

Invandring och arbetsmarknaden för infödda erfarenheter från Danmark

Based on Foged and Peri (2016, AEJ:Applied)

SNS

Mette Foged

January 31, 2017

Immigrants and native wages. Lessons from economic theory

1. Immigrants are workers

Short run: wages fall

Long run: capital adjusts and there is no effect on wages

Very simplistic!

2. Labor is differentiated by schooling and maybe experience.

Focus on relative supplies and elasticities. Cells. Static. Partial

3. There is a specific dimension of skills that is a characteristic to international migrants (manual-complex). There are important margins of adjustment of natives and firms that affect outcomes. Need to analyze them in a dynamic context

► Danish literature

► More literature

► Most related studies

Migrants and natives are concentrated in different jobs

Migrants are concentrated in similar jobs across countries; jobs that are internationally transferable and where they have a comparative advantage!

- Low skilled immigrants (Danish case): manual jobs e.g. cleaning, cooking, assembling, laborers in construction and agriculture
- High skilled immigrants: technical but routine jobs in e.g. engineering (solving a differential equation)
- Natives: country-specific, communication, inter-active and cognitive jobs e.g. human resources, management

Summary of the analysis

The impacts of low-skilled immigration on the working careers of *individual* native workers

Follow native workers and their outcomes over 18 years

1. Short and long run effects
2. Distinguish effects on individuals and on average in an area

New identification using area-variation:

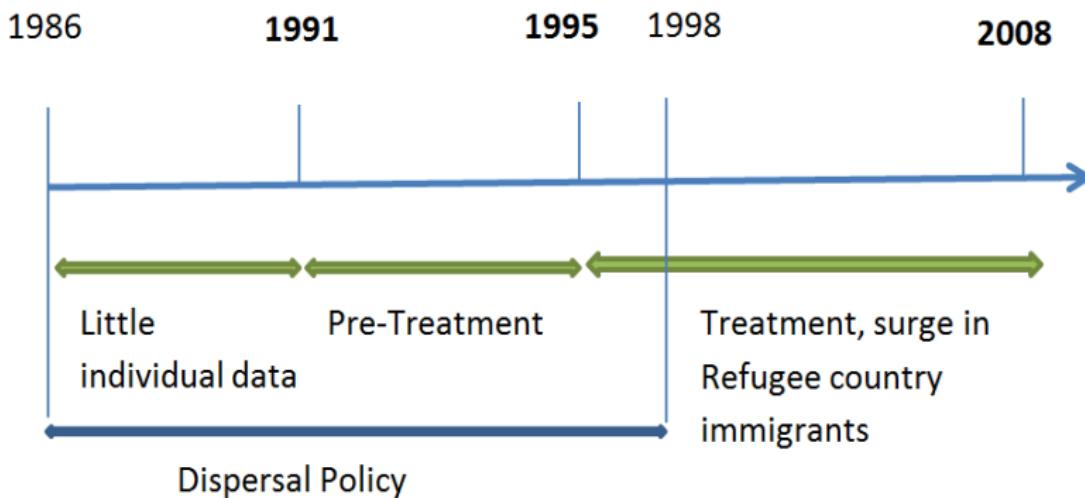
1. Refugees distributed by a Spatial Dispersal Policy, 1986-1998
2. Sharp increase in refugee-country immigrant populations in the 1990s related to country of origin crises and family reunification.
Family reunified followed initial settlements

Main findings

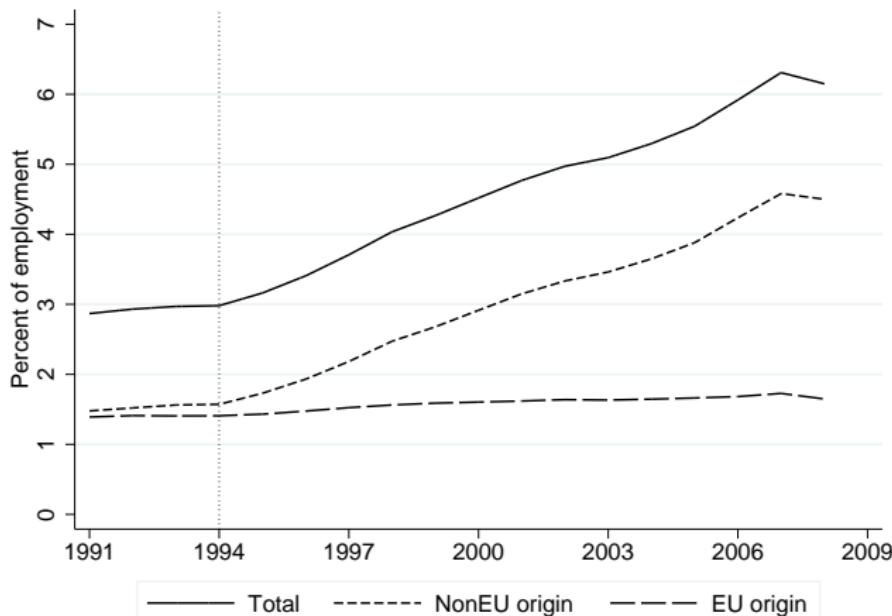
- Immigration increased the mobility of natives and their specialization in complex tasks but did not increase their risk of unemployment
- On average less educated wages were insulated by this mechanism; young and low-tenure ones gained
- Highly educated experience wage gains with less occupational mobility which is a sign of straight complementarity
- TODAY: Focus on most vulnerable: low skilled

Timing: dispersal policy and immigration surge

TIME LINE

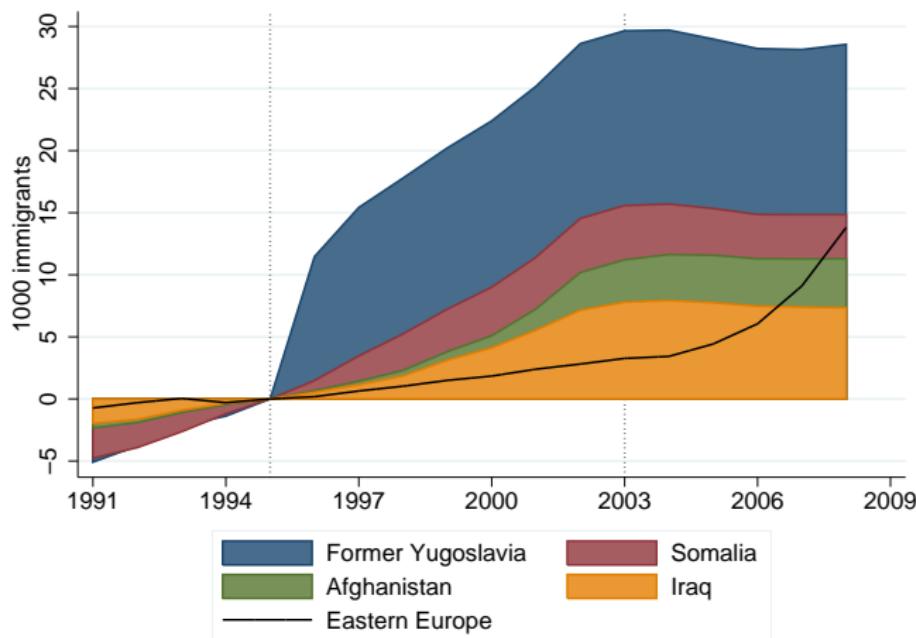


Immigrants in the Danish labor market



Notes: "EU" is defined as EU15 plus Norway, Island og Liechtenstein (EEA) and Switzerland (bilateral agreement).

Drivers of non-EU immigration growth



Notes: Growth in immigrant populations since January 1, 1995, from major source countries for refugee inflows between 1986-1998 and from Eastern Europe.

Immigration in manual jobs

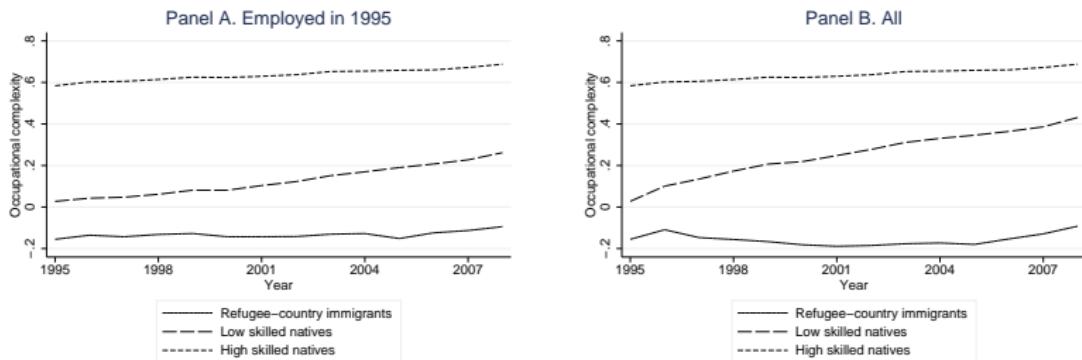
Table : Immigrant concentrations and skill contents of occupations

	Refugee share 1994-2008 dif.	Skill content of occupation			
		Cog.	Com.	Manual	Complex
<i>Panel A. Lowest inflow</i>					
Managers of small enterprises	-0.003	0.666	0.677	0.432	1.136
Legislators and senior officials	0.001	0.897	0.989	0.303	1.828
Skilled agricultural and fishery workers	0.001	0.362	0.248	0.736	-0.328
Corporate managers	0.002	0.796	0.796	0.367	1.488
Armed forces	0.002	0.441	0.390	0.633	0.225
<i>Panel B. Highest inflow</i>					
Laborers mining, constr., mfr. and transp.	0.022	0.215	0.156	0.769	-0.783
Drivers and mobile plant operators	0.023	0.352	0.265	0.810	-0.322
Other elementary occupations	0.027	0.260	0.205	0.742	-0.633
Machine operators and assemblers	0.036	0.276	0.146	0.790	-0.655
Sales and services elementary occupations	0.051	0.126	0.103	0.695	-1.234

Notes: Complexity index = $\ln((\text{Communication} + \text{Cognitive})/\text{Manual})$. The skill content of each occupational grouping (2-digit ISCO) is the population weighted average of the underlying occupations (4-digit ISCO).

Occupational complexity increase over time for low-skilled

Figure : Mean complexity of tasks over time for groups of workers



Notes: Each year the figure shows (for three groups) the mean complexity of tasks performed by either those employed in 1995 (Panel A) or all i.e. including new entrants to Danish employment (Panel B).

Spatial Dispersal Policy

- 76,673 refugees allocated proportional to municipality inhabitants
- Information on birth date, marital status, # children and nationality available from questionnaire, no face-to-face meeting between placement officers and refugees
- When interviewed in 2008, DRC's chief consultant did not recall any turning down of the housing offer
- No realocation restrictions in this period, but 7 years after placement 52 percent still lived in the assigned municipality

Source: Damm (2009); Damm and Dustmann (2014)

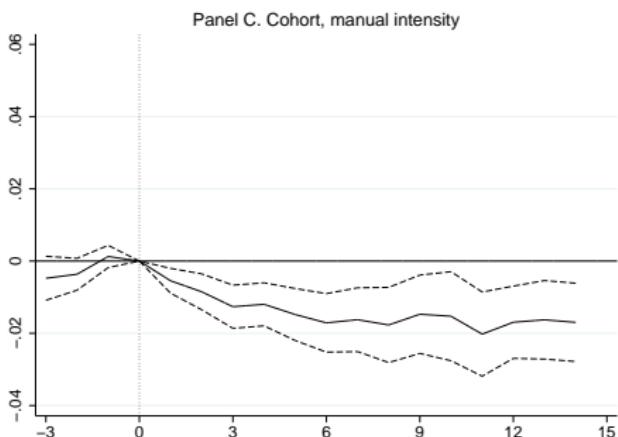
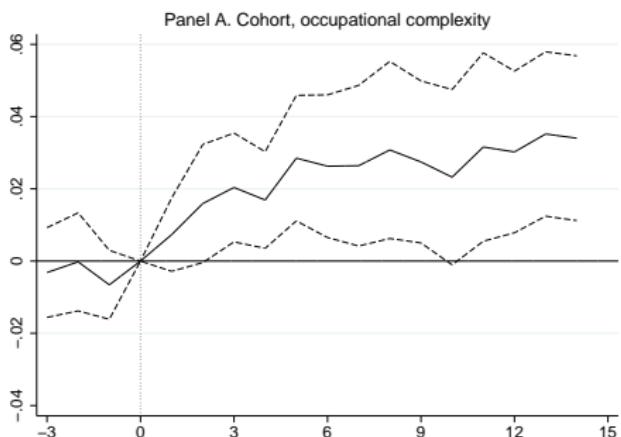
▶ map

Results

Two approaches in the original publication:

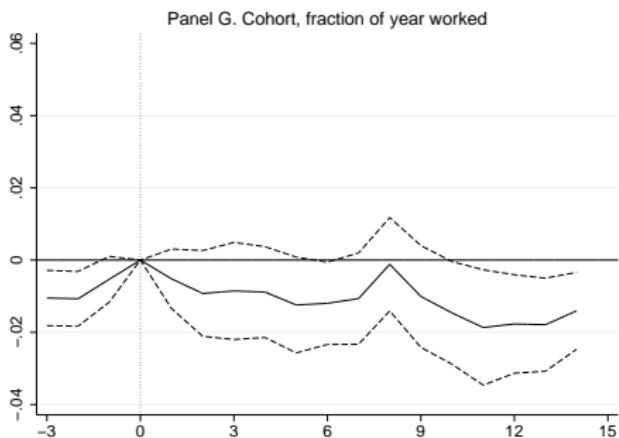
- (1. Follow employed Danish individuals within and across firms and municipalities)
2. Consider all workers and follow them
 - Discontinuous and differential refugee-country immigrant growth across municipalities 1994-2008
 - Follow cohorts of individuals differently exposed in their initial location no matter where they moved (or follow average in an area).
 - Consider the longer-run dynamic response of native workers

Treatment-control differences, complexity and manual



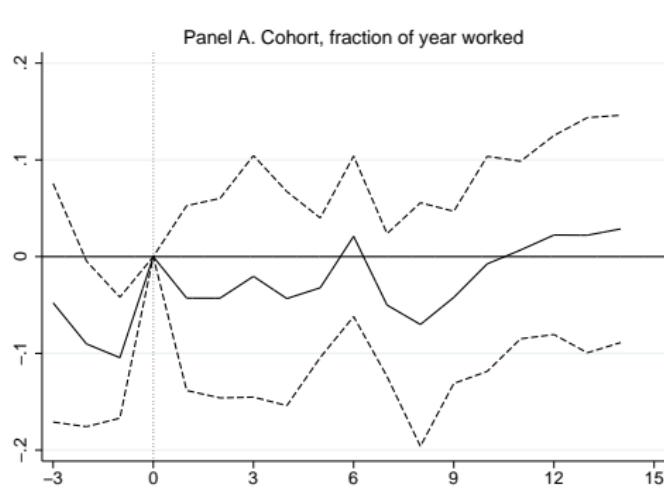
Notes: Parameter estimates (—) and 95% confidence limits (---) on the interaction terms of immigration exposure and year dummies. Standard errors are clustered at the 1994-municipality.

Treatment-control differences, wages and employment



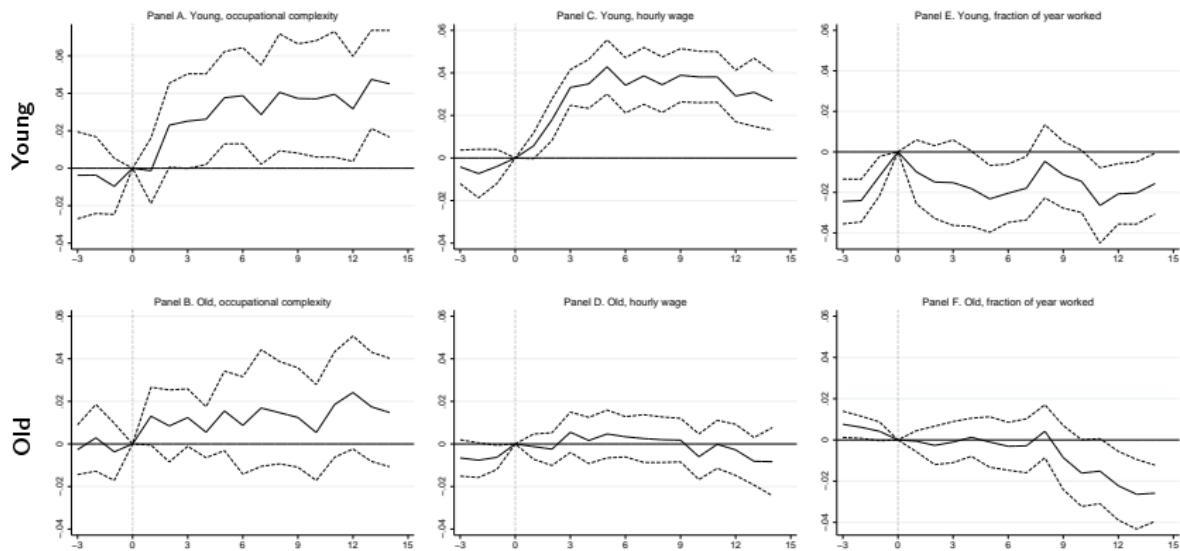
Notes: Parameter estimates (—) and 95% confidence limits (---) on the interaction terms of immigration exposure and year dummies. Standard errors are clustered at the 1994-municipality.

Treatment-control differences, crowding out of the non-employed?



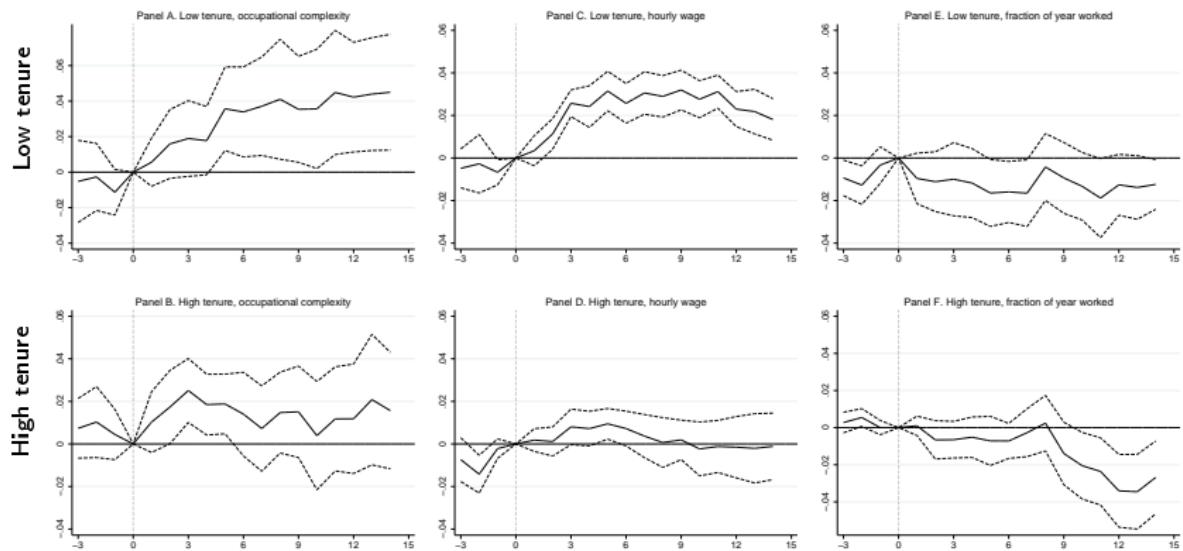
Notes: Parameter estimates (—) and 95% confidence limits (---) on the interaction terms of immigration exposure and year dummies. Standard errors are clustered at the 1994-municipality.

Treatment-control differences by age groups



Notes: Parameter estimates (—) and 95% confidence limits (---) on the interaction terms of immigration exposure and year dummies. Standard errors are clustered at the 1994-municipality. Young (old) are those aged 21-36 (37-51) in 1994.

Treatment-control cohort differences by tenure groups



Notes: Parameter estimates (—) and 95% confidence limits (---) on the interaction terms of immigration exposure and year dummies. Standard errors are clustered at the 1994-municipality. Low (high) tenure are those with less than (at least) 4.35 years in the firm in 1994.

Interpretation

- High and low skilled are complementary
- Among the low skilled, manual and non-manual are complementary tasks. Refugee-country immigrants increase the supply of manual and push natives to non-manual
- Mainly young and low-tenure can redirect their career, takes place across firms
- No costly unemployment, maybe some early retirement

Conclusion

- Refugee-country immigrants, distributed as a supply shock to Danish municipalities, stimulated native occupational mobility
- Natives, especially the young and low-tenure ones, redirected their career towards less manual and more complex tasks thereby increasing their wage
- Employment was not affected, only for older that might have retired earlier
- A flexible labor market likely facilitated the transitions

Danish papers

- Malchow-Møller, Munch, and Skaksen (2011): The effect of foreign experts (eligible for the preferential tax scheme) on wages and productivity in the firm
- Malchow-Møller, Munch, and Skaksen (2012): The effect of immigrants on wages of native coworkers within worker-establishment spells
- Malchow-Møller et al. (2013): The impact of immigrant hirings on firm's job creation in the farm sector
- Parrotta, Pozzoli, and Pytlikova (2014): The effect of an ethnically diversified workforce on firm-level productivity

We consider municipality-level (not firm-level) changes in the immigrant share and exploits a quasi-random dispersion of refugees to municipalities

[Back](#)

Literature

The effect of immigration on native wages and employment

- Altonji and Card (1991); Friedberg (2001); Card (2001); Borjas (2003); Card (2009)...
- Review article by Blau and Kahn (2012)
- Glitz (2012) uses a similar identification strategy, consider 5 years and not cross sectional variation due to dispersal
- Cohen-Goldner and Paserman (2011): Wage effects change over time due to the dynamic adjustment of capital and of immigrants, not dynamic responses of natives

▶ Back

Deviations from the canonical labor demand-labor supply model

- Ottaviano and Peri (2012): Immigrants and natives differ (add an extra CES-nest to Borjas, 2003)
- Peri and Sparber (2009): Theory of task-specialization, evidence from U.S. states
- Lewis (2011, 2013); Dustmann and Glitz (2011); Ottaviano, Peri, and Wright (2013): Endogenous choice of technology and open economy adjustments

▶ Back

Settlements of refugees pre- and post dispersal policy

Figure : From Damm and Dustmann (2014) [Back](#)

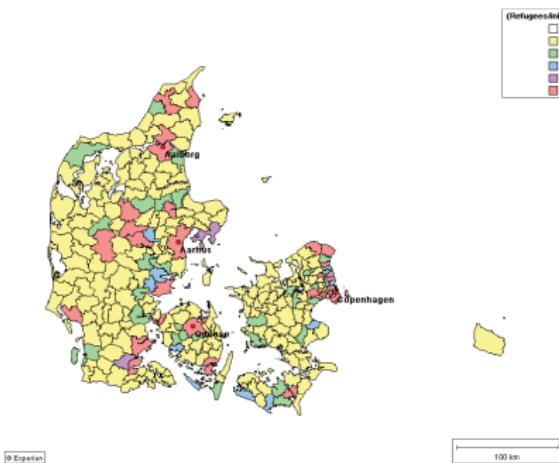


Figure A1a: Refugee Immigrant Allocation, pre-assignment policy

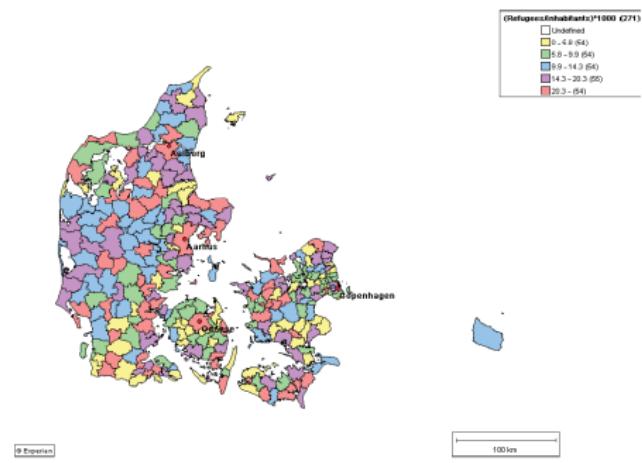


Figure A1b: Refugee Immigrant Allocation, post-assignment policy

- Altonji, Joseph G. and David Card. 1991. "The Effects of Immigration on the Labor Market Outcomes of Less-skilled Natives. Chapter 7 in M. J. Abowd and R. B. Freeman (Eds.)" *Immigration, Trade and the Labor Market* (Chicago: University of Chicago Press):201–234.
- Blau, Francine and Lawrence Kahn. 2012. "Immigration and the Distribution of Incomes." *NBER Working Paper* No. 18515:Cambridge, MA.
- Borjas, George J. 2003. "The Labor Demand Curve Is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market." *Quarterly Journal of Economics* 118 (4):1359–1374.
- Card, David. 2001. "Immigrant Inflows, Native Outflows and the Local Labor Market Impacts of Higher Immigration." *Journal of Labor Economics* 19 (1):22–64.

- . 2009. "Immigration and Inequality." *American Economic Review: Papers & Proceedings* 99 (2):1–21.
- Cohen-Goldner, Sarit and M. Daniele Paserman. 2011. "The Dynamic Impact of Immigration on Natives' Labor Market Outcomes: Evidence from Israel." *European Economic Review* 55 (8):1027–1045.
- Damm, Anna Piil. 2009. "Determinants of recent immigrants' location choices: quasi-experimental evidence." *Journal of Population Economics* 22 (1):145–174.
- Damm, Anna Piil and Christian Dustmann. 2014. "Does Growing Up in a High Crime Neighborhood Affect Youth Criminal Behavior?" *American Economic Review* 104 (6):1806–32.
- Dustmann, Christian and Albrecht Glitz. 2011. "How Do Industries and Firms Respond to Changes in Local Labor Supply." *CReAM Discussion Paper No. 18/11*.

Friedberg, Rachel M. 2001. "The Impact of Mass Migration on the Israeli Labor Market." *Quarterly Journal of Economics* 116 (4):1373–1408.

Glitz, Albrecht. 2012. "The Labor Market Impact of Immigration: A Quasi-Experiment Exploiting Immigrant Location Rules in Germany." *Journal of Labor Economics* 30 (1):175–213.

Lewis, Ethan. 2011. "Immigration, Skill Mix, and Capital-Skill Complementarity." *Quarterly Journal of Economics* 126 (2):1029–1069.

———. 2013. "Immigration and Production Technology." *Annual Review of Economics* 5 (1):165–191.

Malchow-Møller, Nikolaj, Jakob Roland Munch, Claus Aastrup Seidelin, and Jan Rose Skaksen. 2013. "Immigrant Workers and Farm Performance: Evidence from Matched Employer-Employee

- Data." *American Journal of Agricultural Economics* 95 (4):819–841.
- Malchow-Møller, Nikolaj, Jakob Roland Munch, and Jan Rose Skaksen. 2011. "Do Foreign Experts Increase the Productivity of Domestic Firms?" *IZA Discussion Paper* (No. 6001):1–44.
- . 2012. "Do Immigrants Affect Firm-Specific Wages?" *The Scandinavian Journal of Economics* 114 (4):1267–1295.
- Ottaviano, Gianmarco I. P. and Giovanni Peri. 2012. "Rethinking the Effect of Immigration on Wages." *Journal of the European Economic Association* 10 (1):152–197.
- Ottaviano, Gianmarco I. P., Giovanni Peri, and Greg C. Wright. 2013. "Immigration, Offshoring and American Jobs." *American Economic Review* 103 (5):1925–1959.
- Parrotta, Pierpaolo, Dario Pozzoli, and Mariola Pytlíková. 2014. 

- “Labor Diversity and Firm Productivity.” *Review of Economics and Statistics* 66:144–179.
- Peri, Giovanni and Chad Sparber. 2009. “Task Specialization, Immigration and Wages.” *American Economic Journal: Applied Economics* 1 (3):135–169.