How Credit Information System Can Help Improve the Ease of Getting Credit? The Risks and Benefits of Expanding Information Sharing

Submitted by: Joint Credit Information Center (JCIC)
Session 3: Getting credit

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Joint Credit Information Center
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Credit Bureau Services & Getting Credit

Role of Credit Bureaus in financial markets*
- Decreases information asymmetries between borrowers and lenders
- Allows lenders to more accurately evaluate risks and improve portfolio quality
- Eases adverse selection problem and lowers the costs of credit for a good borrower
- Increases credit volume/improves access to credit
- Supports introduction of credit scoring and automated underwriting, lowers lender operational costs and improves profitability

*Source: IFC (International Finance Corporation) - Global Credit Bureau Program. May 2010
International Finance Corporation Survey

Credit Bureaus can have significant development impact in emerging markets...

...by facilitating billions of dollars in financing...

Current

$812 billion

Potential

$1,256 billion

= $2 trillion

...touching millions of people...

396 million

+ 613 million

= 1 billion

...and reducing transaction costs by 30 to 40%.

Note: Estimates have been developed by the Financial Infrastructure Group. Current estimates are based on available survey data from countries with credit bureaus. Potential estimates include growth in current markets and impact from development of credit bureau infrastructure in markets without credit bureaus.

Credit information coverage

Major Challenge:

CB data not fully integrated

Source: IFC - Global Credit Bureau Program 2007/08

1. public registries to expand the collection of Corporate Information (such as financial statement information)
2. public registries to provide public data of individual to private bureaus (such as ID information/verification)
3. To provide full data integration between individual and corporate, especially with SME. Thus closing the gap of information coverage to develop value-added services such as small business scores.

Data Integration in JCIC

✓ Consumer Credit Score (J10)
  (available for inquiry starting 2006/04/01)
✓ Corporate Credit Score (J20/J21)
  (available for inquiry starting 2010/05/01)
Session 3: Getting Credit / Chinese Taipei

Data Integration within JCIC -- Case with SME Credit Score

SME

- Owner
  - Name, ID
  - Company in Charge
  - Credit Information
  - Consumer Credit Score (JHOC)

- Corporate profile
  - Name, ID
  - Industry
  - Company Type
  - Operation Status
  - Size (Paid-in Capital)
  - Date of Establishment

Financial Statement

- Leverage
- Liquidity
- Profitability
- Turnover
- Cash Flow

Integration of immense data into one numerical figure

Credit Information

- Indebtedness
- Payment Record
- Inquiry Record
- Type of Credit
- Length of Credit

Data Consortium

Corporate Basic Profile
daily/monthly

Industry Code
every year

Fraud Case Reporting
every half hour

Inquiry Record
Real time

Credit Card Holder
Credit Card Payment
Monthly/Wkly

JCC Data Base

Quality Check

1. Loan Outstanding Balance
2. New Approval Credit Line & Paid off
3. Cash Card Data

Security Control

Bounced check record
Daily

Import/Export declaration
monthly

(quarterly/semiannually/annually)
Snapshot on JCIC

- Founded in 1975. The only nationwide credit reporting agency.
- 427 members constituted by most foreign banks and all domestic banks, credit cooperatives, farmers' & fishermen's association and other related financial institutions.
- Maintains positive and negative, consumer and corporate credit information.
- Include product types of Basic Profile (A), Loan (B), Financial Statement (F), Affiliated Entities (G), Comprehensive Report (J), Credit Card and Merchants (K), Public Information (N), & Others (O).
- Electronic transfer of inquiries are available 24 hours a day, 7 days a week. Daily inquiries of 450 thousand records.
- Alternative data not include in current database.

<table>
<thead>
<tr>
<th>JCIC Ranking in Getting Credit - highlights of sub-indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Credit Ranking</td>
</tr>
<tr>
<td>Nature of Organization</td>
</tr>
<tr>
<td>Extensiveness-of-public-registries index</td>
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<tr>
<td>Creditor-right index (0-4)</td>
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<tr>
<td>Public/private coverage (0-100%)</td>
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<tr>
<td>Ease of getting credit (0-16)</td>
</tr>
<tr>
<td>Strength of legal rights index (0-10)</td>
</tr>
<tr>
<td>Depth of credit information index (0-4)</td>
</tr>
</tbody>
</table>
2010 Ranking in Getting Credit: Selected Countries & economic organizational bodies

<table>
<thead>
<tr>
<th>2010</th>
<th>TW</th>
<th>East Asia &amp; Pacific</th>
<th>OECD AVG</th>
<th>CN</th>
<th>HK</th>
<th>SG</th>
<th>JP</th>
<th>KR</th>
<th>MY</th>
<th>PH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting Credit Ranking</td>
<td>71</td>
<td>--</td>
<td>--</td>
<td>61</td>
<td>4</td>
<td>4</td>
<td>15</td>
<td>15</td>
<td>.86</td>
<td>127</td>
</tr>
<tr>
<td>Public/private coverage (0-100%)</td>
<td>63.2</td>
<td>14.4</td>
<td>59.6</td>
<td>62.1</td>
<td>71.9</td>
<td>40.3</td>
<td>76.2</td>
<td>93.8</td>
<td>82.0</td>
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<tr>
<td>Strength of legal rights Index (0-10)</td>
<td>4</td>
<td>5.7</td>
<td>6.8</td>
<td>6</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Depth of credit information index (0-5)</td>
<td>5</td>
<td>1.9</td>
<td>4.9</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Due to the lack of alternative data in JCIC database.

Alternative Data & Getting Credit

- For those who were excluded from mainstream credit due to no credit history in credit bureau
  - No credit history → No score → High risk → No credit
  - Paradox of “One must have credit to get credit.”
- Use of non-traditional credit data
  - Alternative data is derived from all payment history data in the non-traditional credit sector, such as utility and telecom services

<table>
<thead>
<tr>
<th>Potential Obligor</th>
<th>Use of alternative data</th>
<th>Credit history</th>
<th>Credit score</th>
<th>Opportunity to get new credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“B”</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
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<tr>
<td>“B”</td>
<td>√</td>
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The paradox?
The Limitation/Paradox of Alternative Data

(continued from last table……)

- For “B” & lenders
  - From lenders’ point of view, major factor for “B” to get credit might be from proof of his stable income. Paying utility bill on time might be irrelevant.
  - If alternative data could be useful to get credit, “B” could provide such information to the lenders himself.

- For credit bureau
  - Difficult to get consent from the consumer
  - Evidence form credit card payment behavior showed that occasionally not paying bill on time was quite common.
  - Bill payer might not be the same as the one named on bill.
  - Not sufficient enough to produce robust credit score. Our credit card transactor segment showed significant lower model discriminative power.

Thickness of credit file and model discriminative power

JCIC’s Experience of developing consumer scoring model

<table>
<thead>
<tr>
<th>Thin file</th>
<th>Thick file</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excluded from mainstream credit</td>
<td>Credit card holders with loan &amp; check accounts</td>
</tr>
<tr>
<td>Credit card transactors</td>
<td>Model KS: 70</td>
</tr>
<tr>
<td>Loan accounts</td>
<td>Model KS: 50</td>
</tr>
<tr>
<td>Credit card revolvers</td>
<td>Model KS: 30</td>
</tr>
<tr>
<td>Model KS: ?</td>
<td></td>
</tr>
</tbody>
</table>

KS Statistic:
- measure of separation used to compare default and non-default frequency distribution, is used to rate predictive power in credit scoring.

Credit card transactors:
- no delayed payment in the last 12 months - not user of revolving credit.
Future Challenges

- Data sharing vs. Data protection
- Getting credit vs. Responsible lending
- Member (Financial Institutions) oriented vs. Consumer oriented
- Regulatory challenge
- Social responsibility of credit bureau
  - Credit education
  - Debt consultation

THANK YOU