Operational Risk in China’s Banking Sector

Prepared by Fay Zhou
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A look at our report methodology and purpose

• Findings based on
  • Secondary research - internal knowledge, government, vendor and financial institutions’ reports.

• Report purpose:
  • Identify the current trends of operational risk in Chinese banks
  • Define current typical operational risk events / issues
  • Compare the Chinese and international regulation on operational risk management
  • Offer recommendations for banks to improve operational risk management
Section 1: Sources of Operational Risk
Section 2: Operational Risk in Chinese Banks
Section 3: Operational Risk Management Policies and Regulations
Section 4: Methods to Reduce Operational Risk
• Operational Risk - The direct or indirect loss resulting from inadequate internal processes, people, external event, or systems

• Potential Sources of Operational Risk - Internal, External, People, System
## Operational Risk Event Type

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Example Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Fraud</td>
<td>Internal - Unauthorized Activities</td>
</tr>
<tr>
<td></td>
<td>Theft and Fraud</td>
</tr>
<tr>
<td>External Fraud</td>
<td>External - Unauthorized Activities</td>
</tr>
<tr>
<td></td>
<td>Theft and Fraud</td>
</tr>
<tr>
<td>Employment Practices and Workplace Safety</td>
<td>Employee Relations Safe Environment Diversity &amp; Discrimination</td>
</tr>
<tr>
<td>Clients, Products &amp; Business Practices</td>
<td>Suitability, Disclosure &amp; Fiduciary Improper Business or Market Practices</td>
</tr>
<tr>
<td>Damage to Physical Assets</td>
<td>Disasters and Other Events</td>
</tr>
<tr>
<td>Business Disruption and System Failures</td>
<td>Systems</td>
</tr>
<tr>
<td>Execution, Delivery &amp; Process Management</td>
<td>Transaction Capture, Execution &amp; Maintenance</td>
</tr>
</tbody>
</table>
Section 1: Sources of Operational Risk
Section 2: Operational Risk in Chinese Banks
Section 3: Operational Risk Management Policies and Regulations
Section 4: Methods to Reduce Operational Risk
Characteristics of Operational Risk in Chinese Bank

- Operational Risk issues are still frequent in Chinese banks

Penalty Case in Chinese Banking Sector, 2004-2012

Data Source: CBRC, 2004-2013
Characteristics of Operational Risk in Chinese Bank

• Internal fraud is the main type of operational risk issue in Chinese banks

Operational Risk Event in Chinese Banks

Data Source: Shen Ping, Research on the form of Operational Risk in Commercial Bank, 2011
<table>
<thead>
<tr>
<th>Bank</th>
<th>Year</th>
<th>Loss Amount</th>
<th>Main Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Construction Bank</td>
<td>1999-2001</td>
<td>¥328.44 Million</td>
<td>Internal Fraud</td>
</tr>
<tr>
<td>Bank of China (Beijing)</td>
<td>2000-2002</td>
<td>¥640 Million</td>
<td>External Fraud</td>
</tr>
<tr>
<td>Agricultural Bank of China (Baotou)</td>
<td>2003-2004</td>
<td>¥115 Million</td>
<td>Internal Fraud</td>
</tr>
<tr>
<td>Industrial and Commercial Bank of China (Nanhai)</td>
<td>1990-2003</td>
<td>Over ¥2 Billion</td>
<td>Internal Fraud</td>
</tr>
<tr>
<td>Industrial and Commercial Bank of China (Shanghai)</td>
<td>2002-2003</td>
<td>¥71.41 Million</td>
<td>External Fraud</td>
</tr>
<tr>
<td>Bank of China (Heilongjiang)</td>
<td>2005</td>
<td>Over ¥1 Billion</td>
<td>Internal Fraud</td>
</tr>
<tr>
<td>Shenzhen Development Bank</td>
<td>2004-2006</td>
<td>¥1.5 Billion</td>
<td>Internal Fraud</td>
</tr>
<tr>
<td>Shenzhen Development Bank and Bank of Communication</td>
<td>2008</td>
<td>¥950 Million</td>
<td>Internal Fraud</td>
</tr>
<tr>
<td>Qilu Bank</td>
<td>2010</td>
<td>¥10 Billion</td>
<td>External Fraud</td>
</tr>
<tr>
<td>Bank of China</td>
<td>2012-2013</td>
<td>¥160000</td>
<td>External Fraud</td>
</tr>
<tr>
<td>CITIC Bank</td>
<td>2011-2013</td>
<td>¥40 Million</td>
<td>Internal Fraud</td>
</tr>
</tbody>
</table>

Source: Kapronasia Analysis, 2013
Specific examples of Operational Risk Events in China

- Internal fraud
  - CITIC bank wealth management product fraud case

- External fraud – borrower doesn’t pay debt
  - E.g. firm went bankrupt -> person in charge runs away without paying
Operational Risk Events in International Banks

- Execution, Delivery & Process Management, and External Fraud are the two main operational risk events in international banks.
- Internal Fraud is the main type in Chinese banks.

Breakdown of Operational Risk events by percentage of Amount Lost:

**Chinese Banks**
- Internal Fraud: 33.50%
- External Fraud: 2.03%
- Clients, Products & Business Practices: 1.69%
- Business Disruption and System Failures: 0.38%
- Execution, Delivery & Process Management: 11.40%

**International Banks**
- Internal Fraud: 62.40%
- External Fraud: 15.20%
- Clients, Products & Business Practices: 32.60%
- Business Disruption & System Failures: 35.50%
- Execution, Delivery & Process Management: 11.40%

Data Source: BIS, 2013; Hexun 2007
• Business Intelligence and Risk Management solutions are the two risk related categories with high spend in Chinese banks

IT Spend in Chinese banks, 2011

- Risk Management: 7.60%
- Enterprise Resource Management: 21.50%
- Business Intelligence: 23.70%
- Finance and Auditing: 15.30%
- Regulatory Reporting System: 21.10%
- Image Management Solution: 3%

Data Source: IDC, 2012
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Current Chinese Operational Risk Management Guidelines

• **Chinese Commercial Bank Operational Risk Management Guidelines**
  - Purpose – improve risk management ability
  - Defined responsibility for every level of employee
  - Clarifies policies, methods, processes, and capital requirements

• **Chinese Commercial Bank Internal Control Guidelines**
  - Purpose – accomplish bank business objective by preventing and controlling bank internal risks
  - Defined rules on legality, accuracy, authenticity of accounting information and loan approval system
Current Chinese Operational Risk Management Guidelines

• **Guidelines for the Measurement of Operational Risk Regulatory Capital of Commercial Banks**
  o Three approaches were defined for the measurement of operational risk capital requirement:

  - Standardized Approach (SA)
  - Alternative Standardized Approach (ASA)
  - Advanced Measurement Approach (AMA)
### International Operational Risk Management Regulations

- **Basel III**
  - Requires higher quality on capital
  - Strengthen the concept of comprehensive risk management
- **Implementation of Basel III capital requirements in China is under way**
  - Lowers risk weights for SMEs when calculating the capital adequacy ratio

<table>
<thead>
<tr>
<th></th>
<th>Minimum Capital Requirement</th>
<th>Transition Period</th>
<th>Basel III in China</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basel II</td>
<td>Basel III</td>
<td></td>
</tr>
<tr>
<td>Total Capital</td>
<td>8%</td>
<td>10.50%</td>
<td>2016-2019</td>
</tr>
<tr>
<td>Tier 1 Capital</td>
<td>4%</td>
<td>6.00%</td>
<td>2013-2019</td>
</tr>
<tr>
<td>Common Equity and Tier 1 Capital</td>
<td>2%</td>
<td>4.5-7%</td>
<td>2013-2019</td>
</tr>
<tr>
<td>Leverage Ratio of Tier 1</td>
<td>-</td>
<td>3%</td>
<td>2013-2018</td>
</tr>
<tr>
<td>Capital Conservation Buffers</td>
<td>-</td>
<td>2.50%</td>
<td>2016-2019</td>
</tr>
</tbody>
</table>

Source: BCBS, Kapronasia Analysis, 2013
## Comparison of Operational Risk Management Regulations

<table>
<thead>
<tr>
<th>Operational Risk Event Type</th>
<th>Chinese Regulations</th>
<th>International Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Fraud</td>
<td>All Types Risk Event</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emphasis on Information Disclosure</th>
<th>×</th>
<th>✓</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Emphasis on Business Ethics</th>
<th>×</th>
<th>✓</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Governance Structure</th>
<th>Few Banks Established Separated Operational Risk Management Department</th>
<th>Independent Operational Risk Management Department</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Lost Data Collection</th>
<th>Lack of Lost Data Collection</th>
<th>Adequate Lost Data</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Operational Risk Capital Requirements Approach</th>
<th>Mainly SA / ASA Currently, 6 banks are preparing for the AMA application</th>
<th>Mainly BA / SA / ASA ~ 34.7% of banks are applying AMA (BCBS, 2009)</th>
</tr>
</thead>
</table>

Source: Kapronasia Analysis, 2013
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Why Do We Need Operational Risk Management

Drivers of Operational Risk:
- New Legislation
- New Financial Product
- New Technology
- New Market
- Business Volume

Improved Operational Risk Management

Benefits:
- Reduced losses
- Improved quality and stability of earnings
- Enhanced competitive advantage
- Improved profitability
- Limited reputational damage

Source: Kapronasia Analysis, 2013
Mitigating Operational Risk in Chinese Banks

• Governance Structure
  ➢ Independent ORM department and committee
  ➢ Limit authority to senior executives in Chinese banks
  ➢ Prepare risk event solutions for the more frequent risk events based on bank business features (e.g. frontline employee fraud risk solutions)

• Culture
  ➢ Building a strong ORM culture in Chinese banks (e.g. organize operational risk training session)
  ➢ Motivate employees, emphasis the quality of work and responsibility over quantity.
Mitigating Operational Risk in Chinese Banks

• Monitoring and Reporting
  ➢ Make the risk event reporting comparable
  ➢ Report major operational risk events to Chinese regulators in a timely manner
  ➢ Boost lost data collection => more Chinese banks can adopt AMA
  ➢ Share operational risk databases => seek more external operational risk information

• Information System
  ➢ Update the risk management system on a regular basis
  ➢ Maintain backups

• Insurance Application
  ➢ Apply insurance to reduce losses
Questions and Answers

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