## Immigration Laws and the Performance of Immigrants

(Motivation) The design of immigration laws affects the composition of the immigrant inflow and the economic performance of immigrants in the destination countries. Policy makers may for instance influence immigrants' incentives to invest in human capital in the destination country through the duration of the residence permit or through the rights of trailing spouses. The return to acquiring knowledge that is specific to the destination country is increasing in the expected length of stay. A myriad of residence permits exists. The specific design vary across countries and time and no evaluation has yet linked the policies to the outcomes of immigrants entering under different policies. I will investigate the relationship between immigration policies and the economic performance of immigrants. I will do this by the use of unique data on type of permit from 1997-2011 linked to register data over the same period. The data will be released for the first time this year by Statistics Denmark, and I have already been promised access to this new source of information. The link between permits and the economic performance of the permit holders is unique by international comparisons.

Denmark provides a perfect laboratory for testing the effectiveness of immigration laws in achieving stated political goals and sheding light on how specific immigration policies shape immigrant performance. Moreover, the features of Danish immigration laws share many common features with other countries. The project will have high academic potential contributing to the field of *immigrant assimilation* and be rich on *policy implications* relevant to all countries wishing to understand the economic impact and effectiveness of the immigration policies they apply.

# Literature and background

(Most influential research) Economic assimilation means that the initial earnings gab between immigrants and natives gradually closes over time (Chiswick, 1978), conditional on observable characteristics. The object of interest in this strand of research is the rate with which the earnings gab closes over time, i.e. the immigrant assimilation rate. It is well-known in this literature that changes in "cohort quality" will bias estimated assimilation rates in cross-sectional studies since identification is based on differences across immigration waves (Borjas, 1985). Lubotsky (2007) shows that selective outmigration is another source of bias. Higher earnings potentials of earlier immigrant-entry cohorts and gradual out-migration of less successful immigrants create too steep estimates of the assimilation rate if not appropriately accounted for. The panel structure of the Danish register data allow me to account for these known biases using relative simple panel data models. Based on age at arrival Friedberg (2000) analyzed the importance of domestic versus foreign education and experience.

(Danish research) Previous work on Danish data have not adopted the framework of the assimilation literature that allow international comparisons of the policy parameter of interest. Interesting is, however, the paper by Nielsen (2011) who documents that immigrants tend to work in occupations with few skill requirements relative to their qualifications. She compares immigrants' education to the

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<sup>&</sup>lt;sup>1</sup> Barth et al (2004) and Bratsberg et al (2006) point to another implicit assumption of the assimilation models, namely identical effects of macro shocks for immigrants and natives and suggest that this can be corrected for by including a differential effect of local unemployment rates for immigrants and natives. This can also easily be done with Danish data.

average education level within occupations. In the framework of this project, over-qualification will show up as an earnings gab given observable characteristics. I estimate an initial earnings gab and a rate of convergence to native earnings (instead of an average skill mismatch over the post-migration period) and more importantly I am able to relate changes in earnings gabs at entry and speed of convergence to changes in immigration laws.

### Contribution and policy relevance

(Main) The initial earnings gab has sometimes been differentiated by country of origin showing large differences across sending countries and immigrant-entry cohorts have been controlled for in pursuit of the "true assimilation rate". The purpose of this project is to understand the underlying determinants of the heterogeneous immigrant performance and the scope for wise policy design. I will contribute to the literature by sheding light on causes of immigrant performance that policy makers can control, the design of immigration laws (Aliens Act).<sup>2</sup> This will produce new knowledge on the causes of the initial earnings disadvantage and the speed of convergence to native earnings using information on entry rules applicable to the immigrant.

(Detail) I will distinguish residence permits granted for humanitarian reasons and other residence permits. Refugees may struggle with physical and psychological after-effects and they are not admitted on the basic of expected economic gains to the host countries. Moreover, their inflow is largely governed by international agreements and thus not subject to national immigration policies. The variety of residence permits granted based on work and educational purposes are the primary focus.<sup>3</sup> The 15 years spanned by the data cover a period of significant changes to the laws governing entry related to work and study. The Job Card Scheme was introduced in 2002; the Danish Green Card Scheme and a six months Job-Seeking period for students came in 2007; and a Job-seeking permit after loss of job expanded the period a labor migrant could expect to stay in Denmark after 2008 to mention some changes. These share common features with permit schemes in other countries, eg. Green Card is a standard point based system employed in many countries. It is therefore interesting to see how immigrant performance differ across all these immigration policies that aim to recruit qualified labor.

(Minor) As a minor contribution the project will also uncover the historical "Changes in Cohort Quality", as Borjas (1985) labels the differences in immigrant performance by year of entry to the US. In broad terms immigration to Denmark has gone from guest workers, to refugees, to family reunifications, to labor migrants. A similar pattern can be found in Norway and Sweden. Hence, for these countries – and other countries with similar immigration experiences - it is interesting to see how assimilation varies with the immigration regimes. This will not be based on the new permit data but simply show the average immigrant performance by broadly defined immigration eras, since I will use immigrant entry years further back than covered by the permit data.

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<sup>&</sup>lt;sup>2</sup> Other sources of heterogeneity in immigrant performance include origin country differences in educational quality and educational transferability across country borders/cultural and linguistic differences. These are not directly controlled by policy makers in receiving countries, though my analysis can show whether some policies are more effective in improving immigrants' labor market match.

<sup>&</sup>lt;sup>3</sup> It is a stated goal for the current government to increase the recruitment and retention of skilled workers through revision of the existing education and work visa programs.

#### Workplan

(Qualifications and relevant scientific network) Prof. Jakob Roland Munch is enthusiastic about the project; he will follow it and supervise me but the project is planned as single-authored (see Letter). I know the theories and applied econometric models from several specialized migration courses (Giovanni Peri, Gordon Hanson, Christian Dustmann and George Borjas), from referee work and my own work on closely related topics (see CV). I will use my network to discuss the project with well-established experts. My coauthors in the field, Panu Poutvaara and Giovanni Peri, are happy to provide feedback and I will spent the last three months of the project at Dartmouth College to work intensively on the analysis, present and get comments from Ethan Lewis (see Invitation). It is realistic for me to be able to present the project at relevant specialized workshops. One option is the 3<sup>rd</sup> CEMIR conference. I have previously been accepted at similar specialized workshops at UCL and Ifo Institute (see CV).

(Time schedule) I am currently employed as a postdoc at the University of Copenhagen in a position that ends March 1st, 2015. With the four months applied for in this project I will have one year to carry out the project. Given I know the relevant research very well and the registers that I am going to combine with the new permit data, it is reasonable that I can complete the project within this timeframe.

The extensive data work (cleaning the raw permit data, merging registers and preparing variables for analysis) will be performed by a student assistant under my supervision during August-November 2014. The first descriptive work will partly be done by me and partly by the student. I will start working on the empirical design and estimations in December 2014 when my teaching load declines. This allows me to have a preliminary paper outline in the early spring, present and get feedback and then finalize the empirical analysis in April-June 2015 during my research stay at Dartmouth College. I will write up a working paper for circulation and submission to a journal (e.g. Journal of Labor Economics) in June.

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	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	Maj	June
Teaching and preparation												
Data management												
Descriptive statistics												
Preliminary estimations												
Preliminary paper outline												
Present and get feedback												
Finalize analysis												
Draft working paper												

(Future employment) I have an Individual Postdoc Application under evaluation at DFF. That project is on firms' adjustments to immigration, i.e. adjustments to changed labor supplies (immigration) through production technologies (input mix) and product specialization and differentiation (output mix). I have more possibilities to apply for research positions/funding in the fall, so I feel confident that I can pass from this project to a future funded projects within this research agenda.

### References

- Borjas, George J. 1985. "Assimilation, changes in cohort quality, and the earnings of immigrants." *Journal of Labor Economics* 3 (4): 463-489.
- Barth, Erling, Bernt Bratsberg and Oddbjørn Raaum (2004) "Identifying earnings assimilation of immigrants under changing macroeconomic conditions" *Scandinavian Journal of Economics* 106 (1), 1-22
- Bratsberg, Bernt, Erling Barth, and Oddbjørn Raaum (2006), "Local unemployment and the relative wages of immigrants: Evidence from the Current Population Surveys", *Review of Economics and Statistics*, 88: 243-263
- Chiswick, Barry R. 1978. "The effect of Americanization on the earnings of foreign-born men." *The Journal of Political Economy* 86 (5): 897.
- Friedberg, Rachel M. 2000. "You can't take it with you? Immigrant assimilation and the portability of human capital." *Journal of Labor Economics* 18 (2): 221-251.
- Lubotsky, Darren. 2007. "Chutes or ladders? A longitudinal analysis of immigrant earnings." *Journal of Political Economy* 115 (5):820-867.
- Nielsen, Chantal Pohl. 2011. "Immigrant over-education: evidence from Denmark." *Journal of Population Economics* 24 (2): 499-520