

MSME Country Indicators 2014

Towards a Better Understanding
of Micro, Small, and Medium
Enterprises

ANALYSIS NOTE

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Abstract

This note provides an overview of updated and expanded data for Micro, Small, and Medium Enterprise Country Indicators (MSME-CI) in 155 economies. It presents detailed statistics for micro, small, and medium enterprises (MSME) definitions and data. Based on an analysis of the data, the most widely used variable for defining an MSME is the number of employees, followed by turnover, and assets. There are about 162.8 million formal MSMEs, employing more than 508 million employees. Countries use a wide range of thresholds to define whether a business is a micro, small, or medium sized enterprise. The range of thresholds narrows as firms become smaller. Countries frequently use 250, 50, and 10 employees to define medium, small, and microenterprises, respectively. The employee-based definition is more uniform among microenterprises. In general, low- and middle-income economies tend to use lower threshold values for defining an MSME than high-income economies. High-income economies have the most MSMEs per 1,000 people, or MSME density. But the growth rate in the number of MSMEs is highest among low- and middle-income economies and countries in Europe and Central Asia. MSMEs account for 50 percent to 70 percent of employment across regions. While MSMEs are important because of their total numbers and contribution to employment, they could improve the amount of value added they contribute to an economy, particularly in developing countries. Better access to finance, a more streamlined environment in which businesses operate, greater competition, adequate institutional frameworks, lower poverty, and a more equal distribution of wealth are linked to greater numbers of formal MSMEs per 1,000 people around the world. Finally, the quantity and quality of MSME data require drastic improvements to produce more rigorous studies and a better understanding of the MSME sector.

Acknowledgments

The authors would like to acknowledge the contributions of the IFC peer reviewers Roland Michelitsch, Vanya Candia, Aksinya Sorokina, Mahima Khanna, Deepa Chakrapani, Khrystyna Kushnir, Rita Ramalho, Oya Pinar Ardic Alper, Wendy Teleki, and Matthew Gamser.

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Please read the “[Description Note on the MSME Country Indicators 2014](#)” along with the country specific comments in the [MSME-CI MS Excel workbook](#) before using the data. MSME-CI presents secondary data collected by various institutions (statistical institutes, ministries, international organizations, small business promotion agencies, research institutions and others) using different methods (survey, census and others). IFC is not responsible for the quality, accuracy, reliability or completeness of the data these sources provide. Data are not always standardized across countries and time which, among other issues, hampers comparability.

MSME Country Indicators

MSME-CI records the number of formally registered MSMEs across 155 economies. This database is current as of 2014 and expands on the 2010 MSME-CI edition. The 2014 MSME-CI data can be found at <http://msmecountryindicators.smefinanceforum.org>.

The MSME-CI database is designed to provide an objective and unique overview of the MSME sector and can be used in combination with other data sources. The MSME-CI fills a knowledge gap covering country-by-country structural indicators for the enterprise sector based on firms' size for all regions of the world. The 2014 update includes:

- The latest country MSME definitions.
- A breakdown of the number of micro, small, medium, and large enterprises where such data is available, as well as aggregate data such as the total number of small and medium enterprises (SMEs) and the total number of MSMEs.
- The number of employees based on the same breakdown and aggregate results as above.
- The share of enterprises based on size, the number of enterprises per 1,000 people, their share of employment, and the share of value added for microenterprises, SMEs, MSMEs, and large enterprises.
- The sector distribution for microenterprises and SMEs, along with a detailed sector distribution breakdown for those economies where information is available.
- Historical data going back 25 years for some economies for variables such as the number of enterprises, the number of employees, the share of enterprises by size, the number of enterprises per 1,000 people, and the share of employment based on the new structure which includes micro, small, medium, and large enterprises along with their totals, or aggregates.
- Countries' gross national income (GNI) per capita, population, income group, geographic region, and sources for the information.

With more detailed levels of disaggregation by firm size, the 2014 update kick-started the collection of the following information: MSME contribution to value added, and multiple MSME definitions within a country (broken down by key variables such as number of employees, turnover, and assets).

Based on the data collection process detailed in the "Terms of Use and Disclaimer," common sources of information for MSME definitions and data include: MSME development/promotion agencies (52 percent); national statistics offices (37 percent); and central banks, finance ministries, and similar institutions (11 percent). The most common MSME definition based on the number of employees is: microenterprises, less than 10 employees; small enterprises, between 10 and less than 50 employees; and medium enterprises, between 50 and less than 250 employees. When a country did not use this definition, the local definition or the local method of structuring the data is used. The data includes enterprises with zero employees. It typically covers the private-sector economy, excluding the agricultural sector. For some countries, the actual number of formal enterprises—especially microenterprises—could be underestimated. For example, microenterprises in Nigeria, Indonesia, and Vietnam were excluded because data sources in those countries did not clearly differentiate between formal and informal microenterprises. The combined number of microenterprises in these three countries is around 77 million (Indonesia accounts for 70 percent of that number).

A key lesson learned during the data-collection process for the MSME-CI is that the amount of good quality MSME data is limited, particularly in developing countries. MSME data is not always standardized across countries or by time period. Different institutions use different methods to collect MSME data, including different variables and scales. In some cases, the MSME definitions are not consistent within a single country—let alone a single region. The European Union offers a good example of regional coordination and harmonization of MSME data. To make MSME data more comparable, the following steps could be taken:

- Institutions gathering MSME data should better coordinate with one another and establish standards for data collection. Economies should be surveyed using a unified and standardized method.
- MSME data collection could utilize crowdsourcing schemes. International organizations could lead this effort, in coordination with national statistics offices, private-sector stakeholders, and other national/regional institutions.

Initially, these actions could be taken at the regional level, and ultimately expanded to the global level.

Additional steps that could improve MSME data could include:

- The collection of time series data. (The availability of MSME data across time is crucial for evaluating business regulation reforms, for example).
- The periodic collection of census data or statistically representative data that includes all sectors of the economy (i.e. not only manufacturing), geographic regions, and enterprise sizes.
- The breakdown of MSME data based on gender.
- Better differentiation between formal and informal enterprises, in particular among microenterprises.
- Continued collection of not only quantity type but also quality type variables such as MSMEs' share of value added, share of exports, competitiveness, and types of employment, among others.

For more details on the methodology see the [“Description Note on the 2014 MSME Country Indicators.”](#)

Among other data sources, the structural information presented in the 2014 MSME-CI could be used together with company-level surveys about the business environment contained in the World Bank Group's *Enterprise Surveys*. It also could be used with data on new business entry density—the number of newly registered businesses per 1,000 people—in the World Bank Group's *Entrepreneurship* database.

This analysis note provides an overview of the MSME-CI database, covering the various definitions and data. After summarizing the key takeaways, the MSME definitions are analyzed based on their sources and main variables. The data analysis section provides a statistical description and explores the MSME sector's access to finance, investment climate, institutional frameworks, inequality, and poverty.

Key Takeaways

- The most widely used variable for defining an MSME is the number of employees (92 percent of the analyzed definitions use this variable), followed by turnover and assets (49 percent and 36 percent, respectively). Overall, 11 percent (out of 267) of the analyzed definitions make use of alternative variables, including loan size, formality, years of experience, type of technology, initial investment amount, etc.
- Common sources for MSME definitions and data are MSME development/promotion agencies (52 percent), national statistics offices (37 percent), as well as central banks, finance ministries, and similar institutions (11 percent).
- The most common threshold for defining an MSME by number of employees is 250 globally. But differing levels of income, among other factors, influence some countries—particularly low-income economies—to use lower threshold values of 100 and 50 employees.
- Globally, the most common thresholds for defining an MSME by number of employees are 250 employees for medium enterprises, 50 employees for small enterprises, and 10 employees for microenterprises. MSME definitions by number of employees in high-income OECD countries, Europe and Central Asia, Latin America and Caribbean, and South Asia, register low dispersion of values which signals agreement among regional definitions. By contrast, Middle East and North Africa, Sub-Saharan Africa, East Asia, and Pacific, present, at times, high dispersion of data, indicating little agreement among the definitions found within these regions. In terms of firm size, definitions by number of employees for microenterprises appear to be more similar across countries.
- Common threshold values for classifying an MSME by annual turnover fall in the following ranges: US\$ 50 million to 70 million (35 out of 267 definitions), mainly driven by high-income countries; US\$ 1 million to 5 million (31 out of 267 definitions); and below US\$ 1 million (30 out of 267 definitions). The two lower thresholds are most common in lower income developing countries.
- The most common threshold values for value of assets range from US\$ 50 million to 62 million (34 out of 267 definitions), with lower income countries again using lower thresholds.

- Threshold values for the three main variables—number of employees, turnover, and assets—tend to decline with country incomes.
- Several institutions within a single region, or even a single country, sometimes use different MSME definitions (except for the European Union). Eligibility for special support, the culture for doing business, population, economic sector, international economic integration, an absence of coordination, or political factors could play a role in the lack of harmonization.
- The database contains about 162.8 million formal MSMEs employing approximately 508 million people. Of this total, about 96.3 million MSMEs and 231.4 million employees operate in emerging markets.
- High-income economies have the most MSMEs per 1,000 people. This pattern has persisted over time. Nevertheless, the lower-middle-income economies (for example, in the Europe and Central Asia region) have the highest growth rates of MSMEs. Globally, MSMEs have registered a growth rate of around 5.2 percent annually since 2000.
- MSMEs' share of employment for all regions fluctuates within a range of 50 percent to 70 percent. OECD economies, South Asia, the Middle East and North Africa, and Europe and Central Asia have the highest shares of MSME employment.
- MSMEs are important because of their total numbers and contribution to employment; however, MSMEs could improve their contribution to value added, particularly in less developed countries.
- More SMEs than microenterprises operate in manufacturing. The trade and service sectors appear to have higher shares of microenterprises.
- Higher levels of GNI per capita, better access to finance, streamlined business environments, a more competitive landscape, adequate institutional frameworks, less poverty, and greater shared prosperity are associated with higher numbers of MSMEs per 1,000 people around the world.
- In addition to disaggregated data for microenterprises, SMEs, and large enterprises, it would be useful to generate and collect more information about value added, share of exports, productivity, product quality, and quality of employment, among other variables; this would provide more relevant descriptions of the MSME sector.
- Better quality data for MSMEs is needed, particularly for developing countries. Examples include: periodic data broken down by several firm sizes and covering all sectors of the economy and regions; disaggregation based on gender; and clear distinctions between formal and informal enterprises. It is particularly important for national statistics offices and other national/regional institutions to unify their methods of data collection. For instance, international organizations could play a leading role in the establishment of crowdsourcing schemes for collecting such data.

Most common sources of MSME data

The sources of information for the MSME-CI database were categorized into three broad categories described in the table below.

TABLE 1: Classifications of sources by codes

Source Code	Data Coming From
1	National Statistics Office
2	Central Bank, Banking Association, Ministry of Finance, Ministry of Economy, or similar
3	Small Business Administration/Development/Promotion Agencies, SME Regional Institutions, SME Associations, etc.; also, Ministry of Industry or similar

Source: MSME Country Indicators.

Out of 267 definitions, 98 (37 percent) come from national statistics offices, 31 (11 percent) from central banks, finance ministries, and similar institutions, and 138 (52 percent) from MSME development/promotion agencies and other institutions across different fields working at the local or regional level (see Figure 1).

FIGURE 1: Sources of MSME information

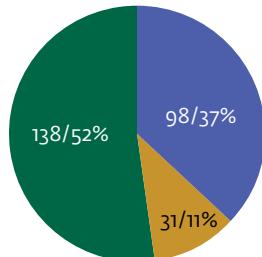
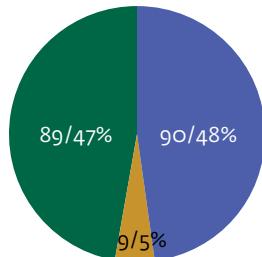


FIGURE 2: Sources of MSME information—Most widely used definition



- National Statistics Office
- Central banks, ministry of finance & others
- MSME agencies & others

Source: MSME Country Indicators.

Box 1: All definitions versus most widely used definition¹

More than one MSME definition was registered for each country if the information was found. The database contains information for 267 definitions corresponding to 155 countries. The “most widely used” definition is only used for the MSME data analysis section. The key factor to identify this definition was the existence of more data (e.g. number of MSMEs, number of workers in MSMEs, share of value added by MSMEs, etc.) with the aim being to maximize the analysis of MSME data associated with a definition. For example, in the Netherlands, two sources of MSME information were found: Statistics Netherlands and Eurostat’s Structural Business Statistics (SBS). The information found in Statistics Netherlands detailed the number of enterprises only. Eurostat’s SBS provided detailed standardized information for number of enterprises, number of employees, and value added for different firm sizes in the Netherlands and, consequently, was selected as the “most widely used” definition. In addition,

and only for the MSME data analysis section, some economies had to be excluded to achieve more accurate results during the data analysis. The data cleaning process excluded economies whose information was not census data, not covering all the sectors in the economy (except for agriculture) and/or whose information was classified as an outlier after analyzing extreme values, scatter plots and post estimation of outliers (leverage, standardized and studentized residuals among others). The following economies were excluded from the analysis: United Arab Emirates, because data does not cover the whole country; Puerto Rico, Ghana, Iraq, Libya, Sri Lanka, Morocco, Nepal, Uganda and Sudan because data does not cover all sectors of the economy; Nicaragua because data covers only urban areas, and Ethiopia, Malawi, Mauritius, Nigeria, Guinea as well as Montenegro because data come from surveys. Data for Maldives, Tanzania, Qatar and Kuwait were excluded based on the analysis of outliers.

¹ Please, see Annex I of Description Note for a procedure detailing the considerations taken to select one definition per country, or the most widely used. Terms of use and disclaimer apply.

When considering only one definition per country—that is, the most widely used—the share of definitions provided by national statistics offices increases, equaling the share provided by MSME agencies (see Figure 2). Box 1 further explains the logic behind selecting the most widely used definition in each country.

Analysis of MSME Definitions

Most common variables for defining MSMEs

Among the 267 definitions used by different institutions in 155 economies, the most widely used variable for defining an MSME is the number of employees (92 percent of the analyzed definitions utilize this variable). Other variables commonly found in MSME definitions are turnover as well as value of assets (49 percent and 36 percent, respectively). Overall, 11 percent (out of 267) of the analyzed definitions make use of alternative variables such as loan size, formality, years of experience, type of technology, size of the manufacturing space, and initial investment amount, among others. While several definitions detail specifications for each firm size (i.e. micro, small, medium, and large) under each variable, some definitions do not distinguish between micro, small and medium enterprises. Furthermore, a few definitions may classify all MSMEs under one firm size category.

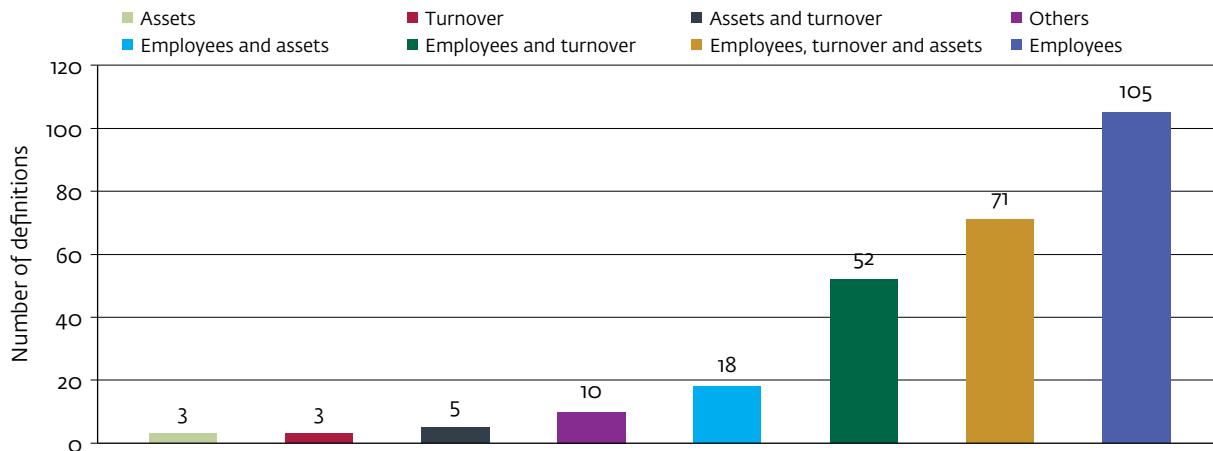
Within those definitions that use only one variable, the number of employees is also the most common for defining an MSME: 105 definitions utilize only number of employees; three definitions use only assets; and three definitions utilize only turnover. Among the definitions utilizing two and three variables, the most common combination is the one using three variables: number of employees, turnover, and assets. The second most common combination is number of employees and turnover (see Figure 3).

What is the most common value for defining an MSME by number of employees?

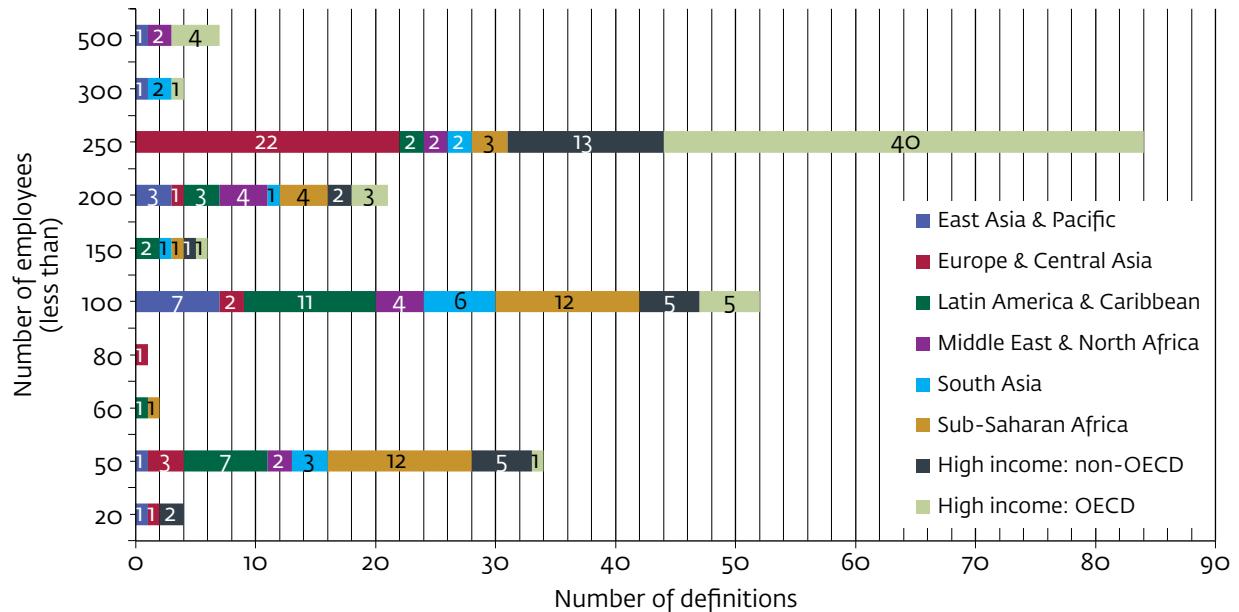
The most common value—i.e., the upper limit threshold under which an enterprise is considered micro, small, or medium-sized—is 250 employees. As shown in Figure 4, this threshold is more common among high-income economies. In addition to high-income economies, this value is more commonly found in Europe and Central Asia. Other thresholds used relatively often are 100 employees (52 out 267 analyzed definitions), and 50 employees (34 out of 267 analyzed definitions); both are typically most common in lower income economies.

Descriptive statistics of the most common values suggest that those regions or income levels that register low

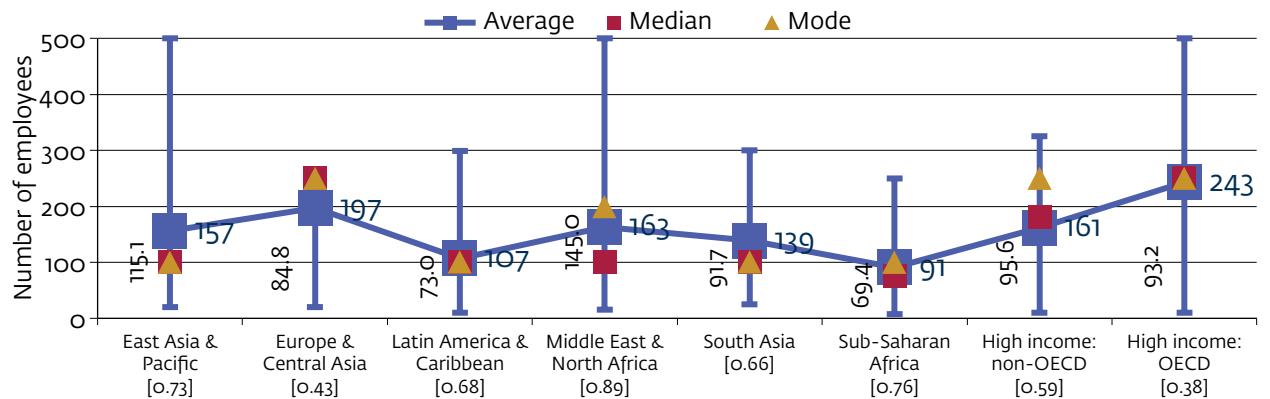
FIGURE 3: How many definitions utilize only one variable and which are the most common combinations?



Source: MSME Country Indicators.

FIGURE 4: Most common thresholds for defining MSMEs by number of employees

Source: MSME Country Indicators.

FIGURE 5: Average, median and mode thresholds for defining an MSME by region (max. and min. values in bars, standard deviation in vertical numbers, and coefficients of variation in brackets)—MSME definitions based on number of employees

Source: MSME Country Indicators.

values of coefficients of variation² contain definitions that are more similar to each other. For example, in Figure 5, high-income countries, Europe and Central Asia, Latin America and Caribbean, and South Asia register low dis-

persion of values and a relative consistency among central tendency indicators. By contrast, the regions of Middle East and North Africa, Sub-Saharan Africa, and East Asia and Pacific show the highest dispersion of data, suggesting there is not much agreement among definitions within these regions.

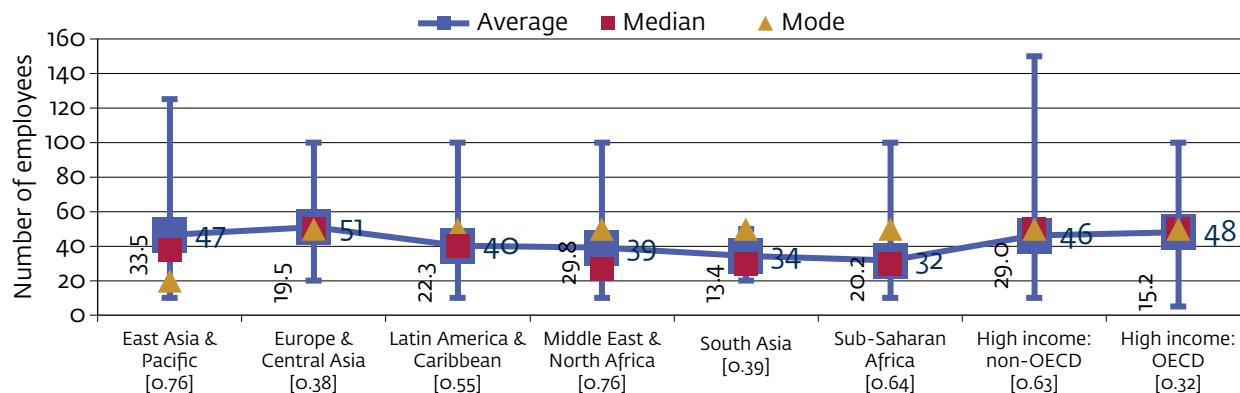
² The coefficient of variation is the standard deviation of a variable as a percentage of its mean ($CV = s/\bar{X}$) according to Black, Hashimzade, & Myles (2009). This measure of spread is a normalized coefficient that has no units and helps to compare dispersion of variables.

What are the most common thresholds for defining a small and microenterprise by number of employees?

Less than 50 employees is the most widely used value for small enterprises, and less than 10 employees for

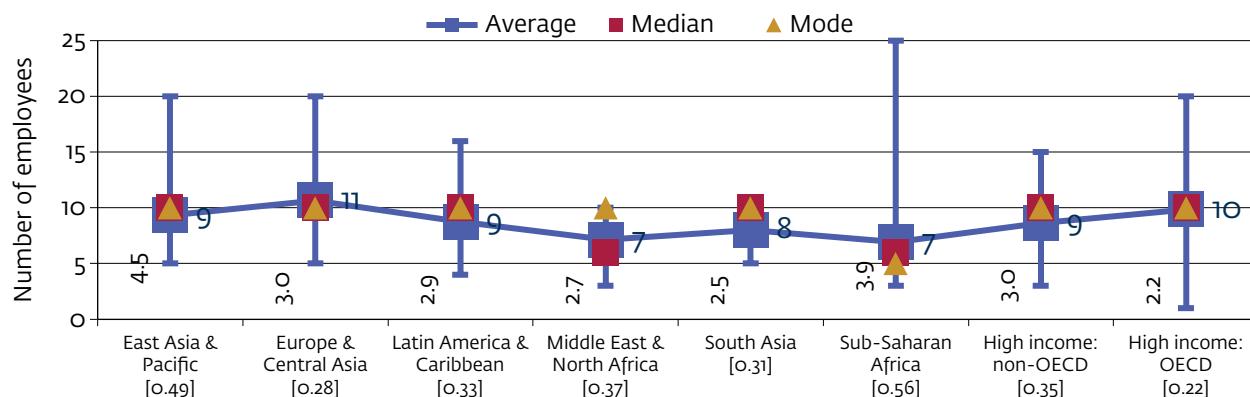
microenterprises. For microenterprises, every region reports average values that are close to the 10-employee threshold, and the dispersion is the lowest among firm sizes. In other words, definitions for microenterprises appear more uniform about the number of employees by which an enterprise is classified as a microenterprise.

FIGURE 6: Average, median and mode (max. and min. values in bars, standard deviation in vertical numbers, and coefficients of variation in brackets) for small enterprises by region—Small enterprise definitions based on number of employees



Source: MSME Country Indicators.

FIGURE 7: Average, median and mode (max. and min. values in bars, standard deviation in vertical numbers, and coefficients of variation in brackets) for microenterprises by region—Microenterprise definitions based on number of employees



Source: MSME Country Indicators.

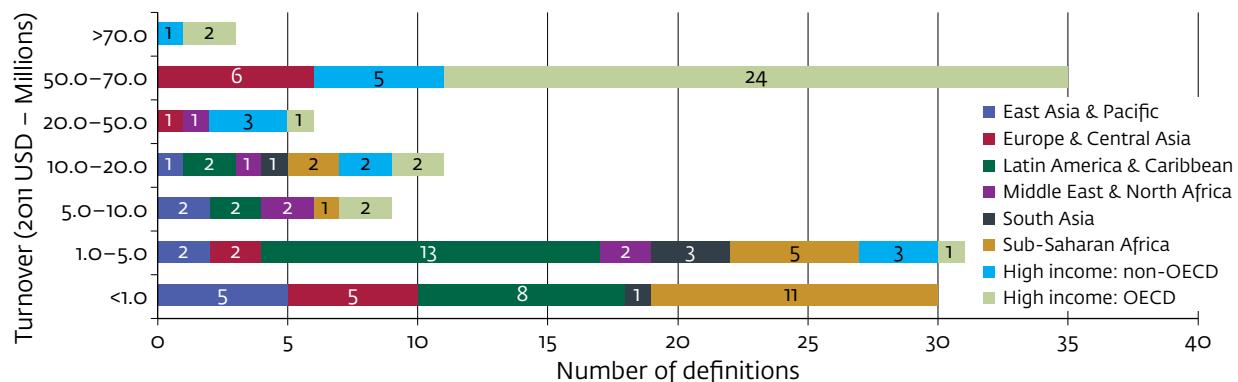
What is the most common range for defining an MSME by turnover?

The most common range is between US\$ 50 million to 70 million³ (35 out of 267 definitions), mainly reflecting high-income country threshold values. A significant number of definitions also exist in the range of US\$ 1 million to 5 million (31 out of 267 definitions), as well as in thresholds below US\$ 1 million (30 out of 267 definitions); both are most common in lower income developing countries (see Figure 8).

What is the most common range for defining an MSME by value of assets?

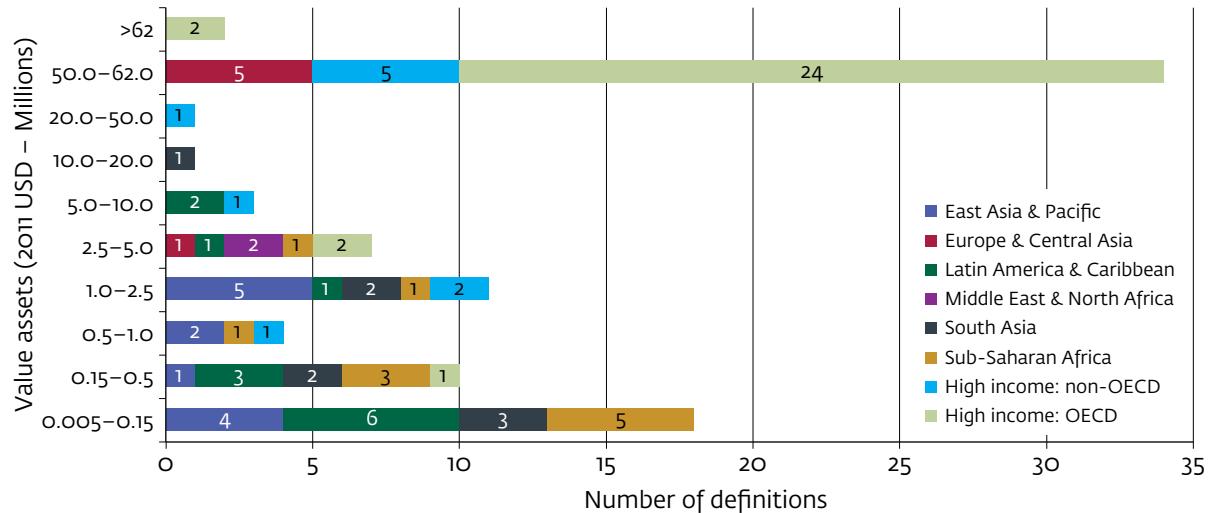
The most common range for the value of assets under which a firm will be classified as an MSME is US\$ 50 million to 62 million (34 out of 267 definitions). The other common ranges do not present significant differences in absolute dollar value terms. The second and third most frequently used ranges for value of assets are US\$ 5,000 to 150,000 (18 out of 267 definitions) and US\$ 1 million to 2.5 million (11 out 267 definitions) (see Figure 9).

FIGURE 8: Most common values for defining MSMEs by turnover (ranges)



Source: MSME Country Indicators.

FIGURE 9: Most common values for defining MSMEs by value of assets (ranges)

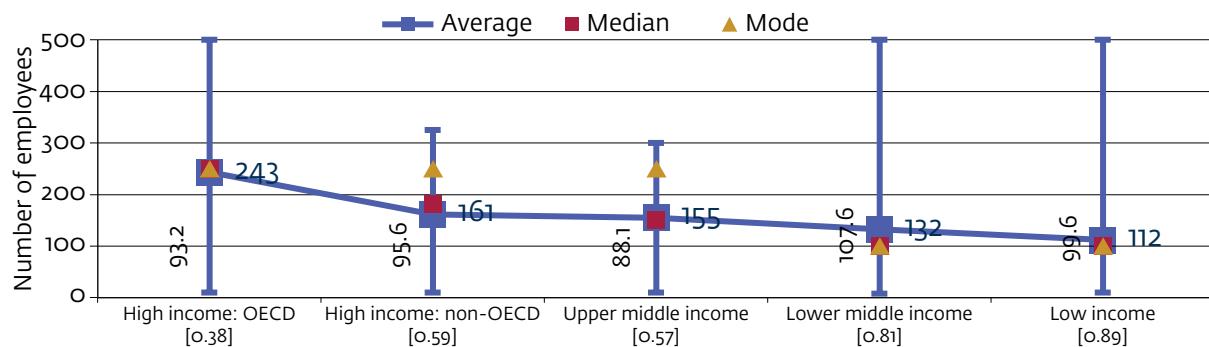


Source: MSME Country Indicators.

³ All monetary values were converted from domestic currency to 2011 US\$ values, taking into account inflation (Consumer Price Index; source United States' Bureau of Labor Statistics (BLS)) and exchange rates (Official exchange rate – LCU per US\$, period average; source WDI). For further details, please see Annex I in Description Note (Determination of Monetary Values).

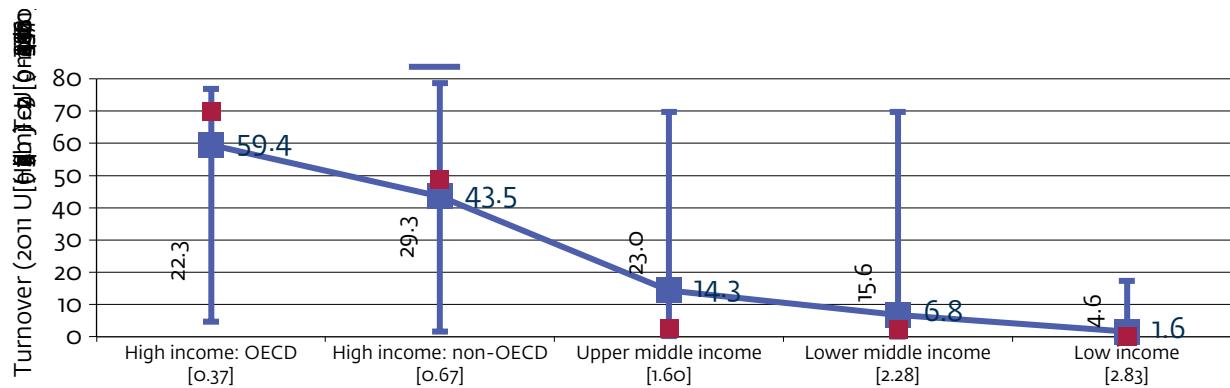
Across the three main variables, the thresholds for number of employees, turnover, and assets fall in value as the country income level declines (see Figures 10–12).

FIGURE 10: Average, median and mode thresholds for defining an MSME by income level (max. and min. values in bars, standard deviation in vertical numbers, and coefficients of variation in brackets)—MSME definitions based on number of employees



Source: MSME Country Indicators.

FIGURE 11: Average, median and mode thresholds for defining an MSME by income level (max. and min. values in bars, standard deviation in vertical numbers, and coefficients of variation in brackets)—MSME definitions based on turnover



Congruence of MSME definitions

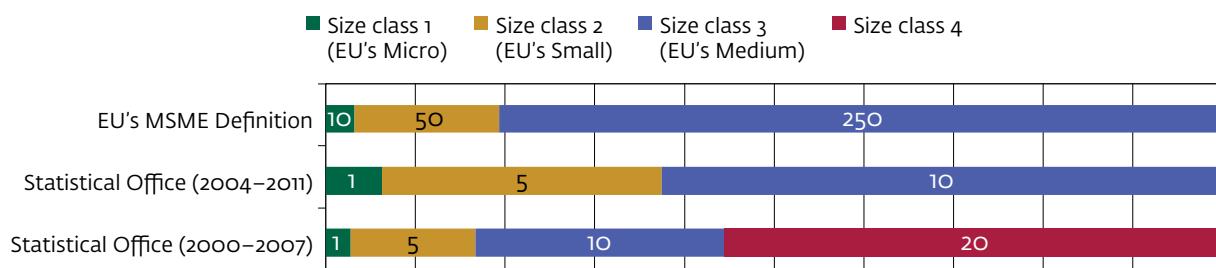
Well defined standards for MSME definitions and data contribute to more uniform data collection and comparability across subjects and time. Unfortunately, sometimes several institutions in the same region—or the same country—use inconsistent MSME definitions. A positive example is the European Union (EU) where, in addition to a well-defined standardized MSME definition, data provided for the member countries are comparable and released yearly. Nevertheless, there are cases where EU countries use methods that differ from EU standards for providing online MSME data. For instance, the Statistical Office of the Republic of Slovenia provides the number of enterprises by firm size based on number of employees using a definition that differs from the EU's MSME definition (see Figure 13).

Furthermore, different institutions within some lower income countries use different MSME definitions (see Figure 14). Eligibility for special support, culture for

doing business, population, economic sector, international economic integration, lack of coordination, or political factors may help explain the lack of harmonization, as noted by Gibson & Van der Vaart (2008), Kushnir, Mirmulstein & Ramalho (2010) and OECD (2013).

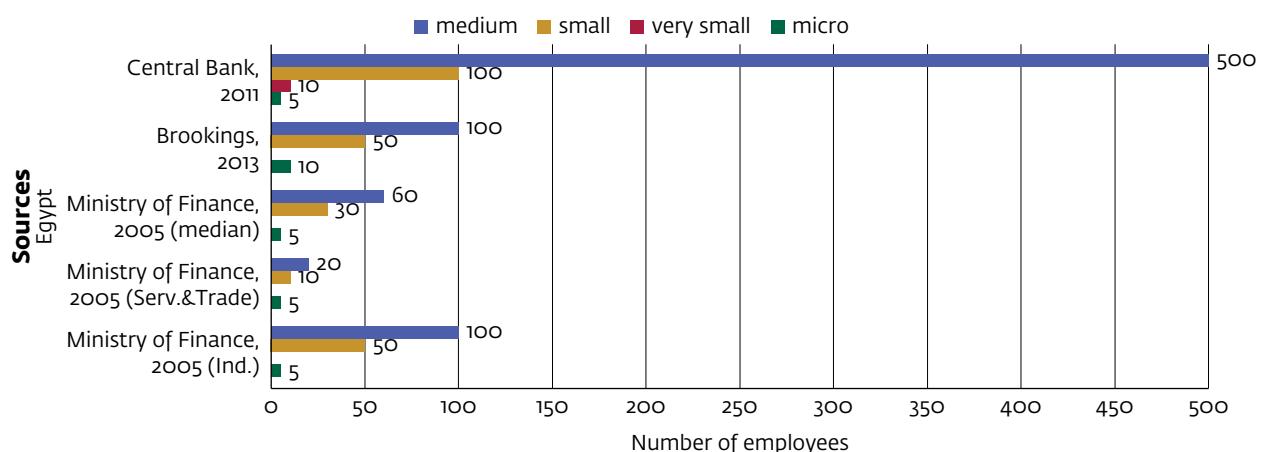
Given several methods for defining an MSME, institutions engaged in MSME data reporting could take a concrete first step by creating uniform standards for collecting MSME data. One approach could be to establish standard strata which aim to satisfy several definitions while enabling the collection of data under clear size classes (Figure 1 in [Description Note](#) provides an example of standard strata for MSME definitions utilizing number of employees). The availability of data for several standard strata across countries could be useful for developing more rigorous analyses. Also, MSME data collection could rely on crowdsourcing schemes, spearheaded by international organizations and in coordination with national statistics offices and other national/regional institutions.

FIGURE 13: Thresholds of number of employees (less than) for the provision of MSME data (Republic of Slovenia and EU)



Source: MSME Country Indicators.

FIGURE 14: Thresholds of number of employees (less than) for the provision of MSME data (Egypt)



Source: MSME Country Indicators.

Data Analysis

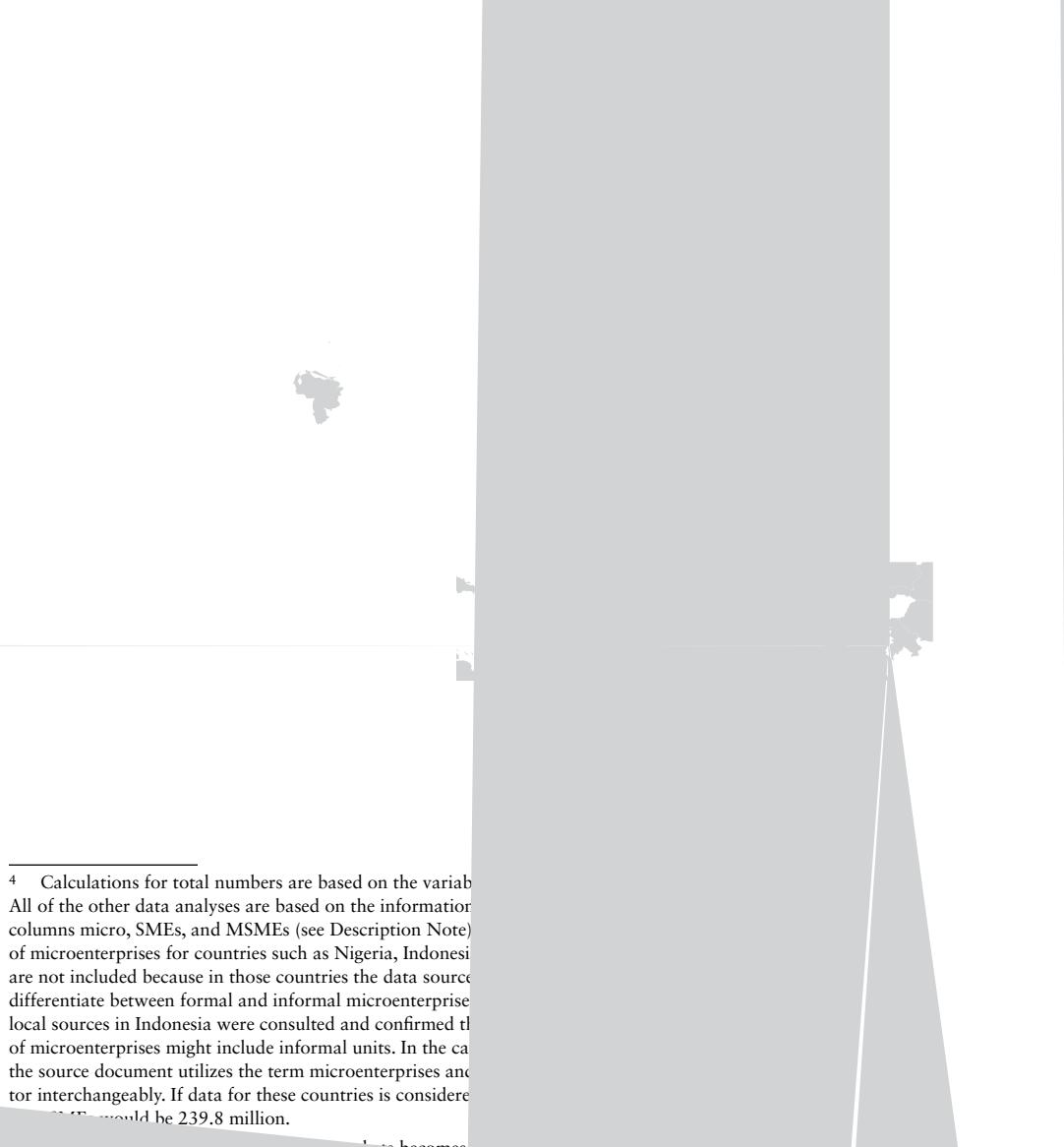
MSMEs densities and employment across the world

About 162.8 million formal MSMEs⁴ are contained in the database, with emerging markets accounting for around 96.3 million of this total.⁵ Overall, the average MSME density indicates there are 32.18 MSMEs per 1,000 people. The five economies with the highest formal MSME densities are: United States (89.96)

Denmark (80.69),

7 million formal MSMEs operating in emerging markets. In formal microenterprises, accounting for about 70 percent of all countries report data available, and their number of MSMEs (12 countries)

FIGURE 15: MSME density across the world



⁴ Calculations for total numbers are based on the variables micro, SMEs, and MSMEs. All of the other data analyses are based on the information in the columns micro, SMEs, and MSMEs (see Description Note). Data for some economies are not included because in those countries the data source does not differentiate between formal and informal microenterprise units. Local sources in Indonesia were consulted and confirmed that the term microenterprises might include informal units. In the case of Indonesia, the source document utilizes the term microenterprises and informal units interchangeably. If data for these countries is considered, the total number of MSMEs would be 239.8 million.

⁵ Some economies such as India and Vietnam are missing data for some economies.

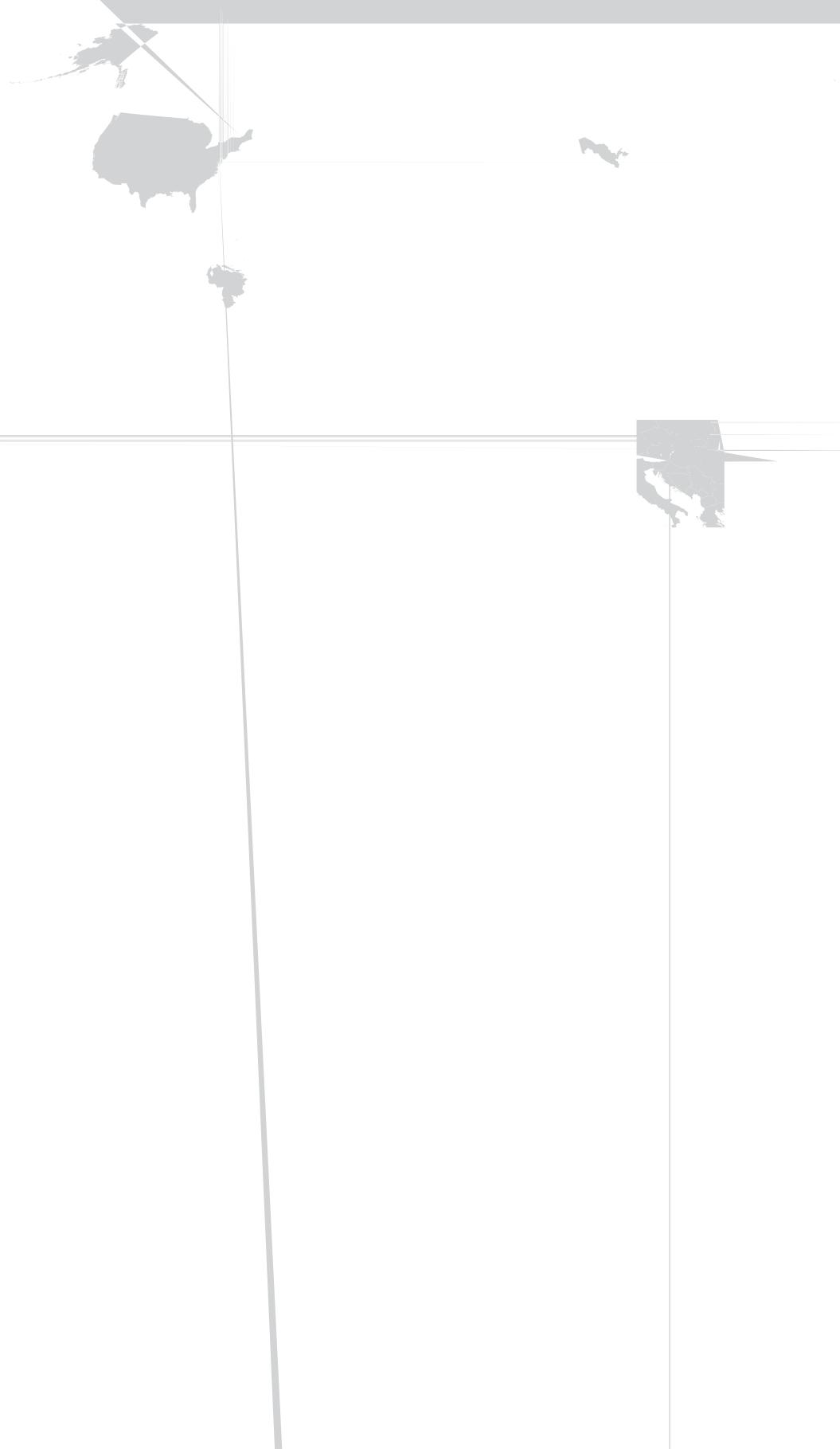
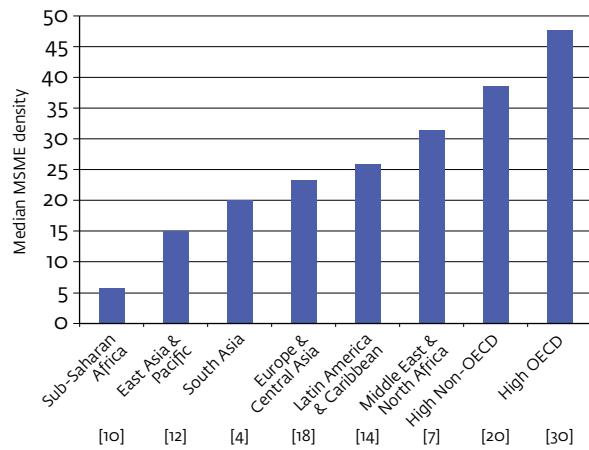
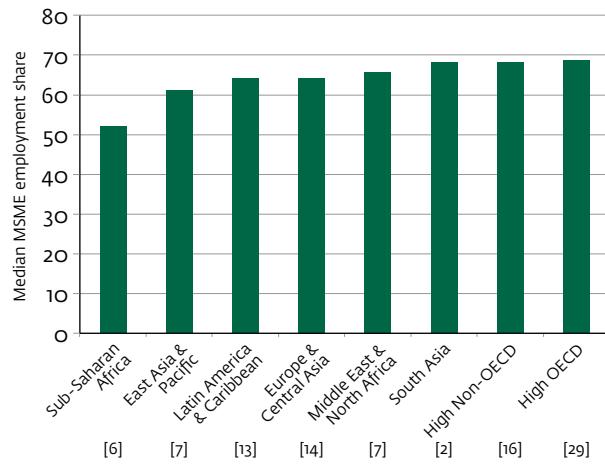
FIGURE

FIGURE 17: Median MSME density by region

Source: MSME-CI and World Development Indicators.

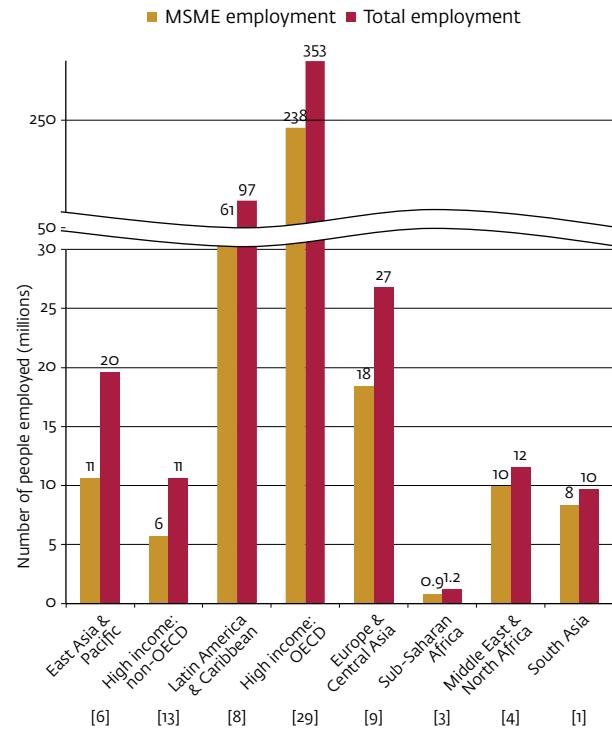
Note: The figure uses data from 115 economies. Number of observations in square brackets.

FIGURE 18: Median MSME Employment share by region

Source: MSME Country Indicators and World Development Indicators.

Note: The figure uses data from 94 economies. Number of observations in square brackets.

Figures 20 and 21 indicate that MSMEs have been growing at a global rate of around 5.2 percent annually. The region with the highest growth rate is Europe and Central Asia (12 countries included) along with high-income non-OECD economies (12 countries included). The regions of Sub-Saharan Africa and Middle East and

FIGURE 19: MSME employment vs. total employment

Source: MSME Country Indicators.

Note: The figure uses data from 73 economies. The number of observations for each region is detailed in square brackets.

North Africa registered relatively high growth rates; but the results for each region are based only on one country that satisfied the criteria described in the notes of the figures below (those countries are Burundi and Algeria, respectively). Based on income level, the group of lower-middle-income economies registered higher MSME growth rates, with an annual growth of approximately 7 percent. High-income economies appear to have the lowest growth rates; this could be explained, in part, by the already high MSME densities.

Higher income economies have higher rates of MSMEs per 1,000 people over time, based on trends for median MSME densities across a span of twelve years. Lower middle-income economies have the lowest median MSME densities over time (see Figure 22).

Despite limited data, the analysis by income level over time suggests the median share of employment among MSMEs tends to converge by the end of the studied period among all income levels (see Figure 23).

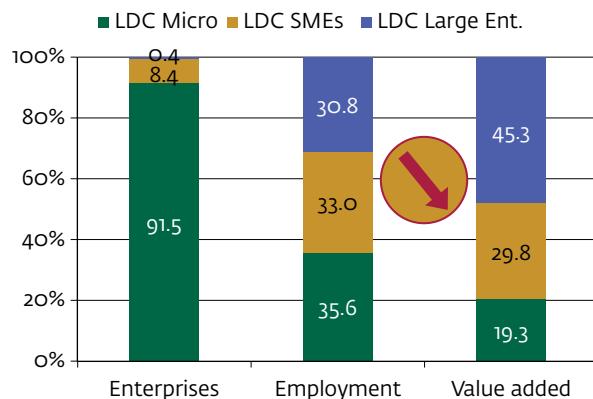
Value Added vis-à-vis density and employment

MSMEs are important because of their total number of enterprises and their contribution to employment. However, MSMEs could improve their contribution to

value added, particularly in less developed countries (see Figures 24 and 25).¹⁰

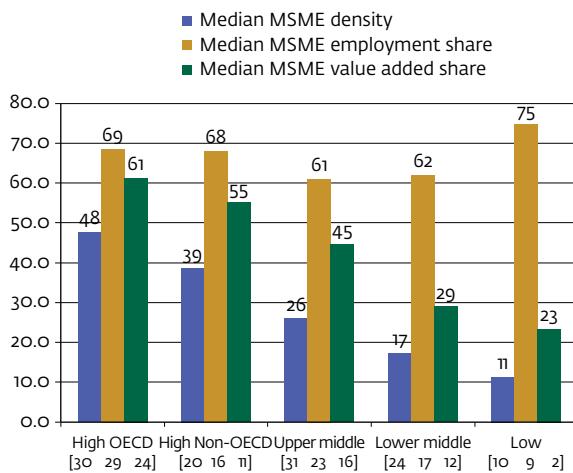
Figure 26 indicates that the number of MSMEs per 1,000 people drops with countries' income level. MSMEs' contribution to employment in high-income economies surpasses 65 percent, while in upper-middle-income

FIGURE 24: Median share of micro, SMEs and large enterprises in number of enterprises, employment and value added—Less Developed Countries (LDC)



Source: MSME Country Indicators.

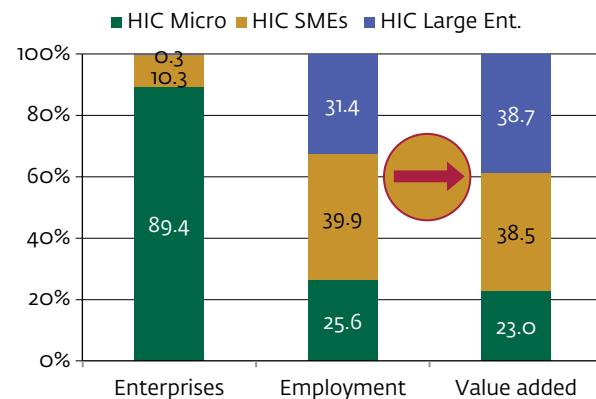
FIGURE 26: Median MSME density, employment share and value added share (percentage of totals) by income level



Source: MSME Country Indicators and World Development Indicators.

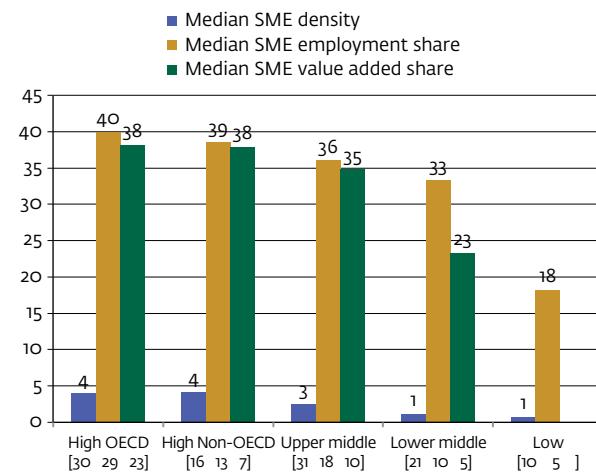
Note: Each indicator (density, employment and value added) uses data for 115, 94 and 65 economies, respectively. The number of observations for each income level and indicator is detailed in square brackets.

FIGURE 25: Median share of micro, SMEs and large enterprises in number of enterprises, employment and value added—High Income Economies (HIC)



Source: MSME Country Indicators.

FIGURE 27: Median SME density, employment share and value added share (percentage of totals)

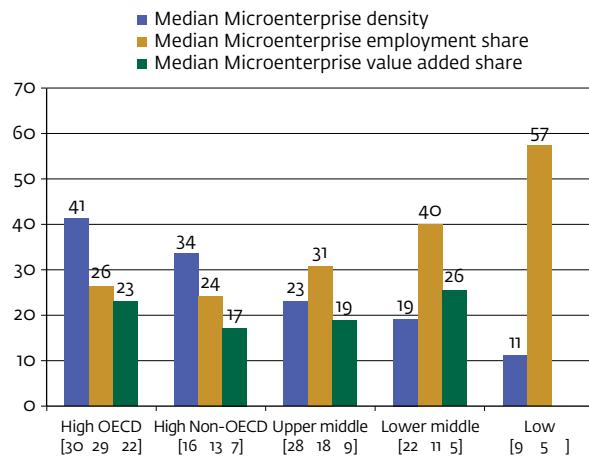


Source: MSME Country Indicators and World Development Indicators.

Note: The number of observations for each income level and indicator is detailed in square brackets. SME density is number of enterprises per 1,000 people.

¹⁰ Out of 155 economies included in the database, there are 107 observations for share of MSMEs (57 observations from middle-and low-income economies), 94 observations for share of employment in MSMEs (49 observations from middle-and low-income economies), and 65 observations for share of value added by MSMEs (30 observations from middle and low-income economies). See Description Note: Value Added for further details.

FIGURE 28: Median microenterprise density, employment share and value added share (percentage of totals)



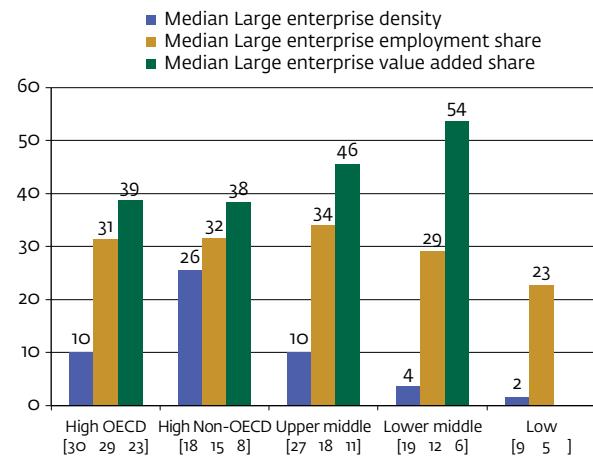
Source: MSME Country Indicators and World Development Indicators.

Note: The number of observations for each income level and indicator is detailed in square brackets. Microenterprise density is number of enterprises per 1,000 people.

economies it is about 60 percent. MSMEs' employment contribution in low-income economies is higher, at approximately 75 percent.¹¹ Furthermore, Figures 27 to 29 focus on microenterprises, SMEs, and large enterprises. For instance, the case of SMEs presents a somewhat more consistent behavior than the case of micro and large enterprises, given that the three featured variables (SME density, employment share, and share of value added) tend to drop as income levels fall. Microenterprises register higher densities as income level increases; they register higher shares of employment as income level decreases. Large enterprises have higher contributions to value added in upper-middle and lower-middle-income countries. Large enterprises contribute around 30 percent to employment, except in low-income countries where the contribution to employment is lower at around 23 percent. The density of large enterprises (only in this figure density is the number of enterprises per 100,000 people in order to improve visualization) is particularly high for non-OECD economies. The rest of the large enterprise densities show lower values for lower income levels.

Providing adequate support to MSMEs requires a better understanding of the MSME sector in different

FIGURE 29: Median large enterprise density, employment share and value added share (percentage of totals)



Source: MSME Country Indicators and World Development Indicators.

Note: The number of observations for each income level and indicator is detailed in square brackets. Large enterprise density is number of enterprises per 100,000 people.

countries. In addition to the number of enterprises, employment, and value added, it is important to describe the MSME sector based on share of exports, productivity, product quality, etc. Each could provide a better insight into the competitiveness of large numbers of MSMEs. Likewise, larger shares of employment are not an indicator of the quality of employment.

Analysis of homogenous groups and sensitivity

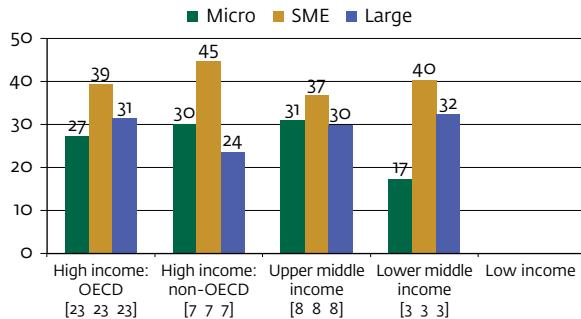
Figure 30 reveals that SMEs' share of employment is higher across all income levels when considering only those economies whose MSME definition matches a cut-off of 250 employees. When considering only those economies whose MSME definition matches a cut-off of 100 employees, the shares of employment corresponding to micro or large enterprises are generally higher (Figure 31).

When contrasting MSME density with GNI per capita, there are higher MSME densities in countries with higher levels of GNI per capita (see Figure 32 in Box 2).¹²

¹¹ Considering average shares, there is a tendency toward higher shares of employment as income decreases in the case of microenterprises. An opposite trend occurs for small and medium firms. Taken together, a similar pattern—where there is a lower contribution to employment by MSMEs at the middle of the income distribution and higher contribution at the extremes—is also found when analyzing average shares of employment.

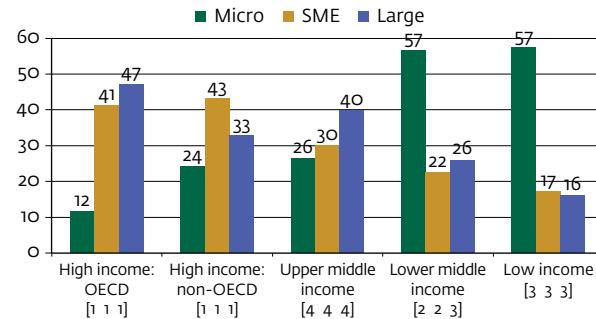
¹² In addition to the considerations detailed in Box 1, Guam, Northern Mariana Islands, and Virgin Islands were eliminated from the analyses utilizing GNI per capita (atlas method) because this variable is not available for those economies. Economies without data for the analyzed variables in each simulation were automatically excluded.

FIGURE 30: Median shares of micro, SMEs and large enterprises in employment by income level: Economies whose MSME definition matches a cut-off of 250 employees



Source: MSME Country Indicators.

FIGURE 31: Median shares of micro, SMEs and large enterprises in number in employment by income level: Economies whose MSME definition matches a cut-off of 100 employees



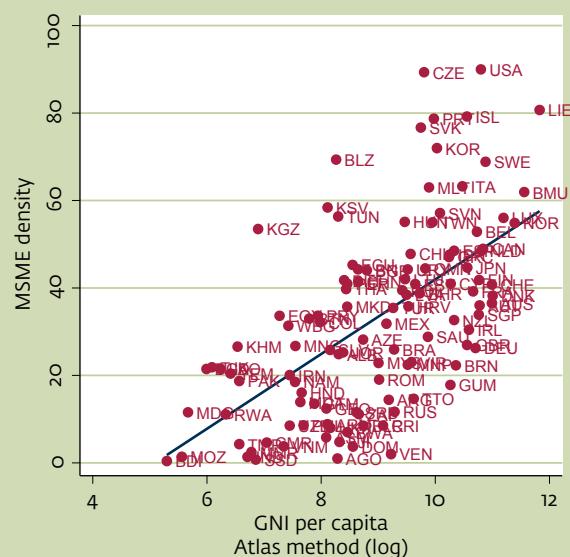
Source: MSME Country Indicators.

Box 2: MSME density and GNI per capita—Analysis of homogenous groups and sensitivity

After the data cleaning process, a sensitivity analysis was conducted to determine the behavior of the results by alternatively analyzing all observations (the most widely used per country) or groups of observations composed on the basis of commonalities such as having similar MSME definitions (homogeneous groups). Four homogeneous groups were created. The first group includes

those economies whose MSME definition matches a threshold of 250 employees. The second group considers only those economies whose MSME definition matches a threshold of 100 employees. The third group includes only those economies that defined an MSME as enterprises with turnover lower than the range of US\$ 50 million to 70 million.

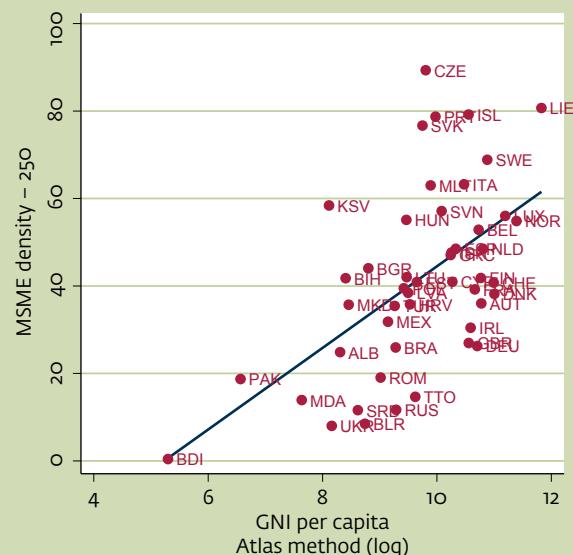
FIGURE 32: MSME Density and Income per Capita—all observations



Source: MSME Country Indicators, and World Development Indicators.

Note: The figure uses data from 115 economies. The results of the regression are statistically significant at the 1 percent level. Included economies: (i) covered in both databases; (ii) with available GNI per capita, Atlas method.

FIGURE 33: MSME Density and Income per Capita—MSME definition threshold: 250 employees



Source: MSME Country Indicators, and World Development Indicators.

Note: The figure uses data from 48 economies. The results of the regression are statistically significant at the 1 percent level. Included economies: (i) covered in both databases; (ii) with available GNI per capita, Atlas method.

(Box 2 *continued*)

Lastly, the fourth homogenous group includes only those economies that defined an MSME as enterprises with turnover in the range of US\$ 1 million to 5 Million. Overall, the results present the same behavior across all different groups. The same procedure was explored for micro and SME density with similar results. Additionally, when analyzing by homogenous groups, the representation of countries from different regions and income levels is

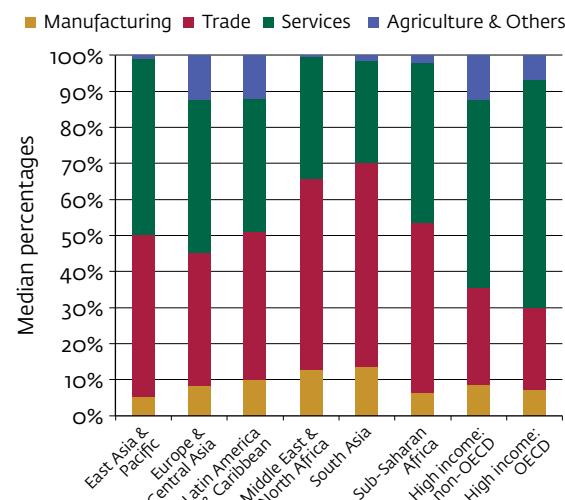
reduced. For example, the homogenous group containing only those economies whose definition matches a threshold of 250 employees contained 48 observations. From those 48 observations, 32 (67 percent) correspond to high income, 10 (21 percent) to upper-middle income, 5 (10 percent) to lower income, and 1 (2 percent) to low-income economies. Furthermore, the number of observations is low for other homogeneous groups.

A comment on MSMEs economic sectors

More SMEs exist than microenterprises in the manufacturing sector. The trade and service sectors appear to contain higher shares of microenterprises. In OECD economies, most microenterprises belong to the service

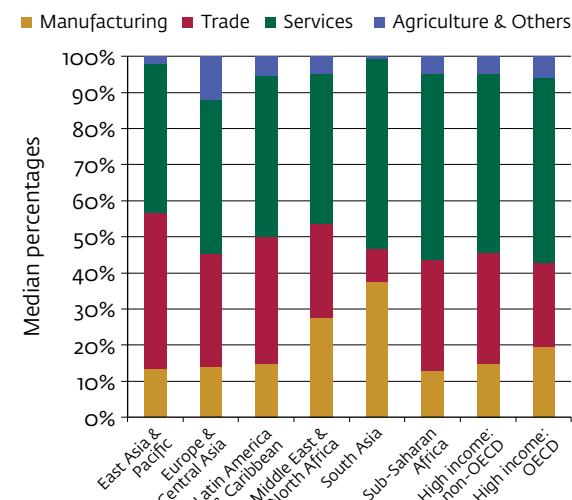
sector, while trade is the largest sector in South Asia and the Middle East and North Africa. Looking at the SME main economic sectors, the manufacturing sector is relatively low for East Asia and the Pacific, Europe and Central Asia, and Middle East and North Africa while in South Asia the agricultural sector is extremely low relative to other regions (see Figure 34 and 35).

FIGURE 34: Microenterprises main economic sectors



Source: MSME Country Indicators.

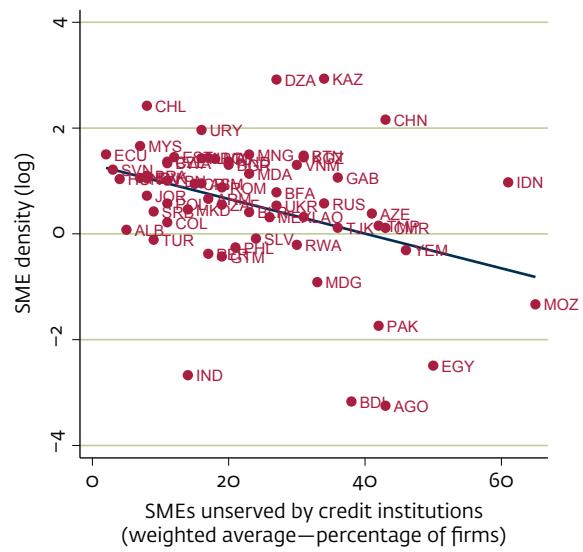
FIGURE 35: SMEs main economic sectors



Source: MSME Country Indicators.

Access to finance

FIGURE 39: SME density and enterprises unserved by credit institutions



Source: MSME Country Indicators and Financial Access Database by CGAP (2012).

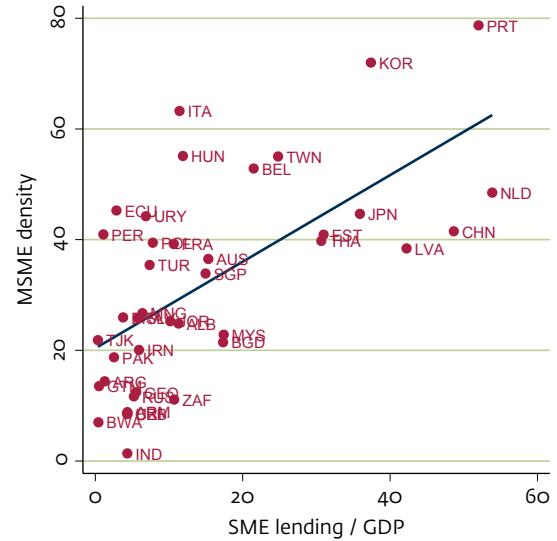
Note: The figure uses data from 63 economies. Results of the regression are statistically significant at the 1 percent level. When controlling for GNI per capita, Atlas method (log), the relationship is no longer significant. Included economies: (i) covered in both databases; (ii) with available GNI per capita, Atlas method.

Better access to finance is associated with higher numbers of MSMEs per 1,000 people. For example, there are more SMEs per 1,000 people in countries with a lower percentage of enterprises that are unserved by financial institutions (see Figure 39). In addition, for those economies that extend higher amounts of loans to MSMEs (as a percentage of GDP), a stronger micro, small, and medium enterprise sector exists in terms of the number of enterprises (remains statistically significant after controlling for GNI per capita) (see Figure 40).

Investment climate and institutional frameworks

A streamlined business environment, adequate competitive landscapes, and well-functioning institutional frameworks are associated with higher MSME densities across

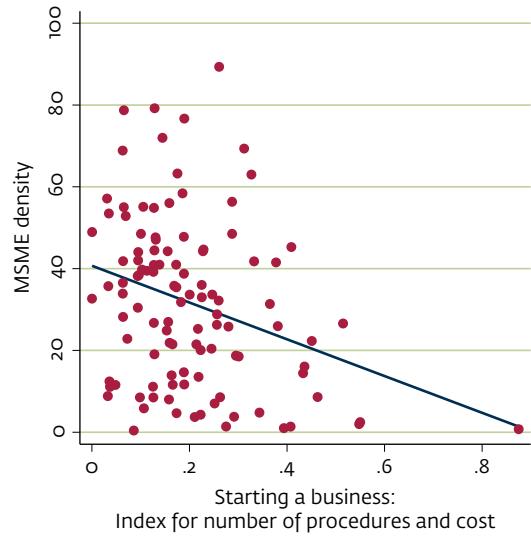
FIGURE 40: MSME density and SME Lending/GDP



Source: MSME Country Indicators, and Financial Access Database by CGAP (2010).

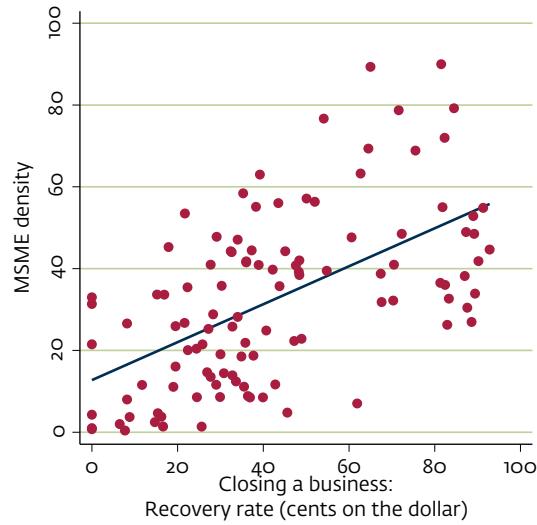
Note: The figure uses data from 40 economies. The results of the regression are statistically significant at the 1 percent level. When controlling for GNI per capita, Atlas method (log), the coefficient for SME lending/GDP remains significant. Included economies: (i) covered in both databases; (ii) with available GNI per capita, Atlas method.

the world. Using the *Starting a Business indicator* from the World Bank Group's *Doing Business* report as an example, MSME density was higher in economies where regulations for starting a business are streamlined and the business environment is friendly in terms of lower costs as well as a limited number of procedures for registering a business. A similar situation was found for the recovery rate of *Closing a Business* (see Figures 41 and 42 below). MSME density also was analyzed in relation to the World Economic Forum's *Global Competitiveness Index* (GCI), which assesses the competitiveness landscape and provides insight into the drivers of productivity and prosperity. In addition, less corruption is associated with higher MSME densities (see Figures 43 and 44 below). Even though results are not presented in this summary version, a good performance in indicators such as getting electricity, university-industry collaboration in R&D, governance, political stability, and rule of law are all tied to higher MSME densities.

FIGURE 41: MSME density and Starting a Business

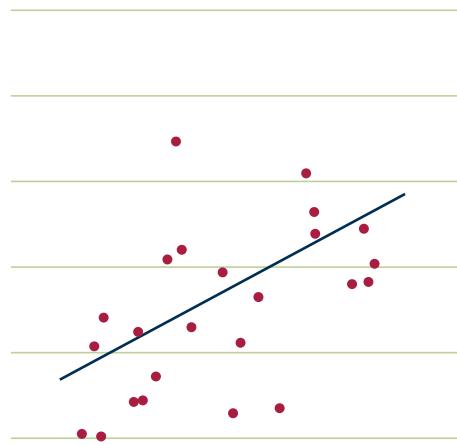
Source: MSME Country Indicators and Doing Business (2014).

Note: The figure uses data from 108 economies. The index for starting a business includes two indicators from doing business; procedures and cost. The goal was to measure both the practical as well as the economic restrictions (equal weights were assigned). The values for each indicator were standardized to vary from zero to one. Values towards zero suggest more business friendly regulation. The results of the regression are statistically significant at the 1 percent level. When controlling for GNI per capita, Atlas method (log), the index for starting a business is no longer significant. Included economies: (i) covered in both databases; (ii) with available GNI per capita, Atlas method.

FIGURE 42: MSME density and Closing a Business

Source: MSME Country Indicators and Doing Business (2014).

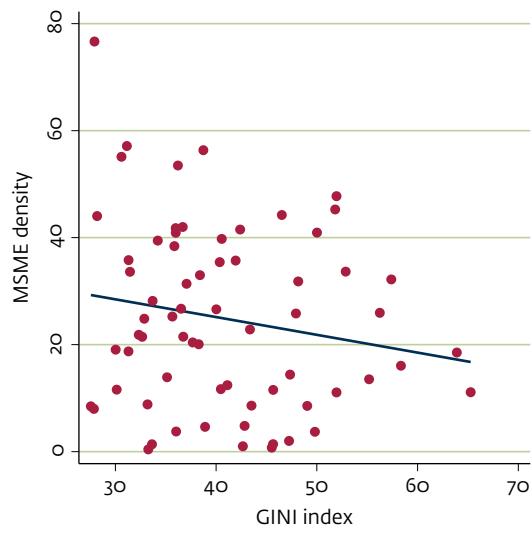
Note: The figure uses data from 109 economies. The results of the regression are statistically significant at the 1 percent level. When controlling for GNI per capita, Atlas method (log), the index for closing a business remains significant at the 5 percent level. Included economies: (i) covered in both databases; (ii) with available GNI per capita, Atlas method.

FIGURE 44: MSME density and control of corruption

Inequality and poverty

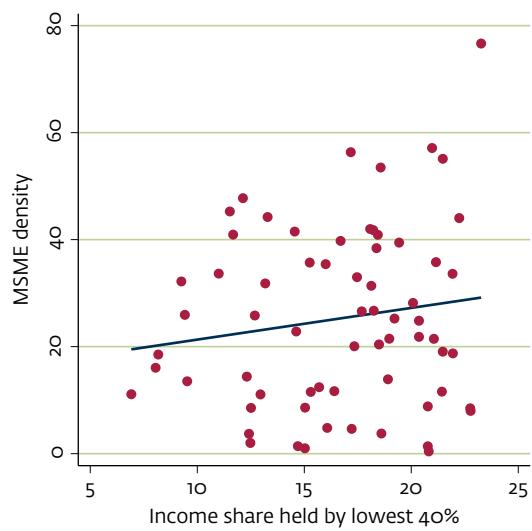
A country's MSME density is lower the more its income distribution deviates from a perfectly equal distribution. Similarly, countries with a bigger poverty gap (mean

FIGURE 45: MSME density and GINI index



Source: MSME-CI, Poverty and Inequality Data, World Bank (2014).
Note: Figure uses data from 67 economies. Results of the regression are not statistically significant. Included economies: (i) covered in both databases; (ii) with available GNI per capita, Atlas method. GINI index represents averages for the past decade (2004 to 2013).

FIGURE 47: MSME density and income share by the bottom 40%

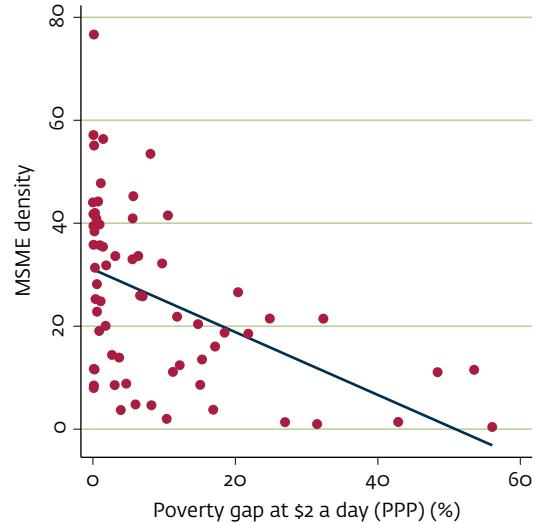


Source: MSME Country Indicators and Poverty and Inequality Database, World Bank (2014).

Note: The figure uses data from 66 economies. The results of the regression are not statistically significant. Included economies: (i) covered in both databases; (ii) with available GNI per capita.

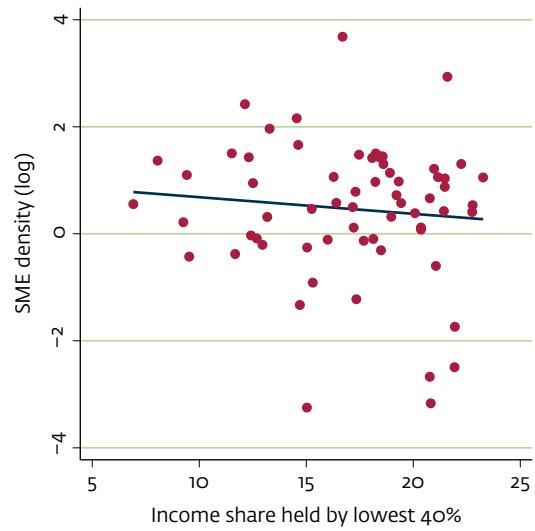
shortfall from the poverty line, counting the non-poor as having zero shortfall) had a lower MSME density. Therefore, the depth and incidence of poverty have a negative relationship with MSME density (Figures 45 and 46).

FIGURE 46: MSME density and poverty gap at \$2 a day (PPP) (%)



Source: MSME-CI, Poverty and Inequality Data, World Bank (2014).
Note: Figure uses data from 65 economies. Results of the regression are statistically significant at the 1 percent level. When controlling for GNI per capita, Atlas method (log), the coefficient is significant at the 5 percent level. Included economies: (i) covered in both databases; (ii) with available GNI per capita, Atlas method.

FIGURE 48: SME density and income share by the bottom 40%



Source: MSME Country Indicators and Poverty and Inequality Database, World Bank (2014).

Note: The figure uses data from 65 economies. The results of the regression are not statistically significant. Included economies: (i) covered in both databases; (ii) with available GNI per capita.

There are more MSMEs in countries where the bottom 40 percent have larger shares of consumption. However, variables related to inequality (such as income share by the bottom 40 percent and also GINI index) report a slightly different pattern when contrasted with MSME and SME densities separately (see, for example, Figures 47 and 48).

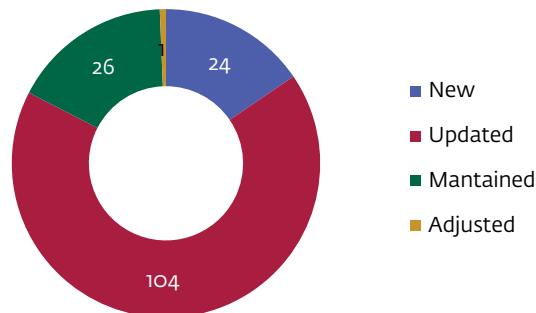
MSME-CI 2010 to 2014 progression

The MSME-CI 2014 database contains 155 countries.¹³ Compared with the 2010 MSME-CI database, the 2014 update includes 24 new countries, and 104 countries with updated information using more recent data. Twenty-six countries used the same information as in the 2010 update (unfortunately, in some countries census for structural business statistics are not conducted regularly). One country required a “backward adjustment” after revising the original data source (see Figure 49).

Taking the differences between the latest year of information available on the 2014 update and the latest year of information available on the 2010, on average, the information was updated 4.6 years.

While the MSME density indicator does not report significant change between the 2010 and 2014 reports

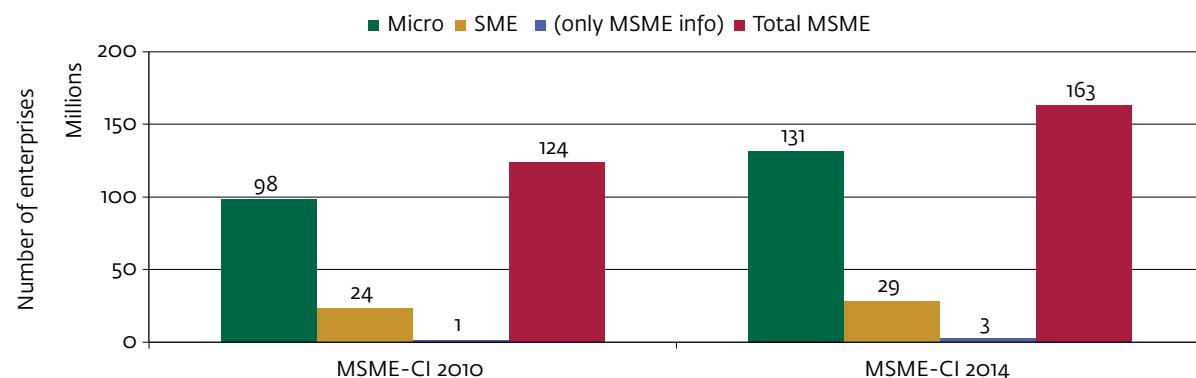
FIGURE 49: Changes in the year of information for each observation—MSME-CI 2010 to 2014



Source: MSME Country Indicators 2010 and 2014.

(the value is maintained at around 31 to 32 MSMEs per 1,000 people on average), the average share of MSMEs in total employment registered an increase in the 2014 report versus the 2010 report (to 65 percent from 41 percent) (see Figures 51 and 52). The collection of data for number of employees is a new feature of this update and may contribute a better understanding of this information. It is possible that MSME density has not changed significantly, given that increases in number of enterprises might accompany increases in country populations.

FIGURE 50: Number of microenterprises, SMEs, and MSMEs—MSME-CI 2010 and 2014¹⁵



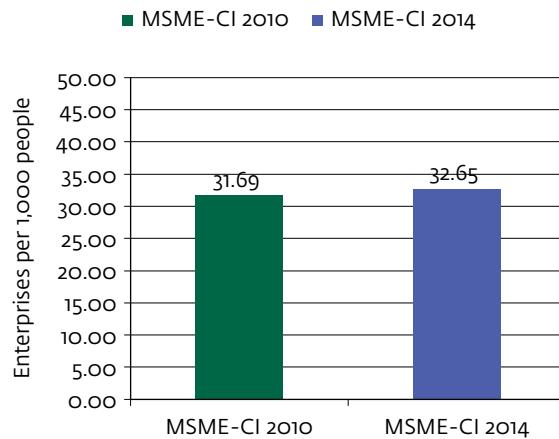
Source: MSME Country Indicators 2010 and 2014.

Note: The figure uses only observations included for data analysis in both databases.

¹³ Considering one observation per country, the most widely utilized. Each observation contains a definition, data or both.

¹⁴ For the 2014 report the economies excluded are detailed in Box 1. For the 2010 report the following economies were excluded because the data do not cover all sectors of the economy: Ethiopia; Puerto Rico; Sri Lanka; Nepal; Panama; Nicaragua; Sudan and Tunisia. Albania, Bahrain, and Georgia were excluded because the data must come from surveys. Belize, Brunei Darussalam, Guatemala, Guyana, and Iran, Islamic Rep., were excluded because data beyond 2000 were unavailable.

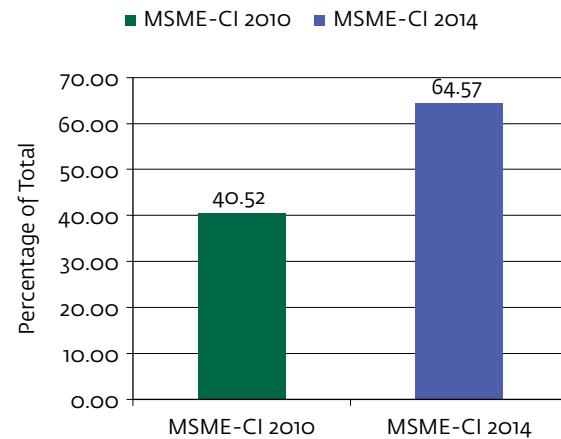
FIGURE 51: Average MSME density—MSME-CI 2010 and 2014



Source: MSME Country Indicators 2010 and 2014.

Note: The figure uses only observations included for data analysis in both databases.¹⁶

FIGURE 52: Average MSME employment share—2010 and 2014



Source: MSME Country Indicators 2010 and 2014.

Note: The figure uses only observations included for data analysis in both databases.¹⁷

¹⁶ Ibid.

¹⁷ Ibid.

References

- Ayyagari, M., Demirguc-Kunt, A., & Maksimovic, V. 2011. Small vs. Young Firms across the World: contribution to employment, job creation, and growth. *Policy Research Working Paper Series*, 5631, The World Bank
- Black, J., Hashimzade, N., & Gareth, M. 2009. A dictionary of economics (3th ed.). Oxford: Oxford University Press.
- Gibson, T. & Van der Vaart, H.J. 2008. Defining SMEs: A Less Imperfect Way of Defining Small and Medium Enterprises in Developing Countries. Brookings Global Economy and Development. Retrieved from http://www.brookings.edu/~media/research/files/papers/2008/9/development%20gibson/09_development_gibson.pdf
- Kushnir, K., Mirmulstein, M., & Ramalho, R. 2010. Micro, Small, and Medium Enterprises Around the World: How Many Are There, and What Affects the Count? *IFC MSME Country Indicators*. Washington, DC: The World Bank.
- OECD. 2013. *Financing SMEs and Entrepreneurs 2013: An OECD Scoreboard*. OECD Publishing.
- Schneider, F., Buehn, A., & Montenegro, C. 2010. Shadow economies all over the world: New estimates for 162 countries from 1999 to 2007. *Policy Research Working Paper Series*, 5356, The World Bank



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