

Businesses and inequality in Latin America[†]

Marcela Eslava 101,* Marcela Meléndez, Gabriel Ulyssea, Nicolás Urdaneta and Ignacio Flores

- ¹School of Economics, Universidad de los Andes, Bogota, Colombia, 111711
- ²The World Bank, Washington, DC 20433, US
- ³Department of Economics, University College of London, London, WC1H 0AX, UK
- ⁴Department of Economics, Duke University, Durham, NC 27708, US
- ⁵Global Inequalities Laboratory, Paris School of Economics, Paris 75014, France
- *Correspondence address. Universidad de Los Andes, Bogotá. Tel.: +57 3394949; E-mail:meslava@uniandes.edu.co
- [†]The authors thank Laura Tenjo for her excellent assistance in generating some of the charts in this chapter.

ABSTRACT

The relationship between businesses and inequality has been a focus of recent attention globally. This chapter summarizes basic facts about this relationship in Latin America (LATAM). Unlike advanced economies where superstar firm growth has prompted concerns over disproportionate income growth at the top, the facts we summarize illustrate that the main concern for LATAM is the extreme prevalence of tiny businesses whose workers and owners tend to populate the bottom income segments. The empirical likelihood that these businesses improve their productivity and grow to hire more workers and pay better wages is also very low. The region displays a deficit of employment generation in small and medium enterprises, by contrast to both micro businesses (including self-employment) and large corporations. While the former tend to remunerate both workers and owners with very low incomes, the latter pay high wages but exhibit low labor shares.

Introduction

The relationship between businesses and inequality has been a focus of recent attention globally. In recent decades, rapid growth by superstar firms has led them to seize an increasingly large share of their respective markets, with gains concentrated in their shareholders. As a result, at least in the developed world, the fraction of income and wealth in the hands of the richest individuals has grown since 1990, while the labor share of national income has shrunk, and average market power has increased.¹ The role of business size and business growth in inequality has thus become a focus of attention.

Business size/growth is also crucial to understanding inequality in Latin America (LATAM), as illustrated by a series of recent studies. First, LATAM economies are unique among high- and middle-income economies in that they exhibit extremely skewed market structures when business size is measured by the number of workers. Most employment creation in the region is concentrated in businesses with at most 10 employees, with nearly half of the workers in that segment self-employed without employees (i.e. in one-person businesses). This stands in sharp contrast with more advanced economies across the world. While in the region, close to 70% of workers are in these business size categories, the figure falls to less than 30% for high-income economies, where most employment occurs at businesses of 10 or more employees (Eslava et al., 2023).

Second, there is a close correlation between personal earnings and the size of the business where the person works, much more

¹ See Autor et al. (2020); Karabarbounis and Neiman (2014); Kavoussi (2019); Loecker et al. (2020).

so in LATAM than in more prosperous regions. For instance, only 3% of workers with earnings in the bottom decile in the region work in businesses with more than ten employees, while the analogous figure is close to 30% in high-income Asian economies, 40% in Europe, and 64% in the USA (Eslava et al., 2023). In the opposite end of the income distribution, the top income decile, the share of workers in businesses with 10+ employees is still different across regions, but the contrast is much more muted: 55% in LATAM vs. 58% in Asia, close to 70% in Europe and to 80% in the USA.

Understanding the relationship between business size/growth and inequality is thus especially important in LATAM. This chapter lays out the basic facts about this relationship, as uncovered by different recent studies. Much of what is known about this relationship for the region is based on establishment-level data, which fails to cover a very large fraction of the workers in the region, and is limited to the manufacturing sector. This paper, by contrast, is comprehensive of businesses where workers in LATAM make their livings. Our purpose is merely descriptive. We abstain from providing explanations for the patterns we describe.

Much of the evidence we summarize is based in Eslava et al. (2023), who use information from household and employment surveys to examine the entire distribution of workers in LATAM across business sizes, including self-employed activities without employees. This type of data allows a comprehensive look at productive activities (all employment-generating activities), including those occurring in businesses not covered by business-level information. Such a comprehensive view is crucial precisely because of the high fraction of employment these businesses generate in the region. At the same time, this type of source

offers information on the workers attached to businesses of specific size classes but not on the businesses themselves. Thus, only the employment-weighted business size distribution can be characterized.

After a broad look at Eslava et al.'s findings regarding the employment-weighted business size distribution in Section 2.1, we move to studies based on business-level data sources in Section 2.2. These allow us to provide a more thorough description of business size and growth across business-size categories. However, these sources leave out the self-employed without employees (over 30% of workers in LATAM) and, in many cases, employment at the smallest units. Section 3 then characterizes the relationship between business size and inequality in LATAM, both from sources that use household surveys and others based on business-level data.

LATAM's skewed business size distribution The economy-wide business size distribution

This subsection summarizes findings on the economy-wide business size distribution (employment-weighted) from Eslava et al. (2023) based on employment/household surveys for 11 countries in LATAM,² economies in the European Union, five Asian-Oceania economies,³ and the United States (detailed sources are listed in Table B1 in the Appendix). The data correspond to 2019 for most

Figure 1 collects some of Eslava et al.'s numbers for LATAM and the European Union (EU).4 We use Europe as a benchmark of economies that not only are richer but also exhibit much lower levels of income inequality than LATAM. As highlighted in the introduction, the most outstanding feature of the employmentweighted average business-size distribution in LATAM is the vastly predominant weight of tiny businesses. The fraction of workers who work outside of businesses in the category of 10+ employees (i.e. the sum of self-employment and workers in microenterprises) is almost 70% in LATAM and only 35% in the EU. It is even lower in the US and Japan, where it falls short of 20%, or if one considers only the more prosperous economies in the EU.

Even within this segment of very small units, it is the categories of the tiniest businesses that exhibit starker contrasts with richer economies. Independent workers represent an important fraction of that segment in LATAM: 32% compared to 12% in the EU. Employer businesses with up to five workers carry a weight of 27% in these LATAM economies but only 12% in the EU.

The data are much more sparse and less comparable across countries for the opposite side of the distribution. For workers in businesses above ten employees, countries report only coarse classifications, in most cases only splitting the segment into above and below the 50-employee mark. Clearly, large businesses contribute much less to employment in LATAM than in the comparator high-income economies. In Fig. 1, businesses with 50+ employees generate 20% of employment in LATAM and 38% in the EU. However, LATAM exhibits signs of some degree of polarization, reminiscent of the idea that the region suffers from a

"missing middle"—that a robust segment of small and medium businesses (SMEs) has not materialized. One sign of this is the particularly striking gap vs. the EU and other comparators in the category of 11–50 employees. In fact, Eslava et al. (2023) find that LATAM economies display lower fractions of workers in businesses between 10 and 50 employees—i.e. small businessesthan their development level would predict and that this occurs because there is more self-employment than in economies with similar levels of GDP per capita. They also show that, for a limited set of countries where a comparison with more detailed size categories is possible, the LATAM employment distribution is Ushaped across business sizes, with more mass for businesses below ten and above 50 or above 100 employees than in the intermediate categories. The absence of a more robust middle is more surprising than the weak employment generation at large businesses and corporations because it does not support the notion that the smaller business size in LATAM is solely a manifestation of a productivity distribution across businesses shifted to the left vs. rich economies or a feature that will disappear spontaneously with economic growth. Instead, it suggests that barriers in the business environment are particularly tolling for the emergence of an SME segment capable of both absorbing significant labor and bringing meaningful competition to the product and labor markets.

The business size distribution from business-level statistics

The numbers presented thus far are based on employment or household surveys for a series of countries. These have the advantage of covering all the employment-generating economic activity in each country and being relatively easy to compare across countries. At the same time, they lack additional information on the businesses where workers generate their income. We, thus, now move to findings from business-level data sources for specific countries. Based on these sources, we discuss findings related to the unweighted business-size distribution in Latin American countries and the patterns of business growth behind the stationary distribution.

Business-level data sources differ across countries in terms of their coverage. We discuss findings from Blundell et al. (2022) using the Economic Census in Mexico, the employer-employee matched data for Brazil (Relação Anual de Informações Sociais, RAIS), and secondary sources that use Annual Manufacturing Surveys for other countries (see Table B.1 in the Appendix). The unit of observation is the establishment. The most comprehensive of these databases is the Mexican Economic Census, which aims to cover all productive units with an identified location, fixed or not, registered or not in administrative data sources. This makes it unique in the wide and continued coverage of informal (together with formal) establishments. In the Mexican Census, establishments are classified as informal if they do not pay their workers social security. Even this very comprehensive dataset, however, misses a large proportion of economic activity, as evidenced by the fact that the number of workers captured in the Census is around 50% of the total number of workers in the economy (Busso et al. 2012). This is perhaps not surprising after having seen the high weight in employment of self-employment and the smallest micro-businesses, which are likely hard to identify and include in the Census because their location may not be visible and the probability that they show up in administrative records is very low. The Brazilian RAIS is based on administrative records and thus only covers formal establishments and their formal employees. The manufacturing surveys of different countries are also mostly

Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Mexico, Paraguay, Peru, and Uruguay.

Korea, Japan, India, Pakistan and Australia.

The fraction of workers in each category is separately calculated for each country. The numbers reported for a region correspond to the weighted average across countries in the region, with the total number of workers in the country used as the country's weight. For the EU, Eslava et al. (2023) calculate and present the figures for countries with income per capita below and above the EU median across countries separately. The numbers in Figure 1 for Europe correspond to the simple average between the two subregions.

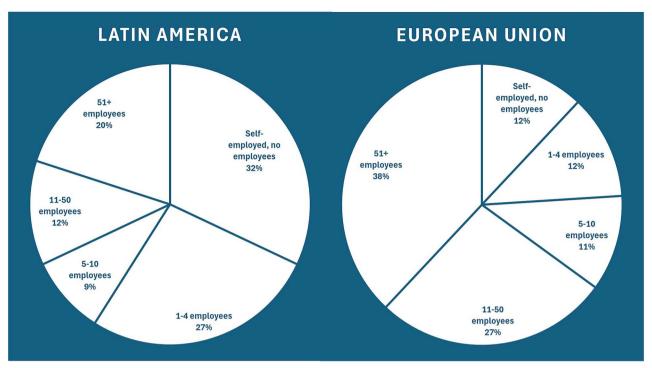


Figure 1: Business size distribution (employment-weighted).

Source: Eslava et al., 2023. See Tables B1 and B3 for data description

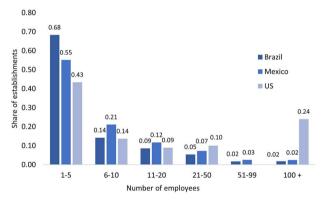


Figure 2: Formal establishment size distribution.

Note: Data have been restricted to establishments in commerce, manufacturing, services, and construction. Brazil: Own calculations using RAIS data for 2003-2017. US: Own calculations from 2018 business dynamics statistics (BDS) tables Mexico:, Blundell et al. (2022) using the 2018 Mexican economic census. For the US, the bar in the category of 21-50 employees corresponds to 21-100 workers as the data does not disaggregate into 21-50 and 51-99. See Tables B2 and B3 for data description

restricted to formal establishments because they are typically representative of establishments above a certain size threshold, which is frequently 10 employees, a segment where formality, by various measures, is more likely. Moreover, the sampling frame of some manufacturing surveys also relies on administrative records, at least partially.

We start by showing the establishment size distribution in the formal sector for both Mexico and Brazil in Fig. 1. The vast prevalence of small businesses indicated by the evidence from worker-level data discussed in the previous sections is confirmed even within the formal sector. As Panel (a) shows, 82.5% of all formal businesses in Brazil have at most 10 (formal) employees, while Panel (b) shows that this fraction is a bit smaller in

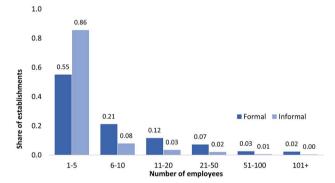


Figure 3: Formal vs. informal establishment size distribution in

Source: Blundell et al. (2022) Using the 2018 Mexican economic census. Establishments are labeled as formal (or not) if they make social security payments for their workers. See Tables B2 and B3 for data description

Mexico, with 76.2% of all formal establishments. In Fig. 3, we further take advantage of the unique feature of the Mexican Census, which also covers informal establishments, to contrast the establishment size distribution in both sectors. As expected, informal establishments are even more concentrated in smallsize bins, with around 93% of informal businesses being smaller than ten employees. Perhaps more interesting is that the data shows that we can see a non-zero mass of establishments in size bins as large as 21-50 employees. These distributions come in stark contrast to the US, where 57.2% of establishments have at most ten employees, and 23.9% have over 100 employees.5

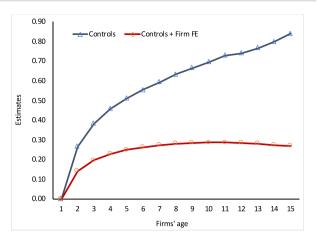
⁵ The data on the establishment size distribution comes from the Business Dynamics Statistics tables for 2018. When focusing on establishments instead of establishments the full distribution is as follows: from 1-4 employees, 58.5%; 5–9 employees, 18.1%; 10–19 employees, 11.4%; 20–99 employees, 9.9%; 100–499 employees, 1.7%; 500 or more employees, 2.1%.

Establishment dynamics

So far, we have provided a completely static picture, focusing on the stock of establishments and jobs in the economy. However, an equally important dimension is the dynamics of establishments outcomes, and in particular, establishment growth (or its lack thereof). Of course, the fact that most establishments are concentrated in small-size bins is suggestive that establishment growth must be slow on average. Figure 4 shows the estimates of age dummies' coefficients in a regression with the logarithm of establishment size (measured as the number of employees) as the dependent variable and additional controls for establishment characteristics (such as location and industry) and establishments' fixed effects, from Blundell et al. (2022). The upper line, which does not control for establishment fixed effects, shows that older establishments in Brazil and Mexico—Panels (a) and (b), respectively—are larger than younger establishments. However, once establishments' fixed effects are controlled for, the growth profile is quite flat after age 4. That is, on average, over the life cycle of the typical establishment, there is some growth in the first 4 years, and then the establishment becomes stagnant. The increasing pattern in the line without fixed effects reflects mostly that more productive, and thus larger, establishments are more likely to survive to older ages.

To put the results displayed in Fig. 4 in perspective, we compare establishments' growth in Mexico, Brazil, and Colombia with that observed in India and the USA. The latter is the benchmark against which we assess all countries, while India provides an important reference point within low- and middle-income countries. To do that, we combine the results from Hsieh and Klenow (2014) on manufacturing in India and the USA with own calculations using the RAIS data for Brazil, results for Mexico from Blundell et al. (2022) and results from Eslava et al. (2022) on Colombia's manufacturing industry. The figures reported correspond to the ratio of average employment at a certain age group to the average employment of establishments with less than 5 years. Figure 5 shows that establishments in the three Latin American countries grow much less than those in the US, with Colombian establishments displaying the flattest growth profile among them. Colombian plants aged 5-9 years are only 8% larger than those aged 0-4, while their comparable number for the US is around 100%. The growth profile of Indian establishments, however, displays a much more drastic shape, with establishments displaying, on average, zero (and at points negative) growth over their life cycle.

Eslava et al. (2022) also present entry and exit rates and transition rates from less than ten employees to ten or more (and vice versa) for manufacturing plants in Colombia vs. the US. They use actual data on some of these rates and calibrate others to match the steady-state size distributions. Their data comes from the Business Dynamics Statistics for the USA, from the Colombian 2005 Census for the steady state distribution of manufacturing establishments, and from the Annual Manufacturing Survey for some transitions for plants over ten employees, simulating the unobserved rates as the transitions necessary to fit the steadystate distributions. They find that all these rates are substantially larger in the US compared to Colombia, in most cases by factors in the vicinity of 8-9. Exceptions are the exit rate of establishments under ten employees, which they estimate to be almost 13 times larger in the USA than Colombia, and the transition (contraction) from over 10 to less than ten employees, which in their calibrations is similar between the two countries. In other words, the manufacturing sector in Colombia exhibits much less entry and much poorer plant growth. Particularly interesting is the category



Panel (a): Brazil

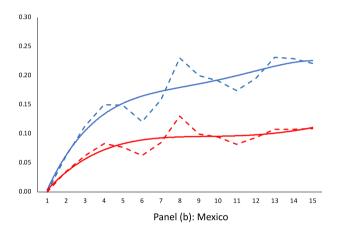


Figure 4: Formal establishments' growth - Brazil and Mexico. Source: Own calculations using RAIS for Brazil. Blundell et al. (2022) For Mexico. Only formal establishments included in these regressions. In

both cases, formal establishments are those that make social security payments on their employees. Controls included: Location and industry dummies. Confidence bands are extremely tight in the Brazilian case. Blundell et al. do not report confidence bands in the Mexican case. They do report, however, both a parametric and a non-parametric version of the estimation, both shown in panel b. see Tables B2 and B3 for data description

of tiny plants under ten employees (micro-establishments). Not only is there significantly less entry of this type of plant than in the US, and less likelihood that they grow sufficiently to outgrow the micro category, but once a micro-establishment emerges, it is very unlikely that it exits.

Business size and inequality in LATAM Earnings vs. business size for the universe of workers

Business size is crucially linked to earnings inequality, not only in developed economies, as emphasized by recent literature, but also in LATAM. Indeed, within the formal sector, Alvarez et al. (2018) have shown that the reduction of between-firm inequality explains most of the decline in wage inequality observed in Brazil in the past two decades, which is the mirror image of the trends observed in developed economies such as the USA and Germany. They argue that changes in observable workers' and firms' characteristics contributed little to these patterns. Instead, the observed decline is due to a compression of returns to these

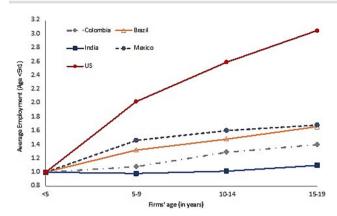


Figure 5: Establishments' growth profile.

Source: Blundell et al. (2022); Eslava et al. (2022); Hsieh and Klenow (2014). Values correspond to the ratio of average employment at a certain age group with respect to the average employment of establishments with less than 5 years. See Tables B2 and B3 for data

characteristics, including firm size and, in particular, a decline in the wage premium associated with firm productivity.

Beyond the formal sector, the link between business size and inequality in LATAM is largely driven by a correspondence between working own-account or in microbusinesses and having very low earnings. Using the household data previously described, Eslava et al. (2023) find a steep negative gradient for the shares of workers in self-employment and micro-enterprises with respect to their income levels and show that the gradient is much more moderate in their richer comparators. The top panel of Table 1 reproduces that exercise with a more limited dataset. The table shows how workers in different quintiles of earnings in the region are distributed across own-account employment, businesses under five employees, and larger businesses. These calculations are based on the United Nations Economic Commission for LATAM and the Caribbean's (ECLAC) database of household surveys for Brazil, Chile, Colombia, Costa Rica, Mexico, Peru, and Uruguay. The data in this dataset are taken from the original household surveys used in Eslava et al. (2024). We use this version of data, rather than the original household surveys, because for the ECLAC version there exist adjustments to individual earnings based on tax records. These adjustments are produced by the World Inequality Database (WID) team to correct the weight of individuals with high income in LATAM, addressing the concern that top income individuals may be underrepresented in the region's household surveys.6 We report results for both unadjusted and adjusted earnings reports. Our ability to produce results with this adjustment comes at the cost of losing granularity in the business size classification, as the ECLAC data only report whether the worker is at a business above or below five employees.

As in the Eslava et al. (2023) results, the percentages of selfemployed workers and those in businesses under five employees markedly decrease between the lowest and highest earnings quintiles in Table 1. In contrast, the percentage of workers in businesses with five employees or more is much higher among workers with high earnings. As a reference point, because poverty

in most countries in the region hovers in the 30%-40% range, most workers in the bottom two quintiles likely belong to households whose incomes fall below the poverty line. The bottom panel of Table 1 shows that this regularity remains true and is, in fact, even starker if individual incomes are corrected using tax registries to account for the fact that high-income levels may be underestimated in household surveys.

In some dimensions, business size is even more closely linked to the distribution of personal earnings in LATAM than in other regions. Eslava et al. (2023) show that, although across the world, the probability of being a worker or owner of a business with more than ten workers is higher for those at the top of the earnings distribution than at the bottom, LATAM is particular in three dimensions comparing to high-income economies and even India. First, the share of this category (10+ employees) for bottom deciles' workers is much smaller, in fact negligible, in LATAM: 3% in LATAM's first decile compared to 62% in the US and 40% in EU higher income countries. Second, contrary to elsewhere, self-employment absorbs more workers than microenterprises in these low-income groups. Third, in LATAM, the likelihood of working in a business with more than ten employees increases more rapidly along the income distribution than in other regions.

Eslava et al. (2023) also find that the likelihood of being a business owner with employees is much higher for high-earning individuals, and this is true both in LATAM and benchmark economies. For instance, the probability of being an employer is four to five times higher in the top decile of earnings compared to the bottom decile (21% vs. 5% in LATAM and 10% vs. 2% in the US). At the same time, the likelihood of being an employer is twice as high in LATAM compared to the US for any decile of the income distribution. The prevalence of ownership is even higher when including business owners without employees, which is around five times higher in the region than in the US, again in any segment of the income distribution. The typical businessperson in LATAM is self-employed without employees and has earnings in the bottom tail of the distribution. Entrepreneurship is predominant in the region, overwhelmingly dominated by survival rather than transformational entrepreneurship.

Workers' earnings are tightly linked to the size of the business to which the worker is associated. Figure 6 depicts results from Eslava et al. (2023) that illustrate this. They run regressions of individuals' earnings on a dummy for the size category of the business to which the worker is attached. They add (progressively) controls for individuals' characteristics and the economic sector of business activity. Regressions are run separately for each country; coefficients reported correspond to employmentweighted averages across countries.7 In each country, the authors use individual-level data from national household surveys for all workers who are 20 or older, and exclude workers from the public administration and education sectors.

The first set of bars in Fig. 6 presents the average earnings (in 2019 PPP dollars) for people working at businesses of different sizes. Subsequent sets correspond to versions of the exercise that control for given characteristics, i.e. only comparing individuals who share those characteristics. Individuals whose income is

Beyond this adjustment WID calculations for LATAM also scale values of earnings and capital income to match National Accounts aggregates. To minimize manipulation, and because our purpose is to correct the weights of high-earnings individuals, likely under-represented in the household surveys, we do not undertake these two additional steps. For further details, see De Rosa

Because the numbers reported correspond to averages across regressions, confidence intervals are not reported. However, the differences between coefficients for size class dummies are statistically significant at high levels of precision with the exception of four out of hundreds of comparisons across coefficients in five different regressions for the different countries (in particular, two tests for Chile and two for Costa Rica). Eslava et al. (2023) impute earnings for workers that report non-positive or missing income with the average of reports matched on the following characteristics: gender, age groups, educational attainment, occupation, urban/rural, groups of hours worked, and whether the worker is in the agricultural sector.

Table 1: Share of workers by size of employer and quintile of personal earnings: Latin America

	Q1	Q2	Q3	Q4	Q5	P95	Total
Self-employed without employees	58	27	19	22	21	17	29
Employee of firm with ≤5 employees	26	28	23	15	6	3	19
Employee of firm with 6+ employees	10	41	54	58	60	58	45
Owner of firm with ≤5 employees	6	4	3	4	8	10	5
Owner of firm with 6+ employees	1	0	0	1	5	11	1

Panel B: ECLAC dataset with WID Tax Records Adjustment

	Q1	Q2	Q3	Q4	Q5	P95	Total
Self-employed without employees	56	25	20	19	19	13	27
Employee of firm with ≤5 employees	26	27	19	12	5	2	18
Employee of firm with 6+ employees	12	45	58	64	63	61	49
Owner of firm with ≤5 employees	5	3	3	4	7	9	4
Owner of firm with 6+ employees	1	0	0	1	7	16	2

Note: Latin America corresponds to the weighted average across the countries Brazil, Chile, Colombia, Costa Rica, Mexico, Peru, and Uruguay. 2019 data for all countries but Mexico and Colombia (2018) and Chile (2017). Panel A uses the original survey sampling weights. Panel B uses the WID sample weights that have been adjusted to account for higher-income individuals based on Tax Record information from each country. See Tables B1 and B3 for data description.

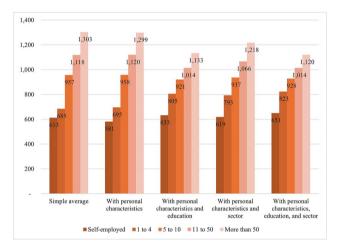


Figure 6: Worker monthly earnings and employer-personal characteristics.

Source: Eslava et al. (2023). Estimates shown are employment-weighted averages of coefficients from separate regressions for each country. Across the five specifications, the coefficients are always statistically different from each other with a 1% significance level in each country's regression. See Tables B1 and B3 for data description

generated at a business with 50 or more employees (workers or owners) earn, on average, 691 dollars (PPP) more than those selfemployed without workers and 618 dollars more than those working at a business with one to four workers. There is little change in these gaps when only people who share age, gender, years of education, or sector in which they work are compared.8 The main change occurs when controlling for education, which reduces the estimated earnings gap between individuals at a business of 50+ employees and others in smaller businesses. However, the gaps remain sizable. The gap with respect to self-employed workers shrinks from \$691 to \$501, and that with workers in businesses up to four workers falls from \$618 to \$328.

Given the results summarized in this subsection, it is not surprising that the overall income distribution in LATAM exhibits a very thick bottom tail, just as the (employment-weighted) distribution of business sizes does. Figure 7 shows that, indeed,

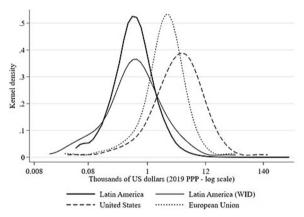


Figure 7: Personal income distribution.

Source: Eslava et al. (2021). Pre-tax national income data from the WID 2020 for the US, EU (Blanchet et al. 2022), and Latin America (De Rosa et al. 2022), own calculations. Weighted average between Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Mexico, Paraguay, Peru, and Uruguay from national household surveys for Latin America. See Tables B1 and B3 for further data description. Note: For WID: Income by percentiles for adults over 20 years old with equal splits among household adults, excluding data below the 5th percentile where income is zero. For UNDP: Personal income for adults over 20 years old. WID incomes for Latin America are adjusted to pre-tax values using administrative tax records to estimate effective tax rates at each income percentile (see De Rosa et al. 2022 for more detail) and using National Accounts

the region's income distribution has a much thicker tail at the bottom compared to the United States and the EU.9 This set of facts highlights how important the dominance of selfemployment and micro-entrepreneurship is in understanding the high prevalence of poverty, the huge income distances between the lower and upper half of the income distribution, and, more generally, income inequality.

Of course, the importance of business size for inequality and, more generally, of the characteristics of the businesses where

Sectors are defined at the ISIC-4 one-digit level (13 broad sectors).

The figure presents Kernel density estimates of the income distribution, as indicated in the vertical axis. Two versions of the region's LATAM's income distribution using National household surveys. The version labeled as 'Latin America (WID)' has been adjusted and unadjusted using administrative tax records. The other line is unadjusted.

people earn their income is widely recognized. However, the dominant role of tiny businesses and self-employment in this relationship, through the weight of these types of businesses in creating low-income employment, stands in contrast with higher-income countries. Our emphasis this far on studies that cover the entire occupied population in the different countries seeks to highlight how crucial this issue is for understanding inequality and its relationship to markets in the region.

At the same time, because it stresses the problem of masses of workers who concurrently earn low incomes and work at tiny businesses, and because it uses data less fit for zooming into the incomes of the richest among the rich, this emphasis obscures the fact that market concentration at the top end of the business distribution is also present in the region and has important implications for the income distribution. We thus move now to research that is able to look in greater detail at the top part of the business size distribution. This requires the use of establishment-level data that portray detailed establishment characteristics. Unfortunately, it misses self-employment without employees by construction, and it also misses most employees in microenterprises.

The wages of salaried workers and characteristics of the employer business

We start by illustrating how the patterns of Fig. 6 change when the Eslava et al. (2023) sample is restricted to using solely data on workers who are most typically captured by business-level data: salaried employees—i.e. excluding self-employed business owners with and without employees. Figure 8 recreates the exercise from Eslava et al. (2023) presented in Fig. 6 for a sample that includes only salaried employees. We continue to see large differentials in average worker earnings across business sizes. Employees whose earnings come from a business with 50 or more employees earn, on average, 708 dollars (PPP) more than those working at a establishment with one to four workers. Again, schooling proves to be the personal characteristic that weighs more as a factor in these gaps. However, it fails to explain them entirely, and business size remains a key explanatory factor. When accounting for education and personal characteristics, the gap with workers in businesses up to four workers falls from \$708 to \$407. We come back to this point further ahead by looking at matched employer-employee data from Brazil and the Mexican Economic Census.

To discuss further the relationship between employers' characteristics and workers' earnings, we rely on matched employeremployee data from Brazil (RAIS). The RAIS makes it possible to run worker-level wage regressions controlling for establishment's characteristics, at the cost of being restricted to formal workers and employers (see Appendix for more details about the data construction).

As Table 2 shows, there is a substantial establishment-size wage premium in Brazil, even after controlling for worker fixed effects (column 5). The authors also examine these results allowing for a non-linear relationship between establishment size and wages. Doing that shows that workers in establishments with 6-10 employees earn, on average, 20.3% higher wages than those in establishments with up to five employees. This wage premium increases to 70.5% for workers in the largest establishment size category, corresponding to establishments with at least 100 employees.

Results on earnings differentials across establishment sizes thus indicate that the inequality in employer size documented in Section 2 can have first-order effects on wage inequality, even

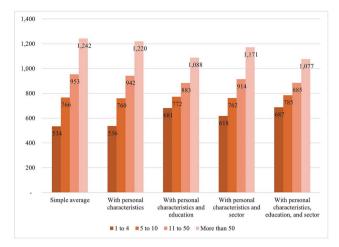


Figure 8: Employees' monthly earnings and employer-personal characteristics.

Source: Eslava et al. (2023). Estimates shown are employment-weighted averages of coefficients from separate regressions for each country. Across the five specifications, the coefficients are always statistically different from each other with a 1% significance level in each country's regression. Data source description in row (4) of Table B1

when only considering formal businesses and workers. Moreover, given that most workers (even in the formal sector) are concentrated in very small establishments, the results reinforce the importance of the distribution of business size and business growth (or its lack, thereof) for understanding wage inequality in developing countries.

The distribution of business sizes in the formal segment is important not only to understand wage differentials across salaried workers but also for the functional distribution of income. Relying on data on manufacturing producers with at least ten workers in Chile, Colombia, Mexico, and Uruguay, Eslava et al. (2021) show that, although larger establishments do pay higher wages, they also exhibit lower labor shares. That is, a lower share of their revenue goes to workers. Relatedly, labor shares are higher where markets are less concentrated.

Figure 9 from Eslava et al. (2021) illustrates this. Across sectors, the aggregate labor share tends to decrease with increases in the revenues Herfindahl–Hirschman Index (HHI). Figure 9 was produced by the authors with the aid of country experts who ran a common routine locally using microdata from the manufacturing surveys conducted by the national statistical offices of their respective countries. The analysis covered manufacturing establishments with ten workers or more in these countries. The figure presents a scatter plot, at the three-digit sector level of the ISIC-4 classification, of annual changes in the HHI for revenues vs. changes over-time in the share of revenue that goes to workers in manufacturing establishments. At the establishment level, the labor share is measured as the ratio of labor payments to value added (revenue minus material input expenditures). Sectorlevel ratios are produced as revenue weighted averages of the establishment-level ratios.

The vertical axis in Fig. 9 corresponds to the sector's labor share (in the left panel) and the dominant establishment's labor share (in the right panel), where the dominant establishment is defined as that with the highest revenue share within the sector. As mentioned, the figure shows that increases in product market concentration tend to be associated with decreases in the labor share of income in these countries' manufacturing sectors, and this is particularly strong for the labor share of dominant player in the respective sector.

Table 2: Worker-level regressions from Brazil

Dep. Var: Log(Wage)	(2)	(3)	(4)	(5)
Log Firm Size	0.221*** (0.0002)	0.201*** (0.0002)	0.167*** (0.0003)	0.143*** (0.0003)
Observations	12 472 959	12 472 959	9 543 672	12 472 959
Adjusted R-squared	0.297	0.342	0.315	0.172
Experience in the formal sector	No	Yes	No	No
Exporter Dummy	No	No	Yes	No
Individual Fixed Effect	No	No	No	Yes

Robust standard errors in parentheses *** P < 0.01, **P < 0.05, *P < 0.1 Source: Own calculations on RAIS data. "Experience in the formal sector" accounts for the total number of years the worker spent formally employed up until year t. See Appendix for data description.

Labor share

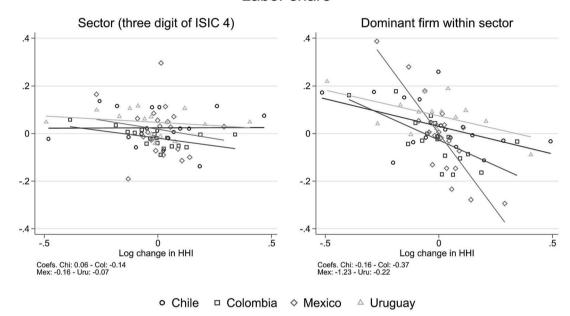


Figure 9: Changes in revenue concentration vs. changes in the share of revenue that goes to workers. Source: Eslava et al. (2021). Both variables in logs. See Tables B2 and B3 for data description

This is in the context of a region where the economy-wide labor share in total value added has been (and remains) lower than that of advanced economies despite the use of labor-intensive technologies. LATAM is also a region where business ownership is much more concentrated than in high-income economies, in particular, because of the prevalence of family ownership (Eslava et al., 2021).

Market concentration becomes particularly worrisome in this context because it makes the exercise of market power more likely linked to political power. But, while there is indeed evidence for the region of the influence on the generation of business revenues of such non-market forces (e.g. Benn-Schneider, 2021) and other distortions (Hsieh and Klenow, 2014; Eslava, Haltiwanger and Urdaneta, 2024), increases in market concentration are also undeniably linked to increases in actual productivity by the dominant establishments. This is illustrated in Fig. 10 from Eslava et al. (2021), where the variable in the vertical axis is a measure of quality-adjusted quantity productivity for the dominant establishment in each sector (in the right panel), and at the sector level—taking weighted averages—(in the left panel).10 It is also

In particular, it corresponds to TFPQ as measured by Hsieh and Klenow (2009). That is, a distortion-freed productivity measure. Additional details provided in Appendix A. Although the term TFPQ was initially meant as a measure of physical productivity in production, Hsieh and Klenow's measure of TFPQ confirmed by findings from the misallocation literature for Latin American countries showing that, although the link between actual productivity and establishment size is weaker than in the US due to the presence of distortions, this relationship is still upward-sloping (e.g. Hsieh and Klenow, 2014 for Mexico; Eslava, Haltiwanger and Urdaneta 2024 for Colombia). Likely because of this positive relationship with productivity, the relationship between increases in market concentration and average establishment wage is also positive in general (Fig. 11, where Uruguay is an exception¹¹), indicating that establishments do share part of the gains from increased market shares with their workers, although they share them less than proportionally (Fig. 9).

Thus, as is also the case in advanced economies, the influence of market concentration on inequality is not black or white, but a shade of grey resulting from the combination market concentration and market power being related to lower labor shares, but also to higher wages, productivity and innovation (Ganapati,

incorporates not only physical productive efficiency but also quality/taste in industries with product differentiation. It is clean, in any case, from distortions external to these two establishment attributes.

Gandelman and Casacuberta (2022), however, show that in more recent years strong labor unions have guaranteed more pro-worker rent sharing in

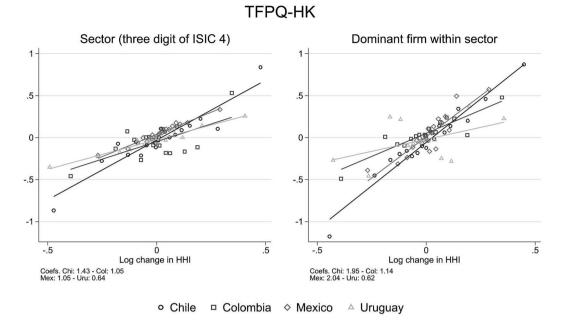


Figure 10: Changes in market concentration vs. changes in productivity. Source: Eslava et al. (2021). Both variables in logs. See Tables B2 and B3 for data description

Wage per worker Sector (three digit of ISIC 4) Dominant firm within sector 1 .5 .5 0 -.5 -.5 .5 .5 -.5 Ó Ó Log change in HHI Log change in HHI Coefs. Chi: 0.81 - Col: 0.10 Mex: 0.06 - Uru: -0.02 Coefs. Chi: 1.04 - Col: 0.02 Mex: -0.00 - Uru: -0.30 Chile Colombia △ Uruguay Mexico

Figure 11: Changes in market concentration vs. changes in average wages. Source: Eslava et al. (2021). Both variables in logs. See Tables B2 and B3 for data description

In sum

Market structure in LATAM factors into high inequality, low productivity, and poor economic growth. As in the developed world, market concentration at the top of the business size distribution should be a focus of attention. Different from richer economies, however, the level of market concentration (and market power) is more a concern than its trend. In fact, existing analyses do not show clear signs of a secular increase of market concentration and market power in the region. But historically high levels of both and more widespread family ownership, open the space for rents concentrated in the hands of a few.

More specific to the region and a more prominent concern should be the fact that LATAM has a disproportionately large share of the workforce making their livings in extremely low productivity business arrangements that, consequently, deliver extremely low earnings to workers. Most workers in the large fraction of the population living in poverty work on their own account or in microenterprises. Evidence from household surveys and business-level data shows that business size is crucial in explaining earning differentials across people, even after controlling by their personal characteristics, including their schooling level. A missing segment of small, medium and large

higher-productivity businesses capable of absorbing the workforce and containing market power at the top is a major regionspecific concern for welfare.

These distinguishing features of income inequality in LATAM call for analyses of inequality that keep an eye on the businesses to which workers are attached, and are inclusive of self-employed workers and those in microenterprises. Since most Latin American workers work in these segments, the types of administrative records used in developed economies to characterize inequality and business performance are not an appropriate source for the study of these phenomena in the region. Analyses relying on them yield a thoroughly incomplete picture, ignoring precisely the massive left tail of both distributions for which the region stands out. It is thus paramount that researchers with an interest in the region complement those analysis with data from sources that are inclusive of informal workers.

Data statement

This paper mainly takes stock and contrasts results from previous work, appropriately cited. Because those papers are accessible, the reader can directly obtain the results. Tables B1 and B2 in the appendix list the data sources used in those papers and discusses the relevant data handling decisions made by the respective

Tables 1 and 2, as well as Fig. 4, were produced directly for this piece:

- 1. Table 1 was produced using household survey microdata from Brazil, Chile, Colombia, Costa Rica, Mexico, Peru, and Uruguay for 2019 in all countries except for Mexico and Colombia (2018) and Chile (2017). Data was collected by the United Nation's Economic Commission for ECLAC and provided, after initial processing, to the WID under confidentiality agreements. Using this dataset, we produced panel A of the table. For panel B, we rely on the adjusted weights produced by co-author Ignacio Flores jointly with M. De Rosa and Marc Morgan (De Rosa et al., 2022) for the WID. They use personal tax returns from each country to adjust the survey weights for higher income individuals. We are unable to provide the microdata as the surveys were provided to the WID under confidentiality agreements.
- 2. Figure 4 and Table 2 for Brazil were produced using the RAIS data set, which is an administrative employeremployee matched data that covers the universe of formal establishments and their workers. The figure and table require using establishment and worker level data, respectively. These are restricted access data, which can be requested with the Brazilian Labor Ministry via email at estatisticastrabalho@economia.gov.br.

STUDY FUNDING AND APC FUNDING

Financial Support to write this piece was provided by the Latin American and Caribbean Inequality Review (LACIR) and its funders. The authors gratefully acknowledge it.

CONFLICT OF INTEREST

All authors declare that they have no relevant or material financial interests that relate to the research described in this paper: 'Businesses and inequality in Latin America'. IRB approval was not necessary for this product, because of the nature of the data used, which does not include data where individual subjects can be identified.

REFERENCES

- Alvarez, J. et al. (2018) 'Firms and the Decline in Earnings Inequality in Brazil', American Economic Journal: Macroeconomics, 10: 149-89.
- Autor, D. H. et al. (2020) 'The Fall of the Labor Share and the Rise of Superstar Firms', Quarterly Journal of Economics, 135: 645-709.
- Blanchet, T., L. Chancel, and Gethin. (2022) 'Why Is Europe More Equal than the United States?' American Economic Journal: Applied Economics, 14, 480-518. https://doi.org/10.1257/app.20200703.
- Blundell, R. et al. (2022) 'The Institutional Determinants of Firm Size and Firm Dynamics in Latin America', Unpublished manuscript.
- Busso, M., Madrigal, L. and Pages, C. (2012) 'Productivity and Resource Misallocation in Latin America', The B E Journal of Macroeconomics, 13. https://doi.org/10.1515/bejm-2012-0087.
- De Rosa, M., Flores, I., and Morgan, M. (2022) More unequal or not as rich? Revising the Latin America Exception World Inequality Lab Working Paper 2022/13.
- Eslava, M., Meléndez, M., and Urdaneta, N. (2021) Poder de mercado, desigualdad y productividad en Latinoamérica UNDP LAC Working Paper, 11.
- Eslava, M., Haltiwanger, J., and Pinzon, A. (2022) 'Job Creation in Colombia Versus the USA: 'Up-or-out Dynamics' Meet 'The Life Cycle of Plants", Economica, 89: 511-39.
- Eslava, M. et al. (2023) Business size, Development and Inequality in Latin America: A Tale of One Tail Policy Research Working Papers; 10584, Washington, DC. http://hdl.handle.net/10986/40446 License: CC BY 3.0 IGO: © World Bank.
- Eslava, M., Haltiwanger, J., and Urdaneta, N. (2024) 'The Size and Life-Cycle Growth of Plants: the Role of Productivity, Demand, and Wedges', The Review of Economic Studies, 91: 259–300.
- Ganapati, S. (2021) 'Growing Oligopolies, Prices, Output, and Productivity', American Economic Journal: Microeconomics., 13:
- Hsieh, C.-T., and Klenow, P.J. (2009) 'Misallocation and Manufacturing TFP in China and India', The Quarterly Journal of Economics, 124: 1403-48.
- Hsieh, C.-T., and Klenow, P. J. (2014) 'The Life Cycle of Plants in India and Mexico', The Quarterly Journal of Economics, 129: 1035-84.
- Karabarbounis, L., and Neiman, B. (2014) 'The Global Decline of the Labor Share', Quarterly Journal of Economics, 129: 61-103.
- Kavoussi, B. (2019) How Market Power Has Increased US Inequality. May 3, Washington, DC: Washington Center for Equitable Growth.
- Loecker, D. et al. (2020) 'The Rise of Market Power and the Macroeconomic Implications', Quarterly Journal of Economics, 135: 561-644.
- Schneider, B. R. (2021) Big Business and the Inequality Trap in Latin America: Taxes, Collusion, and Undue Influence UNDP LAC Working Paper, 5.

Appendix

A. Measuring Quality-Adjusted Quantity Productivity (TFPQ-HK)

Section 3.2 presents results from Eslava et al. (2021) in which the authors estimate a quality-adjusted quantity productivity measure (TFPO-HK). The estimation is based on the assumption that establishments have a Cobb-Douglas production function with capital, labor, and material inputs and a hicks-neutral component that captures technical efficiency (A). Additionally, establishments face a CES demand function with a establishmentspecific demand shifter (D) that captures quality differences. The quality adjusted productivity measure, TFPQ, includes both. More specifically, A and D are defined in the following establishmentlevel production and demand functions:

$$Q = AK^{\alpha}L^{\beta}M^{\phi}$$

$$P = DQ^{-1/\sigma}$$

The authors use elasticity estimates at the sector level (23 sectors at ISIC revision 2) from Eslava, Haltiwanger, and Urdaneta (2024) for Colombian manufacturing establishments to estimate TFPQ-HK from the expression below.

$$\ln (TFPQ - HK) \equiv \frac{1}{1 - 1/\sigma} \ln(D) + \ln(A) =$$

$$\frac{1}{1 - 1/\sigma} \ln (P * Q) - \alpha \ln(K) - \beta \ln(L) - \phi \ln(M)$$

B. Data source descriptions

The results using RAIS rely on two datasets. First, an annual establishment-level panel from 2003¹² to 2017. As establishments do not report their initial and final years of activity in RAIS data, it is necessary to assign an establishment's entry and exit years as the exact years in which it appeared for the first and the last time in the panel, respectively¹³. Throughout the sample selection procedure, we only consider establishments with at least one employee in a given year and those in the economic sectors of construction, manufacturing, retail, public utilities, and services. As larger establishments may employ workers in different economic sectors of activity, we define an establishment's industry sector in a given year as the one with the greatest respective number of active contracts or wage mass in that year. Finally, the authors also drop establishments with missing identifier observations¹⁴.

Second, we use RAIS contract-level data to construct an individual-level panel sample, also relative to the 2003-2017 period. The reason we use a sample in this case is to maintain computational tractability throughout the analysis due to RAIS data large size. In particular, we leverage a 2.5% sample from the universal data. As an individual may have more than one labor contract in a given year, we assign her associated contract in each year as her job with the greatest wage mass or total worked hours in that same year. Similarly to the establishment-level dataset, observations with missing individual or establishment identifiers are dropped. This worker-level dataset is merged with the establishment-level data, which results in an individuallevel sample panel that accounts for the correct measure of establishments' size for each of the panel's years.

^{12 2003} is the first year when RAIS data reports the Cadastro da Pessoa Física (CPF), an individual identifier further used to construct an individual-level

We take into account a right-truncation of exit in the 2016–2017 period, as to avoid the computation of exit due to an eventual establishment misreporting event. We do not left-truncate the entry year as we have data prior to 2003 to construct the panel.

¹⁴ Missing observations of individual, establishment and establishment identifiers in the data are due to incorrect reporting to the federal authorities.

Table B1: Data sources on individuals				
Original data source	Administrative/survey data source and coverage	Main variables	Sample and imputation decisions	Own calculations or other source
(1) Argentina (2019) Encuesta Permanente de Hogares	Household and Labor Force Surveys with national coverage	Individual characteristics: age, sex, educational attainment.	Excluded workers in public administration	Eslava et al. (2023)
(2) Bolivia (2019) Encuesta de Hogares	Figures from Eslava et al. (2023) use the	Income/earnings: wages and	sector and education	Eslava et al. (2023)
(3) Pesquisa Nacional por Amostra de	original surveys.	bonuses, profits from business,	sector.	Eslava et al. (2023) and
Domicílios Conínua (2019)	Our own calculations for Table 1 use the	and income from	Excluded workers	own calculations.
(4) Chile (2017) Encuesta de	WID-ECLAC version of the surveys for	self-employment.	without positive	Eslava et al. (2023) and
Caracterización Socioeconómica Nacional	LATAM, which is similar to the original	Workplace characteristics: type	earnings.	own calculations.
(5) Colombia (2018 & 2019) Gran Encuesta	surveys but contains tax-adjusted sample	of worker (self-employed,		Eslava et al. (2023) for
Integrada de Hogares	weights to account for the possible	employee, owner), number of		2019 data and own
	individuals in the household surveys (at	if not self-employed (1–5, 6 or		data.
(6) Costa Rica (2019) Encuesta Nacional de	the cost of less granular business size	more) or number of employees if		Eslava et al. (2023) and
(, , Hogares	classifications)	owner, economic sector of		own calculations.
(7) Dominican Republic (2019) Encuesta		employer business.		Eslava et al. (2023)
Nacional Continua de la Fuerza de				
Irabajo				
(8) Mexico (2018) Encuesta Nacional d				Eslava et al. (2023) and
(a) Progressos y Gastos de los Hogares				own calculations.
(9) Faraguay (2019) Encuesta Permanente de Hogares Continua				Esiava et al. (2023)
(10) Peru (2019) Encuesta Nacional de				Eslava et al. (2023) and
Hogares				own calculations.
(11) Uruguay (2019) Encuesta Continua de				Eslava et al. (2023) and
Hogares				own calculations.
(12) World Income Database (2019)	Regional aggregates for Latin America, US,	WID estimates average income in	Eslava et al. (2021)	Eslava et al. (2021) used
Used for Fig. /	and European Union. Original information from household surveys for Latin America (Brazil, Chile, Colombia,	each percentue of income for adults over 20 years with equal splits among household adults.	excluded bottom 5 percentiles.	tne percentue aggregates reported by WID.
	Costa Rica, Mexico, Peru, and Uruguay) and tax records for the US and Furone			
	National coverage in all sources.			

Table B2: Data sources on businesses	on businesses			
Original data source	Type of data (Administrative/survey) and coverage	Main variables	Sample decisions	Which paper cited uses this original source?
(1) Mexico (2013 & 2018) Economic Census	Census that captures most of the economic activity in the Mexican economy that occurs in a fixed location. Data is at the establishment level.	Workplace characteristics: industry, location, number of employees, initial year of operation regardless of ownership change.	Restricted to establishments in commerce, manufacturing, services, and construction sectors in Blundell et al. (2022). Sectors restricted as those that are also classified as manufacturing in the US in	Blundell et al. (2022) for 2018 data and Hsieh and Klenow (2014) for 2013 data.
(2) Brazil (2003–2017) Relação Anual de Informações Sociais (RAIS)	Administrative employer-employee matched data. Covers workers with a formal contract (carteira assinada). Data is at the establishment level.	Individual characteristics: age, sex, schooling, tenure, occupation, monthly wages. Workplace characteristics: industry, location, number of employees, age of the firm.	Histen and Klenow (2014). Restricted to establishments in commerce, manufacturing, services, and construction sectors. Uses a 2.5% random sample of worker IDs for the worker-level	Own calculations.
(3) United States (2018) Business Dynamics Statistics (BDS)	Data produced from the Longitudinal Business Database by the US Census. It is a census of establishments with paid employees that is comprised of both survey and	Number of establishments by groups of number of employees.	analysis Restricted to establishments in commerce, manufacturing, services, and construction sectors.	Own calculations.
(4) United States (2002) Manufacturing Census	auministiauve records. Covers all manufacturing establishments with paid employees.	Employment. The year of initial production is not reported. Hsieh and Klenow (2014) impute year of initial production based on the year the establishment appeared for the first time in	N/A	Hsieh and Klenow (2014)
(5) India (2010) Annual Survey of Industries	Census of manufacturing establishments with at least 100 employees and a random sample of establishments with less than 100	ure Census. Employment and initial year of operations regardless of ownership change.	Sectors restricted as those that are also classified as manufacturing in the US.	Hsieh and Klenow (2014)
(6) India (2010) National Sample Survey	employees. Sample of self-employed with less than 10 employees.	Employment and initial year of operations regardless of ownership change.	Sectors restricted as those that are also classified as manufacturing in the US.	Hsieh and Klenow (2014)
Organization (7) Chile (2000–2015) Encuesta Nacional Industrial Anual	Survey that is a census of establishments with at least 10 employees or establishments with revenue above a certain threshold.	Revenue, number of workers, capital stock, material expenditures, wage bill, sector classification, TFPQ-HK (estimated using elasticities from Eslava et al., 2024). The sector classifications used are 3-digit ISIC	Excluded mining sectors if included in the survey Excluded firms with less than 10 employees.	Eslava et al. (2021)
(8) Colombia (1997–2016) Encuesta Anual Manufacturera	Survey that is a census of establishments with at least 10 employees or establishments with revenue above a certain threshold.	revision 4. Revenue, number of workers, capital stock, material expenditures, wage bill, sector classification, TFPQ-HK (estimated using elasticities from Eslava et al., 2024). The sector classifications used are 3-digit ISIC revision 4.	Excluded mining sectors if included in the survey. Excluded firms with less than 10 employees.	Eslava et al. (2021) and Eslava et al. (2022)
		1. 1.0.1011 1.		

Original data source	Type of data (Administrative/survey) and coverage	Main variables	Sample decisions	Which paper cited uses this original source?
(9) Mexico (2009–2016) Encuesta Anual de la Industria Manufacturera	Survey with a complicated sampling procedure. Out of 239 sectors following a 6-digit NAICS-Mexico code, there is a non-probabilistic sampling in 235 of them, out of which, establishments are included in the sample until a certain threshold is met, while the threshold varies by sectors. 171 sectors require an 80% revenue threshold, 48 sectors require a 60% revenue threshold, and the remaining 16 sectors are allowed a threshold below 60%. Overall, Mexico's sampling covers 99.3% of all manufacturing revenue and 96.6%	Revenue, number of workers, capital stock, material expenditures, wage bill, sector classification, TFPQ-HK (estimated using elasticities from Eslava et al., 2024). The sector classifications used are NAICS-Mexico at 4 digits.	Excluded mining sectors if included in the survey. Excluded firms with less than 10 employees.	Eslava et al. (2021)
(10) Uruguay (2002–2016) Encuesta Anual de Actividad Económica.	of the manufacturing employment. In Uruguay the survey is a census for establishments with at least 50 employees and has sampling for establishments with five to 49 employees.	Revenue, number of workers, capital stock, material expenditures, wage bill, sector classification, TFPQ-HK (estimated using elasticities from Eslava et al., 2024). The sector classifications used are 3-digit ISIC revision 4.	Excluded mining sectors if included in the survey. Excluded firms with less than 10 employees.	Eslava et al. (2021)
(11) Colombia (2000–2007) Encuesta de Microestablecimientos	Sampling of establishments with up to nine workers in a broad range of economic sectors	Employment and year of initial operations	Restricted to manufacturing establishments	Eslava et al. (2022)
(12) Colombia (2005) Censo General	Census of households and economic activities. Registered all manufacturing, retail, upolecals and econiose setabilishments	Employment	Restricted to manufacturing establishments	Eslava et al. (2022)

Table B3: Source to Table and Figure mappings

Table/Figure	Original data source	Secondary data source
Figure 1	Household surveys from all 11 countries listed in Table B1.	Eslava et al. (2023)
Figure 2	Mexico (2013) Economic Census, Brazil (2003–2017) RAIS, and US	Blundell et al. (2022) for Mexico data. Own results for Brazil
	(2018) Business Dynamics Statistics	RAIS and US BDS.
Figure 3	Mexico (2018) Economic Census	Blundell et al. (2022)
Figure 4	Mexico (2018) Economic Census, Brazil (2003–2017) RAIS	Blundell et al. (2022) for Mexico data. Own results for Brazil RAIS.
Figure 5	Mexico (2013) Economic Census, Brazil (2003–2017) RAIS, US (2002)	Hsieh and Klenow (2014) for Mexico, India, and the US.
	Manufacturing Census, India (2010) Annual Survey of Industries and National Sample Survey Organization, Colombia (2002–2012) Encuesta Anual Manufacturera, Encuesta de Microestablecimientos, and Censo General.	Eslava et al. (2022) for Colombia. Own calculations for Brazil.
Table 1	Household surveys from Brazil, Chile, Colombia, Costa Rica, Mexico, Peru and Uruguay as listed in Table B1.	Survey harmonization produced by the Statistics Division of ECLAC and then sample weight adjustments based on Tax Record information are calculated by De Rosa et al. (2022) for the World Income Database. Own calculations from the processed datasets.
Figure 6	Household surveys from all 11 countries listed in Table B1.	Eslava et al. (2023)
Figure 7	Household surveys from all 11 countries listed in Table B1 for first	Eslava et al. (2021) for first line of Latin America. WID
	line of Latin America. World Inequality Database (2019)	(2019) for Latin America, US, and European Union.
Figure 8	Household surveys from all 11 countries listed in Table B1.	Eslava et al. (2023)
Table 2	Brazil (2003–2017) RAIS	Own calculations
Figures 9-11	Chile (2003–2017) Encuesta Nacional Industrial Anual. Colombia (1997–2016) Encuesta Anual Manufacturera. Mexico (2009–2016) Encuesta Anual de la Industria Manufacturera. Uruguay (2002–2016) Encuesta Anual de Actividad Económica.	Eslava et al. (2021)