

Providing an Umbrella, Rain or Shine

Lessons for Latin America and the
Caribbean from Korean Experiences
in Productive Development
Financing

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Abstract*

The small- and medium-sized enterprise financing system in Korea, which has as a standpoint the Industrial Bank of Korea, is a world-class example of a set of long-term policies and actions devoted to creating growth and development. Some of the experiences and lessons learned over time in the evolution of this system are used to derive recommendations for the Latin American and Caribbean region. Although current political and economic contexts are different among countries across the region, Korea's experiences are used to provide a set of recommendations for policymakers.

JEL Codes: JEL: G20, G21, G28, L25, O16

Keywords: Finance, financial intermediaries, financial market, banking, policy, firm performance

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Introduction

The small- and medium-sized enterprise (SME) financing system in Korea, which has as a standpoint the Industrial Bank of Korea (IBK), is a world-class example of a set of long-term policies and actions devoted to creating growth and development. Some of the experiences and lessons learned over time in the evolution of this system will be used to derive recommendations for the Latin America and Caribbean (LAC) countries. The intention is to find the main lessons for productivity growth through SMEs' access to financial services, with a pivotal role played by development banks.

Section 1 of this document provides a brief history about Korea's rapid economic growth and the factors that lie beneath it. Section 2 examines the evolution and role of SMEs in Korea's rapid economic development process. Section 3 describes the financial support system designed by the Korean government to support SME growth. Section 4 describes IBK Programs, particularly in terms of productive development financing and value chain financing. Sections 5 and 6 provide conclusions and lessons to be drawn from Korean experiences in SME financing that can be applied in LAC countries.

Korea's Economic Growth¹

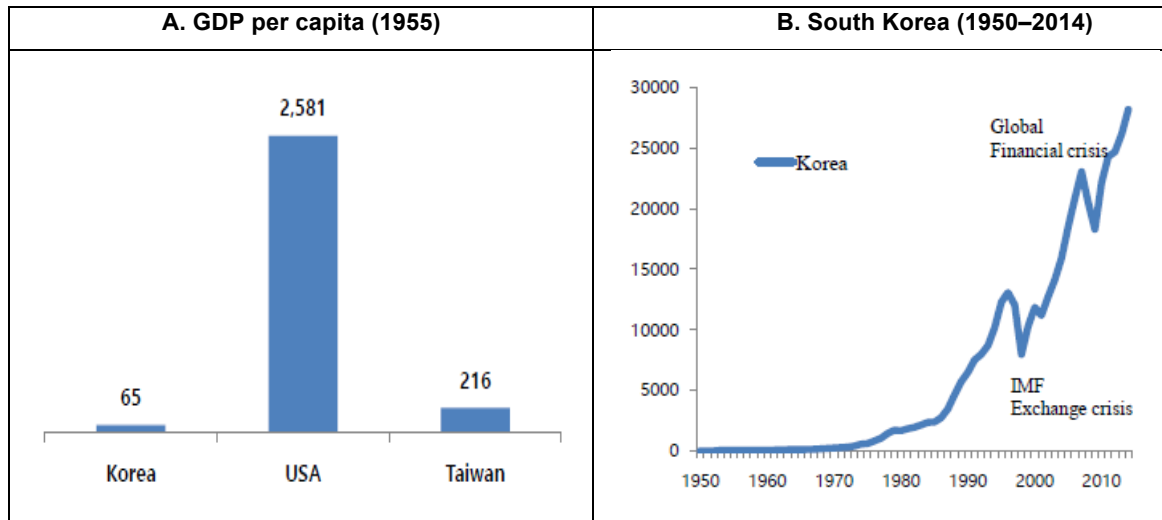
“Miracle on the Han River”: Korea's Substantial Economic Growth Since the 1960s

Until the late 1950s, Korea was one of the poorest countries in the world, with a per capita income of less than US\$100 (KITA, 2010) (Figure 1A). However, through its rapid industrialization, which started in the 1960s and peaked in the 1980s, Korea achieved substantial economic growth (Figure 1B).

This process of economic growth, nicknamed “Miracle on the Han River” as a reference to the historically important river that runs through South Korea, received a great deal of attention worldwide as a unique case of national development. This historical, economic, and sociological process has been extensively documented by economists such as Amsden (1989), Balassa (1981), Johnson (1987), and Wade (1990), who have studied the key drivers of Korea's economic growth. Korea's GDP per capita went from US\$65 in 1955 to US\$28,180 in 2014, an indication of the country's steady and rapid growth. In fact, average annual GDP growth was 9.6 percent from 1960 to 1980 and 8.0 percent from 1980 to 2000. In 2004, Korea joined the trillion-dollar club of world economies. In 2014, it was the world's 14th largest economy.

¹ This section was extracted, corrected, and complemented from KDI (2011).

Figure 1. South Korea: Per capita GDP (in US\$)



Sources: BOK (2014); IMF (2014).

Business Development: A Reflection of Growth

As of now, Korea hosts the headquarters of many competitive enterprises in the global market in the areas of IT, automobiles, shipbuilding, steel, and petrochemicals. These enterprises currently lead the growth of the Korean economy. Samsung, Hyundai, and POSCO are good examples of this.

At their inception, however, these global enterprises were small or medium-sized companies. Just to mention one example, Samsung electronics was founded in 1968 as a joint venture with Sanyo, a Japanese company. It was a small company that started manufacturing black and white screen TV sets using Japanese technology.

Another example is Hyundai, which in the early 1960s consisted only of 150 small repair shops in Korea, with five to six workers per factory. In 1967, Hyundai was established with no technology, capital, or skilled labor. The company developed and produced Korea’s first indigenous car, the Hyundai Pony, in 1974.

The Role of SMEs in Korean Growth

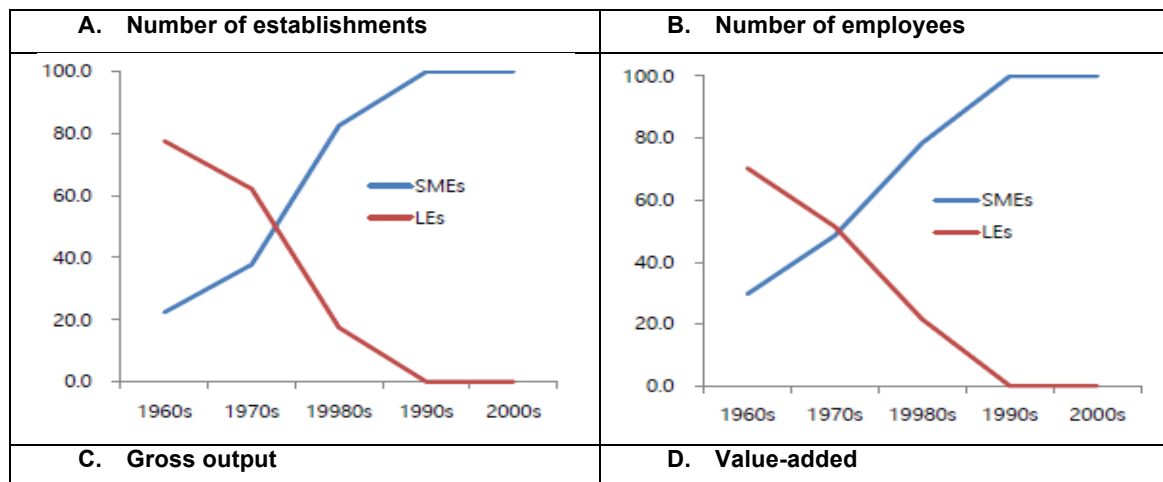
SMEs in Korea: Supporting Large Enterprises and Economic Growth

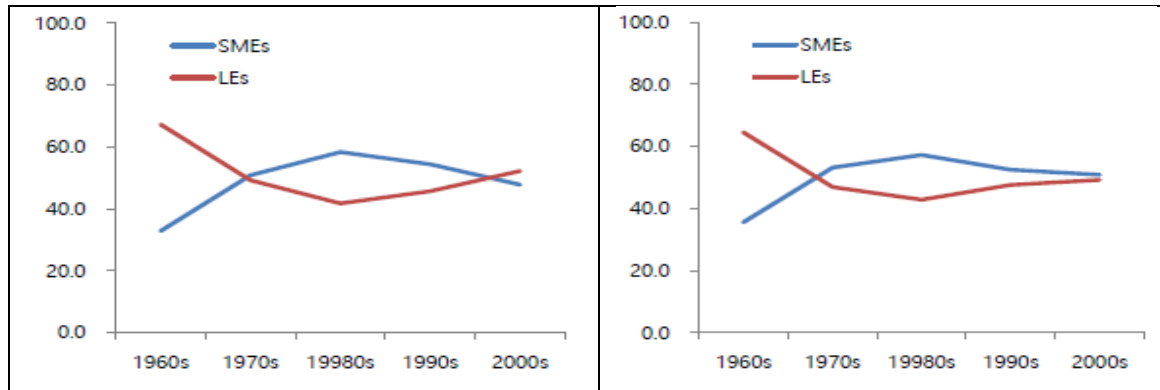
Key to the growth of Korean economy has been the continual support of SMEs as producers of intermediate goods for large enterprises (LEs). Just to mention one example, in the car industry, 20,000 automobile parts are required to produce a single car. Currently, these parts are supplied efficiently by SMEs. It is with this input that LEs are able to produce cars quickly and manage their production more efficiently.

From a historical point of view, the Korean government noticed the need to provide SMEs the proper policy and regulatory support to increase industrial growth, using them as producers of intermediate inputs with value-added for LEs. The results show that since the end of 1970s, as a result of policy changes, the growth of manufacturing SMEs has exceeded that of large manufacturing enterprises. This was a substantial change, since in the 1960s their growth was only about a half that of large manufacturing enterprises, at a time when policy was originally aimed at promoting the growth of chemical and heavy industries, focusing on LEs.

As a result of these policy changes, with the government’s active SME promotion policy designed to remedy structural imbalances stemming from the previous policy that favored LEs, since the 1980s, manufacturing SMEs exceeded large manufacturing enterprises in a large amount of indicators. At that time, the government was promoting SMEs as players in supplying and producing parts with a heavy chemical industry-driven policy in place. The industry underwent a transition and moved into manufacturing more diverse products over time, with the strong support of SMEs as intermediate input providers, using the same model used previously by the chemical industry. As a result of these changes, during the 1990s and the subsequent decades, manufacturing SMEs continuously experienced higher growth rates than large manufacturing enterprises. As a natural consequence, LEs started to show a decrease in indicators such as number of establishments, number of employees, gross output, and value-added (Figure 2).

Figure 2. Korea: Growth Contribution Ratio by Firm Size, 1960s–2000s (in percent)





Source: Authors' elaboration.

Notes: 1) Annual average rate. 2) 5–299 employees. 3) Growth of contribution ratios were calculated on a base of 100 percent.

SMEs in Korea: Pillars of the National Economy

By the end of 2012, SMEs, including manufacturing, were playing a pivotal role in the Korean economy, accounting for 99.9 percent of all enterprises and 87.7 percent of all employees (Table 1). In terms of scale, small enterprises (SEs) take up 97.2 percent of SMEs, and their employees comprise 71.2 percent of the total number of employees that work for SMEs. Medium-sized enterprises (MEs) and their employees make up 2.8 percent and 28.8 percent, respectively.

Table 1: Korea: Number of Firms and Employees within SMEs, 2012

Size of enterprise	Number of firms	Number of employees
LEs	2,916	1,831,790
SMEs	3,354,320	14,891,162
Small-sized enterprise (1–9 employees)	3,258,617	9,295,775
Medium-sized enterprise (10–299 employees)	92,787	3,763,597

Source: SMBA (2014).

Note: In manufacturing, small business means 1 to 49 employees and medium business means 50 to 299 employees.

SME Challenges

There are some challenges remaining for Korean SMEs, which pose obstacles for the existing SME supporting system. Some of them might look familiar to the frequent SME literature reader: financing, human capital, markets (inbound or outbound) and research and development (R&D) (SMBA, 2014).

According to the Bottleneck Survey for SMEs (KBIZ and KCCI, 2014),² administered by KBIZ and the Korea Chamber of Commerce and Industry (KCCI), the two main SME challenges in Korea are differentiated based on the size of each business: namely, R&D is the main issue for MEs, and financing is the main challenge for SEs.

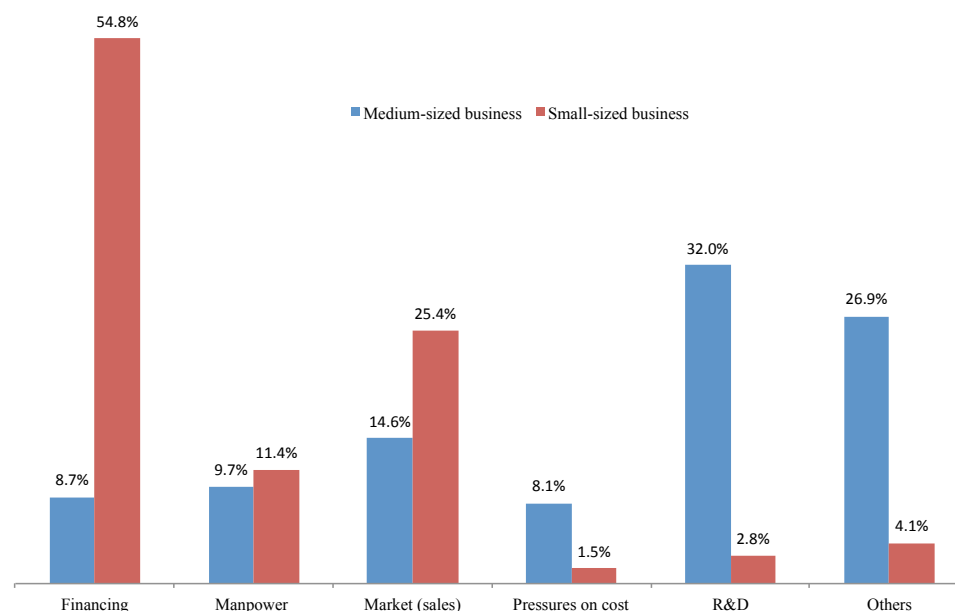
First, to sustain growth overseas, MEs must produce their own products using their own technology. But most Korean MEs are still subcontract suppliers for LEs, rather than graduating to LEs themselves. This is a consequence of bad incentives to improve their innovative capacity, and it actually prevents them from growing into highly competitive enterprises in the global marketplace.

Next, although there is liquidity in the SME financial market, SEs without collateral, such as startups and technology companies, are still suffering from financial difficulties stemming from the most recent financial crisis. In Korea, political support for start-ups is still limited. SME financial institutions and commercial banks are still reluctant to provide financing to startups due to high risk.

Although many SME policies, including financial policy, are being implemented through agencies and financial institutions, SMEs in Korea still face diverse challenges. This is connected to the continuous changes in the roles of public agencies set up by the Korean government (Oh, 2003). They still focus on loans rather than investment, and sometimes they duplicate efforts. According to the SMBA (2014), this is due to the absence of a control tower organization to mitigate these problems according to the state of macroeconomic development and micro-level business cycles.

² KBIZ and KCCI survey the challenges in regularly supporting and improving SME policies. When there are issues for SMEs, they administer surveys to solve the problems. KBIZ is Korea's federation of SMEs and represents their interests in Korea. KCCI was established in 1884 and is the nation's largest private economic organization. The main objective of KCCI is to promote improvement and development of Korean commerce and industry.

Figure 3: The Business Bottleneck Survey for SMEs



Sources: KBIZ and KCCI (2014).

SMEs Financial Support System

A Brief History and Justification of Public Policy Intervention

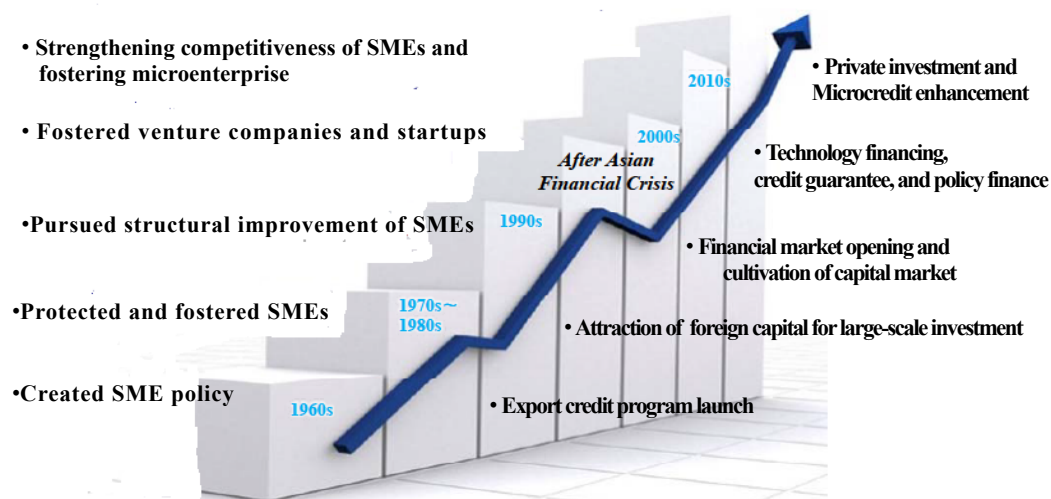
Korean Government SME Support System: Evolving Issues, Evolving Institutions

The Korean government began considering SMEs as targets for financial support when their role started to reflect their actual importance in the economy. The type of support has evolved over time as SMEs have changed their economic status. Specifically, in the 1960s, the government established a legal framework for assisting and fostering SMEs because the financial market was focused on LEs through export credit programs. In the 1970s and 1980s, the government protected and fostered SMEs as players in supplying and producing parts for its heavy chemical industry-driven policy. At that time, the financial market was focused on attracting foreign capital for large-scale investment.

In the 1990s, the government pursued the structural improvement of SMEs. At that time, the government decided to increase liquidity in the financial market through openness and capital market development. The government removed protective SME policies such as SME-exclusive industries and enacted structural improvement and managerial stabilization of SMEs. After the 2000s, the government established measures to complement weak areas such as

small business with a focus on venture policy. The financial market also developed technology financing and microcredit financing.

Figure 4: Evolution of SME Policy and SME Financing



Source: IBK Economic Research Institute (2014a).

Cornerstone 1: The Five-year Plan

One of the key contributors to SME and economic growth was the five-year Economic Development Plan,³ covering the period from 1962 until 1976 (KDI, 2011). Under this plan, Korea was able to develop a competitive advantage in labor-intensive manufactured products, leading to an increase in exports, which in turn fostered economic growth. With this policy action, Korean government also wanted to bring about a change in the long-term trend of low domestic savings, and tried to attract foreign investment and end over-regulation in the private sector. This policy increased competition and innovation among firms. Since this plan was implemented, Korea's savings rate increased from 0.8 percent in 1962 to 14 percent in 1970, and the number of manufacturing companies increased from 8,800 in 1955 to 3,331,634 in 2012. As a result, absolute poverty declined steeply, from 48 percent in 1961 to less than 10 percent at the beginning of the 1980s.

³ The plan was designed to increase wealth within Korea and strengthen political stability. It was an outward-facing and export-centric economic policy that ushered in an era of industrialization and massive technological development following a complete post-war depletion of capital stock. Korea had three five-year plans (1962–1976) under the auspices of the Economic Planning Board, a state pilot agency.

Cornerstone 2: SME Framework Act (1966): The Kickoff of SME Support Policies⁴

The Small and Medium Enterprises Framework Act, passed in 1966, was designed to provide statutory tools to be translated into laws to provide support, which is the constitutional spirit of SME protection. The Act is a comprehensive and fundamental statute for economic policies to safeguard SMEs. Well-framed legal support is very important in the sense that it enables the government to deliver aid to SMEs. The SME Act has been amended 13 times to respond to change in the economic climate (Annex 1).

The Act starts with the definition of SMEs themselves in order to define the subject of the policies. The most recent amendment of the SME Act (January 28, 2015) consisted mainly of a redefinition of SMEs. Before the amendment, SMEs were defined by the number of full-time employees or the amount of capital and the sales volume. Currently, these criteria are combined into a single standard: average sales volume in the preceding three years (Annex 2). One of the most important reasons for amending the definition of SMEs was to prevent “Peter Pan Syndrome,”⁵ and to create incentives for SMEs to graduate in terms of scale. The Korean government decided that it could prevent the intentional adjustment by SMEs of the number of employees or the amount of their capital by defining SMEs in terms of sales volume (SMBA, 2015).

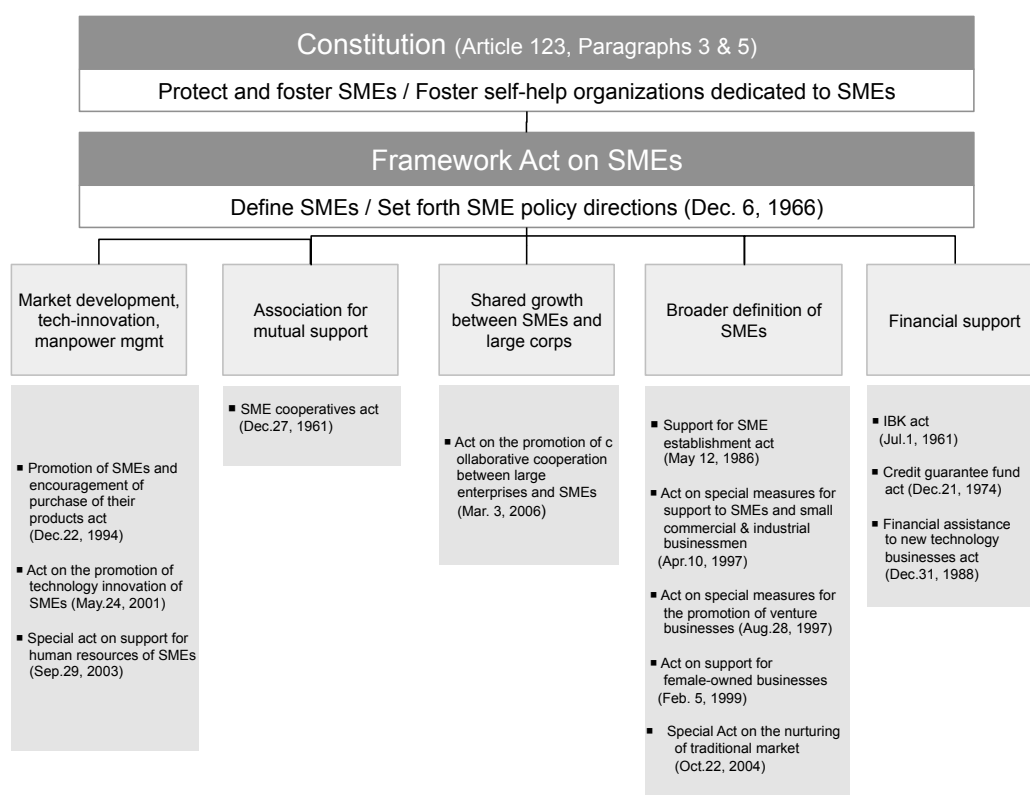
Cornerstone 3: The SME Legal System

To sum up, since the 1960s, and taking as bases the five-year plan and the SME Act, the Korean government has implemented SME support policies that include financial and fiscal incentives as well as nonfinancial/non-fiscal incentives. To provide these incentives, the Korean government has established various agencies and systems and enacted a series of laws addressing objectives such as innovation and development, mutual support associations, value chains, and financial support (Figure 3). This document will describe the latter objective in some detail, covering the creation and functions of the IBK as the largest public institution devoted to SME financing in Korea.

⁴ Extracted from the “Small and Medium Enterprise Legal System” (Ministry of Government Legislation, 2013), and corrected and complemented.

⁵ Peter Pan Syndrome refers to SMEs’ refusal to grow into LEs, as they hope to benefit from numerous forms of state support. Currently, the Korean government offers SMEs up to 160 incentives and support programs.

Figure 5: Framework of the Korean SME Legal System



Source: KSBI (2013).

Evolution of the Current Institutional Framework

Korean Government: Expanding the Frontier of SME Financing

Many countries, including Korea, cite market failures and information asymmetries as the justification for public policy intervention in SME markets. Besley (1994) found that deficiencies in the enabling environment and residual market failures, such as enforcement difficulties, imperfect information, protection of depositors, and market power, have motivated government interventions in the area of SME financing. The Organisation for Economic Co-operation and Development (OECD) (2006) showed that the costs are especially high in the case of SMEs, given that the information asymmetry is more severe. Stiglitz and Weiss (1981) found that due to market failures, financial resources are not efficiently allocated, thus creating the need for a government role in SME financing.

The literature has documented the importance of providing access to financing and developing financial systems as a determining factor of productivity dynamics.⁶ This occurs by: (i) promoting the allocation of savings to more productive investment, improving the allocation of

⁶ See IDB (forthcoming[a]). See also, Arizala, Cavallo, and Galindo (2013) and Beck, Levine, and Loayza (2000).

factors in the economy; and (ii) enabling companies to finance investments in technologies, innovation projects, capital, and market access.

The Korean SME financial system has evolved into diverse forms in accordance with the degree of government involvement and the use of private funds to achieve policy goals. Such government policy interventions have included partial-credit guarantee schemes, direct lending facilities, and lending by state-owned financial institutions.

The Korean Way: Six Public Agencies Specializing in SME Financing

The main sources of public SMEs lending are the Korea Finance Corporation (KoFC)⁷ and the Small and Medium Business Corporation (SBC),⁸ which provide funds to banks and let them choose which firms to finance. In addition to the indirect schemes, the SBC and KoFC lend directly to SMEs.

One of the most important instruments of public support is a credit guarantee, which promotes bank lending to SMEs by reducing lenders' exposure to risk. In Korea, guarantees are provided through the Korea Credit Guarantee Fund (KCGF),⁹ the Korea Technology Finance Corporation (KOTEC),¹⁰ and the Korea Federation of Credit Guarantee Foundations (KOREG).¹¹ The latter is noteworthy because it was established by regional governments and is directly controlled by them. There are differentiated support targets depending on each agency: KCGF supports guarantees for SMEs in general, KOTEC supports guarantees for technology SMEs, and KOREG focuses on micro and small business in the regional administrative district. The government also invests in SMEs through the Korea Venture Investment Corporation (KVIC).¹² KVIC's contribution to supporting SMEs is limited because the main type of funding of Korean SMEs is loans.

⁷ The KoFC was established in 2009 with 100 percent direct ownership by the Korean government. The KoFC was incorporated by the Korea Finance Corporation Act and as a result of the divestment of assets and liabilities of the Korea Development Bank.

⁸ The SBC was established in 1979 to implement government policies and programs for the sound growth and development of Korean SMEs as a non-profit, government-funded organization. To achieve its purpose, SBC operates financial and nonfinancial programs for SMEs.

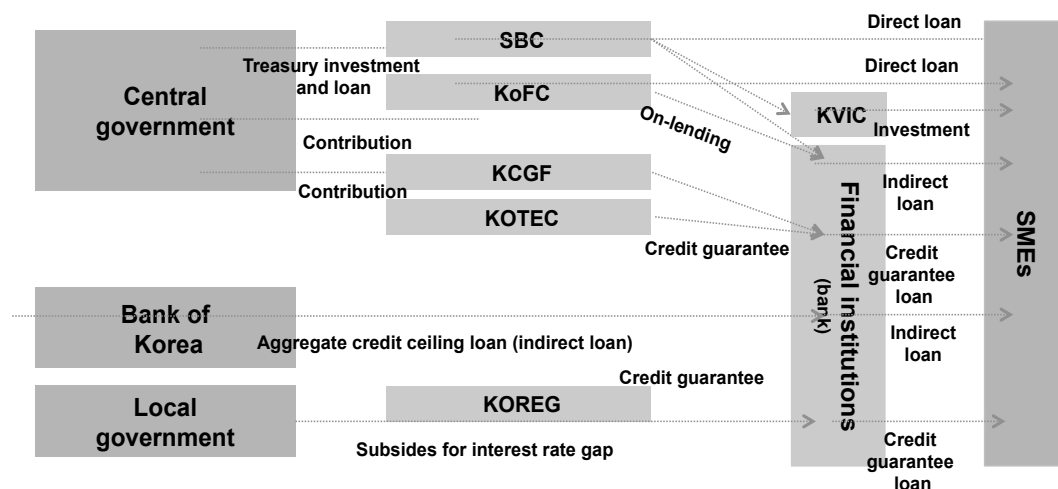
⁹ The KCGF was established in 1976 to invigorate financial supports to SMEs, which suffer from information asymmetry from and are marginalized from mainstream financing, as a public provider that provides loan guarantees to SMEs.

¹⁰ The KOTEC was established in 1989 and designed to revitalize investments in high-tech businesses and provide guarantees to SMEs with technical skills. KOTEC provides guarantees to smaller venture companies compared to KCGF.

¹¹ The KOREG was established in 2000 and designed to provide guarantees to regional small business to invigorate regional economies. KOREG is the control tower of 16 credit guarantee unions established in each city and province to provide credit guarantees for micro and small enterprises lacking substantial collateral. The administrative districts of Korea are divided into upper level local autonomy, that is, one special city, six metropolitan cities, and nine provinces.

¹² The KVIC was established in 2004 by SMBC to support venture business through shareholding. It runs the Korea Fund of Funds, which participate in funds created by private venture capitalists.

Figure 6: The Korean SME Financing System



Source: IBK Economic Research Institute (2014a).

Bank of Korea on SMEs: Aggregate Credit Ceilings

The Bank of Korea (BOK) was established in 1950 as Korea's central bank, with a commitment to developing the national economy through price stabilization. Since 1995, the BOK has set an aggregate credit ceiling (currently, US\$10 billion) for SME loans and has provided low-interest loans within the ceiling to financial institutions in proportion to their SME loan performance based on the obligatory SME loan ratio. The obligatory SME loan ratio is a regulation that requires banks to allocate at least a certain percentage of their loan increase to SMEs.¹³ If a bank fails to meet the obligatory ratio, the aggregate credit ceiling for that bank is reduced for one month by the amount equivalent to the shortfall. Financial institutions play a role on behalf of SMEs in granting indirect loans from public institutions, loans using credit guarantees, and direct loans.

Other Remaining Challenges and Side Effects

As can be deduced from the foregoing, the Korean government has provided financial support by supplying public funds directly to SMEs and by encouraging financial institutions to do so since the 1960s. Today, Korean government policies to promote SME growth receive a great deal of attention as a case of public policy intervention. However, such policies can have negative side effects. First, in terms of the demand side, evidence shows that the current policies might encourage SMEs to remain small—that is, they may choose to remain eligible for

¹³ The obligatory SME loan ratio is adapted according to bank type. The IBK is obligated by the IBK Act to lend more than 70 percent of its total loans to SMEs. Commercial banks are obligated by BOK regulation to lend more than 45 percent of their new loans to SMEs.

public support, thereby foregoing the efficiency gains and economies of scale associated with growth (OECD, 2014). From the standpoint of the policy provider, these policies might increase public agencies' moral hazard in long-run operations. This point is reinforced by the fact of commercial banks' risk aversion to lend to small business, duplication in the support target, and policy limits of financial institutions focused on lending (Seo, 2012).

Role of the IBK

IBK Act (1961): SMEs with Better Access to Credit through the IBK

Until the 1950s, SME support operations were carried out by diverse financial institutions, including commercial banks, the Korea Development Bank, and the Agricultural Bank. In order to reorganize the existing model and construct a more efficient financial support system for SMEs, the IBK was founded pursuant to the IBK Act of 1961. Its founding mission was to provide SMEs with better access to credit in order to promote their independent economic activities and enhance their economic position in the national economy (BOK, 2011). The IBK Act defines the IBK's strong relationship with the government, including legal protection (Annex 3).

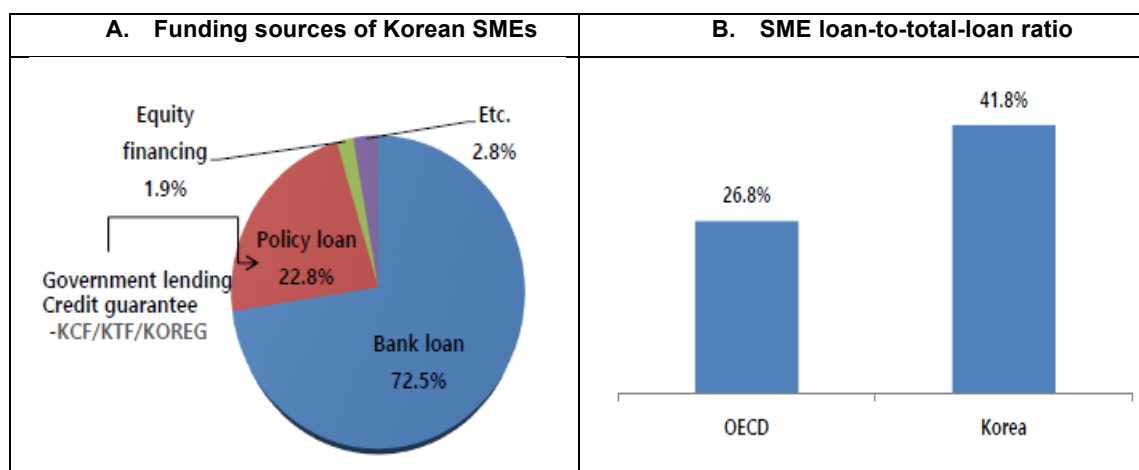
IBK: A Leader in SME Bank Loans

Currently, the IBK is the Korean government-based institution with the flagship role in supporting SME productive financing. Commercial banks provided 72.5 percent of total SMEs funding, whereas policy loans¹⁴ reached 22.8 percent, and equity financing was only 1.9 percent (KBIZ, 2013) (Figure 7). The SME loan-to-total-loan ratio in Korea is 41.8 percent. This proportion was higher than that of any of the OECD countries at the end of 2010.

The IBK was established as Korea's first-of-its-kind bank for SMEs and has played a leading role in providing SME funding. As mentioned above, the IBK's market share ratio of the SME financing market was 22.6 percent in 2013. It was an impressive record, compared to the number of commercial banks and local banks that provided similar funding to SMEs.

¹⁴Policy loans in Korea consist of funding provided through SME financing institutions established by the government, such as SBC, KoFC, KCGF, KOREG, and BOK's aggregate ceiling loan.

Figure 7: The Korean SME Financial Market



Sources: KBIZ (2013); Financing Supervisory Service (2012).

IBK Services

The IBK provides over 22 percent of total SME loans in terms of market share, amounting to 76.3 percent of its total loans. The IBK offers comprehensive financial services through its subsidiaries, which specialize in capital management, securities, insurance, asset management, IT systems, credit information services, and savings banking services for individuals and corporate clients. IBK business activities are growing beyond 23 direct branches in global financial hubs such as New York, London, Tokyo, Hong Kong, China, and other Asian countries. It has established 68,000 global networks through 14 strategic alliances with major banks. The IBK's total assets on an unconsolidated basis registered US\$212 billion by the end of 2013.

The IBK's Historical Role in the Government

Before 1994, the Korean government wholly owned the IBK. On May 15, 1992, the IBK converted its equity into shares in accordance with the IBK Act, as amended on December 31, 1991. On November 30, 1994, the IBK's common shares were listed on Korean Securities Dealers Automated Quotations (KOSDAQ).¹⁵ Since then, the government's ownership share has gradually decreased through the public offering of new stock and an increase in employee stock ownership. KDB and KEXIM emerged as new shareholders of IBK in 1999 and 2000, respectively. As of December 31, 2013, the government's stake amounted to 57.7 percent

¹⁵ KOSDAQ, a trading board of Korea Exchange (KRX), was established in 1996. Initially set up by the Korea Financial Investment Association as an independent stock market from the Korean Stock Exchange, it was benchmarked from its American counterpart, NASDAQ. KOSDAQ, like NASDAQ, is an electronic stock market.

directly, and 68.9 percent indirectly including its shares in KoFC and KEXIM. Foreign ownership reached 13.8 percent of outstanding stock as of December 31, 2013.

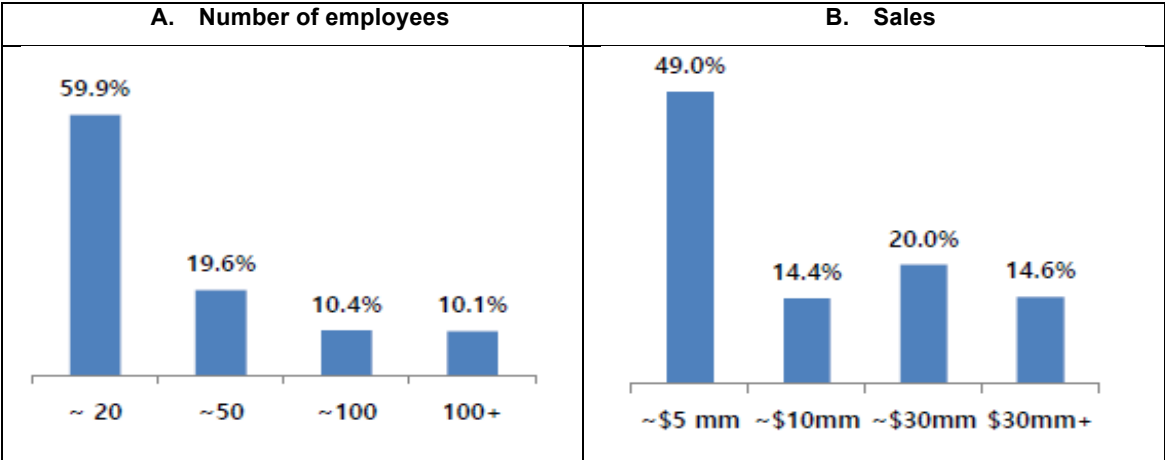
How the IBK Differs from other Financial Institutions

The IBK’s operational policies on SME financing are countercyclical: in general, commercial banks actively expand their loans when the economy is growing and are passive in recessions. However, the IBK consistently supports SMEs even during recessions, supporting their role in national economy.

Second, the IBK is a policy-oriented financial institution and a distributor, so that its limited capital can be more effectively allocated. When observing the IBK’s SME loans, it is clear that loans for small companies with fewer than 20 employees account for 59.9 percent of total loans at the end of 2012 (Figure 8).

Third, the IBK has state-of-the-art asset management and credit evaluation capability specialized in the SME financing sector. Even though the IBK has been providing high-risk loans to SMEs, it has the lowest delinquency ratio among Korean banks.

Figure 8: IBK’s SME Loan Portfolio in 2012



Source: IBK, Credit Management Division data, 2012.

IBK: Providing an Umbrella, Rain or Shine: Post-crisis Experience

Since private commercial banks tend to turn conservative when economic conditions tighten, they also squeeze the credit market for SMEs. However, the IBK actively sought to relieve SMEs’ financial burdens while complying with government policies. During the global financial crisis (from August 2008 to December 2009), the IBK provided over half the net increase in SME loans. During the crisis, the IBK’s net increase in SME loans reached

US\$11.6 billion; that is, 50.8 percent, more than half of the net increase in total loans of US\$22.9 billion. The IBK provided more credit to SMEs than the sum of all the other banks' credit supply in 1998 and between 2008 and 2009. Indeed, the IBK is the only bank that actually increased its credit supply during the crisis (see Table 2 and Figure 9).

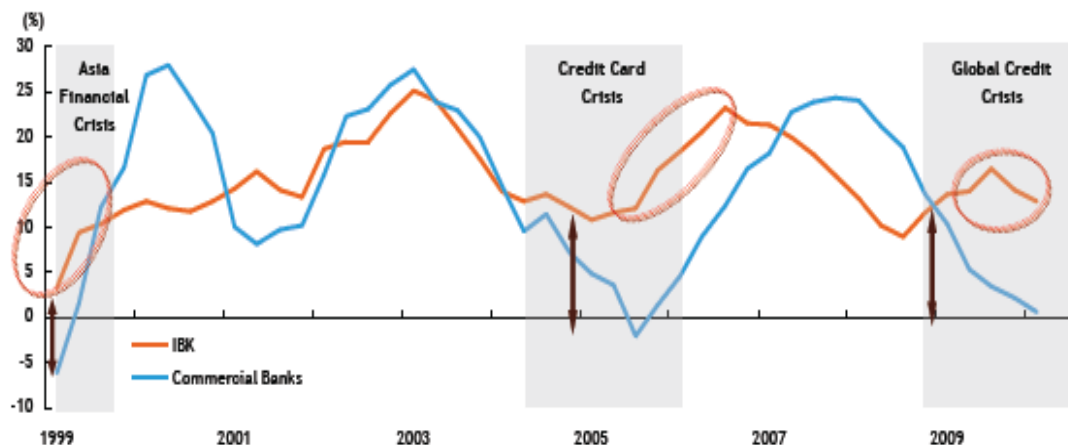
Table 2: Net Increases in SME Loans by Bank and the Ratio

Date/figure	End of July 2008		August 2008–December 2009	
Institution	Total balance (in US\$ billions)	Ratio (in percent)	Net increase balance (in US\$ billions)	Ratio (in percent)
IBK	56.0	17.4	11.6	50.8
Kookmin Bank	47.3	14.7	2.5	11.1
Woori Bank	44.7	13.9	4.3	18.9
Shinhan Bank	41.2	12.8	1.0	4.2
Hana Bank	24.1	7.5	0.7	2.9
Banking Sector	321.0	100	22.9	100

Source: FSS (2012); IBK (2014).

Notes: Based on the BOK's Financial Stability Report (2013) (loans in won in banking accounts + trust loans - loans in the financial sector).

Figure 9: Change in Loan Balance: Countercyclical Role of the IBK



Source: IBK Economic Research Institute (2014a).

IBK Programs

Productive Development Financing: SME Financing Schemes

The IBK offers SME funding at four different business stages and transaction coverage—production to receivables collection. It offers not only financial but also consulting support for Korean SMEs at every stage of the business. Namely, the IBK provides both consulting and financing to startup SMEs at the startup stage. It proactively finds and incubates SMEs by

providing stage financing, particularly to small manufacturing SMEs with fewer than five employees.

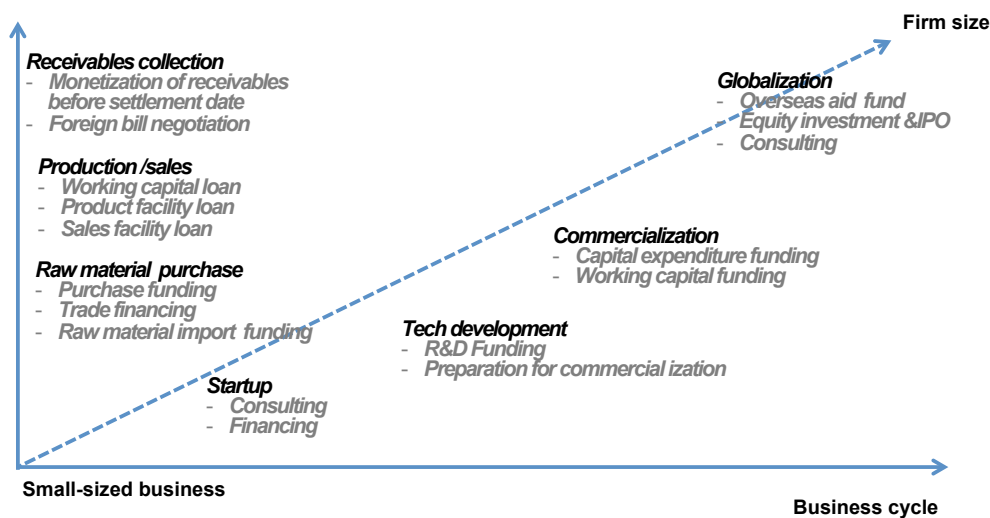
The next stage is the tech development stage, where the IBK provides R&D funding and preparation for commercialization, such as funding for prototype development. To do this, the IBK operates a separate division to evaluate SMEs technology and provides long-term funding of over seven years.

SMEs can get also help from the IBK in commercialization through specialized funding for purposes such as capital expenditure, including land, building, machinery and working capital. At the globalization stage, the IBK provides resources through overseas aid funds, equity investments and IPOs, and overseas consulting, among others (Figure 10).

In terms of every transaction in the value chain, the IBK provides SME funding in each cash flow, from the purchase of raw materials to the collection of receivables. When the SMEs purchase raw materials, the IBK supplies working purchase capital, raw material import capital, and trade banking, both domestic and overseas.

At the production and sales stage, the IBK provides working capital, production facilities, sales facilities, and many other products for SMEs. At the sales money collection stage, the IBK is responsible for the encashment of sale credits and export bills. This scheme adapts differently according to firm size, industry, and capital use purpose, among other characteristics. The IBK is offering an optimized product for each SME through product tuning.

Figure 10: SME Financing Scheme of the IBK



Source: IBK Economic Research Institute (2014a).

The IBK also offers comprehensive consulting services in all business-related areas. SMEs face several non-financial barriers related to their managerial capabilities. With the aim of addressing those issues, the IBK launched the IBK Consulting Service in August 2011. As of October 31, 2014, 1,972 corporate clients had benefited from the complimentary service.

The IBK's process analysis through these services resulted in improving their performance: SME clients who had benefited from IBK consulting services, when asked in a survey, answered that in 97.3 percent of the cases they were very satisfied. In addition, the consulting service has the effect of increasing the SMEs' productivity. Compared to other SMEs, those that received consulting services from the IBK realized about 1.5 times higher growth and profitability, as well as debt ratios that were calculated to be 0.7 times lower (Table 3).

Table 3: Performance Comparison: SMEs with and without Consulting Services

Indicator/type of SME	SMEs without consulting services	SMEs with consulting services
Growth (sales growth ratio)	5.6%	8.2%
Profitability (income ratio)	3.2%	5.1%
Stability (debt ratios)	168.3%	126.5%

Source: IBK Consulting Center (2014).

Notes: (1) 492,288 cases; (2) 410 cases; (3) 2013 performance compared to 2012.

Productive Development Financing: Value Chain Financing

Network Loans: Support for Weaker Enterprises

Many SMEs face cash-flow difficulties for a number of reasons, such as increasing raw material prices, exchange-rate fluctuations, and delayed payment for delivery of goods, among others. Delayed payment for delivery of goods has been one of the main difficulties in cash flow management for Korean SMEs, as it is worldwide. As mentioned above, SMEs are intermediate good producers for LEs; thus, their cash flows depend heavily on when the latter pays for their goods and services. Furthermore, in Korea, 47 percent of SMEs were classified as subcontracting companies that supply LEs (KBIZ, 2013). These are the types of issues that network loans are designed to address.

Network Loans: Providing Capital to Suppliers as a Priority

Network loans are offered based on the purchase order issued by the buyer (commonly a LE), which repays the loan to the IBK. The flow structure of network loans is as follows: first, the IBK underwrites a business agreement for a network loan with the superior buyer (tractor enterprise), which is audited by an external agency if it holds over US\$12 million in assets. This tractor

enterprise must also hold a credit rating¹⁶ of BBB or higher to sign onto this business agreement.

The buyer places the order to the supplier and transmits the order sheet to the IBK. Then, the IBK provides the network loan to the supplier according to the terms and conditions of the business agreement. The repayment rate of the network loan usually provides up to 80 percent of the contract amounts upon delivery of goods. After that, it automatically repays the loans to the IBK when the supplier receives the delivery payment from the buyer based on the IBK's electronic payment method. To complement the collateral power of the supplier, when the buyer's management status is unstable, this system makes a network loan support agreement with guarantee agencies and jointly supports the SMEs when needed (Figure 11).

Network Loans: Beneficial and Evolving

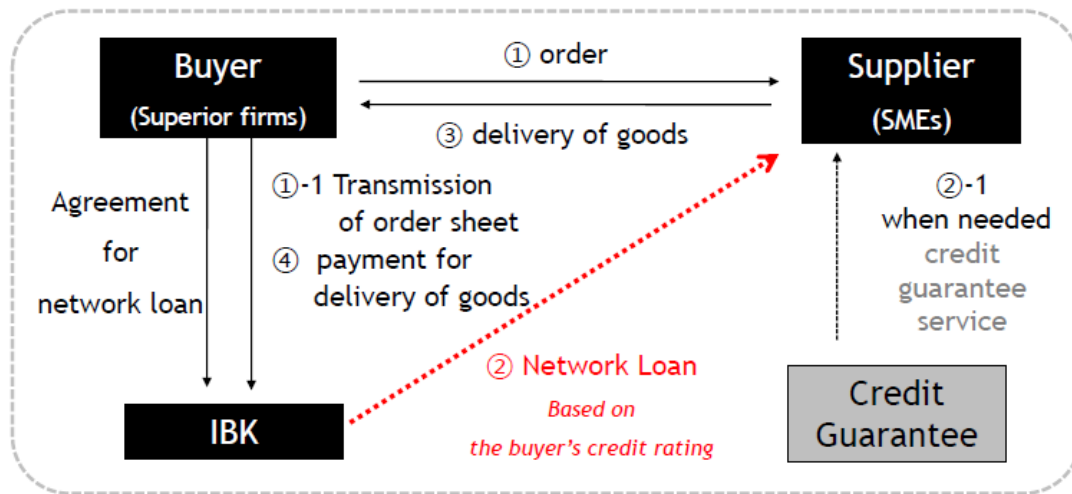
Currently, the interest rate charged by the supplier is at least 1 percent lower than that of regular credit, because it is calculated based on the buyer's credit rating. For the tractor enterprise, this type of instrument will not only reduce production costs because the supplier can obtain funds at a lower cost to produce the delivery of goods; it also means more partnerships with suppliers and a better social reputation, since the buyer is identified as participating in the shared growth policy of the government.

The network loan product was launched in July 2004. Although it is very simple, evaluation has shown that it has improved SMEs cash flows, applying innovative thinking to creditworthiness between LEs, SMEs, and financial institutions (IFC, 2010). This product can get more complex: there are a variety of advanced network loan approaches, such as public purchase loans and medical network loans, among others. It has been recognized as the most practical means of "shared growth"¹⁷ between LEs and SMEs. At the end of 2014, 12,182 corporations were using network loan products, and the total loan balance was US\$1.6 billion.

¹⁶The IBK can take advantage of both the buyer's internal credit rating and the ratings of the credit rating agencies.

¹⁷ Shared growth, the principle according to which both large and small companies should grow together, is among the top priorities on the political agenda in Korea. There are many policy instruments to promote shared or mutual growth of LEs and SMEs, and the Korea Fair Trade Commission has played a pivotal role.

Figure 11: Flow Chart of Network Loans



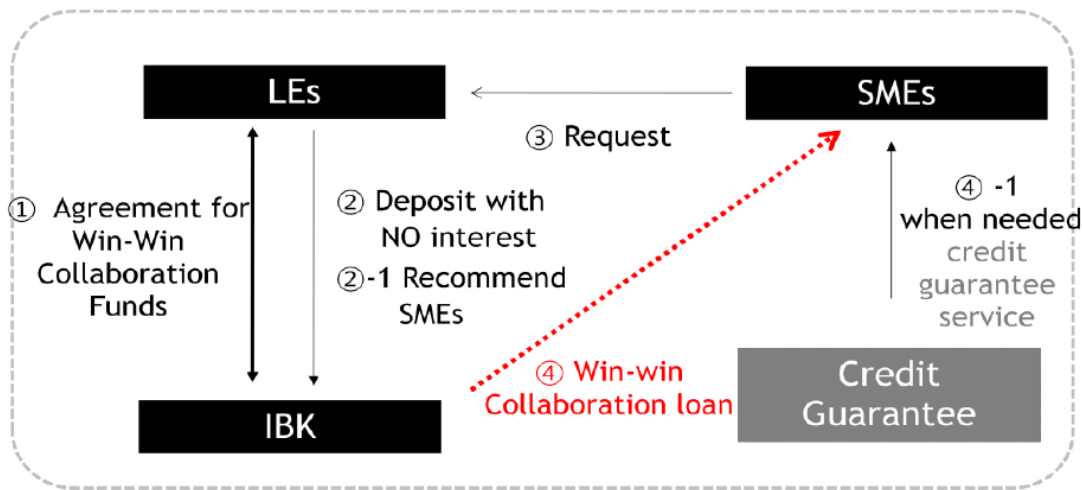
Source: IBK Economic Research Institute (2014b).

Win-win Collaboration Loans: Capital to Cooperative SMEs Recommended by LEs using Interest Income from LE Deposits

The impact of the global financial crisis created social consensus around shared growth; thus, value chain finance gained further attention with regard to SME financing. This was also the case with network loans. Considering this situation, the win-win collaboration loan concept was developed to provide loans to superior cooperative SMEs using the financial resources of LEs deposited in public institutions.

The structure of a win-win collaboration loan is as follows: the IBK underwrites a business agreement with LEs or public institutions, which deposit their flows in the IBK (Figure 12). LEs deposit these funds without receiving interest from the IBK, which in turn takes advantage of these zero-interest loans to support cooperative SMEs: LEs can support cooperative SMEs while maintaining deposits. When SMEs apply for the LE capital, LEs recommend the cooperative SMEs to the IBK as targets for support. The IBK executes the win-win collaboration loan to offer these resources at a low interest rate. It is important to mention that guarantee agencies may deliver support for these types of SME loans if necessary.

Figure 12: Flow Chart of Win-win Collaboration Loans



Source: IBK Economic Research Institute (2014b).

LEs and Cooperative SMEs: Significant Benefits of Joining the Win-win Collaboration Loan

As explained above, the interest on win-win collaboration loans is lower than that on regular credits because SMEs use the interest income from LEs deposits, almost in a cross-subsidy fashion. The loan interest rate depends on the cooperative SMEs' credit rating, as recommended by LEs. In order to receive the full credit loan from the IBK, an SME must hold a credit rating of BB+ or more according to the IBK's criteria. In turn, LEs receive significant benefits for taking part in a win-win collaboration: they improve partnerships with the cooperative SMEs, improve their reputation, and use it to enhance the company's image.

In 2010, the Korean government established the Korean Commission for Corporate Partnership (KCCP) to identify and discuss issues of social conflict between LEs and SMEs and create consensus in the private sector. The KCCP annually estimates and announces the contributions of LEs and public agencies to the shared growth policy. The participation of LEs in the win-win collaboration loan agreement positively affects the KCCP evaluation of these LEs.

Expansion of a Shared Growth Financial Product

This product, launched in November 2008, had been used in 6,582 cases as of the end of 2014, with a total loan balance of US\$3.5 billion. These win-win collaboration loans have ensured consistency in supply chains for 90 renowned participating LEs, such as Samsung Electronics, Hyundai/Kia Motors, and POSCO. More recently, not only LEs but also middle-tier firms have been participating in the collaboration funds. Win-win collaboration funds not only validate LEs'

contribution to society; they also facilitate capital flows between SMEs and serve as a risk-management option for the bank.

Risk Management

IBK SME High-risk Loans with the Lowest Delinquency Ratio in Korean Banks

The three stages of the IBK risk-management process can be categorized by implementation in the same order of the loan; that is, the pre-lending assessment stage, the interim review stage, and the aftercare stage. The pre-lending assessment stage is a decision-making stage before the loan is issued. The main systems are composed of the pool of credit officers, the loan approval, and the credit limit decision. Next is the interim review stage, which is executed after issuing the loans. It is largely divided into manual checks executed directly by the loan officer and systematic checks filtered by various systems. The final stage of risk management takes place at the aftercare stage. This process is mainly targeted at businesses with potential insolvency concerns in the interim review process explained above. When SMEs with IBK loans face liquidity crises due to declining sales, bankruptcy of a trading company, or a collection delay, among others, they are more likely to be designated as high risk in the corporate credit assessment (Table 4).

As a whole, the risk management process contributes to the IBK's low delinquency ratio. It was lower than the market average by 0.3 to 0.5 percent in 2012 (Table 5). Observing the delinquency ratio on IBK products, more interesting results can be seen. This low delinquency ratio shows the value-added to each chain by the IBK's financial products. For example, the delinquency ratio differential of 1.05 percent from win-win collaboration loans is significantly lower than the total SME loan delinquency rate.

Table 4: The IBK's Risk Management System

Pre-lending assessment	Interim review	Aftercare
· Pool of credit officers	· Manual check(credit officers)	· Corporate restructuring
· Loan approval	Interim credit review	Fast track
Credit rating	Loan review	Change up
Credit analysis	Watch list check	Corporate renewal
Feasibility study	· Systematic check	
· Credit limit decision	Early warning system	
Required capital calculation	Credit monitoring system	
Delegation of approval authority	Asset quality classification	
Total exposure		

Source: IBK Economic Research Institute (2014a).

Table 5: Delinquency Ratio in SME Loans (percent)

	2007	2008	2009	2010	2012
Industry average(A)	0.99	1.68	1.15	1.50	1.69
IBK(B)	0.58	1.35	0.81	0.98	1.33
Win-win collaboration loan (C)	-	-	-	0.29	0.28
B-A	-0.41	-0.33	-0.34	-0.52	-0.36
C-B	-	-	-	-0.69	-1.05

Sources: FSS (2012), IBK Economic Research Institute (2014b).

Note: Nominal delinquency rate for SME loans in won.

The Credit-rating Model and the Early Warning System

Unlike commercial banks in Korea, using a common credit-rating model for LEs and SMEs, the IBK uses a specialized system for SMEs. In 1995, the IBK developed its own SME credit-rating model, the first of its kind in Korea. The credit-rating model is a combination of the IBK's extensive database on 180,000 SMEs and IBK credit officers' know-how. The IBK's corporate credit-rating model is classified into six types, depending on total assets and total exposure, among other factors.

The early warning system automatically checks for credit risk of the company, using automated techniques, on a daily basis. The credit monitoring system checks for the appropriateness of the current credit rating and, if an issue occurs that affects it, it is adjusted after considering the results. The possibilities of a change in the client's credit risk due to financial and trading situations are regularly monitored through the early warning system at each classification stage.¹⁸ The early warning companies are intensively managed.

SMEs and Growth: LAC and Korea

LAC and Korea

As is evident from the previous analysis, Korea and the LAC region have taken different paths in terms of development and growth. One of the main reasons for this is the different approaches that governments have taken in the LAC region, which are not convergent and have varied over time with changes in government. This document extracts some lessons from the Korean experience for LAC governments to implement ideas for their development banks and SME networks to complement the current policies.

¹⁸ According to the risk factors, the categories are 'normal,' 'standard,' 'precautionary,' 'doubtful,' and 'estimated losses.' Insolvent loans are prevented and managed in advance by classifying the companies which receive a rating of 'precautionary,' 'doubtful,' or 'estimated losses.'

SME Size

Despite the differences in growth rates between Korea and LAC countries, there are some interesting insights from the Korean experience that may be relevant for LAC countries with regard to promoting SMEs and private sector development. Given SMEs' share in terms of both number of firms and number of employees, they are critical players for productive development in both Korea and Latin America. However, while Korean SMEs contribute as much as 60 percent to the country's GDP as a result of encouragement by the Korean government, among other historical and technological reasons, in Latin America, SMEs contribute only 30 percent to GDP. This gap shows that SMEs in Latin America are less productive than SMEs in Korea, thus contributing less to GDP and GDP growth. While this subject certainly deserves more attention, this section will focus on the policy actions undertaken by Korean administrations to support SMEs.

Long-term Government Support in Korea

In Korea, SMEs have received strong support from public policy for the past five decades, regardless of changes in government and economic policies. Indeed, SMEs in Korea have been supported by decisions such as long-term policies, plans, and laws. It is of particular interest that support to Korean SMEs was conceived in the context of improving the competitiveness of the Korean economy as a whole. In this context, public policy stressed that in order to achieve competitiveness for LEs, it was critical to improve the competitiveness of their SME suppliers. Therefore, directing public support to SMEs was important not only because of SMEs' role in employment, but also their role in a connected, networked economy, where the productivity of large Korean enterprises depended on the performance of a large number of smaller suppliers.

Lack of Access to Financing

Lack of access to financing was identified as a key barrier for Korean SMEs to grow and improve their performance. Hence, different agencies put in place a number of financial and nonfinancial instruments. Among these are credit funds, guarantee funds, and technical assistance. Public support is provided through different institutions, which include public banks, ministries, and a vast array of agencies. In recent years, efforts have been directed to enhancing coordination among public programs to avoid overlapping and dispersion of public resources. Among financial instruments, guarantee funds play a critical role in increasing access to financing for SMEs. Information asymmetries and lack of collateral usually increase the cost of lending and reduce the incentives for commercial banks to finance SMEs. Credit

guarantees provided by public funds as collateral of funds lent to SMEs by commercial banks have proven to be an important incentive to enhance access to financing for SMEs.

Risk Management Systems

The IBK, among some other institutions within the Korean SME financing system, has developed and tested strong risk management systems, which are an important basis not only for delivering credit but also for measuring and understanding SMEs. Risk measurement allows the IBK and other institutions to deliver loans securely, whether they are acting as second-tier banks or lending directly to borrowers. LAC countries' development banks are frequently overseen by regulators and supervisors and must comply with local regulations for risk management. Also, it is common to find these banks serving as second-tier banks, and there are often exemptions for such banks in terms of risk management. In the end, the final borrowers are those who generate impact with the actions of development banks. Whether they are second-tier banks or not, starting with proper measurements, development banks must implement risk management. This practice should not be restricted to first-tier banks, but should be applied to final beneficiaries.

Enterprise Surveys

One of the most relevant activities described above was the fact that the Korean government surveys enterprises to gather data on their size, shape and type of organization, risks, among other relevant data. This sort of measurement allows policymakers not only to correctly describe and classify SMEs but also to understand their needs, enabling them to adopt policies which actually solve their problems. Furthermore, surveys shed light on managerial issues such as the aforementioned Peter Pan syndrome. LAC countries should invest some money and time in such surveys to properly focus policy actions and obtain relevant data, among other benefits.

Institutional Capacity

Strong institutional capacity is also an important characteristic of the Korean experience. Among these institutions is the IBK, which through different instruments provides integrated support to SMEs in all phases of their business. The ability to combine financial and nonfinancial instruments allows the IBK to be an important partner for SMEs willing to grow and become members of domestic and international supply chains. The IBK provides funding to address different needs of SMEs, including financing, R&D, technological improvements, and overseas expansion, and provides innovative instruments to enhance supply-chain performance and

collaboration. As the IDB's experience has recently shown, the results of access to financing for the productive sector are increased if development banks go beyond pure financing and complement their efforts with training and, again, measuring results (IDB, forthcoming[b]). This means that institutional capacity must be created for development banks within the region, and laws must be changed for them to fulfill this responsibility.

Supply Chain Performance

Related to this instrument, a critical characteristic of the Korean experience is close collaboration between the public and private sectors. Indeed, the role of LEs is relevant for instruments such as network loans and win-win collaboration loans to succeed in their purpose of enhancing both SME access to finance and access to markets by becoming suppliers of LEs.

Some Key Lessons

Based on the distinctive characteristics of the Korean experience in supporting SMEs, some key lessons for Latin American countries that merit further analysis are the following:

- A long-term policy aimed at supporting SMEs is needed not only because of their role in employment, but also because of their role in a connected, networked economy where SMEs are key suppliers of larger firms and where competitiveness depends on the performance of both the larger firm and its suppliers.
- A strong institutional environment that promotes access to financing for SMEs through different instruments throughout the different business phases of a firm is essential.
- Innovative products that address the needs of the private sector (such as overseas financing and network loans) are needed.
- Close collaboration between the private and the public sectors that allows the latter to identify and better address the needs and actions to support private sector growth is key.

Conclusions

The contribution of SMEs to the rapid growth of Korea's economic was greater than that of LEs. The Korean government positively intervened in setting up SMEs' legal framework and building the SME financial infrastructure through loans and guarantee agencies. In particular, it performed a countercyclical role and managed risk through a variety of products developed to meet SMEs' needs by establishing the IBK, a state-owned bank. The most important factor for

Korean SME growth is a harmonious role and operation of these financial institutions for SMEs under the SME legal system, rather than one institution. However, to support sustainable growth for SMEs, the Korean government still endeavors to adjust the limits of policy agencies and financial institutions focused on lending. It also tries continuously to develop diverse policies, including equity financing, according to the state of macroeconomic development and micro-level business cycles. LAC country policymakers could observe and draw lessons from the Korean experience to complement and improve their current SME support systems, thus increasing growth and development.

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Annex 1: Amendments of the SME Act

	Purpose of amendment	Amendment of other related statutes
First amendment (1976. 12. 31)	Redefined SMEs in response to the changing economic environment such as the wholesale pricing index, firm size, and debt/asset ratio of firms	
Second amendment (1978. 12. 5)	Redefined SMEs subject to the SMEs Act in response to the economic environment	
Third amendment (1982. 12. 31)	Redefined SMEs and strengthened policies to support SMEs	
Fourth amendment (1993. 3. 6)		Integrated the Ministry of Commerce-Industry and the Ministry of Power and Energy into the Ministry of Commerce, Industry and Energy due to the revision of the Government Code
Fifth amendment (1995. 1. 5)	Redesigned the SMEs Act in response to changes in the domestic and international economic climate in order to effectively execute SME policies	
Sixth amendment (1997. 12. 13)		Changed the Ministry of Trade and Industry into the Ministry of Commerce, Industry and Energy
Seventh amendment (1998. 2. 28)		Established Presidential Commission on Small and Medium Enterprises
Eighth amendment (2007. 4. 11)	Rewrote statutory jargon in plain Korean	
Tenth amendment (2008. 12. 26)	Created the statutory basis enabling government survey on business challenges and complaints of SMEs; established the Ombudsman system to survey business barriers on SMEs for the purpose of deregulation	
Eleventh amendment (2011. 7. 25)	Strengthened economic policies for SMEs, such as including social companies in the definition of SMEs subject to the SMEs Act	
Thirteenth amendment (2015. 1. 28)	Owing to economic or market climate changes, redesigned the definition of SMEs	

Sources: Ministry Government Legislation; SMBA (2015).

Annex 2-A: Definition of the SMEs in Korea (current, from 2015)

Sector	Sales
Manufacturing (6 sectors): Electrical equipment, clothing, bag/shoes wood pulp/paper, primary metal, furniture	\$150M or less
Manufacturing (12 sectors): Cigarette, automobile, chemical, metal processing food, textile, lumber, oil refinery, rubber/plastic electronic/computer/video/communication machine/equipment, other transportation equipment	\$100M or less
Agriculture/forestry/fishing wholesale and retail electrical/gas/water works	
Mining, construction	
Manufacturing (six sectors): Beverage, printing machine/duplicator medicine/medical products, nonmetallic mineral medical service/precision other product manufacturing	\$80M or less
Transportation	
Waste water treatment environmental conservation	
Publication/information service	\$60M or less
Repair and other personal services	
Business support service	
Science and technology service	
Healthcare/social welfare	
Arts/sports service	\$40M or less
Lodging/restaurant	
Finance/insurance	
Education service	
Real estate/leasing	

Source: SMBA (2015).

Annex 2-B: Definition of the SMEs in Korea (past, up to 2014)

Sector	SMEs		Small business	Micro enterprise
	No. of workers	Capital or Sales	No. of workers	
Manufacturing	Fewer than 300	Capital worth 8 billion won or less	Fewer than 50	Fewer than 10
Mining, construction, and transportation	Fewer than 300	Capital worth 3 billion won or less	Fewer than 50	Fewer than 10
Publication, information and communication; administrative and support service activities; human health and social work activities; professional, scientific, and technical activities	Fewer than 300	Capital worth 30 billion won or less	Fewer than 10	Fewer than 5
Agriculture, forestry and fishery; electricity, gas, steam and waterworks business; wholesale and retail trade;	Fewer than 200	Capital worth 20 billion won or less	Fewer than 10	Fewer than 5

accommodation and food service activities; financial and insurance activities; arts, entertainment and recreation				
Sewerage, waste management and remediation activities; education; repair and other services	Fewer than 100	Capital worth 10 billion won or less		
Real estate, rental and leasing activities	Fewer than 50	Capital worth 5 billion won or less		

Source: SMBA (2015).

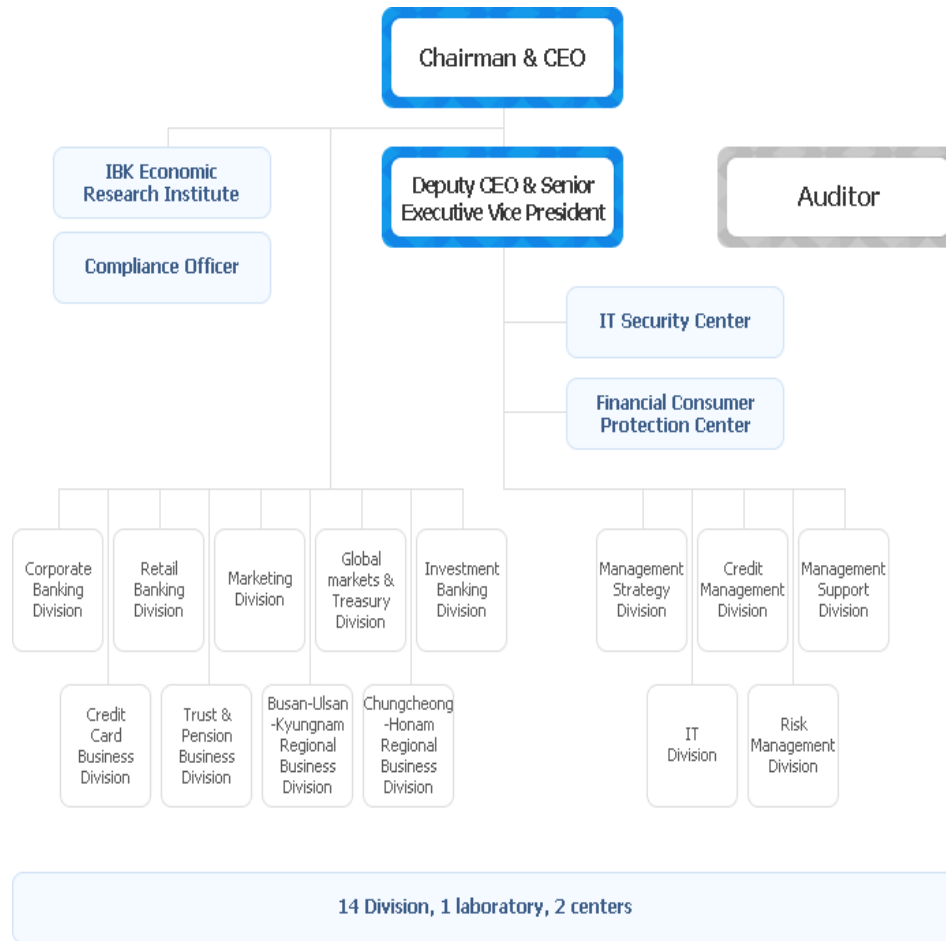
Notes: For microenterprises, Article 2 of the Act of Special Measures on Assisting Small Business and Microenterprises shall apply.

Annex 3: Amendments of the IBK Act

	Purpose
Second December 31, 1964	The government made over a half of the capital investment mandatory to permit the issuance of SME financial bond
Third March 7, 1968	To abolish the restrictions on the income from current accounts
Fourth March 5, 1973	To form the board of directors
Fifth December 22, 1975	To require losses to be replenished by the government
Sixth December 28, 1979	To form special provisions for SME transactions
Seventh December 31, 1980	To make legally mandatory to conduct research and corporate guidance for SMEs; to differentiate the reserves ratio from other financial institutions
Eighth December 31, 1991	To abolish investor restrictions (confined to the government and SME entrepreneurs); to require shareholders' meetings
Tenth August 28, 1997	To abolish the government's obligation of mandatory capital investment; to expand the issuance limit of SME financial bonds
Thirteenth May 24, 1999	To set the rationale for supervising the soundness of the Financial Supervisory Commission
Fourteenth December 11, 2003	To deregulate, including abolishment of the permit and approval of the guardian minister
Fiftieth December 14, 2005	To prohibit other intuitions from using the brand, Industrial Bank of Korea
Sixteenth December 14, 2008	To change the competent Minister from Ministry of Strategy and Finance to Financial Supervisory Commission
Seventeenth February 6, 2009	To increase paid-in capital from 4 trillion to 10 trillion won

Source: IBK (2014).

Annex 4: Organization of the IBK



Source: IBK (2014).

Annex 5: Case Studies of Productive Development Financing

BOX A.1: SME Financing Schemes—HJC

This is one case study of how IBK has pursued sustainable growth with SMEs as a SME development-focused policy agency. The Hong Jin Crown (“HJC”) is a Korean company that supplies over 20 percent of the world motorcycle helmets market. HJC was founded in 1971 as cottage industry of 10 family members. At that time, there was no company that produced helmets directly in Korea. Therefore, there was no place to sell helmet-manufacturing equipment. HJC directly made plant equipment using the long-term production facility financing of IBK. Because HJC produced helmets with homemade equipment, it had a positive price competitiveness compared with imported products. After that, HJC took advantage of R & D funds of IBK and continued the development of technology and production process efficiently. Furthermore, HJC accounted for 70 percent of the domestic market in 1982. Many SME CEOs tend to settle in the domestic market, after achieving the first place. However, HJC did not stop. For overseas markets, HJC gained DOT (Department of Transportation Federal) helmet standard certification and Snell certification and HJC's global market share started to increase. Finally, HJC achieved the number one position in the world market through design and R&D. In the process of overseas market growth, IBK provided both the overseas funds and consulting services. Also, when HJC fell into difficulty due to the Knock-In Knock-Out (“KIKO”) crisis in 2008, IBK helped negotiate directly with the banks signed into KIKO on behalf of HJC. Appreciating its successful story, HJC joined the first IBK’s Entrepreneurship Hall of Fame in 2004.

Source: Extracted from *Success Story Magazine* 2011. (IBK, 2012) and corrected and complemented.

Note: KIKO is a currency option product that has been a social issue in the global financial crisis in developing countries, especially Korea. More than 500 Korean companies are struggling to repay KIKO contracts sold as a hedge against an appreciating currency.

BOX A.2: Value Chain Financing—Samsung Electronics

This is one case study of how Samsung has pursued sustainable growth with SMEs in the value chain. Although the IBK made the network loans, it was Samsung that enabled the product to operate practically in the financial market. Samsung entered into an agreement with the IBK's network loans in 2004 at first to support 1,200 of its first delivery SMEs. In accordance with that, the first supplier to deliver Samsung's products could receive the loans by submitting the order statements received from Samsung to the IBK. This means that cooperative SMEs received delivery changes ahead of schedule by about 90 days. After the first contract signed with IBK, Samsung entered into other agreement with the IBK and other banks' network loans in 2008 to support 3,800 of its second delivery SMEs. Samsung's leading participation in diverse value chain financing is ongoing. Samsung presents plans that create US\$1 billion in funds until 2017 to support cooperative SMEs.