Internal migration and spatial de-concentration of population in Latin America

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Abstract. Little is known about the details of migration across the urban hierarchy in Latin America and the Caribbean. Building on our recent work, this article aims to examine the balance of net migration gains and losses and quantifies the impact of internal migration on reshaping urbanization process as well as the human settlement system of 10 LAC countries.

Introduction

Urbanization has evolved very rapidly in Latin America and the Caribbean (LAC) in the past 50 years or so, with the share of urban population increasing from 50% in 1961 to 80% in 2015. A similar change took more than 100 years in North America. LAC is now one of the world's most urbanized regions. In 2015, the share of urban population represented 73% in Europe, 48% in Africa and only 40% in Asia (UN, 2015).

The rapid urbanization process in LAC was largely spurred by an economic model based on an import-substitution strategy during the 1930s and 1970s, which promoted location of firms and people in metropolitan areas with large consumer markets (ECLAC, 2012; Rowe, 2013; Villa and Alberts, 1980). During the 1980s, the economic strategy in most of LAC shifted to the adoption of a market-oriented development policy, promoting export-led economic growth based on natural resources. This shift usually leads to a deceleration of the urbanization process and a diversification of internal migration flows, favoring rural areas and cities linked to commodities production, but we lack direct data on this period.

For more recent periods, instead a new source of information exits and can be usefully exploited.

Data and definitions

We built five-year transition migration matrices from the 2000 and 2010 census rounds.¹ City boundaries were obtained from the "Spatial Distribution of Population and Urbanisation in Latin America" database, hosted by CELADE (<u>https://celade.cepal.org/bdcelade/depualc/)</u> and census microdata were processed via REDATAM.² Together these data provide coverage for eight LCA countries from the 2000 census round and 10 countries from the 2010 census round,³ and are

¹ Migration matrices are available in MIALC database (<u>www.cepal.org/celade/migracion/migracion_interna/default-ciudades.html</u>). The periods covered are (approximately) between 1995 and 2000 (first quinquennium) and between 2005 and 2010 (second quinquennium).

² <u>www.cepal.org/es/temas/redatam/download-redatam</u>.

³ Bolivia (2012), Brazil (2000, 2010), Costa Rica (2000, 2011), Dominican Republic (2002, 2010) Ecuador (2001, 2010), Honduras (2001, 2013), Mexico (2000, 2010), Panama (2000, 2010), Uruguay (2011), Venezuela (2001, 2011).

based on temporally consistent urban boundaries. The boundaries correspond to 2010 census round geographies and thus account for recent urban population growth.

Most of the countries considered here do not include the entity "city" in their migration items: rather, they rely on administrative areas (i.e. municipalities or counties), which, unfortunately, do not correspond to cities. We had to reconstruct the global picture, and we faced essentially three situations:

a) several administrative units forming in reality one large city: in this case we merged them;

b) one administrative unit with a city: we kept the administrative unit;

c) one administrative unit without any city in it: we considered it as a rural area.

With these definitions, we obtained national migration matrices capturing moves between cities of various size, as well as moves between cities and our category "rural area". To simplify the picture, we created six types of areas, depending on their size:

- metropolitan (1 million or over),
- large cities (500,000-999,999),
- standard cities (100,000-499,999),
- intermediate cities (50,000-99,999),
- small cities (20,000-49,999) and
- rural areas (19,999 or less).⁴

and we considered matrices of moves between these six areas.

Based on these matrices, we analysed changes in the contemporary patterns of internal migration across the urban hierarchy over the last decade, and identified how these movements have reshaped urbanisation and the highly concentrated population structure of the Latin American human settlement system.

Net gains and losses across the urban hierarchy

The total number of internal migrants between areas across the urban hierarchy was estimated to be 16.6 million in 2005-2010, most of them city to city. On one hand 81% of inmigrants have cities as destination while. the 19% left have rural areas as destination. On the other hand, 77% of out-migrants have cities as origin while 23% have rural areas as origin.

The number of metropolitan areas experiencing net migration losses increased from eight in 1995-2000 to 17 in 2005-10, although the number of metropolitan areas experiencing net migration gains (24 in 1995-2000 and 28 in 2005-2010) still exceeds the number of areas with net losses, and its net migration rate is still positive buy very low (0.3 per thousand in 2005-2010) (Figure 1). Net migration gains concentrated in large and major intermediate cities, albeit the net migration rate of these cities decreased from 3.0 per thousand in 1995-2000 to 2.4 per thousand in 2005-2010 (Figure 1).

Mirroring these gains, areas at the lower end of the national settlement system suffered net migration losses, with a larger number of minor intermediate and small cities, as well rural areas, experiencing net migration losses.

Overall, rates are lower for every category although there is still a gap between metropolis and larger cities (attractive) and small cities and rural areas (expulsive)

⁴ Intrametropolitan, intra city, and rural to rural moves are excluded from our matrices. In fact, migration between municipalities reached around 25 million in 2005-2010 (www. https://www.cepal.org/celade/migracion/migracion_interna/).

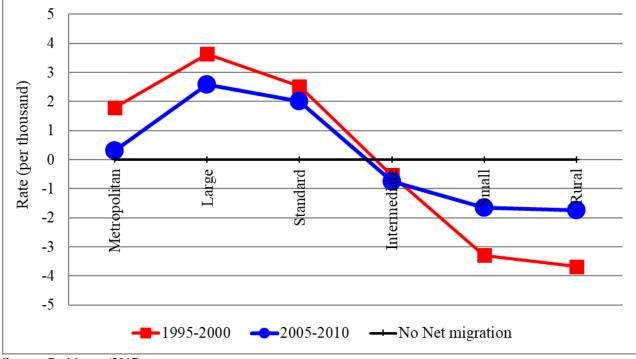


Figure 1. LAC, selected countries: net migration rates by settlement size

Source: Rodriguez (2017).

The vast majority of small cities and rural areas the urban system in LAC experienced net migration losses in both periods (Figure 2).

Complementing these findings, in previous research we also revealed evidence that internal migration in LAC countries contributes to boost demographic dividend in metropolitan, large and "standard" cities by reducing dependency ratios (Rodriguez and Rowe, 2018) and increasing the share of children (i.e. aged 5-14) and older people aged 60 and over in small cities and rural areas (Rodriguez, 2017).

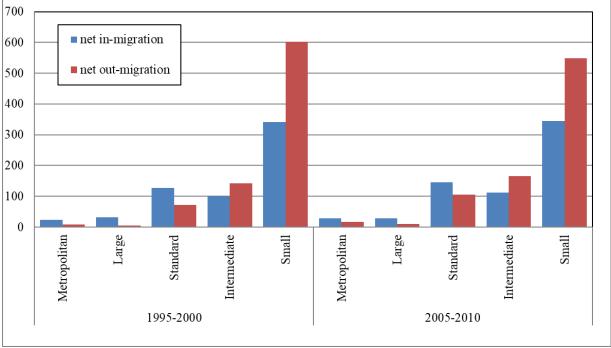


Figure 2. Number of cities by settlement size and net migration balance. Selected LAC countries, 1995-2000 and 2005-2010.

Source: Rodríguez (2017).

Discussion

The continuing net migration loss of small cities and rural areas seem to respond to the persistent gap in living conditions and professional opportunities between them and large urban centres. Recent evidence points to a widening in this gap as a result of the poverty eradication policies and social investments in large and intermediate cities (Rodríguez 2017). The main message of the 2030 Agenda for Sustainable Development, "Leaving no one behind", seems to be a major challenge in Latin America and the Caribbean, where the geographic distribution of opportunities is still very unbalanced across the human settlement system.

The increasing number of metropolitan areas experiencing net migration losses is a reflection of grave problems, like high crime rates, persistent housing deficit (UN-Habitat 2012; ECLAC, 2012), and insufficient planning and infrastructure. The metropolitan urban sprawl raised the local demand for housing and transport infrastructure, resulting in environmental degradation and longer commutation. Poor governance and limited financial resources are often quoted as key hindrance to the development of appropriate policy responses to address these problems (UNFPA 2007; UN-Habitat 2012). Despite these problems, however, metropolitan areas continue to concentrate resources and opportunities (e.g., economic and technological activities, and tertiary educational opportunities), and therefore attract young adults (Rodriguez, 2017).

In between these extremes, large and "standard" cities offer some advantages in terms of quality of life and governance, and they are improving in key spheres as job and educational opportunities (ECLAC, 2012). However they still trail metropolitan areas in crucial dimensions like wages, university education, high level jobs, technological infrastructure and cultural activities. And this is why their potential as engines of urban deconcentration is still unclear.

References

ECLAC (2012) Economic Commission for Latin America and the Caribbean *Population, Territory and Sustainable Development* (LC/L.3474(CEP.2/3), Santiago, Chile, <u>www.cepal.org/celade/noticias/paginas/0/46070/2012-96-Poblacion-WEB.pdf</u>

Fujita, M., Krugman P., Venables, A. (2000) *The spatial economy: Cities, regions, and international trade.* Cambridge, Ma: The MIT Press.

Rodríguez, J. (2017) Cities and migration in Latin America and the Caribbean: updated estimates of key socio-
demographic effects, www.un.org/en/development/desa/population/events/pdf/expert/27/papers/III/paper-
Rodriguez-final.pdf

Rodriguez, J., Rowe F. (2018) *How is internal migration reshaping metropolitan populations in Latin America? A new method and new evidence*, Population Studies (forthcoming).

Rowe, F. (2013). *Spatial Labour mobility in a transition economy: Migration and commuting in Chile*, (Ph.D. thesis), The University of Queensland, Brisbane, Australia.

Villa, M., Alberts J. (1980) *Redistribución espacial de la población en América Latina*, Serie E, Nº 28, Centro Latinoamericano de Demografía (CELADE), Santiago de Chile.

UNFPA (2007) Unleashing the Potential of Urban Growth, New York.

UN (2015) United Nations, *World Urbanization Prospects: The 2014 Revision*, Department of Economic and Social Affairs, Population Division, New York, (ST/ESA/SER.A/366).

UN-HABITAT (2012) United Nations Human Settlement Programme. *State of Latin American and Caribbean cities* 2012. *Towards a new urban transition*. Nairobi, Kenia.