Financing for SMEs: Korea’s Experience

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Public Support in SME Financing

I. Overview of SME Financing Programs

II. Evaluation of Pros and Cons

III. Remarks
The share of employment in SMEs in Korea is the highest in the OECD

The share of workers employed across different sized firms

Note: Percentage of all persons, total business economy, 2015 or latest available year

Source: OECD Structural and Demographic Business Statistics
SMEs in Korean Economy (2)

◆ SMEs had the largest proportion of sales with the lowest profitability & productivity

A comparison of large firms, mid-sized firms and SMEs

<table>
<thead>
<tr>
<th>A. Percentage of total in 2014</th>
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<tr>
<td></td>
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<tr>
<td>Enterprises</td>
</tr>
<tr>
<td>Employees</td>
</tr>
<tr>
<td>Sales</td>
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<tr>
<td>Exports</td>
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</table>

B. Percentage growth in 2013

|                               | Large enterprises | Mid-size firms | SMEs |
| Sales                         | 0.3              | 5.8            | 5.6  |
| Assets                        | 7.9              | 8.3            | 3.6  |

C. Ratios in 2013

<table>
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<tr>
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<th>Large enterprises</th>
<th>Mid-size firms</th>
<th>SMEs</th>
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<tbody>
<tr>
<td>Operating profits margins(^2)</td>
<td>4.7</td>
<td>4.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Debt-equity ratio</td>
<td>133.5</td>
<td>120.2</td>
<td>168.3</td>
</tr>
<tr>
<td>Labour productivity(^3)</td>
<td>100.0</td>
<td>56.2</td>
<td>28.8</td>
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</table>

Note: 1. Often referred to as high potential enterprises.
2. As a percentage of sales. 3. Labor productivity as per cent of that in large companies.
Source: Statistics Korea
Public SME Financing Support Programs

- Various programs conducted by different institutions

- KODIT, KTFC, regional credit guarantee foundations (+K-Sure, KEX-IM)
- SBC, Industrial Bank of Korea
- Bank of Korea, SBC, Korea Development Bank
- Korea Venture Investment Corp., K-Growth
- Ministries of SMEs and Start-Ups (+ other ministries)

<table>
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<tr>
<th>Credit Enhancement (mostly loan guarantees)</th>
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<tr>
<td>(Direct) Lending</td>
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<td>On-lending</td>
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<tr>
<td>Venture Capital Investment</td>
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<tr>
<td>Start-Up Financing</td>
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Increasing Public Support in SME Lending

- Main SME programs amounting to more than 126 tn KRW (112 bn USD)
- Portion of publicly supported bank SME loans hovering around 20%

Ratio of Public Support in SME Financing and SME Bank Loans
One of the few countries with much larger VC investments in 2016 than in 2010
Over 30% of VC investments are supported by the public programs (K-VIC & KDB)

Change in Venture Capital Investments

Note: Israel (ISR) in 2014
Source: OECD
The public-sector’s share of venture capital investment is falling but still high

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<tbody>
<tr>
<td>Public-sector investors(^1)</td>
<td>429.3</td>
<td>822.3</td>
<td>1 050.4</td>
<td>1 114.7</td>
<td>1 207.5</td>
<td>615.5</td>
<td>468.6</td>
</tr>
<tr>
<td>Share (%)</td>
<td>47.1</td>
<td>49.3</td>
<td>40.1</td>
<td>42.3</td>
<td>36.0</td>
<td>35.1</td>
<td>33.1</td>
</tr>
<tr>
<td>Private investors</td>
<td>481.4</td>
<td>845.8</td>
<td>1 569.1</td>
<td>1 519.9</td>
<td>2 144.0</td>
<td>1 137.5</td>
<td>947.7</td>
</tr>
<tr>
<td>Total</td>
<td>910.7</td>
<td>1 668.1</td>
<td>2 619.5</td>
<td>2 634.6</td>
<td>3 351.5</td>
<td>1 753.0</td>
<td>1 416.3</td>
</tr>
</tbody>
</table>

1. The public sector includes central government ministries, local governments, the Korea Development Bank, growth ladder funds and public funds, including the National Pension Fund.

Source: Ministry of SMEs and Start-ups (2017d).
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Public Support Can Smooth the Credit Cycle of SMEs

- Public support in SME financing had been expanded in response to ‘98 and ‘08 crises
- Alleviating financing gap worsened by credit contraction and bank deleveraging

Size of Public Financing Programs

(trl KRW)

Note: USD/KRW exchange rate is around 1,087
Public Support Can Help to Close SME Funding Gap

- Active individual and small business sector backed by public support
- Public facilities contributing to vibrant manufacturing sector

Size of Public Credit Guarantee Schemes over GDP (2016)

**Challenge: Supporting Early Stage SMEs**

- Start-ups and early stage SMEs still experience financing gap
- How to make public programs focus on the SMEs in financing gap but with growth potential

**Accessibility to Expansion Capital**

**Accessibility to Start-up Capital**

*One of the best market for expansion capital*  
*Yet, one of the worst market for start-up capital*

Note: The higher the score, the better the accessibility  
Source: Ernst & Young (2013)
Upside of the Coin: Contribution of Public Programs

**Contribution to the industries development**

- Industries relying on the complex networks of vendor or supplier (e.g. automobile, shipbuilding, steel, etc.) have a lot of help

**Good financing condition**

- Financing condition of Korean SMEs is regarded as superior to most other markets
  - Korean SMEs are hardly credit rationed (Lee and Lim (2017)): the portion of loans with the credit rationing probability larger than 80% is estimated to be consistently less than 0.4%
  - The average spread of lending rate of SMEs over large firms has fallen: from 0.74%p in 2007 to 0.34%p in 2017

**Effectiveness**

- Few public programs are loss-making on the surface
**Oversupply of public support**

- Public financial institutions compete with each other by trying
  - To copy-cat other’s programs
  - To add more programs and to provide more financing every year
  - At the same time, to minimize the loss

- They end up providing financing to (legally categorized) SMEs with low default risks, which are not the main target of public support in the first place
- Public support needs to focus on the high-risk/high-growth potential younger/smaller firms that find it difficult to finance in the private market
- As the programs are getting larger and larger, the marginal effectiveness of the programs is said to be declining
  => receiving overlapping supports for longer periods (even some unprofitable ‘zombie’ SMEs)
- Yet it is hard to contain this expansion, because
  - there is no single control tower to check the growth and effectiveness of public institutions’ programs and
  - the programs are being run in a way that makes quite difficult for researchers to evaluate the effectiveness ex-post.

**Coordination & performance evaluation**

- Coordination and performance evaluation: necessary to ensure the effectiveness of public support.
- Performance metrics: a mix of quantitative and qualitative indicators.
- Challenges: lack of data, resource constraints, and policy ambivalence.
- Solutions: enhancing transparency, improving data collection, and incentivizing evaluative practices.
Flip Side of the Coin: Side-effects of Public Support (2)

Crowding out private sector

- (Private) markets of SME financing are getting more reliant on public supports, especially because public financing programs are provided at a much lower cost than private markets.
- Since public institutions mostly decide which firms to support, private financial institutions have little incentive to strengthen their firm evaluation capacities.

Dilemma

- Now, a trade-off between the marginal increase of public supporting programs and the marginal increase of enterprise value (and/or credit risk) evaluation capacity of private institutions occurs.
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Now Going Forward

Mandates and Program Design

- Clear mandates/goals
  enabling rigorous & quantitative evaluation
  promoting effective competition within SMEs
- Incentive-aligned design
  recipients/inst./government’s agent problem
  risk-sharing with private sector

Efficient Execution

- Setting up control tower to coordinate roles/responsibilities of public institutions
  managing the risk concentration
  reducing overlapping
  support/SME information collected/centralized

Performance Evaluation and Feedback

- Evidence-based approach
  focusing on where performance is high
- Adjusting the size of public support
  select and concentrate
- Meeting new demands
  new technologies, sustainable investments, etc.

Note: After the revision of SME Act in 2015, SMEs in most manufacturing sectors can have annual sales of about 130 mil USD and still be categorized as an SME. (In most countries, an SME needs to have fewer than 250 employees and 1~5 million annual sales)
Thank You