Migration: Empirical Findings

Lecture 2

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Outline

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Labour supply shocks

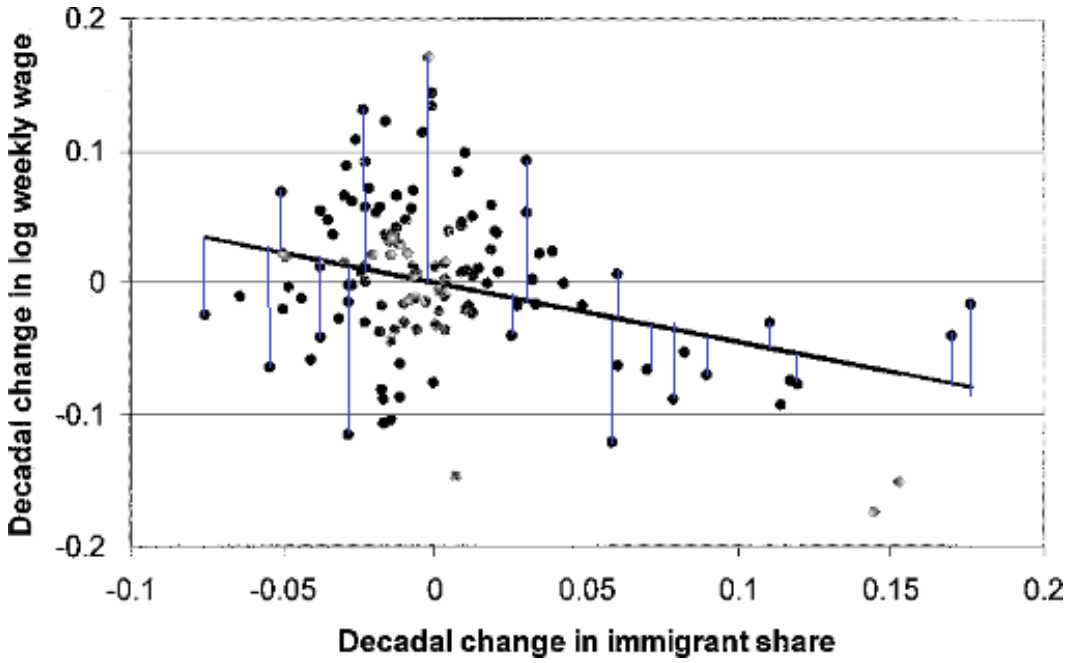

Figure: Scatter Diagram Relating Wages and Immigration, 1960–2000, Borjas(2003)

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Labour supply shocks-Multivariate analysis with Panel data

$$\Delta w_{it} = \beta_0 + \theta \Delta Immshare_{it} + \beta_1 experience_i + \beta_2 experience_i^2 + \beta_4 yearsofschooling_i + \\ + trend + \beta_5 experience_i * trend + \beta_6 yearsofschooling_i * trend + s_{it} \quad (1)$$

Δw_{it} = change in weekly earnings over 1960-2000
$\Delta Immshare_{it}$ = change in immigrant shares over 1960-2000
Trend= time dimension of the dataset

Univariate analysis (one variable) $\Rightarrow$ Multivariate analysis (many variables)
Cross-sectional analysis (individual obs) $\Rightarrow$ Panel Data (individual obs over time)

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IMPACT OF IMMIGRANT SHARE ON LABOR MARKET OUTCOMES OF NATIVE EDUCATION-EXPERIENCE GROUPS

Specification:	Dependent variable: Log annual earnings	Log weekly earnings	Fraction of time worked
1. Basic estimates	−0.919	−0.572	−0.529
	(0.582)	(0.162)	(0.132)
2. Unweighted regression	−0.725	−0.546	−0.382
	(0.463)	(0.141)	(0.103)
3. Includes women in labor force counts	−0.919	−0.637	−0.511
	(0.661)	(0.159)	(0.148)
4. Includes log native labor force as regressor	−1.231	−0.552	−0.567
	(0.384)	(0.204)	(0.116)

The table reports the coefficient of the immigrant share variable from regressions where the dependent variable is the mean labor market outcome for a native education-experience group at a particular point in time. Standard errors are reported in parentheses and are adjusted for clustering within education-experience cells. All regressions have 160 observations and, except for those reported in row 2, are weighted by the sample size of the education-experience-periodcell. All regression models include education, experience, and period fixed effects, as well as interactions between education and experience fixed effects, education and period fixed effects, and experience and period fixed effects.

Figure: Borjas(2003)

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Migration choice - Ties in the host country

Effects of Skill Group Population Shares on Employment-Population Rates of Natives and Earlier Immigrants

	Natives		Pre-1985 Immigrants	
	Men	Women	Men	Women
Ordinary least squares estimation:				
A. 175 cities weighted	−.028	−.045	−.019	−.023
	(.004)	(.005)	(.005)	(.007)
B. 175 cities unweighted	−.035	−.047	−.032	−.020
	(.005)	(.005)	(.006)	(.008)
C. Top 50 cities weighted	−.022	−.046	−.007	−.035
	(.008)	(.009)	(.006)	(.009)
Instrumental variables estimation (instrument is predicted immigrant inflow):				
D. 175 cities weighted	−.202	−.081	−.096	−.146
	(.042)	(.018)	(.040)	(.036)
E. Top 50 cities weighted	−.185	−.070	−.041	−.072
	(.056)	(.020)	(.027)	(.032)
F. Three least-educated occupations only	−.068	−.032	−.020	−.045
	(.019)	(.014)	(.020)	(.036)
G. Laborers/low-skill services and professional/technical only	−.040	−.060	−.022	−.038
	(.010)	(.010)	(.011)	(.013)

NOTE.—Entries are estimated regression coefficients of the log population share of a specific occupation group in a model for the employment rate of individuals in the occupation group. Models are fitted separately by gender and nativity: each model is estimated on a sample of six occupation groups in 175 cities, except as noted in rows F and G. All models include occupation group dummies, city dummies, mean age, mean education, percentage black, and percentage married; and (for immigrants only) mean years in the United States and fractions of immigrants from Western Europe, Asia, and Mexico for the gender/origin/skill group in the particular city in 1990. The employment rates for each city and occupation group are adjusted for the characteristics of individuals in the particular city and occupation using a first-stage regression model, as described in the text. Standard errors are in parentheses.

Figure: Card(2001)

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Migration choice - A simultaneity problem

Migration shocks have a very short run effect, after this period the labour market absorbs the migration effect. This issue drives the estimate towards zero. The literature tries to construct a labor supply shock by using the ties in the migration area. Most of the time measured as the percentage of migrants born in the same country of new arrivals 20 years ago.

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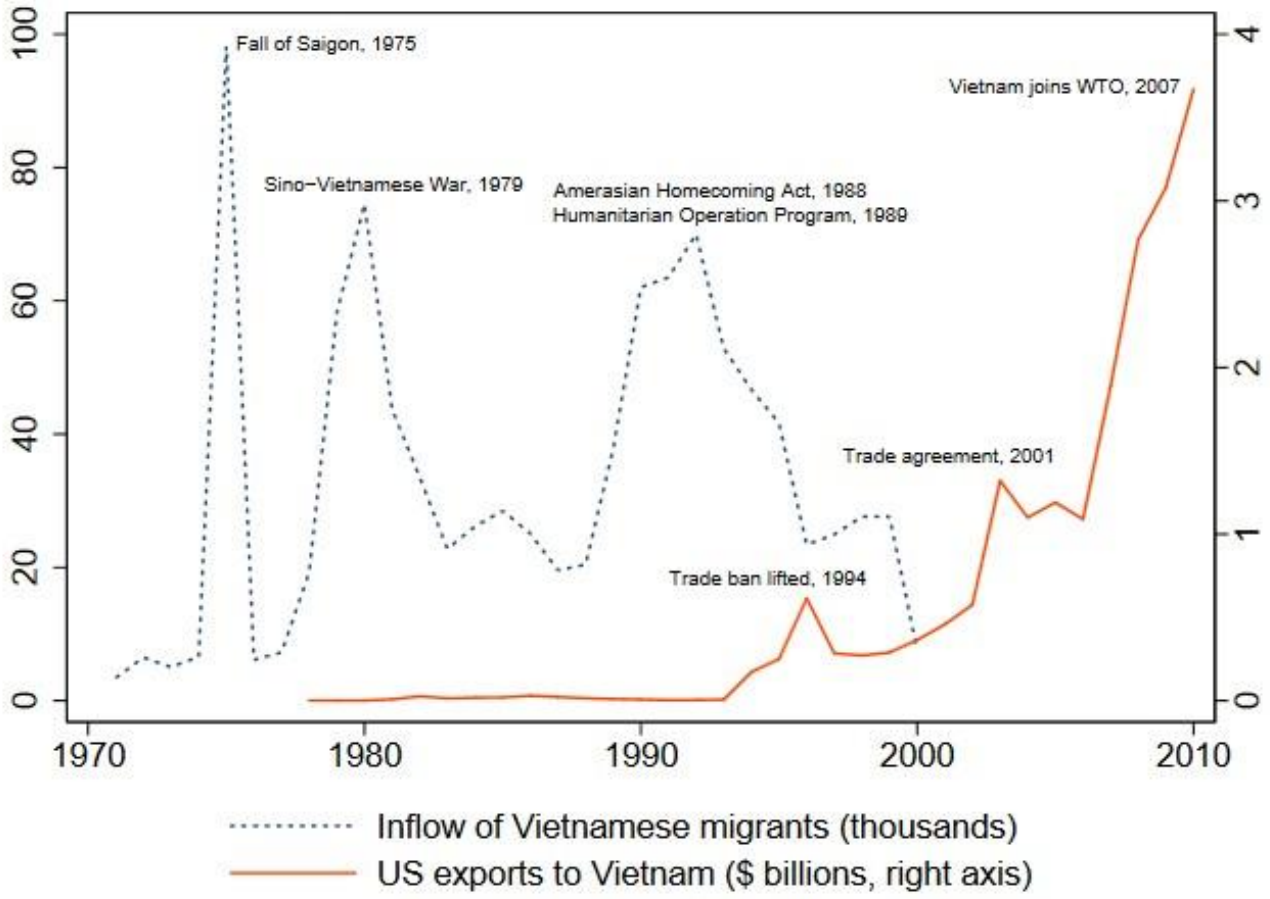
Trade and migration - A long run effect

Figure 1: Vietnamese inflows to the US and US Exports to Vietnam



Sources: US Census 2000 and USITC.

Figure: Parsons and V´ezina (2018)

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Trade and migration - A quasi-random experiment

	(1) Exports to Vietnam	(2) Exports to Vietnam	(3) Exports to Vietnam	(4) Exports to Vietnam	(5) Exports to Vietnam	(6) Exports to Vietnam
	PPML	PPML-RF	IV-PPML	PPML	PPML-RF	IV-PPML
ln (Exports to World)	0.208	0.328	0.156	0.271	0.842***	0.148
	(0.249)	(0.300)	(0.280)	(0.314)	(0.293)	(0.491)
ln (GDP)	0.445	0.367	0.356	0.297	-0.818	-0.724
	(0.536)	(0.488)	(0.470)	(0.660)	(0.626)	(0.737)
ln (Vietnamese)	0.360*		0.453**	0.483**		1.381**
	(0.188)		(0.195)	(0.239)		(0.662)
ln (1975 Refugees)		0.459**			1.073***	
		(0.206)			(0.335)	
ln (Income per capita)				-2.870	-1.675	-3.115
				(1.859)	(1.422)	(2.931)
ln (Mfg share of GDP)				0.464	1.403**	1.334
				(0.674)	(0.689)	(0.852)
West Coast				0.268	0.082	-0.692
				(0.360)	(0.317)	(0.652)
East Coast				1.054**	1.493***	1.256
				(0.482)	(0.423)	(0.782)
Constant	1.758	-0.307	3.144	29.334	13.672	38.527
	(2.742)	(2.823)	(3.329)	(18.524)	(14.446)	(33.444)
N	51	51	51	51	51	51
R-sq	0.64	0.65		0.75	0.85	

Dependent variable is 1995 Exports to Vietnam. The 51 obs. are 50 US States and Washington DC. Columns 1 to 3 give the PPML, PPML-RF (reduced form) and IV-PPML estimates, respectively. Columns 4 to 6 provide the same estimates with extra controls. The figures in parenthesis are robust standard errors, and * stands for statistical significance at the 10% level, ** at the 5% level and *** at the 1% percent level.

Figure: Parsons and V´ezina (2018)

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After the fall of Saigon a lot of Vietnamese (Boat People) move to USA. After a period in a camp, they were relocated across US. The relocation was random and in particular not driven by economic factors. In this case the Vietnamese migration shocks are perfect to measure the economic outcomes linked to this event.

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Migration and crime - A policy change

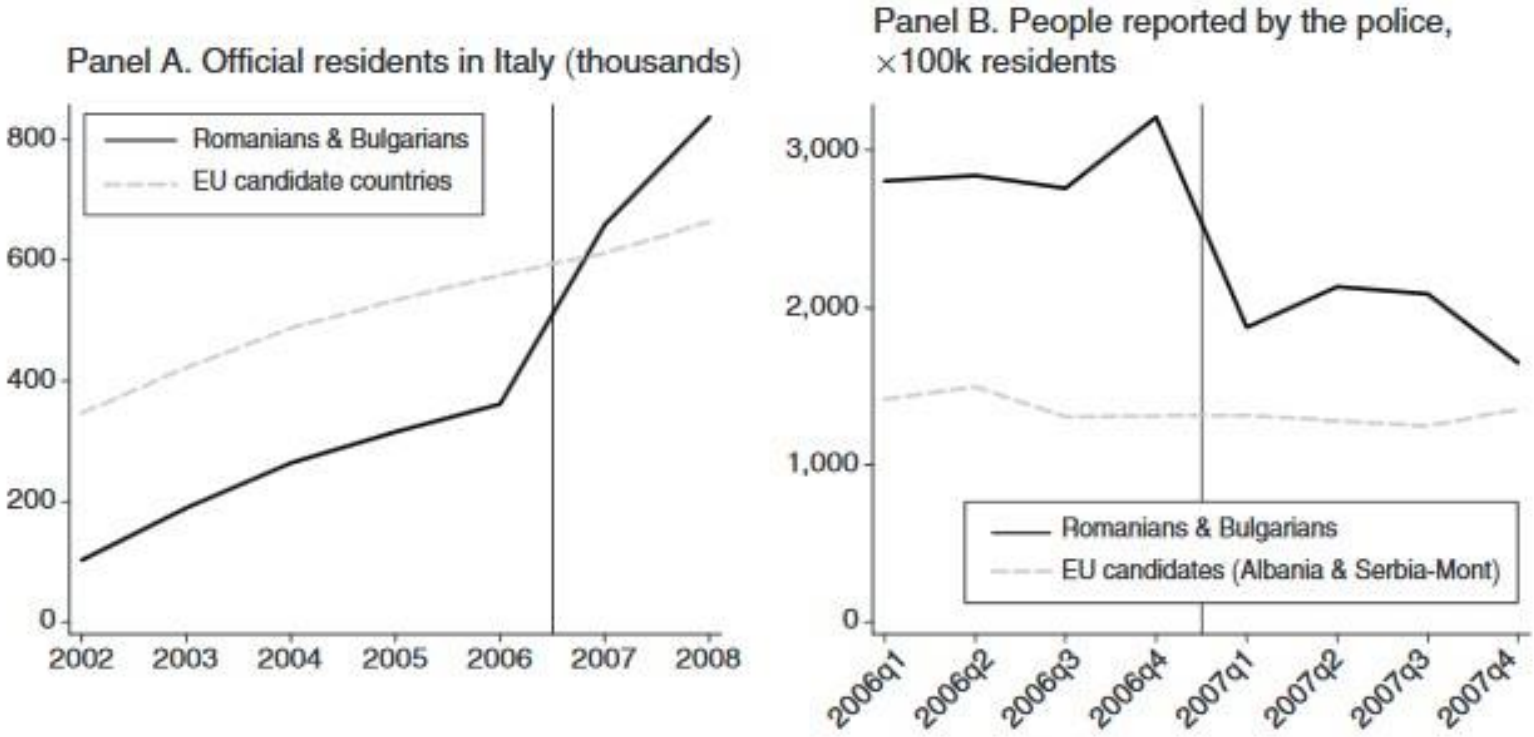

FIGURE 6. IMMIGRANTS FROM NEW EU MEMBER AND CANDIDATE MEMBER COUNTRIES RESIDING IN ITALY, AND NUMBER OF ARRESTS

Notes: The left graph plots the number of citizens of new EU member and candidate member countries officially residing in Italy during the period 2002–2008. The right graph shows, instead, the ratio of those by the police over the number of official residents arrested in each quarter during the period 2006–2007. In both graphs, the vertical line refers to the date of the last EU enlargement.

Source: ISTAT and Ministry of Interior

Figure: Mastrobuoni and Pinotti (2015)

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2007 EU Enlargement shifted Romanians and Bulgarians from the illegal market to legal market by lowering the crime rates with respect to others EU candidates. The graph shows as the crime rate is changed only for the "treated" people and not for the others.

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Migration and crime - A difference in shares

TABLE 3—PROBABILITY OF REINCARCERATION FOR PARDONED INMATES FROM NEW EU MEMBER AND CANDIDATE MEMBER COUNTRIES, BEFORE AND AFTER THE EU ENLARGEMENT

	Economic crimes			Noneconomic crimes		
	New EU	Control	Diff.	New EU	Control	Diff.
Post	0.023	0.054	−0.031**	0.047	0.034	0.013
	(0.005)	(0.008)	(0.010)	(0.020)	(0.014)	(0.025)
	[0.006]	[0.008]	[0.010]	[0.021]	[0.014]	[0.025]
Pre	0.058	0.057	0.001	0.033	0.043	−0.009
	(0.013)	(0.007)	(0.015)	(0.028)	(0.021)	(0.035)
	[0.014]	[0.008]	[0.015]	[0.019]	[0.022]	[0.029]
Diff.	−0.035**	−0.003	−0.032*	0.014	−0.009	0.023
	(0.014)	(0.011)	(0.017)	(0.034)	(0.025)	([0.043])
	[0.014]	[0.011]	[0.018]	[0.028]	[0.027]	[0.039]
	Economic crimes, north			Economic crimes, south		
	New EU	Control	Diff.	New EU	Control	Diff.
Post	0.014	0.061	−0.046**	0.034	0.046	−0.013
	(0.006)	(0.010)	(0.009)	(0.009)	(0.012)	(0.015)
	[0.007]	[0.011]	[0.013]	[0.010]	[0.012]	[0.015]
Pre	0.066	0.053	0.013	0.049	0.063	−0.014
	(0.020)	(0.009)	(0.022)	(0.017)	(0.012)	(0.021)
	[0.020]	[0.010]	[0.022]	[0.019]	[0.013]	[0.023]
Diff.	−0.052**	0.007	−0.059**	−0.015	−0.017	0.001
	(0.021)	(0.014)	(0.025)	(0.020)	(0.017)	(0.026)
	[0.021]	[0.015]	[0.025]	[0.021]	[0.018]	[0.027]

Notes: This table reports the fraction of citizens of new EU member and candidate member countries that are reincarcerated before ("pre") and after ("post") the enlargement, as well as the difference and difference-in-differences between the two groups for different subsamples of pardoned inmates. The top left and right panels show the cross tabulation for the subsamples of individuals that were previously incarcerated (before the pardon) for economic and violent crimes, while the bottom left and right panels distinguish between economic offenders in northern and southern Italy. Observations are weighted by the inverse propensity score according to equation (4). Robust standard errors clustered by Italian region and country of origin are reported in parentheses. Bootstrapped standard errors, based on 400 replications, are also reported in square brackets

Figure: Mastrobuoni and Pinotti (2015)

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Given the exogenous shift driven by the EU policy the difference of the differences between the reincarceration rates of Romanians and Bulgarians and the EU candidates pre and post is a sufficient statics to measure the crime change.

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Political preferences and migration - a current issue

TABLE 4. The effect of the share of immigrants on the share of FPÖ votes: Fixed effect estimation.

	(1) All immigrants	(2) Low skilled immigrants	(3) High skilled immigrants
Share of immigrants	0.159***	0.299***	−0.757***
	(0.039)	(0.046)	(0.111)
	[0.107]	[0.154]	[−0.134]
Community characteristics[a]	Yes	Yes	Yes
Community fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Number of observations	14,598	14,598	14,598
Mean of dependent variable	0.156	0.156	0.156
S.d. of dependent variable	0.094	0.094	0.094
Mean share of immigrants	0.073	0.057	0.014
S.d. of share of immigrants	0.063	0.048	0.017

Notes: This table summarizes the estimated effect of immigration on the share of votes for the FPÖ based on a series of weighted (community population weights) OLS estimations with community fixed effects using Austrian community level data. The dependent variable ($FP\ddot{O}_{it}$) is equal to the share of votes for the FPÖ in the general election in community i in the year t, where $t = \{1979, 1983, 1990, 1994, 1999, 2002, 2013\}$. In column (1), the key explanatory variable is the share of residents without Austrian citizenship. Columns (2) and (3) differentiation immigrants by skill levels. The share of immigrants with a certain level of education is equal to the number of residents without Austrian citizenship with the respective educational attainment as a fraction of all residents. Shares by skill are calculated based on residents 25 years of age or older and refer to the highest attained educational degree. Low and medium skills are compulsory schooling, an apprenticeship, or a lower secondary school. High education is a higher secondary school or an academic degree. The shares of immigrants on a community-level are available in the years 1971, 1981, 1991, 2001, 2011 (census years). The share of immigrants in the years 1979 and 1983 is imputed with information form the year 1981, the data in the years 1990 and 1994 are imputed with information form the year 1991, the data in the years 1999 and 2002 are imputed with information from the year 2001, and the data in the year 2013 are imputed with information form the year 2011. The same imputation is used for the other covariates. Robust standard errors (allowing for clustering on the community and census year levels and/or heteroskedasticity of unknown form) are in parentheses. Standardized (beta) coefficients are in square brackets. [a]The community characteristics are described in the notes to Table 2. ***Significant at 1%.

Figure: Halla, Wagner, and Zweimuller (2017)

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Why do migration have a negative impact on voting behaviour? In the literature there is no a strong evidence of the main channels that drive these preferences. There are a lot of explanation as cultural background, education, linguistic distance. In particular linguistic distance is a solid barrier to integration.

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