SME FINANCE: SUPPLY-SIDE DATA AVAILABILITY

Lack of finance is one of the key obstacles to SME growth

SMEs are critical for sustainable economic growth. In high-income countries, SMEs constitute 67 percent on average of the formal employment in the manufacturing sector. In developing countries, this number is lower at about 45 percent. Similarly, SMEs contribute a sizeable share to formal GDP: 49 percent on average in high-income countries and 29 percent on average in low-income countries.[1]

A number of factors, ranging from the overall business environment to the availability of an educated and trained labor force, affect the growth of SMEs. But lack of access to finance consistently ranks as one of the most important obstacles to doing business, according to World Bank surveys of firms in more than 100 economies.[2] Empirical research supports entrepreneurs' views and indicates that lack of finance is negatively correlated with SME firm growth.[3] Access to finance for SMEs remains low. In the survey of firms, only about 32 percent of SMEs had a loan with a financial institution, compared with 56 percent of large firms.[4]

The appeal for the need to support SMEs is hardly new. Most economies have comprehensive SME finance programs, many of which trace their history to the 1950s and 1960s. Governments around the world have used interest rate subsidies, directed lending, guarantee funds, and a variety of other approaches to get SMEs financed. However, the gap between SMEs and larger businesses remains. With the recent financial crisis, many economies are looking to SMEs to provide much needed jobs and to help pull their economies out of recession, putting SMEs back into the spotlight of development and political agendas.

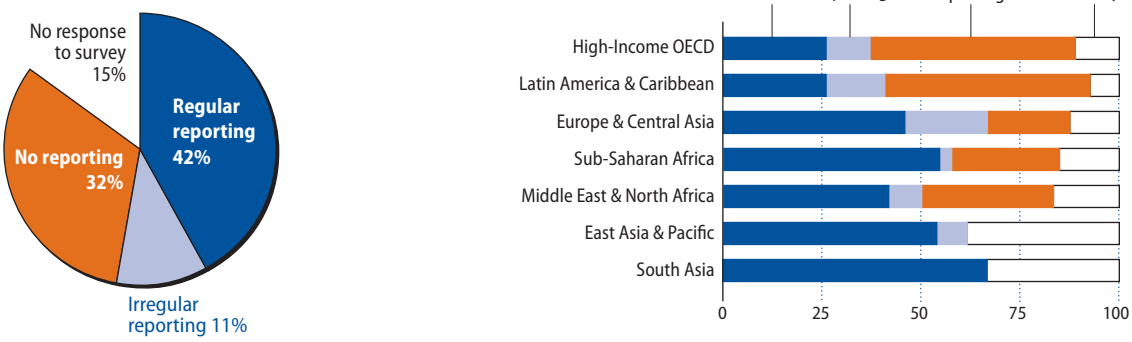
In 2009, G-20 countries committed to identifying lessons learned on innovative approaches to providing financial services to SMEs and to promoting successful regulatory and policy approaches.[5] In the *Financial Access 2010* survey, 44 percent of economies cite SME support as a priority for financial regulators, and 47 percent report implementing reforms that support SME finance. Most of these programs and reforms set targets for the number of SMEs reached, volume of SME financing facilitated, and employment created. Some progress has been made in collecting comparable demand-side information across countries through firm surveys by the World Bank, European Bank for Reconstruction and Development (EBRD), and other development organizations. Yet, to date there are no reliable data across countries on the volume of SME financing, which makes it difficult to set global targets and track progress. In 2004, the OECD identified the need to foster greater international comparability of SME statistics,[6] and a number of initiatives are under way to reach this goal. One of them is to strengthen the culture of evaluation of SMEs and entrepreneurship policies across nations.[7] Moreover, the SME Performance Review, launched by the European Commission in 2008, represents one of its main tools to monitor the implementation of the Small Business Act.[8] It represents a comprehensive source of information on the performance of SMEs in Europe.

Financial Access 2010 contributes to the effort to improve measurement of SME financing and reviews SME finance data available to financial regulators as well as data collection methodologies. Supply-side data—information collected from financial service providers—are likely the most effective tool to collect information on SME finance volume. Firms are often reluctant to share information on the dollar amounts of their operations, such as sales or loan sizes, during interviews. As a result, information on the volume of SME financing is difficult to obtain from firm surveys and requires a survey of credit providers. The most economical way to collect this information worldwide is to survey government authorities instead of surveying individual financial institutions in each economy. The *Financial Access 2010* survey, as a survey of financial regulators, evaluates whether they collect information on SMEs.

FIGURE 4.1

How often are SMEs required to report about their lending?

% of economies by frequency of required reporting



Source: Financial Access database.

The objectives of this year's survey were to identify the feasibility of consistent cross-country data on SMEs going forward, summarize methodological challenges, and provide a rough estimate of SME financing volume by regulated financial institutions. The analysis of topics such as the effectiveness of SME support programs, the impact of the SME sector on economic growth, and the relationship between access to finance and SME development is beyond the scope of this year's report.

Financial regulators in more than half of the economies worldwide monitor levels of SME financing, but use a variety of definitions

Data on SME volumes are collected by financial regulators in 74 out of 142 economies surveyed in *Financial Access 2010*. In 21 more economies, SME finance statistics are collected by other government agencies. The Ministry of Economy collects SME data in Chile, Lithuania, Taiwan (China), Nicaragua, and Venezuela. The Ministry of Trade monitors SME lending in Albania, Botswana, Colombia, and Zambia; the Ministry of Cooperatives does so in Indonesia. In a number of economies, including Japan, Denmark, and Greece, the National Statistics Office collects this type of data.

Financial regulators in 53 percent of the economies that responded to the survey monitor the level of lending to SMEs. Most important, in 42 percent of these economies these data are collected through regular reporting (figure 4.1). Financial regulators in middle- and low-income countries are more likely to require regular reporting of SME statistics. Out of 59 economies that collect SME lending data on a regular basis, 86 percent are low- and middle-income countries. Most economies in East Asia and the Pacific, as well as in South Asia, monitor SME lending at least periodically (figure 4.1). Often, these data are collected to monitor compliance with lending targets set for priority sectors, including SME, as is the case in Afghanistan, India, the Philippines, and Pakistan.

In a number of economies where data are not collected through regular reporting, they are collected through surveys of financial institutions or by estimating lending volume in credit registries. Credit registries contain loan-level data and allow estimation of a variety of SME statistics using loan size as a proxy for an SME definition. In 13 of the reporting economies, including Argentina, Tunisia, and Brazil, regulators use public credit registries to estimate the volume of SME lend-

ing. In 23 economies, regulators conduct periodic surveys of financial institutions to monitor SME lending. The frequency of surveys varies. For example, Estonia, Singapore, and Armenia conduct such surveys annually, Algeria and Tunisia do so monthly, and Uganda does it on an ad-hoc basis. Financial institution surveys can be an important tool for a regulator to collect information not only on SME lending volumes but also on other aspects of SME finance such as fees and number of applications received and rejected, all of which are essential for the implementation of SME finance reforms and programs. In 10 economies, 8 of which are in the Western African Monetary Union, regulators combine information from the credit registries and periodic surveys from financial institutions.

There is a clear regional pattern in reporting SME data. More than half of the economies in Asia and Africa report that they regularly collect information on SME finance. These are also regions where regulators tend to identify access to finance as a priority. Financial regulators in high-income countries and in Latin America and the Caribbean are the least likely to collect data on SME finance, because some other agency is usually assigned this task.

The responsibility to promote SME finance often lies with more than one government agency, each of which also has the responsibility to monitor the performance of the sector, including availability of finance. Agencies collecting regular statistics from financial institutions, such as central banks and bank regulators, are well positioned to collect SME finance statistics, and already do so in a majority of economies. Experience in economies such as Malaysia, Russia, Greece, and the Czech Republic that have introduced monthly reporting for SMEs shows that SME data collection on a monthly basis is possible when there is a clear definition of SMEs, in addition to a well-established reporting process that is easy to follow.

Lack of a clear definition is the main challenge in measuring SME finance

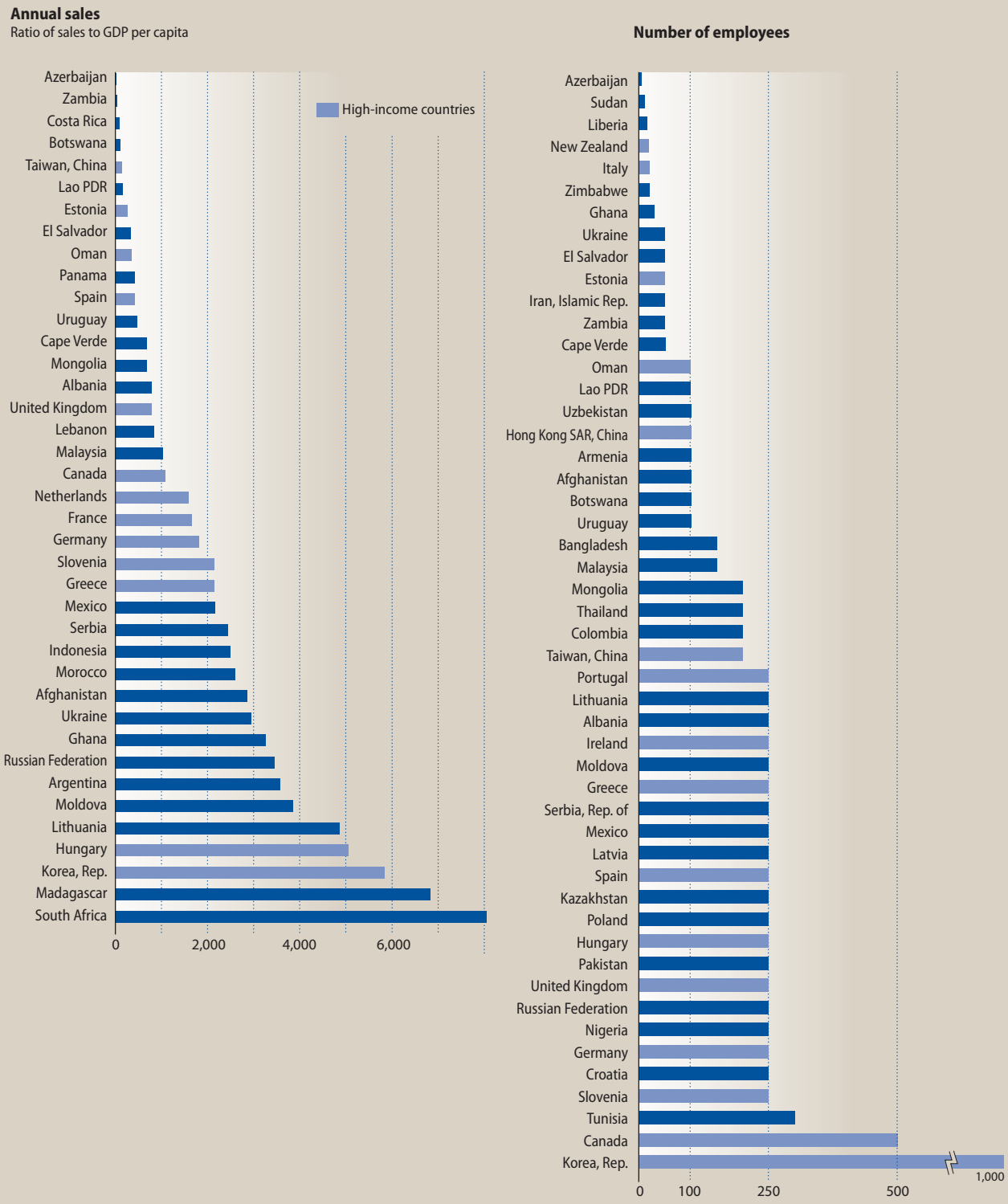
What is an SME? Definitions vary greatly across countries, and financial regulators in 68 economies reported that their SME definition is based on number of employees, sales volume, or loan size. Number of employees and sales volume seem to be the most widely used criteria, present in 50 and 41 economies, respectively. Sixteen economies use the value of loans. Often, the definition relies on multiple criteria and depends on the industry. In Pakistan, for example, SME refers to an entity that employs no more than 250 persons in manufacturing or service sectors or 50 persons in the trade sector, as well as sales criteria of up to $590,000 for trade and industry firms, $1.2 million for manufacturing firms, and no more than $3.5 million for any industry of operation. In addition, a number of economies use alternative criteria such as total assets, fixed assets, and turnover, and 17 economies report that no official definition exists at all.

The following examples underscore the diversity of definitions used. In Zambia it is a firm with fewer than 50 employees and sales of no more than $50,000. In Russia SMEs include individual entrepreneurs and firms with fewer than 250 employees and sales of up to $30 million. In Canada it is a firm with up to 500 employees and sales of up to $45 million at current exchange rates. And in Korea, SMEs can have up to 1,000 employees and sales of up to $130 million.

The most common cutoff points for the maximum number of employees cluster around 50, 100, and 250 employees (figure 4.2). A large portion of economies (20 out of 49 that use number of employees as a criterion to define SMEs) set 250 employees as the maximum cutoff.[9] Maximum values of sales range from $50,000 in Zambia to over $70 million in Korea, Germany, France, Greece, and Hungary, with no clear patterns or clustering. The maximum sales cutoff value is closely correlated with income per capita but does not translate into a common ratio of SME maximum sales

FIGURE 4.2

Definitions of SMEs cover a large range in sales volume and number of employees

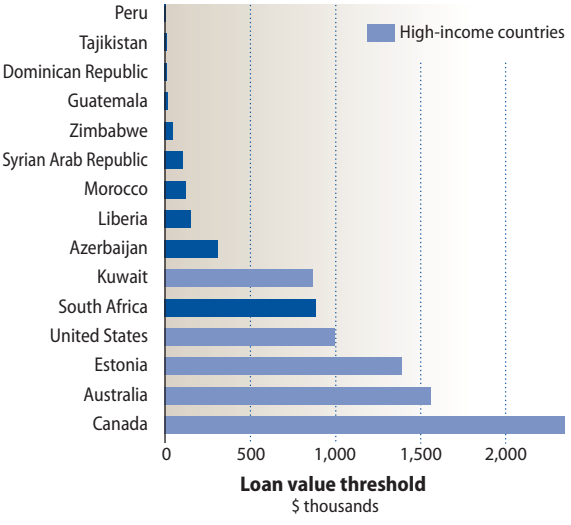


Source: Financial Access database.

to average income per capita. Maximum sales values represent 23 times income per capita in Azerbaijan at the lower end and more than 8,000 times income per capita in South Africa at the higher end (figure 4.2).

Number of employees and sales volume are probably the most accurate parameters to define SME, but this information is not always available from lenders. Banks may collect this information at the time of evaluating loan applications but often do not keep it in their systems and as a result are not able to report lending volumes based on these criteria. Thus, some economies choose to rely on loan size as a proxy when collecting information on SME finance from financial institutions. Extracting information on loans to firms below a certain size and loans to individual entrepreneurs can be a reasonable approximation for SME lending volume. Fifteen economies in the *Financial Access 2010* survey reported using loan size criteria to define SMEs (figure 4.3). As in sales criteria, high-income countries tend to have higher loan size brackets in their definition of SMEs. Canada, the United States, Estonia, and Australia set the loan value cutoff for SMEs above $1 million.

FIGURE 4.3
Economies that define SMEs by loan value



Source: Financial Access database.

In the long term, encouraging financial institutions to collect and maintain information on employee numbers and sale volumes will allow for more accurate monitoring of SME lending. The data may also be useful to banks themselves for client segmentation and development of SME scoring models. In the short term, collecting data using loan size criteria as a proxy may provide a reasonable estimate of SME volumes for regulators tasked with monitoring this statistic. A number of efforts aim to streamline and harmonize SME definitions,[10] although the heterogeneity of SMEs themselves and the nature of the economies in which they operate might mean that establishing a global definition is not feasible.

Variation in definition is not significantly correlated with variation in lending volumes to SMEs

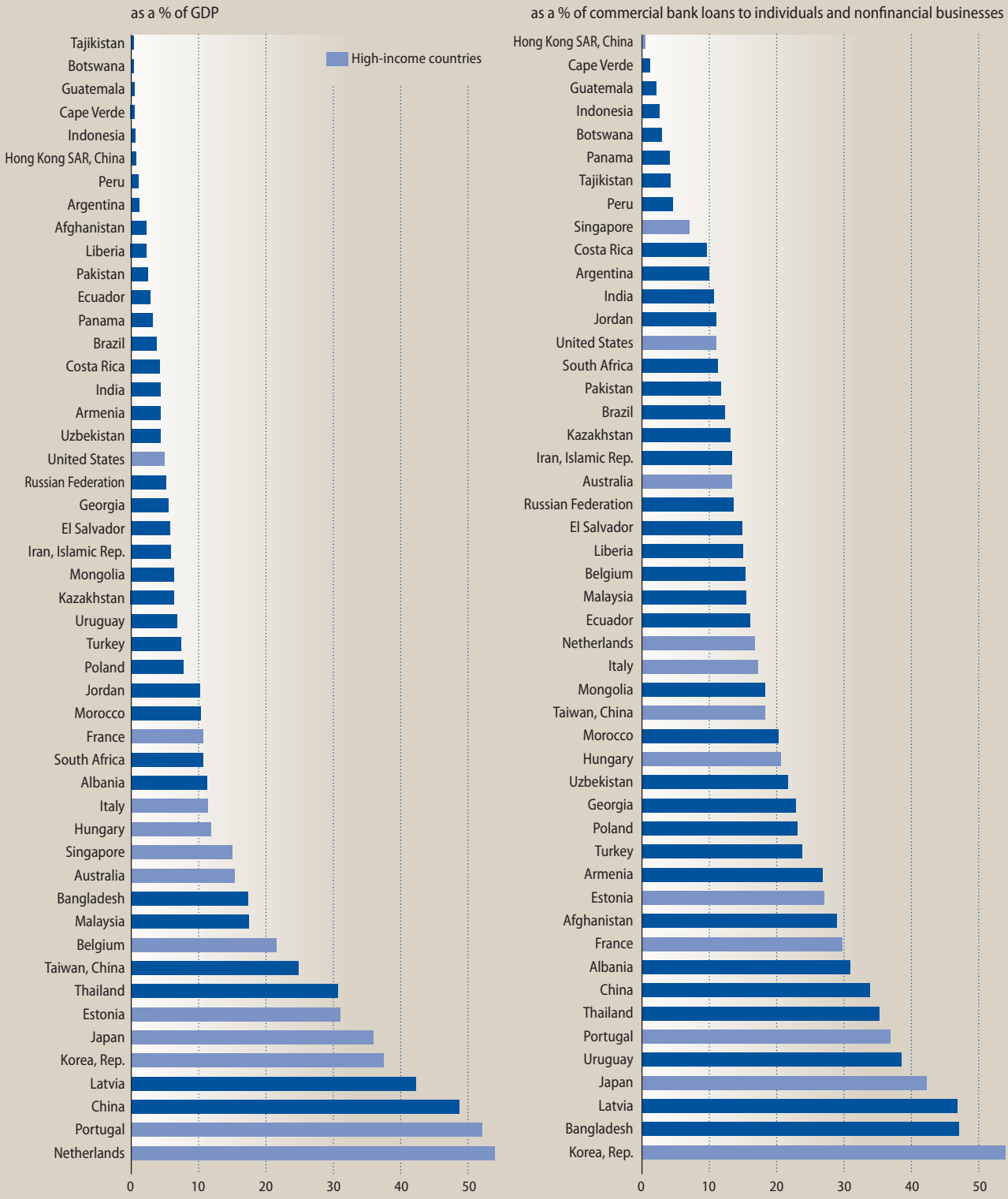
Do economies that set higher cutoff criteria for the number of employees and sales tend to have a higher ratio of SME lending volume to GDP? The correlation between the maximum number of employees and the ratio of SME loans to GDP reported in *Financial Access 2010* is positive but weak and not statistically significant at the 10 percent level.[11] The correlation coefficient between the maximum definition for sales and SME lending volume is also not statistically significant. These results must be interpreted with caution as estimates are based on a small number of observations: 40 for the number of employees and 31 for the sales volume. Lack of a strong correlation (except for those economies defining SMEs as firms with 1,000 employees or more) indicates that the variation in the definitions for the most part is not a strong enough factor to permit cross-country comparison of the data on SME lending using national definitions.

Estimating global SME volume

In *Financial Access 2010*, 50 economies provided data on the total value of outstanding loans to SMEs (figure 4.4). Out of these, 30 economies (60 percent) are middle-income and 14 (28 percent) are high-income. Among low-income countries, only Afghanistan, Ban-

FIGURE 4.4

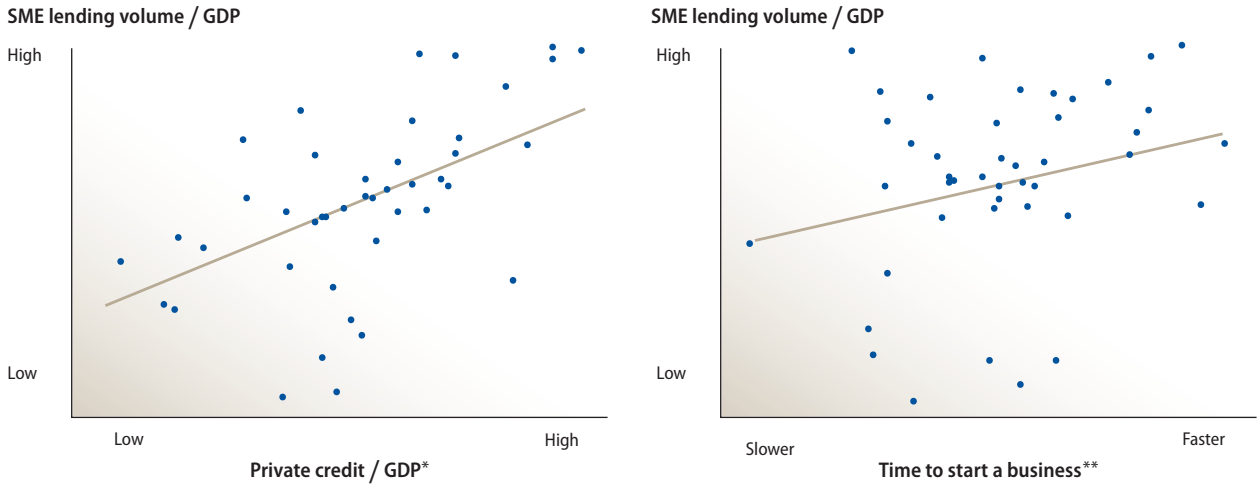
Value of outstanding loans to SMEs



Source: Financial Access database.

FIGURE 4.5

SME lending volumes are higher in developed credit markets and where starting a business is faster



Source: Financial Access database.

* Correlation controls for time to start a business and offshore centers. The relationship is statistically significant at the 5 percent level.

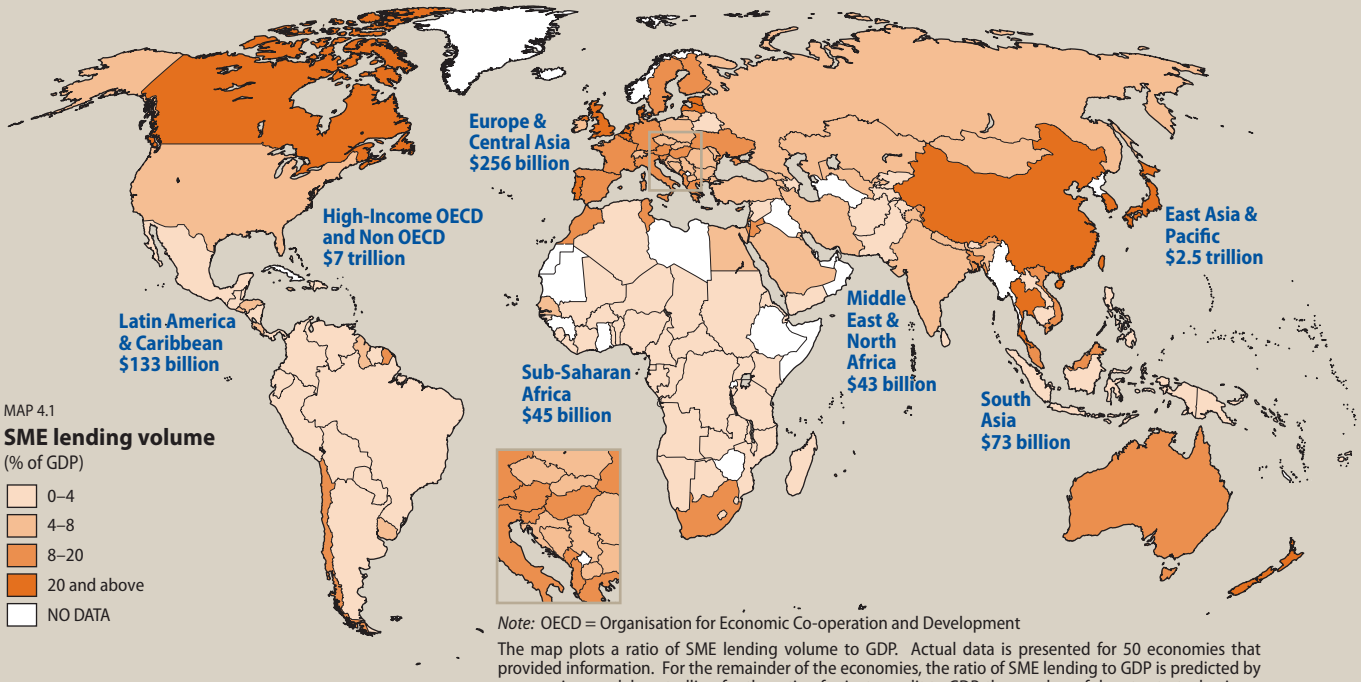
** Correlation controls for expected private credit/GDP and offshore centers. The relationship is statistically significant at the 5 percent level.

gladesh, Liberia, Pakistan, Tajikistan, and Uzbekistan provided these data points. The ratio of SME lending to GDP ranges from less than 1 percent in Tajikistan to more than 50 percent in the Netherlands and Portugal. The median ratio of SME credit to GDP is 6.4 percent, and in 75 percent of the economies in the sample, it is below 15 percent.

The share of SME loans as a percentage of total loans also varies greatly across countries, reflecting the structure of the local financial market (figure 4.4). The ratio of SME loans to total loans ranges from less than 1 percent in Hong Kong Special Administrative Region (China), to 56 percent in Korea, where SMEs can employ up to 1,000 people. Overall, high-income countries tend to have higher ratios of SME finance volume to GDP and to total loans, suggesting a more developed SME finance market compared with developing countries.

To assess the global volume of SME financing from formal institutions for *Financial Access 2010,* the value of SME lending to GDP ratio was estimated for economies that have not provided statistics on SME finance using a regression model. Model selection is based on two factors: data availability and predictive power. The ratio of overall private credit to GDP, number of days to start a business, and a control for offshore financial centers are used as explanatory variables in this model.[12] The level of SME finance is likely to be affected by the overall development of the credit market as measured by the ratio of private credit to GDP (figure 4.5). In addition, economies in which it is easier to start a business are likely to have higher levels of SME lending. One potential explanation is that in those economies where it is more difficult to start a business, there are fewer formal SMEs to finance, and hence lower SME lending. This finding supports earlier evidence on the importance of reforming business registration and other regulations affecting firm entry.[13] The share of SME finance in relation to total lending volume is likely to be affected by the structure of the financial market. Specifically, offshore financial centers are likely to have high levels of credit to GDP but low levels of SME financing.

On the basis of these estimates, global volume of SME lending was roughly $10 trillion in 2009 (map 4.1). The bulk of SME lending volume—70 percent—is concentrated in high-income countries. The second largest SME loans market is in East Asia and the Pacific, which accounts for 25 percent of the total SME



Note: OECD = Organisation for Economic Co-operation and Development

The map plots a ratio of SME lending volume to GDP. Actual data is presented for 50 economies that provided information. For the remainder of the economies, the ratio of SME lending to GDP is predicted by a regression model controlling for the ratio of private credit to GDP, the number of days to start a business (*Doing Business database*) and a dummy for offshore financial centers. See Ardic, Mylenko and Saltane (forthcoming) for detailed methodology. Data for Taiwan (China), Hong Kong SAR (China), and Puerto Rico (US) have been broken out from the national dataset.

lending volume. But 90 percent of this amount is in China, where the SME definition is broad and SMEs can employ up to 2,000 people. Without China, the total SME lending volume in East Asia is comparable to Eastern Europe and Central Asia, or about 3 percent of the total. Africa, Middle East, and South Asia together account for only 1.6 percent of the total SME volume.

A similar picture emerges when comparing ratios of SME lending to GDP (map 4.1). The median ratio of SME lending to GDP in high-income OECD countries is about 13 percent, compared with the 3 percent world median. In more than 80 percent of economies, the SME lending to GDP ratio is below 10 percent.

Data analysis indicates that further efforts are necessary to define the criteria and processes for collecting data on SME financing, which can also be comparable across countries. A recently created SME Finance subgroup under the G-20 Financial Inclusion Experts Group,[14] bringing together international experts, development agencies, and governments, offers an excellent platform for the establishment of a comprehensive, consistent, and scalable framework and mechanism to measure and track the progress over time of SME access to financial services in the developing world.

NOTES

1. Ayyagari, Beck, and Demirgüç-Kunt (2007).
2. World Bank Enterprise Analysis Surveys (various years).
3. Beck and Demirgüç-Kunt (2006).
4. World Bank Enterprise Analysis Surveys (various years).
5. The Pittsburgh G-20 Summit (2009).
6. OECD (2004).
7. OECD (2007).
8. European Commission (various years).
9. This figure is based only on data provided in the *Financial Access 2010* survey and does not include any external sources.
10. OECD (2004).
11. The correlation, controlling for income per capita, is not statistically significant when countries that set a maximum definition at 1,000 employees or more are excluded (Korea and China). The estimate is based on 65 observations. *Financial Access 2010* survey data were supplemented by information on maximum number of employees for SMEs from other sources, including World Bank (2004) and World Bank Enterprise Analysis Surveys (various years).
12. For details on estimation results see Ardic, Mylenko, and Saltane (forthcoming). A number of macroeconomic and business environment factors were tested, but relationships are not statistically significant after controlling for overall level of private credit to GDP.
13. See World Bank (2004) for an overview.
14. See the Pittsburgh G-20 Summit (2009), "Leaders' Statement," paragraph 41.