Introductory Migration Economics

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Overview

- Language: English. Audience: Max 20 participants.
- Format: 3 lectures + 1 workshop + 10 presentation sessions.
- Time and room: Wednesdays 16:00–18:00, GD 03/218.
- Examination: Presentation and participation.
- Recommended text: Bodvarsson & Van den Berg (2013), *The Economics of Immigration: Theory and Policy(Not Compulsory; slides stand alone).*

Assessment and Contact

- Grading: Presentation 80% | Participation 20%.
- Topic allocation via Moodle; uploads as PDF one day before presentation.
- Communication: ali.demir-l1f@ruhr-uni-bochum.de.
- Office hours by appointment.

Schedule (WS 2025/26)

Date	Type	Content
15 Oct 2025	Lecture 1	Introduction, Facts and Definitions
22 Oct 2025	Lecture 2	Foundations and Integration
29 Oct 2025	Lecture 3	Causality, Empirical Designs and Labor Market Models
05 Nov 2025	Workshop	Mariel Boatlift
12 Nov 2025	Presentations	Session 1
19 Nov 2025	Presentations	Session 2
26 Nov 2025	Presentations	Session 3
03 Dec 2025	Presentations	Session 4
10 Dec 2025	Presentations	Session 5
17 Dec 2025	Presentations	Session 6
24 Dec 2025	—	No class (Christmas)
31 Dec 2025	—	No class (New Years Eve)
07 Jan 2026	Presentations	Session 7
14 Jan 2026	Presentations	Session 8
21 Jan 2026	Presentations	Session 9
28 Jan 2026	Presentations	Session 10
04 Feb 2026	Backup	

Workshop: Case Study of Mariel Boatlift

- **Mandatory Readings:**
  - Card, D. (1990). The impact of the Mariel boatlift on the Miami labor market. Ilr Review, 43(2), 245–257.
  - Borjas, G. J. (2017). The wage impact of the Marielitos: A reappraisal. Ilr Review, 70(5), 1077–1110.
  - Clemens, M. A., & Hunt, J. (2019). The labor market effects of refugee waves: reconciling conflicting results. ILR Review, 72(4), 818–857.
  - Peri, G., & Yasenov, V. (2019). The labor market effects of a refugee wave: Synthetic control method meets the Mariel boatlift. Journal of Human Resources, 54(2), 267-309.
- **Supplementary Material:**
  - Documentary: Against Wind and Tide: A Cuban Odyssey (1981)

Part I - Content:

- Definitions, migration categories: Why they differ?
- Decision to Migrate: What is the motivation?
- Why migration matters globally and for Germany?

What is migration?

- Cross-border vs. internal; **immigration** vs. **emigration**; stocks vs. flows.
- Types: voluntary/forced, temporary/permanent, regular/irregular, family/labor/asylum, high/low-skilled.
- **Refugee** under 1951 Convention[1] vs. **migrant**: legal protection differs; economic analysis overlaps in costs/benefits.

[1] The 1951 Refugee Convention defines who is a refugee and the rights they hold. It protects those fleeing persecution for reasons such as race, religion, nationality, social group, or political opinion. Its key rule is non-refoulement: refugees cannot be sent back to danger. The 1967 Protocol removed its original time and geographic limits, making it the foundation of today's international refugee protection system.

Definitions of "Migrant"

- Germany
  - Person with *migration background* if self or at least one parent not born with German citizenship. Includes foreigners, naturalized citizens, repatriates, children of migrants. Legal term: *foreigner* = no German passport.
- EU
  - International migrant = someone who changes country of usual residence for $\geq$12 months. Shorter stays = short-term migrants.
- USA
  - *Foreign-born population* = anyone not a U.S. citizen at birth. Includes naturalized citizens, permanent residents, temporary migrants, refugees, unauthorized migrants.
- UN
  - International migrant = any person who changes country of usual residence, regardless of legal status or reason. Long-term $\geq$12 months, short-term 3–12 months.

Why migration matters for international economics

Global efficiency

- Moving labour to higher–productivity places raises world output; potential gains exceed those from marginal tariff cuts. Same worker earns much more across borders due to institutions and agglomeration.

Development

- Finance education/health, and can exceed FDI in many origin countries. Diasporas lower trade and FDI frictions via networks, trust, and information.

Human capital

- Brain drain vs. brain gain: emigration can raise education at origin; returnees transmit know-how. Cross-border knowledge flows and collaboration boost global innovation.

Demographics

- Migration reallocates labour across ageing and youthful regions; helps smooth asymmetric shocks.

Sources: Clemens (2011, JEP); Docquier & Rapoport (2012, JEL); Borjas (2014); OECD & World Bank remittance data; Kerr et al. (2016, JEP).

Why migration matters for domestic economics

Labour markets

- Wage and employment effects; fills shortages; capital adjustment; productivity.

Demand, prices, and housing

- Higher local demand raises output and variety; rents can rise in tight markets.

Public finance

- Net fiscal impact depends on age at entry, skills, employment, and tax–benefit rules; younger inflows support PAYG pensions.

Firm dynamics and innovation

- Entrepreneurship, export entry, and patenting respond to migrant skills and diversity.

Long-run growth and cohesion

- Second generation outcomes feed into human capital and tax bases; policy design shapes integration and distributional impacts.

Sources: Dustmann, Schönberg & Stuhler (2016, JEP); Card (teaching notes); Peri (2012, JOLE); Kerr & Lincoln (2010, JLE); OECD IMO.

Categories

- **Economic Migrants**
  - Labour Migrants
- **Family Migrants**
  - Family Reunification
- **Educational Migrants**
  - Student Migrants
- **Forced Migrants**
  - Refugees
  - Asylum Seekers

Economic (Labour) Migrants

Definition

- Primary motive: employment and income. Temporary or permanent; intra-EU free movers or third–country nationals.

Main legal channels in Germany/EU

- EU free movement (no permit for EU/EEA/CH).
- Third–country: Skilled Immigration Act routes, EU Blue Card, *Chancenkarte* (points-based).[2]

Rights & constraints

- Work authorization tied to qualification recognition; portability varies by permit.
- Family reunion and settlement options depend on earnings/contract duration.

Measurement hints

- Identify by permit purpose or sector of first job; avoid mixing with family/education permits.

[2] Residence Act (AufenthG) and 2023/24 Skilled Immigration Act reforms.

Family Migrants

Definition

- Entry to join spouse/parent or for marriage/partnership; often follows a prior migrant.

Main legal channels

- Family reunification under EU/DE rules; conditions on income, housing, and basic language.[3]

Rights & constraints

- Residence tied to sponsor initially; access to work usually granted but timing can vary.
- Integration/language courses; path to permanent residence and naturalisation.

Empirical predictions

- Slower initial labour market entry; strong convergence with language/childcare support.
- Household decisions: fertility and secondary earner labour supply margins.

[3] EU Family Reunification Directive; AufenthG §§27–36.

Student Migrants

Definition

- Tertiary students enrolling in host-country institutions; potential transition to skilled work.

Main legal channels

- Study visa/residence for education; limited work hours; post-study job-search period; Blue Card on qualifying job.[4]

Empirical predictions

- High human-capital inflow; strong earnings upon retention; boosts innovation in STEM. Lower integration problems: After studying more than a few years in the country.

Design angles

- Tuition/visa reforms, scholarship shocks, graduation timing discontinuities.

[4] AufenthG §§16b/16d; typical limits: 120 full or 240 half days; 18-month post-study search.

Forced Migrants: Refugees & Asylum Seekers

Definition

- Protection–seeking due to persecution, conflict, or serious harm.

Difference:

- Refugee: Legal status under the 1951 Refugee Convention/1967 Protocol: well–founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group, or political opinion; outside country of nationality and unable or unwilling to avail of protection.
- Key principles: non–refoulement; access to rights under domestic incorporation of the Convention.
- Asylum Seeker: Individual who has applied for international protection and awaits a decision; outcome may be refugee status, subsidiary/other protection, or rejection.

Process & placement

- Asylum procedure with recognition rates; initial reception; dispersal via *Königsteiner Schlüssel*.
- Work access varies: immediate under TPD; staged for asylum seekers; recognition of prior qualifications is key.

Empirical patterns

- Employment ramps up over 3–7 years; strong heterogeneity by education, trauma, childcare.
- Local impacts depend on capacity: schools, housing, caseworker loads.

International and EU

Refugee status

- Recognition under 1951 Convention; rights depend on national transposition and EU acquis.

Subsidiary protection (EU)

- Granted when criteria for refugee status are not met but there is a real risk of serious harm (e.g., death penalty, torture, indiscriminate violence).
- Similar core protections; often different duration/family reunification rules.

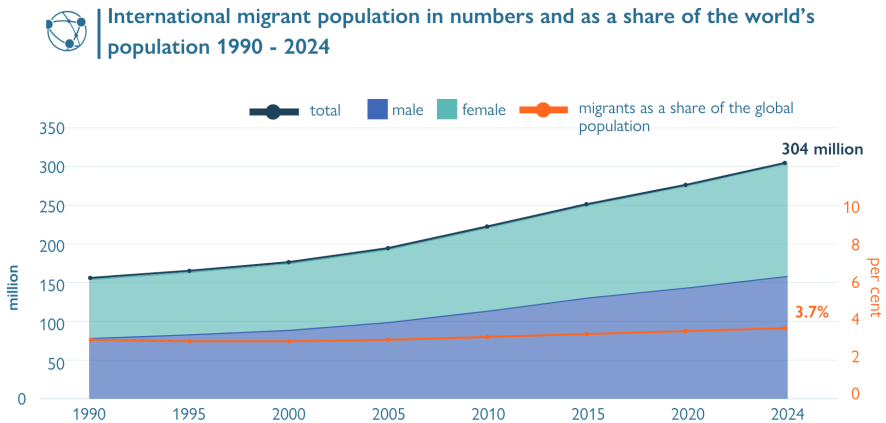
Temporary Protection Directive (TPD, 2001/55/EC)

- Mass influx tool providing immediate, collective protection with access to residence, work, education, and social support.
- First activated March 2022 for people fleeing Ukraine; currently extended in the EU.

Operational distinctions (typical)

- Right to work: immediate under TPD; varies for asylum seekers; granted on recognition for refugees/subsidiary protection.
- Length of stay and travel documents: status–specific; renewal rules matter for integration incentives.

Visual: International Migrant Population: Total Stock



Europe 2000–2025: Selected Inflows

EU enlargements (2004/2007)

- Free movement triggered large intra–EU labour migration (Poland, Romania, Bulgaria) with staggered transitional controls.

Syrian conflict and mixed flows (2014–2016)

- Peak asylum applications in Europe in 2015; sizable shares from Syria, Afghanistan, Iraq; frontline and secondary movements via Eastern/Central Mediterranean.

Venezuelan displacement (post–2015, Americas-focused)

- Multi–million regional displacement affecting labour markets and services in LAC; growing extra–regional movements.

Afghanistan (2021)

- Evacuations and subsequent protection needs; European resettlement/humanitarian admissions limited relative to need.

Ukraine (since 2022)

- First–ever EU TPD activation for a multimillion–person displacement; rapid labour–market and school integration under temporary protection.

Germany focus: Contrasts 2015/16 vs. 2022–2025

2015/16 asylum surge

- Large increase in first–time asylum applications; queueing and registration frictions; dispersal via Königsteiner Schlüssel.
- Identification: event–study with staggered exposure; synthetic controls for high-exposure localities; attention to internal migration responses.

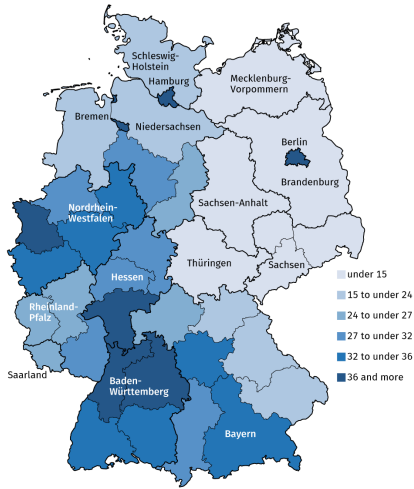
2022–2025 Ukraine under TPD

- Immediate residence and work rights; sizeable female/minor composition; integration channeled via schools and recognition policies.
- Identification: compare TPD vs. asylum cohorts; leverage policy discontinuities (activation/extension dates) and administrative allocation.

Why the episodes differ for research

- Legal channel (TPD vs. asylum), processing time, access to work, household composition, and return options shift outcomes and mechanisms.

Proportion of Migrants by German Federal States



First, 1.5, and second generation: definitions

First generation

- Foreign–born individuals residing in the host country.

1.5 generation

- Foreign–born who arrived as children; often grouped with second generation for outcomes like language acquisition.

Second generation

- Native born with at least one foreign–born parent (EMN/OECD usage); sometimes further split into two foreign–born parents vs. mixed.

Measurement cautions

- Data sets differ: nationality vs. country of birth vs. "migration background"; harmonize before pooling.
- Education surveys (e.g., PISA) use student and parents' birthplaces; labour surveys (e.g., ELS) may use citizenship.

Empirical implications of generational status

Selection and exposure

- First generation: selection on observables and unobservables; partial transferability of human capital; language acquisition after schooling.
- Second generation: native schooling and language; outcomes shaped by neighbourhoods, parental resources, and integration policy.
- Empirical angles: quasi-random timing across regions, dispersal policies, school entry cutoffs, labour-market access rules, housing capacity constraints.

Design choices

- Define treatment consistently (e.g., foreign–born share vs. foreign–background share).
- Separate short–run arrival shocks from long–run composition effects.
- Report heterogeneity by age-at-arrival, origin, and parental education.

Outcomes to track

- Education (attainment, tracking), labour (employment, wages, occupations), civic participation, intermarriage, and spatial mobility.

Some Facts: World and Germany

World since 1960

- Global migrant stock rose from ∼2.6% to ∼3.6% of world population.
- Drivers: income gaps, cheaper travel/communication, demographics, conflict, policy.
- Flows are pro-cyclical; composition shifts with crises and policy gates.

Germany since 1990

- Foreign-born share roughly doubled; marked rise since 2010.
- Key episodes: EU enlargements (2004/07), asylum surge (2015/16), Ukraine under TPD (since 2022).
- Employment of foreign nationals trended up; gaps narrow with years-since-arrival.

Sources: UN DESA migrant stock; Destatis; BA/IAB labour statistics; OECD IMD.

Spatial concentration and cohorts

Where migrants live

- Concentrated in large metros and network hubs; within-country dispersal rules shape initial placement.
- Local exposure is uneven, which matters for identification and policy load.

Who arrives

- Cohort composition differs by episode (education, age, gender).
- Age-at-arrival predicts language and schooling trajectories; recognition of qualifications affects employment paths.

Measurement cautions

- Distinguish foreign-born vs. foreign citizen vs. "migration background."
- Separate *stocks* from *inflows*; report units and sample on each figure.

Sources: Dustmann–Schönberg–Stuhler (JEP 2016); Borjas (JEL 1994); Card (2012 lecture notes).

Demographic Effects

Facts

- Fertility below replacement for decades; rapid ageing raises old-age dependency. **1.35** children per woman in **2024**.[5]
- PAYG pensions: fewer contributors per retiree increase required contributions or reduce benefits. Old-age dependency ratio *(65+/working-age)* around **37% in 2024**; rising further.[6] [7]

Policy set

- Later retirement, productivity growth, activation of domestic labour, pension parametric reform, **and** net immigration to enlarge the contributor base.

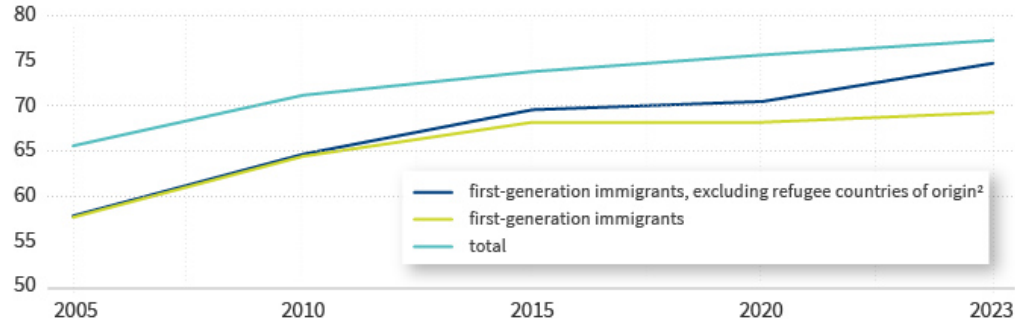
Economics

- Migration cannot offset ageing alone but eases bottlenecks and supports tax bases if entrants integrate into skilled employment; **sustained labour inflows** help stabilise the contributor base while other reforms work.

Sources: EC Ageing Report 2024; Destatis projections; OECD IMD; JEP 2016 review.

[5] Destatis press release, 17 Jul 2025.
[6] World Bank/UN WPP, 2024 update (via OWID/TE).
[7] European Commission, *2024 Ageing Report*, Germany fiche.

Fig. 1: Rising employment rates[1] - especially for non-refugee migrants by migration status 2005 to 2023, in percent



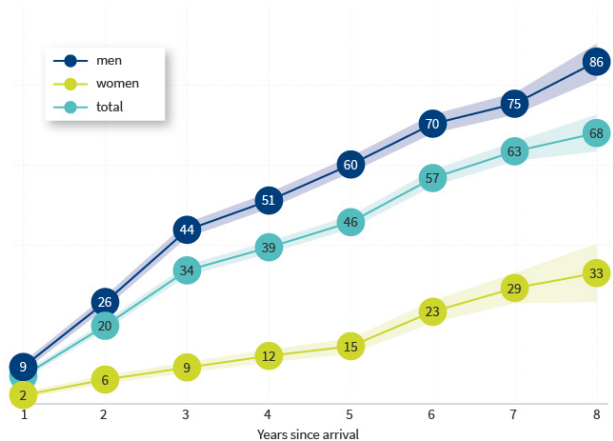
[1]Proportion of employed persons in the working-age population (15 to 64 years)

[2]Afghanistan, Iraq, Iran, Pakistan, Syria, Ukraine

Source: DESTATIS (Statistisches Bundesamt - Federal Statistical Office of Germany): Bevölkerung mit Migrationshintergrund. Ergebnisse des Mikrozensus 2005, 2010, 2015, 2020 and 2023 (Population with migration background – results of the Microcensus). © IAB

Fig. 3: Employment rate of working-age refugees (15 to 64 years) by gender and length of stay

in percent



Source: IAB-BAMF-SOEP Befragung von Geflüchteten (Refugee Survey) 2016 bis 2022, provisional weightings. © IAB

Labour market capacity and growth

Persistent vacancies and skill gaps

- **1.28 million** job offers in Q3 **2024** (IAB/Bundesagentur für Arbeit), still high in long-run comparison despite cyclical cooling.[8]
- Shortages in health care, engineering, IT, construction, education and care services.

Role of migration

- OECD: Germany received **669k** new long-term/permanent immigrants in **2022**; migration supports labour supply and entrepreneurship.[9]
- *Policy response*: 2023/24 Skilled Immigration Act and *Chancenkarte* points route to widen legal labour channels.[10]

Objective assessment

- Migration **cannot** solve ageing alone, but **does** ease bottlenecks, supports tax bases, and complements activation, training, and productivity policies.[11]

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[8] BA, *The German Labour Market in 2024*, Sect. 5; see also Reuters coverage of IAB quarterly numbers, 5 Dec 2024.
[9] OECD, *International Migration Outlook 2024*, Germany note and statistical annex.
[10] BMI press note on *Chancenkarte*, 31 May 2024; Make-it-in-Germany overview of the new Skilled Immigration Act.
[11] See also synthesis in Dustmann, Schönberg & Stuhler (JEP 2016) on heterogeneous labour-market effects and adjustment margins.

Part II - Content:

- Selection with the Roy model;
- Linking human capital model to integration paths;
- Discussion of Chiswick vs. Borjas with cohort effects;
- Wages and assimilation by subgroup.

Migration Decisions

Selection

- People move when expected gains net of costs exceed staying. Gains differ by skills because places reward skills differently.

Networks

- Prior migrants reduce cost and risk of moving; creates path dependence and spatial concentration.
- Bilateral flows scale with origin/destination mass and fall with dyadic frictions (distance, border, language, colonial ties).
- Networks create path dependence via information and job matching; policy acts as time-varying bilateral resistance.

Policy

- Legal channels and recognition of qualifications shift costs and thus who moves.

Sources: Borjas (1994, JEL), Card's notes (2012), Bodvarsson & Van den Berg (2013, chs. 2–3).

Migration Decisions: Roy Model

Goal: Explain how individuals sort across locations/sectors when returns to skills differ, and what that implies for observed wage distributions and migrant selection.

Applications:

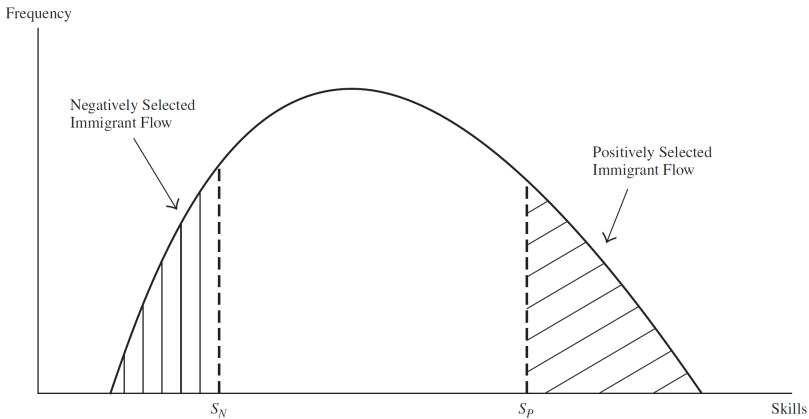
- Internal vs. international migration; sectoral choice; self-employment vs. wage work.
- Who migrates where (positive vs. negative selection); consequences for wages/productivity.

Key insight: People choose the option with the *highest return net of costs*. If places/sectors reward the same skills differently, choices are *selective*, not random.

Positive vs. Negative selection (Borjas, 1987)

FIGURE 8-8 **The Distribution of Skills in the Source Country**

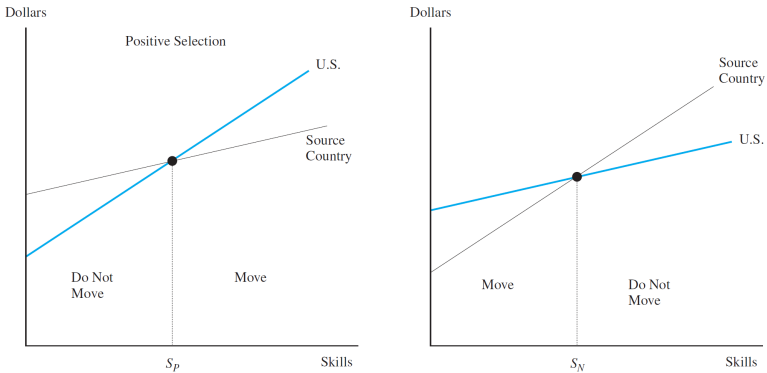
The distribution of skills in the source country gives the frequency of workers in each skill level. If immigrants have above-average skills, the immigrant flow is positively selected. If immigrants have below-average skills, the immigrant flow is negatively selected.



Positive vs. Negative selection (Borjas, 1987)

FIGURE 8-9 **The Self-Selection of the Immigrant Flow**

(*a*) If the rate of return to skills is higher in the United States than in the source country (so that the wage-skills line is steeper in the United States), the immigrant flow is positively selected. Workers with more than s_P efficiency units find it profitable to migrate to the United States. (*b*) If the rate of return to skills is lower in the United States, the immigrant flow is negatively selected. Workers with fewer than s_N efficiency units emigrate.



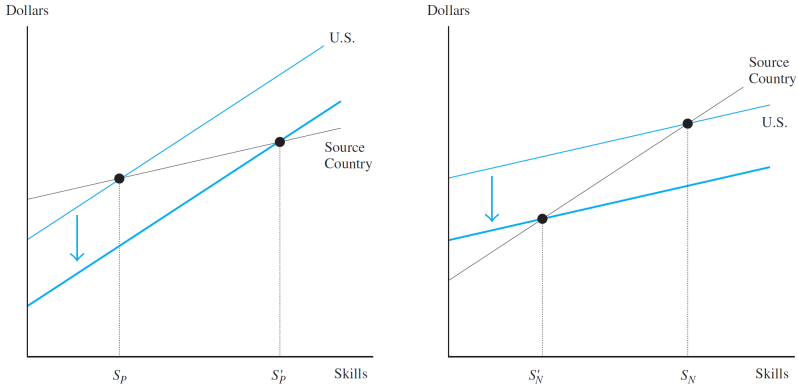
(*a*) Positive Selection

(*b*) Negative Selection

A Shock Response in Roy Model: Decline in Income

FIGURE 8-10 **The Impact of a Decline in U.S. Incomes**

If incomes in the United States fall (or if there is an increase in migration costs), the wage-skills line for the United States shifts down and fewer workers migrate. The decline in U.S. incomes, however, does not change the type of selection that characterizes the immigrant flow.



(*a*) Positive Selection

(*b*) Negative Selection

From Roy to Data

Entry wages: reflect selection *and* transferability of foreign skills.

Cohorts: each arrival wave has different origin mix, education, macro conditions.

Implications

- High returns to skill at destination $\Rightarrow$ stronger positive selection (higher entry wages).
- Low transferability (language/licensing) $\Rightarrow$ low entry wages but steeper growth if investments pay off.
- Cross-sections mix cohorts $\Rightarrow$ need cohort tracking to measure assimilation.

Comparative Statics and Policy

- **Lower moving costs.** When visas, fees, risks, or paperwork ease, more people migrate and the average newcomer is less extreme on skills than early movers (you attract more "marginal" candidates).
- **Higher skill payoffs at destination.** If high-skill wages rise or a points-based route targets qualifications, positive selection strengthens: arrivals are more skilled on average and have higher entry wages.
- **Bigger origin–destination income gap.** A larger gap mainly raises the number of movers; whether it also changes the skill mix depends on how strongly the destination rewards education and experience relative to the origin.
- **Better transferability of foreign credentials.** Recognition of degrees, licensing reform, and language certification make more of migrants' human capital count on arrival, which both strengthens positive selection and speeds earnings growth after arrival.

Earnings Assimilation: Chiswick vs. Borjas

Chiswick (1978)[12]

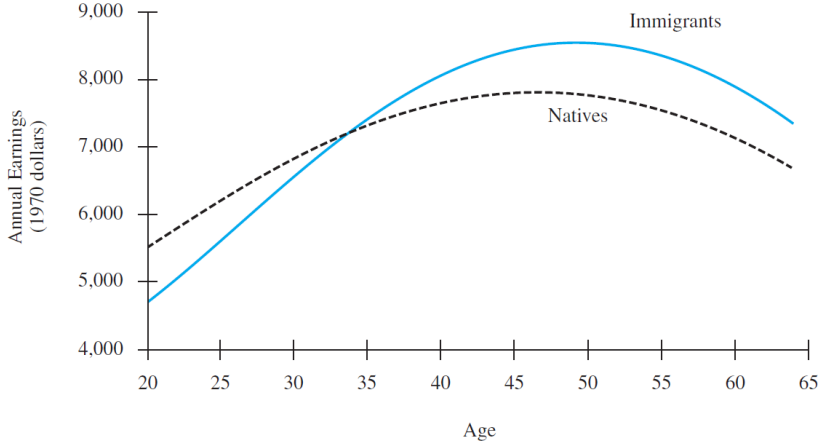
- Uses a single cross-section; compares immigrants by years-since-migration (YSM).
- Finds immigrants start with earnings gaps but *converge* toward natives as YSM rises.

Borjas (1985; 1994)[13]

- Points out cross-sections *confound* assimilation with *cohort quality* (origin mix, education, macro conditions).
- Recommends tracking *arrival cohorts* over time (cohort fixed effects).
- Finds *slower* earnings convergence once cohort differences are netted out.

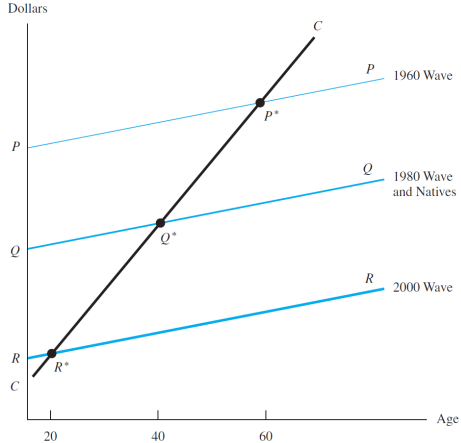
[12] B.R. Chiswick (1978), *Journal of Political Economy*.
[13] G.J. Borjas (1985), *Journal of Labor Economics*; Borjas (1994), *Journal of Economic Literature*.

The Age-Earnings Profiles of Immigrants and Natives - Chiswick 78'



Notes: Census data from 1970 show immigrant men earn about 15% less than natives at entry (age 20). Their age-earnings profile is steeper, and after 14 years they overtake natives. After 30 years, immigrants earn about 10% more. Cross-sectional data suggest strong upward mobility, as long-settled immigrants earn far more than recent arrivals. location.

Cohort Effects and the Immigrant Age-Earnings Profile - Borjas



Notes: 1960 immigrants are skilled with profile PP; 1980 immigrants match natives with profile QQ; 2000 immigrants are unskilled with profile RR. All arrive at 20. The 2000 census observes newcomers at R, 1980 arrivals at age 40 at Q, and 1960 arrivals at age 60 at P. This cross section falsely implies faster immigrant earnings growth than natives.

Cohort Effects - Borjas

- Cross-sectional data show that earlier immigrant waves earn more than recent arrivals. An assimilationist view attributes this to U.S.-specific skill acquisition, implying new arrivals will eventually catch up. The problem is that this inference comes from a single snapshot, which mixes different immigrant cohorts. For example, the 1960 cohort is highly skilled (profile PP), the 1980 cohort has skills similar to natives (profile QQ), and the 2000 cohort is the least skilled (profile RR). Each cohort's profile is parallel to natives, so there is no true convergence.
- The 2000 census captures only one point for each cohort: R for the 2000 arrivals at age 20, Q for the 1980 arrivals at age 40, and P for the 1960 arrivals at age 60. Connecting these points yields line CC, which is steeper than the native profile and crosses it at age 40. This makes it appear that immigrants catch up and overtake natives after 20 years, though no cohort actually does.
- These misleading results come from **cohort effects**. They can arise from changes in immigration policy that alter the skill mix of arrivals or from selective return migration, where lower-earning immigrants leave the U.S. Over time, earlier waves are "filtered," leaving higher earners behind, while newer waves still include future emigrants. As a result, cross-sectional correlations between earnings and years since migration do not measure true assimilation.

Who is right?

Consensus

- *Borjas's measurement critique holds*: cross-sectional YSM overstates assimilation if cohorts differ.
- *Chiswick's mechanism holds*: immigrants do improve as host-country human capital accumulates, but the *true pace* is more modest in cohort-based estimates.

Evidence:

- Cohort/panel re-analyses: *within-cohort* earnings growth is positive but smaller than cross-section profiles.[14]
- Reviews stress identification and composition:[15]
- Heterogeneity matters: age-at-arrival, transferability of skills, licensing barriers, and selective emigration shape paths. Some groups show faster growth (e.g., those with initially low transferability who invest heavily in host-specific skills), while heavily regulated occupations or weak credential transfer slow convergence.

[14] E.g., Duleep & Dowhan (2002), *Research in Labor Economics*; Lubotsky (2007), *JPE*.
[15] Abramitzky & Boustan (2017, 2022 overviews); Dustmann, Schönberg & Stuhler (2016), *JEP*.

Summary & Takeaways (Roy, selection, and integration)

Decision

- Migrate if expected *destination return* − *origin return* − *costs* > 0.

Selection

- Sign of selection hinges on *relative returns to skill* across places; strength rises with return gaps and falls with moving costs.
- Networks lower costs $\Rightarrow$ more movers and (typically) weaker selection at the margin.

Integration Link (Human Capital)

- Transferability matters: recognition, licensing, and language make foreign human capital pay off, speeding earnings growth.

Policy

- Change costs (visas, matching) or returns (points/Blue Card, recognition) to shape *both* volumes and skill mix; expect different short- vs. medium-run wage effects as capital adjusts.

Part III — Content:

- Empirical designs, why do they differ and how to analyze them;
- Diagnostics;
- Partial vs. general equilibrium and distributional incidence (wages vs. prices).

Why do estimates differ across studies?

Design targets differ

- *National skill-cell*: compares wage changes across education–experience cells at national level.
- *Pure spatial*: compares places with different immigrant exposure.
- *Mixed*: combines region & skill variation.

Parameters differ

- Relative vs. total effects; short- vs. medium-run adjustment; capital responses.

Assumptions that often fail

- Homogeneous native labor-supply responses.
- Assigning immigrants to "measured" skill cells despite occupational downgrading.

Data choices matter

- Stocks vs. flows, exposure definitions, internal migration controls, origin mix, time window.

Measuring Migration Exposure:

Stocks (immigrant share at t)

- Captures cumulative presence & composition; risks mixing old and new arrivals.

Inflows (arrivals over $[t-1, t]$)

- Cleaner shock measure; better for event studies; noisier in small areas.

Shift–share IV tips

- Use leave-one-out origin weights; report donor origins; check weak-instrument risk.

Integration: concepts and margins

What is integration?

- Economic: employment, wages, occupations, entrepreneurship, taxes–transfers.
- Social: language proficiency, education, civic participation, intermarriage.

Key margins

- *Speed*: years since arrival; policy frictions (work access, recognition).
- *Quality*: job–skill match, credential transferability, language.
- *Heterogeneity*: age at arrival, origin, education, gender, legal channel.

Identification pitfalls

- Selective location and selective return; cohort composition shifts.

Supply–Demand Mechanics

Short run

- Inflow raises labour supply in specific *skill cells* or tasks.
- Wages adjust by substitutability vs. complementarity with natives; capital initially fixed.

Medium run

- Capital deepening, firm entry, and product variety expand *labour demand*.
- Native task reallocation and occupational upgrading mitigate wage pressure.

Which wages change?

- Substitutes: downward pressure; complements: upward; neutral if adjustment absorbs.
- Local vs. national effects differ with mobility and general equilibrium.

Policy levers

- Speed of work authorization; credential recognition; language and matching services.

Human Capital Theory:

Decomposing earnings gaps

- *Portable capital*: general education/experience; partial transfer on arrival.
- *Non-portable capital*: language, licensing, local norms, networks.

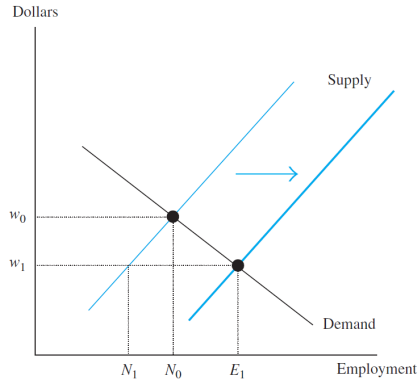
Predictions

- Younger at arrival $\Rightarrow$ faster language and schooling assimilation.
- Regulated occupations $\Rightarrow$ slower convergence without recognition.

Policy mapping

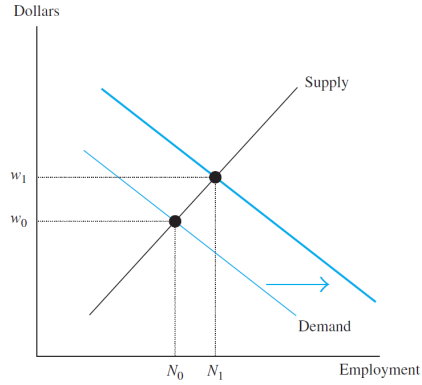
- Language training and credential recognition increase the return to host-specific investment.
- Early work access raises on-the-job learning and speeds integration.

The Short-Run Impact of Immigration - Perfect Substitution



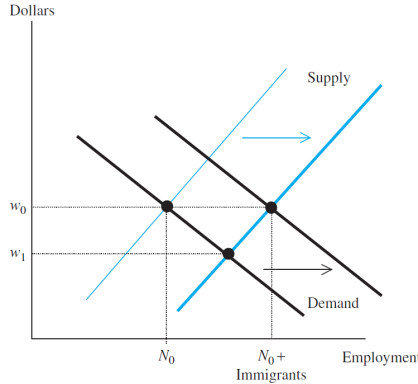
Notes: Immigrants and natives are perfect substitutes, so they compete in the same labor market. Immigration shifts labor supply outward, lowering wages from w0 to w1 and raising total employment from N0 to E1. At the lower wage, native employment falls from N0 to N1.

The Short-Run Impact of Immigration - Complements



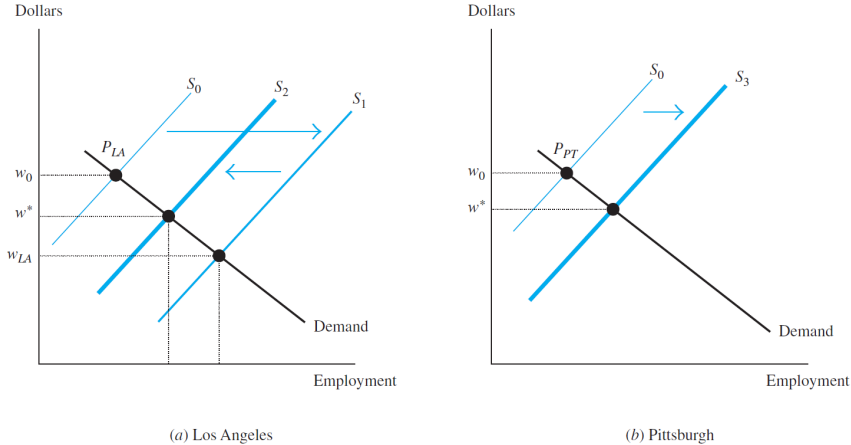
Notes: If immigrants and natives are complements, they do not compete in the same labor market. Here the market reflects supply and demand for natives. Immigration raises native productivity, shifting demand outward despite fixed capital, which increases both native wages and employment.

The Long-Run Impact of Immigration



Notes: Immigrants and natives are perfect substitutes, so they compete in the same labor market. Immigration shifts supply outward, lowering wages from w0 to w1. Over time, capital expands as firms exploit cheaper labor, shifting demand outward. With constant returns to scale, wages return to w0 and native employment returns to its pre-immigration level.

The Native Labor Market's Response to Immigration



Notes: Both markets start at wage w0. Immigration into Los Angeles shifts supply from S0 to S1, lowering the wage to wLA. Some natives move to Pittsburgh, shifting LA supply back to S2 and Pittsburgh supply to S3. Equilibrium is restored at wage w, but all natives earn less regardless of location.

Takeaways

- Integration is driven by host-specific human capital and labour-market adjustment on tasks and capital.
- Chiswick-style YSM profiles overstate assimilation if cohort quality shifts; track cohorts to separate mechanisms.
- Policy that accelerates host-capital accumulation and matching speeds convergence with limited adverse wage effects.

Workshop: Mariel Boatlift

May 1980: The *Mary Evelyn* arrives crowded with Cuban refugees from Mariel during the two–month exodus to Key West. Photo: *Miami Herald*.

What happened?

Before 1980

- Miami: most immigrant-intensive US city; $\sim$35.5% foreign-born; large Cuban diaspora and networks.

Apr–Oct 1980

- Cuba temporarily opens the Port of Mariel; $\sim$125,000 departures in weeks.
- $\sim$50% settle in Miami $\Rightarrow$ local labor force $\uparrow$ $\sim$7–8%; low-skill (no HS) labor supply $\uparrow$ $\sim$18%.

Aftermath

- US–Cuba agreement ends exodus (Oct 1980); integration proceeds amid recession/Volcker disinflation backdrop.

Data & Measurement

Main source

- Current Population Survey (CPS): March ASEC and monthly May/ORG extracts (wages, hours, demographics).

Outcome construction

- Log hourly wages (annual earnings/hours or ORG directly), unemployment, subgroup splits (education, race/ethnicity).

Design choices that matter

- City definitions (MSA boundaries change), control group selection vs. Synthetic Control, very small cell sizes for male non-Hispanic dropouts in Miami.

Card (1990):

Design

- CPS MORG, 1979–1985; Miami vs. LA, Houston, Atlanta, Tampa (difference-in-differences).
- Outcomes: wages & unemployment for less-skilled non-Cubans.

Findings

- Labor force shock $\sim$7%; low-skill content high.
- **No detectable** wage decline for less-skilled non-Cubans; **no rise** in unemployment (including Black workers) through mid-1980s.

Interpretation

- Adjustment via native mobility, sectoral mix, capital, and demand expansion dampened local price effects.

Borjas (2017 reappraisal):

Focus & data

- Narrow subgroup: male, non-Hispanic *dropouts*; compares March CPS vs. May/ORG.
- Notes $\geq$60% of Marielitos were HS dropouts.

Findings

- Relative wages for Miami dropouts fell $\sim$10–30% in mid-1980s; implied elasticity -0.5 to -1.5.

Sensitivity

- Estimates hinge on control choice, CPS extract, and extremely small Miami-cell samples; effects attenuate in ORG and alternative donor sets.

Peri & Yasenov (2019):

Method

- Synthetic Control to match Miami pre-trends using May+ORG CPS; placebo and leave-one-out checks.

Results

- For non-Cuban *no-HS* workers: **no significant** wage or unemployment deviation from synthetic Miami post-1980.
- Benchmarks: total labor $\uparrow \sim 8\%$, dropouts $\uparrow \sim 18\%$; partial-equilibrium predictions imply modest short-run wage effects.

Clemens & Hunt (2019):

What drives the discrepancy?

- Borjas' large negatives arise from **very small** Miami dropout samples and shifts in racial composition within that cell.

Reassessment

- No negative effect for US Hispanics; unemployment effects ≈ 0 across specifications.
- Plausible short-run wage impact in the narrow cell ranges -2% to -8% but often **statistically indistinguishable from zero**.

Popular Culture & Narratives

Media imprint

- News coverage emphasized speed/scale and the "Marielito" label; later films (e.g., *Scarface*, 1983) shaped public perceptions.

Research caution

- Salient narratives need not match average labor-market effects; measurement and subgroup definitions are decisive.

Econometric Pitfalls

- **Small cells**: dropout males in one city $\Rightarrow$ noisy series; tiny composition shifts move means.
- **Control groups**: ad-hoc vs. data-driven (SCM) donors; check pre-trend fit and leave-one-out robustness.
- **Survey extract**: March ASEC vs. ORG differ in wage construction/sample; replicate across both.
- **Boundary changes**: consistent MSA definitions through time; harmonize samples and weights.

Side-by-side Comparison

Study	**Design/data**	**Headline estimate**
Card (1990)	CPS MORG; 4-city controls	$\Delta L \sim 7\%$; no wage or job loss for less-skilled non-Cubans.
Borjas (2017)	March CPS; male non-Hisp. dropouts	Wages $\downarrow$ 10–30% mid-80s; highly sensitive to donors/extract/small cells.
Peri & Yasenov (2019)	SCM, May+ORG	No significant wage/unemp. effects for non-Cuban dropouts vs. synthetic.
Clemens & Hunt (2019)	Reconciliation	Borjas' effect driven by composition and sampling; often n.s.; unemployment ≈ 0.

Workshop Synthesis

Conclusion:

- Parameter targets differ across papers (PE vs. GE; subgroup vs. average).
- Small cells & composition explain Borjas' large negatives; unemployment ≈ 0 throughout.
- Best practice: pre-trend fit, exposure variants, donor transparency, cell-size reporting.

Policy:

- Large, sudden inflows *need not* depress average local wages if capital, demand, and mobility adjust.
- Distributional impacts can appear in *narrow* cells; interpret with caution when samples are tiny.
- For future shocks, track: pre-trend fit, subgroup sizes, and robustness across data extracts and control sets.

Workshop Takeaways

- **Shock size**: Miami labor ↑ 7–8%; dropouts ↑ ∼18%—a rare, sharp test of labor-supply shocks.
- **Core result**: Unemployment ≈ 0 across studies; wage effects range from *nil* to modest negatives in *very* narrow groups and are often not statistically different from zero.
- **Methods matter**: Subgroup choice, pre-trend fit (SCM vs. ad-hoc controls), CPS extract, and small-sample composition critically shape estimates.
- **Best practice**: Be explicit about "how many" (scale) vs. "who" (composition), show robustness, and prioritize transparent design over headline magnitudes.

Summary of the Lecture Notes

Big Picture

- Migration is a persistent feature of economies; today ∼3–4% of the world lives outside country of birth.
- Why it matters: reallocates labour to higher–productivity places, affects wages, prices, public finance, and long-run growth.

Decisions & Selection (Part II)

- People move when destination returns minus costs exceed origin returns.
- Selection follows *relative* returns to skill; networks and policy (costs/recognition) shape who moves.

Integration & Human Capital (Part II)

- Entry gaps reflect transferability (language, licensing). Host-specific investment drives *within-cohort* earnings growth.
- Chiswick vs. Borjas: assimilation exists but cross-sections overstate it; track cohorts for credible estimates.

Impacts & Evidence (Part III)

- Short run: supply shocks hit specific skill cells; medium run: capital, demand, and task reallocation attenuate wage effects.
- Estimates differ by design (skill-cell, spatial, mixed), exposure measure (stocks/inflows), and pre-trend fit.

Presentation rubric

How to read?

- Question: Understand and state it in one sentence; identify the margin.
- Design: What variation identifies the causal effect? Draw the DAG.
- Data: Unit of observation, sample restrictions, exposure definition.
- Threats: What would break identification? Which tests address them?
- Magnitude: Units, elasticities, policy relevance.

What to present?

- Intro: Research question and hypothesis?
- Motivation: Why should economists care?
- Data and empirical strategy: Design clarity over algebra.
- Results and robustness: Focus on identifying figures/tables.
- Conclusion: External validity, open questions.
- Discussion: Credibility, alternative mechanisms, suggested tests.

Timing: 30 min presentation + 15 min questions

Topic selection

- Select **one** paper from the list.
- Upload slides as PDF by 18:00 the day before.

Full paper list for presentations I

1. **Push Factors**
   - Mahajan, P. and D. Yang (2020). Taken by Storm: Hurricanes, Migrant Networks, and U.S. Immigration. AEJ: Applied Economics 12(2): 250–277.
   - Bosetti, V., C. Cattaneo, and G. Peri (2021). Should they stay or should they go? Climate migrants and local conflicts. J. Economic Geography 21(4): 619–651.
2. **Immigration Selection**
   - Parey, M., J. Ruhose, F. Waldinger, and N. Netz (2017). The Selection of High-Skilled Emigrants. REStat 99: 776–792.
   - Patt, A., J. Ruhose, S. Wiederhold, and M. Flores (2021). International Emigrant Selection on Occupational Skills. JEEA 19(2): 1249–1298.
3. **Migration Flows**
   - Feigenberg, B. (2020). Fenced Out: The Impact of Border Construction on US–Mexico Migration. AEJ: Applied 12(3): 106–139.
   - Friebel, G., M. Manchin, M. Mendola, and G. Prarolo (2018). International Migration Intentions and Illegal Costs: Evidence from Africa-to-Europe Smuggling Routes. IZA DP 11978.

Full paper list for presentations II

4. Regional Prosperity

- Sequeira, S., N. Nunn, and N. Qian (2020). Immigrants and the Making of America. RESTUD 87(1): 382–419.
- Abramitzky, R., P. Ager, L. P. Boustan, E. Cohen, and C.-J. Hansen (2019). The Effects of Immigration on the Economy: Lessons from the 1920s Border Closure. NBER WP 26536.

5. Wages of Natives

- Edo, A. (2020). The Impact of Immigration on Wage Dynamics: Evidence from the Algerian Independence War. JEEA 18(6).
- Dustmann, C., J. Stuhler, and U. Schönberg (2017). Labor Supply Shocks, Native Wages, and the Adjustment of Local Employment. QJE 132(1).

6. Education

- Ballatore, R. M., M. Fort, and A. Ichino (2018). Tower of Babel in the classroom: immigrants and natives in Italian schools. JLE 36(4): 885–921.
- Figlio, D. and U. Özek (2019). Unwelcome guests? The effects of refugees on the educational outcomes of incumbent students. JLE 37(4): 1061–1096.

Full paper list for presentations III

- Hunt, J. (2017). The Impact of Immigration on the Educational Attainment of Natives. JHR 52(4): 1060–1118.
- Bauer, T. K. (2002). Educational mismatch and wages: a panel analysis. Economics of education review, 21(3), 221–229.

7. Voting and Immigration

- Edo, A., Y. Giesing, J. Öztunc, and P. Poutvaara (2019). Immigration and electoral support for the far-left and the far-right. EER 115: 99–143.
- Mayda, A. M., G. Peri, and W. Steingress (2022). The Political Impact of Immigration: Evidence from the United States. AEJ: Applied 14(1): 358–389.

8. Voting and the Refugee Influx

- Dustmann, C., K. Vasiljeva, and A. P. Damm (2019). Refugee Migration and Electoral Outcomes. RESTUD 86(5): 2035–2091.
- Steinmayr, A. (2021). Contact versus Exposure: Refugee Presence and Voting for the Far Right. RESTAT 103(2): 310–327.
- Vertier, P., M. Viskanic, and M. Gamalerio (2023). Dismantling the "Jungle": migrant relocation and extreme voting in France. PSRM 11(1): 129–143.

Full paper list for presentations IV

- Bredtmann, J. (2022). Immigration and electoral outcomes: Evidence from the 2015 refugee inflow to Germany. RSUE 96: 103807.

9. Immigration Policies

- Fasani, F., T. Frattini, and L. Minale (2021). Lift the Ban? Initial Employment Restrictions and Refugee Labour Market Outcome. JEEA 19(5): 2803–2854.
- Pinotti, P. (2017). Clicking on Heaven's Door: The Effect of Immigrant Legalization on Crime. AER 107(1): 138–168.
- Amuedo-Dorantes, C., A. Arenas-Arroyo, and A. Sevilla (2018). Immigration enforcement and economic resources of children with likely unauthorized parents. JPubE 158: 63–78.
- Felfe, C., H. Rainer, and J. Saurer (2020). Why Birthright Citizenship Matters for Immigrant Children: Short- and Long-Run Impacts on Educational Integration. JLE 38: 143–182.

10. Language Skills

- Arendt, J. N., I. Bolvig, M. Foged, L. Hasager, and G. Peri (2020). Language training and refugees' integration. NBER WP 26834.
- Lochmann, A., H. Rapoport, and B. Speciale (2019). The effect of language training on immigrants' economic integration: Evidence from France. EER 113: 265–296.

Full paper list for presentations V

- Bauer, T., Epstein, G. S., & Gang, I. N. (2005). Enclaves, language, and the location choice of migrants. Journal of population Economics, 18(4), 649–662.

11. Discrimination

- Glover, D., A. Pallais, and W. Pariente (2017). Discrimination as a Self-Fulfilling Prophecy. QJE 132(3): 1219–1260.
- Weichselbaumer, D. (2020). Multiple Discrimination against Female Immigrants Wearing Headscarves. ILRR 73(3): 600–627.
- Alan, S., E. Duysak, E. Kubilay, and I. Mumcu (2023). Social Exclusion and Ethnic Segregation in Schools: The Role of Teachers' Ethnic Prejudice. RESTAT 105(5): 1039–1054.
- Alesina, A., M. Carlana, E. La Ferrara, and P. Pinotti (2018). Revealing Stereotypes: Evidence from Immigrants in Schools. AER 114(7): 1916–1948.

12. Effects on Sending Countries

- Batista, C., J. Seither, and P. C. Vicente (2019). Do migrant social networks shape political attitudes and behavior at home? World Development 117: 328–343.
- Barsbai, T., H. Rapoport, A. Steinmayr, and C. Trebesch (2017). The Effect of Labor Migration on the Diffusion of Democracy. AEJ: Applied 9(3): 36–69.

Full paper list for presentations VI

13. Sex Ratios, Culture, and Norms

- Angrist, J. D. (2002). How Do Sex Ratios Affect Marriage and Labor Markets? Evidence from America's Second Generation. *QJE* 117(3): 997–1038.
- Grosjean, P. and R. Khattar (2019). It's Raining Men! Hallelujah? The Long-Run Consequences of Male-Biased Sex Ratios. *Review of Economic Studies* 86(2): 723–754.
- Boelmann, B., A. Raute, and U. Schönberg (2025). Wind of Change? Cultural Determinants of Maternal Labor Supply. *AEJ: Applied Economics*, forthcoming.
- Dustmann, C., U. Schönberg, and J. Stuhler (2016). The Impact of Immigration: Why Do Studies Reach Such Different Results? *JEP*.

Data Sources

- Destatis (Mikrozensus, labor force, prices)
- BAMF/BMI asylum statistics
- BA/IAB employment registers
- SOEP and IAB-SOEP Migration Sample
- EU-LFS, EU-SILC
- UN DESA migrant stock and flows
- World Bank Bilateral Migration Matrix, WDI
- OECD International Migration Database
- Local admin registers (Melderegister) where available

Suggested Readings

- Bodvarsson, Ö. and H. Van den Berg (2013). *The Economics of Immigration: Theory and Policy*. Springer.
- Borjas, G. (2014). *Immigration Economics*. Harvard University Press.
- Selected empirical papers from the topic list (see Moodle handout).

Some Notes

- All slides and updates on Moodle.
- *Tip*: Bring 1–2 clear identification figures per paper; hide non-essential regressions.

Extra Lecture Notes:

Demand and prices

- Immigrant demand raises output, variety, and local nontradables; price and rent effects inform incidence.
- Sectoral and spatial reallocation over the medium run.

Public finance

- Net fiscal effects hinge on age-earnings profiles, family composition, and institutional design.
- Distinguish average vs. marginal migrant; cohort and life-cycle accounting.

Education and politics

- School peer effects depend on baseline resources, language support, and class composition.
- Political responses: exposure vs. contact, media framing, and institutional thresholds.

Source-country effects

- Remittances, knowledge transfer, and return migration; brain drain vs. incentive effects.
- Political diffusion via diasporas and returnees.

Policy lenses

- Labor-market policy: legalization, work restrictions, recognition of qualifications, language training.
- Asylum/refugee policy: processing, dispersal, early access to work, integration services.
- Place-based policy: capacity of schools, housing markets, local finance.

Extra Lecture Notes:

Public finance: how to think about it

- Net fiscal impact $\approx$ taxes paid $-$ transfers/services used over the life-cycle.
- Drivers: age at entry, education, employment path, family size, institutions.
- Evidence: average net effects are small in sign; younger working entrants more positive.
- Policy margin: faster integration (work access, language, recognition) improves net balances.

Notes: Use country reports (OECD/ifo/SVR) sparingly; focus on mechanisms.

End

Questions?

References (Lecture Notes & Workshop) I

Card, D. (1990). The Impact of the Mariel Boatlift on the Miami Labor Market. *ILR Review*, 43(2), 245–257.

Borjas, G. J. (1985). Assimilation, Changes in Cohort Quality, and the Earnings of Immigrants. *JLE*, 3(4), 463–489.

Borjas, G. J. (1994). The Economics of Immigration. *JEL*, 32(4), 1667–1717.

Borjas, G. J. (2017). The Wage Impact of the Marielitos: A Reappraisal. *ILR Review*, 70(5), 1077–1110.

Chiswick, B. R. (1978). The Effect of Americanization on the Earnings of Foreign-born Men. *JPE*, 86(5), 897–921.

Duleep, H. O., & Dowhan, D. (2002). Insights from Longitudinal Data on the Earnings Growth of U.S. Foreign-born Men. *Research in Labor Economics*, 21, 297–317.

Lubotsky, D. (2007). Chutes or Ladders? A Longitudinal Analysis of Immigrant Earnings. *JPE*, 115(5), 820–867.

Dustmann, C., Schönberg, U., & Stuhler, J. (2016). The Impact of Immigration: Why Do Studies Reach Such Different Results? *JEP*, 30(4), 31–56.

Peri, G. (2012). The Effect of Immigration on Productivity: Evidence from U.S. States. *JOLE*, 30(1), 1–34.

References (Lecture Notes & Workshop) II


Kerr, W. R., & Lincoln, W. F. (2010). The Supply Side of Innovation: H-1B Visa Reforms and U.S. Ethnic Invention. *JLE*, 28(3), 473–508.


Clemens, M. A., & Hunt, J. (2019). The Labor Market Effects of Refugee Waves: Reconciling Conflicting Results. *ILR Review*, 72(4), 818–857.


Peri, G., & Yasenov, V. (2019). The Labor Market Effects of a Refugee Wave: SCM Meets the Mariel Boatlift. *JHR*, 54(2), 267–309.


Docquier, F., & Rapoport, H. (2012). Globalization, Brain Drain, and Development. *JEL*, 50(3), 681–730.


Clemens, M. (2011). Economics and Emigration: Trillion-Dollar Bills on the Sidewalk? *JEP*, 25(3), 83–106.


OECD (various years). *International Migration Outlook*. Paris: OECD Publishing.


United Nations DESA. International Migrant Stock datasets (various editions).


Destatis. Fertility/Population press releases and Mikrozensus documentation (cited years).


European Commission (2024). *The 2024 Ageing Report*. Country fiche: Germany.


Bundesagentur für Arbeit / IAB (2024). *The German Labour Market 2024*. Quarterly vacancy statistics.