CENTER FOR GLOBAL DEVELOPMENT

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Growing Smaller: COVID-19's Impact on Firm Size in Latin America

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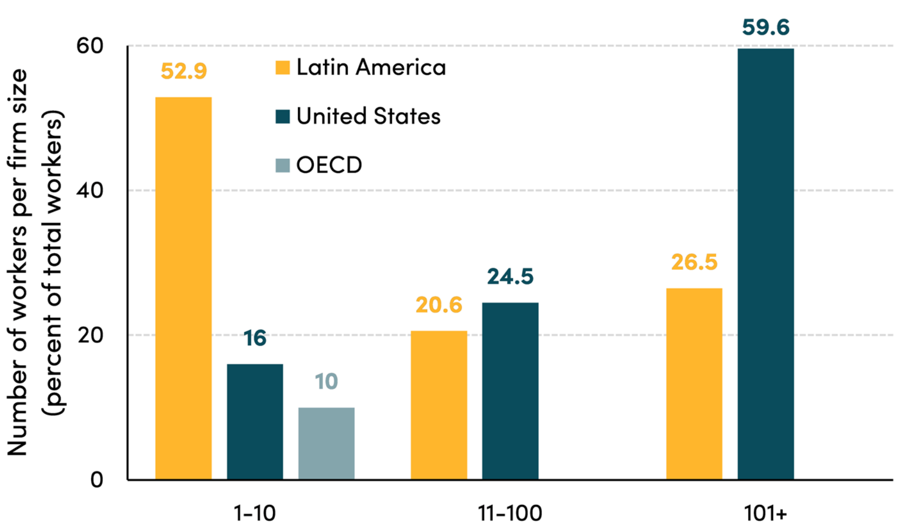
A well-known structural problem in Latin America is that firms[1] are generally quite small, and most workers in the region are concentrated in small firms. In recent years, about 32 percent of workers were self-employed, and of those working in firms, over 50 percent were in firms that employed 10 or fewer people (Figure 1). In contrast, most workers in OECD countries and the United States are employed by medium and large-size firms.

Firms' size matters because smaller firms tend to be less productive (see OECD (2014) and Bento and Restuccia (2018)). The effect of firm size on productivity can be substantial,[2] and in Latin America, the productivity lag is a significant hindrance to growth.[3,4]

FIGURE 1. Employment per firm size by number of workers (2017–2019; in percent)

Latin American workers are concentrated in smaller firms...



Source: Meléndez (2022) for Latin America and the United States and OECD (2022).

What is less well known is that the COVID-19 pandemic aggravated this problem by further shrinking the size of firms in Latin America. This note presents evidence of this worrying outcome and complements research for a CGD-IDB working group report (Powell and Rojas-Suarez, forthcoming) that analyzes the different types of scarring suffered by firms and workers during the pandemic.[5]

To evaluate the pandemic's evolving impact on firm size, we delved into local databases; which was not an easy task since data is sparse, indicators are diverse and not always comparable, and information comes with a time lag (in some countries, a significant one). However, **we identified three defining features that indicate firms became smaller as a result of the pandemic and widespread lockdowns:**

1. **The net creation of firms shifted towards micro and small firms**
2. **Across firm sizes, the average number of employees per firm decreased**
3. **New firms are being created with less capital**

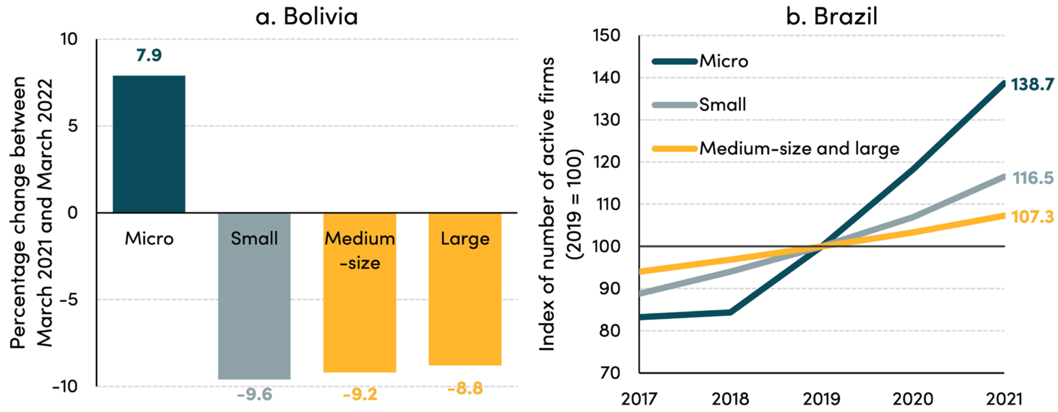
The net creation of firms has shifted towards micro and small firms

Data for 2020, 2021, and 2022 shows that the distribution of firms has tilted towards smaller units: the net creation of firms (new firms minus closed firms)[6] resulted in an increase in the proportion of micro and/or small firms in several countries.

Data for **Bolivia** and **Brazil** illustrates this result. In Bolivia, between March 2021 (when data first became available) and March 2022 (latest data point), micro firms increased by 7.9 percent and now represent 87.1 percent of total firms (compared to 85.1 percent in 2021), while small, medium-size, and large firms all decreased substantially (Figure 2a). In Brazil, while there was strong firm creation throughout the pandemic—potentially due to the significant fiscal support from the government, which was the largest stimulus package in the region—it was mainly concentrated in micro firms (Figure 2b). These firms increased their proportion over the total and reinforced the regional trend. By March 2022, the number of micro firms had soared by 38.7 percent from pre-pandemic levels (2019), and small firms had also increased more than medium-size and large firms. Significantly, the move towards smaller firms has persisted beyond the peak of the pandemic and into 2022.

FIGURE 2. Net firm creation by firm size in Bolivia (March 2021–March 2022; percentage change) and Brazil (2017–2022; 2019=100)

Micro firms were the only firm type that grew (net of firm closing) in Bolivia and micro and small firms outpaced medium-size and large firms in Brazil...



Source: Fundempresa (Bolivia) and Painel Mapa de Empresas (Brazil).

Less comprehensive but still revealing data exists for other countries and supports this trend. 2020 data (where more recent data was not available) and proxy measures (where net firm creation is not available) shows that this concerning pattern was common in the region.

2020 data

- In **Chile**, micro firms sustained strong growth during the peak of the pandemic in 2020, growing by 3.2 percent (considerably higher than its historical average of 2 percent), while small firms decreased by 0.5 percent and medium-size and large firms grew below their historical averages.
- In **Dominican Republic**, micro firms were the only group with positive growth net of closings between 2019 and 2020. The number of micro firms increased by 3.4 percent, while the number of small, medium-size, and large firms decreased (–13.3 percent, –17.5 percent, and –6.9 percent, respectively).
- In **Ecuador** *only* 3.1 percent of micro firms disappeared, while small, medium-size, and large firms closed at much higher rates (15.7 percent, 11.9 percent, and 12.5 percent, respectively).
- In **Uruguay**, between 2020 and 2019 small firms concentrated the net growth with an increase of 10 percent, while medium-size and large firms disappeared at high rates (14.3 percent and 10.8 percent, respectively).

Proxies

In **Colombia** and **Peru**, net firm creation data is not available. However, two alternative measures serve as proxies and show a similar pattern to the one observed in other countries.

- In **Colombia**, gross firm creation data (that is, not accounting for closings) shows that micro firms recovered pre-pandemic creation levels in 2021 and that small firms' gross creation increased in both 2020 and 2021, while medium-size firms creation remained below 2019 levels.
- In **Peru**, sole proprietorship companies (a proxy for the smaller type of companies) outpaced the growth of the larger limited liability and public companies, suggesting that the shift towards smaller units also occurred there. Data for **Bolivia** paints a similar picture consistent with the data described above.

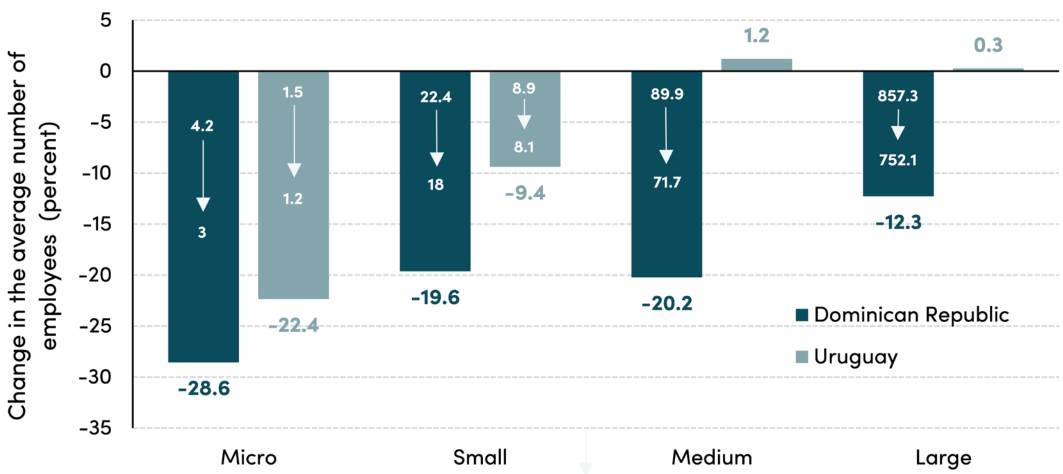
Of the nine countries for which data was available, **Costa Rica** is the only one in which firms' net creation remained steady for all firm types between 2019 and 2021.

Across firm sizes, the average number of employees decreased

A pattern of reduction in average number of employees per firm was observed in **Dominican Republic** for all firm sizes and in **Uruguay** for micro and small firms. As shown in Figure 3, when classified by size, every firm type in Dominican Republic had a lower average number of employees in 2020 than in 2019. In Uruguay, while medium-size and large firms remained relatively unchanged in 2020, micro and small firms, which compose most of the firm universe, decreased sharply and the overall average number of employees per firm decreased by 15 percent.

FIGURE 3. Average number of employees per firm in the Dominican Republic and Uruguay, by firm size (2019–2020; percentage change)

Average number of employees per firm decreased across the board in the Dominican Republic and in micro and small firms in Uruguay...

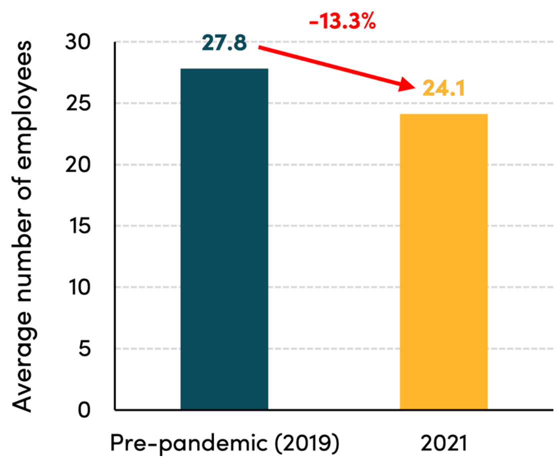


Source: Oficina Nacional de Estadística Directorio de Empresas y Establecimientos (Dominican Republic, see 2019 and 2020) and Instituto Nacional de Estadística (Uruguay).
Note: The upper numbers inside the bars indicate the 2019 average number of employees and the lower ones the respective values for 2020.

Surveys in Mexico indicate that the average number of employees in small and medium-size enterprises (SMEs) also fell; importantly, the data from Mexico includes informal firms. As shown in Figure 4, the average number of employees working in SMEs was 13.3 percent smaller in 2021 than in 2019.

FIGURE 4. Average number of employees in SMEs in Mexico (2019 and 2021)

SMEs' average number of employees dropped...



Source: INEGI.
Note: 2019 data is for May and 2021 data is for July.

Survey data from other countries is consistent with this evidence. In **Colombia**, a study of micro firms indicates that, among the smaller type of firms, the average number of employees decreased by 5 percent in 2020 and remained about the same level in 2021, suggesting some persistence. In **Paraguay**, an SME survey comparing 2019 and 2020 shows that 41.8 percent of micro, 53.2 percent of small, and 59.2 percent of medium-size firms reduced their number of employees and that very few firms expected to increase employment in coming years. **Ecuador** is the only exception, among countries for which we could find data, as the number of employees increased across the board. Yet, as discussed in the previous section, the firm type distribution in Ecuador moved towards micro firms.

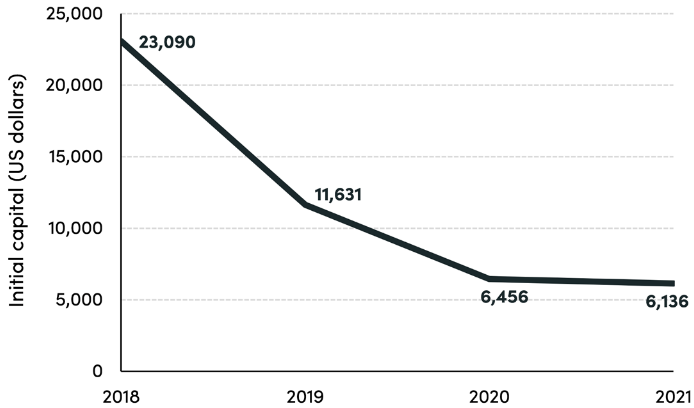
New firms are being created with less capital

Data from **Chile** shows that in 2020 and 2021, new firms were created with substantially less capital than in pre-pandemic years (Figure 5). Firms' average capital fell by 44.4 percent in 2020 compared to 2019, and decreased further, by 2.7 percent, in 2021 (and even more when compared to the average for 2013–2019). Although 2022 data (up to April) suggests a partial recovery, at an average capital of US$9,500, new firms were still being created with just 82 percent of the capital invested in 2019.

The data from Chile is consistent with the findings of the upcoming CGD-IDB report, which shows that investment in the region decreased broadly across sectors for large firms.

FIGURE 5. Average capital of new firms per year in Chile in thousands of US dollars (2018–2021)

New firms' average capital decreased considerably...



Source: Registro de empresas y sociedades.

Summing up

Investment and firm size—both in terms of the distribution of micro, small, medium-size, and large firms and of the average number of employees—are key structural indicators of the strength and dynamism of the national economy that policymakers need to monitor and consider when designing emergency and recovery policies. The pandemic-induced reduction in firms' size, from an already very small base, reinforces the region's productivity trap and adds new obstacles to future growth. While these outcomes are to some extent natural, and smaller firms are crucial engines of employment and economic activity, if these firms are not able to grow and invest, the region's fragilities will only increase. The forthcoming CGD-IDB report offers recommendations for addressing these enormous challenges. A recovery that rests upon the shoulders of even smaller firms makes Latin America a *giant with feet of clay*.

Endnotes

1. Throughout this note, "firms" refers to formal firms, unless otherwise noted.
2. Leung, Meh, and Terajima (2008) find that 50 percent of the labor productivity gap in manufacturing between the US and Canada can be explained by firm size.
3. These are not minor issues; experiences in Chile (Garone et al., 2020) further show that there are considerable differences in productivity within industries and that these differences are highly persistent.
4. A misallocation of resources often explains the smaller firm size and some estimates indicate that an adequate reallocation of capital and labor would increase total factor productivity between 45 and 127 percent in the region. Studies for Mexico and Latin America also link misallocation to the prevalence of informality.
5. As of March 2022 (two years after the onset of the pandemic) formal employment had not fully recovered to pre-pandemic levels in many countries, and informality had increased. Evidence shows that policy responses have been largely ineffective in helping smaller firms.
6. A negative number implies net *destruction* of firms.

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