

## **Education Policy, International Students and Migration Flows: An Economic Analysis**

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### **Summary**

Few forces have shaped, and continue to shape, the world as much as migration. In countries like the United States, Canada and Australia, most of the population has immigrated during less than two hundred years, or are descendents of these recent immigrants. Also Denmark and other Western European countries have experienced significant immigration during the last decades. Due to aging populations, Western Europe is expected to need significant immigrant flows to maintain its high standard of living.

Understanding the dynamics of international migration is of paramount importance for education and immigration policy. Denmark attracts a significant number of foreign students, partly due to the absence of tuition fees. Is this a good or bad policy from the perspective of Danish tax payers? Answering such a question requires taking into account the dynamics of migration, more specifically, how the student flows affect migration.

This project has two major aims. First, we integrate the role of foreign students into an empirical model explaining migration flows. The results from this project would be useful to Denmark and other European countries aiming to attract skilled migrants. The theoretical work, on the other hand, would contribute to the debate on the proper role of governments in the provision of higher education.

### **Empirical part**

The determinants of migration have received a lot of attention in the economics literature, as evidenced in the review by Borjas (1994). A consensus view is that both economic and cultural forces play an important role. Increased standard of living and employment rate in the destination country tend to stimulate migration, while advances in the source country reduce push factors for emigration. Migration is easier between more similar countries, especially a shared language plays an important role, but so do also existing networks of previous migrants.

Despite numerous studies on how many foreign students stay in the country they study in, and the fact that the numbers are significant, we are not aware of any empirical research incorporating student flows into a more general model explaining permanent migration. We aim to fill this gap. We take as our starting point previous studies estimating migration, most notably, Hatton (2003), Mitchell and Pain (2003) and Clark et al. (2004). These studies do not take into account the role of student flows.

Due to restrictions concerning data availability, we can only estimate cross-section regressions when analyzing worldwide migration. Our aim is thus to focus on explaining

migration to the United States (in addition to the cross section). We focus on the United States both because it is the largest recipient of international students, and also because understanding the reasons behind the success of the United States in attracting skilled migrants is valuable if Denmark were to aim to do the same. We plan to acquire panel data on permanent migration, student flows, and other relevant economic variables for all source countries of migration for the United States. We then estimate the relationship between migration and student flows employing up-to-date panel data techniques. Starting with GLS regressions, we intend to test for causality and employ instrumental variables techniques where necessary. To deal with endogeneity and the problem of inconsistency in panels where both fixed country effects and the lagged dependent variable are included, we intend to employ the GMM estimator proposed by Arellano and Bond (1991) and Arellano and Bover (1996).

### **Theoretical part**

The project would also include two theoretical papers by Poutvaara, building on Poutvaara (2004a, 2004b). The research question in the first project would be how migration influences public provision of different types of education and taxation when human capital is a joint product of public and private investments, and the governments cannot commit to their tax policy in advance. The second project would analyze the welfare and efficiency effects of privatizing university education inside the European Union, taking into account that the tax rates are strategically chosen by the governments.

### **Policy part**

An important part of this project would be disseminating the general insights and policy recommendations to the decision-makers and wider audience. We would aim at doing this by writing a non-technical policy paper, summarizing the insights arising from the empirical and theoretical work. This would answer into specific questions: What are the tradeoffs involved in continuing current policy with no tuition fees, or introducing tuition fees in Danish universities? How could education policy help to solve the challenges arising from population aging? Is there scope for efficiency-improving policies at the European level? We would also communicate the results to the wider audience by an article in Danish, which we would offer for publication in one the biggest newspapers.

### **Time table**

Our aim is to complete first versions of all three projects by June 2005, and we aim at submitting each resulting paper either to a highly-ranked general interest journal, like the Economic Journal, or to a leading field journal, like the Journal of Public Economics.

## References

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