A microscope on small businesses

Spotting opportunities to boost productivity
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Bicycle mechanic focuses on a detail while working on a customer's bicycle.
At a glance

— Micro-, small, and medium-size enterprises (MSMEs) form the backbone of economies. Across the 16 countries we examine, MSMEs account for two-thirds of business employment in advanced economies—and almost four-fifths in emerging economies—as well as half of all value added. They also power dynamism and will play an important role in preserving competitiveness in an era of shifting global production.

— Boosting MSME productivity relative to large companies could yield significant value. Small business productivity is only half that of large companies, and less in emerging economies. Raising MSMEs to top-quartile levels relative to large companies is equivalent to 5 percent of GDP in advanced economies and 10 percent in emerging economies.

— Capturing this value requires a fine-grained view. Relative productivity of MSMEs and large companies varies widely across subsector and country. For example, in virtually all countries, eight subsectors out of 24 drive more than 60 percent of the value of narrowing the productivity gap in manufacturing, but the top ones vary by country.

— A win-win economic fabric can improve productivity for both MSMEs and large enterprises. MSME and large company productivity move in tandem in most subsectors, indicating spillovers if the right conditions are created. For example, automotive MSMEs have gained operational proficiency through systematic interactions with productive original equipment manufacturers, and small software developers have benefited from talent and capital ecosystems seeded by larger companies.

— All stakeholders have a role to play in developing granular productivity strategies. In subsectors where both small and large companies lag, infrastructure and policy improvements can target both together. Where MSMEs struggle but large enterprises outperform, building networks among them helps. Even where both large and small companies do well, strengthening their interactions could boost productivity.
Man sewing carpets in a market shop in Marrakech, Morocco
Introduction

Micro-, small, and medium-size enterprises (MSMEs) are the lifeblood of economies around the world. They account for more than 90 percent of all businesses, roughly half of value added, and more than two-thirds of business employment.¹

But small businesses lag behind large companies on productivity. On average, their labor productivity, or value added per worker, is half that of their larger peers. Accelerating productivity growth has always been the sure way to deliver long-term prosperity, and MSMEs can—must—play a crucial role. Their contribution is potentially even more important amid the beginnings of a reconfiguration of global trade patterns.² Such shifts are unlikely to translate into a meaningful long-term realignment without a competitive network of MSMEs supporting and complementing large companies.

If MSMEs were to narrow the productivity gap with large companies, not only could that breathe new life into economy-wide productivity, employment, and growth, but economies and companies could raise their resilience in an uncertain world. The question is how.

Only by studying MSMEs at the fine-grained level can we understand where and why opportunities exist and plot a path toward higher productivity for all. After all, MSMEs are immensely varied. They range from a self-employed individual, such as a taxi driver or an online game designer; to a microenterprise with one to nine employees, like a laundry or a dental practice; to a small enterprise with up to 50 employees, such as a bakery or local auto repair chain; to a medium-size furniture manufacturing company or software business employing up to 250 people.

In this research, the McKinsey Global Institute (MGI) has aggregated a richly granular data set of MSME productivity across sectors and subsectors for 16 countries with different income levels accounting for more than 50 percent of global GDP. In this group (listed by per capita GDP in 2021 in purchasing power parity terms) are ten advanced economies: the United States, Germany, Australia, the United Kingdom, Italy, Israel, Japan, Spain, Poland, and Portugal; and six emerging economies: Mexico, Brazil, Indonesia, India, Nigeria, and Kenya.³ At the sector level, in the manufacturing sector, for instance, our data cover 24 level-two subsectors and 95 level-three subsectors.⁴ This enables us to explore the details of businesses that are highly diverse in size, economic context, degree of formalization, and, especially, the nature of economic activity in which they engage (see sidebar “Definitions, scope, and data limitations”). Most previous external analysis has tended to study MSMEs in a single country or has compared productivity among countries within a particular sector.⁵

This research focuses on the variation in MSME productivity relative to large companies across sectors, subsectors, and countries, enabled by our rich data set. We use this microscopic, but cross-country, lens to spot potential value and identify how MSMEs can work with other companies in specific business contexts to capture it.
Definitions, scope, and data limitations

The data collected for this research are arguably deeper and broader than those collated in the past. Here we present an overview of our approach. (See the technical appendix for more detail on the data sources and analysis undertaken in this research.)

Types of MSMEs studied. We examine a diverse array of MSMEs, from self-employed workers and entrepreneurs to mom-and-pop shops and small family businesses, across 16 countries. One notable exception is smallholder farmers, most of whom can be considered small business owners and constitute a substantial portion of the workforce, particularly in emerging economies. For example, in 2022, the agriculture sector employed 29 percent of the workforce in Indonesia, 33 percent in Kenya, 38 percent in Nigeria, and 43 percent in India. In this research, we focus on the nonfarm sector and do not examine agricultural productivity, which has its own unique dynamics, meriting a separate study.

MSME size category definitions. Enterprise sizes are typically defined by the number of persons employed. We take each country’s national definition of micro-, small, and medium-size enterprises. For example, for European economies in our sample, we used the OECD’s definition of MSMEs. The OECD thresholds are as follows: microenterprises employ nine people or fewer, small enterprises employ between ten and 49 people, medium-size companies between 50 and 249, and large companies 250 or more. However, definitions of enterprise sizes may vary by country. For example, in the United States, large companies are defined as having 500 or more employees. Indonesia and Kenya define businesses with 100 or more employees as large, and Nigeria sets the threshold at 200. India and Indonesia define MSMEs based on their revenue and their investment in plant and equipment as well as employment. While this makes cross-country comparisons inexact, it enables us to use reported data more directly and to limit assumptions.

Scope of data. We gathered data on value added and employment by sector (classified based on economic activity) across corporate size classes (micro, small, medium, and large) from country-level economic and business censuses, MSME and labor surveys, and aggregated databases, such as those of Eurostat, OECD, ILOSTAT, and S&P Global Market Intelligence. Typically, we use 2019 data to exclude potential distortions due to the COVID-19 pandemic. However, for availability reasons, the dates used range from 2016 to 2019 across countries.1

Level of aggregation. We aggregated data at the level of 12 level-one sectors (for example, manufacturing) and 68 level-two subsectors (for example, manufacturing of textiles within the manufacturing sector), as defined by the International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4 or equivalent. For the United States, Brazil, Mexico, and the European economies in our sample, we also collected data for 219 level-three subsectors (for example, manufacturing of carpets and rugs within manufacturing of textiles). The 12 level-one sectors are mining and quarrying; manufacturing; electricity, gas, steam, and air conditioning supply; water supply, sewerage, waste management, and remediation activities; construction; wholesale and retail trade; transportation and storage; accommodation and food services activities; information and communications technology (ICT); professional, scientific, and technical activities; administrative and support service activities; and other service activities.2

Sectoral data for some countries, typically the emerging economies, are not as granular as for the advanced economies. For cross-country comparisons, we used a combination of data sources, including a sector breakdown of employment from ILOSTAT, and distinguished between MSMEs and large companies using national sources. In some cases, we also conducted comparisons at a less granular level by grouping two or three level-two sectors.

Measuring productivity. Productivity is a measure of output relative to input.3 In macroeconomic terms, it is defined as the value of the goods and services produced divided by the amount of labor, capital, and other resources required for its production. For this report, we focus on labor productivity, measured as value added per worker (in US dollars at purchasing power parity). While the more accurate measure of labor productivity is value added per hour worked—as the number of weekly hours worked varies substantially among countries, from 31 hours in Australia in 2023 to roughly 46 hours in India—we use the per worker metric as it is more commonly available across size categories by country. Due to the lack of comprehensive data at the individual company level for MSMEs, we rely on

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1 To verify stability of the data, we examined data from 2009 and 2014 for some countries but did not collect complete longitudinal data due to the significant effort involved. However, the topic of understanding trends in MSME productivity would be a valuable area for future research.

2 We grouped two sectors—electricity, gas, steam, and air conditioning supply; and water supply, sewerage, waste management, and remediation activities—into one sector: utilities.

3 Investing in productivity, McKinsey Global Institute, March 2024.
subsector-level average productivity to make inferences.4

**Other important limitations.** Our research reflects the challenges of working with significant constraints on data availability. For all the countries in our sample, we included data for both formal and informal sectors, although we recognize that data pertaining to the informal sector are often less reliable. Beyond informality, as consistent data were not always available across countries, we had to exclude certain sectors from our analysis. Because of inconsistent data availability, across countries we exclude financial services; real estate; education; human health and social work activities; arts and entertainment; public administration and defense; and activities of households and extraterritorial organizations. These sectors play a substantial role, particularly in advanced economies where they contribute 37 percent of value added, on average, ranging from 26 percent in Poland to 43 percent in the United States. As noted, we also exclude agriculture despite its significant contribution to the economy. These exclusions imply that our findings may not be entirely representative of the entire economy and are limited to the narrower “business” economy. Similarly, from a country perspective, we do not cover some major emerging economies, such as China, and regions, such as the Middle East and North Africa, due to limited data availability. We also include only a selected set of advanced economies in our research. As such, we cannot state definitively the degree to which our conclusions are globally representative. While we derive broad and generalized implications for emerging and advanced economies, these are directional only.

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4 We focus on national- or sector-level productivity from a growth economics perspective. Organizational productivity research often studies issues related to attrition, disengagement, skills mismatch, or time inefficiency. See, for example, Aaron De Smet, Marino Mugayar-Baldocchi, Angelika Reich, and Bill Schaninger, “Some employees are destroying value. Others are building it. Do you know the difference?,” McKinsey Quarterly, September 2023.
1. Small businesses power the economies of today and tomorrow

MSMEs are ubiquitous and play vital economic roles across countries, albeit with important differences depending on whether they operate in an emerging or advanced economy.

**MSMEs fuel economy-wide production and jobs**

MSMEs create enormous value for economies around the world. They account for roughly half of global GDP. That share varies significantly among economies (Exhibit 1). In Portugal, Israel, Indonesia, Italy, and Kenya (ordered by decreasing share of value added), the share is larger than 60 percent. In the United States, Nigeria, and India, it is less than 40 percent.

They are also significant employers, accounting for roughly 40 percent of all employment and 70 percent of employment in the business sector, which we define as excluding the farm, government, and finance sectors. That share is as high as 96 percent in Kenya, where MSMEs account for half of all employment.

The business sector plays a larger role in advanced economies. But within the business sector, MSMEs have a greater impact in emerging economies, employing four-fifths of all workers, compared with two-thirds in advanced economies.

**MSMEs create enormous value for economies around the world.**
MSMEs generate the majority of jobs and roughly half of total corporate value added.

MSMEs are also meaningful job creators. In advanced economies, one 2013 study suggested, they contributed more than half of net job growth in businesses. In the United States, for example, SMEs have accounted for two out of every three jobs added in the past 25 years. In emerging economies, MSMEs created seven out of ten new formal jobs over the past decade.

MSMEs play a crucial role in production across sectors, but their contribution is more significant in some (Exhibit 2). While there are differences among countries, MSMEs tend to contribute the majority of the value added in four sectors—accommodation and food, construction, professional services, and trade. Although they contribute only about 45 percent of value added in the manufacturing sector, they are the second-largest contributor to small business value after the trade sector. Across all sectors, MSMEs also employ at least half of all business workers.
MSMEs drive business dynamism

Many MSMEs grow rapidly into large companies, adding to the vibrancy and dynamism of the economies in which they operate. They promote innovation and competition among companies, encouraging all businesses to continually improve their products, services, and processes, which, in turn, can enhance overall economy-wide productivity and dynamism.

Many large companies of today were MSMEs not long ago. About one in five of today’s very large companies—defined as having a market capitalization of more than $10 billion in the United States and equivalent values in other economies—were MSMEs at some point after 2000 and have since powered their way to large company status.

The share of scaled-up companies varies by country, indicating different levels of MSME dynamism (Exhibit 3). Dynamic MSMEs can stimulate competition among businesses, driving the entire system to become more innovative and efficient, ultimately resulting in increased productivity. Yet overall, rising productivity—crucially, that of large companies—can create new
market opportunities and build business capabilities for smaller enterprises, raising the rate of scaling up.

Unique factors at the country level can contribute to dynamism. In Australia, high dynamism reflects a resources boom that has expanded growth opportunities for small mining companies. Israel, by contrast, has a small economy, but one of the most technologically advanced in the world. Its dynamism is connected to entrepreneurial ecosystems, a high density of skilled professionals, an ability to tap into global networks, and large-scale lending to MSMEs. Over the past decade, growth in bank credit to SMEs in Israel was higher than to large businesses, at 61 percent versus 16 percent. In India, only about 10 percent of large companies in 2022 were MSMEs at some point after 2000. Indeed, previous MGI research found that India has a "missing middle" of mid-size companies. MSMEs have faced structural barriers, such as the high cost of compliance and finance, that have tended to constrain their growth.

Researchers have found that high-growth businesses in advanced economies tend to be younger and intangibles heavy. Enterprises that tend to rely on profits rather than external financing to fund their growth are also more likely to scale up. Our analysis finds that in the information and communications technology (ICT) and mining sectors, one in three enterprises that are large today have grown from being MSMEs in the past two decades (Exhibit 4). These sectors seem to experience a fast pace of innovation and technological disruption as well as higher rates of investment.
MSMEs in the emerging economies in our sample seem to exhibit greater dynamism than in advanced economies in core sectors like construction, utilities, and transportation. Investment in physical infrastructure tends to rise faster in countries that are in the earlier stages of their development. Where such sector growth opportunities have been captured, we see greater business dynamism.

Some emerging economies have powered national growth through the manufacturing and trade sectors as well. In a similar analysis of companies founded after 1950, in China—not included in our sample, as noted—the dynamism of the manufacturing and trade sectors is higher than in the advanced economies on average.

**MSMEs can boost national productivity while staying small or by fueling larger companies**

In emerging economies, the MSMEs that are so vital to sustaining livelihoods are heavily skewed toward microenterprises. In India, Kenya, and Nigeria, microenterprises employ more than 90 percent of MSME workers, of whom some 90 percent are self-employed own-account workers and contributing family members. They face challenges of particularly low productivity.17

As these emerging economies climb the income ladder, microenterprises may grow their revenue and productivity, but most tend to stay small or medium size.18 As a result, MSMEs as a group

Exhibit 4

**Mining and ICT companies scaled up more overall, while construction, utilities, and transportation MSMEs were more dynamic in emerging economies.**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Advanced economies</th>
<th>Emerging economies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>32</td>
<td>23</td>
</tr>
<tr>
<td>ICT</td>
<td>31</td>
<td>25</td>
</tr>
<tr>
<td>Construction</td>
<td>31</td>
<td>20</td>
</tr>
<tr>
<td>Utilities</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Trade</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Transportation</td>
<td>10</td>
<td>22</td>
</tr>
</tbody>
</table>

Share of scaled-up companies by country, share of 2022 large public companies that were MSMEs at some point since 2000, %, simple average across countries

1Large companies defined as top public companies above specific market capitalization thresholds defined by country (as of December 2022). Of these, all companies that could be classified as MSMEs with <250 employees at any point after 2000 were considered to have scaled up into large companies by 2022. If a company was founded after 2000 and became a large company by 2022, it is considered to have scaled up.

Note: Sample size: 1,907 large companies of which 1,543 are from 9 advanced economies and 364 are from 4 emerging economies. Analysis excludes 100 companies included in country-level scale-up rates as they are typically involved in multiple economic activities and they could not be mapped to any one sector. Analysis excludes Kenya, Nigeria, and Portugal due to insufficient data availability.

Source: S&P Capital IQ, The Conference Board Total Economy Database, April 2023; McKinsey Global Institute analysis

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continue to contribute larger shares to national output, and in that sense, MSMEs directly lift aggregate productivity growth.

In richer economies, the dynamic is different. Much of employment has shifted away from microenterprises to small and medium-size companies or even to larger ones. Only about half of all MSME workers are employed in microenterprises. As these advanced economies climb the income ladder, beyond a certain point more MSMEs tend to scale up into larger companies, are taken over and merged into them, or simply exit in the process known as creative destruction. As a result, the contribution of large businesses to the national output of the richest economies rises, relative to that of small companies. As such, MSMEs may not increase their share of economies, but they still contribute to business dynamism.

In emerging economies, the MSMEs that are so vital to sustaining livelihoods are heavily skewed toward microenterprises.
2. Boosting MSME productivity could yield significant value

Despite their central role in economies across the world, MSMEs are only about half as productive as large companies, and narrowing that gap could create significant value. Yet somewhat unexpectedly, this gap is by no means monolithic: relative productivity performance varies enormously across countries and sectors, and even within the same sector among countries.

**MSME productivity lags behind that of large companies**

The MSME productivity gap—defined as the distance between MSME productivity and that of large companies—varies among countries. For example, in Kenya, MSMEs are just 6 percent as productive as large companies, translating to a hefty 94 percent productivity gap. Among the countries we investigate, MSMEs are relatively most productive in the United Kingdom, at 84 percent of the levels of large companies, translating to a productivity gap of only 16 percent (Exhibit 5). In general, the productivity gap is larger in emerging economies than advanced ones.

As discussed in the previous chapter, within increasing income levels in emerging economies, MSME productivity rises steeply relative to that of large companies, whereas in advanced economies, the productivity of large companies rises noticeably.

The size of MSMEs certainly plays a role in their productivity relative to that of large companies. Microenterprises trail large companies by a greater margin than do small and medium-size ones (Exhibit 6), and microenterprises account for much more employment in the emerging economies in our sample.

Yet in our sample advanced economies, only about 15 percent of the differences in MSME productivity among countries can be explained by the mix of micro-, small, and medium-size enterprises. The rest of the variation comes from differences in sector mix as well as how MSMEs in each country fare at a subsector level.

The MSME productivity gap—defined as the distance between MSME productivity and that of large companies—varies among countries.
MSME productivity lags behind that of larger firms across countries, with a wider gap in emerging economies.

Productivity, value added per worker, $ thousand (PPP), 1 countries ordered by overall MSME productivity

1 Year for which data are available/represented varies by country from 2016 to 2019; MSME and large size category definitions match each country’s national definition.

2 Defined as ratio of MSME productivity to large company productivity.

3 Measured as 1 minus MSME productivity ratio.

Note: Analysis excludes the following sectors due to inconsistent data: agriculture, financial and insurance activities, real estate, public administration and defense, education, human health and social work, arts and entertainment, activities of households, and activities of extraterritorial organizations. Analysis also excludes additional sectors varying by country because data are not available: other service activities in Italy and Portugal; mining, water supply, sewerage and waste management, construction, and other service activities in India; ICT and other service activities in Kenya; administrative and support service activities and other service activities in Nigeria.

Source: Country-level economic and business censuses; MSME surveys; labor surveys; aggregated databases such as Eurostat, OECD, ILOSTAT, and S&P Global Market Intelligence; McKinsey Global Institute analysis

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Lack of scale matters more to the MSME productivity gap in some sectors than in others

Considering the broad sectors of our sample advanced economies, the MSME productivity ratio, averaged across economies, ranges from 49 percent in ICT to 104 percent in the administrative services sector. In other words, MSMEs in the ICT sector face the largest gap in productivity relative to large companies in ICT, while MSMEs in administrative services tend to outperform their large peers in productivity. Country-level differences within each sector are greatest in mining and utilities, and smallest in manufacturing and ICT (Exhibit 7).

Larger scale is generally associated with higher productivity. Yet being small has its advantages, too. Small businesses can be a vehicle for individuals to channel their entrepreneurial ambitions...
as well as for people who simply own and run a business for a living. They shape our social fabric and day-to-day life in important ways and are trusted by citizens. In the United States, for example, MSMEs are considered the most trusted institutions by the general public, more even than the military or the police. While small businesses do not have as much time and resources to innovate as large companies, their relative advantage comes from being closer to customers, being less bureaucratic, and reacting nimbly to changing market dynamics. They are able to effectively mobilize local labor and offer flexible work arrangements.

Small businesses also play a crucial role in enabling the productivity of large companies, which tend to focus on core competencies and outsource less essential activities to other businesses, a phenomenon called work fissuring. This results in greater concentration of higher-value-added activities in large companies, with smaller businesses taking on lower-value work. Similarly, in many advanced economies, as waves of labor-intensive manufacturing moved to countries with low labor costs—often to MSMEs in those countries—higher-value work remained with larger enterprises.

Moreover, being engaged in higher-value work enables large businesses to build three types of competencies: intangible capital, which comprises both better technology and superior human capital; global connections; and financial capital. Consequently, the MSME productivity ratio...
tends to be lower, and the productivity gap wider, in sectors where these competencies play a significant role in driving business competitiveness (Exhibit 8).

— **Intangible capital.** In sectors like ICT, manufacturing, and professional services, intangibles drive a larger share of value added and MSMEs have a wider productivity gap. Manufacturing productivity depends on organizational efficiency, the application of technology, and the effective utilization of capital—areas where scale makes a difference. In the mining sector, large companies have an advantage in undertaking explorations because they can invest effectively in acquiring geological information and in developing specialized know-how. In the ICT and professional services sectors, productivity drivers like automation, connectivity, and access to high-skill talent also become more powerful with scale. According to the World Bank Enterprise Surveys conducted between 2013 and 2022 and the OECD ICT Access and Usage by Businesses database, these are areas where MSMEs struggle. The share of MSMEs that adopt technologies like customer relationship management systems and artificial intelligence is only half the share of large companies. Large companies are twice as likely to provide formal skilling programs and are more active in monitoring performance and awarding performance bonuses. Large enterprises also contributed to 84 percent of

### Exhibit 8

The productivity ratio is typically lowest in sectors that are intangibles-heavy, are export-intensive, and have better financial access.

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1 Y-axis (MSME productivity ratio) shows different average in this chart because mining and professional services sectors are missing from the indicator database.

2 Year for which data are available/represented varies by country from 2016 to 2019; MSME and large size category definitions match each country’s national definition.

3 Includes commodities brokering, meaning trade sector export as percent of value added is likely overestimated.

4 ICT sector does not follow the trend, as it includes video and sound production, telecommunication subsectors that are more domestically focused.

5 ICT sector does not follow the trend, as funding for companies in this sector is typically led by venture capital funding and not bank financing.

Note: Advanced economies include Australia, Germany, Israel, Italy, Japan, Poland, Portugal, Spain, UK, and US. Data on intangibles as percent of value added unavailable for Australia, Israel, and Poland. Data on exports as percent of value added unavailable for Australia and Japan. Data on share of firms using banks to finance working capital unavailable for Australia, Japan, UK, and US.

Source: Country-level economic and business censuses; MSME surveys; labor surveys; aggregated databases such as Eurostat, OECD, ILOSTAT, and S&P Global Market Intelligence, KLEMS database, Intan Invest; OECD Trade by Enterprise Characteristics database; World Bank Enterprise Survey; McKinsey Global Institute analysis.
research and development spending in the United States in 2015, spending more than five times as much as small businesses.\textsuperscript{24}

In sectors where intangibles matter less to competitiveness, the MSME productivity gap tends to be narrower. In such sectors, companies drive productivity through local reach and access to lower-skill labor. Examples are accommodation and food services, administration and support services, trade, and transportation.

— \textit{Global connections}. In sectors like manufacturing and mining where exports drive a larger share of value added, MSMEs have a wider productivity gap with large companies. In trade, however, MSMEs actively participate in cross-border activities, likely driven by commodity brokering in wholesale trade. This translates into a 70 percent share for MSMEs in all trade exports and a higher MSME productivity ratio.

MSMEs are typically less able than larger companies to gain access to global markets and benefit from global procurement. According to the World Bank Enterprise Survey, MSMEs derive just 5.0 percent of their total sales from direct exports, but large enterprises triple that. In emerging economies, on average, MSMEs account for 2.5 percent or less of exports.\textsuperscript{25} In Indonesia, for instance, only 1.5 percent of small enterprises and 10.0 percent of medium-size enterprises participate in global value chains, compared with more than one-quarter of all large companies.\textsuperscript{26} Moreover, only about one-fifth of purchases of material inputs by MSMEs were of foreign origin, compared with more than one-third for large companies.

— \textit{Financial capital}. Access to finance is the second most cited obstacle for MSMEs in the World Bank Enterprise Survey. In sectors like manufacturing, other services, transportation, construction, and trade, where businesses typically rely more on traditional financing such as bank loans to secure working capital, MSMEs have a wider productivity gap. When the sector as a whole relies less on bank financing—perhaps because it is less necessary, as is the case in ICT—this may create a more level playing field, resulting in relatively smaller productivity gaps.

In addition to these competencies, small businesses may be disproportionately affected by lack of public infrastructure, such as reliable logistics networks, access to basic utilities like uninterrupted power supply, and the availability of 5G. Large businesses often have the ability to establish their operations in areas with robust infrastructure. They also can develop infrastructure themselves, such as investing in power generators and building last-mile connectivity. While this enabler is critical for MSMEs overall, it is difficult to differentiate at the sector level.

\textbf{Narrowing the productivity gap is equivalent to 5 to 10 percent of GDP}

The tremendous variation in MSME productivity ratios across countries indicates potential for improvement. In any given country, overall productivity stands to gain when the ratio of MSME productivity to large company productivity is brought closer to its full potential.

That potential varies by country given different underlying economic conditions. It depends on the industry structure in each business domain, as well as the specific nature of existing bottlenecks to growth, and the extent to which they are addressed to achieve the optimal economic structure. The productivity improvement itself may manifest in various ways. It could stem from some MSMEs increasing their productivity while remaining in their size bracket. Or it could result from a shift in the industry structure in which some small firms transition within the MSME category from micro to small or small to medium, or scale up to become large companies.

While meaningful benchmarks would vary based on local conditions, we compare the average ratio of MSME productivity to that of large companies in each country with the top quartile ratio across countries at a subsector level (see sidebar “Estimating the value of narrowing the
Estimating the value of narrowing the productivity gap

To assess the value for each country, we compare the ratio of MSME productivity to large company productivity in the country in each subsector to a benchmark level in the same subsector. We considered three benchmarks—a higher threshold representing the top quartile, a midpoint threshold representing the median, and a lower threshold representing the bottom quartile among all advanced economies. We assumed no change in subsectors in countries that have already achieved the benchmark levels.

As an illustration, the MSME productivity ratio in the manufacturing of food products subsector varies from 46 percent in the United States to 88 percent in the United Kingdom. In addition to the United Kingdom, Israel and Spain are in the top quartile of advanced economies. The value of narrowing the productivity gap in this case is the difference between the actual productivity ratio and the top-quartile threshold of 61 percent.

As MSME productivity improves, the interlinked economics of small and large firms may create feedback loops, altering its overall economic impact. While we recognize that increasing MSME productivity could have multiplier effects on the broader economy, estimating those effects is more challenging. Therefore, we focus only on estimating the first-order effects.

We estimated the value only in accommodation and food services, administrative services, construction, ICT, manufacturing, mining, other personal services, professional services, trade, transportation and storage, and utilities. We excluded other sectors, including agriculture, financial services, and real estate, because of inconsistent data that make it difficult to compare across countries. We also excluded self-employed individuals—who are often sustenance workers in emerging economies— inorder to be able to compare the remaining MSMEs in emerging economies with those in advanced economies using the same benchmarks.¹

¹ By not considering self-employed workers, who are more prevalent in emerging economies, we establish a lower benchmark for these countries. To be conservative, we chose this approach instead of adjusting the benchmarks for each country based on their per capita GDP.

productivity gap” for an overview of our approach). This exercise is a useful thought experiment to motivate an investigation of the specific drivers of MSME productivity and where to focus.

The gap between the actual productivity ratio and the top quartile level is equivalent to an average of 5 percent of GDP in advanced economies and an average of 10 percent in emerging economies. It ranges from 2 percent in Israel and the United Kingdom to 10 percent in Japan among advanced economies, and from 3 percent in Brazil to 15 percent in Indonesia and Kenya among emerging economies (Exhibit 9). On a per business worker basis, the amount is meaningful, ranging from about $3,000 in Israel to $12,900 in Japan among advanced economies, and from $3,200 in Mexico to $8,800 in Indonesia among emerging economies (all in purchasing power parity terms).

If we used lower thresholds to set benchmarks, the gap is lower, but still meaningful. For example, comparing the current MSME productivity ratio against the median ratio in each subsector, it is equivalent to 2 percent of GDP in advanced economies on average and 8 percent in emerging economies. Using bottom-quartile benchmarks, it would be about 1 percent of GDP on average in advanced economies and 7 percent in emerging economies.

Among advanced economies, the impact of narrowing the gap is larger in Italy, Japan, Poland, and the United States. In Japan, two-fifths of all MSME value added is in manufacturing and construction where, in many subsectors, MSMEs achieve only the bottom quartile of performance across countries. Similarly, in Italy and Poland, MSMEs in two-fifths of subsectors are in the bottom quartile of performance. In automotive trade, for instance, Poland has the highest productivity gap (73 percent) and Italy the second highest (67 percent) of our sample advanced economies. In the United States, MSMEs in almost half the subsectors are in the bottom quartile of the productivity ratio.
Where the overall gaps are smaller, as in Israel and the United Kingdom, the impact is limited. In these countries, about half the subsectors are already in the top quartile of MSME productivity relative to large companies.

The value is highest in four emerging economies—Kenya, India, Indonesia, and Nigeria—where MSME productivity gaps are the most substantial. In Kenya, the productivity of small businesses is the lowest of all the sample countries, explaining the wide gap. In Indonesia, the productivity of large companies is double that of the figure for other emerging economies, and therefore its MSMEs have further to go.

The sectors that produce the most economic output account for the largest share of GDP from improving their MSME productivity ratios. The three largest are trade, manufacturing, and construction (Exhibit 10). Nevertheless, some sectors in some countries punch above their weight relative to their role in economies. A standout example is ICT, particularly—in order of importance—in India, Nigeria, Brazil, the United Kingdom, Indonesia, and the United States. In these countries, the ICT sector contributes about 8 percent of economic value added on average, but about one-fifth of the value from narrowing the productivity gap. Other examples include...
Exhibit 10

Trade, manufacturing, construction, and ICT represent the most value from narrowing productivity gaps.

Contribution of sectors from narrowing productivity gaps, share of total in each country,\(^1\) %

<table>
<thead>
<tr>
<th>ADVANCED ECONOMIES</th>
<th>Manufacturing</th>
<th>ICT</th>
<th>Administrative services</th>
<th>Accommodation and food services</th>
<th>Utilities</th>
<th>Mining</th>
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<tbody>
<tr>
<td>Japan</td>
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<td>Poland</td>
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<td>Australia</td>
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<td>Israel</td>
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</table>

<table>
<thead>
<tr>
<th>EMERGING ECONOMIES</th>
<th>Manufacturing</th>
<th>ICT</th>
<th>Professional services</th>
<th>Transportation</th>
<th>Accommodation and food services</th>
<th>Administrative services</th>
<th>Utilities</th>
<th>Other services</th>
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<tbody>
<tr>
<td>Kenya</td>
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<td>Nigeria</td>
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</table>

\(^1\)To measure value of narrowing the productivity gaps for each country, we assumed that the productivity ratio of MSMEs in the country in each subsector reaches a benchmark level (top quartile among all advanced economies, capped at 100%) in the same subsector. We assumed no change in subsectors in countries that have already achieved the benchmark levels. We exclude self-employed workers in this calculation. Note: Countries ordered in descending order of value. Sectors ordered in descending contribution to value, simple average across countries. Analysis excludes the following sectors due to inconsistent data: agriculture, financial and insurance activities, real estate, public administration and defense, education, human health and social work, arts and entertainment, activities of households, and activities of extraterritorial organizations. Analysis also excludes additional sectors varying by country due to data unavailability: other service activities in Italy and Portugal; mining, water supply, sewerage and waste management, construction, and other service activities in India; ICT and other service activities in Kenya; administrative and support service activities and other service activities in Nigeria. Source: Country-level economic and business censuses; MSME surveys; labor surveys; aggregated databases such as Eurostat, OECD, ILOSTAT, and S&P Global Market Intelligence; McKinsey Global Institute analysis

transportation and storage in Australia, Kenya, and Israel; administrative services in Portugal, Kenya, and Germany; professional services in Nigeria and India; and accommodation and food services in Germany and the United Kingdom.
3. Looking through a microscope to fill the gaps

To move the needle beyond broad-brush solutions, we need to look in detail at variations in relative MSME productivity performance to identify specific opportunities to achieve potential additional value. Consistent with MGI’s micro-to-macro analytical approach, we have looked at MSME productivity through a microscope, homing in on 68 level-two subsectors and 219 level-three subsectors. See the technical appendix for details of each of the 16 countries in our sample.

A granular approach helps prioritize where to act to boost MSME productivity

MSME productivity ratios vary across sectors, but the spread is even wider at the subsector level (Exhibit 11). For instance, in Germany’s sectors, ratios range from 55 percent in manufacturing to about 100 percent in transportation. In subsectors, the range is even wider. The spread is largest in administrative services, where the ratio is about 20 percent in rental and leasing activities and about 120 percent in building services and landscaping activities. There is a wide range in manufacturing, too. Small businesses engaged in the manufacture of tobacco products are only 35 percent as productive as larger counterparts, while those manufacturing basic metals are 85 percent as productive. In transportation, MSMEs engaged in postal and courier activities are less productive than large companies, while in warehousing, they are closely matched.

MSME productivity ratios vary across sectors, but the spread is even wider at the subsector level.
Within sectors, the MSME productivity ratio varies significantly among subsectors: Germany example.

This granular view at the subsector level is important when setting aspirations for, and thinking about ways to boost, MSME productivity. No single country can be considered the north star for all MSME productivity. The truth is that the best-performing MSMEs are found in one country for one type of activity, but in another country for another type of activity.

The trade sector illustrates this (Exhibit 12). In automotive trade, Japan’s MSMEs are more vertically integrated with large manufacturers than in many other advanced economies, including the United States (see chapter 5). This enables them to have more efficient logistics that follow just-in-time principles and respond effectively to market fluctuations, making them top-quartile performers. However, in retail and wholesale trade (excluding automotive trade), vertical integration among Japanese MSMEs appears to be weaker, and they fall into the bottom two quartiles of relative performance. In these sectors, the United Kingdom and Germany, respectively, present compelling benchmarks for Japan.

Exhibit 11

Ratio of MSME productivity to large company productivity for subsectors in Germany,\(^1\) %

This year for which data are represented: 2019.
Source: Country-level economic and business censuses; MSME surveys; labor surveys; aggregated databases such as Eurostat, OECD, ILOSTAT, and S&P Global Market Intelligence; McKinsey Global Institute analysis

McKinsey & Company
Within subsectors, the productivity ratio varies significantly among countries:

trade sector example.

Ratio of MSME productivity to large company productivity for trade subsectors
in advanced economies,† %

<table>
<thead>
<tr>
<th>Countries</th>
<th>Automotive trade</th>
<th>Retail trade (excluding auto)</th>
<th>Wholesale trade (excluding auto)</th>
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</thead>
<tbody>
<tr>
<td>Poland</td>
<td>US</td>
<td>Germany</td>
<td>UK</td>
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<tr>
<td>Italy</td>
<td>Japan</td>
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<td>UK</td>
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</tbody>
</table>

†Year for which data are available/represented varies by country from 2016 to 2019; MSME and large size category definitions match each country’s national definition.
Source: Country-level economic and business censuses; MSME surveys; labor surveys; aggregated databases such as Eurostat, OECD, ILOSTAT, and S&P Global Market Intelligence; McKinsey Global Institute analysis

Viewing MSMEs at a fine-grained level brings high-value subsectors into sharp focus. Considering manufacturing, for example, in almost all countries eight sizable subsectors (out of 24) account for more than 60 percent of the value from narrowing productivity gaps, In advanced economies, this ranges between five and 11 subsectors, while in emerging economies, the opportunity is more concentrated in four to eight subsectors.

While the sector overall contributes 18 percent of total value from narrowing productivity gaps in advanced economies and 25 percent in emerging economies, the opportunity is not uniform—the subsectors that offer the largest opportunities differ depending on the country (Exhibit 13). For instance, if we compare Indonesia and Australia, there are important differences. Manufacturing of basic metals, chemicals, rubbers and plastics, and food products are important sources of value in both economies. But in Indonesia, the apparel manufacturing subsector appears to offer meaningful value, whereas in Australia the textiles subsector is a sizable opportunity. For Indonesia, electrical equipment and automotive manufacturing would be higher priorities, but in Australia the comparable subsectors would be machinery and equipment, and fabricated metal.

Looking through the microscope also helps to tailor efforts to build MSME competencies

The importance of scale for productivity and the hurdles that stand in the way of MSMEs gaining that scale are well recognized. So, too, are ways to address this issue, such as building national infrastructure and providing access to markets, finance, and technology. But national-level action is only one aspect of the competencies that MSMEs require to thrive and raise their productivity.
Which competencies matter most can vary depending on the type of MSME. For example, drawing on the World Bank Enterprise Survey, we find that more than one-third of MSMEs in the apparel manufacturing subsector report an “inadequately educated workforce” as their biggest obstacle to operations, but less than 15 percent in chemicals manufacturing do so. Because the business needs and hurdles to creating value are somewhat different in each subsector, solutions need to be tailored to local business and industrial contexts.

Take US construction as an example. This sector has one of the highest potentials for adding value because MSMEs perform poorly on productivity relative to large companies, at 46 percent against the top-quartile level of 60 percent in Germany. Large companies in the building construction subsector tend to concentrate on residential and nonresidential construction projects that typically involve larger projects, greater standardization, modular construction methods, and advanced technology and equipment—all of which help to boost productivity.

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1 To measure value of narrowing the productivity gaps for each country, we assumed that the productivity ratio of MSMEs in the country in each subsector reaches a benchmark level (top quartile among all advanced economies, capped at 100%) in the same subsector. We assumed no change in subsectors in countries that have already achieved the benchmark levels. We exclude self-employed workers in this calculation.

Note: Countries ordered by increasing value of narrowing productivity gaps.

Source: Country-level economic and business censuses; MSME surveys; labor surveys; aggregated databases such as Eurostat, OECD, ILOSTAT, and S&P Global Market Intelligence; McKinsey Global Institute analysis
However, MSMEs in the building construction subsector tend to focus on small-scale residential construction and refurbishments. They are subject to comprehensive building codes, regulations, and standards governed by local and state laws—factors that make it challenging for MSMEs to achieve higher productivity. This degree of stratification is not present in all countries in this sector. In the United Kingdom, for example, construction MSMEs receive incentives to participate in projects similar to those undertaken by large companies and are much more productive, relative to large companies, than their counterparts in the United States. Residential construction MSMEs in the United States could potentially diversify by becoming subcontractors to major players, helping them tap into potential additional value.

Because the business needs and hurdles to creating value are somewhat different in each subsector, solutions need to be tailored to local business and industrial contexts.
Engineering workers in the United Kingdom
4. Creating value through networks and interactions

No MSME operates in a vacuum. Its prospects are shaped by its interactions with other companies. These interactions can be mutually beneficial, creating a “win-win” for businesses small and large. When the economic fabric surrounding companies of all sizes enables them to interact productively with one another and grow, the overall economy attains the greatest benefits.

**B2B MSMEs tend to be more productive than B2C, suggesting that business interactions matter**

Business-to-business (or B2B) companies interact closely with other companies, often larger ones, as part of their supply chains. In five sectors that account for the largest share of GDP from improving their MSME productivity ratio—construction, ICT, manufacturing, trade, and transportation—the productivity gap with large companies is narrower for B2B MSMEs than it is for business-to-customer (B2C) MSMEs that sell primarily to individuals. In fact, the gap is a significant 40 percent narrower on average (Exhibit 14).

The superior performance of B2B MSMEs can be attributed to both a selection bias, because business customers have higher expectations of their providers, and the fact that these MSMEs can benefit from lessons learned in the course of working with larger enterprises. Other research has also noted how large companies have an incentive to help the smaller businesses they work with to become more productive.

There can, of course, be situations in which large companies take advantage of MSMEs, leading to less equitable division of benefits.

The difference in productivity gaps between B2B and B2C MSMEs is particularly pronounced in the transportation and storage sector, where the productivity ratio of B2B MSMEs that transport commodities (typically via pipelines) is almost double that of B2C MSMEs, which are typically involved in passenger transportation. In the manufacturing sector, B2B MSMEs include manufacturers of iron and steel and of locomotives that, on average, have 60 percent of the productivity of large companies. In comparison, B2C MSMEs in the sector that, for instance, make consumer electronics and jewelry are only 40 percent as productive.

In the trade sector overall, the difference in the productivity gaps of B2B wholesalers and B2C retailers is not large. But in some subsectors, that is not the case. Take the specialized trade subsector where stores sell one type of product rather than a wide variety of products as nonspecialized supermarkets or department stores do. In this subsector, B2B MSMEs are 75 percent as productive as large companies operating in the sector—1.2 times higher than B2C MSMEs, which are only 63 percent as productive. The advantage in terms of absolute productivity is even higher: On average, B2B specialized trade MSMEs are 2.5 times more productive than their B2C counterparts. Interestingly, B2B and B2C MSMEs differ not only on productivity but also on their dynamism. B2B MSMEs are 1.5 times more likely to have scaled up than B2C MSMEs. Twenty percent of large B2B companies were MSMEs two decades ago, against 14 percent of B2Cs.
These gaps between B2B and B2C MSMEs reflect different levels of business competencies to some extent. Our analysis of the World Bank Enterprise Survey indicates that B2B MSMEs have an edge over B2C counterparts on some of the competencies that we discussed earlier, such as the following:

— **B2B MSMEs have a technology and innovation edge.** B2B MSMEs are 30 percent more likely than B2C MSMEs to have introduced a process innovation in the past three years. International quality certifications are also 60 percent more common in B2Bs than in B2Cs, perhaps because they are often a requirement when doing businesses with large corporations.

— **B2B MSMEs invest more in building human capital than their B2C counterparts.** B2B MSMEs track performance metrics more often and in more detail than B2C MSMEs. They also provide formal training to 60 percent of their employees, compared with about
35 percent of B2C MSMEs. One micro digital marketing agency in the United Kingdom offers employees a 20 percent “development time” commitment—for every ten hours worked in a week, employees can spend two hours on courses of their choosing.

— **B2B MSMEs are more globally connected.** B2B MSMEs derive 6 percent of their revenue from direct exports, almost triple the share for B2C MSMEs. B2B e-commerce platforms that facilitate exports of products between small manufacturers and wholesalers or even offshore software services between companies have become increasingly popular.32 One microenterprise launched in 2000 created a platform to enable a transparent and mutually beneficial system of centralized MSME purchasing across European countries.

**Large and small companies perform in tandem, and the right economic fabric can enable both**

MSME interactions with other companies matter, but it is arguably a mistake to view those interactions as adversarial, necessitating policies that attempt to create incentives, quotas, or protections that tilt the balance toward either small enterprises or larger ones.33 Is this really a zero-sum game? The truth—broadly—is that both MSMEs and large companies can benefit when they are operating within the right economic fabric.

We looked at whether large company productivity moves in tandem with that of smaller businesses in subsectors (Exhibit 15). In accommodation, for instance, the correlation appears strong—the productivity of large and small enterprises moves hand in hand. In Italy, Mexico, Poland, Spain, and the United States, both large and small companies tend to outperform the average productivity levels of their peers across countries. In Australia, Brazil, Germany, Israel, Portugal, and the United Kingdom, both large and small companies tend to underperform their respective averages.

In other subsectors, the correlation is weaker. In advertising and market research, for instance, in Indonesia, Japan, and Nigeria, large companies outperform the average cross-country productivity while small companies underperform, and vice versa in Australia, Germany, Italy, and Spain.

In the vast majority of cases—66 percent, or 45 subsectors—the fortunes of MSMEs and large companies go hand in hand.34 This interdependent relationship is even more pronounced in manufacturing, where productivity levels of MSMEs and large companies are highly correlated (across countries) in about 80 percent of the 24 subsectors analyzed.

Within each subsector, we categorize countries where both large and small companies perform better than peers as win-win domains. If only one outperforms while the other lags behind, we classify it as either a “large firms outperform” or a “small firms outperform” domain. If both large and small firms lag behind their peers, it is considered a “challenged” domain.

How large is the win-win advantage? In the 45 subsectors where large and small companies are closely intertwined, the overall productivity of the win-win domain is $163,000 (in purchasing power parity terms). That is 1.5 times higher than in the domains where only small businesses or only large businesses outperform. This relationship holds true even for the subsectors in which the correlation is weak.

Other studies corroborate our finding that MSME productivity and large firm productivity are interconnected. One analysis of 26 European countries found that a 1.0 percent rise in MSME productivity is associated with a 0.124 percent increase in the productivity of large firms. While the analysis does not establish a causal relationship, there do appear to be some knowledge spillovers through the sharing of ideas, best practices, and even talent.35
In two-thirds of subsectors, the productivity of MSMEs and large companies goes hand in hand.

Large company vs MSME productivity,\(^1\)
indexed (100 = simple average productivity across countries for the subsector)

66% of subsectors show strong correlation between large company and MSME productivity across countries

Example subsector: Accommodation

Strong correlation (≥60%)

Other examples: manufacturing of beverages, construction of buildings, publishing activities

34% of subsectors show weak correlation between large company and MSME productivity across countries

Example subsector: Advertising and market research

Weak correlation (<60%)

Other examples: manufacturing of chemicals, air transportation, telecommunications

All 45 strong-correlation subsectors\(^2\)

- Accommodation (from example above)
- Others

All 23 weak-correlation subsectors\(^3\)

- Advertising and market research
- Others

Large firms outperform Small firms outperform Win-win domains

Each dot represents a country in each subsector

A microscope on small businesses

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1 Year for which data are available/represented varies by country from 2016 to 2019; MSME and large size category definitions match each country’s national definition.

2 Large company and MSME (indexed) productivity of 524 country x subsectors represented, correlation coefficient = 77%.

3 Large company and MSME (indexed) productivity of 227 country x subsectors represented, correlation coefficient = 35%.

Note: Analysis excludes the following sectors due to inconsistent data: agriculture, financial and insurance activities, real estate, public administration and defense, education, human health and social work, arts and entertainment, activities of households, and activities of extraterritorial organizations. Analysis also excludes additional sectors varying by country because data are unavailable: other service activities in Italy and Portugal; mining, water supply, sewerage and waste management, construction, and other service activities in India; ICT and other service activities in Kenya; administrative and support service activities and other service activities in Nigeria.

Source: Country-level economic and business censuses; MSME surveys; labor surveys; aggregated databases such as Eurostat, OECD, ILOSTAT, and S&P Global Market Intelligence; McKinsey Global Institute analysis.
5. Seven examples of win-win domains

Working closely with thriving large companies is one important route to higher MSME productivity, but not the only one. Network effects among small enterprises can help them attain competencies associated with scale. While MSMEs do not have significant market power because they have limited scale, creation of sector-wide infrastructure and boosting interfirm networks and linkages can provide “collective productivity”—the competitive advantage derived from local external economies and joint action—and substitute for direct benefits of scale.36

As countries try to reduce concentration and geopolitical risks, they are aiming to realign their global manufacturing and services footprints, but for this to happen, MSMEs need to raise their productivity game. Without MSMEs getting more productive, it’s hard to imagine a meaningful realignment of global production. Industrial policies that aim to create new manufacturing capabilities also need to focus on MSMEs in those specific ecosystems.

To illustrate examples of how win-win domains have been created in some countries, benefiting both small and large companies, we looked in detail at examples in the largest sectors for MSME value potential (Exhibit 16). Each of these case studies demonstrates how MSMEs have achieved high productivity through network effects.

In manufacturing, we examine the auto sector in Japan and beverages (wine) in Italy; in trade, the wholesale trade sector in Germany; in construction, examples from both Australia and the United Kingdom; in ICT, US software publishing; and in professional services, Israel’s R&D. Within each of these sectors, both MSMEs and large companies in the highlighted country generally exhibit higher productivity levels compared with their counterparts in other advanced economies. However, this does not necessarily imply that their productivity has increased over time. It is possible that they attained high productivity levels in the past and managed to sustain them over the years.

By looking through the microscope at these examples, a clear message emerges: there is no single path to success, but rather a range of promising possible approaches. A common characteristic of these approaches is their focus on addressing the issue of scale through structural changes, enabling MSMEs to become “collectively large” by creating network efficiencies.

There is no single path to success, but rather a range of promising possible approaches.
Both large companies and MSMEs outperform in a wide range of sectors: seven case examples.

MANUFACTURING: Auto and other transport equipment

MANUFACTURING: Beverages

CONSTRUCTION: Construction of buildings

TRADE: Wholesale trade

ICT: Publishing (incl software development)

OTHER PROFESSIONAL SERVICES: Scientific R&D

Note: Year for which data are available/represented varies by country from 2016 to 2019; MSME and large size category definitions match each country’s national definition.

Source: Country-level economic and business censuses; MSME surveys; labor surveys; aggregated databases such as Eurostat, OECD, ILOSTAT, and S&P Global Market Intelligence; McKinsey Global Institute analysis

McKinsey & Company
1. Japanese auto manufacturing MSMEs benefit from deep integration with large companies

On average, MSMEs in auto manufacturing in Japan have double the productivity of MSMEs in other advanced economies. This is predominantly because medium-size enterprises have close linkages to large companies. Benefits from best practices such as Keiretsu networks and vertical integration trickle down to them.\(^{37}\)

With the overall credo of “we are all in this together,” large Japanese OEMs have built deep links with MSMEs, enabling their operational proficiency, and enhancing technological capabilities and access to talent for smaller companies. These deep linkages also extend to financing, with large OEMs often having crossover share investments with their MSME partners.\(^{38}\)

Toyota is an example of a company that has unusually high integration with its ecosystem partners. Some contractual partnerships with suppliers have lasted for more than 30 years. Toyota has directly involved itself in raising the operational standards of its partners through knowledge transfer, from demand planning and cost reduction to raising management capabilities. In the 2000s, Toyota created three cost-reduction programs for its suppliers, in combination aiming to reduce costs by 60 percent. While many of Toyota’s MSME partners remain reliant on Toyota for more than 70 percent of their revenue, some have developed independently.\(^{39}\) These MSMEs share some common traits; they often harness their ecosystem partnerships to enhance their technological capabilities and venture into highly specialized production.

2. Italian winemaker MSMEs gain global market access through collective branding and marketing

Italy’s MSME beverage manufacturing sector—particularly its winemakers—is highly fragmented but superproductive. These enterprises are 1.5 times more productive than their counterparts in other advanced economies.

Winemaking typically has some very large players. In the United States, for instance, most wine is made by less than 0.5 percent of makers. But Italy’s wine business is dominated by small, often family-led enterprises. Fragmentation and a plethora of small players are not usually associated with high productivity, but there is a “paradox of scale” in productivity in Italy’s wine business.\(^{40}\) Why?

Italy has created an environment that delivers small players access to branding and marketing. The “Made in Italy” campaign has championed traditional and local production, with a particular focus on the international market. Italy has more than 500 wines that have Protected Designation of Origin or Protected Geographical Indications certifications. Similar designations have delivered success elsewhere, for instance in the cases of Alphonso mangos and basmati rice in India, and Guadarrama beef in Spain. These are stamps of quality in the eyes of consumers and apply to the 42 percent of Italy’s wine production that is exported, enabling small producers to charge premium prices and obviating the need to produce at scale. Where they are located is a key part of marketing. Layered on top of this is that Italy’s MSME winemakers are highly networked with one another through membership of associations or in cooperatives, giving them collectively a louder voice.

3. Construction MSMEs in the United Kingdom profit from better access to new markets and finance

In the United Kingdom, construction sector productivity has stagnated over time.\(^{41}\) But small businesses exhibit higher productivity than those in our other sample countries, as policy interventions in the United Kingdom have boosted their ability to respond to burgeoning demand. UK policy makers simplified procurement processes, reduced bidding costs, and accelerated
payment timelines for construction projects, enabling MSMEs to compete with large companies for government contracts on a broadly equal footing.42 The government has also, more recently, orchestrated demonstrator projects to showcase modern construction methods and to enable small businesses to learn from one another.43

Although the impact of these enablers on productivity growth is not fully evident yet, they seem to have triggered a wave of creative collaborations among MSMEs. For instance, Cara EPS built a digital platform to bring together specialist retrofitter microenterprises, enabling them collectively to undertake substantial contracts leveraging their distinct expertise.44 MSMEs need to invest in innovation and technology to compete in the same markets as large companies. For ProBuild360, this involved developing capabilities in modern methods of construction and enlisting similar-sized MSMEs not only as suppliers but also as mentors to assist in the adoption of new techniques and materials. This enabled the company to emerge as a key building partner for social housing authorities.45

4. Construction MSMEs in Australia gain from subcontracting for larger companies and access to skilled workers

In specialized construction, particularly in the mining sector, Australia’s large players have higher productivity than those in our other sample countries, and MSMEs the second highest among their peers. This is attributable to collaborations between large and smaller players that have developed partly due to the country’s remoteness and climatic extremes, and partly due to effective public policies that encourage partnerships and facilitate a robust system of mutual cooperation.

MSMEs specialize in niche construction projects that are more often subcontracted than in other countries. Australia has one of the highest shares of public–private partnership construction projects in the world.46 The government has reduced red tape, cutting the number of regulatory procedures from 14 to ten and the average time it takes to approve permits from 150 days to 112.47 Skills building has also been a priority. Construction workers go through rigorous certification and licensing processes and benefit from a national system of vocational education and training, formal apprenticeship programs, and industry-led initiatives, such as Construction Skills Queensland.48

5. Germany’s wholesale trade MSMEs benefit from vertical integration with European manufacturers and strong logistics infrastructure

Germany’s MSME wholesalers are 1.3 times more productive than the average among advanced economies in our sample and are more productive even when excluding commodity traders. They are able to tap into global markets through the European single market, which is further bolstered by Germany’s central location, contributing to their productivity. They also benefit from Germany’s industry-wide logistics backbone, which is reinforced by a range of benefits conferred by free trade port zones, including tax reductions for imports and reexports, and simplified customs regulations.

German wholesalers are also among the most innovative in Europe.49 These enterprises gain spillover benefits from being part of a larger ecosystem. They often operate as legally independent affiliates or subsidiaries that are vertically integrated with upstream purchasers for retail supermarkets or distributors for large manufacturers for the entire European Union.50 An example is Coffee Friend, a medium-size wholesaler of coffee makers that mediates transactions for several manufacturers based in Europe.51
6. US software development MSMEs benefit from the network created by industry giants

In the dynamic US software publishing business, MSMEs are 1.7 times more productive on average than those in the same sector in other advanced economies. MSMEs gain from talent and capital ecosystems seeded by successful large companies. Large companies serve as reputational anchors, delivering market access and branding. A virtuous cycle of robust capital ecosystems and the agglomeration of a strong talent pool have enabled the growth of large businesses and continue to support the growth of MSMEs in this sector.

MSMEs in this sector are highly innovative and internationally minded. Small technology firms have patented more per employee than their large counterparts. Tech startups are also often seen as “born global” because they create products and services for a global market. Almost half of all US ICT MSMEs were engaged in international trade as long ago as 2007.

Large companies in the sector are important clients, frequent buyers, and potential partners, and multiple connections mean that MSMEs are able to leverage a larger pool of resources and experience, including talent and capital.

7. Israel stands out for its ability to connect different stakeholders engaged in scientific R&D

The productivity of MSMEs in Israel’s scientific R&D subsector is almost double that of those in other advanced economies in our sample. Israel is a unique economy that ranks high among the world’s economies on the quality of its research organizations. The government has long been committed to promoting innovation and R&D, and has helped forge strong links between companies large and small, academia, and venture capitalists.

The close proximity of businesses, research institutions, and venture capital firms in cities such as Jerusalem and Tel Aviv facilitates collaboration and networking. Universities actively encourage researchers to work on projects with commercial potential. Ties between academia and the private sector are strong, encouraged by the government setting up technology transfer offices to facilitate the process of licensing technologies to industry partners and creating startups based on the research undertaken. These close ties are particularly vital because Israel focuses on highly technical (and highly regulated) innovation, such as biotech, health tech, and pharmaceuticals. The Israeli venture capital industry has also thrived since the 1990s with help from governmental programs such as Yozma, which offered incentives to foreign companies willing to back Israeli startups.

The productivity of MSMEs in Israel’s scientific R&D subsector is almost double that of those in other advanced economies in our sample.
People buying food from a food truck in Argentina

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6. Delivering a win-win future

Productivity is a hot-button issue for economies navigating particularly turbulent times. Indeed, accelerating productivity growth may be the only route out of current financial stress, reconfiguring global trade patterns, and shifts in companies’ manufacturing and services footprint to build resilience that delivers rising wealth and robust growth in GDP and incomes.\(^{56}\)

This research indicates that narrowing the MSME productivity gap with large companies can yield considerable value, and that large companies, policy makers, and MSMEs themselves can contribute to capturing that value by acquiring key competencies.

Improving the productivity of small businesses merits immediate attention. It may be a self-resolving issue—a natural progression as employment shifts to larger enterprises as economies develop. As discussed, this progression can play out in different ways. Some MSMEs may scale into larger companies, others may be acquired by larger enterprises, and some may cease operations and make room for new businesses. Indeed, previous MGI research suggests that high-growth emerging economies tend to be the ones where large companies are allowed to scale rapidly.\(^{57}\) However, the extent of this natural progression is limited. Even in the most advanced economies, MSMEs continue to contribute the majority of all workers employed by businesses. Change is also likely to be slow. The clear implication is that, overall, MSMEs will continue to play an important role in the long term, and that acting now to boost their productivity growth can make the difference to economy-wide growth.

But given the enormous variation in productivity performance evident at the subsector level and even among enterprises with different business models, getting the conditions right for raising productivity requires a microscopic view to help prioritize, design, and implement solutions.

Three considerations can help shape stakeholder actions

Even with an abundance of initiatives and examples of efforts that stakeholders can make, understanding how to capture the MSME productivity opportunity is a complex exercise. Opportunities vary a great deal on the ground, and there are few one-size-fits-all solutions. Intentional measures targeted at helping small enterprises may even raise questions about how this might affect the overall productivity of economies. We suggest three considerations for stakeholders as they develop their approaches.

Creating a win-win economic fabric is important

The global business landscape is deeply interconnected. The success or failure of large companies can have ripple effects throughout entire economic ecosystems. As such, stakeholders, including policy makers, regulatory bodies, associations, and large companies need to foster the right enabling conditions for the growth and prosperity of all enterprises. These conditions may require measures that go beyond conventional policies focused on MSMEs, such as facilitating access to credit for MSMEs and encouraging training for MSME employees. In addition to such measures, it may involve strategies to build “collective productivity.”

Strengthening networks and interactions between large and small businesses can yield productivity gains in the win-win domains and in domains where large companies outperform their peers but smaller ones lag behind. Where small businesses outperform while larger ones do not, there would be benefit in enabling those small enterprises to evolve into large ones or merge with them to promote business dynamism. When both large and small companies lag behind their peers, more fundamental steps to improve the economic fabric as a whole may be needed; for instance, investing in physical and digital infrastructure, establishing transparent and fair
regulatory frameworks that boost competition, reducing trade barriers, and ensuring equal access to financial capital.

**Prioritization can pay off**

Stakeholders first need to decide which economic domains to focus on to make MSMEs more productive. Failing to prioritize which opportunities to pursue can lead to a dilution of efforts and place a burden on the often-limited resources at hand. Some countries have selected and supported “national champion” sectors, as has happened with beverage manufacturing in Italy, automotive manufacturing in Japan, and R&D in Israel. Such prioritization requires meticulous identification of the nation’s competitive advantages and a keen eye for demand trends, as well as allocating resources toward innovation, facilitating access to capital, and cultivating supportive networks.

**A granular and tailored approach matters**

Measures designed to help MSMEs improve their performance tend to be broad, but the granular lens of this research reveals that different subsectors have varied needs. Stakeholders may need to design a menu of measures for each prioritized opportunity. In other words, taking a microscopic approach that reflects the dynamics of each subsector and country and that addresses barriers to productivity and scale in that context is warranted.

**All stakeholders can boost MSME competencies through a variety of proven approaches**

All stakeholders—policy makers, large companies, and MSMEs themselves—can adopt strategies designed to boost productivity, which may involve structural changes that go beyond traditional approaches. Policy makers can provide access to better infrastructure, while large companies can help MSMEs build scale-related competencies. MSMEs can collaborate with others to achieve network efficiencies.

**Policy makers can boost access to technology, new markets, and finance**

Supportive policy interventions can create advantages of scale for MSMEs and help overall business dynamism. The following three broad contributions stand out:

— **Being intentional in improving technology access and building management skills of businesses.** Singapore’s GoBusiness initiative provides financial support for all businesses that adopt technology solutions to improve their business processes, aligned to industry road maps. Governments can also make direct investments in digital infrastructure that help businesses expand their market reach. For example, in India, the Open Network for Digital Commerce aims to build an e-commerce platform, which can particularly assist small retailers reach new consumers because they lack the resources and financial capacity to develop their own platforms. The Help to Grow program in the United Kingdom aims to help small businesses scale up by offering management courses taught by entrepreneurs and industry experts to develop leadership skills and establish business networks.

— **Opening up access to new markets.** One example is Europe’s “Small Business, Big World” initiative, which offers guidance on customs procedures, trade regulations, and market entry requirements in various countries to enable SMEs to expand their export activities. Canada’s CanExport program supports MSMEs in exploring new export opportunities, enabling them to participate in trade shows, conduct market research, and develop marketing materials for the international market.

— **Boosting financial infrastructure that helps underfinanced MSMEs.** An open data framework, for instance, can enable financial institutions to use nontraditional data sources for credit underwriting, targeted at a range of underfinanced companies including MSMEs. An Experian study showed that including utility data allowed 20 percent of “thin-file” credit customers with scant documentation to support their credit application to become “thick-
file” customers who have higher loan approval rates. For small businesses, this can increase access to financing, provide greater convenience, and improve product options. Financial institutions could also benefit from efficiency improvements, better fraud prediction, and reduced friction and cost of data intermediation. Governments can also help businesses improve their working capital management by improving tax-related infrastructure and systems. In Latin America, countries such as Brazil, Chile, Colombia, and Peru have launched initiatives aimed at radically simplifying business registration and tax payment processes. One reform enabled businesses to formally register in a day.

In addition to these interventions, policy makers can also facilitate the availability of globally consistent yet granular data to enable all stakeholders to take a microscopic approach to understanding and thereby improving the productivity of MSMEs.

**Large companies can boost the competencies of MSMEs within their value chains**

As discussed earlier in this report, networks and linkages between MSMEs and large companies benefit the growth and performance of both. One study of small businesses in New York found that seven out of ten of them increased their revenue within two years of becoming part of a corporate supplier base. A 2023 study of Belgian companies found that when MSMEs started supplying superstar companies for the first time, their productivity increased by about 8 percent after four years. They also achieved an increase in sales to businesses other than the new superstar partner.

But it is not a one-way street. As noted earlier, large companies also appear to benefit when their MSME partners and suppliers are more productive. This could be because large companies often depend on MSMEs in most parts of the value chain, from development to supply, production, service delivery, distribution, and sales and post-sales. For example, a large logistics player works with local delivery partners for last-mile delivery, and a small recruiting agency might help a large company fill key positions. Large companies therefore had an incentive to raise MSME capabilities. The following three ways are pivotal:

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**Assisting MSME partners to build digital and R&D capabilities.** Unilever’s open innovation platform Foundry connects its different divisions with startups to engage in joint ideation and mentorship opportunities, for instance. Google helps small businesses that purchase ad placements from it in gaining a deeper understanding of customer behavior and in improving the utilization and efficiency of ad spaces. In India, Maruti Suzuki set up a “comprehensive excellence” program for its main MSME suppliers. In 2018–19, 50 percent of the company’s suppliers met the performance standards laid out and reported improved efficiency, more interest from investors, and broader access to procurement and R&D opportunities. Nestlé’s Nescafe Plan has provided training to small coffee farmers for techniques to increase crop yields.

**Conferring MSME partners with an ability to build workforce capabilities**. One example is Apple, which launched a $50 million fund in collaboration with the International Labour Organization and the International Organization for Migration to provide learning and skills development opportunities for the employees of its suppliers. In India, Walmart launched a Supplier Development Program to train and prepare 50,000 small businesses to better integrate into global supply chains.

**Lending weight to the reputation of MSMEs when requesting finance.** For example, DuPont leveraged its relationship with a financial institution to secure working capital credit for its MSME suppliers in rural areas, thereby strengthening its supply chain and increasing sales. Large financial institutions have a particularly important role in providing affordable credit and better product options to MSMEs. Innovative underwriting approaches that use alternative credit data can help; an Experian survey found that 70 percent of small businesses are willing to furnish additional financial information if it will improve the chances of loan approval or reduce borrowing rates.
MSMEs can collaborate with one another to achieve network efficiencies
Collaboration among MSMEs can help build their capabilities. In Europe, for instance, 30 to 40 percent of SMEs do not belong to any formal network, but can still forge collaborations.\(^7\) That collaboration can even be at the level of individual MSMEs. Innovative companies cooperate on business activities with other organizations more than those that are not innovative.\(^7\) One OECD study of SMEs operating in Association of Southeast Asian Nations economies found that they perform better when they are allied with large enterprises, but also when they strike partnerships with other MSMEs.\(^7\) Japan’s Small and Medium Enterprise Agency has shown that SMEs that have partnered with other small enterprises in order to implement technology solutions in their operations have 76 percent more sales per employee than those that haven’t taken this route.\(^8\) For example, a small sheet-metal processor in Japan wanted to incorporate in-house cloud computing into its operations and partnered with two other enterprises in the same sector, but with different specialties. Together, the three companies built a joint order reception system, which enables them to collaborate on a range of projects with the same clients. All three MSMEs improved the digital and management capabilities of their manufacturing operations.\(^9\)

Broader MSME collaborations at the association or group level can help more small businesses raise productivity through knowledge sharing, mentoring, networking, and online platforms. The SME Finance Forum works with more than 240 active member institutions—financial institutions, technology companies, development finance institutions, and relevant large corporations—to facilitate resources to help MSMEs bridge their financial access gap.\(^10\) The DIGITAL SME Alliance in Europe launched a platform for traditional SMEs to access a catalog of digital solutions ranging from video conferencing to AI modeling.\(^11\)

Other companies can also facilitate the creation of such MSME networks. For example, IBM, in collaboration with other Fortune 500 companies, launched a Supplier Connection initiative that connects small suppliers to one another and to large businesses to access new opportunities.\(^12\) SABI, an African digital infrastructure provider, fosters connections between MSME merchants, wholesalers, distributors, and manufacturers. It also provides them with enterprise resource planning tools, B2B commerce interfaces, and financial services, enabling MSMEs to reach new customers, improve their cash flow, and streamline their logistics.\(^13\)

Raising productivity is, and always has been, the optimal route to healthier incomes and business resilience. In a world beset by uncertainty amid geopolitical tensions and shifts in manufacturing and services footprints, raising the game of the world’s MSMEs—which are so central to jobs, livelihoods, value creation, and economic growth—is a priority. The potential is large, but efforts to capture it need to be thoughtful and very likely targeted. Only by having a granular understanding of MSME productivity can effective action be taken. That action can create a win-win for all companies, small and large.
Young man working with clay in a pottery studio in South Africa.
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Endnotes

2 Geopolitics and the geometry of global trade, McKinsey Global Institute, January 2024.
3 Countries classified as “advanced emerging,” “secondary emerging,” or “frontier” by FTSE Russell have been categorized as emerging economies for this research. For more detail, see FTSE equity country classification September 2023 annual announcement, FTSE Russell, September 2023.
4 Levels of subsectors are defined by the International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4 or equivalent. See International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4, United Nations, 2008.
7 Is small still beautiful?, International Labour Organization, April 2013.
9 Small and medium enterprises (SMEs) finance: Improving SMEs’ access to finance and finding innovative solutions to unlock source of capital, World Bank, October 2019.
14 India’s turning point: An economic agenda to spur growth and jobs, McKinsey Global Institute, August 2020.
15 Alex Coad and Stjepan Srhoj, “Catching gazelles with a lasso: Big data techniques for the prediction of high-growth firms,” Small Business Economics, volume 55, number 3, October 2020.
17 The low productivity challenges of microenterprises in emerging economies could be linked to informality. According to the World Bank, almost 80 percent of all MSMEs in emerging economies are informal. These businesses typically have limited access to markets, finance, and government support, restricting their productivity. We estimate that informal employment in our sample emerging economies is only one-quarter to one-fifth as productive as formal employment. See Micro-, small and medium-sized enterprises (MSMEs) and their role in achieving the Sustainable Development Goals, United Nations Department of Economic and Social Affairs, 2020; and Guillermo E. Perry et al., “Informality: Exit and exclusion, World Bank, 2007.
18 For instance, over the past two decades, as Brazil transitioned from being a lower-middle-income to an upper-middle-income economy, about nine percentage points of tiny microenterprises (with fewer than five employees) advanced into larger micro- and small enterprises (with five to 30 employees), but there was no net movement into higher size categories from 2002 to 2021.
20 Lydia Saad, Historically low faith in U.S. institutions continues, Gallup, July 2023.
25 Trade finance and SMEs: Bridging the gaps in provision, World Trade Organization, 2016.
28 The 24 subsectors within the manufacturing sector are manufacturing of food products; beverages; tobacco products; textiles; wearing apparel; leather products; wood products; paper products; recorded media; coke and refined petroleum products; chemical products; pharmaceutical products; rubber and plastics; nonmetallic mineral products; basic metals; fabricated metal products; electronics; electrical equipment; machinery and equipment; automotives; other transport equipment; furniture; repair and installation of machinery and equipment; and other manufacturing, for example, of medical instruments and sports goods.
29 This is the simple average for nine sample countries for which we have data for 219 level-three subsectors: Brazil and Mexico among emerging economies, and Germany, Italy, Poland, Portugal, Spain, the United Kingdom, and the United States among advanced economies.
31 Dougai Jamieson et al., Large businesses and SMEs: Exploring how SMEs interact with large businesses, ORC International, July 2012.
33 The impact of trade policies and agreements on MSMEs’ sustainability, Global Council for the Promotion of International Trade; and “The private sector and the catalytic role of micro, small and medium-sized enterprises,” in Development Co-operation Report 2018: Joining forces to leave no one behind, OECD, 2018.
34 Of the 68 subsectors analyzed, 46 subsectors showed a correlation of more than 60 percent between large company and MSME productivity, and 56 subsectors showed a correlation of more than 40 percent.
36 Albert Berry, SME competitiveness: The power of networking and subcontracting, Inter-American Development Bank, January 1997.
37 Keiretsu networks are business networks made up of different companies, including manufacturers, supply chain partners, distributors, and sometimes financiers.


The scientific R&D subsector includes basic and applied research, and experimental development on natural sciences, engineering and technology, medical sciences, biotechnology, agricultural sciences, social sciences, and humanities.


Outperformers: High-growth emerging economies and the companies that propel them, McKinsey Global Institute, September 2018.

Productivity solutions grant (PSG), GoBusiness, Singapore.


Help to scale-up and grow, Gov.UK, February 2024.

Small business, big world, European Economic and Social Committee, European Union, May 2012.


Let there be light: The impact of positive energy-utility reporting on consumers, Experian, 2015.


Regis Augusto Ely, Daniel de Abreu Pereira Uhr, and Júlia Gallego Ziero Uhr, “The impact of the individual microentrepreneur program on the Brazilian labor market,” Economic Analysis of Law Review, volume 10, number 2, May–August 2019; and Tu empresa en un día, Chilean Subsecretaría de Economía y Empresas de Menor Tamaño, July 26, 2023.

Giving small firms the business, Center for an Urban Future, 2011.


Google for Small Businesses.

Falendra Kumar Sudan, Leveraging the participation of small and medium-sized enterprises in global value chains of the automotive Industry: Insights from Maruti Suzuki India Limited, ADBI working paper number 1167, Asian Development Bank Institute, July 2020.

Mark Segal, “Nestle commits over $1 billion to sustainable coffee farming plan,” ESG Today, October 4, 2022.

*Apple launches $50 million Supplier Employee Development Fund,* Apple, March 30, 2022.

“Walmart empowers MSMEs to accelerate growth and access new markets,” Walmart, December 9, 2019.


Stefani Wendel, What is alternative credit data?, Experian, September 2018.

OECD SME and Entrepreneurship Outlook 2023, OECD, June 2023; and Fröhse and Hilmersson, “Networking to accelerate the pace of SME innovations,” Journal of Innovation and Knowledge, volume 6, number 1, January–March 2021.


White paper on small and medium enterprises in Japan, National Association of Small and Medium Enterprise Promotion Organizations, 2018.