Two trillion and counting

Assessing the credit gap for micro, small, and medium-size enterprises in the developing world

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The importance of MSMEs to economic development and job creation is increasingly recognized, as suggested by the scale and scope of government interventions designed to encourage them. For instance, in 1976, South Korea developed the Korea Guarantee Scheme (KODIT) to extend credit guarantees to support lending to SMEs that would otherwise go unserved. It has scaled up the effort significantly in the last 35 years, to the point that, during the recent financial crisis, outstanding guarantees reached approximately 4 percent of South Korea’s GDP. The list of countries that scaled up or introduced new guarantee schemes during the last financial crisis includes Canada, Chile, Germany, the Netherlands and Malaysia. Guarantee schemes are, however, just one of a number of common policy interventions. Other interventions include regulatory and legal steps such as increasing SMEs’ access to collateral by reducing barriers to property registry or reducing enforcement costs for lenders and other steps related to improving the amount and quality of financial information about SMEs—for example, by developing credit bureaus. These types of interventions have been common in developed countries for several decades. Governments in developing countries are increasingly implementing them, too.

Nevertheless, the total unmet need for credit by all formal and informal MSMEs in emerging markets today is in the range of $2.1 trillion to $2.5 trillion. In fact, of the estimated 365 million to 445 million formal and informal MSMEs in the developing world, approximately 70 percent do not use external financing from financial institutions, although they are in need of it. Another 15 percent or so are underfinanced. To put this in context, the gap is equivalent to approximately 14 percent of total developing countries’ GDP and to about one-third of the current total credit outstanding to MSMEs in emerging markets globally. Exhibit 1 maps MSMEs’ access to finance worldwide.

Micro, small, and medium-size enterprises (MSMEs—enterprises that typically have fewer than 250 employees) contribute significantly to economic development. This is particularly evident in developing countries, where formal MSMEs represent approximately 45 percent of employment and approximately 33 percent of GDP. This contribution to economic development is even greater when informal MSMEs—that is, enterprises that are not formally registered—are included.

Exhibit 1 maps MSMEs’ access to finance worldwide.

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1 Excluding farms and including nonemployer firms (i.e., firms that do not have paid employees and are operated by their owners). Throughout the paper, nonemployer firms are grouped with informal enterprises.
3 Including high-income countries, there are approximately 420 million to 510 million MSMEs and the estimated financing gap is $3.1 trillion to $3.8 trillion.
4 In this article, the value of the credit gap is defined as all formal financing that would be classified as debt on a company’s balance sheet. This could include loans, overdrafts, trade financing, leasing, and factoring. When the article describes the number and percentage of enterprises with or without use of formal credit, these numbers are estimated using data on use of loans and/or overdrafts from financial institutions, not measuring separately for other forms of formal debt financing such as trade finance, leasing, or factoring. The different definitions are due to differences among sources. We assume that enterprises that are not able to get a loan or overdraft from a financial institution also currently lack access to other forms of formal financing.
5 Summing single regions here and throughout may not equal overall totals due to rounding.
To help spur greater support for MSME finance, the G-20 announced the formation of the Financial Inclusion Experts Group (FIEG) in September 2009. The FIEG focuses on developing recommendations for public-, private-, and social-sector actors that will promote access to finance. The effort is significantly focused on MSMEs in developing countries.

We believe the “credit gap” can be substantially closed, but it will require significant effort from both governments and private institutions. Governments will need to create the enabling environments and financial infrastructure. Private firms will need to identify economically sustainable approaches to serving MSMEs. Private institutions that implement sound business models will be able to earn billions of dollars in incremental revenues per year, while also contributing significantly to economic development and job creation.

However, a business cannot serve a market it does not understand. The primary goal of this article is to offer what we believe is the first comprehensive assessment of the global MSME credit gap, including key insights regarding the somewhat bifurcated nature of the challenge that the MSME credit gap represents.
We also offer some implications for public- and private-sector actors as they seek to close that gap.

**Measuring the gap**

MSMEs are not a monolithic group: the categories within them have different needs and face diverse challenges. MSMEs are also not distributed evenly across regions: each market presents a different MSME profile. Understanding the different ways in which this large portion of the global economy is segmented is fundamental to helping these enterprises meet their financing needs.

As noted above, of the estimated 365 million to 445 million enterprises in emerging markets, approximately 85 percent suffer from credit constraints. Only 15 percent can either fully access the credit they need or do not need it because they are able to finance themselves through internal capital or informal sources of finance. The estimated 310 million to 380 million enterprises that do need credit require an additional $2.1 trillion to $2.5 trillion to fully meet their financing needs. And approximately 70 percent of all emerging-market MSMEs (roughly 255 million to 310 million enterprises) do not use any formal credit at all (that is, neither overdrafts nor bank loans) and want it.

Within these numbers, however, there are significant distinctions to be made.

First, significant variation exists among regions. Latin America has the highest percentage of MSMEs with access to finance (approximately 60 percent), followed by Central Asia and Eastern Europe (approximately 45 percent). By contrast, more than 85 percent of MSMEs in East Asia, South Asia, and Sub-Saharan Africa are unserved or underserved. In terms of the size of the credit gap, approximately 45 percent ($900 billion to $1.1 trillion) is in East Asia, more than six times that of Sub-Saharan Africa and more than five times that in Middle East and North Africa (MENA) countries.

Though the financing gaps in Sub-Saharan Africa, MENA, and Latin America are not the largest in absolute terms, they are the largest in relative terms—the gap represents between almost one and a little more than four times current outstanding credit to MSMEs in these three regions.

Second, of the total estimated 365 million to 445 million formal and informal MSMEs in developing countries, only 25 million to 30 million are formal SMEs (that is, they have 5 to 250 employees). That is, less than 10 percent of all enterprises are formal SMEs, while more than 90 percent are micro or informal enterprises (formal enterprises with fewer than 5 employees or enterprises that are not formally registered).

Not surprisingly, the value of the credit gap is not divided proportionally between these two groups: the formal SMEs account for between $700 billion and $850 billion, approximately 35 percent of the total gap in the developing world, though they represent less than 10 percent of the number of MSMEs. Exhibit 2 displays the relationship between the number of MSMEs in emerging markets and the size of the credit gap by size of enterprise and formality.

Formal SMEs are also better served by financial institutions. Whereas more than 85 percent of micro and informal enterprises are unserved or underserved, for SMEs the figure is approximately 70 percent, and for medium-size enterprises (50 to 250 employees) it is approximately 60 percent. Looking exclusively at the unserved, the differences are greater still: approximately 70 percent of micro and informal enterprises are fully unserved, versus only about 50 percent of SMEs and just about 20 percent

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6 Measured as those enterprises without any use of overdrafts or loans from financial institutions.
Exhibit 2

Number of MSMEs and value of MSMEs’ credit gap in emerging markets by segment

**Number of enterprises by segment and formality in emerging markets**

<table>
<thead>
<tr>
<th>Millions</th>
<th>Formal SMEs¹</th>
<th>Formal micro enterprises²</th>
<th>Informal enterprises and nonemployer firms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-10</td>
<td>17-21</td>
<td>0.7-0.8</td>
<td>~0.3</td>
<td></td>
</tr>
<tr>
<td>12-16</td>
<td>65-73</td>
<td>1.1-1.4</td>
<td>2.1-2.5</td>
<td></td>
</tr>
</tbody>
</table>

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<th>Millions</th>
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<td>12-16</td>
<td>65-73</td>
<td>1.1-1.4</td>
<td>2.1-2.5</td>
<td></td>
</tr>
</tbody>
</table>

¹ Registered enterprises, with 5 or more employees
² Registered enterprises with 1-4 employees

Exhibit 3

MSMEs’ use of financial-institution loans or overdrafts and financing constraints

% of total enterprises in emerging markets (i.e., excluding high-income OECD)

<table>
<thead>
<tr>
<th></th>
<th>Have a loan and/or overdraft and no financing constraints</th>
<th>Have a loan and/or overdraft but face financing constraints</th>
<th>Do not have a loan or overdraft but need credit</th>
<th>Do not need credit</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal SMEs in emerging markets</td>
<td>8-10</td>
<td>21-24</td>
<td>45-55</td>
<td>16-20</td>
<td>25mn-30mn</td>
</tr>
<tr>
<td>Formal micro enterprises in emerging markets</td>
<td>8-10</td>
<td>17-21</td>
<td>46-55</td>
<td>20-24</td>
<td>55mn-70mn</td>
</tr>
<tr>
<td>Informal MSMEs and nonemployer firms in emerging markets</td>
<td>12-16</td>
<td>70-78</td>
<td>7-9</td>
<td>285mn-345mn</td>
<td></td>
</tr>
<tr>
<td>Total MSMEs in emerging markets</td>
<td>13-17</td>
<td>65-73</td>
<td>10-12</td>
<td>365mn-445mn</td>
<td></td>
</tr>
</tbody>
</table>

¹ The number of MSMEs unserved or underserved is calculated based on MSMEs’ access to bank loans and overdrafts (i.e., not including MSMEs’ access to trade financing, leasing, factoring, and other forms of credit). However, the value of the credit gap in dollars takes into consideration credit available through loans, overdrafts, leasing, factoring, trade finance and other forms of formal credit.

of medium enterprises. Exhibit 3 sets out emerging-market MSMEs’ use (and lack of use) of loan and overdraft services.

Although still challenging, closing the gap for formal SMEs will be less complex than serving the needs of formal micro and informal enterprises, especially those beyond urban centers. The following sections discuss in more detail the different challenges inherent in financing these two groups.
Formal SMEs: How to lever existing banking relationships?

Approximately 70 to 76 percent of all SMEs in emerging markets already have a bank account, including 75 to 80 percent of SMEs that have no formal credit (that is, those within the unserved segment). In fact, 80 to 88 percent of the value of the credit gap for formal SMEs in emerging markets (that is, roughly $600 billion to $730 billion out of $700 billion to $850 billion) comes from SMEs with a bank account.

Once again, however, large differences exist among regions. For instance, the credit gap in East Asia ($250 billion to $310 billion) is almost tenfold that in South Asia ($30 billion to $40 billion). Regional differences are driven, among other things, by how many enterprises are formal (including matters of different definitions among countries) and the economic structure in each country and region. The much smaller value of the credit gap for formal SMEs in South Asia can be explained in large part by the much higher level of informality (for example, only about 7 percent of all Indian employment is in the formal sector7) and lower revenue per enterprise. Exhibit 4 makes the relevant regional comparisons.

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Just as the SME credit gap varies across regions, so too does the level of underfinancing as a percentage of current outstanding credit. The overall formal SME gap is $700 billion to $850 billion, or 21 to 26 percent of current outstanding SME credit. But closing the financing gap among Sub-Saharan African SMEs would require an increase of 300 to 360 percent over their current outstanding credit, while the corresponding figure in East Asia is just about 11 to 14 percent. Exhibit 5 offers details on each region.

Although they are better served than MSMEs, formal SMEs have significant unmet credit needs. The barriers to meeting these are driven by weaknesses in the enabling environment (such as the regulatory environment for financial institutions and enterprises’ ability to collateralize assets), limited current financial infrastructure, and banks’ capacity and capability in working effectively with formal SMEs. As noted, however, a significant majority already has a bank account—and thus a functioning relationship with a financial institution that can be built upon. Leveraging these relationships will be the key to addressing the SME challenge.

Micro and informal enterprises: How to adapt and innovate?

In emerging markets micro and informal enterprises’ collective financing need is close to double that for formal SMEs—the credit gap for micro and all informal enterprises is $1.4 trillion to $1.7 trillion. However, this need is split among approximately nine times as many much smaller enterprises (340 million to 415 million).

While it is more difficult to make determinations about regional variability than it is for formal SMEs, due to data limitations and definitional differences, there are a few distinctions among regions that can be made and that are worth noting. The credit gap among micro and informal enterprises in South Asia

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**Exhibit 5**

Credit gap relative to current outstanding SME credit

<table>
<thead>
<tr>
<th>Region</th>
<th>Total formal SME outstanding credit $ bn</th>
<th>Formal SME credit gap $ bn</th>
<th>Gap as percentage of current outstanding SME credit %</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Asia</td>
<td>2,000-2,500</td>
<td>250-310</td>
<td>11%-14%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>25-30</td>
<td>80-100</td>
<td>300%-360%</td>
</tr>
<tr>
<td>Latin America</td>
<td>180-230</td>
<td>125-155</td>
<td>60%-75%</td>
</tr>
<tr>
<td>Central Asia and Eastern Europe</td>
<td>600-700</td>
<td>105-130</td>
<td>16%-20%</td>
</tr>
<tr>
<td>South Asia</td>
<td>95-115</td>
<td>30-40</td>
<td>29%-35%</td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>80-100</td>
<td>110-140</td>
<td>125%-150%</td>
</tr>
<tr>
<td>High-income OECD</td>
<td>11,000-13,500</td>
<td>800-700</td>
<td>5%-6%</td>
</tr>
<tr>
<td>Total</td>
<td>14,000-17,000</td>
<td>1,300-1,600</td>
<td>8%-10%</td>
</tr>
<tr>
<td>Total excluding high-income OECD</td>
<td>3,000-3,700</td>
<td>700-850</td>
<td>21%-26%</td>
</tr>
</tbody>
</table>
is approximately $280 billion to $340 billion, making it the region with the second largest financing gap for these enterprises after East Asia (approximately $650 billion to $800 billion). Indeed, roughly two-thirds of the total financing gap in emerging markets for micro and informal enterprises is in East and South Asia. This stands in contrast to the gap for formal SMEs, where less than 40 percent of the total emerging-markets gap is in East and South Asia. As a proportion of current outstanding credit, the biggest gaps for micro and informal enterprises are—similar to the situation for all MSMEs—in Sub-Saharan Africa, MENA, and Latin America.

Micro and informal enterprises are hard to serve. They are less likely than formal SMEs to have a preexisting banking relationship, the revenue potential per enterprise for a financial institution is much lower because of these enterprises’ smaller size, and these enterprises are more likely to be located in rural or otherwise hard-to-serve areas. Their lack of formal records or proximity to financial institutions also makes them more expensive to serve than larger, more formal enterprises. The challenge for governments is to find ways to help informal enterprises adapt and become formal enterprises, and private-sector institutions need to figure out how to innovate business models to serve these enterprises sustainably.

Lack of credit is only one of several constraints on enterprises’ growth

The problem of credit is significant. Unfortunately, it is not the only challenge. There are significant nonfinancial barriers that also constrain MSMEs’ growth. Some of the major nonfinancial obstacles identified by MSMEs are infrastructure-related (for example, lack of electricity), regulatory, tax-structure-related, and corruption-related. These nonfinancial barriers are particularly challenging in many developing countries, and are often strongly correlated with the ability of MSMEs to obtain financing. For example, improvements in physical infrastructure typically generate significant productivity gains and improve the prospects for higher rates of returns, thus facilitating access to a wider range of financial services.

MSMEs also need financial services beyond credit, whether these are transaction accounts, insurance, payments services, or other products and services. Indeed, the potential deposits of MSMEs in emerging markets without bank accounts represent many billions of dollars.

Equity finance is also particularly important for small businesses, especially early in their life cycle when cash flow is irregular and bank debt is hard to come by. Although there are a few specialized private equity firms that invest in SMEs in emerging markets (with positive development outcomes and financial returns), equity financing is still very limited. Even well-established and successful SMEs face a number of challenges when trying to access capital markets.

Nevertheless, credit from banks remains the most important source of formal external financing (debt or equity) for most formal SMEs. For example, recent analysis of the World Bank’s and IFC’s Enterprise Surveys data found that financing from banks accounts for approximately 50 to 70 percent of the external financing used to fund MSMEs’ investments in growth.

Exhibit 6 provides a conceptual map of today’s MSME financing landscape. The options currently available to the smallest enterprises are not nearly as comprehensive as those for larger enterprises.
What is to be done?

As noted, the primary purpose of this paper is to paint a picture of facts whose details have largely been a blur up until now. The presentation of solutions, here a secondary aim, is dealt with in far greater detail in a forthcoming report by IFC prepared for the G-20 Financial Inclusion Experts Group, “Scaling up SME Access to Financial Services in the Developing World.” Nevertheless, it is worth summarizing the types of actions that would have to be taken by institutions from both the public sector and the private sector if the approximately $2.1 trillion to $2.5 trillion MSME credit gap in emerging markets is to be closed.

At least three key issues should be addressed: the creation of a more supportive enabling environment to promote MSME finance, the need for an improved financial infrastructure, and the kinds of efforts private-sector institutions will have to make to meet these enterprises’ needs in economically sustainable ways.

As regards the enabling environment, governments might analyze regulatory levers that would decrease barriers to serving MSMEs and create incentives for private players to extend their reach to these new markets. The annual Doing Business reports, published by the World Bank Group, highlight elements of a legal and regulatory framework that encourages lending by financial institutions to the private sector. Key elements include securing creditors’ rights by allowing out-of-court enforcement of security rights and protecting secured creditors during insolvency processes. In addition, governments should continue to encourage and make it easier for small, informal enterprises to become formal, making it much easier in turn for formal financial institutions to serve them.  

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8 “Supporting business environment reforms: Practical guidance for development agencies,” the Donor Committee for Enterprise Development, 2008. This document provides a wide range of examples of reforms that can improve the business environment in developing countries.
Financial infrastructure includes accounting and auditing standards, credit reporting systems (credit registries and bureaus), collateral and insolvency regimes, and a well-functioning payments and settlement system. Improvements in financial infrastructure reduce the opacity and legal uncertainties that increase lenders’ risk and thus constrain the supply of finance.

The actions private-sector institutions can take in closing the gap for formal SMEs and for formal micro and informal enterprises will differ.

As noted, formal SMEs tend already to have bank accounts. This relationship is a rich data source. The approximately 25 million to 30 million formal SMEs that represent between $700 billion and $850 billion of the credit gap offer significant opportunities for banks. To close this gap, financial institutions will largely need to strengthen and optimize their current business models.

Serving the smaller, more rural, often informal MSMEs may require significant innovation to existing business models. There is a large commercial opportunity associated with providing financial services to these enterprises, but it will be captured only if private-sector institutions identify economically sustainable ways to serve these clients, the vast majority of which are either formal micro enterprises with no current financial-services relationship or informal enterprises. In both cases, as noted, the enterprises tend to have a much lower revenue potential per enterprise than formal SMEs and higher costs to serve because they are less likely to have good records and more likely to be located in hard-to-reach rural areas. Business model innovation by private-sector institutions, as well as public-sector initiatives to increase the formalization of informal enterprises, will be the key drivers of increased access to finance for micro and informal enterprises.

There is research to draw upon that suggests that financial institutions can serve MSMEs in a manner that is sustainable for both lender and borrower. The SME Banking Knowledge Guide, published by IFC in 2009 and based on IFC’s experience with its investees and advisory clients around the world, details the key success factors for profitable MSME banking operations. Those factors are grouped into five areas: strategy and execution capabilities; market segmentation, products, and services; sales culture and delivery channels; credit risk management; and IT and MIS (management information systems).

Whether it is a matter of improving the enabling environment, building the necessary financial infrastructure, or scaling up business model adaptation and innovation, the challenges to closing the credit gap are significant. However, experience suggests that the gap can be substantially addressed. Given the key role MSMEs play in the global economy and particularly in developing countries, doing so would contribute significantly to economic development and job creation.
Note on methodology and approach

This article is the result of a joint effort of IFC and McKinsey & Company to size the MSME credit gap. It draws on existing data including local government sources, literature reviews, and the research and insights of IFC and McKinsey colleagues. The major sources utilized are the World Bank’s and IFC’s Enterprise Surveys, used to assess the percentage of MSMEs with access to finance and their potential financing needs, IFC’s MSME Database, used to estimate the number of formal MSMEs, and McKinsey’s proprietary knowledge and data to fill in gaps around the world.

One of the major conclusions to be drawn from this effort is the need for much more and much more consistent underlying data on the number of MSMEs, their current use of financial services, and their unmet demand. An effort such as this faces a number of data-driven limitations: the lack of harmonized definitions across countries (for example, definitions of formal SMEs); the uneven quantity of data available among countries (for example, very limited data available for Sub-Saharan Africa); and very limited available data covering some areas of the analysis (for example, currently available credit to MSMEs, number of informal and nonemployer firms, average credit need for formal MSMEs). As a result, the analysis of formal SMEs should be regarded as the most reliable of the analyses contained herein. The analysis of formal micro enterprises and, even more, that of informal and nonemployer enterprises, necessarily required a greater number of assumptions.
Peer Stein is the Global Business Line Leader for Access to Finance Advisory at the International Finance Corporation (IFC). Tony Goland is a Director who leads McKinsey & Company’s global Financial Inclusion Practice, and Robert Schiff is a consultant in McKinsey’s Social Sector office.