Creating Jobs and Developing Skills in Latin America and the Caribbean[1]

Basic Definitions

Countries surveyed in 2010 and how they are grouped for analysis:

In 2010, Enterprise Surveys (ES) interviewed 12,855 enterprises in 30 Latin American and Caribbean countries. In addition in 2009, 1,802 firms were interviewed in Brazil also following the standard ES global methodology.

For analytical purposes, the 31 countries are categorized into 3 groups:

Small Caribbean countries: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Suriname, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines

Medium-size countries: Bolivia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Uruguay, and Trinidad and Tobago

Large countries: Argentina, Brazil, Chile, Colombia, Mexico, Peru, and República Bolivariana de Venezuela.

Two waves of Enterprise Surveys, 2006 and 2010:

Fifteen countries were surveyed in 2006 using the ES global methodology: Argentina, Bolivia, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and República Bolivariana de Venezuela. In total, 10,930 firms were interviewed in 2006, of which 3,535 were re-interviewed in 2010.

Reference periods of the survey data:

The information collected in the surveys refers to characteristics of the firm at the moment of the survey (2006, 2010 and 2009 for Brazil) or to the last completed fiscal year (2005, 2009, and 2007, respectively). In addition, sales, employment, and labor productivity annual growth rates are calculated comparing data from the last complete fiscal year of each survey and recall data. Consequently, growth rates refer to the period 2002-05 for the 2006 surveys, 2004-07 for the 2009 Brazil survey, and 2007-09 for the 2010 surveys.

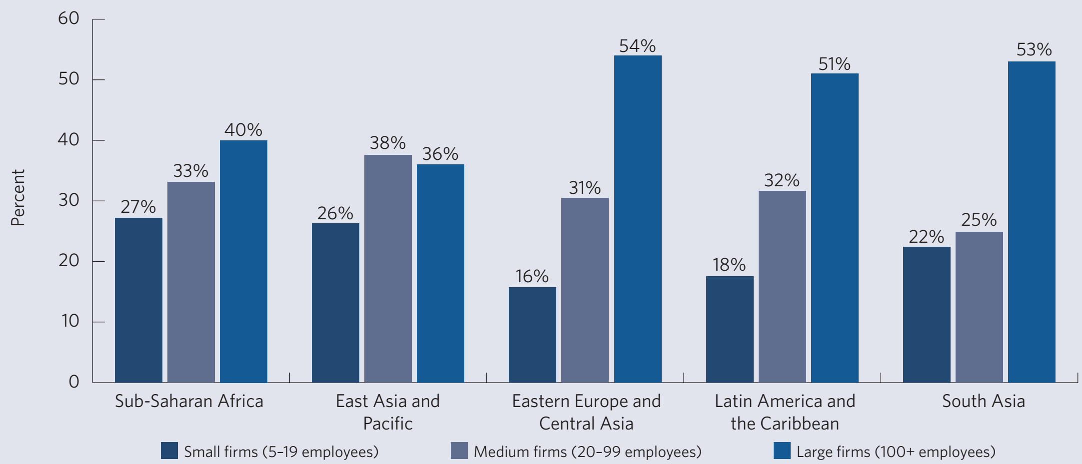
Creating productive jobs is one of the greatest challenges in any economy. Concerns about job creation and labor market outcomes are central to the public debate and policy agenda in the Latin America and the Caribbean (LAC) region. One of the main objectives of the Enterprise Surveys (ES) is measuring private sector employment, as well as job creation and loss. The surveys look at which types of firms contribute the most to net job creation and at the relationship between job creation and productivity. Additionally, the Enterprise Surveys identify the challenges facing firms when it comes to training and hiring, information that can be used to inform strategies to match worker skills with job openings.

Utilizing the ES data, the size of a firm, in terms of employees, is measured by the number of full-time permanent employees plus full-time temporary employees, with the latter adjusted for the average length of employment during the year. Net job creation is measured by the difference in full-time, permanent employment over a two-year period, using recall data. Such recall data are not available for temporary employment. Net job creation captures the number of jobs created minus the number of jobs eliminated. Note that the respondents to the ES are active, "living" firms and hence aggregate numbers on net job creation do not capture job losses that result from companies which may have gone out-of-business and were, by definition, not interviewed as part of the survey.

Small and medium-size enterprises (SMEs) have long been considered to play a vital role in job creation. Prior research using Enterprise Surveys data, including earlier data for the LAC region, found that SMEs account for the majority of total employment in developing economies, as well as the largest share of new job creation. The contribution of SMEs was found, however, to be smaller in high-income developing economies than in low-income developing economies (Ayyagari, Demirguc-Kunt, and Maksimovic 2011). This study was inspired by a well-known paper by Haltiwanger et al. (2010) that found different results in the United States: a systematic negative relationship between firm size and job creation

FIGURE 1 **WORKERS IN LAC ARE EMPLOYED ALMOST EQUALLY BY LARGE FIRMS AND SMEs**

(Average share of total employment across all countries)



Source: Enterprise Surveys.
Note: Percentages may not add to 100% due to rounding error.

that is mostly explained by firms' age. That is, when firms' age is accounted for, the relationship between firm size and job creation disappears. (Haltiwanger, Jarmin, and Miranda 2010). In contrast, Ayygari et al. found that both firm and age are significant in explaining employment growth rates with small firms exhibiting higher growth rates at all ages.

Moreover, SMEs in developing economies have also been found to lag behind large firms when it comes to investment in job training (Almeida and Aterido 2010). Investing in human capital is crucial to fostering technological adoption and increasing productivity. Firms' investment in human capital is particularly important in LAC, where evidence suggests a shortage of labor with needed skills, especially among growing firms (Pagés, Pierre, and Scarpetta 2009).

In Latin America, employment is divided almost equally between large firms and SMEs

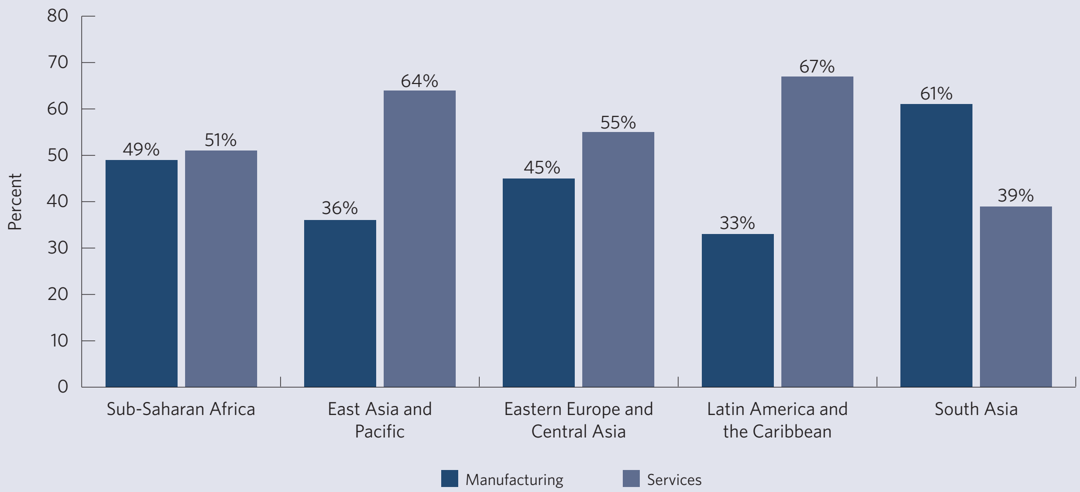
Contrary to what most existing studies show, the ES data show that in LAC total employment is divided almost equally between large firms,[2] defined as those with more than 100 employees, and SMEs. Figure 1 shows the distribution of employment by firm size for the average country in LAC and other regions. As the figure shows, in LAC slightly more than half the working population is employed by large firms; the distribution of employment is similar to that in the Eastern Europe and Central Asia region (ECA). Only in Sub-Saharan Africa (AFR) and in East Asia and the Pacific (EAP) do SMEs contribute to more than 50 percent of employment. Note that these figures are arrived at by computing the average share of employment by size group, across all countries in the region. Looking at regions as a whole, instead of computing averages over countries within a region, the share of employment accounted for by large firms is even higher than what figure 1 reveals. In fact, in all the regions of the world, the majority of workers are employed in large firms. In the case of LAC, considering the region as a whole, large firms employ two-thirds of the working population, under this alternative form of aggregation.[3]

More than two-thirds of total employment in LAC is in the service sector

An average Latin American worker is twice as likely to be employed in the service sector than in manufacturing. Relative to other regions of the world, the share of employment in services is similar to that in EAP region (figure 2). By contrast, the contribution of manufacturing and services to total employment is roughly the same in Sub-Saharan Africa, and considerably higher for manufacturing in the South Asia region (SAR). In the LAC region, even when total employment is added across all

FIGURE 2 **AN AVERAGE LAC WORKER IS TWICE AS LIKELY TO WORK IN THE SERVICE SECTOR**

(Average share of total employment across all countries)

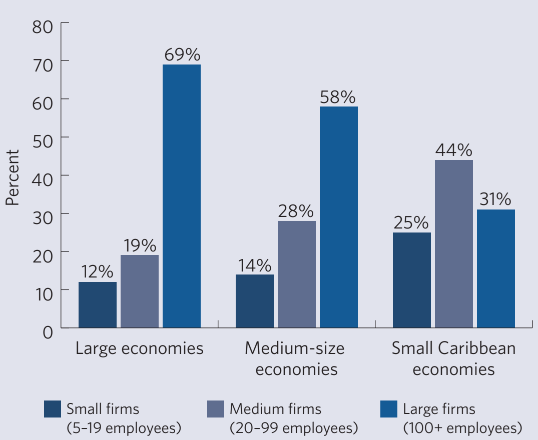


Source: Enterprise Surveys.

countries by sector, instead of averaging across countries, the service sector represents 60 percent of total employment. Nonetheless, it should be noted that shares of employment by firm size and/or sector may differ from the ones presented here, depending on the relative share of micro firms (those with less than 5 employees) or informal sector employment in an economy.

FIGURE 3 **IN THE SMALL CARIBBEAN ECONOMIES, SME CONTRIBUTION TO TOTAL EMPLOYMENT SURPASSES THAT OF LARGE FIRMS**

(Average share of total employment across all countries)



Source: Enterprise Surveys.

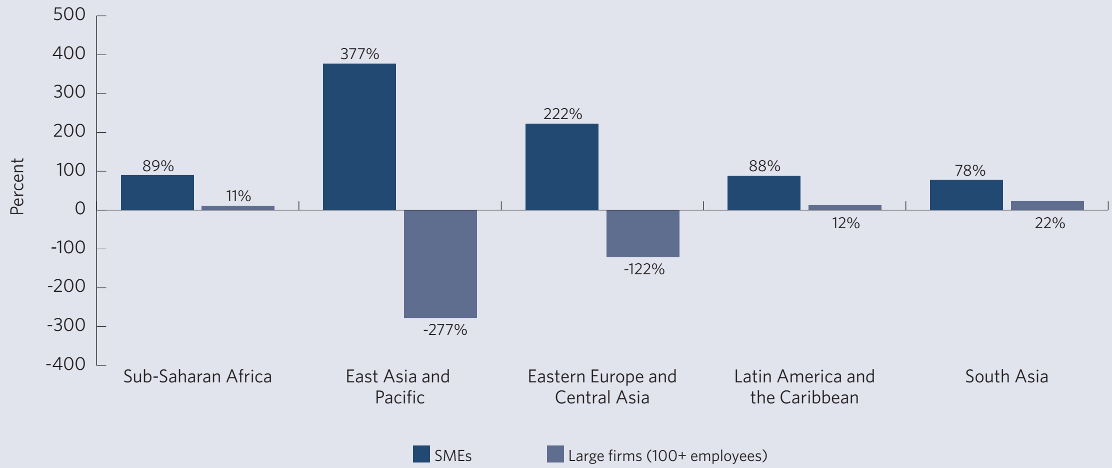
Within LAC, large firms also contribute more to total employment than SMEs in the large and medium-size economies. In the small Caribbean economies, however, SMEs account for more than two-thirds of total employment (figure 3). The larger contribution to total employment by SMEs in the small Caribbean economies holds even if employment is added across all countries in the sub-region grouping: in this case, the SME contribution to employment falls from 69 percent to 58 percent, but it is still the dominant employer in this sub-region. For medium-size and large economies, adding employment across all countries in the region does not drastically change the contribution to employment by SMEs vs. large firms in the other two sub-regions from the ones shown in figure 3.

Most countries in Latin America and the Caribbean are net job creators

In the LAC region, net job losses are not common: in 2010, only 6 out of 31 LAC economies experienced job losses at the country level. Two were large economies (Mexico and Peru), three were medium-size economies (Ecuador, El Salvador, and Honduras), and only one was a small Caribbean economy (St. Vincent and the Grenadines). In virtually all of these countries, job losses were driven by the contraction of jobs in large firms. Yet compared to other regions of the world, LAC had a higher

FIGURE 4 **SME CONTRIBUTION TO JOB CREATION IN LAC IS CONSIDERABLY HIGHER THAN THE CONTRIBUTION OF LARGE FIRMS**

(Average contribution to job creation across all countries)



Source: Enterprise Surveys.

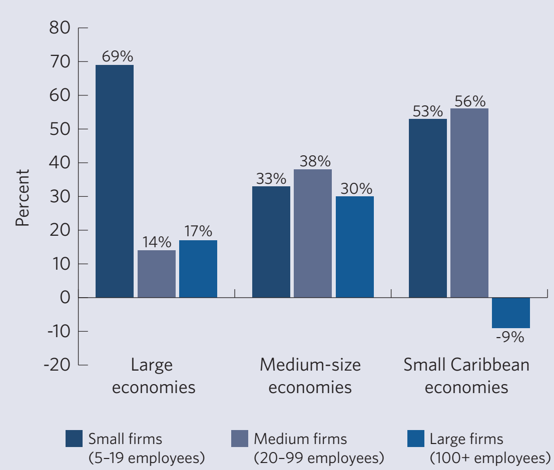
percentage of countries with net job losses. No country in the South Asia region experienced job losses and only two out of 39 countries in the Sub-Saharan Africa region experienced net job losses. In total, out of 118 countries with comparable ES data, only 14 countries experienced net job losses.

SMEs are the largest contributors to job creation in LAC, generating 88 percent of new jobs in 2010.[4] Interestingly, this figure is one of the lowest in the developing world (figure 4): only in the South Asia region did SMEs contribute a smaller share to overall job creation. Indeed, the East Asia and the Pacific and Eastern Europe and Central Asia regions experienced considerable SME contribution to job creation, which counterbalanced considerable job losses among large firms.[5] In LAC, as in South Asia and Sub-Saharan Africa, large firms experienced positive net job gains but their contribution to overall job creation was considerably smaller than that of SMEs.

Among all countries in the LAC region that exhibit positive, net job creation,[6] the bulk of job expansion comes from SMEs. Among large economies, small firms are the most dynamic in generating new jobs: almost 70 percent of new jobs are generated by these small firms (figure 5).[7] In medium-size economies and small Caribbean countries, both small and medium-size firms contribute significantly to the creation of new jobs, but in small Caribbean economies the creation of new SME jobs is much higher, counterbalancing the average job losses experienced by large firms.

In LAC, older firms contribute most to new jobs, in absolute numbers, and to total employment. On average, firms 10 years and older create 79 percent of new jobs and account for 85 percent of total employment. High labor productivity firms generate more new jobs than lower productivity firms; an average of 67 percent of new

FIGURE 5 **SMEs ARE THE MAIN JOB CREATORS IN THE LAC REGION**



Source: Enterprise Surveys.

jobs come from high productivity firms while only the remaining 33 percent are created by lower productivity firms.

While more workers are employed in older and larger firms in the region, the rate of growth of employment is higher for smaller firms of all ages. As Ayygari et al. found using earlier ES data for the Latin America and the Caribbean region, the new data show that both age and size are significant elements that explain employment growth rates: smaller firms exhibit higher employment growth rates and so do younger firms.[8]

More than half of manufacturing firms in LAC provide training to workers

The Enterprise Surveys also provide information on training and skills of the workforce for manufacturing. Manufacturing firms in LAC are as likely to provide training as their counterparts in East Asia and the Pacific, but more likely than those in the Sub-Saharan Africa, Eastern Europe and Central Asia, and South Asia regions. For a typical country in LAC, 43 percent of firms offer formal training to permanent, full-time employees, compared with 42 percent for East Asia and the Pacific, 36 percent for Eastern Europe and Central Asia, 33 percent for Sub-Saharan Africa and 19 percent for South Asia.

The percentage of manufacturing firms offering formal training is higher in the region's largest economies than in medium-sized economies and the Caribbean. In 2010, 56 percent of such firms in large economies offered formal training compared with 46 percent in medium-size economies and 32 percent in small Caribbean economies.

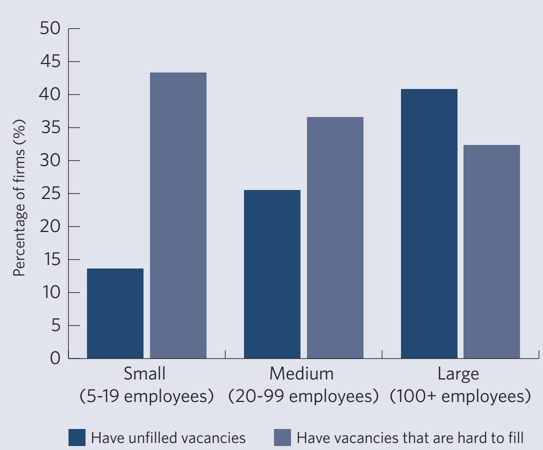
Large manufacturing firms are more likely to invest in workers. On average, more than three out of four large manufacturing firms in LAC provide formal training to employees compared with one in three small manufacturing firms. This finding is consistent with the existing evidence for OECD economies (Ammerman and Cuddy 2012). However the intensity of training, or the percentage of workers receiving training in manufacturing firms, is similar across firm sizes with firms on average offering training to roughly 60 percent of their employees.[9]

Comparing training and labor productivity in manufacturing firms across the region, high-productivity firms are more likely to offer training than low-productivity firms among small and medium firms. Large firms, however, do not exhibit differences in frequency of training between high and low productivity firms. Indeed, small firms that offer formal training are more than twice as productive as those that do not. This difference in training by labor productivity of the firm is less remarkable for medium-size firms. For large firms, productivity levels are similar for those that offer formal training and those that do not.

In addition to information on training frequency and intensity, the Enterprise Surveys in LAC also collected information on labor market frictions faced by employers: the number of firms with unfilled vacancies at the time of the survey and the percentage of firms with unfilled vacancies for more than four months. As expected, the likelihood of having unfilled vacancies increases with firm size, but the probability of experiencing vacancies that are "hard to fill" decreases with firm size (figure 6).

In sum, the recent Enterprise Surveys in the Latin America and Caribbean region confirm that SMEs show higher employment growth rates than large firms even though employment is divided almost equally between them. Naturally, large firms create more new jobs than SMEs in absolute numbers but the growth rate of employment is higher for SMEs.

FIGURE 6 **LABOR MARKET FRICTIONS FOR BUSINESSES IN LAC**



Source: Enterprise Surveys.

Endnotes:

1. Lead authors: David C. Francis, Silvia Muzi, Jorge Rodriguez Meza, and Federica Saliola with the collaboration of the LAC report team.
2. As in the earlier research this result is for the universe of inference of the Enterprise Surveys: it includes only the formal sector and it does not include micro (less than 5 employees) nor firms and or firms in the agricultural, extractive, financial, or public sectors.
3. Considering the region as a whole is equivalent to considering each region without frontiers, or to adding up all employment across countries within a region.
4. When analyzing job creation, size is defined using the baseline year which is 2007 for all countries with the exception of Brazil, for which the baseline year is 2004.
5. Given that the 100% contribution to job creation is divided between SMEs and large firms, net job losses in any of these groups necessarily mean that the other group must have a contribution greater than 100%.
6. Excluding the 6 countries with negative job creation.
7. If Venezuela is excluded, however, large firms become the main job creators among large economies, with a 49% share of job creation.
8. This was confirmed by regression analysis following the model developed by Haltiwanger, et al.
9. Due to differences in the questionnaire the intensity of training can only be computed for medium-size economies and large economies.

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