

Migration, Trade and Unemployment

This paper estimates the effects of immigration and trade on unemployment at the country level using a yearly panel of OECD countries for the period 1997-2007. It employs different GMM techniques to deal with the potential endogeneity of immigration and trade flows. The main finding is that immigration significantly decreases aggregate unemployment rates. For trade, no significant impact on unemployment can be identified.

In principle, the paper has the potential to make an interesting and relevant contribution to the literature. Yet, it needs to be strengthened in several ways.

Main comments

- It is not really clear what the main objective of the paper is. In particular, do the authors aim to estimate the impact of immigration on unemployment just controlling for trade flows or do they want to explicitly consider the substitutability of worker and goods flows when estimating the effects of immigration and trade on unemployment? The authors need to do a better job in specifying what exactly they mean by taking “*an international trade perspective*” to analyze the unemployment effects of immigration and develop a coherent theoretical and empirical framework.
- More could be done to take into account the interrelationship between immigration and trade. Both the theoretical framework and the empirical strategy tend to treat immigration and trade as separate flows. The unemployment effects of immigration and trade are theoretically predicted with separate hypotheses and empirically tested without allowing for interacting effects. This approach can be justified (compare previous comment), but it ignores the potential interdependencies between immigration and trade. For instance, while standard neoclassical trade theory predicts that immigration and trade are substitutes, recent evidence has suggested that immigration may actually spur trade (e.g. Kugler and Rapoport, 2011; Felbermayr and Jung, 2009; Gould, 1994). The degree to which immigration affects unemployment may hence depend on the size of trade flows, calling for an interaction term in the econometric framework.
- “*Why then should goods trade have a statistically significant effect on unemployment and (im)migration not matter at all? And when trade decreases unemployment, should not (im)migration, too? If the answer to this question is yes, one has to conclude that previous studies may suffer from a potential omitted variable bias.*” (Introduction, p. 3) This conclusion is not necessarily true and illustrates that the paper could benefit from embedding it more rigorously in the recent literature. First, observed labor market effects of immigration are likely to be weaker than predicted by theory. Standard economic theory assumes that immigrants and natives are perfect substitutes. This assumption, however, is unlikely to hold in reality as recent evidence documents an only imperfect degree of substitutability (Manacorda, Manning and Wadsworth, forthcoming; Ottaviano and Peri, forthcoming). Second, neoclassical trade theory predicts that migration and trade are substitutes for a given pair of two countries. Yet, at the level of the destination country aggregating all trade and migration flows from various countries, it does not have to be the case anymore that the effects of immigration and trade go into the same direction. Third, this statement does not do justice to the

many micro-level studies that have carefully analyzed the causal labor market effects of immigration. These studies have used instrumental variable estimation and natural experiments to deal with endogeneity including omitted variable bias.

- As the authors themselves acknowledge, cross-country regressions are plagued by endogeneity. In addition to immigration flows, trade flows are likely to be endogenous, too. This view is also taken by Felbermayr, Prat and Schmerer (2011) on which the empirical specification of the paper is based. It is therefore not clear why the authors decide to present results from regressions, in which immigration is the only endogenous variable. Unless the authors can make a compelling case that endogeneity is limited to immigration flows, they may want to drop the instrumental variable specification and resort to GMM estimation only.
- In addition to net immigration flows, the authors include the population size of the receiving country as control variable. Given that $population(t) = population(t-1) + [births(t) - deaths(t)] + [immigration(t) - emigration(t)]$, is there not a problem of double-counting net immigration?
- The labor market effects of immigration and trade include effects on both unemployment and wages. The analysis, however, is strictly limited to the effects on unemployment. To assess the overall impact on welfare and understand the restrictions on immigration, would it not be worthwhile to investigate wage effects as well?

Minor comments

- The period under consideration (1997-2007) includes 2004, the year in which the first Eastern enlargement of the EU took place and many old member states did not impose restrictions on immigration from the new member states. Is there a structural break in the relationship of migration, trade and unemployment, i.e. do coefficients differ for the periods 1997-2003 and 2004-2007?
- How are observations weighted in the regressions, in particular do all countries have the same weight regardless of their size?
- The author's estimation framework is based on panel regressions which identify the impact of immigration through changes over time. For this reason, it is not clear why the authors check the robustness of their estimates using immigrant stocks instead of flows. Will any impact of existing immigrant stocks not already be reflected in previous unemployment rates and hence reduce the variation left for identification?
- For the uninformed reader who does not know the details of the literature, hypotheses 3-5 could be derived in more detail.
- The regression lines in Figures 2 and 3 suggest a negative relationship between unemployment and immigration. How much of this relationship, however, is driven by the potential outliers Poland and the Slovak Republic?
- What does w stand for in $Y_{w,t}$ in Equation 2 (p. 12)?