

Project Seminar

Migration and the Labour Market



Prof. Dr. Herbert Brücker

Department of Economics
Otto-Friedrich-University of Bamberg

Session 1, May 5, 2011

Contents

- International migration: Stylised Facts, Trends, Some Economic and Policy Questions
- What do we know about the labour market effects of immigration?
- What will we investigate in the project seminar?
- Time table and deadlines
- Literature
- Contact details

Part I

International Migration: Stylised Facts, Trends, Economic and Policy Questions

Globalisierung of labour markets

- Incentives for labour migration tend to increase (Freeman, *JEP* 2006)
 - Income differences are high and persistent
 - Transport- and communication costs tend to decline
 - Demographic change and diverging age structures
- Migration tend to increase from countries with
 - low income per capita
 - medium and low human capital endowment
- In 2007, the share of migrants stands at
 - 3 per cent of the global population
 - 9 per cent of the population in the developed countries
 - UN Population Division (2008); World Bank (*WDI* 2011)
- But: migration flows have ceased in the course of financial crisis

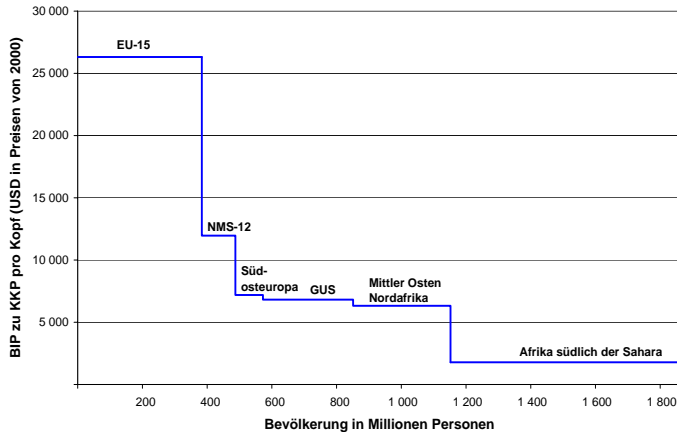
Brain Drain and Brain Gain

- High and increasing migration of high-skilled individuals
 - Migration rate of individuals with tertiary education degree exceeds average migration rate by a factor of 3
 - Increasing share of high skilled emigration from emerging economies (medium income level)
 - But migration rate of high skilled individuals increases continuously in OECD countries
- Main winners are the US, CA and AUS
 - Absorb 70 per cent of high skilled immigration in OECD
 - Almost all other OECD countries (incl. DE) are net senders
- But: sending countries may benefit from high-skilled migration
 - Migration option increases education incentives and level of human capital endowment
 - Return and circular migration
 - Remittances

The winds of change

- Fall of the 'Iron Curtain'
 - Removal of emigration barriers in a region of 400 million people and per capita income of 20 per cent of the EU-15 on average in 1989
- EU Eastern enlargement
 - Integration of 10 Central and Eastern countries (excl. Cyprus and Malta) with a population of 104 millions and a per capita PPP-GDP level of 50 per cent (GDP: 30 per cent) into Common Market
- Institutional change
 - Increasing role of EU in immigration policies ("First Pillar")
 - EU Bluecard and Schengen area
 - Increasing selectivity of national immigration policies in the EU ("Battle for Brains")

The income gap in Europe (PPP-GDP per capita, 2008)



Germany as a destination for migrants

- Germany is the destination with the largest immigrant population after the US and Russia of the world in absolute terms (World Bank, *WDI* 2011)
 - 8 per cent of the German population are foreign citizens
 - 12 per cent of the German population is foreign-born
 - 19 per cent of the German population has a 'migrant background' (Mikrocensus, 2009)
- The net migration rate has declined from 5 per 1,000 in the 1990s to less than 1 per 1,000 since 2000
- The migration balance was negative in 2008 and 2009
- The main migration destinations are the Southern European countries, Ireland and the UK since 2000, but the financial crisis is likely to change this picture

Net immigration rate per 1,000 persons, 1960 - 2008



Quellen: Eurostat; UN Population Division, Statistisches Bundesamt, eigene Berechnungen.

Labour market protection as main objective of German immigration policies

- Labour market protection became an official objective of immigration policies after first oil price shock 1973
- Family reunification, humanitarian immigration and immigration of ethnic Germans ("Spätaussiedler") became main channels of immigration since 1973
- Several attempts of a skill-selective immigration policy failed
 - Reform proposal of "Süssmuth-Kommission"
 - Immigration law 2005
 - Less than 1,000 residence permits for highly qualified p.a.
 - Reform of immigration law 2009

Transitional arrangements for the free movement of labour

- The new Member States
 - EU-8: population 72 millions and PPP-GDP p.c. of 60 % of EU-15, joined May 1, 2004
 - BU and RO: population of 30 millions and PPP GDP p.c. of 35 % of EU-15 joined January 1, 2007
- The institutional setting
 - 2+3+2 formula for transitional arrangements, also for service trade in Germany
 - Selective application: IE, SWE and UK opened first, AT and DE last
- The migration experience so far
 - 2.4 million immigrants from EU-8 reside in EU-25, net immigration: 210,000 persons p.a. since Enlargement
 - Diversion: Before enlargement DE and AT absorbed 60-70 % of immigrants, since enlargement IE and UK absorb 70 %

Two unintended consequences of labour market protection

- ① Low education level of immigrant population
 - Average education of immigrant population in Germany is
 - considerably below that of native population in Germany
 - considerably below that of average immigrant population in OECD countries
 - Similar or below that of native population in countries of origin
- ② Ageing and a rapidly declining labour force
 - Without further migration the potential labour force will decline in Germany from 44.5 millions (2010) to 27 millions (2050)
 - A net immigration of 200,000 persons p.a. can stabilise the potential labour force at 36 millions in 2050 (Fuchs/Söhnlein, 2008)

Why protection of the labour market?

A political opinion

"Der Staat ist verpflichtet, seine Bürger und Bürgerinnen zu schützen, er ist verpflichtet zu verhindern, daß Familienväter und Frauen arbeitslos werden, weil Fremdarbeiter zu niedrigen Löhnen ihnen die Arbeitsplätze wegnehmen."

"The government is obliged to protect its citizens, it is obliged to prevent that family fathers and women become unemployed since foreign workers take away jobs at low wages."

Oskar Lafontaine in Chemnitz, July 4, 2005

Why protection of the labour market?

A textbook opinion

" (...) after World War I, laws were passed severely limiting immigration. Only a trickle of immigrants has been admitted since then. ... By keeping labor supply down, immigration policies tends to keep wages high."

Paul A. Samuelson, *Economics*, 6th edition, New York: McGraw-Hill 1964.

Part II

What do we know about the labour market effects?

The previous state of research

"(...) the effect of immigration on the labour market outcomes of natives is small."

Rahel Friedberg and Jennifer Hunt, *Journal of Economic Perspectives*, Vol. 9, 1995

- A large econometric literature uses the spatial variance of the foreigner share for identification of wage and employment effects
- These studies find on average, that the immigration of 1 per cent of the labour force (roughly 400,000 workers in Germany)
 - increases the unemployment rate by well below 0.1 percentage points (Longhi et al., 2006),
 - wages by less than 0.1 per cent (Longhi et al., 2005)

Two approaches to estimate immigration impact

- Simple regression models, which explain the wage or (un-)employment rates by foreigner share in a region under control for covariates (GDP growth, regional production etc.)
- Estimation of parameters of structural models and simulation of wage effects based on these parameters (production function or factor proportion approach)
 - E.g. estimation of parameters of *CES*- or *Translog*-production functions

A criticism of the state of research ...

"(...) this framework has been troublesome because it ignores the strong currents that tend to equalize economic conditions across regions and cities."

George J. Borjas, *Quarterly Journal of Economics*, Vol. 118, 2003

- Endogeneity problem: migration is concentrated in prosperous regions with high wages and low unemployment
- Solution I: Natural experiments (*Marief Boatlift*, Card, *ILRR* 1990)
- Solution II: Estimation with Instrumental Variables (IVs) (e.g. Pischke/Velling, *RES* 1997)

... and a new approach ...

- Uses the variance of the foreigner share across education and experience cells of the labour market at the national level for identification of wage and employment effects (Borjas, *QJE* 2003; Aydemir/Borjas, *JEEA* 2006)
- Result: immigration of 1% of labour force in the US reduces
 - domestic wages by 0.3 to 0.4 %
 - domestic employment by 0.3 to 0.4 %-points
 - the authors find surprisingly similar elasticities in Canada and Mexico (Aydemir and Borjas, *JEEA* 2006)

... which has been challenged again:

- Two modifications ...
 - Foreigners and natives are imperfect substitutes in the labour market even if they have the same education and work experience
 - adjustment of the physical capital stock
- ... change results dramatically
 - native wages increase by 0.06 % at immigration of 1% of labour force in US
 - while immigrant wages fall by 0.6% (Ottaviano/Peri, *NBER WP* 2006; 2008)
 - Empirical criticism by Borjas/Grogger/Hanson (*NBER WP* 2008)

What can we learn from this?

- The important conclusions from the US literature:
 - The assumption that regional labour markets are closed economic units is questionable
 - Foreigners (immigrants) and natives need not to be perfect substitutes in the labour market even if they have the same education and work experience
 - Adjustment of other markets, particularly capital markets, is relevant
- Findings and experience from US can however not transferred one to one to Europe
 - Other wage-setting institutions and welfare state require consideration of links between migration, wage-setting and unemployment

European studies

- Estimation of Borjas (*QJE* 2003) or Ottaviano/Peri (*NBER* 2006) models in DE, UK and ESP in Deutschland, GB und Spanien (Bonin, *IZA DP* 2005; D'Amuri et al., *EER* 2010; Felbermayr et al. 2008; Manacorda et al., 2006)
- Consideration of unemployment in separate regressions (D'Amuri et al., *EER* 2010)
- Simultaneous estimation of wage and employment effects in structural model with wage rigidities (Brücker/Jahn, *ScJE* 2011)
- These studies have in common that they find only moderate wage and unemployment effects

Part III

What will we do in the project seminar?

A classical question

- What is the impact of immigration on wages and (un-)employment?
- Consideration of imperfect labour markets

Analysing the labour market effects

- Analyse the effects of immigration on wages and employment on specific groups in the labour market which are distinguished inter alia by skills, work experience, natives and foreigners
- Systematic consideration of unemployment
- Based on data from IAB for Germany (1980-2004), which has been derived from individual social security data of the unemployment insurance system

Tasks ahead of us

- 1 Review of state of research
- 2 Definition of research question
- 3 Decision on research method
- 4 Data collection
- 5 Loading data and data description
- 6 Estimation of econometric model (simple regression model)
- 7 If possible, estimation of structural model
- 8 Discussion of estimation results
- 9 Drafting the research paper
- 10 Presentation of findings in class

What kind of support do you have?

- (Some) literature will be provided as pdf
- Provision of data
- (Some) assistance in work with STATA
- Advise in estimation of econometric model
- Discussion of findings and problems in class

What have you to do?

- Reading of literature and collection of additional literature
- Control of data
- Get familiar with STATA or other software (e.g. EViews)
- Descriptive statistics
- Estimation of model following the literature
- Presentation of findings
- Drafting the paper

Literature: Classical contributions

- Friedberg, R., J. Hunt (1995), The impact of immigration on host country wages, employment and growth, *Journal of Economic Perspectives*, Vol. 9, pp. 23-44.
- Card, D. (1990), The Impact of the Mariel Boatlift on the Miami Labor Market, *Industrial and Labor Relations Review*, Vol. 43, No. 2, pp. 245-257.
- Hunt, J. (1992), The Impact of the 1962 Repatriates from Algeria on the French Labor Market, *Industrial and Labor Relations Review*, Vol. 45, pp. 556-572.
- Borjas, G.J., R. Freeman, L. Katz (1997), Searching for the Effect of Immigration on the Labor Market, *American Economic Review*, Vol. 86, No. 2, pp. 246-251.
- Pischke, J.S., J. Velling (1997), Employment effects of immigration to Germany: an analysis based on local labor markets, *Review of Economics and Statistics*, Vol. 79, pp. 594-604.

Literature: The Borjas/Ottaviano-Peri controversy

- Borjas, G.J. (2003), The Labor Demand Curve is Downward Sloping: Reexamining the impact of immigration on the labor market, Quarterly Journal of Economics, 2003, pp. 1335 - 1374.
- Aydemir, A., G.J. Borjas (2006), Cross-country variation in the impact of international migration: Canada, Mexico, and the United States, Journal of the European Economic Association (JEEA), Vol. 5, No. 4, pp. 663-708.
- Ottaviano, G., G. Peri (2006), Rethinking the Gains from Immigration: Theory and Evidence from the U.S., NBER WP 12497
- Borjas, G.J., J. Grogger and G.H. Hanson (2008), Imperfect Substitution between Immigrants and Natives: A Reappraisal, NBER WP 13887
- Ottaviano, G., G. Peri (2008), Immigration and National Wages: Clarifying the Theory and the Empirics, NBER WP 14188

Literature: Recent German and European studies

- D'Amuri, F., Ottaviano, G., G. Peri (2008/2010), The Labor Market Effect of Immigration in Western Germany in the 1990s, NBER WP 13181, published in: European Economic Review
- Felbermayr, G., Geis, W., Kohler, W. (2008), Restrictive Immigration Policies in Germany: Pains and Gains Forgone?, CESifo Working Paper 2316
- Manacorda, M., Manning, A., Wadsworth, J. (2006), The Impact of Immigration on the Structure of Male Wages: Theory and Evidence from Britain, IZA DP 2352
- Brücker, H., E. Jahn (2011), Migration and Wage-Setting: Reassessing the Labor Market Effects of Migration, Scandinavian Journal of Economics (forthcoming)

Obligatory (!) literature for next meeting:

- Friedberg, R., J. Hunt (1995), The impact of immigration on host country wages, employment and growth, *Journal of Economic Perspectives*, Vol. 9, pp. 23-44.
- Borjas, G.J., R. Freeman, L. Katz (1997), Searching for the Effect of Immigration on the Labor Market, *American Economic Review*, Vol. 86, No. 2, pp. 246-251.
- Pischke, J.S., J. Velling (1997), Employment effects of immigration to Germany: an analysis based on local labor markets, *Review of Economics and Statistics*, Vol. 79, pp. 594-604.
- Borjas, G.J. (2003), The Labor Demand Curve is Downward Sloping: Reexamining the impact of immigration on the labor market, *Quarterly Journal of Economics*, 2003, pp. 1335 - 1374.
- Ottaviano, G., G. Peri (2006), Rethinking the Gains from Immigration: Theory and Evidence from the U.S., NBER WP 12497

Time table and deadlines:

- May 5: Introduction
- May 19: Discussion of state of literature
- June 9: Introduction to STATA (1)
- June 23: Introduction to STATA (2)
- July 7: Discussion of problems and results (1)
- July 21: Discussion of problems and results (2)
- July 28: Presentation in class
- August 15: Submission of paper

Contact details

- Email: herbert.bruecker@iab.de
- fon: 0911-179-3807
- Secretary at IAB: Ms Sabine Distler
- email: sabine.distler@iab.de
- fon: 0911-179-3238
- Secretary in Bamberg: Ms Petra Koch
- email: sekretariat.wirtschaftspolitik@uni-bamberg.de
- fon: 0951/863-2633