POLICY NOTE OF WORKING PAPER 3.3

INTERNATIONAL MIGRATIONS AND AGGLOMERATION ECONOMIES

January 2013

OBJECTIVE

According to World Bank's data, in 1960 almost one third of the World Population lived in cities. In 2010 this figure is above 50% and is steadily growing 1% every three years. At that speed, in 2050 around two thirds of the world population would be living in cities. In 2010 the ENP countries + Russia accounted for an urbanisation rate of 63%, although this figure has remained stable since the 1990's.

Migration to more developed regions in the world has significantly increased over the last decades. Internationally, regional migration is a big part of labour mobility. Migration among neighbours is considerable, and that has been the case for the European Neighbouring Countries as well. If 3% of the world's population live outside their region of birth, in ENP countries + Russia that figure is above 7%. Of course, the majority of migrants end up in developed countries: immigrants represent more than 12% of population in OECD countries (Gheasi et al 2012).

In this paper I analyse the influence of agglomeration economies and particularly of urbanisation rates as a pull factor of international migration flows.

SCIENTIFIC METHODS

There is a long tradition of estimating bilateral migration flows as a function of characteristics in the source and destination countries only. Nevertheless, since the work of Anderson and van Wincoop (2003) for trade, there is a growing body of literature where the econometric analysis is consistent with a theoretical background. In this paper I assume two theoretical approaches (Faggian and Royuela, 2010, and Ortega and Peri, 2009) based on a model of migration choice across multiple locations and derive an estimating equation, where urbanisation plays a role as a pull factor for migration.

Urbanization, industrialization and economic development tend to be parallel processes. Theory and evidence point towards a positive effect of agglomeration on economic growth. "Due to localized spillovers, geographical agglomeration fosters growth" (Dupont 2007). Adopting various measures of urbanization, some studies empirically report a growth-enhancing effect on countries' income in the long run

(Henderson 2003; Brülhart and Sbergami 2009). Additionally the degree of urban concentration may be more important than urbanization per se; the growth-enhancing effects of urbanization, related to scale and agglomeration economies, and particularly in developing countries, are significant for large urban agglomerations but not for small ones (Duranton and Puga 2004; Rosenthal and Strange 2004; Bertinelli and Strobl 2007). On one side, if urbanisation is expected to promote economic growth, it is likely to be associated with higher opportunities and larger migration flows. On the other side, as stressed by Rodríguez-Pose and Ketterer (2012), economic and noneconomic territorial features have been found to be essential elements determining utility differentials, and hence migration incentives of potential movers, across different territories.

Overall, I consider a double strategy to explain the observed international migration between countries at every point in time:

> 1) I firstly use a log linear function following Ortega and Peri (2009), including two sets of fixed effects: paired origin and destination country fixed effects, and origin country-time fixed effects. Once we account for any origin specific cost of migration plus multilateral resistance aspects and permanent distance effects, we include in the vector of deterministic components of utility of the destination country the GDP per capita (the variable usually posed in international migration) and urbanisation (the one that focuses the main attention here).

> 2) The second alternative considers a model following Faggian and Royuela (2010) in which I estimate a set of non-linear models, not considering the previous vast amount of fixed effects, as it becomes a computationally unfeasible problem, and consequently I estimate a typical gravitational model with control variables for both origin and destination countries.

> 3) Finally I restrict the sample to the migration matrix between the EU27 and the ENP countries + Russia and I run the model following the Ortega and Peri (2009) specification using Poisson and Negative Binomial regressions.

I use the World Bank Bilateral Migration Database 1960-2000 and the World Bank Bilateral Migration Matrix 2010 (197 countries for the years 1960, 1970, 1980, 1990, 2000 and 2010) together with the urbanisation figures belonging to the World Bank World Development Indicators.

POLICY VALUE-ADDED

The estimates report the following results: international migration flows all over the world accounts for an elasticity of the log of GDP pc of 0.36, larger than the result obtained for OECD countries by Ortega and Peri (0.29). Restricting the model to international migration from ENC countries + Russia towards EU27 we account for a much larger elasticity (2.77), what highlights the large migration flows responding to large and increasing GDP pc differentials between neighbouring countries. This result is important in policy terms, as clarifies that important international migration flows will persist as development differences are present between EU and ENC.

Urbanisation rates matter for international migration. In the international sample the urbanisation rate in small and median cities is positive and significantly correlated with migration, while the urbanisation in large cities display a negative and significant sign, clearly influenced by the decreasing or stagnated evolution of the urbanisation rate in large cities in more developed countries in Western and Northern Europe. The result is just the opposite for ENC countries + Russia, as migration is more driven to Southern Europe, a region that has experienced important increases in larger cities.

Gravitational models report the following results: urban growth matters, particularly at home: people prefer migrate from own rural to own urban rather than migrating away; migration is related with development, as less developed countries have increased more their urban level; and large cities have a stronger influence than median cities (gateway cities).

The count models a-la-Ortega and Peri (2009) stress the influence of urbanisation issues in the restricted sample of international migration from ENC countries + Russia towards EU27, as GDP pc arises as non-significant in all models, while urbanisation rates in large cities arises as a pull factor. Again, migrants from ENC countries are directed towards EU27 countries where urbanisation rate in large cities have increased most.

Consequently, once everything else is considered, our results report that urbanisation is a key factor for explaining international migration flows. Wherever urbanisation expands, international migrants are expected to be a part of this expansion. In this line, migrants from ENC countries + Russia have been significantly directed to Southern Europe, a region that has experienced important increases in larger cities.

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