Box 3

The Impact of Recent Migration from Venezuela on the Colombian Labor Market

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In the last three years, Latin America has witnessed a migratory phenomenon unlike any in its history. According to figures compiled by the United Nations, the number of migrants from Venezuela amounted to four million people in 2019.¹ Estimates based on DANE's *Integrated Household Survey* (GEIH) show Colombia, the main receptor country, was home to approximately 1.4 million Venezuelans by March 2019. The objective of this section is to examine the possible impact of that migration on the Colombian labor market.

The literature on analysis of the impact of migration on employment and wages distinguishes between two major approaches. The first analyzes the decisions that lead people to migrate and the process whereby migrants assimilate into the destination labor market. When controlling for the observable characteristics of workers, empirical studies for different countries find that migrants enter with lower levels of employment and income than locals, but these gaps disappear as migrants stay on in the receptor country. The second approach, which is emphasized in this section, examines the "displacement" effects migrants can generate with respect to the employment and wages of local workers. In other words, seeing as the other productive factors are immobile in the short term, economic theory indicates an exogenous increase in the labor supply

* The author is a junior researcher with Banco de la República's Labor Market Analysis Group (Gamla). He wishes to thank Julio Romero, a researcher at the Cartagena branch, for his help with the demographic forecasts. should push down workers' average wages. Given the possible existence of wage rigidities, this pressure also would result in an increase in unemployment.

There are very few empirical studies for Colombia that validate the premise of displacement caused by migration, since the phenomenon is still ongoing. However, two recent papers attempt to quantify the magnitude of these effects. For the first, the Labor Market Analysis Group (Gamla) at Banco de la República estimated an econometric model in which the migration rates for each region, as reported in the GEIH, are regressed on the variables of labor market of interest, and migration is instrumented to avoid endogeneity biases.3 In doing so, it found that a 1.0 pp increase in the migration rate would be associated with a 0.21 pp increase in the unemployment rate and 0.18 pp in the informality rate (Gamla, 2019). Secondly, Santamaría (2019) quantifies the impact of migration on employment and its disaggregation (formal and informal) and on wages. using a difference-in-differences strategy as an empirical method and measuring migrants by figures on migration to Colombia and by the number of Google searches for keywords Venezuelans could look for when migrating.4 With regard to employment, the preliminary results show the effect of migration is not statistically different from zero, but there is a reshuffling of formal to informal employment: an increase of 1 pp in the immigrant population raises informal employment by 0.2 pp. As for wages, it was found that a 1 pp of increase in the immigrant population reduces wages in the informal sector by 1.7 pp, on average, and there is no significant change in salaries in the formal sector. A drop in wages of about 1.3 pp is perceived in the aggregate.

In order to measure the labor market implications of the elasticities found for the Colombian case, two possible scenarios are considered for the anticipated path of migration. Both work with the same figures for migrants observed in the 2015 - 2018 period, obtained from estimates of the GEIH: 1,049,000 migrants in total for that period, including 819,000 of working age. In contrast, two variants are considered for future migration built on estimates based on demographic projections. In the first scenario, which is referred to as "normal migration" and considered the most likely, future migrants in the period from 2019 to 2026 would account for another 946,000 individuals, including 768,000 of working age. In the second scenario, which is called "high migration," future migrants in the same period would come to 1,976,000 additional individuals, including 1,614,000 of working age. Figure B3.1 shows

In recent history, the magnitude of this migration is greater than the one caused by the brutal conflict in South Sudan (2.2 million) and is second only to the Syrian migration (5.6 million). Source: UNHCR (2019).

See Borjas (1994) for a summary of the levels found by the leading empirical studies up to the early 1990s, and Kerr and Kerr (2011) for the findings of studies from the 1990s to the start of the current decade.

The instruments used include the interactions of the percentage of individuals in each region who reported in the 2005 Census as having been born in Venezuela and variables that reflect the momentum in the Venezuelan economy (Venezuelan imports and the exchange rate on the parallel market).

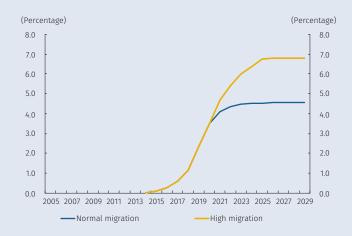
For example, searches for key words such as "Venezuelans in" or "special residency permit."

the participation of migrants of working age in the WAP and how they would modify the path of their expansion in both scenarios.

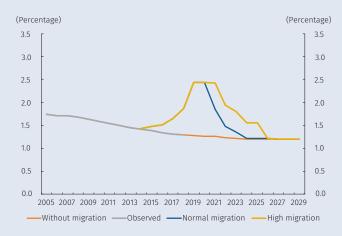
On the other hand, the economic growth estimates worked out for the next two years by the technical staff at *Banco de la República* are used to feed an unemployment rate projection using an econometric model based on the principle of Okun's law.⁵ Based on this forecast and the two migration scenarios being considered, the elasticities obtained in Gamla (2019) are used to quantify the impact of migration on the unemployment rate. The result is shown in Chart B3.2. The greatest impact of migration on the unemployment rate would have been reached at the end of 2018 and would be 0.25 pp. The average impact during 2019 would be 0.24 pp.

Therefore, the empirical evidence suggests that displacement does impact the Colombian labor market but to a small degree. Although these results suggest the effects of displacement are mild, on average, it is important to point out that they may be heterogeneous and accentuated in specific segments of the population. Additionally, the sizes of the elasticities found in Colombia are consistent with what the empirical literature shows with respect to studies on large-scale migrations in other countries. Despite some dispersion in the results, most of that research indicates the effects of displacement are significant but limited. For example, Kerr and Kerr (2011), in a compilation of more than 25 studies carried out from 1990 to the beginning of the current decade,6 found the effects in most cases are null or negative in magnitude, but very low. In a compilation that is similar but focused on studies published for the present decade that analyze forced migrations, Becker and Ferrara (2019) obtained comparable conclusions, although with a slightly greater dispersion of results.

A. Migrants of working age as a percentage of the WAP



B. Annual growth in the WAP with migration



Source: DANE (GEIH), calculations by Banco de la República.

Graph B3.2 Unemployment Rate With and Without Migration



Source: DANE (GEIH), calculations by Banco de la República.

Graph B3.1 Future Migration Scenarios

⁵ This model is based on the methodology presented in Flórez et al. (2018).

⁶ Cases of mass migration to different European countries, the United States, Israel and Australia are analyzed.

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