

EXPANDING ACCESS TO FINANCING FOR MSMEs IN RUSSIA BY LEVERAGING INNOVATIVE FINANCIAL SOLUTIONS

Policy Note



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EXPANDING ACCESS TO FINANCING FOR MICRO, SMALL AND MEDIUM-SIZE ENTERPRISES IN RUSSIA BY LEVERAGING INNOVATIVE FINANCIAL SOLUTIONS

Policy Note

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ACRONYMS

ABL	Asset-based lending
BDC	Business Development Bank of Canada
BNDES	Banco Nacional de Desenvolvimento
CBR	Central Bank of Russia
DFI	Development finance institution
FND	Financiera Nacional de Desarrollo Agropecuario, Rural, Forestal y Pesquero
FDN	Financiera de Desarrollo Nacional de Colombia
GDP	Gross domestic product
ID	Proof of identity
IP	Intellectual property
IT	Information technology
KDB	Korean Development Bank
KFW	Kreditanstalt für Wiederaufbau
KPIs	Key performance indicators
KYC	Know your customer
M&E	Monitoring and evaluation
MFO	Microfinance organization
MSME	Micro, small and medium size enterprises
NAFIN	Nacional Financiera
NBFI	Non-bank financial institution
OECD	Organization for Economic Cooperation and Development
PCG	Partial credit guarantee
QRCT	Quasi-randomized control trials
RCT	Randomized control trials
SLPCG	Second loss partial credit guarantee
SME	Small and medium size enterprises
STCR	Secure transactions and collateral registries
TReDS	Trade Receivables Discounting System
UK	United Kingdom
USA	United States of America

EXECUTIVE SUMMARY

In Russia, the contribution of small and medium-size enterprises (SMEs)¹ to the economy is still considerably lower than in other countries. As of March 2019, there were 6.2 million SMEs in Russia employing 15.8 million people. Ninety-five percent of SMEs were micro enterprises, accounting for 47 percent of the SME employment. SMEs account for 22 percent of Russia's GDP and 25 percent of total employment. Even though the number of SMEs has been growing, their contribution to the economy is still below most of the BRICs countries and considerably lower than in developed economies. In the OECD group, SMEs account for 50 to 60 percent of GDP, and 60 percent of total employment.

SME development is important to the Russian economy to enable stronger economic growth and improve productivity. In the developed economies, SMEs are at the core of the private sector, contributing to job creation and growth. Russia has a high presence of State-Owned Enterprises, which tend to be less productive than private firms; therefore, developing the SME sector has the potential to increase productivity. Creating conditions for SMEs to develop and grow is crucial for the Russian economy to expand and become more productive. Access to finance is critical for the growth of SMEs as it allows firms to innovate, improve efficiency, expand to new markets, and create new jobs.

Despite various government financing schemes to support credit to SMEs, the share of SME credit in total business credit (12.6 percent) is lower than their contribution to Russia's GDP (22 percent) and is half the OECD average (25 percent). Demand and supply factors constrain SME access to finance. The demand-side constraints include excessive collateral and documentation requirements by banks, difficulties in accessing government support programs, a limited number of suitable financial products for SMEs beyond traditional bank loans, and weak financial knowledge and skills of SMEs. On the supply side, banks are challenged by market distortions caused by the administration of the state support programs, stringent regulatory requirements to lend to SMEs and uneven access to government funding programs, depriving smaller private banks, which are often important finance providers to SMEs, of such access. While the Central Bank has been softening regulatory requirements for banks to incentivize lending to SMEs and the government has amended some of its public support programs to allow participation by a greater number of banks, the growing number of such programs, their administration by various entities (at national, regional and sectorial level) and their complexity still make it difficult for SMEs to access government support schemes. Furthermore, in many instances, the ability to access finance and the speed and convenience with which it can be done, is more critical for SMEs than the cost at which they can obtain financing.

Development of the SME sector is a priority of the Russian government, which allocated RUB 427.6 billion (USD6.6 billion) for the implementation of a six-year National Project on SME and Individual Entrepreneurship Support. The National Project on SME and Individual Entrepreneurship Support (known as the National SME Project) was endorsed by the government in 2018 to align SME development with the national objective of becoming the 5th-largest economy globally by 2024, focusing on innovation-led and productivity-driven growth. The National SME Project envisions a holistic approach to support SME development, with emphasis on strengthening the legal and institutional frameworks supporting SMEs operations and developing SMEs' financial and non-financial programs for SME support. This approach is supported by five components under the National SME Project, namely improving doing-business conditions, accelerating the growth of SMEs, establishing systems to support farmers and agri-cooperatives, popularizing entrepreneurship and improving access to finance for SMEs.

¹ For the purposes of this report, the term SME includes micro, small, and medium firms.

The National SME Project aims at improving SME access to finance by scaling up subsidized bank lending, but also diversifying the sources and types of financial solutions for SMEs. The main measures envisioned in the National SME Project to improve SME access to finance include: (1) simplifying access to subsidized finance and increasing its volume; (2) facilitating access to capital markets for SMEs; (3) improving access to leasing instruments; and (4) facilitating access to micro-finance and crowdfunding. The Central Bank of Russia (CBR) developed a roadmap on facilitating SME access to finance in order to support the implementation of the National SME Project. For 2019-2024, the government will provide RUB 261.8 billion (USD 4 billion) for improving SME access to finance, with a significant portion going to subsidized bank lending.

The current efforts of Russian policymakers to support the SME financing ecosystem is a positive trend; however, more could be done to gradually reduce reliance on subsidized lending and to develop more market-based solutions for SME finance. Current policy examples leading to development of market-based solutions in Russia include regulatory efforts to support the fintech ecosystem, including the digitalization of financial services and the development of crowd-funding platforms, the establishment of a multi-originator SME securitization platform to enable smaller private banks to securitize their SME loan portfolios, or the envisioned creation of an electronic factoring platform to expand access to factoring services for SMEs. These innovative financial solutions can help allocate risks to investors with a higher risk appetite. In other segments of the non-bank SME finance sector, the government should gradually limit the use of non-market-based approaches and focus on more market-based solutions, such as the transformation of public microfinance institutions into commercial entities, or developing multi-originator securitization of SME microloans instead of providing subsidized funding to microfinance companies. It could also substitute large-scale subsidized lending with more targeted interventions limited to the most innovative products or most the economically disadvantaged regions. While many governments use subsidized lending to ease SME access to credit, this policy instrument should be used selectively due to its distortionary effects. To maximize the benefits of the public support measures, subsidized lending should be targeted to those SMEs who otherwise cannot get financing. The implementation of a two-pronged approach aimed at complementing policies to ease SMEs' access to credit with initiatives to support a more diversified financial offer for SMEs could be a route to follow to reduce dependence on subsidized schemes, and lending in particular, and develop a vibrant SME financing ecosystem.

The Russian Government can play a more decisive role in supporting the development of the SME financing ecosystem by providing technical assistance and access to technology-based platforms for commercially oriented non-bank financial intermediaries. In addition to establishing a regulatory framework proportional to the risk profile of the financial institutions, governments support the development of the SME financing ecosystem by providing SME lenders with technical assistance and access to technology-based platforms to help them attain economies of scale and facilitate access to customers. These platforms could be IT platforms to manage process, platforms to commercialize products or electronic trading platforms for the provision of finance. In many cases such support is provided through DFIs. Experiences from other countries show that such interventions result in reduced borrowing rates for SMEs as efficiency gains are shared among finance providers and SMEs. Over time, public non-commercial MFOs and leasing companies could increase their commercial orientation, focusing on providing more flexible terms as opposed to lower rates, as in many instances the problem for SMEs is not the rate, but the time and conditions required to access credit.

Digitalization and innovation provide great opportunities to expand SME access to financing, but also some challenges. Governments around the world are supporting digital adoption and the creation of new types of infrastructure to realize its potential. Lending to SMEs is costly and risky, which translates into high interest rates to borrowers. Digital platforms and technologies can provide a cost-effective way to originate, monitor and collect credit.² Furthermore, digitalization of the economy

² They can also allocate the risks to those more willing to bear them as in the case of crowdfunding, facilitating access to finance for riskier segments such as start-ups.

has dramatically increased the sources of data available to assess the creditworthiness of MSMEs and improve risk assessment. On the other hand, as the economy becomes more digital and less physical, firms' real assets decline, hampering traditional lending based on real tangible assets. Innovative solutions are being developed by both private and public financial institutions, and governments are supporting the adoption of digital technologies, data sharing and creation of new types of infrastructure to facilitate MSME access to finance. The Korean government, for example, has developed a regulatory framework and supported with public funding the creation of a system of institutions to value and realize intangible collateral, which enabled lending against intellectual property rights. The provision of digital SME identification, which allows simplifies access to SMEs for formal financial services and public support schemes, is a type of new infrastructure that is receiving substantial attention in many countries, including Canada, India and Mexico.

As the Russian SME development institutions play a critical role in facilitating SME access to finance, they should periodically review the key SME finance gaps so that their target segment and product mix continue evolving to ensure a clear focus on SME target groups and their access to finance, as opposed to large-scale subsidized lending. Russian SME development institutions – the SME Corporation and the SME Bank – run guarantee and financing schemes for SME financiers such as banks, microfinance institutions and leasing and factoring companies. They also implement direct schemes for SMEs, such as direct lending by the SME Bank, guarantees for startups by the SME Corporation and an “investment lift” program for non-commodity exporters, as well as, more recently, support for capital market instruments for SMEs. The public support measures implemented by the DFIs are becoming more focused and targeted to underserved regions (e.g. with difficult social and economic conditions) and priority sectors (e.g. innovative industries). They are also expanding the range of services (e.g. facilitating secondary markets for SME loans or capital market access by SMEs). Still, the additionality they provide could be enhanced. To ensure better efficiency of DFI operations, it is necessary to periodically identify the type of SME funding needs to be addressed and the root causes of the problems, changing the product mix as necessary. While subsidized funding is attractive for financial intermediaries when interest rates are high, DFIs need to implement more innovative solutions when interest rates decline. The provision of subsidized lending to certain segments can be justified in the presence of externalities, but it is important to ensure that subsidies are appropriately targeted and used sparingly, given their fiscal costs and distortionary effects.

Further efforts to modernize current DFI operations and products can be implemented following international best practices to transition towards a role of market-creation and private finance catalyzer. At the institutional level, the transformation would involve imbedding mobilizing private-sector funding and additionality in the mandate or strategy. To attain that vision, the product range would focus on risk-sharing facilities, as well the provision of infrastructure and technical assistance to support market creation. This paper provides an overview of such types of interventions by DFIs around the world. Supporting the effective implementation of such strategy requires enhanced risk management capabilities and more sophisticated monitoring and evaluation systems.

Monitoring of the SME public support programs in Russia is rather fragmented and mostly oriented towards tracking intermediated volumes and served customers, without assessing macro and micro economic impacts and qualitative aspects. Russian SME development institutions typically produce reports assessing the state of SME development and the results of public support measures. While they provide assessment of developments in both policy inputs (e.g. amount of loan guarantees or volume of loans granted) and intermediate outcomes (e.g. number of firms having received loan guarantees or subsidized loans), they lack any evaluation of policy outcomes (e.g. new employment created as a result of loan guarantees or funding received). Evaluations of public support programs for SMEs should have clear objectives and should assess both financial additionality (e.g. incremental credit flows to SMEs and/or improvements in terms and conditions) and economic additionality (e.g. effects on variables such as employment, turnover, sales and the probability of default, which might have been influenced by the public support measures).

I. INTRODUCTION

The development of micro, small and medium-size enterprises (SME) in Russia is a priority of the Russian government, which emphasizes the need of improving SME access to finance, along with other critical factors for SME growth. The National Project on SME and Individual Entrepreneurship Support (known as the National SME Project), a key six-year policy and action plan adopted by the government in 2018 and led by the Ministry of Finance and the Ministry of Economic Development, takes a holistic approach to supporting SME development. Under the National SME Project, the government will provide RUB 427.6 billion (USD 6.6 billion) for strengthening legal and institutional frameworks supporting SMEs operations and developing financial and non-financial programs targeted at the sector. Over sixty percent of the National SME Project's budget, RUB 261.8 billion (USD 4 billion), has been allocated for improving SME access to finance by subsidizing bank credit to SMEs and developing non-bank financing solutions for SMEs.

The objective of this policy note is to inform the Russian policy-makers about options to enhance their measures for improving SME access to finance, as a part of the overall Government objective to increase the contribution of SMEs to the Russian economy. The policy note aims to (i) review existing public policies aimed at facilitating SME access to finance in Russia; given that SMEs' access to diverse, non-traditional bank financing instruments and alternative financing channels is particularly limited, a more in-depth look is being taken at the policy measures aimed to advance the use of non-bank finance instruments for SMEs; (ii) improve the understanding about opportunities and challenges of financing instruments alternative to traditional bank loans; (iii) review relevant international experience through the lens of broadening the range of instruments for SME and entrepreneurship financing in Russia; (iv) explore options for use of these instruments in Russia, taking particular account of the local context and (v) propose policy recommendations and encourage discussion among policy makers, financial institutions and SME representatives about new approaches to SME and entrepreneurship financing.

The policy note's audience is a broad group of Russian stakeholders, specifically economic policy makers and financial sector regulators, as well as SME support and development institutions, the financial sector and the private sector. The authors believe that only a systemic, coherent, coordinated and balanced approach to development of the SME finance ecosystem can lead to improved access to finance for SMEs and to grow their role in the Russian economy. With that view, the policy note aims at informing the Russian stakeholders about (1) alternative and complementary approaches to subsidized financing of SMEs, including policies to support development of an ecosystem of financial providers and innovative products and (2) the evolving role of the SME development institutions in creating new markets for SME finance and crowding in private sector finance.

The policy note has six chapters. Chapter I is the Introduction. Chapter II provides an overview on SME access to finance in Russia. Chapter III discusses the development of the non-bank SME financing ecosystem in Russia by focusing on the regulatory approaches to non-bank financial institutions and products, drawing upon relevant international experience. Chapter IV reviews international approaches to key challenges and policy responses for developing non-bank finance instruments for SMEs. It also provides an overview of innovative financial products and services for SMEs that could be introduced in Russia by public or private banks as well as non-bank financial institutions, based on international experience and global trends. Chapter V looks at the role of the SME development institutions in Russia and puts their activities in the context of international best practices. Chapter VI concludes with recommendations on further enhancing SME access to finance.

II. SME ACCESS TO FINANCE IN RUSSIA

SMEs account for 22 percent of Russia’s GDP and 25 percent of total employment in the country, well below OECD levels. The SME sector in Russia has grown in recent years, both in terms of SME number and turnover. Nevertheless, the current share of SME in GDP is estimated at 22 percent,³ which is below most of the BRICs countries, and significantly lower than in developed economies. In the OECD group, SMEs account for 50 to 60 percent of GDP, and 60 percent of total employment. As of March 2019, there were 6.2 million SMEs in Russia employing 15.8 million people. Ninety-five percent of SMEs were micro enterprises, accounting for 47 percent of the SME employment (See Figures 1 and 2).

Table 1. Definition of SMEs in Russian Federation

Type	Employees (Number)	Revenue (RUB million)
Micro	Up to 15	Not more than 120
Small	Up to 100	Not more than 800
Medium	101-250*	Not more than 2,000

* In 2017, individual criterion for light industries was established – 1,000 employees.

Figure 1. Distribution of Russian SMEs

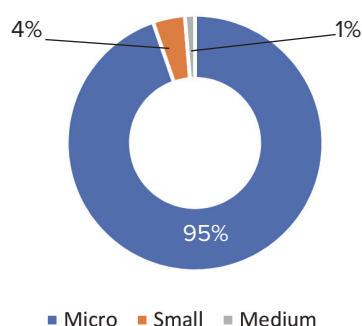
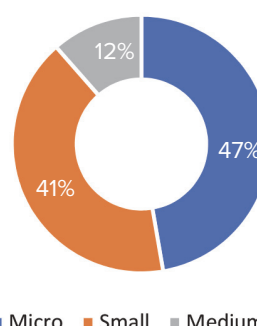


Figure 2. Employment by SMEs



SME support and development is important to the Russian economy to enable stronger economic growth and improve productivity. In developed economies SMEs are at the core of the private sector, contributing to job creation and growth. Russia has a high presence of the State-Owned Enterprises, which tend to be less productive than private firms;⁴ hence increasing the SME sector has the potential to increase productivity. Recent evidence from a wide range of countries shows that small, young firms tend to generate more employment than large mature firms (Ayyagari, Demircuc-Kunt, and Maksimovic 2011, 2003; Heyman, Norbäck, and Persson 2018). Creating conditions for SMEs to come in the market and grow is crucial for the Russian economy to expand and become more productive. Access to finance is critical for the growth of SMEs as it allows firms to innovate, improve efficiency, enter new markets and create new jobs. The positive correlation between access to finance and SME performance is well-documented in the economic literature (Kersten, Harms, Liket, and Maas 2017).

³ Federal State Statistics Service

⁴ World Bank Russia Productivity Analysis

SMEs could become a more relevant source of growth and jobs in Russia if their access to finance were improved. According to the Russia Small Business Index Survey (RSBI), as of the first quarter 2019, obtaining credit was perceived as difficult by 34 percent of surveyed SMEs – up from 25 percent a year ago. While nearly 40 percent of SMEs experienced a need for financing, 13 percent of these SMEs had their loan applications rejected, while another 7 percent did not apply for a loan due to concern of their application being rejected. While the Russian government has put substantial efforts into developing financial and non-financial support programs for SMEs, various demand and supply factors constrain SME access to finance.⁵ On the demand side, SMEs are challenged by high collateral and documentation requirements by banks (e.g. limitation to submit to banks all required documents in electronic form), difficulties in accessing government support programs, a limited number of suitable financial products for SMEs beyond traditional bank loans (e.g. leasing, crowd-funding, factoring), and weak financial knowledge and skills. On the supply side, SMEs are challenged by stringent regulatory requirements for banks to lend to SMEs (e.g. assessment of creditworthiness based on official financial statements and limited use of alternative credit assessment methods, etc.), uneven access to government funding programs for banks, depriving smaller private banks of such access, and market distortions caused by the administration of the state support programs (e.g. when direct lending by a DFI competes with market-based products). While the Central Bank of Russia (CBR) has been softening regulatory requirements for banks to incentivize lending to SMEs and the government has amended some of its public support programs to allow participation of a greater number of banks, a growing number of such programs, their administration by various entities and their complexity often prevent SMEs from effective use of these programs.

Despite the various financing schemes run by the government in the last years to support credit to SMEs, the share of SME credit in total business credit (13 percent)⁶ is lower than their contribution to Russia's GDP (22 percent) and is half the OECD average (25 percent). Credit to SMEs declined during the 2015-2016 recession. This trend was reversed only recently, but SME lending volumes are still below the pre-crisis level of RUB 6.8 trillion (USD 105 billion) in 2018, and the outstanding SME loan portfolio remained flat in 2017-2018 at RUB 4.2 billion (USD 65 billion), amounting to 13 percent of the total outstanding business loans and 4.1 percent of GDP.⁷ At the same time, the SME Finance Forum estimates that the finance gap of the micro, small and medium-size enterprises (SMEs) in Russia stands at USD 222 billion, or about 17 percent of GDP.

Figure 3. Outstanding Bank Loan Portfolio by Type (%), as of January 2019

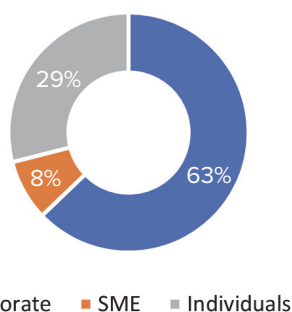
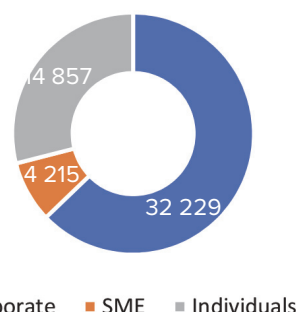


Figure 4. Outstanding Bank Loan Portfolio by Type (RUB bln)



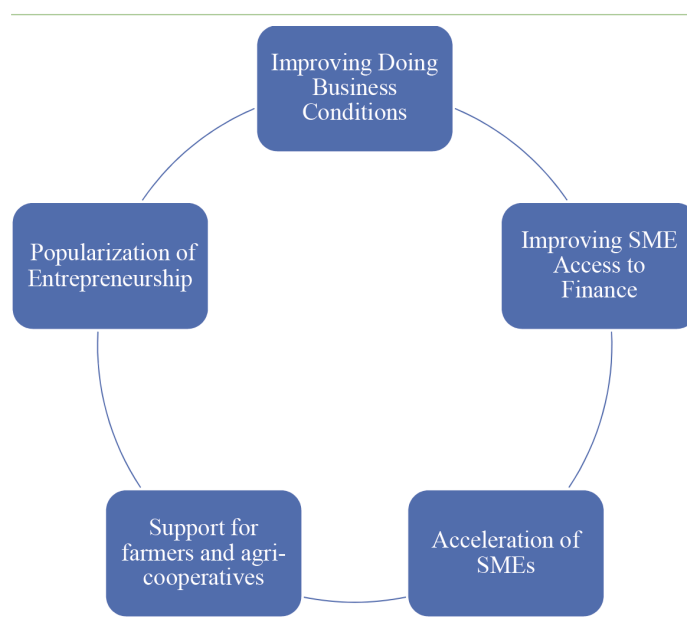
⁵ Analyzing the underlying constraints for SME access to finance in Russia is beyond the scope of this note. However, in order to develop more targeted public support policies and schemes for SMEs, it is important to analyze the existing constraints in more depth. The upcoming World Bank Russia Enterprise Survey 2019 will be a useful tool for performing the analysis of the demand-side constraints for SME access to finance: <https://www.enterprisesurveys.org/Methodology/Current-projects>.

⁶ As of January 1, 2019.

⁷ As of January 1, 2019. Source: Central Bank of Russia.

To increase the contribution of SMEs to GDP and employment, the government of Russia recently adopted two strategic documents that emphasize improving SME access to finance. The long-term SME Development Strategy through 2030 adopted in 2016⁸ sets an ambitious target of nearly doubling the share of SMEs in Russia's GDP by 2030, to 40 percent. The Strategy also calls for improved access to finance for SMEs that would increase the share of SME loans to 23 percent of outstanding business loans by 2030. The SME Development Strategy laid the foundation for expanding a range of public support measures to improve access to finance for SMEs, including streamlining a national guarantee system, increasing subsidized lending programs and developing non-bank financial instruments. The mid-term National Project on SME and Individual Entrepreneurship Support calls for increasing employment by SMEs by 30 percent from 19.2 million in 2018 to 25 million in 2024 and raising their contribution to the GDP from 22.3 percent in 2017 to 32.5 percent by 2024. The National SME Project sets out a framework to align SME development to the national objectives of becoming the 5th-largest economy globally by 2024, focusing on innovation-led and productivity-driven growth. This is supported by five components (federal projects) under the National SME Project, namely (1) improving doing-business conditions, (2) acceleration of SME, (3) establishing a system to support farmers and agri-cooperatives, (4) popularization of entrepreneurship and (5) improving access to finance for SMEs (See Figure 5).

Figure 5. National Project on SME and Individual Entrepreneurship Support



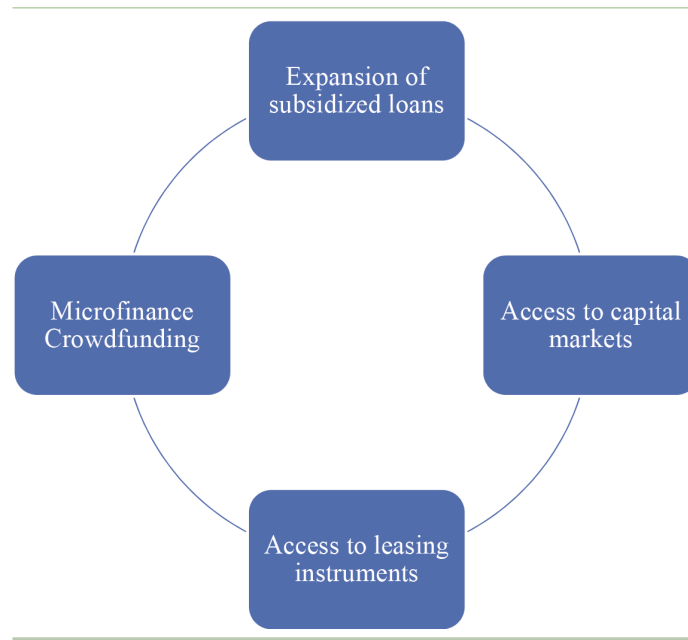
In recent years, the Russian authorities have been building a comprehensive system to support the financing needs of SMEs by providing access to a wide range of public financial support programs, many of them at subsidized rates. Various subsidized lending programs have been administered through the Ministry of Economic Development, the Ministry of Industry and Trade, the Ministry of Agriculture, the SME Corporation, the SME Bank and the Central Bank of Russia. In 2018, the government spent RUB 1.44 trillion (USD 22 billion) on an interest-rate subsidy program known as Program 6.5 that facilitated RUB 101 billion (USD 1.6 billion) of SME loan issuances, representing 1.5 percent of the SME loan volume in 2018. The national guarantee system provides partial credit guarantees (50-75 percent of a loan amount) through a three-level system comprised of the SME Corporation, the SME Bank and regional guarantee organizations. The SME Corporation and the SME Bank run several financing and

⁸ Adopted on June 2, 2016 by a Government Decree 1083-p

guarantee schemes for financiers of SMEs such as banks, microfinance institutions, leasing and factoring companies. They also implement direct schemes for SMEs, such as direct lending by the SME Bank, guarantees for startups by the SME Corporation and an “investment lift” program for non-commodity exporters jointly implemented by the Industry Development Fund, the SME Corporation, the Russian Direct Investment Fund and the Russian Export Center.

The National Project on SME and Individual Entrepreneurship Support scales up subsidized bank lending but also aims at diversifying the sources and types of financial solutions for SMEs. The main measures included in the Federal Project on Improving Access to Finance for SMEs under the National SME Project are grouped along the following directions (see Figure 6): (1) simplifying access to subsidized finance and increasing its volume; (2) facilitating access to capital markets for SMEs; (3) improving access to leasing instruments; (4) facilitating access to micro finance and crowdfunding. The National SME Project envisions the provision of RUB 261.8 billion (USD 4 billion) in public funds for improving SME access to finance, with a significant portion going to subsidized bank lending. The volume of subsidies under the new program administered by the Ministry of Economic Development and the SME Corporation since 2019, Program 8.5, is expected to increase manifold. Under this program, the participating banks (currently 70 banks) are compensated for the difference between the interest rate at which they lend to SMEs (capped at 8.5 percent) and the market rate, with the compensation limited to no more than 1.5-3.5 percent differential. The Government allocated RUB 9.2 billion (USD 142 million) to fund the difference, which is expected to generate RUB 1 trillion (USD 15.4 billion) in subsidized SME loan issuance in 2019 (or 15 percent of the total 2018 SME loan issuance volume). Overall, banks are expected to issue RUB 10 trillion in subsidized SME loans in 2019-2024, with the federal budget subsidies for this purpose reaching RUB 56 billion (USD 862 million) in 2019-2021.

Figure 6. Federal Project on Improving Access to Finance for SMEs



The Central Bank of Russia developed a roadmap on facilitating SME access to finance to support the implementation of the National SME Project. The roadmap is aimed at leveling the playing field between SMEs and large corporations in their ability to access financing by stimulating banks and non-bank financial institutions to support more SMEs, as well as increasing the financial literacy of SMEs. The CBR Financial Inclusion Strategy (2018-2020) also includes a set of measures aimed at

expanding SME access to financing, namely (1) by improving the information infrastructure for SMEs, (2) improving the efficiency of the SME support programs and diversifying non-bank financing sources; (3) simplifying regulations to stimulate the supply of SME financing and (4) improving the financial literacy of SMEs.

Recent government initiatives to facilitate the development of new financial products and providers servicing SMEs may over time reduce reliance on subsidized lending. While many governments use subsidized loans to facilitate SME access to credit, this policy instrument is most efficient when used selectively due to its distortionary effects. To provide additionality, subsidized lending should be targeted to those SMEs that otherwise cannot get finance. In many instances, the issue is not the cost at which firms can get credit, but the lack of access to credit at any rate due to lack of collateral. The development of alternative financing avenues to complement the banking system is required to better support certain SME segments, particularly in new growth areas. Bank financing will remain ill-suited to some businesses in such areas, given the fiduciary responsibility of banks to ensure the safety of the public's deposits and avoid excessive risk-taking. Alternative financial solutions can help reduce the risks associated to SME lending or allocate those risks to investors with higher risk appetite. While the new government policy measures call for a substantial increase in subsidized bank lending to SMEs, and the creation of state-owned leasing and microfinance institutions operating on quasi-commercial or non-commercial basis, they also include complementary policies to support access to a wider range of finance instruments, such as capital market financing, securitization and crowdfunding. In particular, capital-market financing can open the possibility of tapping into different sources of funding, including institutional and retail investors, to support SME innovation and growth, provided an appropriate and transparent measure and management of associated risks are conducted. As alternative channels develop and scale up the supply of finance to SMEs, authorities can revise the need for subsidies, as in many instances the problem is not the interest rate, but the access to finance.

III. DEVELOPMENT OF A NON-BANK SME FINANCING ECOSYSTEM

Having viable alternatives to bank-loan financing could be critical in filling the supply-demand gap in SME bank lending. While bank lending is the most common source of external finance for many SMEs, it poses challenges to some categories of SMEs and may not be the most appropriate form of financing at specific stages in the firm’s life cycle. Capital gaps may exist for newer, more innovative and fast-growing companies with a higher risk-return profile and limited collateral. Gaps typically exist as well as for companies seeking to effect important transitions, such as changing ownership and control structures, de-leveraging and improving their capital structures, or SMEs growing into larger enterprises. Yet, in Russia, alternative financing methods, such as microfinance, leasing, crowdfunding and capital market instruments for SMEs remain underdeveloped. More diversified options for SME financing could support long-term investments and reduce the vulnerability of the sector to changes in the credit market.

Microfinance

The microfinance market in Russia is split into three main segments: consumer microloans, microloans to SMEs and payday loans (PDL), which differ in target groups, volumes, terms, and effective interest rates. According to the CBR registry, as of April 2019, there were 1997 microfinance organizations in Russia, out of which 219 were microfinance organizations (MFOs) specializing in entrepreneurship finance,⁹ approximately two thirds of them nonprofit.¹⁰ Consumer loans represent the largest share of MFO portfolios, while microloans to individual and micro entrepreneurs account for 18.3 percent of the total portfolio.¹¹ As of 3Q2018, the total outstanding portfolio of microloans amounted to RUB 148.6 billion (USD 2.3 billion), of which microloans to SMEs comprised RUB 27 billion (USD 417 million), or less than a half percent of GDP. According to microfinance regulations, the maximum amount of a microloan to individual entrepreneurs and SMEs is limited to RUB 5 million (USD 75,000).

Figure 7. Distribution of Micorfinance Organizations by Type

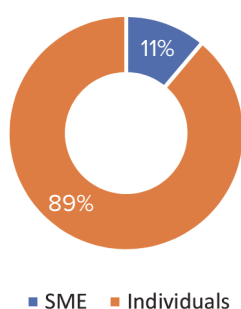
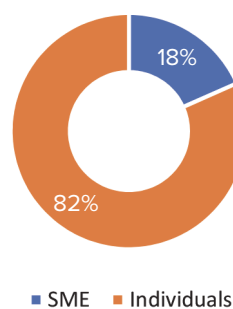


Figure 8. Distribution of Micorfinance Organizations Portfolio



Source: Central Bank of Russia

⁹ According to the CBR definition, MFO is qualified as an entrepreneurship finance MFOs if at least 75% of the company portfolio and at least 70% of number of loans are provided to legal persons and individual entrepreneurs.

¹⁰ Nonprofit microfinance organizations (NPMFO) are microfinance organizations, one of the founders (participants) or shareholders of which is a subject of the Russian Federation and (or) a local government body. NPMFO were created to provide SME access to financial resources. Funds for the development of microfinance programs were allocated from the federal, regional or local budgets.

¹¹ Central Bank of Russia, as of 3Q2018

As part of the government efforts to build an SME finance ecosystem, public nonprofit microfinance organizations were created in most of the Russia's regions to provide subsidized microloans to SMEs. These microfinance organizations operate on a non-commercial basis, solely in the regions where they are registered, providing loans under RUB 5 million up to three years at a rate capped by the CBR key rate. Public nonprofit microfinance organizations comprise about 80 percent of the MFOs providing microloans to SMEs. The National SME Project set a target for increasing the volume of funds provided by public microfinance organizations to Micro, Small and Medium-size Enterprises (MSMEs) of RUB 20 billion (USD 308 million) annually by 2024. To put this figure in perspective: as of 3Q2018, all MFO-provided RUB 20.9 billion financing to SMEs. Accordingly, the federal budget will allocate RUB 21.4 billion (USD 357 million) to regional governments for establishing or growing regional MFOs and subsidizing interest rates on microloans. At the same time, these MFOs will be required to have at least 10 percent of uncollateralized microloans in their portfolio.

The transformation of nonprofit entrepreneurship MFOs into more commercially based entities could be considered as a part of the authorities' efforts to expand outreach and avoid crowding out private-sector MFOs. While the emphasis on supporting entrepreneurship is appropriate, it is important to ensure that subsidies are accurately targeted to entrepreneurial activities with larger externalities, such as in lagging regions with high unemployment rates. In most instances, the problems for MSMEs and entrepreneurs is not the interest rate but the access. Public nonprofit institutions could move more towards rates that price appropriately the risk of the loan to avoid reliance on subsidies while providing more flexible terms regarding repayment profiles or collateral. At the same time, the regulation of the public nonprofit microfinance organizations, which is currently undertaken not only by the central bank, but also subject to various regional regulations, could be streamlined by ultimately bringing them under a single set of rules. Transforming them into more commercial entities would also create a level playing field that could facilitate the entrance of private-sector providers. As there could be different approaches to doing this, a more thorough assessment of the role of the public nonprofit microfinance organizations in the regional context, taking into consideration regional specifics, would be needed. As the government plans to develop a strategy for developing public nonprofit MFOs focused on entrepreneurship financing by the end of 2019, it should consider turning them into more commercial entities, at least in the regions where they crowd out private-sector solutions.

The securitization of commercial microloans could provide funding for the micro-finance sector, supporting its growth without reliance on public-sector funding. Access to funding could be problematic for entrepreneurship-finance MFOs outside the public support programs, so broadening their funding sources is needed to lessen dependence on public funding while still providing alternatives to bank financing. Securitizing microloans could be considered a viable option, as it diversifies funding sources for MFOs and lessens their dependence on direct public support via credit lines and capital injections. The use of a multi-originator platform established by the SME Bank could be considered for this purpose. Although multi-originator securitization of microloans has been limited to date, some countries, notably India, present successful examples of using this instrument to grow the provision of microloans to SMEs (see Box 1).

Leasing

The leasing market in Russia has been growing by double digits since 2016; yet the share of SMEs in the overall leasing volume has been declining over the years. The size of the leasing market in Russia, as measured by outstanding portfolios, has nearly doubled since 2011, reaching RUB 4.3 trillion (USD 66 billion) as of January 1, 2019.¹² For the year ended December 31, 2018, the total leasing volume reached RUB 1.3 trillion (USD 20 billion) or 1.3 percent of GDP.¹³ SMEs accounted for nearly half of the volume, within which small businesses accounted for 31.5 percent (RUB 410 billion). As in the banking sector, the state plays a dominant role in the leasing market, with the share of the state-owned

¹² Expert RA Rating Agency

¹³ Expert RA Rating Agency, CBR, WBG staff calculations

Box 1. Multi-originator securitization (MOSEC) for small and micro loans in India

In India, the Micro Finance Institutions (MFIs) have emerged as a step forward in addressing the perennial challenge of financial inclusion. MFIs traditionally have lent to low-income households to enable them to engage in income-generating activities, asset building and consumption smoothening. Some of the MFIs also give larger loans to individuals working in the MSME sector. Non-banking financial companies (NBFCs) with a sectoral focus on MSME finance have steadily developed over the past years. Their unique model of underwriting and credit delivery has helped them scale financing to small businesses up while maintaining a good to moderate portfolio quality.

In 2010, India pioneered the first multi-originator securitization (MOSEC) of microloans. The MOSEC structure combines loan pools from multiple originators to achieve a pool with higher volume that can then be taken to the market. The key advantage of MOSEC is the diversification of both originators, thereby reducing concentration risk at an originator level, and geographies, thereby reducing concentration risk at a geography level.

These transactions provide larger aggregate transaction size; individually, the pool size of each originator may not be large enough to attract investor interest and may also be economically unviable. In a MOSEC structure, multiple originators are supported by a common subordination by the junior tranche. Moreover, such transactions also offer better geographical diversification and lower dependence on individual servicers.

The share of these transactions increased in the first few years. Various small entities participated in the securitizations market for the first time through the multi-originator route and tapped funds from diverse investors. In the following years, multi-originator volumes came down because many of the smaller issuers whose portfolio had increased in size started participating in securitizations as single originators. In ten years, over 100 multi-originator transactions have been placed in India by IFMR Capital, a private company focusing on financial inclusion, which has also invested in the junior tranches in most transactions to maintain its “skin in the game.” Most of these transactions had micro loans as the underlying asset class, while some small and medium business loans were also securitized.

leasing companies in the leasing volume growing from 48 percent in 2014 to 57 percent in 2018.

The SME Bank and the SME Corporation are actively supporting the development of the leasing industry through loans and guarantees to leasing providers, and the creation of the state-owned leasing companies. Improving SME access to leasing services is stipulated in the SME National Project and CBR roadmap. Public support has been provided through (1) the provision of credit lines by the SME Bank to banks and leasing companies, (2) the provision of partial credit guarantees (50% of the loan amount) by the SME Corporation on bank loans/credit lines to leasing companies targeting SME clients, and more recently via (3), the establishment of public leasing companies in the form of capital injection by the SME Corporation (75 percent) and regional governments (25 percent). These companies focus on providing leasing services to certain categories of SMEs at subsidized rates (see Box 2) at about half of the market rate, though they are also authorized to operate on commercial terms. So far, four such companies, each capitalized at RUB 2 billion (USD 30 million), were established in the following regions: Tatarstan, Bashkortostan, Yakutia and Yaroslavl Oblast. They provided RUB 3 billion (USD 46 million) in 2017-2018, or less than 1 percent of leasing volume to small business. These leasing companies provide services to SMEs located outside of these regions as well.

Public support measures through 2024 are heavily focused on supporting the establishment of regional quasi-commercial leasing companies and subsidizing interest rates on leasing for SMEs. It is expected that the regional leasing companies will have an outstanding portfolio of RUB 33 billion (USD 508 million) by the end of 2024, a more than tenfold increase of their current portfolio. In addition, the government will develop a mechanism for subsidizing interest payments on leasing for SMEs, with a target leasing volume of RUB 107.6 billion (USD 1.66 billion) by the end of 2024.

Leasing regulation is currently being reformed; however, the proposed rules are limited in scope as they only pertain to state-owned leasing companies. The main feature of the draft law “On introducing amendments to select legal acts of the Russian Federation in relation to regulation of leasing

special entities”¹⁴ is the creation of a separate category of leasing companies, known as “leasing special entities,” which include: (1) leasing companies that are applying for approval or have access to state support for leasing activities; (2) legal entities in which the Russian Federation, a Russian region or a municipality (or persons affiliated with them) hold charter capital exceeding 50%; (3) legal entities affiliated with credit organizations in which CBR or the Deposit Insurance Agency hold charter capital; and (4) banks. Other types of leasing companies (including foreign companies) may be included in the register of leasing special entities for reputational reasons and fulfill the relevant requirements on a voluntary basis. According to the draft law’s explanatory note, companies deemed leasing special entities will own from 50% to 70% of the assets of the leasing market in Russia.

Box 2. Key Terms of the Subsidized Leasing Programs by Regional Leasing Companies

Eligibility: individual entrepreneurs and small businesses (up to 100 employees with annual revenues not exceeding RUB 800 million) in the following sectors: production of high tech and innovative goods, sports and tourism, and agricultural cooperatives; located in single-industry towns, special zones or Far East; suppliers to public entities under the public procurement law.

Eligible Equipment: New, previously unused or not commissioned equipment, except for the following:

- equipment intended for wholesale and retail trade;
- passenger cars, trucks and passenger vehicles;
- water vessels;
- aircraft and other aviation equipment;
- rolling stock of railway transport.

Target types of equipment:

- High-tech equipment;
- Industrial equipment (including metal-working, energy, energy-saving, etc.);
- Equipment in the field of processing and storage of agricultural products.

Term: up to 7 years

Interest rate: 6 percent for domestically manufactured equipment, and 8 percent for internationally manufactured equipment.

State-owned and state-supported leasing companies will have to comply with a set of new requirements, including supervision by the CBR. To operate, these leasing special entities will be included in a register operated by the central bank and will be required to join the relevant self-regulatory organization once it is created. For leasing special entities (with the exception of banks described below), the law establishes minimum capital requirements that increase with the asset size.¹⁵ The draft law also provides for the regular submission of financial statements and mandatory audits to the CBR, compliance with certain standards of internal control and risk management, and the application of certain requirements of the anti-money laundering law. In addition, leasing special entities that are not banks will be unable to combine leasing activities with the activities of credit and non-credit financial organizations. Transition to the new requirements will be gradual and is expected to be completed by January 2021.

While increased oversight of leasing companies is welcome, considering the envisioned growth of the sector, the authorities will need to carefully monitor overall market developments and retool the public programs when necessary to avoid crowding out the private sector and to ensure sound

¹⁴ Draft Federal Law # 586986-7

¹⁵ Minimum capital requirements include: (1) for a leasing special entity whose assets have a book value of RUB 500 million (USD 7.7 million) or more: RUB 70 million (USD 1.08 million); (2) for a leasing special entity whose assets have a book value of less than RUB 500 million (EUR 7.7 million): RUB 20 million (USD 307,692); and (3) for a leasing group (i.e. a group of leasing special entities (with the exception of banks) whose parent organization holds more than 50% of the voting shares in other members of the group due to direct participation in their charter capital): RUB 70 million (USD 1.08 million).

sector development. The envisioned tenfold increase in the subsidized portfolio of the state-owned leasing companies over the next five years may crowd out private sector activity in the market. Hence authorities should carefully monitor overall leasing volumes by segment, such as equipment leasing, to ensure overall market growth. To that end, consideration should be given to request all institutions to become members of self-regulatory organizations or to report financial statements to CBR. Furthermore, the current law establishes a regulatory perimeter for leasing companies based on the support received by the state rather than on the size or inter-connectedness of the company. Potentially, large companies operating on a commercial basis with capital markets funding would be outside the regulatory perimeter and such developments should be monitored. Also, it will be important to evaluate if bringing those companies receiving public-sector support under the regulatory perimeter will disincentivize the use of credit lines and partial credit guarantees granted by the SME Bank and the SME Corporation. The focus of subsidized programs on equipment is appropriate, as this is the segment typically least attractive to financial intermediaries, given the lack of secondary markets to liquidate goods in case of default. The fact that subsidized programs can only be used for the purchase of new machinery further limits recourse to the secondary market for assets repossessed by the state-owned companies, and may affect their risk management.

Factoring

In line with global trends, factoring is a growing source of external financing for firms in Russia. The size of the factoring market in Russia, as measured by the outstanding portfolio, has grown nearly four-fold since 2011, reaching RUB 610.7 billion as of January 1, 2019.¹⁶ For the year ending December 31, 2018, total factoring volume reached RUB 2.6 trillion or 2.5 percent of GDP, compared to an average of 2.2 percent (1.4 percent median) for upper middle-income countries.¹⁷ Improving macro-economic conditions, the convergence of interest rates between factoring and bank loans¹⁸ and the expansion of product range have boosted demand for factoring services. Recent changes in factoring regulations, the digitalization of services and growth in new segments, such as the assigning of public procurements receivables and export factoring, further boosted supply of factoring services. Amendments in the Civil Code that entered into force on July 1, 2018, introduced a definition of factoring, eliminated uncertainties for the transaction parties and brought overall Russian regulation of factoring more in line with the provisions of the UNIDROIT Convention on International Factoring.

The market is fairly concentrated, with the top five factors accounting for 65 percent of the market share, which is dominated by the factoring subsidiaries of the state-owned banks (58 percent) catering mostly to corporates. In addition to banks, there are also specialized financial institutions offering factoring services. Specialization among factors by industries, regions and segments has been growing. Typically, banks target segments with large businesses. This allowed the development of medium and small factors, focusing on medium and small enterprises. However, SMEs account only for 13 percent of the overall factoring portfolio. Yet, this segment has a significant growth potential. Some of the challenges limiting the growth of factoring among SMEs include remaining restrictions on using factoring services during public procurement, the uneven supply of factoring services across the country (the market is concentrated in the central part of the country), lack of awareness about such products among MSMEs, and limited sources of funding for specialized factoring companies.

The government provides support to the factoring industry through funding, risk-sharing and regulatory initiatives to facilitate market development. Public support is provided through (1) the provision of credit lines by the SME Bank to banks and factoring companies, (2) the provision of partial credit guarantees (50% of the loan amount) by the SME Corporation on bank loans/credit lines to factoring companies targeting SME clients at the fixed rate of 0.75% annually from the guaranteed amount, as well as (3) simplifying access of SMEs to public procurement. In addition, recent changes

¹⁶ Association of Factoring Companies, CBR, WBG staff calculations

¹⁷ World Bank Finstat data.

¹⁸ As of January 2019, the spread between factoring and corporate loans under 1-year maturity was 150 basis points

in the regulations governing the assignment of public procurement receivables, which require the use of factoring when purchasing goods and services from SMEs, provide new opportunities for the factoring industry and SMEs, given the size of public procurement, which makes up a third of Russia's GDP.

The National SME Project foresees the establishment of an electronic factoring platform by the SME Corporation by 2020. Electronic factoring platforms originated under different formats, typically depending on the strength of the framework to register and enforce the priority of the claims over movable assets. Depending on the country, these platforms are initiated by the private sector or by development finance institutions. In Mexico, the SME development bank (Nacional Financiera, NAFIN) created an electronic reverse-factoring platform in the early 2000s. It aimed to address shortcomings in the secure-transaction framework that impeded lending against receivables and operated independently of other financial infrastructure, such as credit registries for movable assets or invoices (see section IV). Other platforms have subsequently emerged. In 2015, the Reserve Bank of India supported establishment of an electronic Trade Receivables Discounting System (TReDS) to finance the trade receivables of MSMEs (see Box 3).¹⁹ Currently, there are three such platforms operated in India by various providers authorized by the Reserve Bank of India. In Russia, the first private electronic factoring platform, FactorPlat, emerged in 2017. FactorPlat is an online, multibank factoring platform

Box 3. Trade Receivables Discounting System (TReDS)

Electronic factoring platforms have become a growing trend worldwide as they provide an online marketplace where SMEs can secure funding from financial intermediaries for outstanding customer invoices in real time at competitive rates. SMEs benefit from immediate liquidity, which allows them to better exploit their growth potential.

The Indian Trade Receivables Discounting System (TReDS) allows MSMEs to post their receivables on the system and get them financed at a competitive rate. TReDS is an electronic platform that allows the auctioning of trade receivable of MSMEs from corporate and other buyers, including government departments and public-sector undertakings, to multiple financiers. There are three direct participants involved in the TReDS: MSME suppliers, corporate buyers and financiers (banks, non-bank factors and other financial institutions as permitted by the Reserve Bank of India). The TReDS platform brings these participants together to facilitate uploading, accepting, discounting, trading and settling of the invoices of MSMEs. A financier, typically a bank, buys a bill (a trade receivable) from a supplier of goods before it is due or before the buyer credits the value of the bill. The discount is the interest paid to the financier. The transactions processed under TReDS are "without recourse" to the MSMEs.

The platform's operating mechanism: A seller has to upload the invoice on the platform. It then goes to the buyer for acceptance. Once the buyer accepts, the invoice becomes a factoring unit. The factoring unit then goes to auction. The financiers then enter their discounting finance rate. The seller gets to accept the final bid. TReDS then settle the trade by debiting the financier and paying the seller. The amount gets credited the next working day into the seller's designated bank account through an electronic payment mode. The second leg of the settlement is when the bill is paid to the financier by the buyer.

Current discounting platform providers: The Reserve Bank of India has given license to three entities to set up and operate TReDS. They are governed by the Payment and Settlement Systems Act. These are:

- Receivables Exchange of India (RXIL), a JV between the National Stock Exchange and the Small Industries Development Bank of India (SIDBI)
- A.TREDS, a joint-venture between Axis Bank and Mjunction Services
- M1xchange, operated by Mynd Solutions.

Main Challenges: All the transactions undertaken on the TReDS have to be registered with the Central Registry of Securitization and Asset Reconstruction and Security Interest of India. The registration charge discourages small-ticket sellers from using the platform. Currently, only banks and certain non-bank financial companies are allowed to be financiers. High-net-worth individuals are not allowed to participate.

So far, only 34 private companies have registered on the platform. Large companies are somewhat uncomfortable in having their bills traded due to the fear that their rival companies will be able to identify details of their MSME suppliers.

¹⁹ Financing India's MSMEs Estimation of Debt Requirement of MSMEs in India, IFC, November 2018

servicing the needs of the retail sector that connects retailers, suppliers and factors. The platform supports three-party transactions based on legally valid e-docs. All transactions are run based on e-docs certified by e-signatures, while all delivery operations are checked and verified automatically. Another innovative solution was recently established by the private investors – a crowd-factoring platform, which allows the participation of private investors (individuals and businesses) in financing SMEs.

Securitization and secondary markets could free up capital for factoring, and Russian SME development institutions could help support these transactions. Factoring firms, in turn, can securitize their receivables portfolios to reach higher creditworthiness on their bond issuance. Factoring firms are SME themselves in many countries. Their main sources of financing are bank credit lines. Securitization could facilitate their access to capital markets. Russian SME development institutions could support this type of securitization, along with their ongoing efforts to scale up securitization of SME loans.

Crowdfunding

Many jurisdictions see crowdfunding as an innovative way to facilitate funding for SMEs and steer seed capital to start-up companies. According to the International Organization of Securities Commissions (IOSCO), crowdfunding is an umbrella term describing the use of small amounts of money obtained from a large number of individuals or organizations to carry out a project, business/personal loan or other financing needs through online web-based platforms. Peer-to-peer (or marketplace) lending is a form of crowdfunding used to fund loans, which are paid back with interest. Equity crowdfunding is the raising of capital through the issuance of stock to several individual investors using the same method as crowdfunding. Enabled by new information and communication technologies, crowdfunding platforms represent a new mode of financial intermediation by directly connecting lenders or investors with borrowers or startups via internet platforms. Crowdfunding finances specific projects rather than an enterprise. It can provide concept and idea validation to the project or business, give access to many people providing the entrepreneur with insights and information, and become a marketing tool.

Globally, the crowdfunding industry is still small, but it is growing rapidly. In some countries, it is becoming an important provider of finance for certain market segments. Crowdfunding has grown rapidly since the middle of the 2000s, and at an increasing rate in the last few years, to reach approximately USD 84 billion globally. The share of loans facilitated by lending-based crowdfunding platforms is still very small. Even in countries with the most developed crowdfunding markets, only around 1% of total loans are facilitated by platforms. In some countries' market segments (such as small-business lending or consumer lending), however, platforms are becoming a real alternative to bank credit, and their importance is growing. For example, in 2016, business lending facilitated by United Kingdom crowdfunding platforms amounted to 15% of the total new loans to small businesses by banks, compared to less than 1% in 2012 (Havrylchuk, 2018). Given Russia's position among the top five global leaders in digital transformation of the financial sector,²⁰ it is well positioned technologically to grow the crowdfunding sector, especially once the regulatory framework for crowdfunding activities is put in place.

While there are no official statistics on crowdfunding in Russia, the CBR has been monitoring crowdfunding activities since 2015 by collecting information from the largest crowdfunding platforms on a voluntary basis. In line with the global trends, the market in Russia has been growing exponentially. In 2018, the size of the crowdfunding market reached RUB 15.2 billion²¹ and is expected to grow to RUB 20-23 billion by the end of 2019. Based on the product, the crowdfunding market in Russia is primarily split into peer-to-peer (P2P) and peer-to-business (P2B) lending, equity investment

²⁰ World Bank. 2018. Russia Digital Economy Report, September 2018, Competing in the Digital Age: Policy Implications for the Russian Federation.

²¹ Central Bank of Russia

and reward-based. Crowdlending is the largest segment of the market (see Figure 10). In 2018, individual entrepreneurs and SMEs raised RUB 14.6 billion (USD 225 million) via crowdfunding platforms, which is equivalent to approximately 0.2 percent of the bank loan financing obtained by SMEs that year. The average loan amount obtained by an SME or individual entrepreneur through the crowdfunding platforms in 2017 was slightly under RUB 1 million.²² As a sign of further market development, the Russian crowdfunding association, the Association of Investment Platform Operators, was created in 2018 by four founding members to consolidate industry players and advance their interests, as well as to promote crowdfunding. In 2015, the government backed the establishment of the largest crowd-investing platform – Startrack – to expand funding options for startups some of the largest banks and online retailers established their own crowdfunding platforms (Alfa Bank, Sberbank, Ozon). As the market grows, more innovative solutions continue to emerge, such as the launch of the first crowd-factoring platform in Russia, and of a crowdfunding platform to enable lending against intellectual property rights.

Figure 9. Russian Crowdfunding Market (RUB bln)

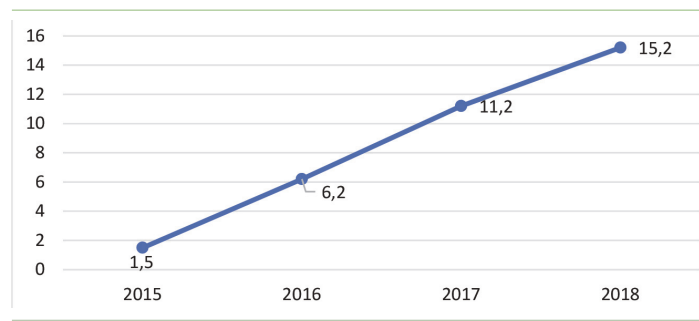
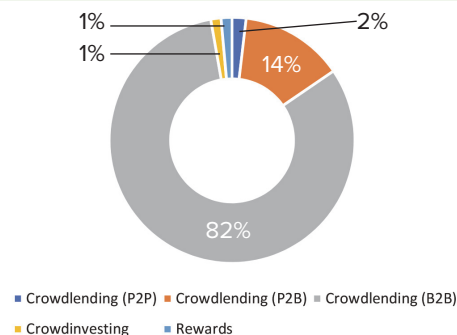


Figure 10. Russian Crowdfunding Sector in 2017 by Product



Source: Central Bank of Russia

Crowdfunding legislation in Russia is currently under approval. While the broader enabling environment for crowdfunding is being developed under the National Digital Economy Project, the industry-specific regulation is currently under development. On May 2018, the Russian parliament, the State Duma, approved in a first reading a legislative proposal to regulate crowdfunding platforms in Russia. The draft law “On attracting investments using investment platforms”²³ regulates investments by legal entities or individual entrepreneurs through investment platforms, and it determines the legal basis for the activity of investment platform operators. The draft law authorized the following methods of investment on an investment platform: granting of loans, acquisition of securities and acquisition of

²² Central Bank of Russia

²³ Draft Law N° 419090-7 submitted to the State Duma of the Russian Federation on 20.03.2018

investment project tokens. The CBR will maintain a register of investment platform operators, monitor their compliance with the legal requirements and adopt normative acts on matters within the scope of the draft law. Only crowdfunding platforms registered with CBR can operate in that market.

The draft law “On attracting investments using investment platforms” provides the framework for the operation of crowdfunding platforms in Russia. The draft law has the following key features: (1) it determines the regulated service; (2) it establishes requirements for the investment platform, its operator and participants (in particular, the minimum amount of the operator’s own funds (capital) should be at least RUB 5 million); (3) it differentiates between qualified and non-qualified investors and their ability to invest via the platforms; (3) it describes the process of investing through an investment platform, including specifics of investing in equity securities placed with the use of an investment platform; (4) introduces the mechanism of nominal accounts to operate transactions and to segregate invested funds; (5) it allows attracting investment by all types of business entities and specifies the restrictions for operators not included in the register of operators of crowd-hosting platforms; (6) it establishes requirements for the disclosure and provision of information and (7) it regulates the duty to submit information to the credit bureau. The draft also envisages the possibility of setting different limits for different types of investors. These will be determined either by law or by the CBR in the secondary regulation. The latter would be a preferred option, as it would provide the regulator with more flexibility. The threshold will likely be established at around RUB 600,000 (about USD 9,200) per year for unqualified investors.

The key features in the Russian draft law are in line with international regulatory trends. The draft law aims at achieving a balance between risks/investor protection and further sector growth, by setting minimum capital requirements, limiting the maximum invested amount, regulating the treatment of clients’ money and granting access to credit bureau information. For example, setting minimum capital requirements, which helps to ensure platform solvency during financial shocks and align incentives between lenders and platforms’ shareholders, is a common practice in many countries. In most countries, platforms should either respect a fixed minimum capital requirement (around 50,000 euros) or have a professional liability policy (in France). The United Kingdom is the only country where the minimum capital requirement is expressed as a percentage of loaned funds.²⁴

Ensuring high disclosure standards of crowdfunding platforms to enable market discipline presents a regulatory challenge in many countries, including Russia. The draft law proposes a set of disclosure requirements, including about the platform itself, as well as about the borrowers. Once the regulation is in place and the crowdfunding platforms become registered with the CBR, the regulator can compile and publish sector-level data, including the provision of some granular data and portfolio performance. While the CBR has been collecting the data from the crowdfunding companies for several years, the current availability of the aggregated market-level data is very limited. Although individual crowdfunding platforms present certain information on their web pages, consistent reporting standards for loan origination data and portfolio performance are lacking. It is virtually impossible to find aggregated information to compare information about borrowers on different platforms as well as about platform performance. In many countries, supervision authorities compile and publish such data. The U.S. Treasury Department has recommended the creation of a private-sector registry for tracking data on transactions, including the issuance of notes and securitizations as well as loan-level performance. In France, the French regulator, the French Prudential Supervisory Authority, known as ACPR, provides an explicit formula for calculating platforms’ default rate to ensure the consistency of the reported information (Havrylchuk, 2018). As the crowdfunding industry in Russia develops further, the Association of Investment Platform Operators could take a more prominent role in developing and promoting voluntary disclosure standards.

²⁴ 0.2% of the first £50 million of that total value, 0.15% of the next £200 million of that total value, 0.1% of the next £250 million of that total value and 0.05% of any remaining total value. Platforms should have either £50,000 of capital or a percentage of loaned funds, whichever is higher.

Also, authorities in several countries have adapted their taxation policies to certain types of crowd-funding. Notably, lenders can subtract crowdfunding losses from their revenues in the calculation of the tax base. In some countries, revenues from some financial products are tax-free and the authorities have introduced similar benefits for the crowdfunding activity. For example, the British government introduced the Innovative Finance Individual Savings Accounts (IFISA) in April 2016. It allows lending-based crowdfunding activities to be eligible for a tax-free ISA. IFISA allows UK individual investors to lend money using Financial Conduct Authority (FCA)-regulated, peer-to-peer lending platforms and receive interest and capital gains tax-free. The scope of the Innovative Finance ISA extends to cover crowdlending platforms and crowdfunding debentures²⁵, but it does not extend to include equity-based investing. The French government has announced in 2018 that bonds and minibonds raised via crowdfunding platforms will be eligible for the favorable tax treatment that is already applicable to other sources of SME financing. This tax system is called in French PEA-PME; its objective is to shift the savings of individuals towards French SMEs. Once the regulatory framework for the crowding sector in Russia is in place, the financial sector authority could consider extending the scope of Individual Investment Accounts to cover crowdlending activities.

Development banks in many European countries invest to support the development of crowdfunding platforms. The British Business Bank was the first state bank to finance SMEs via loans issued by crowdfunding platforms. The European Investment Bank and the KfW, the German state-backed bank, have invested in securitized loans generated by a crowdfunding platform. Bpifrance, the French state investment bank, and the European Investment Bank (via its European Investment Fund) co-finance loans originated by Lendix, the largest French platform. Enterprise Ireland, the Irish Governmental agency responsible for the development of Irish businesses internationally, has invested in GRID Finance, the Irish lending-based crowdfunding platform (Havrylchuk, 2018). While the Russian government (via the Internet Initiatives Development Fund) backed the establishment of one of the largest crowdfunding platforms – Startrack – to expand funding options for startups, the SME development institutions are not yet leveraging the crowdfunding platforms. Once the regulatory framework for the crowdfunding industry is in place, the Russian SME development institutions could partner with the crowdfunding platforms to channel funds to those SMEs that fall outside of the perimeter of the banking system.

Box 4. Government policies to support crowdfunding

In **China**, internet financing is believed to be key to addressing SME financing needs in the near future. To encourage this, the Chinese Government included developing a crowdfunding industry as a key task in the 13th National Five-Year Plan. The government has also become more aware of risks associated with Internet financing in 2015-16. It initiated reforms like a risk-supervision framework for the Internet financing industry, which included shutting down illegal online financing platforms. In 2016, the China Internet Finance Association was established to strengthen industry self-discipline.

France has undertaken an innovative method to encourage the usage of crowdfunding as a source of finance for SMEs. Its credit mediation scheme, *Médiation du Crédit aux Entreprises* (Business Credit Mediation), signed an agreement with *Financement Participatif France*, the association of crowdfunding platforms, in 2015, to widen the range of financing options for SMEs. Firms in mediation are to be informed by *Médiation du Crédit* of the possibility of using crowdfunding to address their financing needs. Crowdfunding platforms should inform firms that are not selected on their website that they can turn to the *Médiation du Crédit*. This synergy between the two sources of funding aims to increase access to finance for SMEs of different profiles. *Médiation du Crédit aux Entreprises* was created at the height of the financial crisis in 2008 and is backed by the *Banque de France*. It is a public system that helps companies overcome difficulties with obtaining financing from financial institutions (banks, creditors, factoring companies, and credit insurers).

The **UK** Government has been supporting the growth of the crowdfunding sector by providing funds via its British Business Bank (the state-owned SME development bank) for online lending to SMEs via the Funding Circle crowdfunding platform. GBP 165 million has been provided to date, with a multiplier effect on the value of loans made to SME businesses through the crowdfunding platform. As each loan is repaid by the borrowing business, those funds are subsequently made available to another business to borrow.

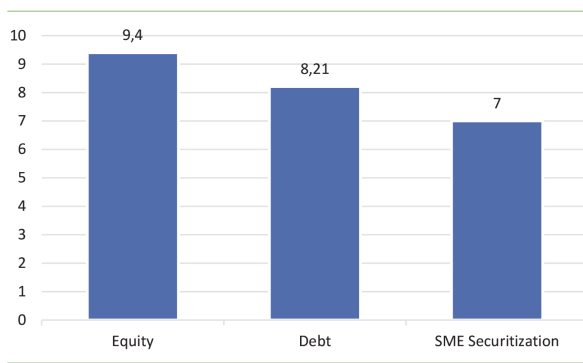
²⁵ “Crowd bonds” – bonds raised via crowdfunding platforms

Capital market financing for SMEs

While at first sight, the potential of capital markets to bridge debt funding of SMEs appears limited, they actually could play a more important role in debt financing of SMEs. Most SMEs, due to their small size and relatively informal nature, lack the creditworthiness or the capacity to prepare their businesses for an offering of securities to the public, as it requires meeting a set of disclosure requirements on an initial and ongoing basis. SME issuances are also not attractive to institutional investors, who would have to assemble a large number of SME issuances to see a meaningfully higher yields on their portfolios. Moreover, the lack of easily available information on SME performance makes it difficult and not worthwhile for investors to select and monitor individual SME deals. However, capital markets can provide funding to SMEs, either directly or indirectly, by refinancing SME lenders through non-traditional debt solutions. SME corporate-bond issuances, securitization of SME loans and SME-covered bonds are the main SME capital-market instruments. SME corporate-bond issuances are the smaller portion of the capital-markets solutions to SME financing, as they can only fit the larger and more formal SMEs.

The National SME Project and CBR's SME Access to Finance Roadmap aim at enhancing SME access to capital markets by establishing market infrastructure and facilitating the issuance and placement of securities by SMEs. The Moscow Exchange has established two sections aimed at SMEs – Growth Sector and Innovation and Investment Market. The Growth Sector was launched in 2017 to facilitate the issuance of small and mid-cap companies – companies with annual revenue not exceeding RUB 10 billion (USD 154 million) for bonds issuers and not exceeding RUB 25 billion (USD 385 million) for issuers of shares. To date, there were three equity issuances totaling RUB 9.4 billion (USD 145 million), 13 bond issuances (including five issuances by SMEs) totaling RUB 8.21 billion (USD 126 million) and an inaugural multi-originator SME securitization (See Figure 11). The Innovation and Investment Market section of the Moscow Exchange is aimed at innovative companies, including SMEs. The Moscow Exchange plans to further develop its specialized segments catering to SMEs by developing a dedicated stock exchange index and analytics for investors.

Figure 11 Moscow Exchange Growth Sector Issuance (2017-1Q2019), RUB bln



SME development institutions will play a key role in lowering the cost of issuance and providing liquidity to the transactions. The National SME Project sets a goal of cumulative SME bond issuance totaling RUB 48 billion (USD 738 million) in 2019-2024. The SME Corporation, with the Ministry of Economic Development, will provide subsidies for application and listing fees for two percent of the issuance volume, capped at RUB 1.5 million (USD 23,000), as well as for interest rate paid on SME-issued bonds (up to 70 percent, capped at two-thirds of the CBR key policy rate). The SME Corporation will also provide guarantees on debt securities issued by SMEs, while the SME Bank will be performing

the functions of an arranger, anchor investor, market maker and advisor. In addition to facilitating direct SME access to capital markets, the SME Bank will continue supporting the securitization of SME loan portfolios by smaller banks by maintaining its multi-originator SME securitization platform.

While the Russian government foresees a lot of measures aimed at lowering issuing costs for SMEs, policy measures to promote market literacy for SMEs and investors are equally important actions to be taken by the government to realize a functional market. International experience shows that even if the exchange market provides preferential measures for SMEs, such as lowering listing criteria and fees, the lack of SMEs' ability to tap capital markets, especially in complying with disclosure requirements, is still a critical hurdle for establishing an SME market. A number of countries introduced a market advisor system to facilitate the issuance of securities by SMEs. It has been observed, for example, that the dedicated equity markets for SMEs that have market advisors, which assist firms so that they can be properly prepared for listing, have developed at a faster pace after the introduction of the market advisor system.²⁶ The Korea Exchange has established a Listing Support Center in order to provide free education and consulting services related to listing issues. In India, policy measures include building the base of professionals that support SMEs in capital markets, e.g., disclosure support by consultants and certified public accountants (CPAs). Also, direct financial measures could be eventually replaced by tax-incentive schemes for issuers and investors.

In a growing number of countries, SMEs can raise funding from retail investors based on a proportionate regime in which disclosure requirements have been streamlined. Under these proportionate regimes, the requirements for the inclusion of financial information in the prospectus are less onerous, quarterly reporting is not imposed, and the deadlines for periodic reporting are usually extended. These regimes can be found in many advanced jurisdictions, including the United States and Europe, and examples are starting to appear in emerging market economies such as Peru.

In tandem, some countries are creating specific platforms for the trading of SME issuances to provide investors with some level of liquidity. While initially SME platforms were developed to trade equity, more recently platforms for the trading of SME debt issuances have started to appear. In cases where the issuances have relied on private offerings, the platforms are not open to retail investors. This type of platform exists in countries such as France, Germany, Italy, Spain and the UK. In all these countries, the platforms were created in the last decade (see Box 5).²⁷ In Latin America, Peru has been one of the first countries to create this type of platform. Some of these platforms have had a very successful start (see for example MARF in Spain and the platform for minibonds in Italy). However, it is still early to assess their impact. Other platforms, such as in Germany, experienced a sizeable number of defaults, with negative effects on investor wealth and the reputation of the market (see further discussion below). Thus, it is important to recognize that SME bond markets are inherently less liquid than other bond markets due to the nature of the asset itself, combined with the characteristics of SME issuances (very small). This is not an easy issue to overcome: it needs to be accepted as a characteristic of the asset class ("compensated" in the yield).

The German experience with the SME bond market development provides valuable lessons for establishing transparent and credible SME bonds markets. The German SME bond market (also called mini-bonds) is a fixed-income segment created on several German exchanges around 2009-2010. The main novelty was the reduction in the minimum issuance volume from €100 million to (depending on the exchange) around €10 million, together with lower standards regarding the investment prospectus. The market segment was conceived favorably at its inception, seen as a post-crisis possibility for smaller firms to break their traditional reliance on the banking system to raise capital.²⁸ Issuance grew rapidly until the first defaults appeared, and issuance activity almost stopped completely in 2014.²⁹ Almost one half

²⁶ Financing of SMEs through Capital Markets in Emerging Market Countries. International Council of Securities Association.

²⁷ Access to public capital markets for SMEs. November 2017 | ESMA22-106-535

²⁸ Feiler and Kirstein 2014; Horsch and Ueberschär 2013

²⁹ The Issuance of German SME Bonds and its Impact on Operating Performance, Feihle, P.C. & Lawrenz, J. Schmalenbach Bus Rev (2017) 18: 227. <https://doi.org/10.1007/s41464-017-0036-9>

Box 5. International Experience with SME Bond Platforms

UK. One of the oldest mini-bond markets was introduced in the United Kingdom. In 2010, the London Stock Exchange activated a platform to trade bonds in retail size (from £100 up to £10,000) known as 'Order book for Retail Bonds' (ORB). A market maker is required to provide liquidity. Admission requirements are the same as those for the main market. Other options for UK SMEs wishing to issue bonds are: unlisted bonds and bonds placed through crowdfunding platforms.

France. Corporate bonds issued by SMEs in France are traded in two regulated markets (the B and C segments at Euronext) and one MTF (Alternext). They are all open to professional and retail investors. Minimum issue size is €10 million on Euronext and €5 million on Alternext. Rating is a requirement if the issuer is not a listed firm. The last three financial reports must be audited. In 2016, the French government passed a regulation to allow the placement of bonds through crowdfunding platforms.

Spain. In 2013, Bolsa y Mercados Españoles (BME) set up a market to trade small-cap bonds named Mercado Alternativo de Renta Fija (MARF). Only professional investors are allowed to trade. Minimum trading size is €100,000. An advisor to assist the company during the issuance process is required. Rating is not required, nor is a liquidity provider.

Italy. In 2012, the Italian government introduced new regulations to enable unlisted companies to issue debt instruments commonly known as mini-bonds. Mini-bonds are eligible for listing and subject to the same tax regime as bonds issued by listed companies. Investors are exempt from tax withholdings on interest earned. Issuers are allowed to deduct the interest paid for up to 30% of EBIT. The issue size may be as low as €20 million. Mini-bonds aim to be pari passu with banks, with financial covenants in line with the banking ones. In 2013, Borsa Italiana set up the ExtraMOT PRO as an MTF to trade mini-bonds and other debt securities. Only professional investors, as listed in the Annex II of the MiFID I, have access to ExtraMOT PRO.

of the issuer defaults and more than half of the bond volumes have been related to renewable-energy market distress. While the remaining half of defaults are linked to other corporate or industry developments, there have also been serious fraud allegations against some issuers regarding misrepresentation of financial accounts. Covenant structures, usually requested by professional institutional investors and standard in other high-yield bond markets or in conventional loan contracts, were not established in the early stages of the market. Such covenants could have protected creditors against risky developments, as well as from the misuse and mis-investment of proceeds from the debt instruments.³⁰

Following the poor performance of the SME bond market in Germany in its early days, several industry adjustments were made. Stronger creditor protection through covenants and asset pledges was introduced, rating agencies that were focused on small and mid-sized corporates amended their rating approaches and methodologies, and the exchanges introduced best-practice guides and stricter listing requirements. Deutsche Börse has published a best-practice guide giving advice to issuers and intermediaries on bond listings, while the specialized bond exchange Mittelstandsbörse Düsseldorf has restructured its bond segment. The latter sharpened its listing requirements regarding transparency with the timely publication of interim reports and key financial metrics.³¹

Some countries have created specific regimes for SME offerings backed by guarantees. Argentina recently created a specialized regime for SME offerings backed by a guarantee of the Sociedades de Garantía recíproca (SGRs, mutual entities whose sole purpose is to provide guarantees to debt instruments issued by their members). These entities provide a full wrap to the issuances, and as a result in practice, the credit risk taken by the investors is that of the SGR (which acts as a monoliner). In this case, investors are mainly provided information about the financial situation of the guarantor, its regulation and supervision, with minimal information needed from the SME. In turn, adequate regulation and supervision of the entity providing the guarantee is critical for the sustainability of this product.

³⁰ Lessons Learned in the German SME Bond Market. 2015 SCOPE Ratings

³¹ Leveraging Capital Markets for SMEs In Emerging Market Economies. 2018 The World Bank Group

Some countries are seeking to improve the appeal of SME bonds to institutional investors by creating SME bond funds that invest in small offerings. By pooling individual bonds issued by SMEs and offering larger investment units to investors, they overcome the size challenge. They also provide risk-return diversification by investing in a variety of SMEs across sectors and sometimes geographies. Finally, they offer specialized expertise to source suitable SME bond investments and monitor them over time. SME bond funds exist in countries like Germany, Italy and France. Among the emerging market economies, Peru has been a pioneer on the creation of these funds and other emerging markets are currently considering them.

SME loan funds have gained traction in recent years, mainly as a result of the 2008 crisis. In general, two types of funds exist: co-origination funds and specialized-debt funds. The former buy the SME portfolio from banks that originate them. In the latter, the fund itself originates the SME loans instead of purchasing them from a bank, and the fund manager is involved in selecting, analyzing, and monitoring the individual loans. From a borrower's perspective, the latter type of fund can offer greater flexibility in terms of the debt structure and its terms, as well as speed of execution. From an investor's perspective, these funds typically target a higher yield on lending than banks, and as a result have become very attractive for institutional investors seeking yields in the low-interest rate environment of recent years. While the phenomenon is recent, their importance in SME financing in Europe is growing significantly. Examples of loan funds targeting SMEs, some with public support, exist in the Netherlands, the UK, Germany, France, Ireland, and Poland. In general, they are being structured as private funds (not for public offerings). Some of these countries were required to make changes to their definitions of lending and/or intermediation to allow the provision of lending by these funds.

IV. PUBLIC SUPPORT TO NON-BANK FINANCING FOR SMES AND USE OF DIGITAL INNOVATION

Governments can play a decisive role in supporting the development of the SME financing ecosystem by providing a supportive regulatory framework for commercially oriented, non-bank financial intermediaries. Supportive regulatory frameworks facilitate the entrance of players through simple licensing procedures, proportional regulation to the risks profile of the different types of institutions, and policies that promote a level playing field by ensuring access to the relevant infrastructure. To support the development of a fintech ecosystem, for example, many countries (including Russia) have introduced regulatory sandboxes. In Mexico, authorities have proactively stimulated the entrance of niche financial institutions to cover underserved segments such as MSMEs and low-income population (see Box 6). Russia has introduced a proportional regulation approach and aims to reduce com-

Box 6. Mexico's Regulatory Support to the MSME Financing Ecosystem

Specialized finance companies

In Mexico, the Government has placed substantial efforts to develop the ecosystem of financial intermediaries to better serve the needs of MSMEs and low-income segments of population. Non-deposit taking finance companies (SOFOMES and SOFOLES) focusing on SME lending (including leasing and factoring in the case of SOFOMES) and low-income housing and consumer loans were exempted from prudential regulation. While such institutions are prudentially regulated in countries such as Spain or Italy, in Mexico they only must register with the Ministry of Economy and comply with minimum capital requirement as well as anti-money laundering regulations. Only SOFOMES, which are subsidiaries of a banking group, are fully regulated.

Many of these companies, mostly mortgage-financing SOFOLES, grew quickly prior to the global financial crisis through short-term bond issuances used to fund long-term loans to developers. Some were involved in fraudulent transactions. These companies failed in the aftermath of the crisis, largely due to deteriorated asset quality and increased funding risks, raising concerns about the ability of market discipline to effectively regulate the sector. There were proposals to subject to prudential regulation those finance companies issuing in capital markets, while continue exempting those funded through equity and loans from regulated financial intermediaries. Others argued that the sector size did not pose systemic stability concerns and that transferring the supervision of many small institutions to the banking supervisor would provide a false sense of security, given limited supervisory resources, and ultimately increase moral hazard. In the end, SOFOLES (financed through securities issuance) were fully deregulated. However, credit and savings associations (SOFIPOS) and credit cooperatives (SOCAPs), which focus on small loans, were brought under prudential supervision to protect small depositors.

Niche banks

In 2011, Mexican authorities introduced the niche bank category, with the aim of facilitating the entrance of operators catering to underserved segments. Niche banks have lower minimum capital requirements than commercial banks, and they vary according to their business model. For niche banks providing credit (payment) services, capital requirements were 60 (40) percent of the capital requirement for commercial banks. However, they are subject to the same prudential requirements of banks in terms of capital adequacy ratios and liquidity requirements. Reporting and risk-management requirements are proportional to business-model complexity. Credit and savings niche banks cater mostly to SMEs and agricultural producers. SOFOMES were expected to become niche banks to get access to cheaper and more stable sources of funding, such as deposits and interbank loans. However, in the process, they faced substantial regulatory costs. Overall, penetration has been low (only four institutions are niche banks compared to 1,628 unregulated SOFOMES). High operational costs given their small scale, limited business diversification, exposure to riskier segments and reliance on wholesale deposits are all source of vulnerabilities.

Fintech

In March 2018, the Mexican Fintech Law was enacted to provide a regulatory framework for the providers of financial transactions and services through IT platforms or tools. The law aims to introduce competition in the sector while preserving financial stability and integrity and ensuring consumer protection. Under the law, crowdfunding and e-money issuers need to receive authorization from the regulator, comply with minimum capital requirements and can only collect and transfer resources to/from costumers' accounts at financial institutions. Operation requirements include (i) information security and business continuity, (ii) internal controls and risk management, and (iii) operational limits (size of transactions). The Fintech Law also contemplates temporary operation under a regulatory sand box for novelty models.

pliance costs for the smaller regional banks that tend to serve SMEs. However, the Russian regulation does not target the creation of banks with a particular focus segment, just smaller commercial banks that by their size cannot attract large corporates, but can function as universal banks. In Russia, the government has opted for creating a network of public financial institutions catering to MSME needs that operate largely on non-commercial basis (e.g. regional MFOs and leasing companies).

In many cases governments, through development financial institutions (DFI), support the SME financing ecosystem by providing funding, technical assistance and infrastructure to reduce costs and generate economies of scale. Specialized SME financiers rely on financial markets to raise capital and funding for their operations. To facilitate entrance in the system, facilitate growth and ensure continuity in their operations, DFIs support the industry through funding and risk-sharing facilities. In addition, some DFIs also provide technical assistance to non-bank financial intermediaries to address deficiencies that prevent the NBFIs to get DFI credit or guarantees or more broadly to ensure sound development of the sector. Impact evaluation studies of these technical assistance programs show that improved efficiency of NBFIs receiving the technical assistance results in lower interest rates in loans to final borrowers. DFIs have also provided infrastructure to reduce NBFIs operational costs.

Box 7. Mexican DFIs provision of technical assistance and infrastructure to NBFIs

Mexican DFIs provide technical assistance to NBFIs through a network of consultants. Technical assistance is funded with budgetary resources provided by the ministry of finance, which manages DFIs, and other line ministries depending on the sector focus of the DFI. Technical assistance is provided to help NBFIs' operational efficiency to access to DFI funding, to help NBFIs comply with new regulatory requirements (e.g. SOFIPOS and SOCAPs), to improve operations with a view to access DFI funding facilities, or to help them to launch and commercialize new products supported by DFIs.

For example, Financiera Nacional de Desarrollo Agropecuario, Rural, Forestal and y Pesquero (FND), a development bank serving rural MSMEs and small agricultural producers, gives grants to rural financial institutions for technical assistance, which is provided through a network of accredited specialists. FND, in addition to lending directly, operates in the second tier with a wide network of rural financial intermediaries, including credit unions, cooperatives, SOFOMES, and producers' associations with a view to increase access to credit in rural areas. Before a financial institution can receive an FND loan, it needs to go through an extensive accreditation process, which includes questions about the institution's objectives, as well as a detailed review of products, financial statements, organizational structure and governance, quality of financial reporting, systems, and manuals for operation and risk management. To help improve institutional performance and outreach, FND uses public funds from the national budget to provide grants for capacity-building projects to financial intermediaries with the goal of getting them ready to receive FND loans and more broadly to develop sound rural financial institutions that can responsibly reach more rural borrowers.

The World Bank conducted an impact evaluation study (Bruhm et al, 2018) of the effect of technical assistance programs on credit unions using propensity score matching and timing of the grants to identify the effects of the programs. The study found that the program lowered lending interest rates by up to 2.6 percentage points (from a pre-program average of 17.8 percent). This drop appears to be due to lower operating costs and better risk management, as reflected in a lower nonperforming loan ratio. The program also raised credit unions' returns on assets and significantly increased the value of their loan portfolio.

Mexican DFIs also provide NBFIs with access to infrastructure. For example, BANSEFI, a Mexican DFI focused on supporting financial inclusion, provides back-office services through an IT platform on a fee-for-service basis to facilitate the operations of small-scale institutions that are focused on financial inclusion, such as SOFIPOs and SOCAPs. BANSEFI has also created a commercial alliance (La Red de la Gente) with several of these institutions to commercialize financial products under an umbrella trademark. By homogenizing the products and sharing the branch network and common technological platform, distribution and marketing costs are substantially reduced.

Governments are supporting SME digitalization as a tool to improve productivity but also access to finance. E-commerce, integration in digital platforms, online marketing and digitalization of process can improve access to market, reduce costs and improve firm performance and productivity. Digital payments are an enabler of the digital economy. Firms can leverage digital payments to more

easily transact with their customers and suppliers, as well as to build digital credit histories and seek financing. Every time individuals, micro enterprises, and small and medium-size enterprises (SMEs) and their customers use cloud-based services, conduct banking transactions, make or accept digital payments, browse the Internet, use their mobile phones, engage in social media, buy or sell electronically, ship packages, or manage their receivables, payables, and recordkeeping online, they create digital footprints. Even if SMEs are not digitalized, their clients often are, and that information can be exploited. Russia is well positioned to exploit digital opportunities; virtually every adult account holder makes or receives digital payments (Findex 2017). Governments in upper-middle income countries, including Russia, are formulating ambitious digital development strategies. National Financial Inclusion Strategies, including the one in Russia, support the development of digital financial services (fintech) through supporting industry regulation and data sharing.

Digitalization and innovation present opportunities but also challenges. Governments are increasingly focusing their attention of developing financial infrastructure supporting and exploiting innovation and the digital economy. Digital platforms and technologies can (i) provide a cost-effective way to originate, monitor and collect credit, (ii) improve risk assessment using digital data and data-processing techniques, and (iii) improve risk allocation towards agents more willing to bear risk. On the other hand, as the economy becomes more digital and less physical, firms' real assets decline, hampering traditional lending based on real tangible assets. To exploit the benefits and address the challenges, new types of financial infrastructure to facilitate MSME access to finance are being supported by governments. The traditional financial infrastructure comprises payment systems, credit information systems and secure transactions frameworks (i.e. frameworks for pledging and executing collateral). Currently governments are focusing on infrastructure enabling digital payments and supporting the incorporation of digital information in the credit information systems (World Bank 2019). For example, China is building a credit scoring system to help SMEs gain better access to funding. The database will contain an array of records pertaining to individual SMEs, including penalties and presence on government blacklists, as well as tax payments and utility bills. In Korea, the government has developed a regulatory framework and supported with public funding the creation of a system of institutions to value and realize intangible collateral, which enabled lending against intellectual property rights. The provision of digital SME identification, which allows simplified access of SMEs to formal financial services and public support schemes, is a type of new infrastructure that is receiving substantial attention in many countries, including Canada, India and Mexico.

Box 8. SME Digital ID

Proof of identity (ID) is necessary to access government programs and services, including financial services. Particularly for SMES, digital identifiers facilitate registration and access to formal financial services, while introducing efficiencies in conducting transactions. A strong legal basis, uniqueness, and a robust and secure digital format are the key features of sound digital ID systems. Uniqueness in ID allows financial institutions to have comprehensive information of the operations of the customer across the financial sector. The G20 Digital Onboarding report identifies seven policy measures that governments should consider for an effective ID system that meets the needs of the financial sector.

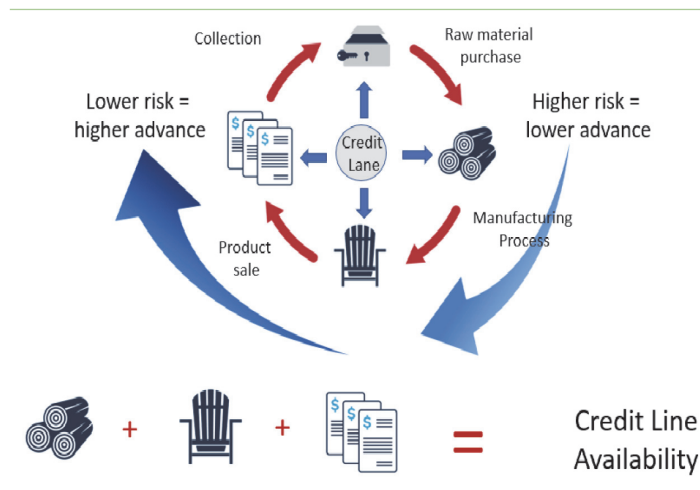
Several countries have already introduced digital IDs for businesses, including Canada, Serbia, India and Bangladesh (Nataharan et. Al, 2018) In the latter, for larger business digital IDs of connecting board members, management team and authorized signatories are connected to the ID of the businesses. In some countries like India, government agencies are developing ancillary services, such as electronic signatures.

Financial sector regulations, specifically those related to AML/CFT, include customer due diligence (CDD) requirements that relate to the identification of the customer. Such requirements include the need to validate the proof of identity against a third-party trusted source, to authenticate customers when accessing financial services, to keep records and to ensure the safety and integrity of the financial system. Digital ID systems contribute to a more efficient customer due diligence process; once the initial verification is conducted for a customer with a digital ID, the information is logged in know-your-customer (KYC) registry and subsequent CDD validations are done through the registry. India and Mexico are setting up KYC registries to facilitate inter-usability of records and reduce compliance costs for financial institutions and customers.

A range of innovative financial solutions has been designed and implemented around the world to mitigate the credit risk and reduce costs associated with SME lending to channel more credit to the sector. Many of these innovative SME finance solutions introduce or exploit existing financial infrastructure to extend the range of collateral that can be used to mitigate SME credit risk. Examples of these type of solutions include Asset-Based Lending (ABL), widely used by US commercial banks, the National Financiera (NAFIN) Productive Chains Program in Mexico or the Techno Banking piloted by the Korean Development Bank. Some of these solutions build on special digital software (ABL) or digital platforms (NAFIN productive chain programs) for effective implementation. Fintech-provided solutions exploit IT to process information with a view to reducing information asymmetries that increase perceived risks. Examples include the well-known Ant financial credit scoring model used to extend working capital to merchants on the Alibaba e-commerce platform in China or the Inbonis (Spanish fintech) use of big data and artificial intelligence (AI) techniques to improve SME credit-risk assessment. There are also examples of solutions aimed at reducing the costs of lending to MSMEs that exploit technology, such as the Banco Nacional de Desenvolvimento of Brazil (BNDES) card products.

Many of these solutions have been developed or supported by development financial institutions to improve efficiency in achieving their mandates by reducing the amount of subsidies required for their operations while leveraging their balance sheets and expanding the number of supported SMEs. Development financial institutions have traditionally focused their support to the SME sector on providing subsidized loans to SMEs. They do so by lending directly to SMEs or by providing funding to commercial banks at below market rates. In the absence of external concessional financing, such activities require fiscal transfers or subsidized funding from monetary authorities or depositors/investors. Fiscal constraints and the distortionary effect that subsidized lending has on inflation and general equilibrium rates (if amounts are substantial) as well as on the volumes of resources intermediated call for a limited amount of well-targeted subsidized support. Furthermore, in many markets liquidity is abundant and interest rates are low, so cheap credit lines for on-lending by SME development banks are not attractive to commercial banks. Hence, development banks have increasingly focused on developing and supporting the implementation of financial products for SMEs that address the underlying impediment for SME access to finance, as opposed to subsidizing commercial risk-taking. Also, DFIs are looking at ways to incentivize risk-taking in the private sector by changing the design of their guarantee schemes to further leverage their balance sheets and support a larger number of SMEs.

• Asset-Based Lending: Lending Using SME Productive Assets as Collateral



Asset-Based Lending (ABL) consists of a revolving credit line to grant financing to the SMEs using their productive assets – inventory and accounts receivable (A/R) – as collateral. Credit availability depends on the liquidation value of the available collateral after applying a haircut. Raw materials have the highest haircut, followed by finished goods and accounts receivables. Unlike factoring, ABL grants credit to MSMEs throughout its productive cycle, from raw material purchase until the collection of the sale proceeds. Implementation of ABL requires an efficient movable-asset registry to enforce the priority of the claims and an extrajudicial procedure to execute the movable collateral.

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ABL does not have scheduled amortizations. SME sale proceeds are directed to a bank account controlled by the lender for repayment purposes. If there is sufficient collateral, the credit line is available for drawdowns. This requires monitoring and balancing of outstanding credit versus available collateral. ABL operation and monitoring is done through specialized IT systems.

ABL reduces lender risk since (i) credit availability is based on a formula that defines credit amount based on the actual level of collateral, and (ii) the lender can modify the advance rates or stop funding in case the financial condition of the borrower deteriorates. Even during the financial crisis, in the US ABL portfolios maintained good credit quality. ABL also incentivizes the borrower to reinvest profits: as more collateral is available, the availability of credit also increases, boosting borrower profits.

ABL Monitoring

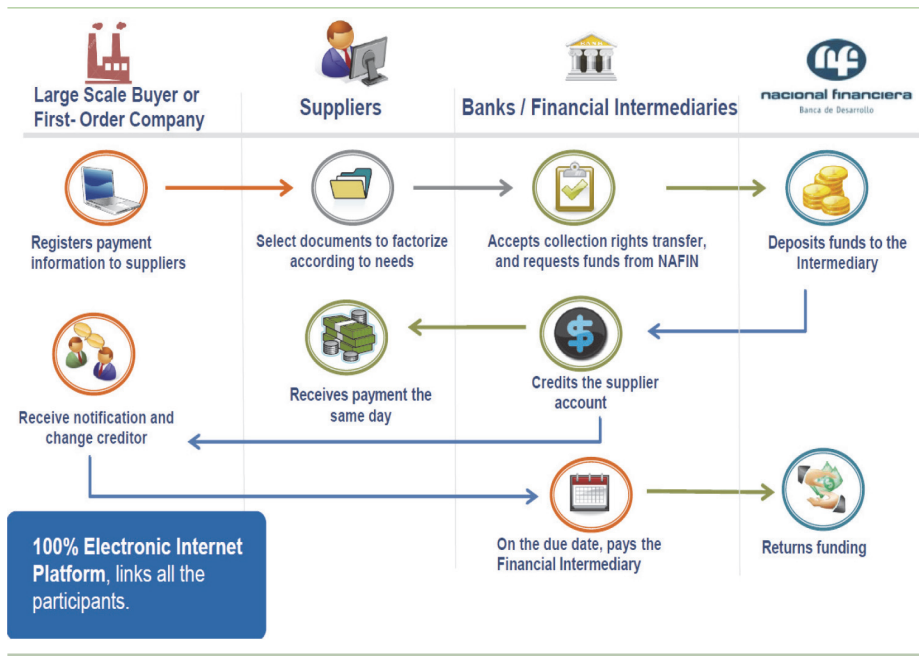
Initially	Every Draw Down	Monthly	Every 3 – 6 Months
<ul style="list-style-type: none"> • Field Audit for Collateral • Accuracy of Ledger amounts • First Calculation of Borrowing Base (Credit Availability) 	<ul style="list-style-type: none"> • Inventory and A/R levels • A/R supporting Info • Updated Borrowing Base calculation • Outstanding +/- changes vs Past Balance + New Funding 	<ul style="list-style-type: none"> • A/R Aging • Inventory Breakdown • Financial Statements (Balance and Income Statement) 	<ul style="list-style-type: none"> • New Field Audit • Accuracy of Ledger Amounts • Differences

• NAFIN Productive Chains Program: Electronic Factoring Platform

The Productive Chains Program launched by Nacional Financiera (the Mexican SME development bank, NAFIN) is a facility that provides liquidity to SME suppliers of large corporations through the sale of their receivables in an electronic factoring platform. Banks and other financial institutions bid to buy those receivables in the platform developed by NAFIN. Access to the platform is free for participants, but financial intermediaries have to use NAFIN credit lines (non-subsidized) to buy the receivables in the platform.

The large corporations register their suppliers' bills in the platform, certifying their authenticity. The SME suppliers select the bills they want to sell, depending on their liquidity needs. Financial institutions participating in the platform bid to purchase those bills at a discount (non-recourse factoring) using funding from NAFIN. The SME supplier receives the funds the same day. The platform notifies the change of ownership in the receivables. On the due date, the large corporation pays to the financial intermediary that purchased the bill, which in turns repays to NAFIN.

The program offers substantial advantages to both large companies and suppliers. Large companies can negotiate better payment terms with suppliers, increasing their working capital. It also supports supplier development, ensuring reliable input provision. Suppliers get immediate liquidity at competitive rates and the certainty of cash flows improves. Also, by exploiting the information accumulated in the platform, suppliers can access additional financial products. The program also improves payment management for large corporations and reduces suppliers' collection expenses. While the benefits are numerous, initially it took a decisive lead from the Ministry of Finance to encourage large private corporations to trade their receivables in the platform. Participation in the program is mandatory for large state-owned enterprises to ensure improved payment management.



The program, launched in the early 2000s, transformed the factoring landscape in Mexico, substantially increasing the volume of operations by automatizing and simplifying the process. Factoring rates declined 100 b.p. (from 17.3 percent to 7.3 percent). In 2017, the program accounted for about 50 percent of total factoring operations in Mexico. Participants included 449 large companies (60 percent of them private-sector companies), 20,000 SME suppliers and 40 financial intermediaries (half of them non-banks).

• Korean Development Bank Techno Banking: Lending against Intangible Collateral /Intellectual Property Rights

The Korean Development Bank (KDB) has been a pioneer in providing financial products and services based on Intellectual Properties (IP) rights. KDB provides two types of technology finance products: (i) products based on external technology evaluation, which are public financial support backed by government programs, (ii) and products based on KDB's internal technology evaluation, which are designed and operated by KDB.

KDB Techno Banking was launched in 2012-2013 and comprises (i) IP Collateral Loans, (ii) IP Purchase Loans, and (iii) Technology/IP Commercialization Finance. The aim of these three products is to provide finance to SMEs that face difficulties in getting credit due to insufficient acceptable immovable collateral, despite having intellectual properties. The target customers are firms that (i) need additional working capital but do not have available collateral because they have already pledged their fixed assets, (ii) are in the IT or services sector with typically small amounts of fixed assets, or (iii) wish to use IP as a collateral to avail of lower interest rates than those of unsecured loans. About 70 percent of the originated Techno Bank loans are IP collateral loans, and the remaining 30 percent is IP commercialization. IP purchase loans are rare so far. KDB offers interest-rate discounts on its technology finance products, ranging from 15 to 50 bps per annum over its standard rates.

Clients (sole proprietors are not eligible) are asked to obtain a technology evaluation by a Technology Credit Bureau (TCB) and only clients with a given rating are eligible. TCBs are private credit-rating firms designated by the Financial Services Commission, the integrated financial regulator. The TCB system for technology finance in Korea was introduced in July 2014 by the FSC and currently six firms

KDB's Technology Finance Products by Firms' Maturity Stage

Categories		Start-up	Growth	Maturity
External Technology Evaluation* Based	Loans	Technology Evaluation-based Loans		
		IP-based Loans		
	Combination of Loan & Equity	S/W Industry Promotion Fund		
		Funds for Supporting Commercialization of Outstanding Technologies		
		Funds for Supporting Growth of Technology-Oriented Firms		
KDB Internal Technology Evaluation Based	Loans	Technology Capacity-based Loans		
		IP Purchase Loans	IP Collateral Loans	
	Combination of Loan & Equity		Technology / IP Commercialization Finance	
	Equity	Start-up Investment	Venture Investment	
		IP Funds for Supporting IP-based Firms (Sales & License Back, IP Liquidation)		

* Note: External technology evaluation relies on the Technology & Credit Reports released by Technology Credit Bureaus (TCBs), which are private credit rating firms designated by FSC as per the Credit Information Use and Protection Act.

are designated and operating as TCBs. Regarding IP valuation, clients or the KDB (Venture & Technology Finance Office) can ask for evaluations to be conducted by either external agencies³² or KDB's internal assessment unit (the industrial technology research center). Assessment fees are paid by the recipient firm. KDB analyzes the firm's cash flow and debt-service capacity. If the creditor is deemed worthy, KDB is recorded as a rightful entity on the patent (or trademark) register of the Korean IP office and the credit is granted.

Technology-Level Evaluation of KDB Techno Banking

The eligibility and support amount are decided mainly by KDB's own assessment; TCB's technology evaluation serves as a threshold for recipient firms.

- A. TCB's Techno-Credit Rating is a combined evaluation of the growth potential and credit risk of technology-oriented firms. It assesses the technology rating and credit rating separately to construct the overall Techno-Credit Rating, with weights given to each component. This is a fee-based evaluation.

Techno-Credit Rating	<ul style="list-style-type: none"> • Assessment of default risk considering growth potential of firms • 10 grades, from AAA (highest) to D (lowest)
Technology Rating	<ul style="list-style-type: none"> • Assessment of technological competitiveness and commercialization capabilities • 10 grades, from T1 (highest) to T10 (lowest)
Credit Rating	<ul style="list-style-type: none"> • Assessment of financial default risk • 10 grades, from AAA (highest) to D (lowest)

- B. KDB also has its own assessment system for firms' technological competitiveness, marketability and commercialization capability to determine the eligibility for KDB products. The assessment has five grades. The evaluation is free of charge.

³² Certified Technology Evaluation Institutions certified by the Ministry of Trade, Industry and Energy as per the Technology Transfer and Commercialization Promotion Act, or evaluation agencies for inventions designated by the Korean Intellectual Property Office as per the Invention Promotion Act

Eligible IP collateral includes patents, trademark rights, design rights and copyrights wholly owned by the corporation and contributing to the corporation's sales of its products or services. For IP Collateral Loans, KDB establishes the rights of pledge for the collateralized IPs. For IP Purchase Loans and Technology/IP Commercialization Finance, securing measures are not necessary unless the KDB decides so in exceptional cases. The nominal collateral value is amortized by a flat rate over the life of the IP and the remaining value is recognized as the collateral amount or materialization value.

When a loan is classified as non-performing (NPL), KDB considers around 50 percent of the collateral amount to be recoverable (i.e. the liquidation value) and then sets loan loss provisions per KDB's policies. KDB manages NPLs from its IP portfolio by selling the collateralized IPs to recovery-supporting vehicles called RSVs, which are firms or investment schemes specializing in IP investments. The sale price is decided based on the value assessment of the IP evaluation agencies. Financially troubled firms usually underperform in sales, hence collateral values of the IPs are adjusted downwards at this stage. To facilitate the development of RSVs, KDB has provided capital, mostly as minority investor.

IP Collateral Loan: Provides firms with diversified funding channels for their working capital and investments. The loan period for working capital is no longer than three years, but for facility investments it can be allowed up to 10 years. The credit amounts are assigned based on the credit rating and the TCB technology rating, but it can never exceed the recognized collateral value of the IP.

Technology/IP Commercialization Finance: Provides customized and integrated financial support for firms that have technologies or IPs that can be commercialized. Not only corporations but funds or associations established for IP commercialization are eligible. A range of products are available (loans, equity, or a combination of both), depending on the recipient's needs and situation. The support can also take the form of structured finance, such as IP securitization. There is no credit ceiling.

IP Purchase Loan: Finances the purchase (or transfer) or licensing of registered IPs. As KDB treats this loan as a type of facility investment loan, the maximum loan period is 10 years. The credit ceiling is 80 percent of the costs for purchasing or licensing the necessary registered IPs.

• Spain's SME Credit Rating Agency: Using Big Data and Artificial Intelligence to Improve SME Credit-Risk Assessment

INBONIS is a Spanish fintech company that exploits unstructured data using artificial intelligence (AI) techniques, such as machine-learning models, to improve SME credit risk assessments.³³ Machine learning models have been found to deliver similar accuracy ratios at assessing SME credit risk as Moody's RiskCalc model that uses firms' financial information.³⁴

Traditional credit-scoring models typically rely on audited financial statements, credit bureau information and macroeconomic models. However, reliable audited financial information and credit history is often not available for SMEs. Furthermore, macroeconomic models rely on national GDP evolution, which does not fully explain economic conditions in the local areas where the SME operates.

Instead of using SME financial information, INBONIS uses big data processed by a proprietary AI-powered algorithm (AROA, Automated Reputation Online Analysis) to identify positive and/or negative signal on SMEs. AROA web crawlers work 24/7 to scan the web for news and webpages about SMEs combining (i) searches in 13,000 local media presses on a SME-zip code basis, (ii) targeted web search using 40 keywords (e.g. shareholder, fraud, etc). AROA provides a reputational score to enhance credit scoring models. It also provides classified relevant news for credit officials and risk managers using the AROA App.

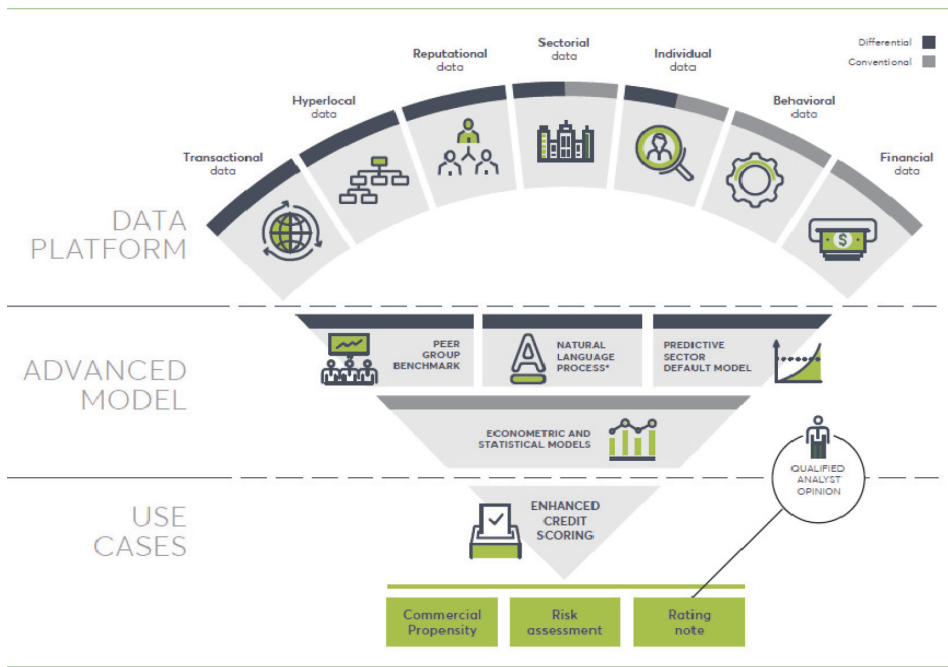
³³ <https://inbonis.com>

³⁴ <https://www.moodyanalytics.com/risk-perspectives-magazine/managing-disruption/spotlight/machine-learning-challenges-lessons-and-opportunities-in-credit-risk-modeling>

INBONIS also offers its credit-scoring model (REFOCAL), which exploits a wide variety of data, including transactional data, hyperlocal data, reputational data and conventional data. Machine learning models are used to create peer group benchmarks. Natural language process (a subset of AI) are used make human language understandable to computers in order to exploit the unstructured data. Combining these tools and using econometric modelling, a credit-scoring system is produced. Adding a qualified analyst opinion to the scoring, provides a credit rating.

SMEs and banks are both INBONIS clients. The former request a credit rating to improve their access to finance, while the latter request it to improve their risk management. In May 2019, INBONIS received accreditation as a European credit rating agency so their ratings can be used for regulatory capital allocation purposes. It has become the first credit rating agency specialized in rating SMEs registered by the European Securities and Markets Authority (ESMA).

REFOCAL credit scoring



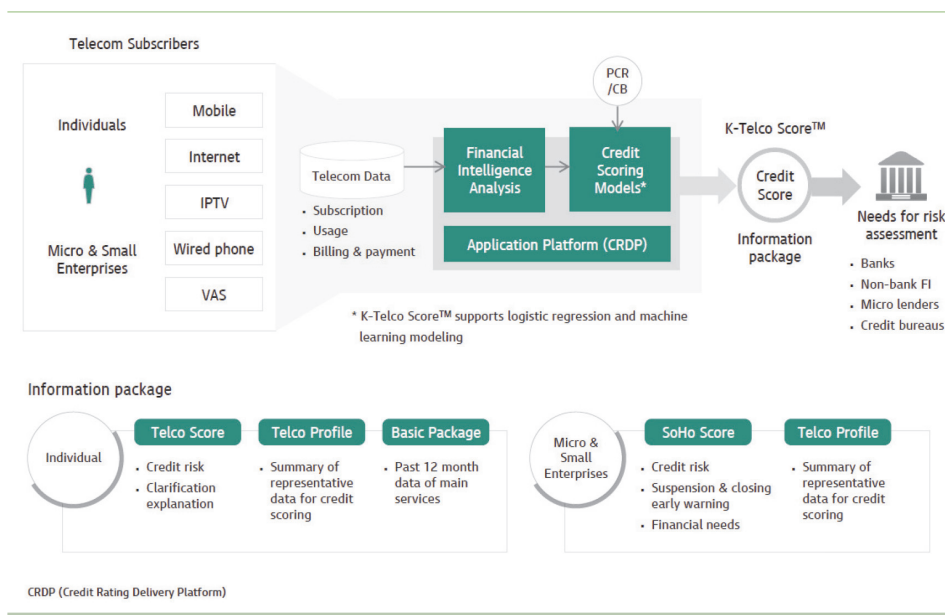
• Alternative Credit Scoring for SMEs: K-Telco Score in Korea

KT, a leading Korean telecom company, has developed financial intelligence solutions for alternative credit scoring that estimates willingness and ability to repay credit services like loans of individuals and micro and small enterprises based on telecom big data analysis. KT launched the first telecom-originated credit scoring model in Korea in 2016 – first for individuals, and then for micro and small enterprises (SoHo scoring model). Such services are delivered through a subsidiary, K-Telco to banks, card companies, insurance companies, and other lending companies in Korea and expanded the business into overseas emerging markets.

Since in Korea credit information can be delivered only by a registered credit bureau, when a financial institution receives a loan application, it requests the credit information from the credit bureau. Then the credit bureau requests a Telco Score from a telecom company and delivers Telco Score and other relevant information to the financial institution.

Telecom data has a good correlation with credit risk estimation of future's possible default. The company uses data from its customers along a wide range of services; mobile phones, land-lines, internet, internet protocol television (IPTV) and value-added services (VAS) such as online storage, instant messaging or music/video subscriptions.

Financial intelligence analysis map data on the customer socio-demographic characteristics, product use patterns and bill payment behavior into willingness and ability to pay to produce a credit scoring, combined with information from credit bureaus and or public credit registries. An application platform implements big data analysis, credit score modeling, and delivery of credit information.



To expand the K-Telco Score model to other markets, the following preconditions apply: the Telco partner should (i) keep subscriber identification information that can be matched with government-recognized proof of identity for both of prepaid and postpaid subscribers, (ii) have a data warehouse that collects and stores data from systems of target services, (iii) support real-time checking of subscriber's status of subscription: e.g. suspension and deregistration, and (iv) acquire comprehensive consent from all subscribers for collection, analysis, and utilization of subscriber information

• Banco Nacional de Desenvolvimento de Brasil (BNDES) Credit Cards: Agile and Massive Working Capital Financing for MSMEs

The Brazilian Development Bank (BNDES) card and the agrocard provide working capital financing to MSMEs and individual agricultural producers with annual gross revenues below R\$300 million (about US\$ 80 million). Micro and small enterprises according to the Brazilian definition account for 60 percent of BNDES card disbursements in 2018. Banks and credit cooperatives issue the card (operated by multiple card companies including Visa and Mastercard) based on their analysis of the MSME credit worthiness. BNDES finances credit card purchases, which offer a preferential (i.e. below market) interest rate by providing funding to the financial intermediaries offering the BNDES card. The financial intermediaries assume the credit risk on the card purchases. MSMEs can use BNDES cards only to purchase products from suppliers in a catalogue of products available in the online BNDES card platform.

Suppliers and distributors request accreditation online via the BNDES card platform. BNDES analyzes requests and makes a decision whether to include them in the catalogue of products and distributors. Currently, there are 267,000 items available for purchase, including machinery and equipment, inputs, training, freight and installation services. Prices for products and services are available online or can be requested from the supplier. Purchases can be done directly in the platform registering the information of the transaction there or indirectly in the supplier environment using the BNDES card. Distributors need to (i) have an e-commerce field or have more than 100 physical stores; (ii) gross revenues above RD300 million, and (iii) possess in its portfolio more than 1,500 items which fit in the list of authorized products by BNDES. Suppliers can be companies of any size.

Example: Catalogue of products offered in the BNDES card platform.



The BNDES card program exploits technology to reduce administrative cost in credit origination and monitoring while ensuring that credit is used for productive purposes to mitigate risk. The program is attractive for borrowers, suppliers and financial intermediaries. Borrowers obtain an attractive rate on a revolving credit of up to RD2 million (about USD 500,000) and access to 73,000 licensed providers. Publication of prices in the catalogue increases competition. For the suppliers, the platform provides access to 655,000 customers with pre-approved credit, eliminating credit risk. For financial intermediaries, while the margin on the BNDES card may be relatively small, it provides a client and transactional information for developing and providing additional financial services.

• A New Generation of Partial Credit Guarantee Programs

Many developing and industrial countries have made partial credit guarantees (PCGs) a key element of their strategy to alleviate SME financing constraints, as these schemes can compensate for SME's lack of collateral and difficulties in establishing credit worthiness. PCGs are considered less distortionary than other public interventions such as direct credit as the guarantee only provides partial coverage.

Even though PCGs are intended to alleviate difficulties of firms when accessing credit, they may add more distortions to the credit markets. By limiting firm liability and transferring it to the government, PCGs can reduce firm incentives to repay the loan and bank incentives to monitor and screen loans,

thus creating moral hazard on the part of both borrower and lender. Thus, while PCGs can allow more entrepreneurs to access credit, they also may induce firms to default. In many countries, governments provided PCGs at subsidized fees. However, the impact of subsidized PCGs can be insignificant if banks use them only to subsidize the risk of loans that would have been approved even without the guarantee.

To address these issues, innovations in PCG programs have been introduced. To reduce moral hazard on the part of the borrower, many countries have introduced portfolio guarantees in which the borrower does not know if its credit is guaranteed or not. To reduce moral hazard on the part of the lender, PCG funds are restricting the amount of PCGs available to intermediaries with outlier delinquency ratios and/or charging risk-adjusted fees for the guarantee considering the lender's default experiences (e.g. NAFIN PCG program).

A more complex issue, in the context of subsidized guarantees, is how to ensure that banks limit their use to those clients who truly require the guarantee and that subsidies are efficiently allocated. To optimize the use of the guarantee, some PCG schemes have introduced an auction mechanism. For example, the Chilean PCG fund (FOGAPE) holds auctions four to six times a year to allocate guarantees to the intermediaries that request the lowest coverage level for a certain volume of loans. Lenders can request up to 80 percent of coverage for long-term loans and up to 70 percent for short-term loans. No lender can get more than two thirds of the total volume of guarantees auctioned. Financial institutions that use less than 80 percent of the allotted guarantees are excluded from the next auction. In Mexico, NAFIN offers guarantees under a first-loss scheme, in which a bank can submit bids on coverage of up to 10 percent of the portfolio, depending on the type of borrower. NAFIN initially auctioned its guarantees fixing the coverage and allocating guarantees to the banks that offered the lowest interest rate for the borrowers. In 2014, they changed the auction to allocate to banks requesting the lowest coverage and capping the rates on the loans to final borrowers at the official 28-days interbank rate plus 700 basis points. NAFIN also offers *pari passu* guarantees covering from 50 to 100 percent of loan loss (the latter only in disaster or emergency situations). The introduction of first-loss schemes and the auction has reduced the average public sector coverage of all guaranteed loan portfolios to below 40 percent.

To address the problem of SME lack of collateral, in addition to PCGs, many governments have reformed their secured transactions laws, collateral registries and enforcement mechanisms to optimize the use of movables as collateral. Secure transactions and credit registry (STCR) reforms allow for the introduction of asset-based lending and other lending products secured with movable assets. However, subsidized PCG programs reduce bank incentives to lend against movable assets, given the more favorable regulatory treatment of public guarantees for the purposes of capital allocation and provisioning, the uncertainty over collateral liquidation values and the uncertainty over the enforcement of the claim in cases of new and untested STCR systems.

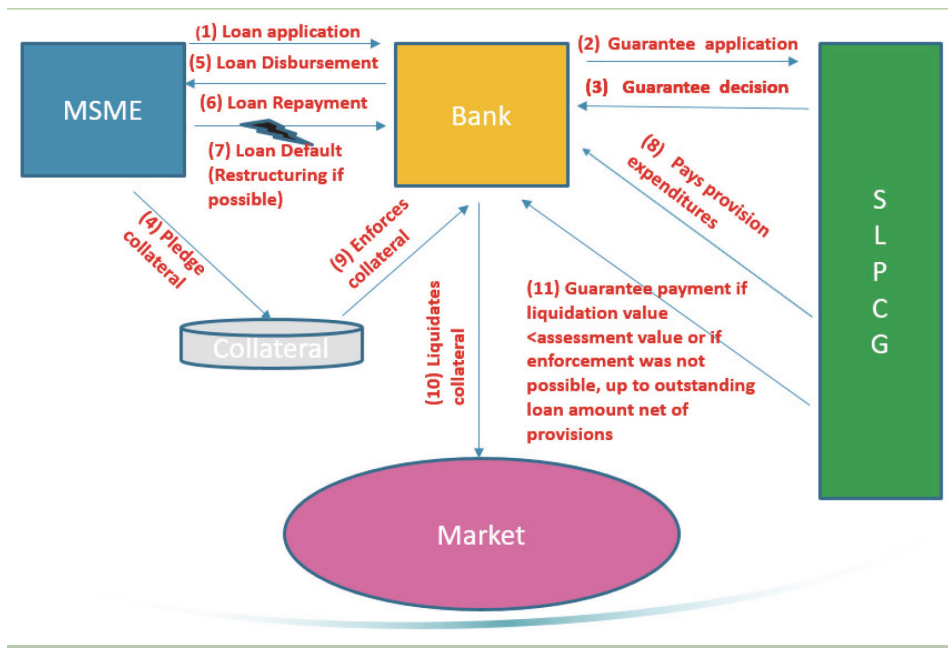
To help develop products based on lending against movable assets, the World Bank is discussing with PCG funds operating in Mexico and Colombia the introduction of a guarantee on the value of movable collateral, or Second Loss Partial Credit Guarantee (SLPCG).³⁵ Its second-loss nature derives from the fact that in case of default, the bank must first execute the collateral to recover the credit loss. The guarantee would cover the difference between the liquidation value of the collateral and its assessment value, up to an amount equal to the principal amount outstanding of the loan. In practice, the SLPCG covers 3 types of risk (i) risk that the collateral cannot be effectively repossessed due to failures in the enforcement system or (ii) inability to protect the priority of the claim on the collateral over third parties, and (iii) risk that the liquidation value of the collateral is well below the assessment value and does not cover the principal amount due. The guarantee would not cover differences between

³⁵ <https://www.worldbank.org/en/news/feature/2018/09/20/unlocking-the-potential-of-smes-with-an-innovative-risk-sharing-financing-solution>.

assessment and liquidation values resulting from fraud (i.e. in cases the collateral has disappeared or has been replaced with lower-value assets). A condition for applying a PGC is to have a sound, secured transactions framework, which should eliminate the first two risks so financial losses for the SLPCG scheme should be limited.

The SLPCG will help reduce the financial sector’s over-reliance on public-sector guarantees by creating a viable private-sector product that lowers banking risk with collateral, rather than with state funds. The end effect would be to free up public-sector guarantees for use with start-up SMEs, which have more limited movable assets. Furthermore, providing the collateral has some liquidation value, as capital allocated to this type of guarantee funds can support a substantially larger portfolio than standard guarantee funds.

SLPCG Decision Flow Chart



V. RETHINKING THE ROLE OF THE SME DEVELOPMENT INSTITUTIONS IN RUSSIA

State support to SMEs' access to finance takes different forms as Russia runs numerous programs to achieve that goal (see Table 1). While the Government is closely focusing on the SME segment and its access to finance, the schemes supporting it are neither unified, synchronized nor easily understood by the ultimate beneficiaries. Various subsidized lending programs targeting different MSME segments and sectors have been administered through the Ministry of Economic Development, the Ministry of Industry and Trade, the Ministry of Agriculture, the SME Bank and the Central Bank of Russia. The government has also set up a supporting infrastructure to facilitate access to finance, including a national guarantee system and a network of regional microfinance organizations and regional leasing companies. The National Guaranty System (NGS) facilitates provision of partial credit guarantees (50-75 percent of a loan amount) through a three-level system comprised of the SME Corporation, the SME Bank and regional guarantee organizations. The share of SME loans guaranteed under the NGS stood at 4.8 percent as of January 2018.³⁶ Regional microfinance organizations were set up with the support of public funds (from federal or regional budgets) to finance micro and small enterprises at the lower rates. Regional leasing companies were established jointly by the SME Corporation and regional governments to provide access to leasing on preferential terms.

While a number of institutions are involved in the provision of public support measures for SMEs, SME development institutions play a key role in facilitating access to finance. The SME Corporation and the SME Bank run guarantee and financing schemes for SME financiers such as banks, microfinance institutions, leasing and factoring companies. They also implement direct schemes for SMEs, such as direct lending by the SME Bank, guarantees for startups by the SME Corporation and an “investment lift” program for non-commodity exporters jointly implemented by the Industry Development Fund, SME Corporation, Russian Direct Investment Fund and Russian Export Center (see Table 1).

The SME Corporation focuses primarily on supporting the development of an ecosystem of non-commercial SME lenders as well as directly reducing risk in SME lending. One of its key functions is the provision of partial credit guarantees via a three-tiered national guarantee system, as

Table 1. SME Access to Finance Support Environment

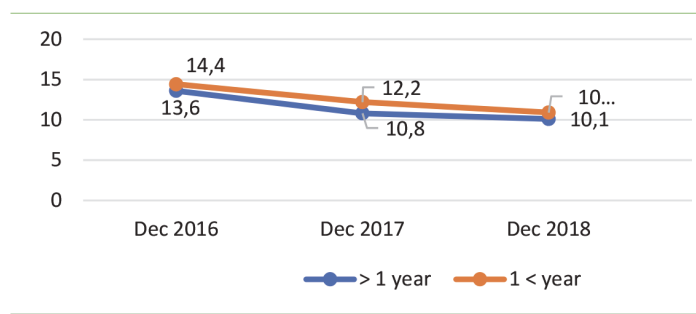
Institution/Scheme	Type of Intervention	Special conditions
Ministry of Economic Development	Interest rate subsidies to participating banks (70 banks as of March 1, 2019)	<ul style="list-style-type: none"> - % rate to SMEs: max 8.5% - % compensated to lenders: 1.5-3.5 % - Max loan term: 3 years (working capital); 10 years (investment) - min 10% of loans should be allocated to micro enterprises - focus on priority sectors and regions
Central Bank of Russia	Subsidized funding to participating banks (61 banks as of March 1, 2019)	<ul style="list-style-type: none"> - % rate to SMEs: 9.6 (priority sectors) -10.6% (other sectors) - min loan amount: RUB 3 million

³⁶ Accounts Chamber of the Russian Federation

Institution/Scheme	Type of Intervention	Special conditions
SME Corporation	Loan guarantee to SMEs	for loan amounts >RUB 25 million fee: 0.75 % p.a.
	Guarantee on asset-backed securities (single and multi-originator SME securitization)	
	Capitalization of regional leasing companies	RUB 1,5 billion capital injection per company
	Investment Lift Program	for non-commodity exporters; implemented jointly with the Industry Development Fund, Russian Direct Investment Fund and Russian Export Center
	Equity and debt financing via MIR direct investment fund (100% owned by SME Corporation)	Projects in innovative and high-tech industries; recipients of support from SME development institutions
SME Bank	Loan guarantee to SMEs	-Up to 70% of loan amount
	Loan co-guarantee (jointly with RGO)	- Guarantee fee: 1.5-1.8% p.a.
	Direct loans to SMEs	-See conditions under the Ministry of Economic Development scheme -For other programs loan terms depend on the target segment (residents of mono towns, woman entrepreneurs, gazelles, etc.) and purpose (investment, working capital): % rate range: 8.5-10.6% Loan amount: RUB 1-1,000 mln Max term: 3-7 years
	Loans/Credit lines to banks for on-lending to SMEs	% rate: 7.25% (end rate to the SME borrower capped at 10.25%) Max term: 7 years for banks with base license; 5 years for banks with universal license Max loan amount to SME borrower: RUB 500 mln
	Credit lines to leasing companies	% rate: 10.5% (end rate to SMEs capped at 12.6%) Max term: 7 years (2-7 years to SMEs) Max amount to SME borrower: RUB 500 mln
	Credit lines to microfinance companies	% rate: 8.2% (end rate to SMEs capped at 10.6-12.3% depending on the segment) Term: 3-5 years Max amount to SME borrower: RUB 3-15 mln
	Credit lines to banks and factoring companies	% rate: 8-10% (end to rate to SMEs capped at 12-15%) Max term: 12 months (8 months to SMEs) Max amount to SME: RUB 150-500 mln depending on program
	SME Securitization support, including multi-originator SME securitization	Refinancing of banks according to SME loan origination and servicing standards; transaction structuring; anchor investor

Institution/Scheme	Type of Intervention	Special conditions
Regional Guarantee Organizations (RGO)	Loan guarantee to SMEs	- fee: 0.5-1.00 % of the guarantee amount - up to 50% of bank loan or micro credit amount
Non-commercial Regional Microfinance Organizations (NcRMO)	Micro loans	Max % rate capped at CBR key rate Max loan term: 3 years Max loan amount: RUB 5 mln Activities limited to the region where the NcRMO is located
Regional Leasing Companies	Leasing to SMEs	- Individual entrepreneurs and small businesses - % rate: 6-8% - Max term: 7 years

Figure 12. Weighted average Rates on bank SME loans (%)



Source: Central Bank of Russia

well as the development and support of regional guarantee organizations. The latter can obtain a counter-guarantee from the SME Corporation for guarantees provided to SMEs (up to 50% of the loan amount). Alternatively, the SME Corporation can provide co-guarantees (up to 70% of the loan amount) or syndicated guarantees (up to 70% of the loan amount) together with regional guarantee organizations. In all cases, the beneficiary of the guarantee is the bank, which provides the SME lending. The SME Corporation also provides capital for the creation of regional leasing companies operating on a quasi-commercial basis. It directly takes SME risk on its balance sheet through the investments in equity and debt of SMEs (via its direct investment fund) as well as the provision of credit enhancement in securitization transactions.

Traditionally, the SME Bank provided subsidized lending to SMEs via commercial banks and non-bank credit institutions, but it is increasingly operating on a first-tier basis while extensively using guarantees issued by the SME Corporation. Recently, its business model has been evolving from a two-tier system towards direct lending to SMEs, leveraging a network of agents. While an attempt is being made to target the underserved segments (e.g. start-ups) or regions (e.g. the Far East, single-industry towns), there are some overlaps with products offered by commercial banks (i.e. working-capital loans). While the share of SME bank loans (RUB 23 billion)³⁷ in total loans provided by the

³⁷ In 2017.

banking sector to SMEs is still negligible (0.5 percent in 2017), by pursuing this approach, the SME Bank effectively enters into competition with commercial providers instead of fully focusing on the underserved segments and on more innovative products. Plans by the SME Bank and the SME Corporation to develop a loan product against intellectual property rights in 2019 is an example of such innovation. In 2019, the SME Bank plans to issue RUB 50 billion in direct loans to SMEs, more than doubling its first-tier portfolio. Half of this amount will be backed by partial credit guarantees from the SME Corporation. Given the role of the SME Corporation in the national guarantee system, its use of guarantees denotes a conflict between its mandates to reach underserved segments and to maintain financial sustainability.

Recently, the SME Bank and the SME Corporation have played a prominent role in developing markets for SME securitization in Russia. Both institutions have been instrumental in establishing SME loan standards, facilitating transactions, educating issuers and investors, setting up needed infrastructure and, most recently, launching a multi-originator SME loan securitization platform to enable smaller banks refinance their portfolios. The SME Bank acted as an arranger and placed bonds secured by a combined portfolio of SME loans originated by three banks, including from its own portfolio. The transaction benefited from a guarantee provided by the SME Corporation on a senior tranche, as well as a reserve fund in the form of a reserve credit line provided by the SME Bank. In addition, the securitized loans carried partial credit guarantees provided by the SME Bank or the SME Corporation at the loan level. Investors in a transaction included another development bank, VEB. While it was important to build credibility with the investors in the first transaction, the amount of public support could be reduced over time.

As Russian DFIs review their assessment of the key SME gaps to cover, their target segment and product mix should continue evolving and focus on certain types of SMEs and on SME access to finance, as opposed to subsidized lending. The DFI strategy is becoming more focused and targeted to underserved regions with difficult social and economic conditions and priority segments with innovative industries. They are also facilitating secondary market for SME loans or capital market access by SMEs. And yet, their additionality still could be enhanced. To ensure the efficiency of DFI operations, it is first necessary to periodically identify the type of SME funding needs to be addressed and the root cause of the problem, changing the product mix as necessary. In the aftermath of the oil price shock of 2014 and the ensuing financial instability in Russia, high interest rates and increased risk aversion hampered access to financing for all SMEs, including those with sound business plans and good credit histories. In these circumstances, the priority was on improving SME financial inclusion in the intensive margin (e.g. by lowering rates and extending maturities to firms that typically have access to credit). However, as interest rates decrease and financial-sector troubles are resolved, SME loan rates and maturities will either decline or increase and the focus should turn towards reaching the firms that have trouble getting credit at any term (i.e. financial inclusion in the extensive margin). While subsidized funding is attractive for financial intermediaries when interest rates are high, as interest rates decline, DFIs need to apply more innovative solutions such as the ones described in section IV. The provision of subsidized lending to certain segments can be justified in the presence of externalities, but it is important to ensure that subsidies are appropriately targeted and used sparingly, given their fiscal costs and distortionary effects. In Brazil, for example, the large amount of subsidized lending was found to hamper monetary policy transmission, resulting in higher and more volatile interest rates.³⁸

Globally, DFIs increasingly focus on improving their efficiency by supporting and developing new products that focus on mobilizing private-sector funding for SME financing. Russian SME DFIs are following this route as well, but incipiently. The USD 2 trillion SME funding gap identified around the world cannot be covered by DFIs alone. Hence DFIs are increasingly focusing on using their capital

³⁸ Bononono and Martins (2016).

and resources to facilitate the private sector funding of SMEs. To that end, institutions are developing their product range to include partial credit guarantees, credit enhancements on securities, or acting as an anchor investor for private equity funds. DFIs also invest in infrastructure to facilitate private sector funding of SMEs, as illustrated by the NAFIN factoring platform example. These solutions to bring in the private sector can be applied to improve access to finance of firms already receiving credit (e.g. credit enhancements on SME securities) or to facilitate access to credit to first-time borrowers or firms without any access to credit (e.g. credit guarantees targeting firms with credit rejections from financial institutions or firms without credit history). Efficient DFIs become innovation labs for testing and launching new products to the market, targeting those borrower groups that are excluded by the commercial banks and nonbank financial institutions.

When lending directly to MSMEs, Russian DFIs should examine where they are positioning themselves on the risk frontier, and price the risk appropriately. For the riskier segments, mobilizing private funding might not be feasible and DFIs may need to take the whole risk of the operation on their balance sheet. If this is the case, it is important to ensure the institution is really supporting firms that do not have access to finance and price the risk accordingly. In this way, the institution ensures it complements, as opposed to crowds out, other financial providers by offering subsidized funding. The Business Development Bank of Canada (BDC) provides an interesting example.

Box 9. The Business Development Bank of Canada (BDC): An Entrepreneur's Bank

BDC supports entrepreneurs through lending, venture capital and minority equity investment in established companies seeking expansion. When lending on the first tier, the BDC focuses on riskier SMEs that cannot get commercial loans. These are firms with viable business projects, but that may have no credit history or are venturing into new sectors in which there is not much experience of portfolio performance. The BDC provides loans to start-ups in their first 12 months of operation, unlike many commercial banks. Their loans are more expensive than the market rates for SMEs, given the higher credit risk of their borrowers. The BDC has a higher ratio of non-performing SME loans than Canadian commercial banks, but the higher interest rate charged ensures the BDC financial sustainability. Lending at higher rates ensures the bank positions itself within the bounds of the risk frontier and complements, instead of crowding out, commercial lenders. SMEs have incentives to exit BDC facilities as soon as they can obtain loans from private banks, given its higher rates. As firms mature, the BDC does not aim to retain them as customers, but instead remains focused on riskier segments. The bank also participates on syndicated loans to mid-sized firms and provides wholesale funds to financial intermediaries operating in the SME space.

The BDC has also a network of business consultants that provide advisory services to SMEs on a fee basis if the firm chooses to pair consulting with finance. An impact evaluation study showed that SMEs receiving both financing and consulting services financially outperformed those that received financing alone and had a better loan repayment performance.

The review of experiences of successful DFIs underlines the importance of imbedding the concept of additionality into DFI mandates and operations. Additionality refers to the positive impact derived from a DFI's intervention that would have not occurred in its absence. Economic additionality refers to the positive effects of publicly supported credit programs on economic variables such as employment or growth. Financial additionality refers to the financing provided (or leveraged) by DFIs to firms that otherwise would not have been served by the private sector. Financial additionality will only result in economic additionality if firms that received funding are credit-constrained and cannot access resources elsewhere. To ensure additionality, successful DFIs adopt different strategies. These include: (1) having an appropriate mandate that emphasizes the need for mobilizing and complementing commercial investors, while focusing on the identified underserved segments that underpin the

rationale for developmental operations. For example, Financiera de Desarrollo Nacional de Colombia (FDN), an infrastructure bank, has a mission, a vision and a value proposition guiding its operations. The latter focuses on mobilizing private sector resources through advisory and innovative financial products; (2) establishing eligibility criteria for developmental programs to ensure additionality. For example, following World Bank recommendations, BNDES reviewed the operational guidance for their programs in 2018 to ensure that credit was directed to credit-constrained firms; (3) designing appropriate instruments to leverage private-sector funding, including supporting the development of an ecosystem of credit providers that operate on a commercial basis and of instruments for risk-sharing with the private sector. As capital markets develop, the mix of instruments typically needs to change from provision of long-term funding to direct risk absorption or mitigation. Mexican DFIs support the development of commercially oriented MSME providers through advice and funding and have a wide range of products to share risks.

An effective monitoring and evaluation (M&E) framework to assess the economic impact of the operations of DFIs is key to ensuring institutional effectiveness in achieving its developmental goals.

While for commercially oriented banks, monitoring financial indicators provides a sense of the effectiveness and efficiency of operations, in the case of DFIs it is necessary to assess the achievement of their developmental goals. M&E systems enhance accountability on the use for public resources and incentives to improve operational efficiency. Measuring DFI's performance by looking at the resources intermediated or clients served provides incentives to grow the portfolio and compete with private providers, as opposed to address market failures and cater to underserved segments.

Ultimately, M&E systems for DFIs and public-support programs should aim to measure additionality.

Measuring the economic additionality of developmental operations involves evaluating the impact of their programs on the economic performance of program beneficiaries in relation to the performance of non-beneficiaries of similar characteristics. The gold standard to measure additionality involves "randomized control trials" (RCTs), in which individuals or firms of similar characteristics are randomly granted or denied access to the program (e.g. credit etc.) and economic results in both groups are later compared. The rejected subjects comprise the control group.³⁹ However, RCTs are rare, given that many DFIs cannot refuse providing service to qualified beneficiaries. Quasi-randomized control trials (QRCTs) techniques involve constructing a synthetic control group of non-beneficiaries with similar characteristics. Control groups can be created by exploiting information on administrative data sets (e.g. propensity score matching), subjects that barely missed qualifying for access to the program (e.g. discontinuity regressions) or changes in program characteristics (e.g. natural experiments).

Currently, monitoring and evaluation of the SME public support programs in Russia is rather fragmented and mostly oriented towards tracking pre-set quantitative indicators, without assessing macro and micro economic impacts and qualitative aspects.

For example, the SME Corporation annually produces reports assessing the state of SME development and the results of the public support measures. While it provides assessment of developments in both policy inputs (e.g. amount of loan guarantees) and intermediate outcomes (e.g. number of firms having received loan guarantees), it lacks evaluation of policy outcomes (e.g. new employment created as a result of loan guarantees). The Russian Audit Chamber periodically reviews the results of the public support measures for SMEs, with an overall assessment of results as mixed, since some intermediate outcomes (e.g. overall increase in lending volumes to SMEs) are not being achieved, or there is a lack of evaluation of the impact on employment created and a lack of assessment in the changes in the contribution of SMEs to the GDP or to the gross regional product. So, the clear objective of the eval-

³⁹ Techniques used to assess additionality assume that the developmental activities of the SOFI do not create effects that affect non-beneficiaries, which may not be the case if the programs are large.

uation should include both assessing financial additionality (e.g. incremental credit flows to SMEs and/or improvements in terms and conditions) and economic additionality (e.g. effects on variables such as employment, turnover, sales and probability of default, which might have been influenced causally by the public support measures).

Comprehensive M&E systems include the monitoring of key performance indicators (KPIs) as well as programs to conduct rigorous impact-evaluation studies of DFI main programs. In addition to financial indicators and indicators of operational efficiency, KPIs include outputs (e.g. clients in certain segments, loans disbursed), as well as outcome indicators (e.g. jobs created or maintained or increase in sales thanks to the financial support provided). KPIs can provide a view of the contribution of DFI operations to attain economic outcomes (e.g. increase exports or employment), and can attribute such outcomes to DFI operations (i.e. assess the additionality of DFI operations). Rigorous impact-evaluation studies (using RCTs, quasi RCTs or other appropriate econometric techniques discussed above) are necessary. KPIs are also useful to monitor financial inclusion objectives (i.e. clients accessing formal financial services for the first time) or intermediate outcomes (e.g. private funding mobilized using public resources allocated to DFIs).

M&E systems should be imbedded in the decision-making process. Monitoring and evaluation systems provide management with invaluable information on the performance of the institution and on what is working and what is not. Such information should be used to adapt and or eliminate programs and products, as required. For example, new products should be piloted and evaluated and adapted as necessary before scaling them up. Information obtained from M&E systems should be used to adapt program features (e.g. changing target groups to ensure they address financially excluded firms/individuals) or even eliminate poorly performing programs.

International research suggests that studies on the effectiveness of subsidies commissioned by the agencies that administered the subsidies tend to produce more favorable results than studies conducted independently by outside organizations or research institutes.⁴⁰ To that extent, it is advisable to consider employing practices that can help minimize any potential bias toward positive outcomes in self-assessments. To the extent that the DFIs are involved in the assessment, a robust governance framework also helps to limit potential bias. This framework might involve appropriate “Chinese walls” separating evaluators from the operational arm. One way is to have an M&E department report directly to the board of the institution, as the internal audit committee does. At the same time, a self-assessment aimed at benchmarking the existing public support scheme (e.g. a partial credit guarantee scheme) against the international best practice could be carried over, following the established framework, such as, for example, the principles for public credit guarantee schemes for SMEs (see Box 10)⁴¹.

⁴⁰ OECD (2017), «Evaluating Publicly Supported Credit Guarantee Programs for SMEs»

⁴¹ World Bank. 2015. Principles for public credit guarantee schemes for SMEs. Washington, D.C. : World Bank Group.

Box 10. Principles for Public Credit Guarantee Schemes for SMEs

Principle 1

The CGS should be established as an independent legal entity on the basis of a sound and clearly defined legal and regulatory framework to support the effective implementation of the CGS's operations and the achievement of its policy objectives.

Principle 2

The CGS should have adequate funding to achieve its policy objectives, and the sources of funding, including any reliance on explicit and implicit subsidies, should be transparent and publicly disclosed.

Principle 3

The legal and regulatory framework should promote mixed ownership of the CGS, ensuring equitable treatment of minority shareholders.

Principle 4

The CGS should be independently and effectively supervised on the basis of risk-proportionate regulation scaled by the products and services offered.

Principle 5

The CGS should have a clearly defined mandate supported by strategies and operational goals consistent with policy objectives.

Principle 6

The CGS should have a sound corporate governance structure with an independent and competent board of directors appointed according to clearly defined criteria.

Principle 7

The CGS should have a sound internal control framework to safeguard the integrity and efficiency of its governance and operations.

Principle 8

The CGS should have an effective and comprehensive enterprise risk-management framework that identifies, assesses, and manages the risks related to CGS operations.

Principle 9

The CGS should adopt clearly defined and transparent eligibility and qualification criteria for SMEs, lenders, and credit instruments.

Principle 10

The CGS's guarantee delivery approach should appropriately reflect a trade-off between outreach, additionality, and financial sustainability, taking into account the level of financial sector development of the country.

Principle 11

The guarantees issued by the CGS should be partial, thus providing the right incentives for SME borrowers and lenders. They should be designed to ensure compliance with the relevant prudential requirements for lenders, in particular with capital requirements for credit risk.

Principle 12

The CGS should adopt a transparent and consistent risk-based pricing policy to ensure that the guarantee program is financially sustainable and attractive for both SMEs and lenders.

Principle 13

The claim management process should be efficient, clearly documented, and transparent, providing incentives for loan-loss recovery, and should align with the home country's legal and regulatory framework.

Principle 14

The CGS should be subject to rigorous financial reporting requirements and should have its financial statements audited externally.

Principle 15

The CGS should periodically and publicly disclose non-financial information related to its operations.

Principle 16

The performance of the CGS – in particular its outreach, additionality, and financial sustainability – should be systematically and periodically evaluated, and the findings from the evaluation publicly disclosed.

VI. CONCLUSIONS

The development of the small and medium size enterprise (SME) sector in Russia is a priority of the Russian government, which emphasizes the need for improving SME access to finance, along with other factors critical to SME growth. SMEs account for 22 percent of Russia's GDP and 25 percent of total employment; though their numbers have been growing, their contribution to the economy is still considerably lower than in other countries. The SME Development Strategy through 2030 and the National Project on SME and Individual Entrepreneurship Support set targets to improve SME access to finance and contribution to GDP through regulatory improvements to the legal and institutional frameworks supporting SME operations and developing financial and non-financial programs targeting the sector.

Schemes supporting SME access to finance in Russia are heavily focused on the provision of subsidized lending and the creation of state-owned, non-commercial financial providers. The main public programs to support access to finance focus on the provision of subsidized funding to SMEs, and the creation of an ecosystem of state-owned leasing and microfinance companies offering their products at largely subsidized rates. While many governments use subsidized loans to ease SME access to credit, this policy instrument should be used selectively due to its distortionary effects. Subsidized lending should be targeted to those SMEs who otherwise cannot get finance to provide additionality. In many instances, the issue is not the cost at which firms can get credit, but their lack of access to credit at any rate due to their lack of collateral.

To expand outreach and avoid crowding out the private sector, state-owned MFOs and leasing companies could increase their commercial orientation and tap capital markets through securitization. While the state-owned MFO emphasis on supporting entrepreneurship is appropriate, it is important to ensure that subsidies are targeted to entrepreneurial activities with larger externalities (e.g. in lagging regions with higher unemployment rates, for example). In most instances, the problems for MSMEs and entrepreneurs is not the interest rate but the access. Public non-profit institutions could move more towards rates that appropriately price the risk of the loan to avoid reliance on subsidies, while providing more flexible terms regarding repayment profiles and/or collateral. Transformation into more commercial activities would also create a level playing field that could facilitate the entrance of private-sector providers. Securitization of commercial microloans and leases could provide funding for MFOs and leasing companies, supporting their growth without reliance on public sector funding. Support for such securitization could be provided by the SME Corporation and the SME bank, similarly to what has been done to develop securitizations of bank SME loans.

Technology offers new solutions to facilitate access to funding. Governments around the world are exploiting those opportunities by supporting the fintech industry through conducive regulation, supporting digital adoption and providing new types of infrastructure. Fintech firms can improve access to finance by exploiting technology to improve risk allocation and mitigation. Financial regulators, including in Russia, are implementing regulatory frameworks to support the industry's development. They are also certifying fintech providers of SME credit ratings that exploit big data and machine learning techniques to introduce alternative methods of SME credit-risk assessments.

DFIs in upper-middle and high-income countries are increasingly focusing on supporting the development of an ecosystem of commercial SME providers and market creation, including through the provision of infrastructure and technical assistance to mobilize private sector finance. The USD 2 trillion SME funding gap identified around the world cannot be covered by DFIs alone. Hence DFIs are increasingly focusing on using their capital and resources to facilitate private-sector funding

of SMEs. To that end, institutions are increasing their focus on risk-sharing products and developing the ecosystem of financial sector providers. Examples of such interventions globally include DFIs provision of funding and capital investments to crowdfunding platforms, the NAFIN electronic factoring platform or the infrastructure developed by KDI to support IP lending, and the FND technical assistance program to financial intermediaries.

More recently, policy initiatives in Russia have begun focusing on supporting the creation of new markets to mobilize private sector funding of SMEs. This is a positive development that may over time reduce reliance on subsidized lending, but more could be done. Examples of this policy orientation include regulatory efforts to support the fintech ecosystem, development of the multi-originator SME securitization platform with the support of the SME Corporation and the SME Bank, and the envisioned creation of an electronic factoring platform. These innovative financial solutions can help reduce risks associated with SME lending and allocate these risks to investors with a higher risk appetite. While many governments use subsidized loans to ease SME access to credit, this policy instrument should be used selectively due to its distortionary effects. To provide additionality, subsidized lending should be targeted to those SMEs that otherwise cannot get financing. In many instances, the issue is not the cost at which firms can get credit but the lack of access to credit at any rate due to lack of collateral.

Russian DFIs could improve their effectiveness by adopting some best international practices, including (i) imbedding the concept of additionality in their mandate and operations (ii) appropriate risk pricing, and (iii) comprehensive M&E systems. To ensure additionality, successful DFIs should adopt different strategies including: (1) having an appropriate mandate that emphasizes the need for mobilizing and complementing commercial investors, while focusing on the identified underserved segments that underpin the rationale for developmental operations; (2) establishing eligibility criteria for developmental programs to ensure additionality; and (3) designing appropriate instruments to leverage private sector funding. Appropriate risk pricing is essential to ensure financial sustainability, particularly when the institution positions itself in the risk frontier to ensure additionality. A comprehensive M&E framework to assess the economic impact of the operations of DFIs is key to ensure institutional effectiveness. Measuring DFIs' performance by looking at resources intermediated or clients served provides incentives to grow the portfolio and compete with private providers, as opposed to addressing market failures and catering to underserved segments. M&E systems should be imbedded in the decision-making process to ensure ineffective programs are discontinued, ensuring that M&E units are operationally independent.

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