, reliable outside rating agencies, other)?
- What other goals are there/should there be for regulation (competition, consumer protection, other)?
Do differences in the size and composition of financial sectors necessitate different regulatory regimes?
### G-20: Comparative Information on Population, GDP, Size and Composition of the Financial Sector

<table>
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<tr>
<th>Country</th>
<th>Population</th>
<th>GDP</th>
<th>Bank Assets (BA)</th>
<th>Equity Market Capitalization (MC)</th>
<th>Bonds Outstanding (BO)</th>
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<th>MC / GDP</th>
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G-20: Bank Assets + Equity Market Capitalization + Bonds Outstanding / GDP

Ratio

United Kingdom 7.2
Japan 5.4
France 4.6
United States 4.6
Germany 4.2
Australia 4.2
Italy 3.8
Canada 3.7
South Korea 3.6
China 3.5
South Africa 3.4
Argentina 3.0
Brazil 2.7
Saudi Arabia 2.1
India 2.0
Mexico 1.6
Russia 1.4
Turkey 1.4
Indonesia 1.2
Ratio of Bank Assets to GDP

- 22% (Country A)
- 112% (Country B)
- 202% (Country C)
G-20: Equity Market Capitalization / GDP

Ratio

Argentina 2.2
South Africa
India 1.6
Australia
United Kingdom
Saudi Arabia
China
United States
South Korea
Canada
Japan
France
Brazil
Russia
Germany
Italy
Indonesia
Mexico
Turkey

Argentina 2.2
South Africa
India 1.6
Australia
United Kingdom
Saudi Arabia
China
United States
South Korea
Canada
Japan
France
Brazil
Russia
Germany
Italy
Indonesia
Mexico
Turkey
G-20: Bonds Outstanding / GDP
Key Issue Number One

Do differences in the size and composition of financial sectors necessitate different regulatory regimes?

Observation

Bigger and more balanced financial sectors promote economic growth and development.

Regulatory Challenge

Design a regulatory regime that promotes such a financial sector to enable a country to better compete in global financial markets.
Every country regulates banks, but what is a bank?
## What Is a Bank?

### Bank/Non-Bank Ownership Restrictions

<table>
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<th>Ownership Status</th>
<th>Banks</th>
<th>Non-financial Firms</th>
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**Can banks own voting shares in non-financial firms?**

- **Prohibited:** 10
- **Restricted:** 68
- **Permitted:** 47
- **Unrestricted:** 15

**Can non-financial firms own voting shares in commercial banks?**

- **Prohibited:** 10
- **Restricted:** 72
- **Permitted:** 42
- **Unrestricted:** 16
### Are Financial/Non-Financial Conglomerates Permitted?

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<tr>
<th>Country</th>
<th>Can banks own voting shares in non-financial firms?</th>
<th>Are limits placed on ownership of non-financial firms by banks?</th>
<th>Can non-bank financial firms own any voting shares in commercial banks?</th>
<th>Are limits placed on ownership of banks by non-bank financial firms?</th>
<th>Can non-financial firms own voting shares in commercial banks?</th>
<th>Are limits placed on ownership of banks by non-financial firms, such as maximum percentage of a commercial bank's capital or shares?</th>
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What Is a Bank?
Scope of Activity Restrictions

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G-20: Government Ownership of Banks

Percent

India 74
China 69
Brazil 45
Argentina 42
Germany 40
Russia 39
Indonesia 38
Turkey 32
Saudi Arabia 20
South Korea 19
World 15
Italy 9.3
France 0.3
Australia
Canada
South Africa
U.S.
Japan
Mexico
U.K.
Government-Owned Banks’ Share of Total Bank Assets

74 Percent

69 Percent
G-20: Percentage of Banking System’s Assets Funded with Deposits

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<td>Turkey</td>
<td>69</td>
</tr>
<tr>
<td>United States</td>
<td>68</td>
</tr>
<tr>
<td>Mexico</td>
<td>67</td>
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<tr>
<td>Canada</td>
<td>67</td>
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<tr>
<td>South Korea</td>
<td>66</td>
</tr>
<tr>
<td>Indonesia</td>
<td>65</td>
</tr>
<tr>
<td>Argentina</td>
<td>62</td>
</tr>
<tr>
<td>Italy</td>
<td>58</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>56</td>
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<tr>
<td>Brazil</td>
<td>44</td>
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<tr>
<td>Australia</td>
<td>41</td>
</tr>
<tr>
<td>Russia</td>
<td>39</td>
</tr>
<tr>
<td>France</td>
<td>19</td>
</tr>
</tbody>
</table>
Percent of the Commercial Banking System’s Assets Funded with Insured Deposits

61 countries with no assets funded with insured deposits:

Angola, Anguilla, Antigua and Barbuda, Australia, Belize, Benin, Bhutan, Bolivia, Botswana, British Virgin Islands, Burkina Faso, Burundi, Cameroon, Cayman Islands, Central African Republic, Chad, China, Congo, Cook Islands, Costa Rica, Cote d'Ivoire, Dominica, Dominican Republic, Equatorial Guinea, Ethiopia, Fiji, Gabon, Ghana, Grenada, Guernsey, Guinea Bissau, Guyana, Jersey, Kosovo, Kuwait, Kyrgyz Republic, Lesotho, Macau, China, Malawi, Maldives, Mali, Mauritius, Montserrat, Mozambique, New Zealand, Niger, Pakistan, Panama, Papua New Guinea, Senegal, Seychelles, South Africa, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Syria, Thailand, Togo, Vanuatu.

Note: No information for India.
Key Issue Number Two
Every country regulates banks, but what is a bank?

Observation
Ownership and activity restrictions on banks limit competition between banks and nonbank financial service firms and differences across countries affect the ability of banks to compete internationally. This, government ownership of banks, and generous deposit insurance have been shown to produce negative outcomes.

Regulatory Challenge
Decide on what a bank should be based on competitive factors but also taking into account prudential matters.
How concentrated is the banking industry, and how complex are banks?
G-20: Percent of Deposits and Assets Held by Five Largest Banks

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent of Deposits</th>
<th>Percent of Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>89%</td>
<td>87%</td>
</tr>
<tr>
<td>Canada</td>
<td>84%</td>
<td>80%</td>
</tr>
<tr>
<td>Mexico</td>
<td>77%</td>
<td>72%</td>
</tr>
<tr>
<td>Australia</td>
<td>74%</td>
<td>73%</td>
</tr>
<tr>
<td>Germany</td>
<td>69%</td>
<td>67%</td>
</tr>
<tr>
<td>China</td>
<td>69%</td>
<td>68%</td>
</tr>
<tr>
<td>South Korea</td>
<td>66%</td>
<td>65%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>58%</td>
<td>57%</td>
</tr>
<tr>
<td>France</td>
<td>56%</td>
<td>55%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>54%</td>
<td>53%</td>
</tr>
<tr>
<td>Turkey</td>
<td>58%</td>
<td>56%</td>
</tr>
<tr>
<td>Argentina</td>
<td>58%</td>
<td>57%</td>
</tr>
<tr>
<td>Russia</td>
<td>58%</td>
<td>55%</td>
</tr>
<tr>
<td>Italy</td>
<td>50%</td>
<td>51%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>Japan</td>
<td>40%</td>
<td>39%</td>
</tr>
<tr>
<td>India</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>United States</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>Brazil</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>France</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Big Banks Increasingly Dominate Banking Industry: Asset Shares by Bank Size

Is Competition Lessened or SMEs Underserved?

1984
- Number: 14,484 Banks
- Assets: $2,508 Billion

- Greater than $10 Billion: 42%
- $1 Billion to $10 Billion: 30%
- Less than $100 Million to $1 Billion: 20%
- Less than $100 Million: 8%

2008 Q2
- Number: 7,203 Banks
- Assets: $11,426 Billion

- Greater than $10 Billion: 80%
- $1 Billion to $10 Billion: 10%
- Less than $100 Million to $1 Billion: 9%
- Less than $100 Million: 1%

(84 banks or 1.2% of total number)
Organizational Complexity Is Regulatory Challenge
(Citigroup Hierarchical Organization)

Citigroup Inc.
(The FHC)
Assets: $2,188 billion

Wholly Owned Subsidiaries: 2,247
Majority Owned: 34

Citibank NA (Las Vegas)
Assets: $1,252 billion

Wholly Owned Subsidiaries: 115
Majority Owned: 30

Citibank Spain
Assets: $3.9 billion
Of which Citibank NA owned more than 50% and the rest of ownership is held by other subsidiaries of Citigroup

Note: Citigroup has 200 million customer accounts and does business in more than 100 countries, with 44% of its employees in the U.S. and 56% of its income earned in the U.S. Its credit commitments totaled $1,631 billion in 2007.
Product Complexity Is a Growing Challenge

Citigroup Segments and Products

**Global Consumer Group**
- U.S.
  - **Cards**
    - MasterCard, VISA, Diners Club, private label and Amex
  - **Consumer Lending**
    - Real estate lending
    - Student loans
    - Auto loans
  - **Retail Distribution**
    - Citibank branches
    - CitiFinancial branches
    - Primerica Financial Services
- **Commercial Business**
  - Small and middle-market commercial banking

**International**
- **Cards**
  - MasterCard, VISA, Diners Club, and private label
- **Consumer Finance**
  - Real estate lending
  - Student loans
  - Auto loans
- **Retail Banking**
  - Retail bank branches
  - Small and middle-market commercial banking
  - Investment services
  - Retirement services
  - Real estate lending
  - Personal loans
  - Sales finance

**Corporate and Investment Banking**
- **Capital Markets and Banking**
  - Investment banking
  - Debt and equity markets
  - Lending
- **Transaction Services**
  - Cash management
  - Trade services
  - Custody and fund services
  - Clearing services
  - Agency/trust services

**Global Wealth Management**
- **Smith Barney**
  - Advisory
  - Financial planning
  - Brokerage
- **Private Bank**
  - Wealth management services

**Alternative Investments**
- Private equity
- Hedge funds
- Real estate
- Structured products
- Managed futures

**Corporate/other**
- Treasury
- Operations and technology
- Corporate expenses
- Discontinued operations
What Organizational Form Is Best for Broader Range of Activities? *Permissible Activities: Pre-GLBA*

**Bank Holding Company**

- **National Bank**
  - Bank-eligible securities only
  - Very limited insurance activities

- **Section 20 Subsidiary**
  - All securities activities
  - Bank-ineligible securities limited to 25% of total revenue

- **Other Affiliate**
  - Financial activities “closely related to banking” only

- **Traditional Subsidiary**
  - Financial activities of bank only

- **Op-Sub**
  - Financial activities “incidental to banking”
  - Municipal revenue bonds
  - Potentially, securities and insurance activities
What Organizational Form is Best for Broader Range of Activities?

Permissible Activities: Post-GLBA

Financial Holding Company

Securities Firm
- All securities activities
- No revenue limitation

Insurance Company
- All insurance activities

Merchant Bank
- All merchant banking activities

Other Affiliate
- "Complementary" financial activities

National Bank
- Bank-eligible securities only
- Very limited insurance activities

Traditional Subsidiary or Op-Sub
- Financial activities of bank only

Financial Subsidiary
- All financial activities, except insurance underwriting, insurance company portfolio investments, real estate investment and development, and merchant banking
Some Regulatory Exceptions Pose Challenges

**U.S. Industrial Loan Companies**

- Mixing of banking and commerce are prohibited, but state-chartered Industrial Loan Companies (ILCs) may be owned and operated by firms engaged in commercial activities.
- Parent companies that operate ILCs include Merrill Lynch, American Express, Morgan Stanley, BMW group, Goldman Sachs, General Electric, Toyota, Target Corporation and Volkswagen.
- Total assets of 58 FDIC-insured ILCs totaled $213 billion at the end of 2006.
- Wal-Mart and Home Depot tried to acquire an existing ILC.
- The FDIC placed a moratorium until January 2008 on commercial firms opening or acquiring insured ILCs.
Key Issue Number Three
How concentrated is the banking industry, and how complex are banks?

Observation
Competition in banking differs across countries and banks in countries like the United States are becoming bigger and more complex in terms of organizational form and mix of products. In some cases, exceptions allow unique organization forms.

Regulatory Challenge
Decide on an appropriate measure of concentration for accessing competition for banks with different organizational forms and different product mixes, taking into account contestability issues.
How globalized are big banks, and what is a country’s regulatory posture toward foreign entry?
G-20: Foreign Ownership of Banks

Percent

Mexico 80
South Korea 56
Indonesia 54
South Africa 40
Argentina 30
Brazil 26
France 20
Australia 16
Italy 15
United States 11
Russia 9
Canada 8
India 7
Germany 7
Japan 7
China 6
Saudi Arabia 2
Turkey n/a

Percent n/a
Foreign-Owned Banks’ Share of Total Bank Assets

11 Percent

80 Percent
G-20: Percent of Commercial Banking Assets and Liabilities that Are Foreign Currency-Denominated

Percent

<table>
<thead>
<tr>
<th>Country</th>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.K.</td>
<td>56</td>
<td>46</td>
</tr>
<tr>
<td>Turkey</td>
<td>35</td>
<td>38</td>
</tr>
<tr>
<td>Canada</td>
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<td>23</td>
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<tr>
<td>Russia</td>
<td>24</td>
<td>18</td>
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<tr>
<td>France</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Indonesia</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Mexico</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Argentina</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Brazil</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>South Africa</td>
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<td>3</td>
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<tr>
<td>South Korea</td>
<td>7</td>
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<td>Australia</td>
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<tr>
<td>China</td>
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<tr>
<td>Germany</td>
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<tr>
<td>Japan</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>India</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>U.S.</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
## Globalization of Big Banks

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>Nov. 14, 2008 Market Capitalization (US$ Billions)</th>
<th>Total Assets (US$ Billions)</th>
<th>Assets Outside Home Country (%)</th>
<th>Income Outside Home Country (%)</th>
<th>Staff Outside Home Country (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial and Commercial Bank of China, China</td>
<td>191</td>
<td>1,190</td>
<td>3</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>HSBC Holdings plc, United Kingdom</td>
<td>129</td>
<td>2,354</td>
<td>55</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>JPMorgan Chase &amp; Co., United States</td>
<td>129</td>
<td>1,562</td>
<td>62</td>
<td>25</td>
<td>N.A.</td>
</tr>
<tr>
<td>China Construction Bank Corporation, China</td>
<td>126</td>
<td>904</td>
<td>2</td>
<td>1</td>
<td>N.A.</td>
</tr>
<tr>
<td>Bank of China, China</td>
<td>109</td>
<td>821</td>
<td>4</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Wells Fargo &amp; Company , United States</td>
<td>109</td>
<td>575</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Bank of America Corporation, United States</td>
<td>82</td>
<td>1,716</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Mitsubishi UFJ Financial Group Inc., Japan</td>
<td>67</td>
<td>1,933</td>
<td>23</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>Banco Santander, S.A., Spain</td>
<td>66</td>
<td>1,331</td>
<td>64</td>
<td>75</td>
<td>77</td>
</tr>
<tr>
<td>Citigroup Inc. , United States</td>
<td>52</td>
<td>2,188</td>
<td>38</td>
<td>43</td>
<td>54</td>
</tr>
</tbody>
</table>

Same or similar aspects of bank entry and permissible activities from both WB and WTO data; 123 countries.

Can we compare “WTO Commitments” and WB “Reported Practices” country-by-country across nine dimensions of banking system assets, restrictions on forms of bank entry, permissible banking activities.

Also possible to construct an index of openness and an index of discrimination: assign values to particular responses for each component, then weight each of the nine components.

- Openness index values range from 0 (very open) to 100 (very closed).
- Discrimination index values range from 0 (no discrimination) to 60 (maximal discrimination).
G-20: Market Openness to Foreign Banks
WTO Commitments Index Value

Index - lower values indicate more openness

- India: 59
- Mexico: 42
- Canada: 34
- Australia: 32
- United States: 30
- Turkey: 30
- Argentina: 20
- South Korea: 20
- Japan: 15
- France: 15
- Saudi Arabia: 10
- United Kingdom: 10
- Italy: 10
- Germany: 10
- South Africa: 10
- Russia: 5
- Indonesia: n/a
- China: n/a
<table>
<thead>
<tr>
<th>Country</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>47</td>
</tr>
<tr>
<td>Mexico</td>
<td>22</td>
</tr>
<tr>
<td>Brazil</td>
<td>12</td>
</tr>
<tr>
<td>Canada</td>
<td>12</td>
</tr>
<tr>
<td>United States</td>
<td>10</td>
</tr>
<tr>
<td>Turkey</td>
<td>5</td>
</tr>
<tr>
<td>Australia</td>
<td>5</td>
</tr>
<tr>
<td>South Korea</td>
<td>5</td>
</tr>
<tr>
<td>Japan</td>
<td>5</td>
</tr>
<tr>
<td>France</td>
<td>5</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>5</td>
</tr>
<tr>
<td>Italy</td>
<td>5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0</td>
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<tr>
<td>Germany</td>
<td>0</td>
</tr>
<tr>
<td>Argentina</td>
<td>0</td>
</tr>
<tr>
<td>Russia</td>
<td>n/a</td>
</tr>
<tr>
<td>Indonesia</td>
<td>n/a</td>
</tr>
<tr>
<td>China</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Index - higher values indicate greater discrimination against foreign-owned banks.
What Do the World Bank and WTO Data Tell Us About Restrictions on Foreign Bank Entry?

- Developing countries are more restrictive under WTO than developed countries. Developing countries less open to foreign entry than developed countries —
- But they are MORE open in practice than their WTO commitments indicate.
- AND developed countries are LESS open in practice than their WTO commitments indicate.
World Bank Survey: Restrictions on Entry

**Foreign**

*Limitations on foreign entry/ownership*

*% of entry applications denied (foreign & domestic)*

**Domestic**

*Summary indicator of rules to obtain a license*

*Draft by-laws, organizational chart, financial projections, financial background information on major owners, background of directors/managers, sources of capital etc.*

<table>
<thead>
<tr>
<th></th>
<th>Limitations on Foreign Bank Entry/Ownership</th>
<th>Domestic Denials</th>
<th>Foreign Denials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>0</td>
<td>50.0</td>
<td>0</td>
</tr>
<tr>
<td>Australia</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Brazil</td>
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</tr>
<tr>
<td>Canada</td>
<td>0</td>
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</tr>
<tr>
<td>China</td>
<td>0</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>France</td>
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</tr>
<tr>
<td>India</td>
<td>0</td>
<td>80.0</td>
<td>42.9</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0</td>
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<td>Russia</td>
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<td>0</td>
</tr>
<tr>
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<td>n/a</td>
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<tr>
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<td>3.0</td>
<td>71.4</td>
<td>41.7</td>
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<td>n/a</td>
</tr>
<tr>
<td>United States</td>
<td>0</td>
<td>n/a</td>
<td>0</td>
</tr>
</tbody>
</table>
Key Issue Number Four
How globalized are big banks, and what is a country’s regulatory posture toward foreign entry?

Observation
Foreign ownership of banks differs significantly across countries, highly-valued banks are operating globally, and WTO commitments regarding foreign entry may not tell the whole story. Evidence shows foreign entry produces good outcomes.

Regulatory Challenge
Reduce barriers to foreign and domestic entry, subject to only real prudential concerns.
What is the current structure of regulation?
### Who Supervises Banks, And How Many Licenses Are Required?

<table>
<thead>
<tr>
<th>Central Bank</th>
<th>What body/agency supervises banks?</th>
<th>Is there a single financial supervisory agency for all of the main financial institutions (insurance companies, contractual savings institutions, savings banks)?</th>
<th>Is there a single financial supervisory agency for all of the activities in which commercial banks are allowed to do business?</th>
<th>Is there more than one body/agency that grants licenses to banks?</th>
<th>Is more than one license required (e.g., one for each banking activity, such as commercial banking, securities operations, insurance, etc.)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Australia</td>
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<td>No</td>
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<td>Brazil</td>
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<td>Canada</td>
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<td>Yes</td>
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<td>No</td>
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<tr>
<td>China</td>
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<td>France</td>
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<td>Yes</td>
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<tr>
<td>Germany</td>
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<td>No</td>
<td>Yes</td>
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<td>India</td>
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<tr>
<td>Italy</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Japan</td>
<td>No</td>
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<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Mexico</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<td>All countries</td>
<td>82 Yes, 58 No</td>
<td>68 Yes, 72 No</td>
<td>9 Yes, 131 No</td>
<td>44 Yes, 96 No</td>
<td>84 Yes, 52 No</td>
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</table>
Is the Central Bank a Supervisory Authority?

Yes 59%
No 41%
Who Funds Supervision in Countries?

- Banks: 20%
- Government: 31%
- Both: 12%
- Not Available: 34%
The U.S. Regulatory Regime: Multiple, Overlapping, Inconsistent and Costly Regulation

Justice Department
• Assesses effects of mergers and acquisitions on competition

Financial, bank and thrift holding companies
• Fed
• OTS

Fannie Mae, Freddie Mac, and Federal Home Loan Banks
• Federal Housing Finance Agency

Fed is the umbrella or consolidated regulator

National banks
• OCC
• FDIC

State commercial and savings banks
• State bank regulators
• FDIC
• Fed—state member commercial banks

Federal savings banks
• OTS
• FDIC

Insurance companies
• 50 State insurance regulators plus District of Columbia and Puerto Rico

Securities brokers/dealers
• FINRA
• SEC
• CFTC
• State securities regulators

Other financial companies, including mortgage companies and brokers
• Fed
• State licensing (if needed)
• U.S. Treasury for some products

Notes:
• Justice Department: Assesses effects of mergers and acquisitions on competition
• Federal Courts: Ultimate decider of banking, securities, and insurance products
• CFTC: Commodity Futures Trading Commission
• FDIC: Federal Deposit Insurance Corporation
• Fed: Federal Reserve
• FINRA: Financial Industry Regulatory Authority
• GSEs: Government Sponsored Enterprises
• OCC: Comptroller of the Currency
• OTS: Office of Thrift Supervision
• SEC: Securities and Exchange Commission
Key Issue Number Five
What is the current structure of regulation?

Observation
Regulatory structures differ substantially, from one to multiple regulators, with the central bank a regulator in some countries but no others. There is no evidence regarding which structure is best.

Regulatory Challenge
Reduce barriers to foreign and domestic entry, subject to only real prudential concerns.
Should supervision be on the basis of separate industries or products/services?
Wide Diversity in Types of U.S. Financial Services Firms

1980, Total = $4.7 Trillion
- Depositories: 49%
- Mutual funds: 3%
- Pension funds: 17%
- GSEs: 7%
- Broker-dealers: 6%
- Insurers: 14%
- ABS pools: <1%
- Hedge funds: <1%
- Other: 4%

2008 Q2, Total = $61.0 Trillion
- Depositories: 23%
- Mutual funds: 18%
- Pension funds: 16%
- GSEs: 6%
- Broker-dealers: 5%
- Insurers: 10%
- ABS pools: 15%
- Hedge funds: 3%
- Other: 4%
Financial Services Firms Compete by Offering Equivalent Products

- Banking vs. Insurance
  - Time deposits vs. fixed annuities
  - Letters of credit vs. surety bonds
- Securities vs. Banking
  - Money market funds vs. demand deposits
  - Medium-term notes and commercial paper vs. commercial loans
- Insurance vs. Securities
  - Variable annuities vs. equity mutual funds
  - Reinsurance vs. catastrophe bonds
Innovative Hybrid Products

- Variable-rate CDs: interest rate tied to a specified market index (e.g., S&P 500)
- Security futures
- Home mortgages with “debt cancellation”
- Synthetic collateralized loan obligations
Innovative Un- or Under-Regulated Products

- Over-the-counter derivatives
- Hedge funds
- Stored value cards
- Subprime home mortgages
- Financial guarantees
Over-the-Counter Derivatives

- Banks, insurance companies and securities firms all issue standardized OTC derivative products.
- Derivatives compete with a wide array of regulated banking, insurance and securities products.
- Derivatives are embedded in hybrid products.
- The "on-balance sheet/off-balance sheet" dividing line for regulation is a concern.
Stored Value Cards

- Any type of company can issue stored value cards.
- Originally intended as replacements for paper gift certificates, they have taken on many uses.
- Technology enables credit, debit and stored value accounts on a single chip.
Key Issue Number Six
Should supervision be on the basis of separate industries or products/services?

Observation
There are a variety of financial services firms, offering a diversity of products, some of which are equivalent, others are hybrid products, and the regulatory treatment of both firms and products is uneven. This contributes to competition and innovation.

Regulatory Challenge
Provide more equal treatment of both firms and products to promote a level playing field.
How much/what kind of activity is unregulated or lightly regulated?
Federal Reserve Vice Chairman Donald Kohn notes that “Market Intermediated finance also requires us to live with less control and less knowledge that we had when banks were dominant. Greater uncertainty about where risk is lodged is the flip side of better dispersion of those risks, especially to less regulated sectors, and of more resilience of the whole system.”

(May 16, 2007)
Increasing Reliance on U.S. Securities Markets for Capital Funding and Portfolio Investment: Complements but Also Competes with Traditional Bank Loans and Deposits

Equity market capitalization and bond outstanding

Assets of depository institutions
Surge in Amount and Diversity of U.S. Asset-Backed Securities Outstanding

Securitization Promotes Credit Intermediation Conducted in Capital Markets Rather than Through Banks

<table>
<thead>
<tr>
<th>Year</th>
<th>US$ Trillions</th>
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<td>1999</td>
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<tr>
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<td>2006</td>
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<td>2007</td>
<td>6.8</td>
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<tr>
<td>Q2 2008</td>
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</tbody>
</table>

- **Private-label-backed mortgage pools**
- **Agency- and GSE-backed mortgage pools**
- **Credit card**
- **Home equity**
- **Student loans**
- **Other**
U.S. Asset-Backed Securities Outstanding

1999, Total = $4.2 Trillion

- Private-Label-Backed Mortgage Pools: 9%
- Student Loans: 1%
- Home Equity: 3%
- Credit Card: 6%
- Automobile: 3%
- Others: 8%
- Agency- and GSE-Backed Mortgage Pools: 70%

2008 Q2, Total = $10.1 Trillion

- Private-Label-Backed Mortgage Pools: 13%
- Student Loans: 3%
- Home Equity: 6%
- Credit Card: 4%
- Automobile: 2%
- Others: 11%
- Agency- and GSE-Backed Mortgage Pools: 61%
Shares of Consumer Credit: Banks Compared to Pools of Securitized Consumer Assets

Percent


Banks

Securitized Assets
The Growth in Mortgage-Backed Securities Has Contributed to the Rise of Structured Finance Collateral in Collateralized Debt Obligations

Quarterly CDO Issuance in the United States

US$ Billions

- All Other
- Structured Finance
Monoline Insurers
Financial Guarantees of Securities Increase, but
What Happens if They Cannot be Honored?

Net Par Outstanding = $3.5 Trillion
December 2006

Structured Finance, $2.2 Trillion, 62%

Public Finance, $1.3 Trillion, 38%

- Mortgage-Backed Securities: U.S. 45%
- Other Asset-Backed Securities: U.S. 11%
- Mortgage-Backed Securities: International 19%
- Utility Revenue 6%
- Other 6%

- General Obligation 34%
- Tax-Backed Revenue 28%
- Transportation Revenue 8%
- Other 15%
A Regulatory Challenge as Commercial Bank Derivatives Explode

December 2003
Total = $70.1 Trillion
Credit Derivatives = $1.0 Trillion

- Futures and Forward Contracts: 16%
- Option Contracts: 21%
- Swaps: 63%

June 2008
Total = $166.7 Trillion
Credit Derivatives = $15.5 Trillion

- Futures and Forward Contracts: 14%
- Option Contracts: 17%
- Swaps: 69%
Are the Concentration and Composition of Commercial Bank Derivatives a Concern?

**Concentration of Commercial Bank Derivatives**
- **September 30, 2007**
  - Seven Largest Participants: $155.4 Trillion (98%)
  - All Other Participants (929 Banks): $155.4 Trillion (2%)

**Composition of Commercial Bank Derivatives**
- **June 30, 2008**
  - Foreign Exchange Contracts, $18.3 Trillion (10%)
  - Equity Derivative Contracts, $2.3 Trillion (2%)
  - Commodity & Other Contracts, $1.1 Trillion (1%)
  - Interest Rate Contracts, $144.9 Trillion (87%)
Key Issue Number Seven
How much/what kind of activity is unregulated or lightly regulated?

Observation
In some countries, intermediation is increasingly done through the capital markets rather than depository institutions. In addition, many types of bank loans are becoming securitized, involving a wider range of financial players. This reflects a movement towards an originate to distribute, as compared to an originate and hold, model.

Regulatory Challenge
How can greater attention be paid to off-balance sheet transactions, who should regulate all the different financial players involved, and should greater emphasis be placed on transparency and market discipline?
How can regulation avoid stifling innovation and competition but still promote safety and soundness?
Is adequate information disclosed to consumers?

Percent of respondents who could not correctly identify various loan costs using current disclosure forms:

- Prepayment penalty amount: 95%
- Total up-front cost amount: 87%
- Property tax and homeowner’s insurance cost amount: 84%
- Reason why the interest rate and APR sometimes differ: 79%
- Presence of charges for optional credit insurance: 74%
- Presence of prepayment penalty for refinance in two years: 68%
- Loan amount: 51%
- Which loan was less expensive: 37%
- Whether loan amount included finances settlement charges: 33%
- Interest rate amount: 32%
- Balloon payment (presence and amount): 30%
- Settlement charges amount: 23%
- Monthly payment (including whether it includes taxes and insurance): 21%
- Cash due at closing amount: 20%
- APR amount: 20%
Key Issue Number Eight
How can regulation avoid stifling innovation and competition but still promote safety and soundness?

Observation
The United States is in the midst of a subprime mortgage market meltdown, which has spread to other parts of the financial sector, and has exposed gaps in the U.S. regulatory system and market discipline. New risky mortgages were originated and securitized by private agencies, rated and guaranteed by private parties, and sold to investors, with the result being substantial foreclosures and losses.

Regulatory Challenge
Can policymakers in countries adapt regulations and the regulatory structure fast enough to changes in the financial market place? If not, what are reasonable alternatives?
What characteristics of financial sectors promote effective market discipline (adequate disclosure, transparency, reliable outside rating agencies, other)?
Case Study
What Works Best for Banks?


What best promotes:
- Bank development
- Efficiency
- Integrity
- Stability
- Bank governance?
Measuring “What Works Best”
(Illustrative Proxies)

- Bank development
- Efficiency
  - Net interest margins
  - Overhead costs
  - Valuation of banks
- Integrity of loans (corruption in lending)
- Fragility (Systemic crises)
Findings So Far ...

- **Until angels govern, the data suggest ...**
  - Avoid relying only on official oversight, restrictions etc.
  - Emphasize private monitoring / incentives
  - Stress Basel II’s third pillar (not capital / official oversight)
  - Increases in deposit insurance generosity increase moral hazard and thereby increase fragility

- **Supervisors have crucial role**
  - Support market discipline, not supplant it
  - Foster / force information disclosure
How Do Countries Choose?
“Best practices” depend on political system.

- Open, competitive, democratic institutions:
  - Foster private monitoring, transparency.
  - Are less likely to limit bank entry, activities.
  - Are less likely to have state banks.

- Closed, uncompetitive, autocratic institutions:
  - Do NOT favor transparency.
  - Limit bank entry, activities.
  - Tend to have state banks.
Key Issue Number Nine
What characteristics of financial sectors promote effective market discipline (adequate disclosure, transparency, reliable outside rating agencies, other)?

Observation
More empirical studies (and more data) are needed.

Regulatory Challenge
Increase receptivity to research and analysis to complement supervisory experience on the ground.
What other goals are there/should there be for regulation (competition, consumer protection, other)?
Most U.S. Banking Laws
Response to Crises

- Federal Reserve Act (1913)
  (Bank runs)
- National Currency Act (1863)
- National Bank Act (1864)
  (Civil War & wildcat banking)
- Glass Steagall Act & Federal Deposit Insurance & SEC
  (Great Depression)
- Depository Institutions Deregulation and Monetary Control Act (1980)
  (S&L crisis)
- Garn St Germain Depository Institutions Act (1982)
  (S&L crisis)
- Federal Deposit Insurance Corporation Improvement Act (1991)
  (Banking crisis)
- Federal Housing Finance Regulatory Reform Act (2008)
- Sarbanes-Oxley Act (2002)
  (Enron and WorldCom bankruptcies)
  (S&L crisis)
Some U.S. Banking Laws Not Crisis Response

Bank Holding Company Acts (1956 and 1970) (Prevent nationwide banking)

Riegle-Neil Interstate Banking and Branching Efficiency Act (1994) (Allows nationwide banking: but acquisitions limited to 10% of nationwide deposits and 30% of individual state deposits)

Gramm-Leach-Bliley Financial Services Modernization Act (1999) (BROADENS ALLOWABLE ACTIVITIES)

Note: Bank acquisitions and mergers are subject to an evaluation of the impact on competition by bank supervisory agencies and the Justice Department. If an increase in concentration is too large, “divestitures” of competing branches may be required.
Key Issue Number Ten
What other goals are there/should there be for regulation (competition, consumer protection, other)?

Observation
Regulation typically encompasses safety and soundness, financial stability, market integrity, consumer protection and competition.

Regulatory Challenge
What is the right balance of these different goals? Who should supervise? And are new supervisory mechanisms necessary?