The Development of SME Credit Information Database to Promote SME Lending

Submitted by: Keio University
The Development of SME Credit Information Database to promote SME Lending

Presented by Naoyuki Yoshino
Keio University, Japan,
September 21, 2010, Sendai

yoshino@econ.keio.ac.jp
Naoyuki Yoshino (Keio University)
### SMEs in Thailand

<table>
<thead>
<tr>
<th>Type of Enterprise</th>
<th>No. of Enterprises (% of total)</th>
<th>No. of employment (% of total)</th>
<th>GDP Mill. Baht (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMEs</td>
<td>2,366,227 (99.6%)</td>
<td>8,900,567 (76.0%)</td>
<td>3,244,974 (38.2%)</td>
</tr>
<tr>
<td>Large Enterprise</td>
<td>9,141 (0.4%)</td>
<td>2,810,767 (24.0%)</td>
<td>5,239,226 (61.8%)</td>
</tr>
<tr>
<td>and Others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2,375,368 (100%)</td>
<td>11,711,334 (100%)</td>
<td>8,484,200 (100.0%)</td>
</tr>
</tbody>
</table>

### SMEs in China

*Red Mark is SMEs’ share*

- **Number:** 99%
- **Employment of urban area:** 75%
- **Export:** 62%
- **GDP:** 54%
- **Tax:** 43%

*Source: Department of SMEs, China National Development and Reform Commission*
SMEs rely on Banks and Micro Credit

Large corporations → Credit Rating → Capital Market

Stock Market

Bond Market

SMEs → Credit Guarantee → Banks

Micro Credit Finance Company

Bank based SME financing

Start-up SMES

1. Bank Loans to SME
2. SME Mutual funds / SME fund
to provide financing to start ups
Separate Accounts of SME financing

1. Traditional Bank finance
   - Private banks
   - Government banks

2. SME fund, SME mutual funds
   - Sell these products through banks

3. Separating two accounts
   - Bank accounts (Guarantee)
   - SME fund (non-guarantee)

Loans by Banks, Credit Cooperatives etc.

Fig. 1-3-11 Trends in outstanding lending to SMEs (by type of financial institution)
Comparatively stable lending by government-affiliated SME financial institutions, credit associations, and credit cooperatives, but lending by domestic banks too has recovered from June 2005

Source: Compiled by the SME Agency from BOJ Monthly Financial and Economic Statistics and other sources.

Notes:
1. The figures for “domestic banks” indicate the combined lending of domestic banks (excluding credit associations and credit cooperatives), domestic trust banks, and overseas branch accounts of domestically licensed banks.
2. Government-affiliated SME financial institutions are the Shoko Chukin Bank, Japan Finance Corporation for Small and Medium Enterprises (JACO), and National Life Finance Corporation.
3. The shaded sections indicate economic contraction (from the peak to the trough in the business cycle).
(1) Financial Position

<Tankan¹>

DI("Easy" - "Tight"), % points

- Large enterprises
- Small enterprises

Fig. 3-3-1 Wage curve of permanent employees

The rise in the wages of SME permanent employees is more moderate in comparison to that of large enterprise permanent employees.

Mean value of large enterprises
Mean value of SMEs

Source: Recomplied from MHLW, FY2007 Basic Survey on Wage Structure.
3.1.2.9 SME bankruptcy trends

The number of SME bankruptcies has been increasing recently.

![Graph showing SME bankruptcy trends]

### Financial institutions

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>City banks</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Regional banks</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Member banks of the Second Association of Regional Banks</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Domestically-licensed banks' banking accounts total</td>
<td>181.6</td>
<td>177.8</td>
<td>166.2</td>
<td>187.1</td>
</tr>
<tr>
<td>Domestically-licensed banks' trust accounts, etc.</td>
<td>1.9</td>
<td>1.9</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Credit associations</td>
<td>40.8</td>
<td>40.5</td>
<td>41.5</td>
<td>42.1</td>
</tr>
<tr>
<td>Credit cooperatives</td>
<td>9.3</td>
<td>9.3</td>
<td>9.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Private-sector financial institutions total</td>
<td>233.6</td>
<td>229.5</td>
<td>228.9</td>
<td>240.2</td>
</tr>
<tr>
<td>Private-sector financial institutions total excluding trust accounts, etc.</td>
<td>231.7</td>
<td>227.6</td>
<td>237.1</td>
<td>238.6</td>
</tr>
<tr>
<td>Japan Finance Corporation (Small and Medium Enterprise Unit)</td>
<td>7.0</td>
<td>6.9</td>
<td>6.8</td>
<td>6.7</td>
</tr>
<tr>
<td>Japan Finance Corporation (Micro Business and Financial Institutions)</td>
<td>7.8</td>
<td>7.7</td>
<td>7.6</td>
<td>7.5</td>
</tr>
<tr>
<td>Shoko Chukin Bank</td>
<td>9.4</td>
<td>9.3</td>
<td>9.3</td>
<td>9.4</td>
</tr>
<tr>
<td>Government-affiliated financial institutions total</td>
<td>24.3</td>
<td>23.9</td>
<td>23.7</td>
<td>23.6</td>
</tr>
<tr>
<td>Total outstanding lending to SMEs</td>
<td>257.0</td>
<td>253.3</td>
<td>250.5</td>
<td>253.8</td>
</tr>
<tr>
<td>Total outstanding lending to SMEs (excluding trust accounts, etc.)</td>
<td>256.0</td>
<td>251.4</td>
<td>260.8</td>
<td>262.1</td>
</tr>
</tbody>
</table>
The SME Industry and Credit Information Infrastructure in East Asia

- SMEs dominate the business landscape of ASEAN economies and influence output, employment and income growth.
- Information asymmetry still exist and the type of infrastructure that could appropriately address this problem in terms of existence and state of development across the ASEAN region.
- It is imperative to have a credit information system for the SME sector to help address the persistent challenge of information asymmetry and financing access.

Four Accounts by SMEs

- SMEs
  - Tax Authority
  - Banks
  - His Own
  - Showing to his wife
SMEs Database

1. Common Database in ASEAN+3
2. Credit Scoring
3. Statistical Examination → Default Risk
4. Reduce Information Asymmetry
5. Benchmark for SME credit analysis

Sustainability of CRD

1. How to collect?
   Credit Guarantee Corp.
2. Balanced SME Data
3. Going concern
   (Revenue, selling information providing data analysis, Consulting Services)
CRD (Credit Risk Database)
Membership composition (July, 2009)

Credit guarantee corporations 52
Government financial institutions 3
Private financial institutions 136
Credit-rating agencies, etc. 6
Small and Medium Enterprises Agency, Bank of Japan, etc. 5
Total 202

CRD Data: Since 1995

Corporations March-2009
Total 10,180,000 (1785)
Default data 1,117,000 (209)

Individual owned company
Total 2,496,000 (803)
Default data 301,000 (90)

Number of (Number of Accounts companies)
SME Data base

Credit Guarantee Corporations (Collect Data of SMEs)
52

Financial Institutions
136+3
Regional Banks
Credit Associations
Credit Cooperatives
Government Banks
Central Bank

SMEs
2588
(12.6 million)

Defaults
299
(1.4 million)

1, Government Support
2, Reliability
3, Security of Information
CRD

@CopyRightYoshinoKeioUniv./2010
10/Sept21

Fig. 1-3-20  Ratio of borrowing companies which have guarantees by Credit Guarantee Corporations
Ratio of borrowing companies showed a recent increase


@CopyRightYoshinoKeioUniv./2010
10/Sept21
**CRD Data Collection**

1. **Financial data** - B/S and P/L
2. **Non-financial data**
   - date of establishment
   - geographical location.
3. **Default data**
   - 3 months or more delay to pay;
   - de facto bankruptcy;
   - subrogation by credit guarantee corporation
   - possible bankruptcy.

**Consolidation and Anonymity**

1. An effective credit information database needs a large amount of data.
   - The database needs to consolidate the data on the same borrower.
2. **Anonymity** is important to form a large and effective credit information database.
   - Anonymity is a legal protection issue.
3. **Confidentiality**
4. **Provide statistical service to clients**
5. **Consulting Services**
Lists of Policy Recommendations

(1) **SMEs have to have incentives to disclose their truth data.** In Japan, SME data are collected nationwide by Credit Guarantee Corporations, which have 52 offices in all the prefectures in Japan. When SMEs want to borrow from banks, they are often asked to put credit guarantee on their loans. This is because SMEs are perceived to be much riskier than large corporations.

(2) **An institution that is mandated to collect SME data while looking after the confidential and trustworthiness interests of the SMEs in its database must be established.**

(3) **At the same time, it must have its own revenue source.** In Japan, CRD (credit Risk Database) collect fees from financial institutions by selling data and by providing the computation of default risks. Consultation of data analysis with various banks is another source of income from CRD. Various support program has to be established.
(4) The SME database should be a repository of both financial and non-financial SME data. In Japan, the data collected by CRD includes sales, operating profits, ordinary profits, investment in plant and equipment, investment in P&E (excluding investment in software), increase in inventories, ratio of operating profits to sales, ratio of ordinary profits to sales, ratio of net worth, liquid assets, inventories, fixed assets, deferred assets, total assets, liquid liabilities, fixed liabilities, net assets, interest expense and personnel expenses.

(5) Statistical analysis is required to compute the default risk ratio of SMEs. The database institution can then provide statistical analysis to its member banks. It should provide continuous services to clients.

Summary---SMEs Database

1, Common Database
2, Credit Scoring
3, Benchmark for SME credit analysis
4, Statistical Examination
   → Default Risk
5, Reduce Information Asymmetry
More than 60% use Credit Data

Direction of Portfolio Investment

Figure 1, From Asia, Figure 2, To Asia, Figure 3, Europe
**ABMI (Asian Bond Market Initiative)**

Steps so far
1. Government Bond Market
2. Semi-Government Bond (Power plant)
3. Large Companies
4. Infrastructure Financing (Revenue Bond)
   → Small & Medium Sized Businesses are neglected
   → Credit Data is difficult to obtain

---

**Reference**

Development of Corporate Credit Information Database and Credit Guarantee System
Presented to the ASEAN Secretariat

By Naoyuki Yoshino, Koichi Suzuki, Yasuhiro Maehara and Kazutomo Abe

*February 2009*