Financial System Architecture for Effective SME Financing

August 26, 2010

Hyoung-Tae Kim

President, Korea Capital Market Institute
kimht@kcmi.re.kr
Contents

I Framework and Principles for SME Financing

II SME Financing and Bank Loans

III SME Financing and Credit Guarantees

IV SME Financing and Capital Market

V Securitization as an Innovative SME Financing Mechanism

VI Conclusion
I. Framework and Principles for SME Financing
# Architecture for SME Financing: Framework

## Policymakers
- S&M Business Administration (SMBA)

## Legal Framework
- Act on SMEs

### Bank Loan
- **On-Lending**
  - Korea Finance Corp (KoFC)
  - Industrial Bank of Korea (IBK)
  - Korea Development Bank (KDB)
  - Commercial Banks

- **Direct Loan**
  - Korea Credit Guarantee Fund
  - Korea Technology Finance Corporation
  - Regional Credit Guarantee Fund

### Credit Guarantee
- **Korea Credit Guarantee Fund**
- **Korea Technology Finance Corporation**
- **Regional Credit Guarantee Fund**

### Capital Market
- **Financial Institution**
  - Korea Venture Investment Corp (Fund of Funds)
  - Venture Capital
  - PEF
  - Securities Firms
  - National Pension Fund

- **Financing Tools and Exit Routes**
  - Equity
  - CB, BW
  - ABS
  - M&A, SPAC
  - KOSDAQ
  - Freeboard
  - Secondary Fund

### Information Production
- Korea Enterprise Data (KED)
Architecture for SME Financing: Design Issues

- **Policymaker and legal framework for SMEs**
  - SME focused(specialized) policymaker(e.g., SMBA) vs. general policymaker

- **Models for providing government-sponsored loans**
  - Direct loan by SME-focused bank(e.g. IBK) vs. Indirect loan through on-lending(e.g. KoFC)

- **Models for providing credit guarantee**
  - Government vs. Public fund vs. Monoline insurance company

- **Models for providing capital to venture capital companies**
  - Government(e.g. SMBA) → Public Institution(e.g. SMBC) → Fund of funds(e.g. K-VIC)

- **Exit mechanisms**
  - New market, M&A, SPAC, Secondary fund, Securitization(ABS)

- **Institution for credit information production**
  - Rating agency, SME-focus information provider, Commercial banks
## Architecture for SME Financing: International Comparison

### Same Functions are delivered but by different institutions

<table>
<thead>
<tr>
<th>Policymaker</th>
<th>Korea</th>
<th>Japan</th>
<th>U.S.</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policymaker</td>
<td>Small and Medium Business Administration (SMBA)</td>
<td>Small and Medium Enterprise Agency (under the Ministry of Economy, Trade and Industry)</td>
<td>Small Business Administration (SBA)</td>
<td>The SME part in the EU Commission</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SME-related public financial institutions</th>
<th>Korea</th>
<th>Japan</th>
<th>U.S.</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SMBC, IBK, KoFC, Korea Technology Finance Corporation, Korea Credit Guarantee Fund, and others</td>
<td></td>
<td>Japan Finance Corporation</td>
<td></td>
<td>KfW (Germany), EIF (EU)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tools for policy support</th>
<th>Korea</th>
<th>Japan</th>
<th>U.S.</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Guarantees and direct loans</td>
<td>Korea Enterprise Data, a subsidiary of the Korea Credit Guarantee Fund</td>
<td>SME-related data are collected by financial institutions</td>
<td>Corporate information is accumulated by commercial databases</td>
<td>Corporate information is accumulated by commercial databases</td>
</tr>
<tr>
<td>• On-lending has been recently introduced</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information production</th>
<th>Korea</th>
<th>Japan</th>
<th>U.S.</th>
<th>EU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Architecture for SME Financing: Principles

- **Principle 1**
  - The financial system architecture as a whole should be the focus more so than individual financial institutions.

- **Principle 2**
  - Each nation's architecture must reflect the capacity and development stage of that specific financial market (e.g., different mechanisms of providing loans, credit guarantees, and equity capitals).

- **Principle 3**
  - The starting point is to recognize the financial properties of SMEs (e.g., high credit risk, no track record).

- **Principle 4**
  - The availability of multiple exit routes is a key success factor for effective SME financing, especially so for the venture capital.
Under the new regulatory paradigm discussed in global institutions, financing architecture for SMEs is one of the crucial global agendas.

**G-20 Proposal**
- Canada proposed to select best models that catalyze finance for SMEs through the G-20 meeting
- Models should address one or more of these objectives:
  - Catalyzing debt finance for SMEs and mobilizing equity or quasi-equity investments in SMEs
  - Building the capacity of financial institutions and related financial infrastructure and develop regulatory and policy best practices that facilitate SME finance

**Basel Committee Concession**
- Basel Committee appear to have responded to arguments that excessive tightening of the rules could constrain growth and lending particularly to SMEs
  - Rules on Liquidity Coverage Ratio and Net Stable Funding Ratio were watered down or delayed to free up SME lending

**Dodd-Frank Act in US**
- Exemption is granted to venture capitals while other financial institutions are under strict regulations
II. SME Financing and Bank Loans
Policy-based financing for SMEs is needed in the face of market failures due to information asymmetry
- However, specific SMEs loan policies are different country by country

Polices on providing loans to SMEs are divided into two categories: one is government sponsored and the other is market-based
- Government-sponsored lending is broken down into two approaches: direct lending vs on-lending

International Comparison
- Japan and Korea have built specialized banks for SMEs (e.g. IBK). They provide direct loans along with private bank loans
- Germany also has specialized banks for SMEs but mainly provide on-lending via private banks
- While U.S. has no specialized banks for SMEs, commercial banks provide direct loans to SMEs based on regulatory incentives (e.g. Community Reinvestment Act)
On-lending is a policy lending scheme where the government allocates capital only to commercial banks, and commercial banks engage in screening, executing, and monitoring loans to SMEs.

### Comparison of On-lending and Direct Lending

<table>
<thead>
<tr>
<th></th>
<th>On-lending</th>
<th>Direct Lending</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strength</strong></td>
<td>Market friendly</td>
<td>Direct and prompt execution</td>
</tr>
<tr>
<td><strong>Loan provider</strong></td>
<td>Commercial banks</td>
<td>Government-sponsored financial institutions</td>
</tr>
<tr>
<td><strong>When appropriate</strong></td>
<td>When CBs and markets are working</td>
<td>When CBs and markets are not working</td>
</tr>
<tr>
<td><strong>Risk taking</strong></td>
<td>Commercial Banks</td>
<td>Government-sponsored financial institutions</td>
</tr>
</tbody>
</table>
Comparison of On-lending and Direct Lending: Korean Case

**Direct Lending**

- Government
  - Industrial Bank of Korea
    - SME₁, SME₂, ..., SMEₙ

**On-lending**

- Government
  - Korea Finance Corp
    - CB₁, CB₂, ..., CBₖ
      - SME₁, SME₂, ..., SMEₙ
Policy-based loans for SMEs in Korea

- Direct loans to SMEs provided by IBK and other government-owned banks (KDB, National Agricultural Cooperative Federation, etc.)
- On-lending provided by Korea Finance Corporation
- The Bank of Korea (BOK) creates financing sources designated for indirect SME loans (aggregate credit ceiling), and places an obligatory SMEs loan ratio for commercial banks
- Government funds earmarked for SMEs are channeled into SMEs through banks

**Loans to SMEs via Banks**

- Depositor
- Bank of Korea
- Government
- Commercial Banks
- Specialized Banks
- SMEs

Depositor: Deposits → Deposits
Bank of Korea: Aggregate Credit Ceiling → IBK
Government: Financial funds → Specialized Banks
Commercial Banks: Obligatory SME Loan Ratio → SMEs
The BOK sets an aggregate credit ceiling (currently US$10 billion) for SME loans, and provides low rate loans within the ceiling to financial institutions in proportion to their SME loan performance.

A system which recommends banks to allocate at least a certain percentage of their loan increase to SMEs.

If a bank fails to meet the obligatory ratio, the aggregate credit ceiling for the bank is reduced for one month by the amount equivalent to the shortfall.

### Obligatory SME Loan Ratio (July, 2010)

<table>
<thead>
<tr>
<th></th>
<th>Ratio</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBK</td>
<td>Over 70% of total financing</td>
<td>The Act on IBK</td>
</tr>
<tr>
<td>Commercial Banks</td>
<td>Over 45% of new loans</td>
<td></td>
</tr>
<tr>
<td>Local Banks</td>
<td>Over 60% of new loans</td>
<td>Loan regulations for financial institutions (BOK)</td>
</tr>
<tr>
<td>Branches of Foreign Banks</td>
<td>Over 35% of new loans</td>
<td></td>
</tr>
</tbody>
</table>
Loans to SMEs still account for the largest proportion in the IBK’s loan portfolio.

As commercial banks play increasingly significant role in SME financing, IBK becomes less responsible for SME loans.

IBK is expected to be privatized.

Unlike other countries’ government-sponsored institutions, IBK finances capital not just by issuing bonds but also by receiving deposits.

### IBK’s Loan Portfolio (composition, %)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2004</th>
<th>2006</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMEs</td>
<td>84</td>
<td>85</td>
<td>82</td>
<td>81</td>
<td>80</td>
</tr>
<tr>
<td>Large Corp.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Consumer</td>
<td>16</td>
<td>15</td>
<td>18</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### IBK’s Funding Structure (2009, %)

- deposit 34.8%
- IBK bond 39.0%
- others 7.0%
- foreign borrowing 3.5%
- borrowing from Gov. 7.9%
- borrowing from BOK 1.7%
- equity 8.1%
Korea Finance Corporation (KoFC) is a on-lending provider in Korea

- KoFC is a public corporation established by the Korean government on October 2009
- KoFC capitalizes on financial institutions’ intermediary role to help finance SMEs, develop regional economies, build social infrastructure, and nurture new growth engine industries

Primary responsibilities

- Supply and manage funds necessary to support SME growth
- Provide on-lending and the risk sharing system, where the KoFC shares some part of the risks that a financial intermediary bears when it provides on-lending to SMEs with a low credit rating
- An indirect investment scheme which supports SMEs with promising technologies, but without sufficient funds

Major investments

- On-lending balance: US$1.3 billion, as of May 2010
- Investments in funds specialized for SMEs: US$100 million
Even after the crisis, while loans to large companies shrink, loans to SMEs consistently increase

- In 2009, loans to SMEs outstanding is even larger than consumer credit
- Commercial banks and specialized banks account for 50%, 35% of total loans to SMEs respectively
  - IBK takes up almost 20% of total loans to SMEs

Source: Financial Supervisory Service (FSS)

Loan Portfolio of Commercial Banks

Source: FSS, BOK
III. SME Financing and Credit Guarantees
## The Evolution of Guarantee Market in Korea

<table>
<thead>
<tr>
<th>Korea Credit Guarantee Fund</th>
<th>Korea Technology Finance Corporation</th>
<th>Regional Credit Guarantee Federation</th>
<th>Reformed the credit guarantee system</th>
<th>Adjust the size of guarantees according to financial situations</th>
</tr>
</thead>
</table>

- **Korea Credit Guarantee Fund**: Designed to invigorate financial support to SMEs, that suffer from information asymmetry and are marginalized from the mainstream financing. A public guarantee provider which provide loan guarantees to SMEs.

- **Korea Technology Finance Corporation**: Designed to revitalize investments in high-tech businesses. Provide guarantees to SMEs with technical skills. Deal with guarantees to smaller venture companies compared to the Korea Credit Guarantee Fund.

- **Regional Credit Guarantee Federation**: Designed to provide guarantees to regional SMEs to invigorate regional economies. Responsible for providing guarantees to regional SMEs.

- **Reformed the credit guarantee system**: Trimmed the size of the credit guarantee, which sharply increased after the 1997 financial crisis. The Korea Credit Guarantee Fund supports general and innovative firms while the Korea Technology Finance Corporation offers support to venture companies, “Innobiz” companies, and other firms less than 5-year-old that lead the technological innovation.

- **Adjust the size of guarantees according to financial situations (Feb. 2009 ~)**: As the global financial crisis worsens SMEs' financial trouble, an emergency measure to expand guarantees was taken until end-2009. Except for fast track cases, credit guarantees were reduced from Jul. 2010.
# Public Guarantee Providers in Korea

<table>
<thead>
<tr>
<th>Establishment</th>
<th>Korea Credit Guarantee Fund</th>
<th>Korea Technology Finance Corporation</th>
<th>Regional Credit Guarantee Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal foundation</td>
<td>Act on Credit Guarantee Funds</td>
<td>Act on Financial Support to New Technology Businesses</td>
<td>Act on the Regional Credit Guarantee Federation</td>
</tr>
<tr>
<td>Established by</td>
<td>Government</td>
<td>Government</td>
<td>Municipalities</td>
</tr>
<tr>
<td>Purposes</td>
<td>Provide loan guarantees to firms with lack of collateral</td>
<td>Financial support to businesses with new technologies</td>
<td>Provide loan guarantees to small-sized firms with lack of collateral</td>
</tr>
<tr>
<td>Financing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funding sources</td>
<td>• Government</td>
<td>• Government</td>
<td>• Government, municipalities</td>
</tr>
<tr>
<td></td>
<td>• Financial institutions</td>
<td>• Financial institutions</td>
<td>• Financial institutions</td>
</tr>
<tr>
<td></td>
<td>• Private firms</td>
<td>• New technology finance corporations</td>
<td>• Private firms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Regulated by special laws</td>
</tr>
<tr>
<td>Through contribution of</td>
<td>0.225% of loans</td>
<td>0.135% of loans</td>
<td>0.02% of loans</td>
</tr>
<tr>
<td>Scope</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary roles</td>
<td>Credit guarantee, and others including debenture guarantee, tax payment guarantee, performance guarantee, escrow guarantee, etc.</td>
<td></td>
<td>Credit guarantee</td>
</tr>
<tr>
<td>Type of guarantees</td>
<td>• Direct guarantee</td>
<td>• Direct guarantee</td>
<td>• Direct guarantee (Re-guaranteed by the federation)</td>
</tr>
</tbody>
</table>
Goals
- Systematically manage and provide SME-related data
- Build a systematic corporate credit information system which suits the needs of the market
- Provide SME credit inquiry service

History
- In July 2004, KED was established as a subsidiary of the Korea Credit Guarantee Fund, to provide specialized services for SME credit rating

Key Roles
- In B2B transactions
  - Provide accurate real time data
  - Improve transparency in B2B commercial transactions
  - Prevent insolvency of receivables
- In loan market
  - Help provide financial institutions with accurate credit information
  - Help manage credit risks and also reduce assessment costs associated with complying with Basel guidelines
- In public projects
  - Provide information for bidders and for selecting qualified companies for government projects
The Small Business Administration (SBA) plays an important role in providing guarantees

- Credit guarantees by the SBA play the biggest role in policy-based financial support to SMEs
- The Small business Investment Company (SBIC) which has been approved by the SBA is a private firm which invests in SMEs. The SBA provides guarantee for debentures issued by the SBIC
- Each state government is independently pushing forward SMEs support measures which suit the needs of the state
- The U.S. government has expanded its support for SMEs since the recent global financial crisis
Japan provide policy-based financing support to SMEs through direct loans by the Japan Finance Corporation (JFC) and credit guarantees by the Credit Guarantee Corporation (CGC)

Japan Finance Corporation (JFC)
- The JFC was established in October 2008 under the Japan Finance Corporation Law, as the result of the merger of the Japan Finance Corporation for Small and Medium Enterprise (JASME), the National Life Finance Corporation (NLFC), Agriculture, Forestry and Fisheries Finance Corporation (AFC), and the International Financial Operations (IFOs) of the Japan Bank for International Cooperation (JBIC)
- A new system was launched in order to cut excessive policy-based financing and streamline the operation
- Primary missions include:
  - Provide direct loans for long-term funds that SMEs cannot finance from general banks
  - Help financial institutions securitize debts to SMEs and expand long-term fund supplies
  - Provide credit insurance and loans for the CGC
Germany provides financing support to SMEs through various channels

- Indirect loans provided by KfW (Kreditanstalt für Wiederaufbau)
- Re-guarantee for credit guarantee companies run by the federal and state governments

KfW's Program for Mittelstand Loan Securitization (PROMISE)

- KfW provide credit guarantees in the process of securitization by entering into credit default swap (CDS)
Since SMEs suffer from lack of collateral and information asymmetry, the credit guarantee is regarded as a pivotal infrastructure for SMEs.

Balance required between public and private guarantees
- At introductory stage, government-sponsored public institutions play more significant role than private institutions like monoline insurance company.
- However, due to the fiscal burdens of governments after the recent crisis, a heavy dependence on public guarantee is not sustainable.
- As market develops, we need to capitalize on market players and market mechanisms.

As for public guarantees, avoidance or at least reduction of moral hazard problem is critical
- Korea’s experience during IT boom and bubble (e.g. KCGF, KTFC).
- To address the potential moral hazard problem, the roles of the public guarantee organizations should be clearly specified and performance must be regularly evaluated and reported.

A different guarantee system is needed depending on the development stage of capital markets
- Countries with underdeveloped capital markets should focus on to credit guarantees for SME loans.
- Countries with developed capital markets can use credit guarantees in the process of securitization (e.g. primary CDO) and credit derivatives.
IV. SME Financing and Capital Market
A bird eye’s view is necessary in designing an architecture of SME financing
## The Evolution of Venture Capital Market in Korea

<table>
<thead>
<tr>
<th>Phase</th>
<th>Period (Year)</th>
<th>Events and Developments</th>
</tr>
</thead>
</table>
| Initial Phase                | (1974~1986)  | • 1974: Korea Technology Advancing Corporation (KTAC) founded by Korea Institute Science and Technology (KIST)  
• Three more New Technology Finance Companies established under Financial Support for New Technology Businesses Act (1986, Ministry of Finance and Economy)  
1981: Korea Technology Development Co. (KTDC)  
1982: Korea Development Investment Co. (KDIC)  
1984: Korea Technology Finance Co. (KTFC)  
• Support for Small and Medium Enterprise Establishment Act enacted (1986, Ministry of Trade and Industry) |
| Growth Phase                 | (1987~1998)  | • Small and Medium Business Administration (SMBA) was established in 1996  
• Act on Special Measures for the Promotion of Venture Businesses enacted in 1997  
• Foundation of KOSDAQ in 1997  
• 12 venture capital companies (VCs) were founded in 1986 and the number of VCs increased to 72 in 1998 |
| Overshooting Phase           | (1999~2000)  | • VCs proliferated and the number of VCs peaked at 156 in 2000  
• 325 venture capital funds (VC funds) were launched in 2000  
• VCs invested $2 billion in 2000 |
| Consolidation Phase          | (2001~Present) | • After experiencing slowdown by the global economy downturn and plummeting technology-centered markets (Nasdaq, Kosdaq, etc.) from 2001 to 2004, the venture capital industry starts to take off again (104 VCs in 2006)  
• Dramatic changes in government policies to “revive the venture industry”  
  - Government General Measures to revitalize the venture industry  
• In 2005, Fund-of-funds (SMBA), whose role is to allocate funds among VCs, was built based on Act on Special Measures for the Promotion of Venture Businesses  
  - To strengthening the function of capital market |

### Success Factors

- **Government Policies for nurturing venture companies**
- **Equity investment is larger than loan contract**
  - Growth of stock market (KOSDAQ)
Despite of the changing government role, the Korean VC market still depends heavily on government sponsored capital

- Korean government is a major limited partner for venture capital funds in Korea
  - Small & Medium Business Administration, The Ministry of Knowledge and Economy, The Ministry of Environment, The Ministry of Culture and Tourism, etc.

In recent years, private corporations have become the largest LP

- While ‘foreign investor’ is a fast growing LP, ‘pension fund’, unlike other countries, accounts for relatively small proportion
Capital Allocation through a Fund of Funds

Capital Allocation by Government

Government (SMBA) → Public Institution (SMBC)

VC_1, VC_2, ..., VC_n

SME_1, SME_2, ..., SME_k

Capital Allocation by Fund of Funds

Government (SMBA) → Fund of Funds (K-VIC)

VC_1, VC_2, ..., VC_n

SME_1, SME_2, ..., SME_k
Providing exit channel for VCs through establishing new markets

- Korea’s new market KOSADQ with 1,026 listed companies, acts as a major exit channel for the venture capital.
- Going public on KOSDAQ is easier than on KSE (main board), and KOSDAQ has special listing standards for venture companies defined in venture business authorization system.
- Venture companies are clearly defined in the “Act on Special Measures for the Promotion of Venture Business (1997)”. 
  - Four types of venture companies: Venture capital investment type, R&D intensive type, New technology patent type, Highly evaluated by authorized institution type.

Other countries also facilitate exits of VCs through new markets

<table>
<thead>
<tr>
<th></th>
<th>Number of listed companies</th>
<th>Market Capitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2009</td>
</tr>
<tr>
<td>KOSDAQ</td>
<td>1,022</td>
<td>1,028</td>
</tr>
<tr>
<td>NASDAQ</td>
<td>3,069</td>
<td>2,852</td>
</tr>
<tr>
<td>JASDAQ</td>
<td>979</td>
<td>889</td>
</tr>
<tr>
<td>AIM</td>
<td>1,694</td>
<td>1,293</td>
</tr>
<tr>
<td>TSX Ventures Exchange</td>
<td>2,338</td>
<td>2,375</td>
</tr>
</tbody>
</table>

Unit: USD billions
Importance of M&A market as exit channels
- M&A market becomes important when IPO is hard to achieve during a stock market downturn
- In Korea, most of the exits for VCs were through IPOs
  - During 2000~2009, on average 85% of the VCs exited through IPO and 15% by M&A
- For the US, during 2000~2009, only 20% were through IPO while the remaining 80% were by M&A

SPAC is an exit scheme combining both IPO and M&A where M&A is executed in the public equity market
- SPAC was introduced in Korea in 2009 to facilitate M&A
  - SPAC is a public listed company with an intention of M&A and raises capital through IPO
  - Promising SMEs can get listed with timely capital injection without depending on the IPO market
Emerging economies without a well-functioning capital market need government-sponsored policies in their early stages
- Establishment of Small and Medium Business Administration (SMBA)
  - SMBA exclusively takes charge of venture capitals and small and medium enterprises
- Tax benefits is an effective policy tool for attracting capital for venture-type SMEs
  - Tax exemptions on capital gains from venture stocks
  - Separate taxation on dividends
  - Investment income deduction on investors

As market advances, the allocation mechanism of the public capital must also change
- From SMBA to SMBC and from SMBC to K-VIC

Various exit routes are essential for active investment of VCs
- IPO, M&A, SPAC, Secondary Fund, Securitization
The Economic Roles and Evolution of PEF

The economic role of PEF in relation to SMEs
- Since SMEs are risky investments, prompt and effective ex-post restructuring of SMEs is as important as ex-ante investment
- PEF provides capital for M&A or restructuring of inefficient SMEs
- For effective financing of SMEs, both PEF and VC are necessary infrastructures

The Evolution of PEF

<table>
<thead>
<tr>
<th>Stage</th>
<th>Evolution of Vehicles</th>
<th>Korea</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st stage</td>
<td>public asset management company</td>
<td>KAMCO</td>
<td>RTC</td>
</tr>
<tr>
<td>2nd stage</td>
<td>specialized private fund</td>
<td>CRC, CRV, CRF, M&amp;A Fund</td>
<td>Vulture Fund, Corporate Restructuring Fund, M&amp;A Fund</td>
</tr>
<tr>
<td>3rd stage</td>
<td>• Private equity fund (buyout fund)</td>
<td>• K-PEF (2004): buyout fund</td>
<td>• Private Equity Fund (e.g. KKR, Carlyle, Blackstone, Warburg Pincus, Castle Harlan)</td>
</tr>
<tr>
<td></td>
<td>• Investment bank</td>
<td>• K-IB (2007): Financial Investment Firm</td>
<td>• Investment Bank (e.g. Goldman Sachs, Morgan Stanley, Merrill Lynch)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mezzanine Fund(2010)</td>
<td></td>
</tr>
</tbody>
</table>

CRC: corporate restructuring company, CRV: corporate restructuring vehicle, CRF: corporate restructuring fund, PEF: private equity fund
RTC: Resolution Trust Corporation, RCC: Resolution & Collection Corporation
A stepwise legal approach for PEF
   - Specialized fund → general PEF (In Korea, from CRC, CRV, CRF to K-PEF)

The development of PEF depends on umbrella capital markets
   - Convertible bond (CB), bond with warrant (BW), debt equity swap, exit mechanisms, M&A rules, bankruptcy law

Efficient operation of PEF requires a well-functioning and supportive legal infrastructure
   - The type of legal system (i.e. statutory law or common law) is of critical importance in designing PEF

Equity based incentive systems are crucial to the success of PEF
V. Securitization as an Innovative SME Financing Mechanism
Due to their high credit risk, SMEs have to depend on financing mechanism which separates credit risk from issuing companies (e.g. ABS, credit derivatives)

- During economic crunch, only a few large companies can issue bond based on their own credit rating
- ABS is useful to the innovative companies with intangible assets like patent, royalty etc

ABS is a major security class in the Korean capital market
ABS as a Financing Scheme of SMEs: Primary CBO

BWs or CBs issued by SMEs → Underwritten by DongYang Security Company → SPC

KTCG 25% Guarantee → Credit Facility Provider (KDB) Guarantee

senior notes (80%)

SPC → Overseas Institutional Investor

Servicer

subordinated notes (20%)

Small Business Corporation (SBC)

Korea Capital Market Institute
ABS as a Financing Scheme of SMEs: Yen-denoted Primary CBO

Pool of SMEs

Issuing SB, BW

Issued Amount

Daeshin Securities Firm

Transferring SB, BW

Transferred Amount

Domestic SPC

Senior Bond

Mezzanine Bond

Subordinate Bond

Small Business Corporation

Industrial Bank of Korea

Guarantee

JBIC

Guarantee

Oversea's Investors

Yen-denoted P-CBO

Issued Amount

Transferred Amount
ABS as a Financing Scheme of Venture Capital: Securitization of Pre-IPO stocks

Venture Capital

Commercial Bank

SPC

Trust Company

Investors

Pre-IPO stocks

Subordinate Certificate of Trust

Senior Certificate of Trust as Collateral

Loan + Gains from Listing + Senior Certificate of Trust

ABS Fixed rate + α

Loan

Sharing Gains from Listing
ABS as a Financing Scheme of SMEs: Synthetic CBO

<Synthetic CBO>

Industrial Bank of Korea

CDS

Credit facility

SPC (SME VI)

SPC

Collateral

cash

Investors

CDO

cash

Collateral

<Pseudo-synthetic CBO>

Industrial Bank of Korea (protection Buyer)

CDS

IBK Bond

cash

Credit facility

SPC (SME VI)

SamSung Sec. Co. (protection seller)

IBK Bond & CDS

cash

SPC (Fn fine)

CDO

cash

Investors
Key Success Factors for Korean ABS Market

- **Effective legal framework: “The ABS Act”**
  - Who can be originators, what kind of assets can be securitized, what kind of securities can be issued, what process should be followed?

- **Clear definition of “True Sale”**
  - By clearly defining “true sale”, regulators have removed legal uncertainties related to asset transfer and, as a result, encouraged active involvement from a wide variety of originators, investors, and IBs.

- **Gradual expansion of originators**
  - Through a stepwise expansion of originators, the government has prevented illegal behavior sometimes associated with high risk companies and has given market players the opportunity to adjust to a new business.

- **Credit enhancement: banks and public credit guarantee funds**
  - For a primary CBO, the government-owned credit guarantee funds (KCGF, KTCGF) have been the major source of credit guarantees.

- **Detailed and prompt information disclosure**
  - Financial Supervisory Commission (FSC) provide a platform, DART system (electronic disclosure system), through which detailed information is quickly disclosed.

- **The CBO fund as a demand pool for subordinated ABS**
  - At the introductory stage, we used to have CBO fund which was required to invest more than 25% of its fund in subordinated bonds.
VI. Conclusion
For effective financing of SMEs, the financial system needs to develop three pillars: loans, credit guarantees, and capital markets

- SME-specialized policymakers and a solid legal framework are instrumental to support the three pillars
  - This is especially true when financial markets are not well-developed
- As for the order of development, the typical model is to develop loans and guarantees arrangements first, and then development of capital markets
  - However, capital markets that function properly make it possible to expand loans to SMEs. The interaction between the loan markets and capital markets must not be neglected when designing the financial architecture.

For SME financing, regardless of countries, government-sponsored institutions play pivotal roles

- Who will carry out what function?
- The architecture should not impose a heavy fiscal burden to the government and this will require more competent market players and infrastructure

Capital markets development is vital for sustainable support for SMEs, especially innovative SMEs

- To activate capital injections to SMEs, we need to expand the exit routes
- The importance of the securitization market backed by a solid legal framework cannot be overemphasized