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Public Lending Schemes for SMEs in Asia and the Pacific: Lessons from the Republic of Korea and the United States

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KEY POINTS

- Public lending schemes for small and medium-sized enterprises (SMEs) are expeditious and replicable interventions to overcome the impediments to access credit for SMEs seeking capital. These schemes have existed since the 1950s, with successful implementations in the Republic of Korea and the United States.
- Bank regulations under Basel I and II have disadvantaged SME loans, relative to other types of bank assets, because of their perceived higher risk and lower liquidity. In response to concerns about the effects of these regulations on the SME sector, regulators amend the reforms to mitigate the effect of SME exposures on measures of bank capital adequacy and liquidity.
- The advantages of public lending schemes include that (i) they can help overcome market failure that is mainly due to the lack of private voluntary financing for high-risk SMEs, and (ii) they can assist in providing a countercyclical mechanism during financial crisis.
- Policy makers in developing countries in Asia and the Pacific can prioritize which SME sectors or firms can receive funding from the public lending schemes. During crises, such as the coronavirus disease (COVID-19) pandemic, public lending schemes can scale up SMEs even if traditional lenders tighten underwriting standards and limit access to funds.

INTRODUCTION

The public lending schemes are a key policy tool for improving access to credit for small and medium-sized enterprises (SMEs). Indeed, among schemes aiming to direct funds to SMEs, the public lending schemes may prove to be fast and accurate. The schemes provide overall economic stability in every country around the world by shoring up this critical sector. Such lending schemes have thus been pivotal in improving access to credit for SMEs in numerous countries, particularly in the Republic of Korea and the United States (US), whose experiences can guide others considering support to improve SME access to finance. The public lending schemes are also a proven countercyclical mechanism for securing access to finance to SMEs during financial crisis.

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SMEs are the bedrock of economies. "Formal" SMEs account for more than 90% of all firms and for more than half of employment around the world. Yet, access to finance is a key constraint for SMEs in growing their businesses in emerging and developed economies.[1] These small firms have limited access to capital markets and difficulty obtaining formal finance from private lenders such as commercial banks. Even when SMEs can obtain formal finance, they often face onerous loan terms such as high interest rates and demands for collateral.

To overcome the impediments to SME access to credit, however, policy makers in developing countries in Asia and the Pacific have a few potential solutions. Governments can set up specialized banks to provide credit to SMEs, for example, as the Republic of Korea has introduced in the Industrial Bank of Korea (IBK). They can also set up government-sponsored entities to provide loans directly to SMEs that are qualified to apply for credit. The U.S. Small Business Administration (SBA) is one such organization. This brief details how these two government institutions have helped improve access to credit for SMEs, as a guide to policy makers in developing Asia as they tackle this critically important issue.

REGULATORY ENVIRONMENT ON SME FINANCING

Policy makers must account for the impact of international banking regulations on the treatment of loans to SMEs. These international banking regulations are known as the Basel Standards and there are three regimes in operation across the world—Basel I, Basel II, and Basel III. Basel II (Basel Standards 2006)[2] is a set of enhancements to the original Basel I regulations (Basel Capital Accords 1988),[3] and Basel III (Basel Standards 2010)[4] is a set of enhancements to Basel II.

The introduction of each iteration of the Basel Standards has had adverse impacts on SME lending through the treatment of expected and unexpected loan losses. Under the Basel Standards, banks must set aside "provisions" for expected loan losses, while they must hold "capital" to deal with unexpected loan losses. Basel I introduced risk-based capital with a risk weighting of bank assets that was unfavorable to SME loans, which drew a 100% risk weight for loans to the private sector. Basel II refined the risk weights for private sector loans based upon external credit ratings or upon output from banks' "internal models" that gave loans to higher rated companies lower risk weights (as low as 20% for an AA- or better rated firm) than the 100% weight for "unrated" companies.

Basel II treatment of loan–loss provisions also adversely affected SME exposures through the treatment of credit-risk mitigation in the form of collateral requirements and guarantees. Exposures secured by qualifying collateral draw much smaller provisions than unsecured exposures. Because most SMEs lack tangible assets that qualify as collateral or a qualified guarantor, unsecured nonperforming SME exposures require higher levels of provisioning than secured exposures.

The final version of Basel II incorporated changes to provide limited relief from SME exposures. These changes include: (i) banks under the internal ratings-based approach were permitted to reduce capital requirements for exposures to small businesses; (ii) retail SME exposures were to have a specific risk weight curve; (iii) non-mortgage retail exposures risk weight was reduced; and (iv) credit risk mitigants (i.e., collateral and guarantees) were better recognized.

This called for regulators to implement measures to support and facilitate SME financing. Three reforms in Basel II aimed to reduce the negative impact on SME lending.

- Financial institutions have been allowed to use collateral and credit enhancements such as government guarantees to reduce the risk weights of SME exposures.
- For SME exposure less than €1 million, the concessional risk weight was lowered to 75%, from the 100% unrated risk weight (footnote 2).
- Banks that adopted an internal ratings-based approach were provided an adjustment in the correlation formula for SMEs with total sales or assets below €50 million.

In the Basel III reform of December 2017, a new category—General Corporate SME—was introduced and further "granularity" was allowed for unrated exposures. The risk weight of SME exposure could be lowered by 85%. The risk weight recommendation was based on the study of SME risk across countries and external rating was not mandatory.

In the Capital Requirements Directives IV (CRD IV), measures were implemented to mitigate the negative impact on SME lending of Basel III regulations on increased capital requirements (10.5% including countercyclical buffer). Capital requirements for SME financing up to €1.5 million was adjusted by an SME supporting factor of 0.7619 (i.e., 0.7619*10.5% = 8%) while the size factor for SME financing up to €2.5 million was adjusted by 0.85.

Even though CRD IV reflects the implementation of Basel III capital accords, it does not fully comply with Basel III. Additional capital buffers, remuneration, and transparency are among the CRD IV items not covered. Because CRD IV applies to all 8,300 European Union (EU) banks, not only the largest or most

1 World Bank. n.d. Small and Medium Enterprises (SMEs) Finance: Improving SMEs' Access to Finance and Finding Innovative Solutions to Unlock Sources of Capital. https://www.worldbank.org/en/topic/smefinance.

2 Bank of International Settlements (BIS). 2006. *International Convergence of Capital Measurement and Capital Standards: A Revised Framework Comprehensive Version*. 30 June.

3 Basel Committee on Banking Supervision. 1988. *International Convergence of Capital Measurement and Capital Standards.* July.

4 BIS, Basel Committee on Banking Supervision. 2010. *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems*. 16 December; and BIS, Basel Committee on Banking Supervision. 2010. *Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring*. 16 December.

internationally engaged, flexibility is essential. However, this flexibility is likely to cause uncertainty, putting the EU on an unequal playing field. Cross-border banks must keep a careful eye on national developments and compliance, given national discretion allowed within CRD IV regarding capital buffers and implementation timing, for example.[5]

BENEFITS OF PUBLIC LENDING SCHEMES

The public lending schemes improves the credit access and financial strength of SMEs, providing two major advantages: (i) overcoming market failure that mainly occurs due to the lack of private voluntary financing for high-risk SMEs, and (ii) assisting in providing a countercyclical mechanism during financial crisis.

Government policy makers can prioritize which SME sectors or firms should receive funding and then direct the government lender to allocate funds to those firms. These measures can address informational asymmetries in markets that mean comparatively transparent lenders have trouble assessing opaque SMEs seeking financing. In addition, during crises such as the COVID-19 pandemic, public lending schemes could quickly scale up to support SMEs, even as traditional commercial lenders experienced difficulty in lending to SMEs.

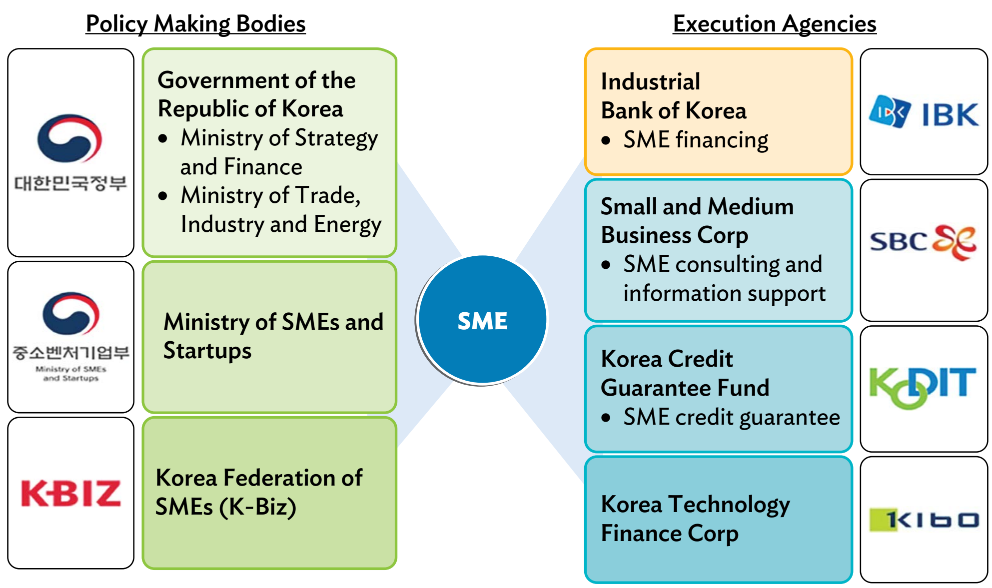
The Public Lending Schemes in the Republic of Korea

SMEs in the Republic of Korea have received various public policy support for the past 50 years, regardless of changes in government or economic policy. The Ministry of SMEs and Startups is mandated to develop and implement government policy for promoting business growth, fostering start-ups, and supporting micro, small, and medium-sized enterprises (MSMEs).

The ministry collaborates with SME-related (or affiliated) institutions to provide financial, marketing, and technological support. Among them are the IBK for financing, the Korea Credit Guarantee Fund for credit guarantees, the Korea Technology Finance Corporation for technology financing, and the Small and Medium Business Administration for financing and business development. The Small and Medium Business Administration, since its foundation in 1996, has supported SME-led innovation as a dynamic force powering the national economy. Its primary mission has been to foster innovative but challenged SMEs to maximize the country's growth potential and competitiveness.

In addition, the Korea Federation of SMEs, a kind of self-regulatory body, represents and protects the rights and interests of SMEs. It aims to provide a supportive economic environment for SMEs and coordinate them with the government by developing related policies and services. Figure 1 summarizes the main supporting organizations in the country.

Figure 1: SME Support Systems in the Republic of Korea



SME = small and medium-sized enterprise.

Source: Industrial Bank of Korea. 2017. *Industrial Bank of Korea and SME Financing in Korea.* http://hts2my.newdept.com/files/occasion/cbff0f9c9fb9d5630fb874eebbbc52a7_20190730130842.pdf.

[5] CFA Institute. 2013. Capital Requirements Directive IV: Issue Brief. https://www.cfainstitute.org/-/media/documents/issue-brief/crd-iv-issue-brief-final.

IBK was established in 1961 as a public bank under the Industrial Bank of Korea Act to provide financial services to SMEs whose access to market resources was limited and constrained, with the Act designed to facilitate IBK's outreach. The bank is required to allocate at least 70% of its loan portfolio to SMEs.

Despite its high proportion of SME loans, however, IBK's financial performance remains sound and since its privatization in 1994 has been competitive with other commercial banks. Its banking business does not differ from other Korean commercial banks in service areas, business performance, and compliance with regulatory factors, such as capital adequacy ratios, asset soundness, liquidity, etc.

The Government of the Republic of Korea also enables IBK to issue Small and Medium Industry Finance bonds separately—with a government guarantee of the interest and principal repayment—to prepare loan resources, because deposits alone are not enough for IBK to raise the funds it needs. As of 2019, these bonds provided almost 50% of IBK's total funding.

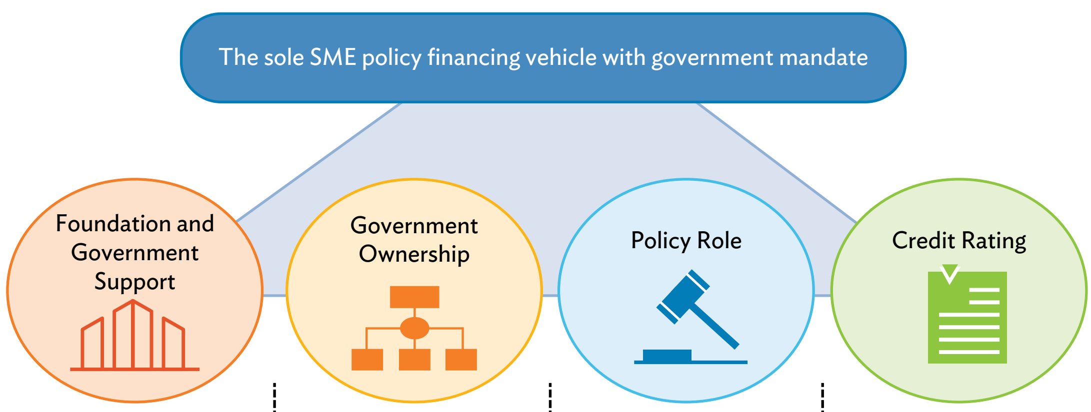
Since 1981, IBK has provided policy loans to SMEs making various intermediate goods—such as diverse parts, industrial materials, or tools. In 1989, the bank expanded the scope of its SME policy loan provision to small firms with good potential for growth and with employees numbering fewer than 50. In particular, the IBK established credit valuation-based loan practices and shifted to a credit lending system that would reduce the financial burden on SMEs. IBK also provides consulting support to SMEs at every stage of business. Figure 2 illustrates IBK's main functions.

In addition, lending directly to SMEs, IBK used to serve as an agency to provide credit guarantees for small business loans. It established the Credit Guarantee Fund in 1967 with credit guarantee reserves and government contributions and guarantee fees. And as the subject and role of the Credit Guarantee Fund expanded, the Government of the Republic of Korea separated its functions from IBK in 1976 and established a separate organization called the Korea Credit Guarantee Fund, which has been performing soundly so far.

IBK later began expanding its nonbanking financial business through acquisitions and new establishments, starting with the establishment of a Korean corporate lease in 1986 to overcome the limitations of financial support for SMEs through loans, which is the traditional financing of banks. IBK also provides nonbank financial services through affiliated securities companies, venture capital, capital companies, asset management companies, and credit information companies, in addition to banks dedicated to SMEs.

Through the participation of these IBK Financial Group constituents, IBK offers comprehensive support measures such as recruitment of investors for SMEs, equity investment decisions,

Figure 2: Industrial Bank of Korea at a Glance



Established and supported pursuant to the IBK Act
- Founded in 1961
- Solvency Protection (Article 43, IBK Act)
- Explicit Guarantee (Article 36.5, IBK Act)

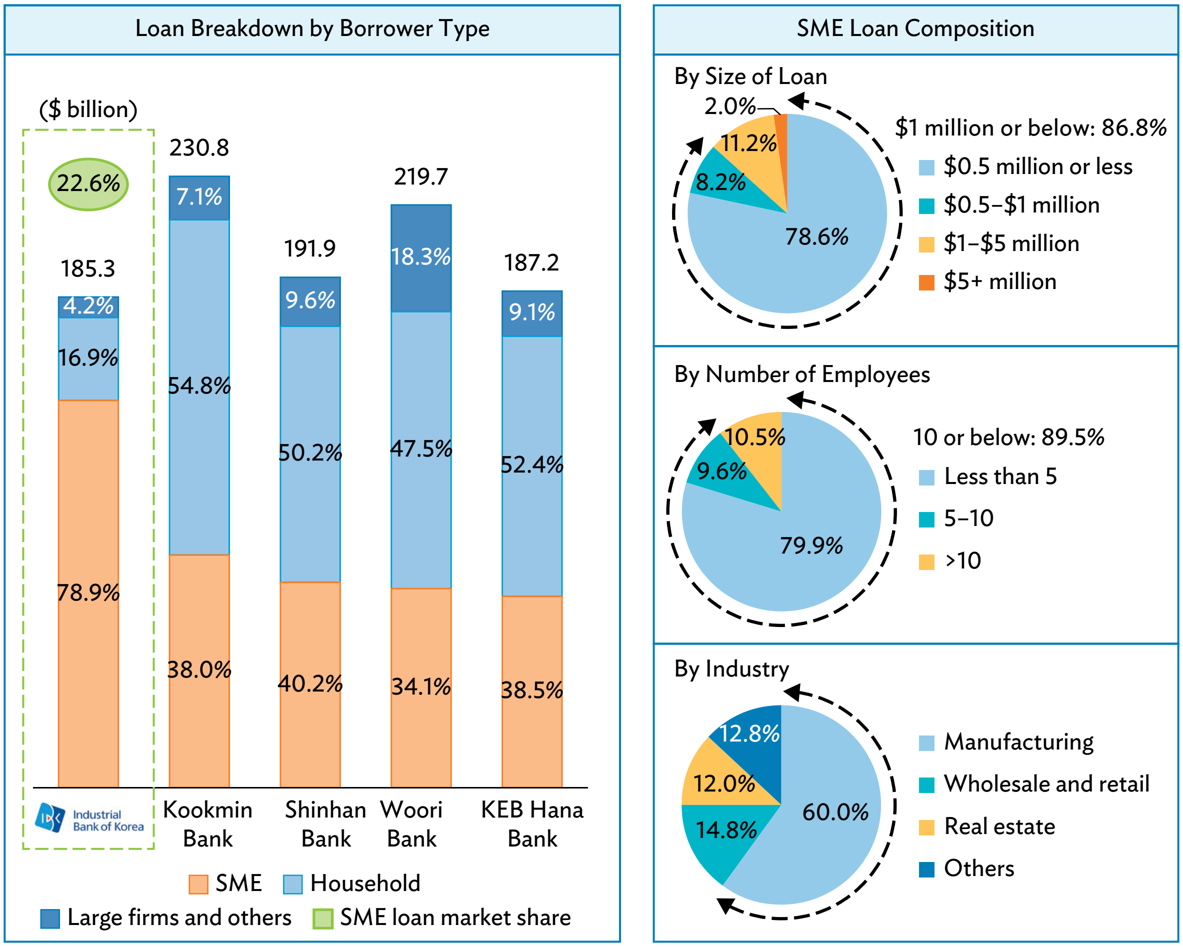
61.9% ownership[a]
- Government: 50.9%
- KDB: 8.7%
- KEXIM: 2.3%

SME promotion and support
- Implementation of government policies
- Safety net for SMEs during crisis
- SME development financing

Rating on a par with the government
- Moody's: Aa2 Stable
- Fitch: AA- Stable

KDB = Korea Development Bank, KEXIM = Export–Import Bank of Korea, IBK = Industrial Bank of Korea, SME = small and medium-sized enterprise.
[a] Includes preferred shares.
Source: Industrial Bank of Korea.

Figure 3: Breakdown of Industrial Bank of Korea SME Loan Portfolio



SME = small and medium-sized enterprises.
Source: IBK Fact Book as of the first quarter of 2018.

investment and technical advice, and credit reinforcement and facility lending, in addition to loans.

As of 2018, the size of IBK's SME loan portfolio was $124 billion, as well as $35 billion in lending to micro-businesses. Figure 3 breaks down IBK's clients compared to leading commercial banks in the Republic of Korea and loan composition by size of loan, number of employees, and industry.

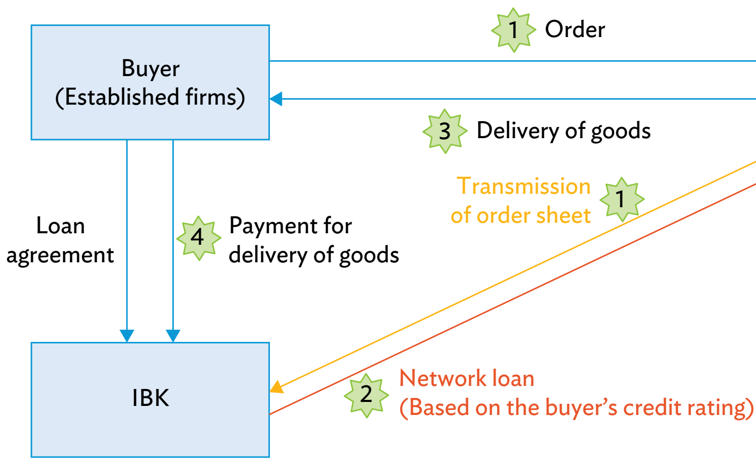
As of the first quarter of 2018, 78.9% of IBK's loans were for SMEs, a 22.6% share of the country's SME market. Among its SME loans, 78.6% were $0.5 million or less, 89.5% for firms with 10 or fewer employees, and 60.0% of the loans for the manufacturing industry.

Many SMEs face cash flow issues for a variety of reasons, including rising raw material prices and delayed delivery of goods. Delay in payment for the delivery of goods is a particular problem. To address the cash flow problem, IBK designed network loans, which are provided based on the purchase order issued by buyers, who repay the loan to IBK (Figure 4).

First, IBK undertakes network loan business contracts with established buyers. The buyers must also hold a BBB or higher credit rating in order to sign this business agreement and, for this buyer's credit-based loan scheme, buyers need to place an order with the supplier and send the order sheet to IBK. IBK then provides the supplier with a network loan, subject to the terms of the business contract. Interest in network loans is lower than regular credit because it is calculated based on the buyer's high credit rating.

As noted, IBK also offers comprehensive consulting services in all business areas to help SMEs overcome the "nonfinancial

Figure 4: Flow Chart of Network Loans



IBK = Industrial Bank of Korea, SME = small and medium-sized enterprise.
Source: IBK Economic Research Institute. 2014. *The Effect Analysis of the Win–Win Collaboration Loan*. Seoul.

barriers" they face.[6] This includes shortfalls in management capabilities and in efforts to strengthen SMEs' technological capacities.

- In 1962, IBK built the SME Consultation Center, which provided consultation and education services on finance, management, accounting, taxation, etc.
- In the 1980s, IBK played a vital role in developing the operational and technological capabilities of SMEs, such as entrusting foreign consultants to provide on-site technical support.
- In 1989, IBK launched a corporate information center to strengthen the functionality of its existing SME service center.
- In 1990, IBK opened a permanent exhibition hall to promote products for SMEs and sought to complement weak marketing capabilities.
- In 1996, IBK launched consultation services for mergers and acquisitions.
- In 2015, IBK launched the SMEs Hope Consulting Project (Figure 5), providing local SMEs with free consulting services on business strategy, taxes, and law.

Meanwhile, the Government of the Republic of Korea has employed IBK to provide countercyclical funding scalability in times of crisis. This has been possible by having a direct SME loan institution like IBK. During the global financial crisis, there was concern that commercial banks could drastically reduce financing for SMEs. However, IBK's liquidity injection helped SMEs gain access to finance. The total net increase of SME financing was $19.3 billion by all domestic banks during and after the global financial crisis. Out of these, IBK played a crucial role in financing $17.6 billion of SME loans, accounting for 91% of the total net increase in loans for SMEs (Figure 6). In 2020, IBK provided financial assistance worth W24 trillion to SMEs and micro businesses experiencing temporary liquidity crises. As such, IBK's loans play a key role in helping SMEs access finance whenever the economic business cycle declines.[7]

In response to concerns that IBK's role in the SME financing business and in countercyclical funding undermine its soundness, IBK has developed and tested an effective risk management system (Figure 7).

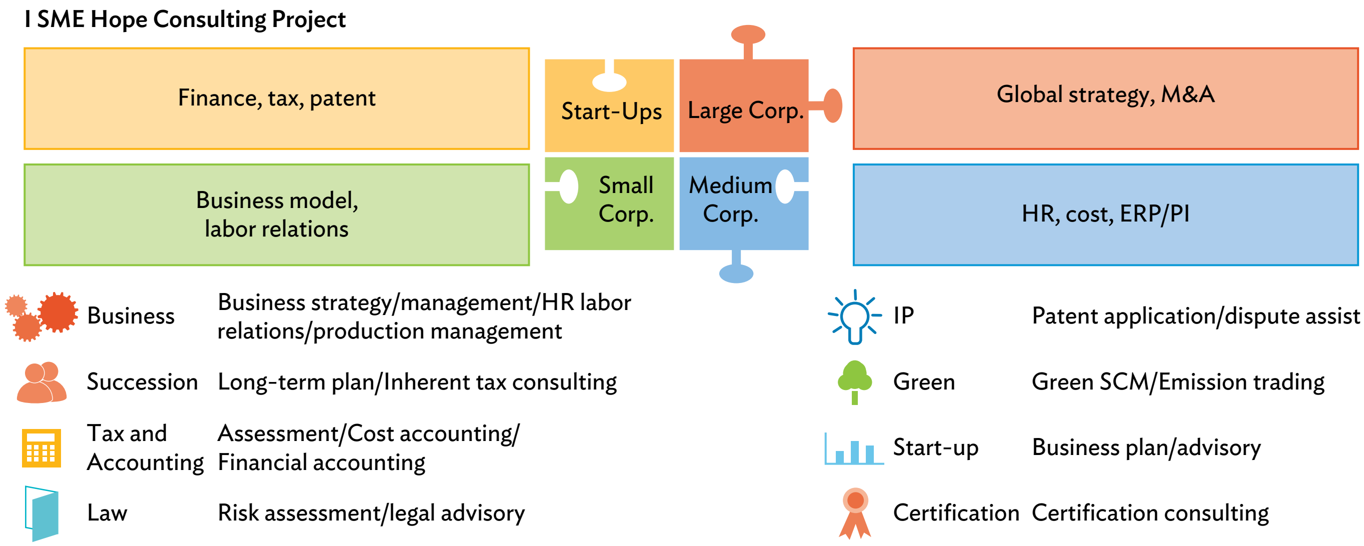
It prudently assesses credit risks to ensure sound asset quality management and constantly monitors any changes in the credit risk of borrowers. Its automated adequacy assessment allows the bank to detect at-risk companies in a timely fashion and conduct preemptive restructuring to support rehabilitation of companies with increased credit risk.

Despite IBK's great contribution to SME financing, and the inherent risks therein, its capital adequacy ratios have continuously improved and remained above the regulatory requirements. IBK has developed and tested a powerful risk management system and it helps prudently assess credit risks to ensure sound asset quality management and constantly monitor any changes in the credit risk of borrowers.

The three stages of the IBK risk management process include pre-lending assessment, the interim review, and the aftercare stage (Figure 8).

6 Each year, through such efforts, IBK provides about 1,000 free consulting services.
7 Industrial Bank of Korea (IBK). 2020. *How IBK Thinks About Finance: Annual Report 2020*. https://global.ibk.co.kr/global/js/pdfobject/pdfViewer.html?/upload/global/2021/20210601154925304593721488346634.pdf.

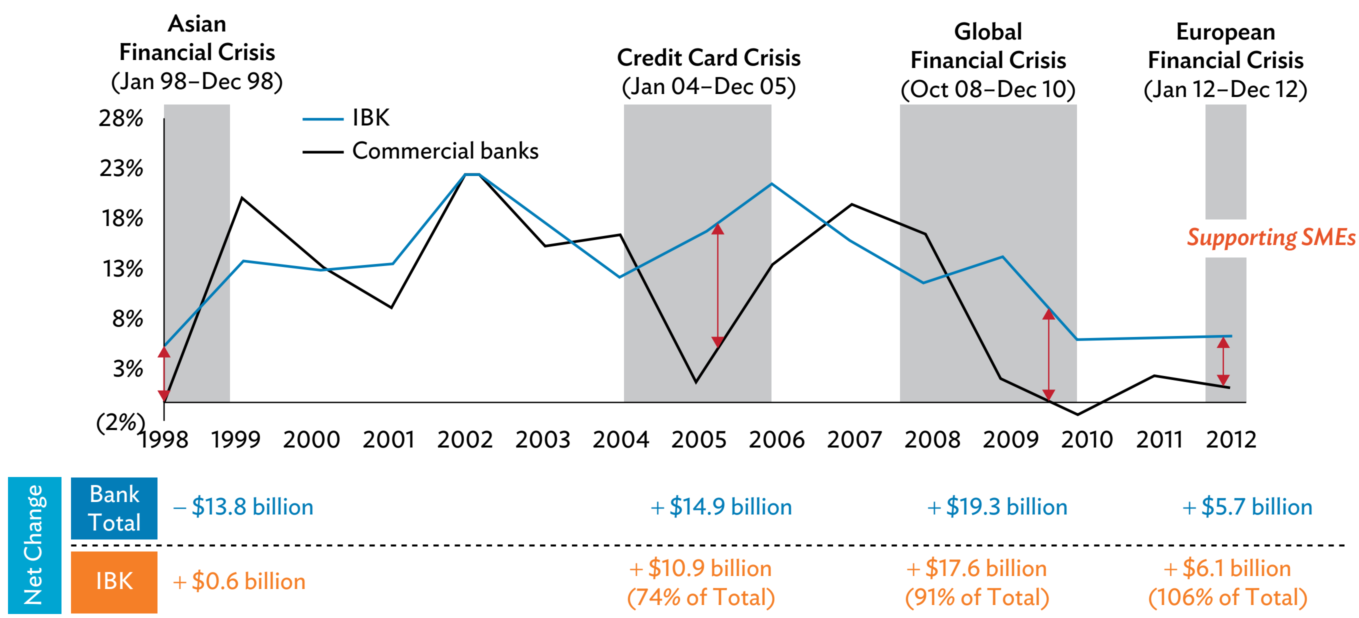
Figure 5: Industrial Bank of Korea SME Consulting Services



ERP = enterprise resource planning, HR = human resources, IP = intellectual property, M&A = merger and acquisitions, PI = process innovation, SCM = supply chain management, SME = small and medium-sized enterprise.

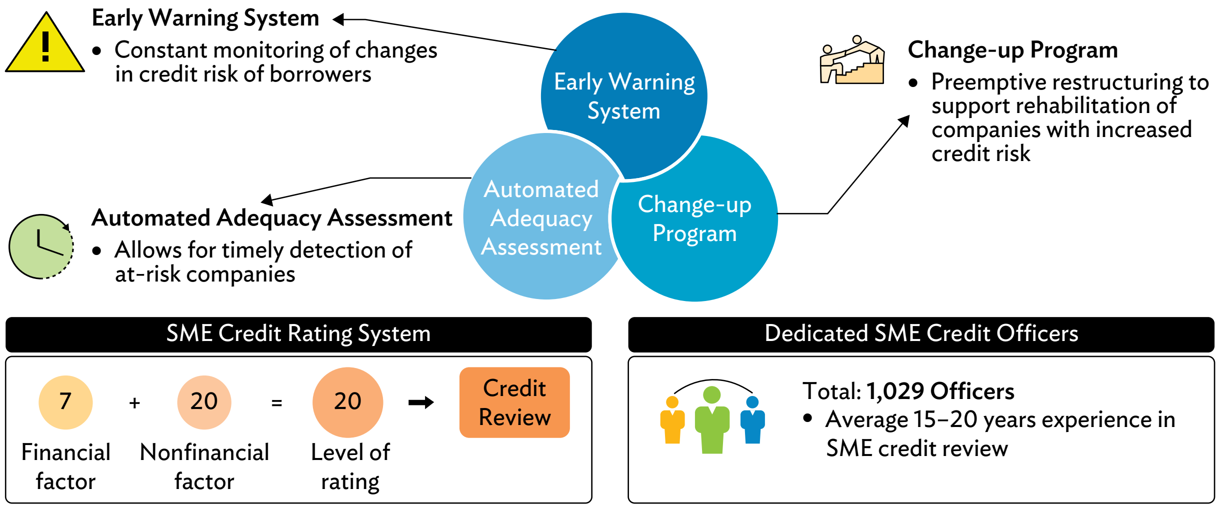
Source: IBK. 2016. *New Future in Finance for SMEs*. Seoul.

Figure 6: IBK's Liquidity Injections in Economic Turmoil



IBK = Industrial Bank of Korea, SME = small and medium-sized enterprise.
Source: Industrial Bank of Korea.

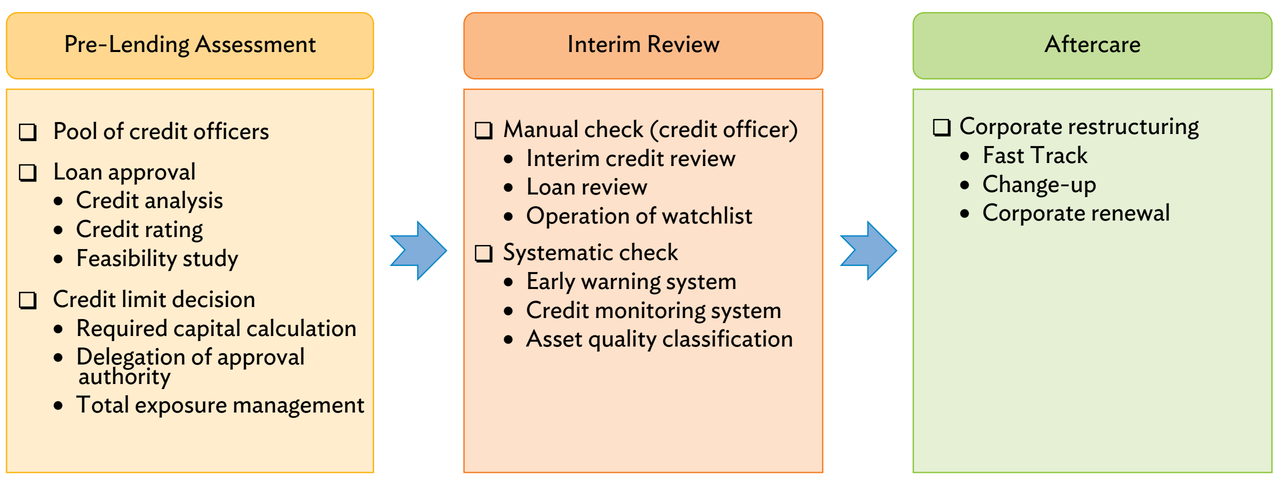
Figure 7: Industrial Bank of Korea's Risk Management



SME = small and medium-sized enterprise.

Source: Industrial Bank of Korea.

Figure 8: Risk Management System of Industrial Bank of Korea



Source: Industrial Bank of Korea. 2014. *SME Financing in Korea and the Role of IBK*. Seoul.

Pre-lending assessment is the decision-making stage before the loan is issued. The main system consists of a pool of credit officers, loan approvals, and credit limit determination. Next is the interim review phase, after the loan is disbursed. This is mainly divided into manual checks performed directly by specialized credit officers and systematic checks filtered by various systems. Aftercare is the final stage of risk management. It takes place primarily with SME borrowers that may be at risk of bankruptcy during the interim review process. The key features of IBK's interim review consists of early warning, credit monitoring, and asset quality classification systems.

The Government Lending Scheme in the United States

In the United States (US), the government has supported small businesses since 1929, when it created the Reconstruction Finance Corporation to provide loans to businesses, small and large, hurt by the Great Depression. During World War II, the government created the Smaller War Plants Corporation to provide loans to small businesses that were considered unable to effectively compete with larger firms in making products for the war. After the war, the functions of the Smaller War Plants Corporation were folded into the Reconstruction Finance Corporation.

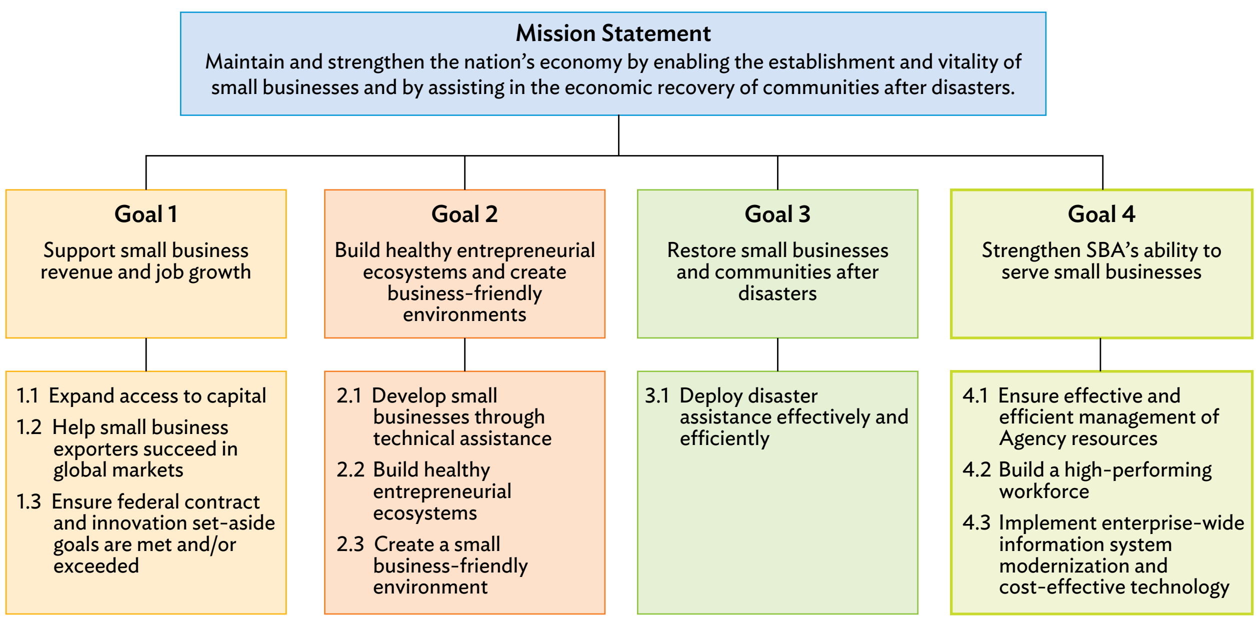
In the early 1950s, President Dwight D. Eisenhower proposed creating a new cabinet-level government agency to consolidate US government efforts to assist small businesses and boost the US economy. The US Congress responded by passing the Small Business Act of 1953, which created the Small Business Administration (SBA) as an independent agency dedicated to aiding, counseling, assisting, and protecting the interests of small business concerns. This includes the protection of small business rights in getting a fair proportion of government contracts and sales of surplus property. The SBA's mission is to "maintain and strengthen the nation's economy by enabling the establishment and vitality of small businesses and by assisting in the economic recovery of communities after disasters." The SBA developed its performance plan and budget for achieving its mission based upon four strategic goals and 10 strategic objectives (Figure 9).

The key to the success of the SBA was the decision to centralize all US government support for small businesses in a single cabinet-level agency, and then to expand and support the agency during the past 70 years. During that time, the SBA has assisted tens of millions of small firms from start-up to maturity. In the process, those small firms have been responsible for more than half of all job growth in the US and accounts for about half of US economic output. Currently, about 30 million small businesses operate in the US. The SBA has 10 regional offices across the country that oversee 68 district offices, which conduct more than 20,000 outreach events each year.[8]

Finally, the SBA has set up more than 1,000 Small Business Development Centers across the country. These training centers are hosted by colleges, universities, as well as state agencies through a partnership with the SBA, and provide low or no-cost training and consulting services to small firms. This setup makes the SBA accessible to small businesses in every one of the more than 3,000 US counties.

The SBA administers several different programs to support small businesses and expand employment opportunities. First and foremost, the SBA improves access to finance through a series of programs that provides loan guarantees and venture capital to small firms. Second, the SBA provides technical assistance for small firms through programs that provide entrepreneurial education and mentoring designed to assist a business in its formation and expansion. Third, the SBA assists small firms in obtaining government contracts; 23% of all government contracts are set aside for small businesses. Fourth, the SBA provides direct lending to businesses and households as assistance during disasters.[9]

Figure 9: SBA Goals and Objectives



FY = fiscal year, SBA = Small Business Administration.

Source: Small Business Administration. FY2021 Congressional Justification, FY2019 Annual Performance Report.

[8] U.S. Small Business Administration (SBA). FY2021 Congressional Justification, FY2019 Annual Performance Report. https://www.sba.gov/sites/default/files/2020-02/FY%202021%20CJ-508_FINAL.pdf.

[9] Congressional Research Service. 2019. Small Business Administration: A Primer on Programs and Funding. https://crsreports.congress.gov/product/pdf/RL/RL33243/93.

It is this multipronged approach to supporting small businesses that has made the SBA effective in promoting financing to SMEs in the US. The loan guarantee programs have been the most important, as they are cost-effective mechanisms for incentivizing private sector lenders to provide financing to small businesses. These loan guarantees, backed by the "full faith" and credit of the US government, reduce the loss exposure of a lender by 80%, making it profitable to provide financing to firms that otherwise would be unable to obtain credit on any terms.

The innovative Small Business Investment Company (SBIC) Program has also been important in raising not only debt but equity financing for small businesses. The SBIC Program leverages private venture funds with $2.00 of government capital for each dollar of private capital. Often times, small firms need equity more than they need debt, and this program provides such capital.

The Microloan Program provides a source of debt financing to very small and very young businesses that would not be seen as viable borrowers by private lenders. The average size of such loans—about $10,000—are too small to justify the fixed cost of underwriting by a private lender. These microloans enable small businesses with need of such small loans an opportunity to grow and build a track record that will enable them to transition to loans from private lenders. This is especially true of female-owned and minority-owned small businesses that also may face discrimination in the private loan markets.

Finally, the mentoring and training offered by various SBA programs provide entrepreneurs with the education they need to establish a new business and survive the tumultuous first few years of operations. The SBA also serves as an advocate for the interests of small businesses with the federal government through its Office of Advocacy. The mission of this office is to support the interests of small businesses by intervening in the development of federal regulations, to produce policy-relevant research to inform policy makers of the importance of small businesses to the US economy, and to foster communication between federal agencies and small businesses.

The SBA's main task is easing small businesses' access to capital through programs designed to encourage lenders and investors to provide loans and equity capital to small businesses that otherwise might be overlooked by lending institutions and investors because of the perceived risks associated with small businesses.

The SBA's flagship programs incentivize creditors and investors through credit-guarantee schemes known as the 7(a) General Business Loan-Guaranty Program and the 504 Certified Development Company Loan-Guaranty Program. However, the SBA also lends directly to businesses through its disaster relief and microloan programs. Table 1 describes the programs.

The first SBA program is the 7(a) General Business Loan-Guaranty Program, and generally used for businesses' various needs, such as equipment purchases, working capital, leasehold improvements, inventory, or real estate purchases. Lenders do not have to require collateral for loans up to $25,000; for loans greater than $350,000, lenders are required to request collateral up to the full amount of the loan.

The second program, the 504 Certified Development Company Loan-Guaranty Program, was designed to provide fixed-rate, long-term financing for a firm to acquire fixed assets for modernization or expansion. SBA partnered with certified development companies that are nonprofit corporations established to promote economic development in a community by making 504 loans; its loans are funded by SBA-guaranteed debentures. Loan maturities can be set for 10, 20, or 25 years.[10]

The third program of the SBA, called the Microloan Program, provides participating lenders with loans and grants to help small businesses and certain not-for-profit childcare centers.

Table 1: SBA's Flagship Funding Programs

7(a) General Business Loan-Guaranty Program	504 Certified Development Company Loan-Guarantee Program	The Microloan Program
• SBA's primary loan program used for businesses to meet various needs • Provides a 75%–85% guarantee for SME loans up to $5 million	• Available from certified development companies to provide fixed-rate, long-term financing to acquire fixed assets • Accommodates loans of up to $5.0 million and $5.5 million for an energy-efficient or manufacturing project, with a cap of $16.5 million for each small business	• Provides participating lenders with loans and grants to help them provide loans and trainings to small businesses and certain not-for-profit childcare centers • Provides a maximum of $6 million in loans to each participating lender

SME = small and medium-sized enterprise, SBA = Small Business Administration.
Source: Authors.

[10] A typical 504 project includes a loan from a private sector lender with a senior first-lien position, an SBA-backed loan from a Certified Development Company in a second-lien position, and an equity contribution from the borrower. As of 2020, 260 certified development companies operated in the US, each with a defined geographic area, usually the state in which the Certified Development Company is located.

The maximum loan amount is $50,000 and the maximum loan maturity is 6 years. In fiscal year (FY) 2019, the average loan size was $14,735 and the average loan rate was 7.5%. Microloans can be used to finance working capital, inventory, and machinery or equipment, but cannot be used to purchase real property or to pay off preexisting debt.

The Microloan Program was authorized in 1991 as a 5-year demonstration program and was made permanent by the Small Business Reauthorization Act of 1997. The program targets start-ups with little or no credit history in underserved markets, especially minority-owned and female-owned firms, as well as those in rural areas. In addition to credit, microloan lenders provide marketing, management, and technical assistance to both potential and actual borrowers. The SBA also provides grants to the intermediary lenders of up to 25% of the loan amounts to help offset the lender's costs of providing business-based training, technical assistance, and coaching to the micro-borrowers. During FY2019, microloans went out to 5,532 small businesses through 144 microlenders in the amount of $81.5 million, supporting 21,235 jobs. From 2014–2018, about half of the loans went to female-owned firms, about two in five to minority-owned firms, but only about 1 in 20 to veteran-owned firms.

The Small Business Investment Company Program

The SBA also operates the SBIC Program, as noted, which is an innovative multibillion investment program created in 1958 to bridge the gap between entrepreneurs' need for capital and funds available from traditional sources of financing. The program has made billions of dollars in capital available to US small businesses representing a variety of industries across the country.

These outcomes came about using a public–private partnership that uses the full faith and credit of the US government to leverage up the amount of private sector investment capital available to small firms. The SBA raises capital by issuing taxpayer-backed debentures guaranteed by the SBA, and then combines these funds with capital raised by privately and publicly managed investment funds that raise capital from private investors, such as banks, pension funds, or wealthy individuals. Qualified fund managers that complete the SBA's rigorous application process are granted a license to operate their fund as an SBIC.

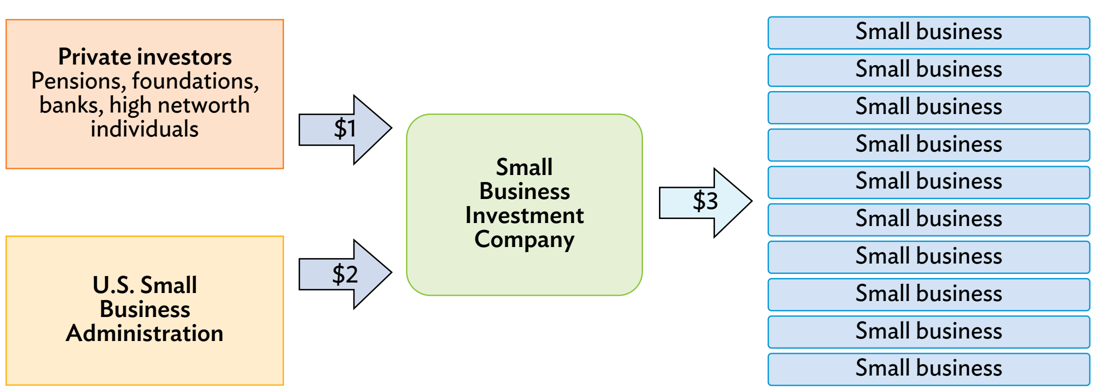
For every $1 the fund raises from investors, again as noted, SBA will commit up to $2 of debt, subject to a cap of $175 million. The SBIC then invests this combination of capital in qualifying small businesses (Figure 10).

Loan terms are established between the SBIC and small businesses following regulations of the SBIC Program. Table 2 presents key features of the SBIC.

An SBIC is organized as either a limited-liability company or a corporation. Small groups of local investors own most SBICs, but about one in six are wholly owned subsidiaries of commercial banks. A few SBICs are publicly traded corporations. The SBA rigorously vets a prospective SBIC's management team to ensure that it has professional capabilities and character. The SBA examines the principals' experience and investment track record as well as their financial acumen. The lengthy application process begins with a nonfundable fee of $10,000 and requires a 10-year financial forecast for the company, as well as details on the company's governance structure, capitalization plan, decision-making processes, and investment strategy.

SBICs invest in small businesses in a number of ways. They may purchase equity securities such as stock or membership interests in a limited liability company; they may make loans directly to small businesses in cooperation with other lenders; they may purchase debt securities from small businesses, which may be convertible into equity; and they may provide loan guarantees for loans from other creditors.

Figure 10: Funding SMEs through Small Business Investment Companies



SBIC = small business investment company, SME = small and medium-sized enterprise.
Source: U.S. Small Business Administration. 2018. SBIC Program Overview. October 1 update, p. 1.

Table 2: Key Features of Small Business Investment Company Program

Key Feature	Program Summary
Use of Proceeds	To purchase small business equity securities, make loans to small businesses, purchase debt securities from small businesses, and provide, subject to limitations, small businesses a guarantee of their monetary obligations to creditors not associated with the Small Business Investment Company (SBIC).
Maximum Leverage Amount	A licensed SBIC in good standing with a demonstrated need for funds may apply to the Small Business Association (SBA) for financial assistance (called leverage) of up to 300% of its private capital. However, most SBICs are approved for a maximum of 200% of their private capital, and no fund management team may exceed the allowable maximum amount of leverage, currently \$175 million per SBIC and \$350 million for two or more licenses under common control.
Maturity	SBA-guaranteed debenture participation certificates can have a term of up to 15 years, although currently only one outstanding SBA-guaranteed debenture participation certificate has a term exceeding 10 years and all recent public offerings have specified a term of 10 years. SBA-guaranteed debentures provide for semiannual interest payments and a lump sum principal payment to investors at maturity. SBICs are allowed to prepay SBA-guaranteed debentures without penalty. However, an SBA-guaranteed debenture must be prepaid in whole and not in part and can only be prepaid on a semiannual payment date. Also, low-to-moderate income area debentures are available in two maturities, for 5 years and 10 years (plus the stub period).
Maximum Interest Rates	The debenture's coupon (interest) rate is determined by market conditions and the interest rate of 10-year Treasury securities at the time of the sale.
Guaranty Fees	The SBA requires the SBIC to pay a 3% origination fee for each debenture issued (1% at commitment and 2% at draw), an annual fee on the leverage drawn, which is fixed at the time of the leverage commitment, and other administrative and underwriting fees, which are adjusted annually.
Job Creation Rate	No job creation rate. It is difficult to say whether SBIC funding caused job creation or whether similar levels of job creation could have been achieved through other means of financing because it is practically impossible to know what employment in these businesses would have looked like if they had not received SBIC funding.

Source: U.S. Small Business Administration 2020. *Small Business Administration: A Primer on Programs and Funding*. 6 October. p. 32.

The SBIC Program's purpose is to increase the flow of private equity capital and long-term loan funds to small firms, which small businesses require for sound financing of their operations as well as development, expansion, and modernization when such capital is in short supply.[11]

It has lent more than \$67 billion over the life of the program since its establishment in 1958. It is authorized to lend up to \$4 billion per year, had \$26 billion in assets under management, and had lent to 303 active SBICs as of 2020 (footnote 11). During FY2019, the SBA provided \$1.93 billion in leverage to SBICs, which invested another \$3.94 billion from private sources of capital for a total of almost \$6 billion in financing for 1,191 small businesses (footnote 11). The program was created "to bridge the gap between entrepreneurs' need for capital and traditional sources of funding" (footnote 11); public–private partnership that utilizes SBICs—privately owned investment funds—in raising capital for eligible small businesses.

The Small Business Association's Role in Crisis Response

In addition to providing access to capital programs, SBA has been instrumental in providing much-needed assistance during financial crises and natural disasters. The global financial crisis of 2007–2008 severely undermined small businesses as banks tightened credit amid worsening financial conditions. Due to SBA's existing infrastructure with banks and small businesses, the American Recovery and Reinvestment Act of 2009 used it as a key response mechanism and provided \$730 million for SBA programs. This included but was not limited to (i) \$375 million for temporary eliminating fees on SBA-backed loans and increased guarantees from a maximum of 80% to 90%, (ii) \$255 million for a new loan program to bolster small businesses' debt servicing capacity, and (iii) \$30 million for expanding SBA's microloan program.[12] The program sharply boosted lending, speeding recovery for SBA accredited small business lenders, with loan levels quickly returning to pre-crisis levels.[13]

11 See U.S. Small Business Administration. SBIC Program Overview. https://www.sba.gov/document/support--sbic-program-overview (accessed 25 October 2021).
12 Social Security Administration. 2009. American Recovery and Reinvestment Act Helps Small Businesses. Woodlawn, MD.
13 SBA. 2009. Review of the Recovery Act's Impact on SBA Lending. Washington, DC.

During the COVID-19 pandemic, small businesses have been hit by government-mandated closure and safety measures to mitigate the spread of the virus. To lessen the burden, the US government CARES Act, signed on 27 March 2020, provided $376 billion in relief funding for workers and small businesses. SBA launched and redesigned existing programs to support government efforts to stem the tide for struggling small businesses—this included its Paycheck Protection Program, Economic Injury Disaster Loan, SBA Express Bridge Loans, and SBA Debt Relief.

RISKS AND CHALLENGES ASSOCIATED WITH GOVERNMENT LENDING SCHEMES

While country cases in the Republic of Korea and the US had positive impacts on SMEs' access to finance, developing countries in Asia and the Pacific should strive for a holistic approach to financial inclusion goals.

First, government should not solely rely on public lending schemes, as this can distort markets and create reliance on ongoing public support, potentially crowding out the private financial sector and burdening fiscal budgets.[14]

Second, the rapid onloading of SME credit could pose financial stability risks if excessive lending to an undeveloped SME sector leads to a large portfolio of nonperforming assets amid weak SME institutional capacity.[15]

Last, public schemes that take a toll on fiscal budgets should be strictly monitored and evaluated to ensure these schemes are reaching businesses most needing support. While issues such as satisficing[16] are more prominent in private financial institutions that have an obligation to their depositors and shareholders, risk-averse decision making can also happen in government schemes. For example, some critics charged that SBA's Paycheck Protection Program—deployed at the height of the pandemic—neglected small business owners in favor of larger and wealthier businesses.[17]

CONCLUSION AND POLICY CONSIDERATIONS

Weak access to finance is a key constraint on growing SME businesses,[18] even though formal SMEs account for more than 90% of all firms and more than half of employment around the world.[19] This is true in emerging and developed economies alike, with SMEs having limited access to capital markets and facing difficulties in obtaining formal finance from lenders such as commercial banks. Many SMEs have neither reliable financial statements nor sufficient tangible assets to pledge as collateral for loans. In addition, they often have no access to a guarantor for their loans.

Financial regulations and underwriting standards, meanwhile, impose fixed and variable costs on formal lenders who provide credit to SMEs. Even when SMEs can obtain formal finance, they often face onerous loan terms, such as high interest rates and demands for collateral and personal guarantees that put an entrepreneur's entire personal wealth at risk.

This brief has examined how the public SME lending schemes in the Republic of Korea and the US have helped their SME sectors in overcoming these impediments. While both countries established different mechanisms to address their unique domestic SME financing issues, both cases have shown the advantageous role of the public lending schemes in bridging the SME financing gap. There can be policy considerations from the case studies of the two countries.

First, the establishment of the public lending schemes allow the government to take charge in circumventing issues of market failure brought about by informational asymmetry between SMEs and private lenders. Policy makers can prioritize which SME sectors or firms should receive funding and then direct the public lender to allocate funds to those firms. Additionally, the transaction history between the public lending schemes and SMEs can provide valuable financial and nonfinancial data that can be utilized in creating SME credit infrastructure, such as credit risk assessment models, thereby bridging the information gap and jumpstarting private participation in SME financing.

14 Organisation for Economic Co-operation and Development (OECD) et al. 2019. Access to Finance for SMEs (Dimension 6) in the Western Balkans and Turkey. In *SME Policy Index: Western Balkans and Turkey 2019: Assessing the Implementation of the Small Business Act for Europe*. Paris: OECD Publishing.

15 ADB. 2018. *Completion Report: Women's Entrepreneurship Support Sector Development Program in Armenia*. Manila.

16 The term "satisficing," combining "satisfy" and "suffice," is a decision-making strategy that aims for a satisfactory or acceptable result rather than the optimal solution.

17 R. Mashayekhi. 2020. Poorly Designed and Irresponsibly Run: PPP Scrutiny Mounts after SBA Data Dump. *Fortune*. https://fortune.com/2020/12/11/ppp-scrutiny-sba-trump-administration-big-companies-small-businesses-covid-relief/.

18 According to the International Finance Corporation, 65 million firms in developing countries, or 40% of formal micro, small, and medium-sized enterprises (MSMEs), have an annual unmet financing need of $5.2 trillion, which is 1.4 times the present level of global MSME lending. East Asia and the Pacific is the region with the highest proportion of the global financial gap (46%) followed by Latin America and the Caribbean (23%) and Europe and Central Asia (15%). World Bank (2015). *Small and Medium Enterprises (SMEs) Finance, Improving: SMEs' Access to Finance and Finding Innovative Solutions to Unlock Sources of Capital*. http://www.worldbank.org/en/topic/smefinance. During 2010–2019, bank lending to MSMEs in Southeast Asia was equivalent to an average of 14.8% of gross domestic product (GDP) and 16.9% of total bank lending (a compound annual fall of 1.3% and 0.3%, respectively). Asian Development Bank. 2020. *Asia Small and Medium-Sized Enterprise Monitor 2020: Volume II—COVID-19 Impact on Micro, Small, and Medium-Sized Enterprises in Developing Asia*. Manila.

19 Among MSMEs in Southeast Asia, according to national firm classifications, Asia accounted for an average of 97.2% of all businesses, 69.4% of total workforce, and 41.1% of a country's GDP during 2010–2019. Asian Development Bank. 2020. *Asia Small and Medium-Sized Enterprise Monitor 2020: Volume II—COVID-19 Impact on Micro, Small, and Medium-Sized Enterprises in Developing Asia*. Manila.

Second, the public SME lending schemes can have negative effects as the schemes get larger and bigger. For example, the marginal effectiveness of the program declines and the possibility increases of generating unprofitable and unviable "zombie" SMEs with overlapped supports for longer periods. In addition, due to this type of public intervention in the SME sector, private financial institutions have little incentive to strengthen their evaluation capacities in the SME sector.

Third, however, policy measures supporting SMEs are needed because these small firms contribute to economic development, including employment and production. Public support is particularly required to support younger and smaller firms facing challenges to access finance in the private financial market for growth and expansion.

The cases outlined in this brief can help policy makers develop economies in Asia and the Pacific, with a focus on financial products, risk management, and monitoring methodologies and nonfinancial services for SMEs. This is of particular importance given the central position of SMEs in the economic crisis brought on by the COVID-19 pandemic and containment measures. To address acute liquidity challenges facing SMEs as a result of confinement measures, public support—often massive—needed to be disbursed rapidly.

IBK and the SBA's strong track record in improving access to credit in their respective countries can serve as a valuable framework for developing countries in Asia and the Pacific as they tackle the critically important SME financing issue. However, countries must realize that the cases in the two countries cannot simply be copied, as each case is born out of each country's unique economic, financial, legal, and regulatory environment. For example, the SBA's guarantee framework will be suited for economies with tight fiscal budgets due to the lack of immediate sizable outlays. At the other end, the hands-on model of public SME banks provides a direct role in developing a nascent SME credit industry as governments can supplement weak market forces and develop good industry practices—such as the case with IBK's SME credit review—that can encourage private participation.

In addition, public SME lending schemes should not be seen as a panacea. Policy makers should explore a holistic approach that accounts for current developments. First, they should adjust policies to mitigate the impact of stricter Basel III regulations for SME lending. Fisera et al. (2019)[20] illustrate that policy makers should enforce strict capital requirements and provisioning alongside prudent macroprudential management, which can cushion the SME sector and provide a risk-tolerant environment for SME financing.

Finally, policy makers can take advantage of digital technologies, particularly using them to make financial services more accessible to underserved and unserved communities. While the benefits of digital transformation have abounded, especially during the pandemic, policy makers must ensure that policies and regulations in digital financial services respond to new threats to financial stability.

[20] Fisera, B., R. Horvath, and M. Melecky. 2019. *Basel III Implementation and SME Financing: Evidence for Emerging Markets and Developing Economies (English)*. http://documents.worldbank.org/curated/en/441951575300867782/Basel-III-Implementation-and-SME-Financing-Evidence-for-Emerging-Markets-and-Developing-Economies.

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Notes: In this publication, "$" refers to United States dollars, "€" refers to euros, and "W" refers to won.

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