## International migration decisions and costly information acquisition

Published on July 16, 2020 – Updated on September 8, 2020

Dates

on the July 17, 2020

Focus on research

International migration decisions and costly information

## acquisition

Migrants are confronted with the uncertainty about the returns that the might enjoy in the various destinations, and they can decide to gather information in order to reduce this uncertainty.

Including costly information acquisition in the location-choice problem that migrants face allows us to refine our understanding of the pro-cyclical character of international migration flows.

<u>Read in french</u>(/toutes-les-actualites/zoom-sur-la-recherche/migrations-internationales-et-acquisition-d-informations-218587.kjsp?RH=1505391225734#/admin)

The decision about whether and where to migrate is portrayed as an investment decision that reflects a comparison of the private returns and costs of moving to the various alternative destinations (see the seminal contribution by Sjaastad, 1962). However, potential migrants might not have access or be able to process all the information that is relevant for this key location choice. Empirical evidence reveals that migrants can have significantly biased expectations about their earnings in foreign labor markets (McKenzie et al., 2013), and a highly imperfect knowledge of the costs and risks associated to moving across borders (Shresta, 2020). This, in turn, suggests that migrants could take deliberate actions to acquire information, and hence narrow down uncertainty, before deciding where to move.

The recent theoretical contributions, that have extended discrete choice models by allowing for a costly information acquisition about the alternative-specific individual payoff (Matjka and McKay, 2015; Caplin, Dean and Leahy, 2019), offer a suitable theoretical framework to put uncertainty back at the core of the micro-foundation of a migration gravity equation. Acquiring more informative signals about the payoffs of the various alternatives in the choice set leads to a higher cost for the migrants, so that the decision about the optimal information acquisition strategy is driven by a comparison between the cost of the signals and the ensuing improved ability of the migrant to opt for the utility-maximizing alternative.

We are able to provide an explicit analytical solution to the location-decision problem with costly information acquisition that migrants face under suitable distributional assumptions. The solution of the model offers a key insight: migration flows originating from countries where migrants face a higher cost of acquiring information will be less responsive to variations in the economic conditions in the various destination countries, as migrants will (rationally) decide to invest less in information acquisition. The theoretical analysis also offers a way to circumvent the problem related to the fact that the origin-specific cost of information acquisition is unknown to us. Following Dasgupta and Mondria (2018), we can demonstrate that this key parameter is monotonically related to the share of past migration flows directed to the main origin-specific destination. This allows us to build an empirical counterpart of this parameter of the theoretical model.

We rely on data on bilateral flows to estimate a specification of the migration gravity equation that allows us to test whether, as implied by the theory, the effects of variations in economic conditions at destination on bilateral migration flows to all destinations are smaller for origin countries with past migration flows that are more concentrated into a single destination. The estimates are consistent with this theoretical prediction, and robust to a number of competing explanations, e.g., binding liquidity constraints, for the pattern that we uncover in the data is not compatible with the one that could be generated by a canonical discrete choice model without information frictions.

Migration flows originating from countries where migrants face a lower cost of information acquisition have a stronger pro-cyclical behavior as migrants can afford (and find optimal) to acquire more precise information before moving, and hence are better able to fine-tune their choices to varying conditions in their potential destinations.

## References

Caplin, A., M. Dean, and J. Leahy (2019): <u>"Rational Inattention, Optimal Consideration Sets, and Stochastic Choice"</u> (https://academic.oup.com/restud/article/86/3/1061/5060717) *Review of Economic Studies*, 86, 1061-1094.

Dasgupta, K. and J. Mondria (2018): "Inattentive Importers" (https://www.sciencedirect.com/science/article/pii/S002219961830028X) *Journal of International Economics*, 112, 150-165.

Matjka, F. and A. McKay (2015): <u>"Rational Inattention to Discrete Choices: A New Foundation for the Multinomial Logit Model"</u>(https://www.aeaweb.org/articles?id=10.1257/aer.20130047) *American Economic Review*, 105, 272-298.

McKenzie, D., J. Gibson, and S. Stillman} (2013): <u>"A land of milk and honey with streets paved with gold: Do emigrants have over-optimistic expectations about incomes abroad?"</u>(https://www.sciencedirect.com/science/article/pii/S0304387812000028?via%3Dihub) *Journal of Development Economics*, 102, 116-127.

Shrestha, M. (2020): "Get Rich or Die Tryin': Perceived Earnings, Perceived Mortality Rates, and Migration Decisions of Potential Work Migrants from Nepal" (https://academic.oup.com/wber/article-abstract/34/1/1 /5588255?redirectedFrom=fulltext) *The World Bank Economic Review*, 34, 1-27.

Sjaastad, L.A. (1962): <u>"The Costs and Returns of Human Migration"</u> (https://www.journals.uchicago.edu/doi/abs/10.1086/258726?mobileUi=0&) *Journal of Political Economy*, 70, 80-93.

## About the authors



Simone Bertoli

Professor in Economics, Université Clermont Auvergne, CERDI.

Jesús Fernández-Huertas Moraga
Universidad Carlos III de Madrid (UC3M)



<u>informa</u>