Competition Conditions in Loans to SME’s in Mexico

Prepared for the Asia-Pacific Financial Forum: Roundtable on Financing Micro-, Small and Medium Enterprises in the Asia-Pacific Region

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1. SMEs relevance: overview

• We analyze the current competition conditions under which regulated institutions provide loans to SMEs.

• It is not an access to finance study. However, some numbers are relevant:
  - In 2014, SMEs represented 99% of economic units and generated 61% of employment and 38% of GDP.
  - Around 83% of SMEs are informal.
  - Around 1/3 of SMEs receive loans from regulated institutions.
  - Most SMEs lack reliable accounting registries and tend to have a high mortality rate.

• Among heterogeneous SMEs definitions, we use one that adjusts to our goals:
  1. Up to 250 employees if economic activity is industrial or up to 1000 if its services.
  2. Yearly sales of less than 250 million pesos.
  3. Aggregated debt with the banking system of less than 3 million UDIS (15.8 million pesos); more than 1 million UDIS is medium size firm.

• We do not include SMEs in the agricultural sector.
Bank loans to SMEs have grown fast recently:
• Outstanding balance has grown at a 17% average annual rate from 2009 to 2014.
• The number of SMEs that received a bank loan increased from 240 to 303 thousand.
• Average loan amount has increased specially for small firms.

Evolution of banking loans to SMEs

<table>
<thead>
<tr>
<th>Number of firms</th>
<th>Total Balance</th>
<th>Average loan amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>(thousands)</td>
<td>(billions of 2010 pesos)</td>
<td>(2010 pesos)</td>
</tr>
<tr>
<td>240</td>
<td>280</td>
<td>300</td>
</tr>
</tbody>
</table>

Source: Own elaboration with data from the R04 form from CNBV.
Suppliers:

- Banks with extended supply networks at the national level.
- Regional or niche Banks (without a national supply network).
- Non-bank regulated lenders (IFNB).
- Non financial institutions that provide loans (trade credit).
  - Very relevant or many firms, but no formal statistical data.

Role of Nafin is very important for competition:

- Banks with extended supply networks take advantage of guarantees program.
- Regional or niche Banks take advantage of funding.
3. SMEs credit suppliers

- Two extreme business models:

<table>
<thead>
<tr>
<th></th>
<th>Banks with extended networks</th>
<th>Regional Banks and non bank FI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>National reach</td>
<td>Limited, regional</td>
</tr>
<tr>
<td>Business model</td>
<td>Offer multiple services. National commercial policy, Little to none regional differences.</td>
<td>Specialized in regions or business line.</td>
</tr>
<tr>
<td>Economies of Scale</td>
<td>Intensive Use information reduces cost of service; Parametric models for credit evaluation; Loan provision through branches.</td>
<td>Non exploited; Traditional credit analysis. Sales force outside of branches.</td>
</tr>
<tr>
<td>Economies of Scope</td>
<td>Intensive: Low funding cost; Deposit services allows for client identification; Easy and cheap credit allocation.</td>
<td>Limited: Small deposit base if any; Dependence on NAFIN funding.</td>
</tr>
</tbody>
</table>
4. **Competition dynamics**

**Determinant factors:**

- Differences in information among providers: information to identify clients does not necessarily come from credit behavior.

- Technological change:
  - Usage of models that exploit big data;
  - Usage of electronic platforms to promote and provide services.

**Market segmentation:**

- Small firms are mainly served by Banks with extended networks;
- Medium sized firms may be served by small Banks and non financial intermediaries.

**Interaction among providers:**

- Banks with extended networks identify clients among deposit accounts; they do not challenge each other because of information advantages.
- Regional Banks: too small to challenge banks with networks.
There are no significant barriers to entry: many recent entrants that remain small.

Concentration levels are not high when non bank providers are considered.

### Competition indicators: Market structure

#### HHI

**Bank and non-bank credit (2013)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Participants</th>
<th>CR2</th>
<th>CR5</th>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Big Enterprises</strong></td>
<td>1,101</td>
<td>48</td>
<td>90</td>
<td>1,853</td>
</tr>
<tr>
<td><strong>SMES</strong></td>
<td>908</td>
<td>65</td>
<td>91</td>
<td>2,382</td>
</tr>
<tr>
<td><strong>Medium</strong></td>
<td>745</td>
<td>49</td>
<td>81</td>
<td>1,615</td>
</tr>
<tr>
<td><strong>Micro and Small</strong></td>
<td>1,721</td>
<td>55</td>
<td>92</td>
<td>2,291</td>
</tr>
</tbody>
</table>

Source: Own elaboration with data from the R04 form from CNBV and the Credit Bureau. Data as of June 2013.

Source: Own elaboration with data from the R04 form from CNBV and the Credit Bureau. Data as of December 2013.
5. Competition indicators: Interest rates

- Interest rates have gone down though they are much higher for small firms.
- Rates are much higher and disperse for low value loans.

**Weighted average interest rate (%)**

![Graph showing weighted average interest rate for different categories over time]

**SME interest rate dispersion by outstanding balance**

![Graph showing interest rate dispersion for different categories over time]

Source: Own elaboration with data from the R04 form from CNBV and Banco de México.
Note: Only marginal credits are considered.

Source: Own elaboration with data from the R04 form from CNBV.
Data as of December 2014. Credits granted within the last year.
Note: Local polynomials weighted by outstanding balance, which are adjusted to the interest rate percentile series, are presented.
5. Competition indicators: Profitability

• Interest margin adjusted by risk: much higher for small firms.
• Switching of small firms: much less than medium and large firms.

**Interest margin adjusted by risk (MIAPR)**
(per cent)

<table>
<thead>
<tr>
<th></th>
<th>Big Enterprises</th>
<th>MSME</th>
<th>Medium</th>
<th>Micro and Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate (weighted mean)</td>
<td>7.3</td>
<td>12.6</td>
<td>10.2</td>
<td>13.8</td>
</tr>
<tr>
<td>Interest Rate minus Base Rate (TIIE)</td>
<td>3.0</td>
<td>8.3</td>
<td>5.9</td>
<td>9.5</td>
</tr>
<tr>
<td>Interest Rate minus Base Rate (TIIE) and Reserve Requirement</td>
<td>1.7</td>
<td>4.3</td>
<td>2.0</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Source: Own elaboration with data from the R04 form from CNBV and the Credit Bureau. Data as of June 2013.

**Firms with credit from more than one financial intermediary**
(per cent within each size category)

<table>
<thead>
<tr>
<th>Size Category</th>
<th>Big Enterprises</th>
<th>Medium</th>
<th>Micro and Small</th>
</tr>
</thead>
</table>
| Source: Own elaboration with data from the Credit Bureau. Data as of November 2013.