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*Banking  
and  
Finance*



**Peter Daly  
Commissioner**

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# U.S. Banking & Financial System

- ◆ Represents a \$7 trillion U.S. financial services market or 40% of the world market
- ◆ Central to the functioning of commerce and the daily lives of Americans
- ◆ This analysis is based in part on direct interviews with regulators and about 100 industry executives and on a series of seminars arranged by key industry associations



# Sector Profile



**Banking & Finance Sector**

President's Commission on Critical Infrastructure Protection





# Major Industry Trends May Create New Risks

- ◆ Globalization and tighter coupling of financial markets through advanced telecommunications technologies
- ◆ Industry consolidations, resulting in fewer participants, heavier concentration of assets, and growing reliance on domestic and off-shore outsourcing of operations
- ◆ New competitive relationships from reshaping of regulations
- ◆ The attractiveness of Internet-based financial service marketing, including electronic commerce and money



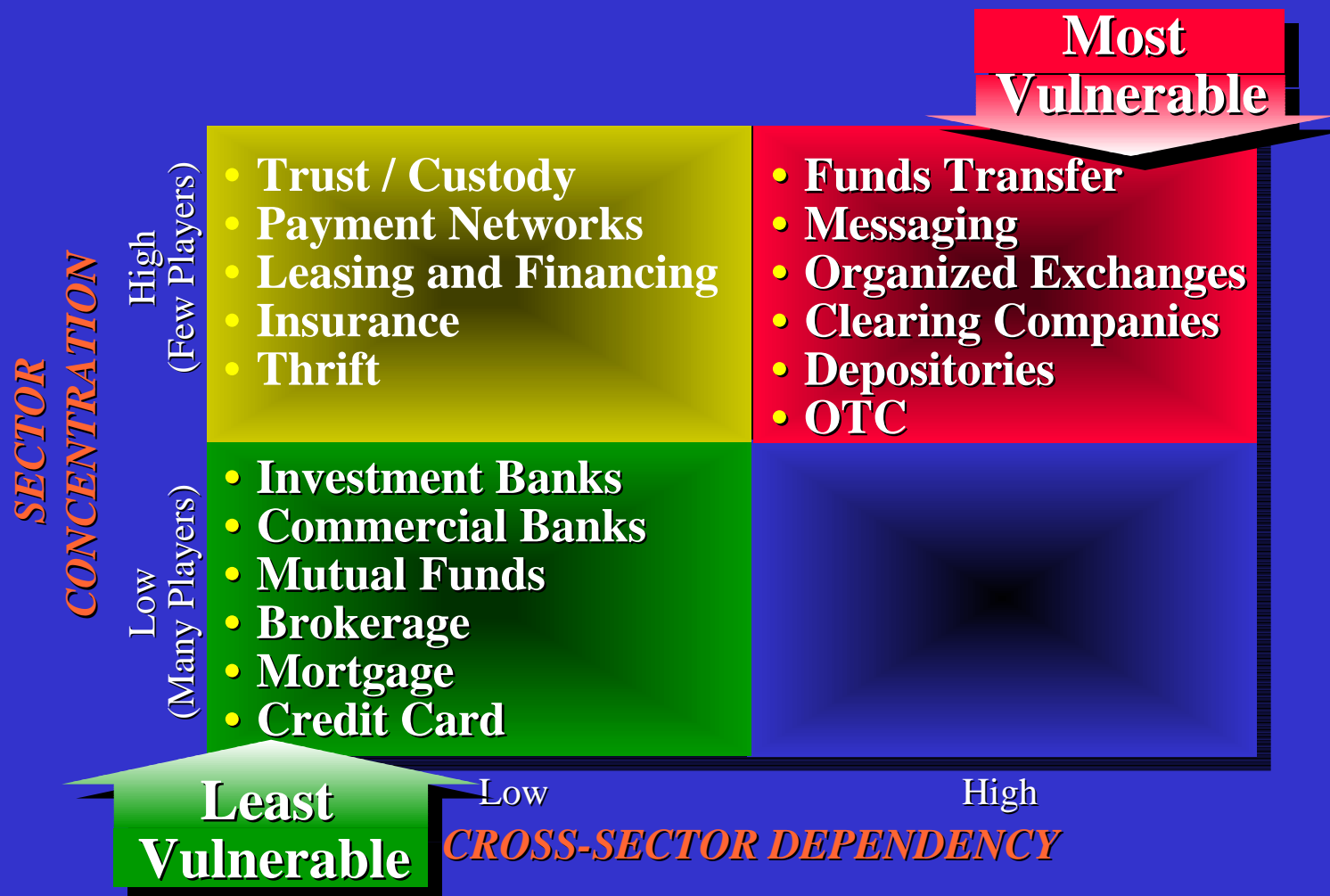


# Banking & Finance Study Specifics

- ◆ Financial sector most advanced in defenses of all industry sectors
- ◆ Well-positioned to confront crime/theft
- ◆ But, vulnerabilities exist if the intent were degradation/destruction, i.e. information warfare offensive attack
- ◆ Vulnerable sectors
  - Exchanges
  - Payment / funds transfer systems



# Sector Risks Concentrations & Dependencies



**Banking & Finance Sector**

# Range of Threats to Financial Sector

**Hacker**

**Criminal**

**Terrorist/  
Nation - State**

- **Access**
- **Challenge / Ego**

- **Theft**
- **Alteration**
- **Destruction**

- **Exploitation**
- **Degradation**
- **Destruction**

**Intrusion**

**Crime**  
(Insider-Outsider)

**Attack**

**Most Likely**  
(Annoyance)

**Least Likely**  
(strategic Impact)

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# Obstacles to Strengthening Infrastructure Protection

- ◆ Industry must be convinced of threat to their business (at a confidence level) as well as to the infrastructure
- ◆ Government to industry, industry to government and industry to industry information flow hampered by fear and rules
- ◆ Interdependencies not well understood
- ◆ Increased government role: stiff opposition without major “event”
- ◆ Deregulating industries will not want the added burden of protecting the infrastructure







# Public Confidence is Common Denominator

## Between Business and Government

- ◆ Both derive viability from it
- ◆ Both view it as a crucial asset
- ◆ Both go to great lengths to retain it





# Some Long Term Solutions

- ◆ Forge a partnership between industry and government to assess infrastructure security
- ◆ Create industry - government communications channels for the bilateral exchange of information
- ◆ Create mechanisms to provide current, accurate threat and capabilities intelligence to government and industry bodies to feed their risk management process
- ◆ Identify responsibilities for infrastructure defense, response, and management





# Principal Near Term Recommendations

(Subject to Pending Cost - Benefit Analysis)

- ◆ Establish contingency trading locations for the banking and finance exchanges
- ◆ Reduce geographic concentration of key industry utilities
- ◆ Build a redundant communications superstructure that is not dependent on the PSN
- ◆ Enhance physical security and access control
- ◆ Build a survivable contingency data center for key systems

