

Unveiling the internal migration dynamics in Ecuador between 2001 and 2010

Nicola Pontarollo & Joselin Segovia

To cite this article: Nicola Pontarollo & Joselin Segovia (2019) Unveiling the internal migration dynamics in Ecuador between 2001 and 2010, *Regional Studies, Regional Science*, 6:1, 368-370, DOI: [10.1080/21681376.2019.1623069](https://doi.org/10.1080/21681376.2019.1623069)

To link to this article: <https://doi.org/10.1080/21681376.2019.1623069>



© European Union 2019



Published online: 08 Jun 2019.



Submit your article to this journal 



Article views: 522



View related articles 



View Crossmark data 

Unveiling the internal migration dynamics in Ecuador between 2001 and 2010

Nicola Pontarollo ^a and Joselin Segovia  ^b

ABSTRACT

This paper unveils the dynamics of internal migration in Ecuador using data from the last two census. The use of chord diagrams allows one to identify the changing patterns of migration between provinces. In the last period, internal migration decreased notably, and traditional destination provinces lost importance in favour of a more balanced redistribution of people within the country.

ARTICLE HISTORY

Received 19 February 2019; Accepted 20 May 2019

KEYWORDS

internal migration; Ecuador; space–time dynamics

JEL

R10; R23

This study analyses the migration flows between provinces in Ecuador using data from the population and housing censuses of 2001 and 2010, a decade of significant political and economic changes, where migration is defined as the change of residence in the five years before the census.

Chord diagram plots are created using the circlize package in R (Gu et al., 2014), where each chord starts at the province of origin and its arrow ends in the province of destination. The three main geographical regions of Ecuador are represented: the Coast, the Andes and the Amazon. The Galapagos Islands are excluded because their population is very low relative to the other regions.

As shown in Figures 1–2, positive net migration is observed in the provinces where the two main Ecuadorian cities, Guayaquil (Guayas) and Quito (Pichincha), are located.

Contrary to the Amazon, in the Coast and the Sierra, the majority of migrants prefer destination provinces within the same geographical region. Outside their geographical region, around 30% move between the Coast and the Sierra, and between 55% and 61% from Amazonia to the Sierra. The main destination provinces are Guayas and El Oro in the Coastal region and Pichincha in the Sierra.

Figures 1–2 show a substantial change in the volume of the flows in 2010. The political and economic stability generated in this decade is accompanied by a drastic decrease of internal migration from 30% in 2001 to 10% in 2010. In the main destination provinces, Pichincha

CONTACT

(Corresponding author)  nicola.pontarollo@ec.europa.eu

^aEuropean Commission, Joint Research Centre (JRC), Ispra, Italy.

^bGIER, Universidad de Cuenca, Cuenca, Ecuador.

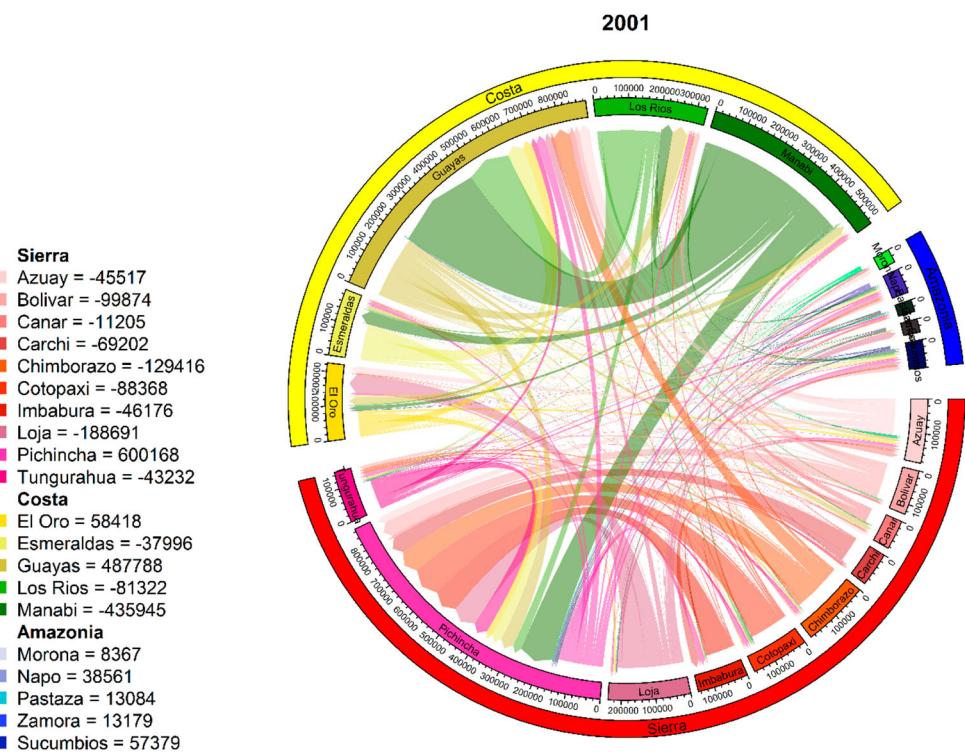


Figure 1. Internal migration, 2001.

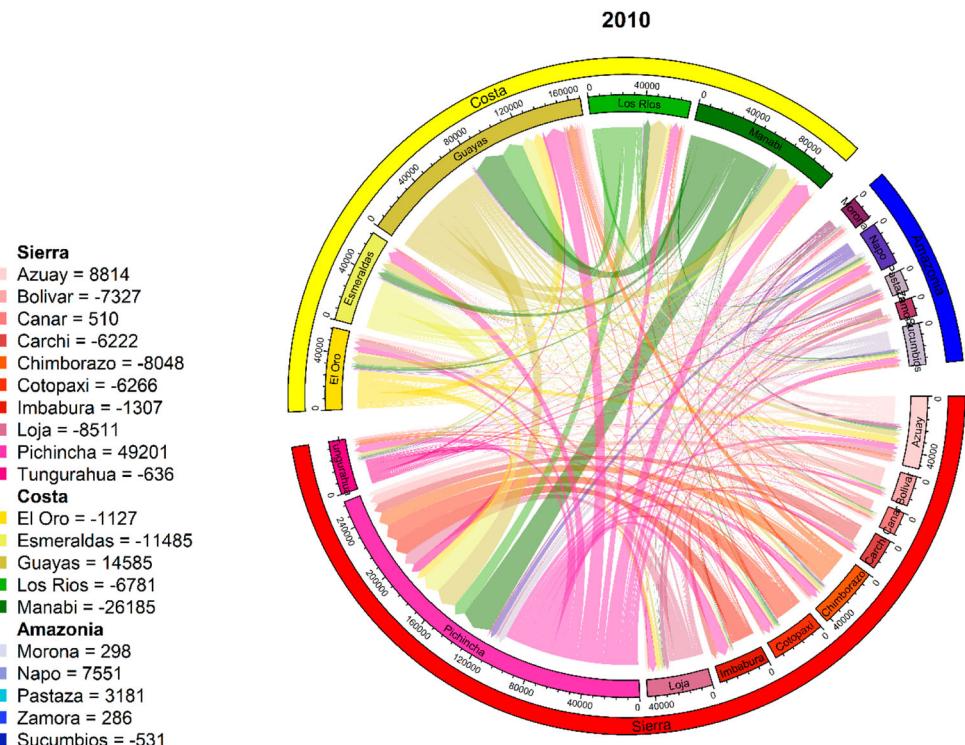


Figure 2. Internal migration, 2010.

and Guayas, out-migration starts playing an important role, doubling from around 20% to around 40%, and in the meantime other provinces in the Amazon and the Sierra, in particular, started attracting migrants.

The loss of attraction power of the traditional poles is not only explained by a process of territorial economic convergence (Rodríguez-Vignoli & Rowe, 2018) but also by the rising of new minor attraction centres (Andrade-Núñez & Aide, 2018), and is associated with the multipolar economic development scenario present in Ecuador (Royuela & Ordóñez, 2018). As an example of this, Azuay, Manabí and Loja increase their attraction power in 2010.

These findings leave room for various implications on, for example, the provisioning of adequate public services in those places that started attracting people to achieve efficient urban development that allows for people's good quality of life.

DISCLOSURE STATEMENT

The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of this paper.

ORCID

Nicola Pontarollo  <http://orcid.org/0000-0001-8498-0840>

Joselin Segovia  <http://orcid.org/0000-0002-3895-3814>

REFERENCES

Andrade-Núñez, M. J., & Aide, T. M. (2018). Built-up expansion between 2001 and 2011 in South America continues well beyond the cities. *Environmental Resource Letters*, 13(084006). doi:10.1088/1748-9326/aad2e3

Gu, Z., Gu, L., & Eils, R. (2014). Circlize implements and enhances circular visualization in R. *Bioinformatics (oxford, England)*, 30(19), 2811–2812. doi:10.1093/bioinformatics/btu393

Rodríguez-Vignoli, J., & Rowe, F. (2018). How is internal migration reshaping metropolitan populations in Latin America? A new method and new evidence. *Population Studies*, 72(2), 253–273. doi:10.1080/00324728.2017.1416155

Royuela, V., & Ordóñez, J. (2018). Internal migration in a developing country: A panel data analysis of Ecuador (1982–2010). *Papers in Regional Science*, 97(2), 345–367. doi:10.1111/pirs.12251