How Does Residential Segregation Shape Economic Inequality, and What Can Policymakers Do about It?

In Latin America, average wages vary greatly between countries’ richest and poorest regions. Differences in average wages across neighborhoods of the same city are even more significant.

Residential segregation reduces access to economic opportunity. Families in less accessible neighborhoods spend more time and money commuting, are less likely to apply to distant jobs, and are more likely to remain unemployed if they lose their job.

Public transportation investments can help to improve access to economic opportunity and reduce inequality in segregated cities if they are combined with zoning policies that allow for flexible housing supply in beneficiary neighborhoods.

CONTEXT

Widespread inequalities in Latin America and the Caribbean have a clear spatial dimension: the places where people live and work can make a major difference in their access to economic opportunities. Recent innovative research in several countries has examined both the geographic dimension of inequality and the policy approaches that may be most effective in reducing inequality involving large spatial disparities. The recently launched report *The Inequality Crisis: Latin America and the Caribbean at the Crossroads* devotes a chapter to discussing the magnitude and consequences of spatial inequality and explores potential solutions based on existing evidence.

THE PROJECT

This project first used individual-level household survey data from 11 Latin American countries to measure the share of income and wage inequality that can be explained by spatial differences. Second, it focused on Brazil, using data from the 2010 census to determine the share of the country’s wage inequality that is explained by differences across states, cities, and neighborhoods, respectively. The quantitative analysis was complemented by a review of the relevant academic literature, focusing on the consequences of spatial inequality and on policies that have proven effective in addressing it.
Ten percent of measured income inequality among survey respondents is explained by cross-country differences in average income, 7 percent by differences across main geographic regions within countries, and the rest by income differences within regions.

Inequalities within cities are even more pronounced than inequalities across regions, as shown for Brazil in Figure 1. Average wage differences across states account for about 1 percent of inequality, and differences across cities within states for 2 percent. Meanwhile, differences in average wages across neighborhoods of the same city account for 9 percent of wage inequality. This reflects both residential segregation by human capital and differences in access to economic opportunities.

The contribution of within-city differences to overall inequality is even larger when cost of living is considered (Figure 1, bottom panel). High-wage cities—which attract low-income population in search of better opportunities—are also expensive cities. Housing costs and other living expenses represent a larger share of the budget for low-income relative to high-income households, thus increasing real wage differences across groups.

Urban residential segregation creates barriers to economic opportunity. Low-income families, who in many cities reside in peripheral neighborhoods, generally spend more time and money to get to work, are less likely to apply to distant jobs, and more likely to remain unemployed if they lose their job.

Distance to job centers is related to labor informality. While most low-wage workers in Brazil are informal, those who work in the formal sector usually have much longer commutes. Informal jobs, which tend to be more dispersed across a city, are more accessible to workers in peripheral locations.

Spatial inequality within cities can limit intergenerational mobility. Several recent U.S. studies find that growing up in neighborhoods with low vs. high economic opportunities matters in the long run. Moving to higher-opportunity neighborhoods at young ages improves adult outcomes.

### Figure 1: Geographic Decomposition of Monthly Wage Inequality in Brazil, 2010

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**Notes:** IDB staff calculations using microdata from the population census in Brazil. Labor income is defined as the monthly wage in the main occupation. To adjust monthly wages for local cost of living and obtain a measure of real wage, the logarithm of the average housing rent in the city multiplied by 0.3 (the typical share of housing rents in the total income of renters) is subtracted from the logarithm of the individual monthly wage. In both the nominal and the rents-adjusted wage measures the top bar reports the labor income inequality of male and females between 16 and 65 years of age. The next two bars report the human capital and residual labor income inequality accounting for years of education and potential experience. See the report for further technical details on the decomposition.

**Source:** Busso, Matías, and J. Messina, eds. 2020. The Inequality Crisis: Latin America and the Caribbean at the Crossroads.
While multiple local development policies—including land titling, slum upgrading, and social housing—have proven effective at improving the well-being of beneficiaries in the short run, they do not necessarily improve access to economic opportunities in the medium and long run. Several studies show that urban transportation projects are effective at improving access to economic opportunities in segregated cities. Public transit investments have been linked to lower informality rates in Mexico and Brazil, better access to well-paying jobs in Colombia, and greater employment and earnings for women in Peru.

Increased access to high-paying jobs for workers living in peripheral neighborhoods, however, does not necessarily translate into reductions in economic inequality. A recent study of Bogota’s TransMilenio shows that, as labor supply to areas with high jobs concentration increased over time, wage growth slowed down. Meanwhile, increased housing demand in neighborhoods that saw accessibility improvements pushed prices up and over time displaced lower-income household towards more affordable but more poorly connected neighborhoods. This suggests that, in order to reduce economic inequality, public transportation projects require complementary policies such as zoning reforms that allow for greater housing supply in locations with better access to jobs.

Results from recent research in the United States suggest that low-cost interventions supporting families’ efforts to relocate to higher-opportunity neighborhoods—through measures such as customized housing search assistance, short-term financial assistance to cover application fees and security deposits, and an insurance fund for landlords covering potential property damages—may also be effective.

FULL STUDY


DEPARTMENT OF RESEARCH AND CHIEF ECONOMIST

The Department of Research and Chief Economist generates new ideas to enrich the knowledge base that supports the policy agenda of the Inter-American Development Bank (IDB) and its member countries for achieving sustainable and equitable development in the region. To maximize the impact of its research, the Research Department carries out activities that serve as inputs to other IDB departments, governments, the academic community and public opinion in the region.