SOME ASPECTS ABOUT THE MAXIMIZATION OF MIGRATION BENEFITS AFTER EU INTEGRATION

Prof. univ. dr.Gabriela Prelipcean
Assoc. prof. dr. Mircea Boscoianu
University „Stefan cel Mare" of Suceava

Abstract
Policies concerning migration differ considerably according to national traditions and current political needs. European countries have distinctive migration histories with regard to origin and composition of their respective migrant population. The migration of the 21st century or world migration, or migration in the context of globalization no longer represents a regional process, but a global one. Given the dynamic field of migration and integration it is important to understand the key role in development and in the alleviation of poverty.
A very important issue is the methods used to capitalize the advantages created by the opening up of the labor force borders in the EU-27 context. Countries can benefit widely both on a short and a long term if coherent public policies and an effective migration strategy are to be employed.
The problem of the effects of more educated migration from Romania to other EU-developed countries is very complex because the migration flows depend on many parameters and also on the presence of a new sorting mechanism of migrants across destinations.
Recent empirical papers (Adams, 2003, Beine, Doquier, 2001, 2007, 2008, Doquier, Rapoport, 2007) demonstrate the new interest in analyzing the impact of more educated migration on developing countries.
We propose a new method for optimizing the benefits of migration inspired from the selectivity-sorting framework of Roy-Borjas (1999) and Rosenzweig (2007) model for scale and selection. In Roy-Borjas framework, it is demonstrated that an increase in the reward to skill in a home country produce a rise of the migration flows and a changing of the structure of migrants to more skilled segment. A version of this model analyzed the decision of skill migrants to choose different destinations, according return to skill function.
In the Rosenzweig model it is analyzed the correlation between migration rates and labor productivity; in this case migration is increasing in the difference destination- source earnings difference by skill group.
The model uses a set of three equations: the equation for the migration flow scale, the selection in terms of education and the sorting process to different destinations. The main contributions are: an analysis of the conflicting results on migrant selectivity, the explanation of the selection influence by using skill related differences in wages and return to skill.

Key words: migration policies, EU integration, skilled labor force, models for benefits of migration

1. Introduction

Migration has a very complex impact both for host countries and the countries of origin of the migrants, with economic, social, cultural and political implications. Regarding the *economic impact*, the main problems are:
- the volume and characteristics of recent migrations flows (age, gender, country of origin, immigration status, duration of stay, skills and qualifications, the expected future trends);

- the sectors and occupations in which the migrants are employed, their employment rates and earnings compare to local workers, the determinants of migrants' performance and integration in the host labor market;
- the aspects regarding the preferences of employers in different sectors to hire immigrants and the technological impact;
- the impact on labor market, including wages, unemployment, the dynamics of employment conditions and the preference for skilled/ unskilled workers, the effects on the minimum wage;
- the effects of illegal migration, employment, wages, fiscal balance;
- the demographic impact, including structure dynamics;
- the impact on key macroeconomic indicators: GDP and GDP per capita, unemployment, productivity, investment, inflation, asset prices especially housing;
- the dynamics of economic effects;
- the effects on public finances, effects on pension funding;
- the effects on public services (health care, education, social housing) and the dynamics;
- the impact variation across different Euro regions;
- the effects of migrants' skills and how migration skill gaps on education and training; the relationship between the governmental migration policies and labor market policies;
- the possibilities to improve data on migration; improvements on forecasting of future migration;
- the effects of government policies; the effects of migration and labor market policies; the response to employer problems regarding how non-EU workers influence the low-skilled job segment;
- innovative mechanisms to improve the contribution of migrants to overall productivity.

2. The gravitational model for migration flows

It is worth noting that despite the multitude of formal theoretical justifications for gravity models, many studies to date are only barely related to the theory, instead inserting variables into their functional forms in an ad-hoc fashion. Frankel (1997) believes this to be an acceptable practice, as many of the theoretical justifications to date omit important aspects of bilateral trade. Helpman (1987), for example does not include distance in his model whatsoever, and thus does not create a true foundation for the gravity model. Frankel cites geographical features as a common omission from gravity models. Indeed the majority of immigrant-link gravity models studies, those detailed in the literature review, though claiming to be based in theory are commonly only loosely based on theory typically simply including variables that the theory suggests are important. This paper in light of the preceding comments, adopts an ad-hoc stance to estimation, and draws upon both the gravity model and immigrant-link literature when identifying variables of relevance. Head (2000) adapted the basic gravity model to social sciences:

$$F_{ij} = G\frac{M_i^{\alpha} M_j^{\beta}}{D_{ij}^{\theta}} \qquad (1)$$

where: F_{ij} - flow from country i to j;

G – gravitational constant, a constant of proportionality;

M_i, M_j - respective (economic) masses of the two countries;

D_{ij} - measure of distance between country i and j.

Then, Head equate the national incomes of the two countries i and j, with the forces of supply/ demand and distance reflecting a measure of the costs:

$$S_{ij} = \frac{g(\mu_i, n_i, D_{ij})}{\sum_l g(\mu_l, n_l, D_{ij})} \quad (2)$$

that can be expressed in Dixit-Stiglitz monopolistic competition manner:

$$S_{ij} = M_i D_{ij}^{-\theta} R_j \quad (3)$$

where

$$R_j = \frac{1}{\left(\sum_l \left(Y_l / D_{ij}^{-\theta}\right)\right)} \quad (4)$$

Rearranging, Head obtains the base line gravity model for international trade:

$$F_{ij} = R_j \frac{M_i M_j}{D_{ij}^{\theta}} \quad (5)$$

where: F_{ij} – flow of trade between country i and country j;

R_j – gravitational constant, a constant of proportionality;

M_i, M_j – GDPs of the importing and exporting country respectively;

D_{ij} - measure of distance between country i and country j.

The functional form for estimation is:

$$\ln F_{ij} = \alpha \ln M_i + \beta \ln M_j - \theta \ln D_{ij} + \rho \ln R_j + \varepsilon_{ij} \quad (6)$$

It is considered a reduced form:

$$Y_{ijt} = f(X_{ijt} M_{jit}) \quad (7)$$

where: Y_{ijt} – flow of goods (imports or exports) from country i to country j at time t;

X_{ijt} – vector of variables wich exert influence on bilateral flows between country i to country j at time t;

M_{jit} – stock of migrants from country i to country j at time t.

3. An analysis of the economic effects of migration after EU enlargement

The analysis of the economic effects of migration after EU considers first of all the economic and social profile of new EU countries:
- political and economic instability;
- deficiencies in democratic infrastructure;
- some difficulties related to transition;
- great economic inequalities among EU-15 and new EU admitted countries;
- emerging markets with fast rates of acceleration;
- labor market with high risks of deregulation and modest productivity;
- technological and efficiency gaps;
- workforce with high qualification and disciplines;
- poor socio-economic conditions (deprivation, social inequalities, high unemployment).

The gravity variables should be tested in conjunction with a variable for the stock and flows. Wagner (2002) adopts a simplified functional form and estimation technique, replacing a two-stage Heckman procedure, with a standard pooled OLS and fixed effects estimation. The main advantage is that using observations and fixed effects at different levels it is minimized the influence of unobservable characteristics.

In the EU, each individual country has its own laws but each is subject to EU law. Observations for EU trade volumes and numbers of EU-expansion migrants are used in conjunction with fixed effects for EU-expansion countries, to benefit from the insight offered by Wagner (2002). The migrant-link model considers two sets of countries simultaneously.

Initially pooled OLS is used to investigate the underlying patterns in the data. Pooled OLS is a simple econometric specification for investigating the independent affects on the dependent variable of any particular explanatory variable; holding constant the influence from other explanatory factors. This procedure is valid even if explanatory variables are correlated with some of dependent variables. This specification therefore allows the affects of immigration on EU-15 trade levels to be identified independently from the other explanatory variables; and thus is deemed suitable for the purposes of this paper. The additional use of fixed effects minimizes the influence of unobserved effects by removing time-constant and unobserved effects, prior to estimation.

It is important to control for the size of countries since there will likely be large disparities between the Western and Eastern European states. Wagner, Head, Ries, calculate their measure of economic mass as the product of the trading pair's national income, as a proportion of world income. This gives additional weight therefore, to those trading links that represent a higher proportion of world trade. GDPs are used as measure of total bilateral economic mass (Baltagi 2003) in conjunction with a variable for the product of per capita incomes (Frankel 1997). The product of trading pair's national income has consistently been demonstrated to be of key significance in these models.

In terms of the distance variable, it is hypothesized that the further each old EU-15 country is from the EU-expansion countries the less the pair will trade due to higher cultural, legal, transportation and communication barriers. It is important how remote each EU-expansion country is from the main Western European markets. Ceteris Paribus one would expect the more remote an EU-expansion country is from an EU incumbent nation, the more the incumbent nation will trade with alternative 'third country' options (Wagner et al 2002). Formally:

$$R_f = \frac{1}{\sum_p \left(Y_p / D_{fp} \right)} \qquad (8)$$

where: R_f – remoteness of country f from European markets;

Y_p – national income of European province p;

D_{fp} – distance from country f from province p.

Formulating the measure of remoteness in this manner also circumvents the need to calculate a countries' distance from itself. However, this measure is time invariant and will therefore drop out from estimation under fixed effects specifications.

In keeping with the immigrant-link studies to date, the natural log of the stock of immigrants from each EU-expansion country residing in each EU-15 country was added to the estimated equation. In light of the literature on immigrant-links, it is hypothesized that greater numbers of immigrants facilitates greater degrees of trade creation, in terms of both imports and exports, though it is difficult a priori to predict which trade elasticity with respect to immigration will be larger.

4. Conclusions

This analysis is inspired by Wagner (2002) and aimed to quantify the economic effects of East-West European migration by using a simple but intuitive gravity model.
The gravity model has a good robustness and has the advantage to remain as simple as possible. The tested core gravity variables are made in conjunction with a variable for the stock of migrants. This simple specification, it was assumed, should yield high quality and significant results, such that the effects from migration on EU-15 trade could be accurately quantified. The most reliable bilateral data available were obtained for evaluation. Equations for both imports and exports were estimated, with a new variable for 'remoteness' being utilized, one more suited to the paper, within the constraints of the data available.
The model results indicated that migration from Eastern European countries effects
The greatest constraint is represented by the lack of data available, which ensured that more conventional testing of immigrant-links was prohibited. Reliable data for many of the countries in question was simply unavailable. This could have serious repercussions for the results of this project; though the most likely effect is a scaling up of the magnitudes of the trade elasticity with respect to migration, as the proxy was a fraction of the total stock of immigrants. With more time, and better access to data, the most reliable stock of immigrant's variable would have been constructed from census, and flow data, from individual countries in question.

Because of the multiple correlations and the complexity of implications, migration remains a topical issue of growing importance. This paper was confined to the affects of migrant-links, there are many additional avenues open for future research. Additional data would facilitate the investigation of the joint effects of migration and remittances that the literature has shown to be of importance. Data on the stock of EU migrants residing in EU-expansion countries would facilitate investigation as to the opposite migrant-link effects, to those examined here. Data on the length of stay, and permanence of immigrant's, would mean one could look at the effects of temporary migration, an issue of growing importance, to allow for the freedom of movement of temporary workers. Looking at the effects of intra-EU rural-urban migration would be a particularly interesting line of inquiry. In conclusion there are good potential for trade between Eastern and Western European states. Migration will likely boost this further in the future. The positive impact of migration on labor markets is represented by: an increase in economic prosperity of both countries of acceptance and of origin, wages of the migrants are lower than the added value they produce, increasing the productivity with decreases in wages due to the quantity of the supplied workforce, earns to capital investors are higher than the reducing of wages, increase in the income of migrants, enlargement of the labor market of the country of acceptance , existence of the economies of scales in different sectors, regulation of labor market in new EUs within the perspective of creating an integrated Euro Social Security System.

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