



## INTERNATIONAL MIGRATION

*Mariola Pytliková*

VŠB-Technical University Ostrava,

CREAM, IZA, CCP and CELSI

*Info about lectures:* <http://home.cerge-ei.cz/munich/labor14/>

*Office hours:* by appointment

*Contact:*

Email: [Mariola.Pytlikova@vsb.cz](mailto:Mariola.Pytlikova@vsb.cz)

Mobile: 739211312

<https://sites.google.com/site/pytlikovaweb/>

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## Study Materials and Reading List

- Slides of the lectures (provided one day in advance or on the day of the class)
- All materials provided on: <http://home.cerge-ei.cz/munich/labor14/>

-George J. BORJAS: "THE ECONOMIC ANALYSIS OF IMMIGRATION", In: Handbook of Labor Economics, Volume 3, Edited by O. Ashenfelter and D. Card (1999); Chapter 28, Elsevier Science B. V.

-Adsera, Alicia and Pytlikova, Mariola (forthcoming): "The Role of Language in Shaping International Migration". *Forthcoming in the Economic Journal*.

### Optional:

- F. Docquier, H. Rapoport (2012): Globalization, brain drain and development, *Journal of Economic Literature*, 50 (3), pp 681-730.

-Palmer, John and Mariola Pytliková (forth): "Labor Market Laws and intra-European Migration: The Role of the State in Shaping Destination Choices". *Forthcoming in the European Journal of Population*.

-Pedersen, Peder J. & Pytlikova, Mariola & Smith, Nina, 2008. "Selection and network effects—Migration flows into OECD countries 1990-2000," *European Economic Review*, Elsevier, vol. 52(7), pp 1160-1186.

- Pedersen, J. P., Pytlikova, M. and N. Smith (2006): "Migration into OECD countries 1990-2000". In Parson and Smeeding (eds.): *Immigration and the Transformation of Europe*. Cambridge University Press.

### Useful Links:

- NORFACE Research Programme on Migration  
<http://www.norface-migration.org/>
- IZA program on migration  
<http://www.iza.org/en/webcontent/research/ra3>
- Web of CREAM at UCL  
<http://www.cream-migration.org/>

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## OUTLINE

1. Trends in international migration
2. Why do people migrate? Determinants of migration
3. Who migrates? Selectivity in migration
4. Adjustment and integration
5. Example: migration from CEECs:
  - Determinants

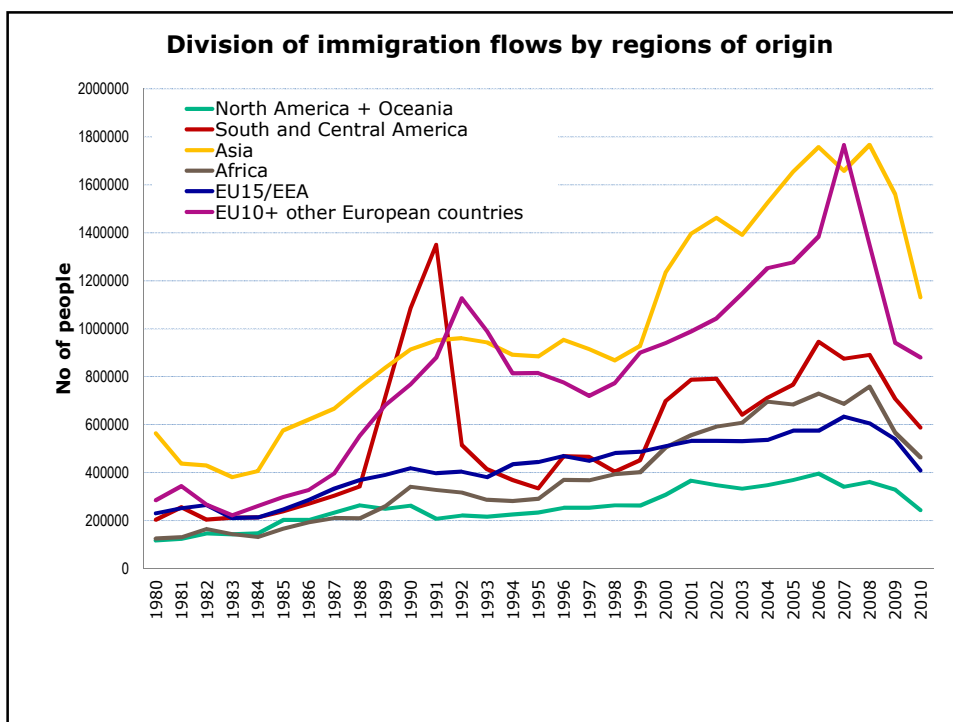
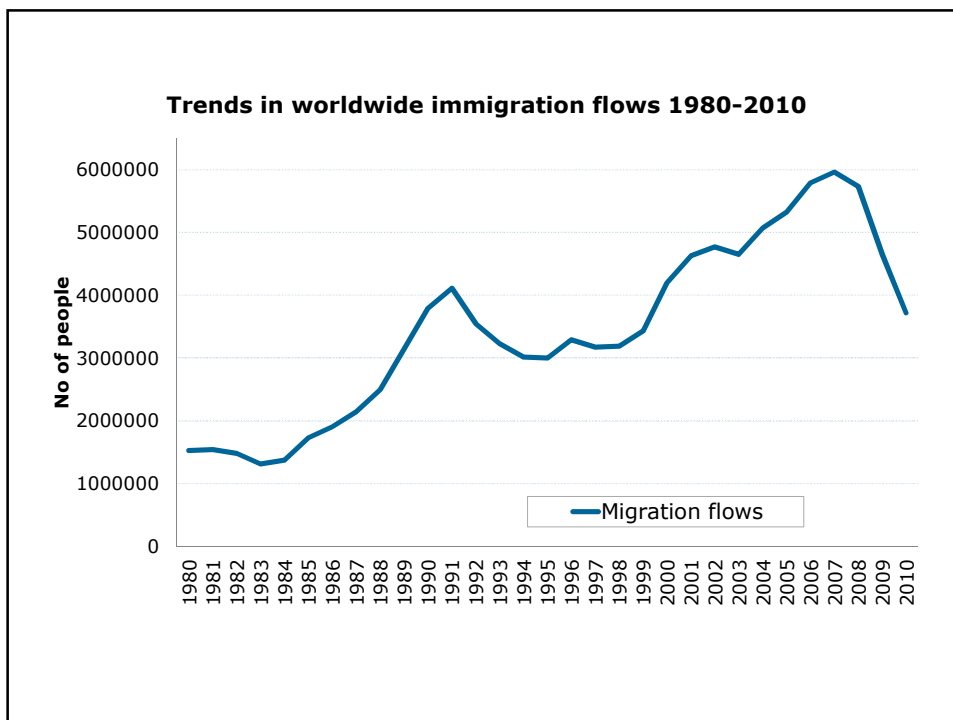
*The next lectures on Wednesday 11.2.2015:*

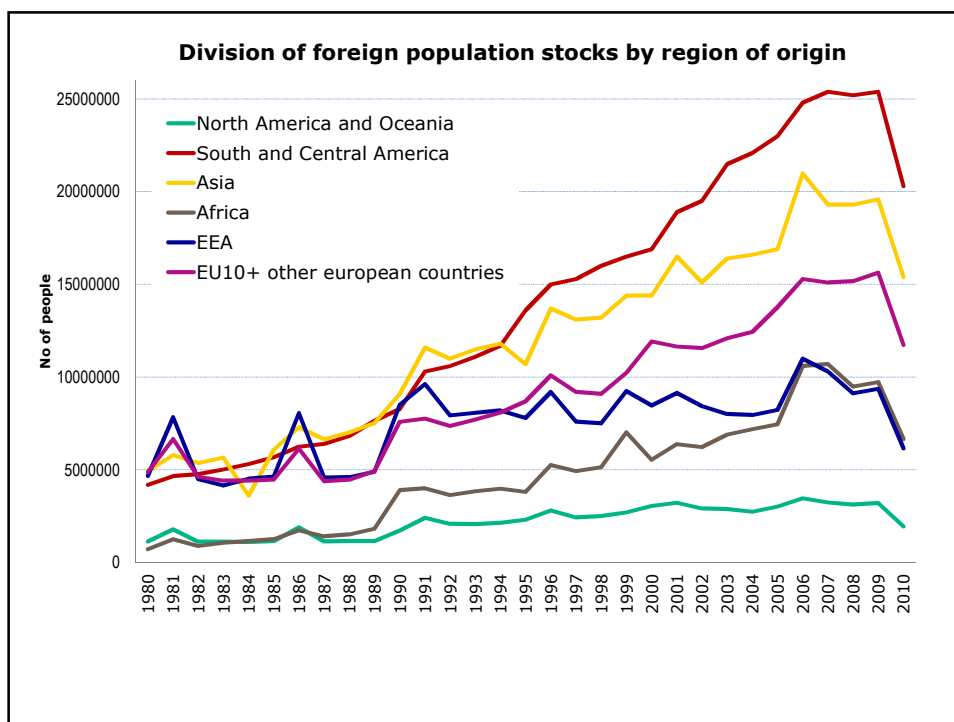
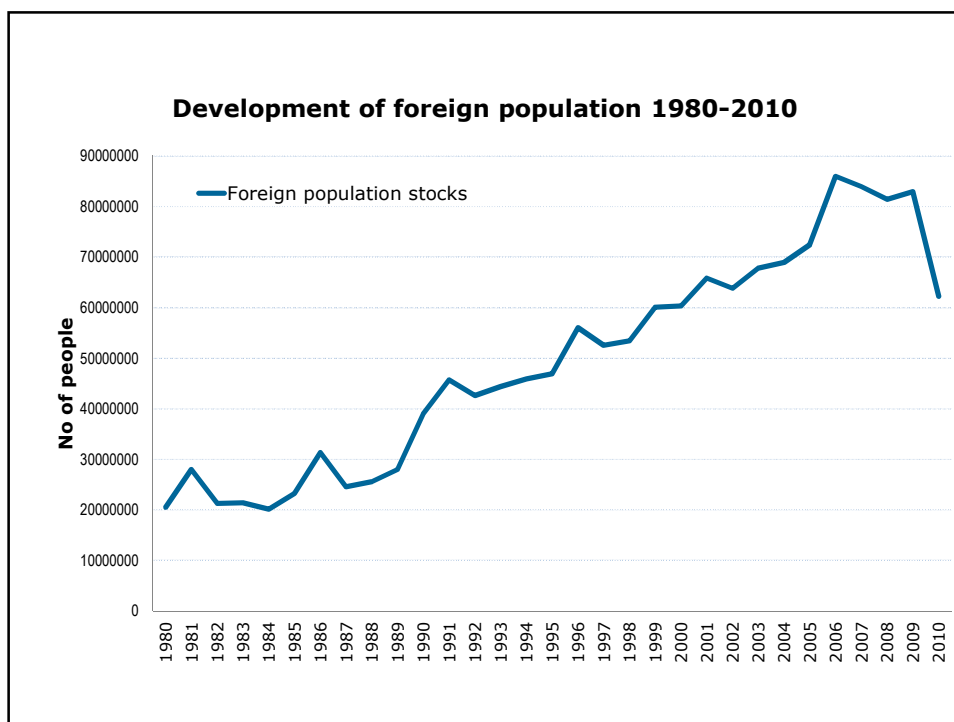
Impact of immigration , role of immigration policies

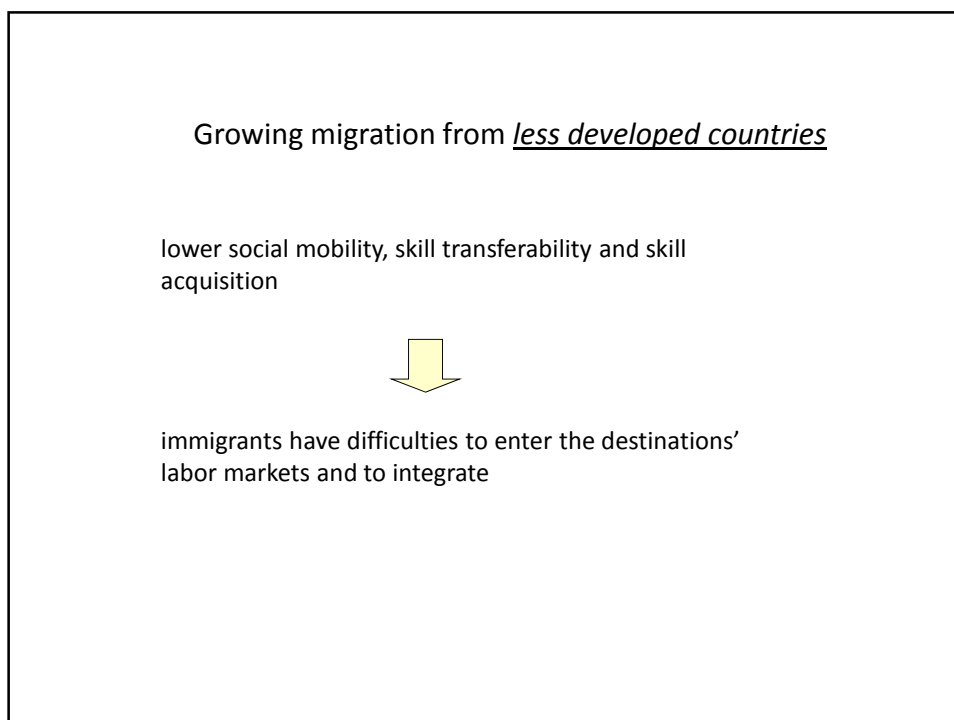
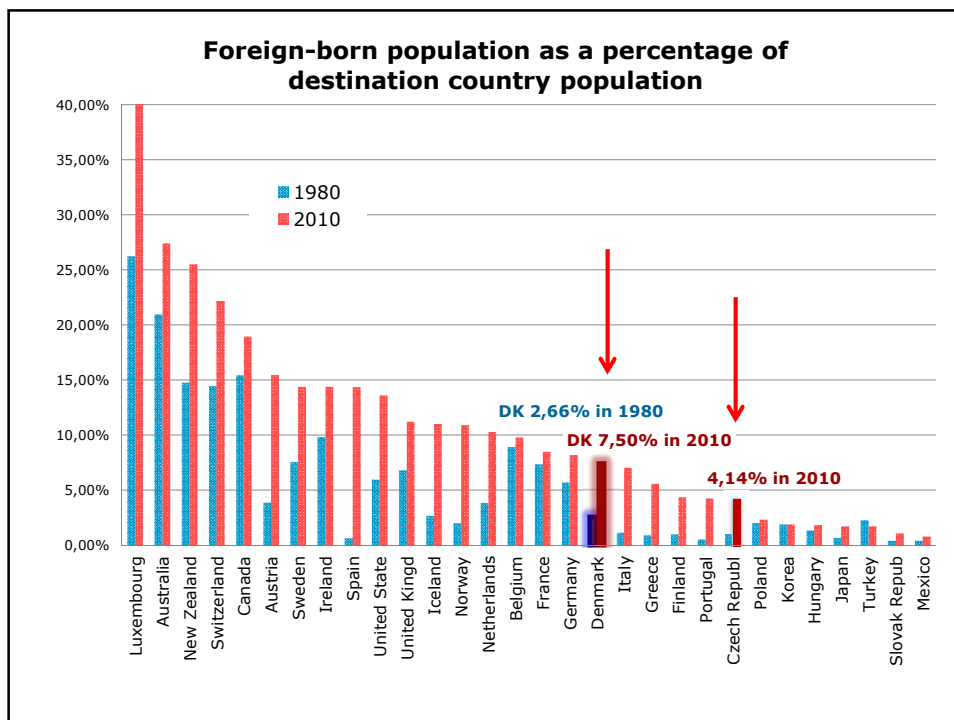
Diversity - Impacts of workforce diversity on firms and economies (effects on productivity, innovation, exporting and FDI behavior, and entrepreneurship)

## TRENDS IN INTERNATIONAL MIGRATION

- **2 phenomena driving migration flows over the last decades:**
  - Growing migration from *less developed countries*
  - Fall of Iron Curtain, EU enlargements:
    - Fall of Iron Curtain
    - EU enlargements







### Emigration from Central and Eastern Europe

- After the fall of Iron Curtain, 1989, CEECs became a new source of emigration
- EU enlargements towards Central and Eastern European countries, 2004 and 2007



Given a geographical and cultural proximity and large economic differences - huge income gaps, high unemployment in CEECs, emigration restrictions before 1989 = feelings of freedom

=> **Western Europe fears a mass migration**

### Emigration from Central and Eastern Europe

#### **EU enlargement towards the East – 2004 enlargement:**

- 10 new countries joined EU15 in May 2004;
- One of the Acquis: Free movement of people; Fear of mass migration; possibility of restrictions on mobility
- => "transition periods"; Rule 3+2+2 years
- All in all, the "old" EU/EEA countries could keep their labor markets restricted to the new members up to 7 years from the enlargement.

### Emigration from Central and Eastern Europe

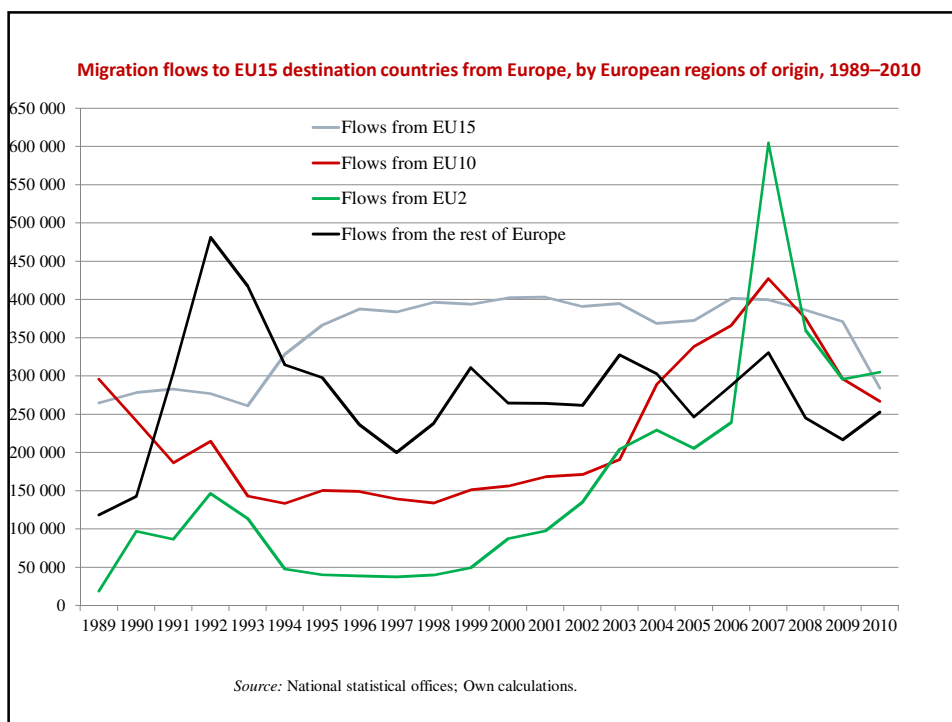
#### EU enlargement towards the East – 2004 enlargement:

- UK, Ireland and Sweden have opened from day one of EU enlargement in May 2004, the rest of “old” EU members imposes restrictions to free movement of workers.
- 2006 - Spain, Portugal, Greece, Italy, Finland and Iceland
- 2007 – the Netherlands and Luxembourg
- July 2008 - France
- May 2009 – Belgium, Denmark and Norway
- May 2011: Austria, Germany and Switzerland hold a maximum period of restrictions.

### Emigration from Central and Eastern Europe

#### EU enlargement towards the East – 2007 enlargement:

- Bulgaria and Romania joined the EU on January 1, 2007.
- Restrictions on labour markets possible until 2014;
- **Open doors for 2007 entrants:**
  - 2007 - Finland, Sweden, Cyprus, Czech Republic, Estonia, Latvia, Lithuania, Poland, Slovakia, Slovenia
  - 2009 - Denmark, Greece, Portugal, Spain
  - 2012 – Iceland, Italy
  - 2014 - the rest of EU holds a maximum period of restrictions and opens in January 2014

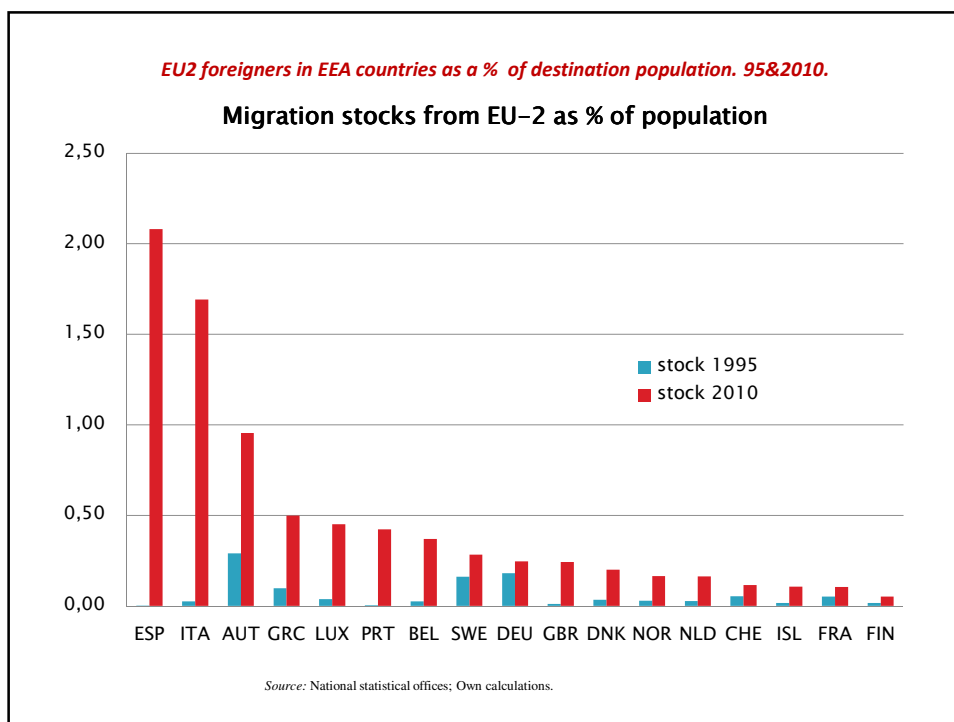
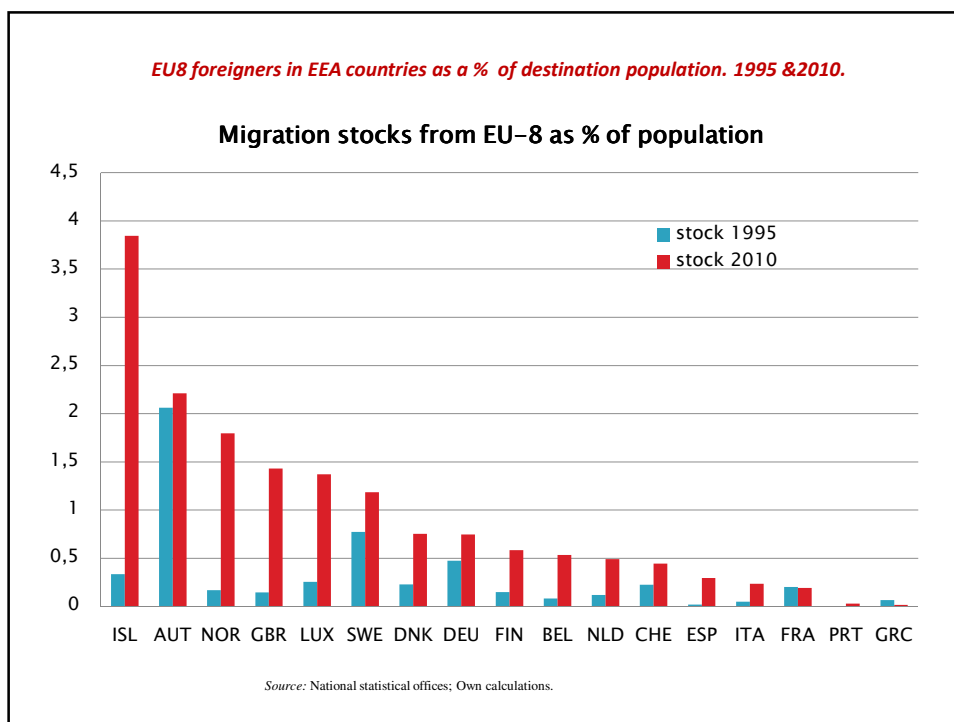


**Where did CEE go? Main destinations, flows annual average 1989–2000**

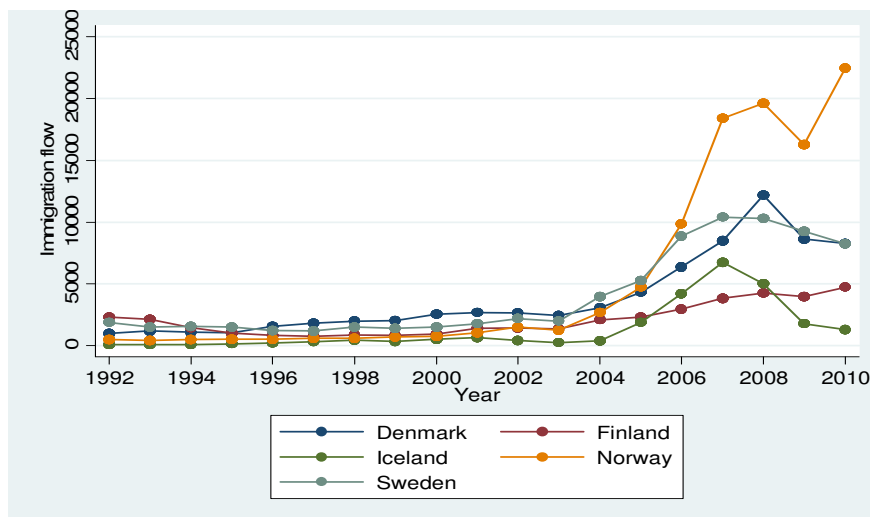
	CZECH REP.			HUNGARY			POLAND	
Germany	12.163	0,118	Germany	18.290	0,180	Germany	110.279	0,287
Austria	1.388	0,014	Austria	2.219	0,022	U.S.	17.104	0,045
Slovakia	942	0,009	U.S.	1.102	0,011	Canada	6.720	0,018
U.S.	570	0,006	Canada	644	0,006	Austria	4.416	0,012
<b>Total</b>	<b>17.197</b>	<b>0,167</b>	<b>Total</b>	<b>24.359</b>	<b>0,239</b>	<b>Total</b>	<b>152.179</b>	<b>0,396</b>
	SLOVAKIA			BULGARIA			ROMANIA	
Germany	7.827	0,146	Germany	11.606	0,139	Germany	42.593	0,189
Czech Rep.	3.835	0,072	Spain	2.168	0,026	Italy	10.185	0,045
Austria	1.756	0,033	U.S.	1.987	0,024	Hungary	9.958	0,044
U.S.	555	0,010	Greece	1.588	0,019	Spain	8.618	0,038
<b>Total</b>	<b>15.626</b>	<b>0,291</b>	<b>Total</b>	<b>20.686</b>	<b>0,248</b>	<b>Total</b>	<b>86979</b>	<b>0,385</b>
	ESTONIA			LATVIA			LITHUANIA	
Finland	1.307	0,094	Germany	2.182	0,090	Germany	2.652	0,075
Germany	1.230	0,089	U.S.	406	0,017	Spain	2.283	0,064
Sweden	176	0,013	Denmark	197	0,008	U.S.	574	0,016
Denmark	175	0,013	Sweden	80	0,003	Denmark	252	0,007
<b>Total</b>	<b>3.331</b>	<b>0,240</b>	<b>Total</b>	<b>3.347</b>	<b>0,138</b>	<b>Total</b>	<b>6.587</b>	<b>0,185</b>

*Source: National statistical offices; Own calculations.*

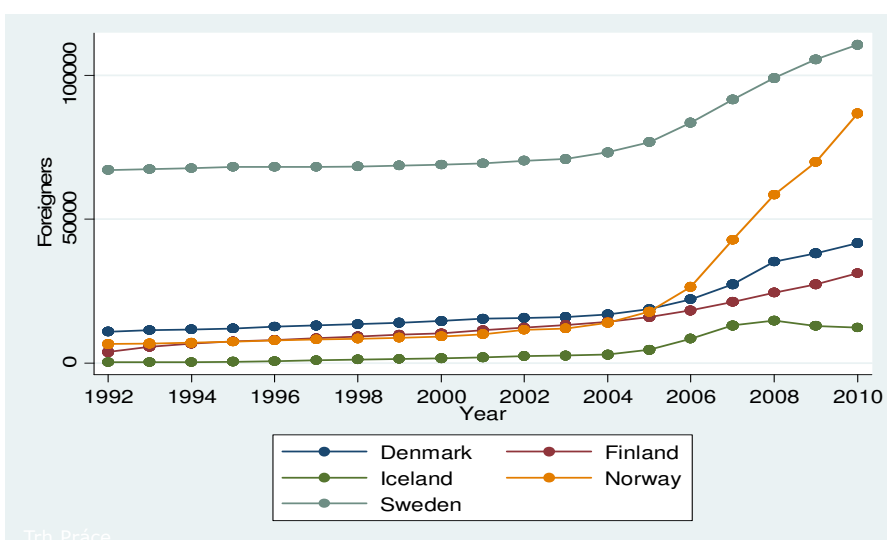




Immigration flows from Hungary, Poland, Slovenia, Czechia, Slovakia, Estonia, Latvia and Lithuania to 5 Nordic countries. 1992-2010

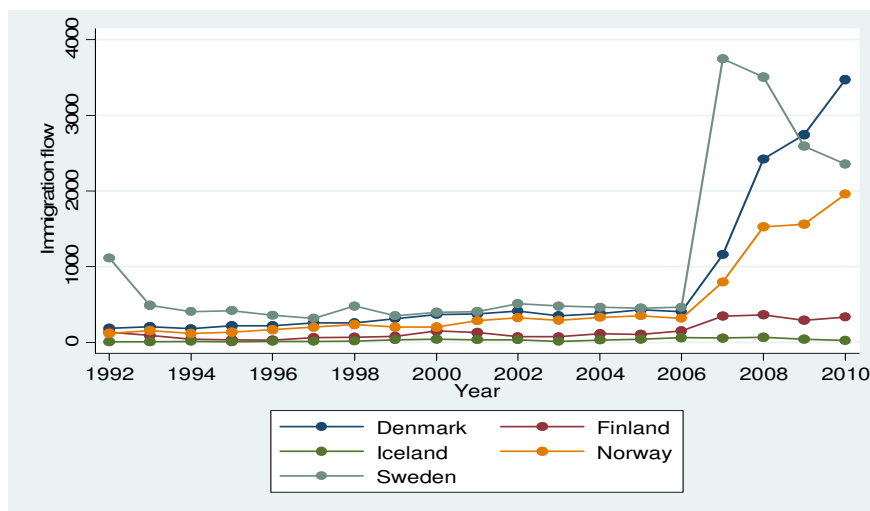


Foreign population from Hungary, Poland, Slovenia, Czechia, Slovakia, Estonia, Latvia and Lithuania living in 5 Nordic countries. 1992-2010

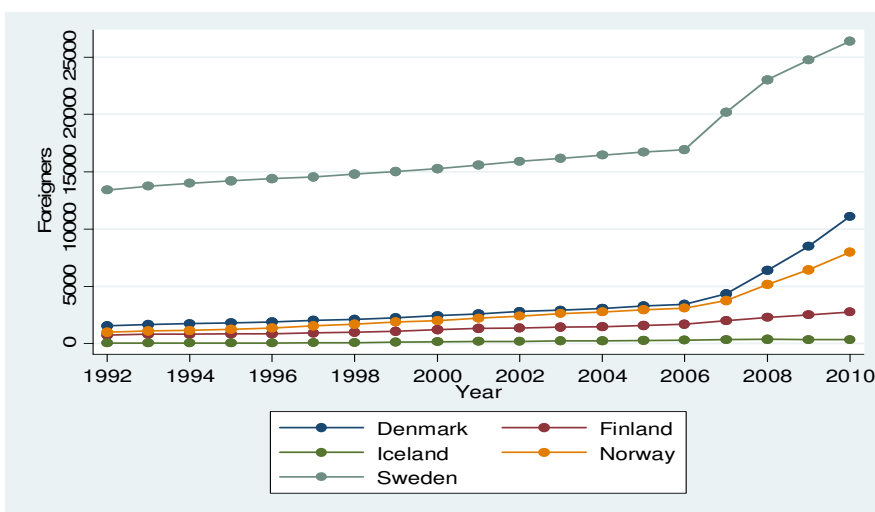


Trh Práce

*Immigration flows from new 2007 EU entrants Bulgaria and Romania to 5 Nordic countries. 1992-2010*



*Foreign population from new 2007 EU entrants Bulgaria and Romania living in 5 Nordic countries. 1992-2010*



CEE stock of foreigners in Nordic countries as a % of destination population. 1990 and 2010.

DESTINATIONS:	DENMARK		FINLAND		ICELAND		NORWAY		SWEDEN	
ORIGINS:	1990	2010	1990	2010	1990	2010	1990	2010	1990	2010
CR and SR, CZECHO-SLOVAKIA	0,019	0,043	0,005	0,013	0,020	0,094	0,021	0,080	0,099	0,091
HUNGARY	0,026	0,047	0,010	0,029	0,015	0,050	0,032	0,051	0,176	0,165
POLAND	0,172	0,481	0,019	0,052	0,109	2,976	0,107	1,183	0,416	0,755
ESTONIA*	0,002	0,020	0,042	0,468	0,001	0,045	0,002	0,057	0,134	0,108
LATVIA*	0,002	0,058	0,001	0,020	0,003	0,207	0,002	0,100	0,023	0,050
LITHUANIA*	0,002	0,113	0,001	0,012	0,002	0,466	0,001	0,322	0,003	0,072
SLOVENIA*	0,00002	0,005	0,00002	0,000	-	0,010	0,00007	0,005	0,001	0,011
<b>Total 2004 EU Entrants</b>	<b>0,223</b>	<b>0,766</b>	<b>0,078</b>	<b>0,594</b>	<b>0,15</b>	<b>3,848</b>	<b>0,165</b>	<b>1,797</b>	<b>0,852</b>	<b>1,252</b>
BULGARIA	0,005	0,061	0,005	0,021	0,007	0,042	0,011	0,053	0,023	0,072
ROMANIA	0,019	0,140	0,003	0,031	0,0004	0,066	0,010	0,112	0,103	0,212
<b>Total 2007 EU Entrants</b>	<b>0,024</b>	<b>0,201</b>	<b>0,008</b>	<b>0,052</b>	<b>0,007</b>	<b>0,108</b>	<b>0,021</b>	<b>0,165</b>	<b>0,126</b>	<b>0,284</b>
<b>TOTAL % of destination population</b>	<b>0,247</b>	<b>0,9672</b>	<b>0,086</b>	<b>0,6460</b>	<b>0,157</b>	<b>3,9550</b>	<b>0,186</b>	<b>1,9625</b>	<b>0,978</b>	<b>1,5354</b>
<b>TOTAL % of ALL IMMIGRANTS</b>	<b>3,690</b>	<b>7,7570</b>	<b>1,302</b>	<b>4,6481</b>	<b>3,794</b>	<b>10,8784</b>	<b>4,665</b>	<b>11,7898</b>	<b>9,235</b>	<b>14,8883</b>

Source: National statistical offices; Own calculations.

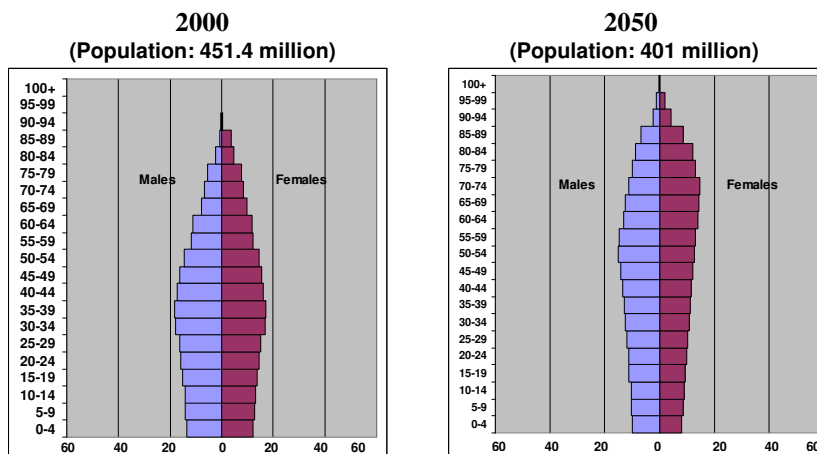
## TRENDS IN INTERNATIONAL MIGRATION

Migration pressures will continue in the future



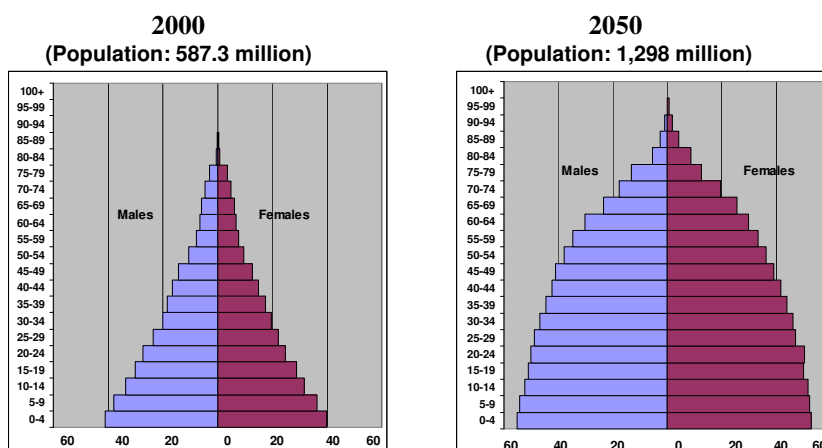
- Growing globalization – improvements in communication, Internet, transportations
- Demographic projections:
  - Aging of the populations in highly developed countries (fiscal burdens).
  - Young populations in LDCs.

### Demographic projections – European Union



Source: Cohen (2003): Human Population: The Next Half Century

### Demographic projections – North Africa and West Asia



Source: Cohen (2003): Human Population: The Next Half Century

## TRENDS IN INTERNATIONAL MIGRATION

Migration pressures will continue in the future



Immigration policy must adjust to the migration pressures and to the aging populations.



**ANALYSES OF MIGRATION DETERMINANTS, SELECTIVITY, ADJUSTMENT OF IMMIGRANTS and THEIR IMPACT ON ECONOMY and SOCIETY - IMPORTANT FOR POLICY MAKERS**

## WHY DO PEOPLE MIGRATE? Theory I

### •ECONOMIC FACTORS:

- Wage differences (Hicks, 1932),
- Human capital model (Sjaastad,1962; Becker,1964): Move if net discounted future expected benefits > costs of migration
- Income expectations conditioned on probability of being employed (Harris & Todaro, 1970; Hatton, 1995),
- Family or households decision (Mincer,1978),
- Relative deprivation approach (Stark, 1984),
- “Welfare magnet” (Borjas, 1999), or “social tourism”, “social raids” (Kvist, 2004).

## WHY DO PEOPLE MIGRATE? Theory II

### •MIGRATION NETWORKS:

- **migration networks:** “...sets of interpersonal ties that connect migrants, former migrants, and non-migrants in origin and destination areas through ties of kinship, friendship, and shared community origin” (Massey, 1993)
- **help to explain persistence in migration**
- “herd behavior” effect (Bauer et al. 2002),

### •NON-ECONOMIC FACTORS:

- war, love/marriage, taste for adventure
- Language proximity

### •OTHER (UN)OBSERVABLE COUNTRY SPECIFIC FACTORS

## WHY DO PEOPLE NOT MIGRATE? Theory

•Less than **2-3 percent** of the world’s population is living in a country other than they were born.

**?? WHY THERE IS NOT THAT MUCH MIGRATION ??**

### •BARRIERS TO MIGRATION:

- Immigration policies
- Costs of migration (out-of-pocket exp., psychological costs)
- Cultural distance
- Language barriers
- Skill transferability

## WHAT DOES THE EMPIRICAL EVIDENCE SAY?

• **Importance of economic factors** – pull stronger than push, no direct welfare magnet effect.

• **Importance of migration networks** – networks more important for immigrants coming from poor countries

• **Importance of distance variables:** cost of migration, cultural and linguistic distance between the countries.

• *Literature:* e.g. Pedersen, Pytlikova and Smith (2004), Pytlikova (2006), Belot and Edrveen (2011), Palmer and Pytlikova (forthcoming), Adsera and Pytlikova (forthcoming). Others: G. Peri, F. Docquier, H. Rappoport, G. Hanson

## WHO MIGRATES??

### SELECTION PROCESSES IN MIGRATION

In line with the “**Human capital investment**” there are higher “returns to migration” for young, healthy with greater abilities/education (Chiswick, 2000).

Different selectivity for different types of migrants:

- Economic migrants
- Tied movers – family re-union
- Refugees
- Illegal migration
- Short-term migrants

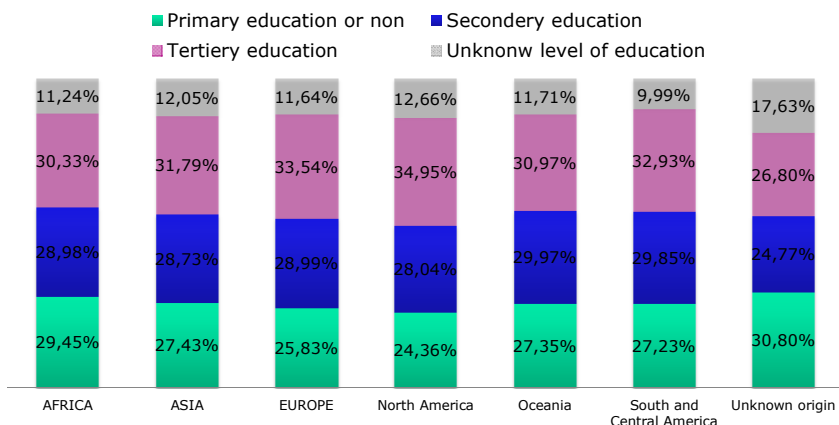


### WHO MIGRATES??

•“self-selection model” (Borjas, 1987) based on Roy’s model - immigrants skill differentials in relation to the variance in the wage distribution.



### Educational attainment of foreigners, by region of birth around year 2000

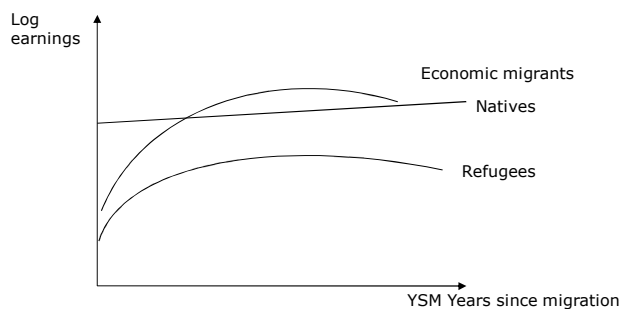


Source: own calculations, using DIOC-E 2.0 dataset

### ADJUSTMENT OF IMMIGRANTS

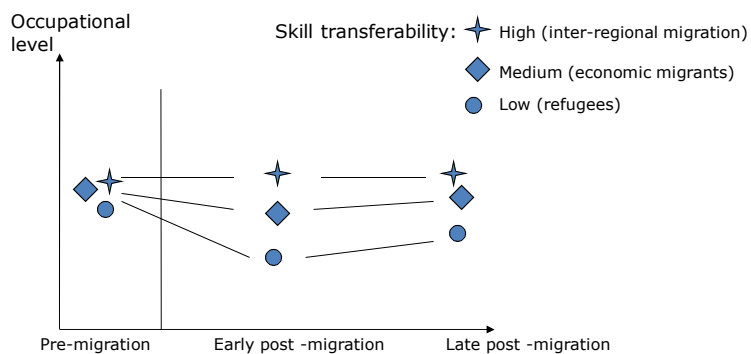
- Earnings (used by economists)
- Occupation (used by sociologists)

Different types of immigration – impact on adjustment



### ADJUSTMENT OF IMMIGRANTS

- u-shape pattern of occupational mobility



## ADJUSTMENT OF IMMIGRANTS

? Which occupations have high/low skill transferability ?

*Example*

**Important:**

Selectivity,

Skills transferability & transferability of occupation,

Investment into post-migration training.

## IMPACT OF MIGRATION

- Impact on employment and wages of natives and on general welfare
- Ethnic diversity and firm outcomes: innovation, productivity, entrepreneurship, FDI, trade..
- The role of immigration policy

The next lectures on Wednesday 11.2.2015

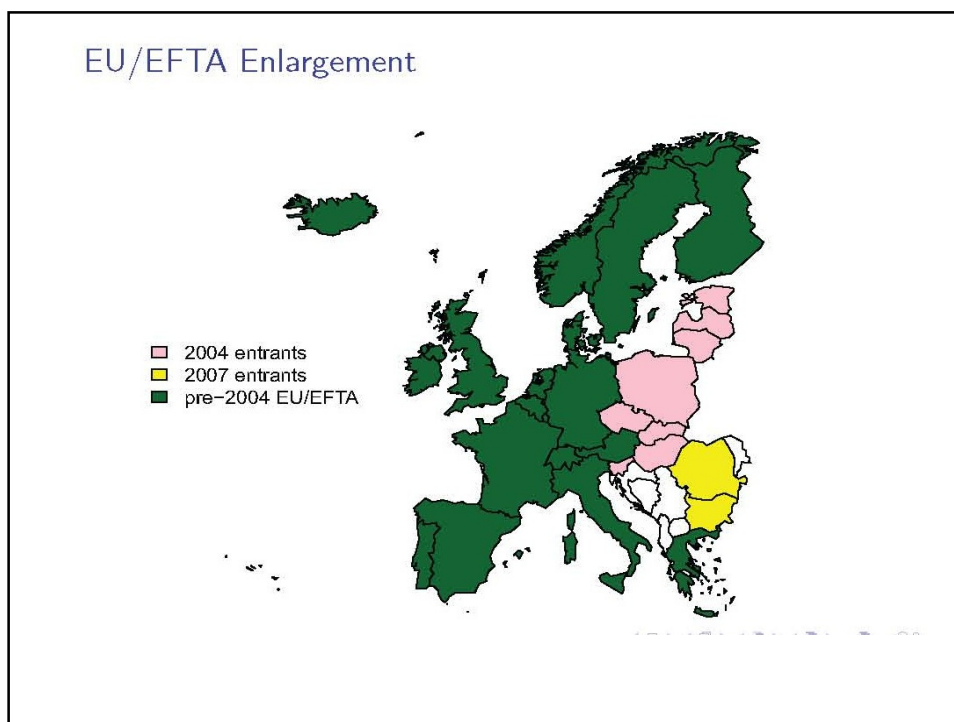
### Example – migration from CEECs

- Determinants of migration
- How do CEE fare? Post-enlargement experience
- *Impact of CEE migration – lecture on 11.2.2015*

## The effect of EU enlargements and labour market openings on migration

**Mariola Pytliková**

VSB-Technical University Ostrava, IZA, CELSI and CReAM



### Emigration from Central and Eastern Europe

#### 1<sup>st</sup> EU enlargement towards the East – 2004 enlargement:

- UK, Ireland and Sweden have opened from day one of EU enlargement in May 2004, the rest of “old” EU members imposes restrictions to free movement of workers.
- 2006 - Spain, Portugal, Greece, Italy, Finland and Iceland
- 2007 – the Netherlands and Luxembourg (November 2007)
- July 2008 - France
- May 2009 – Belgium, Denmark and Norway
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## Emigration from Central and Eastern Europe

### 2<sup>nd</sup> EU enlargement towards the East – 2007 enlargement:

- Bulgaria and Romania joined the EU on January 1, 2007.
- Restrictions on labour markets possible until 2014;
- Open doors for 2007 entrants:
  - 2007 - Finland, Sweden, Cyprus, Czech Republic, Estonia, Latvia, Lithuania, Poland, Slovakia, Slovenia
  - 2009 - Denmark, Greece, Portugal, Spain
  - 2011 - Spain reimposes restrictions for workers from Romania
  - 2012 – Iceland, Italy
  - 2014 - the rest of EU holds a maximum period of restrictions

## Motivation –previous evidence

- many studies trying to forecast migration potential from CEECs prior EU enlargements:

### 2 different approaches:

A) surveys: 6 - 30% of the CEE populations, see e.g. Wallace (1998), Fassmann and Hintermann (1997).

B) econometric analysis: a long-run migration potential is usually estimated at around 2-5%, net migration potential around 2% of source countries population, see Pytlikova (2006), Dustmann et al. (2003) or Alvarez-Plata et al. (2003).

- Example of a forecast for UK: 5.000–13.000 immigrants per year to UK (Dustmann et al. 2003)

Reality: around 500.000 CEE immigrants between 2004 and 2006!!!

### ***Why so bad forecasts?***

### Motivation –previous evidence

- out-of-sample historical data on migration;
- and/or past enlargement experience;
- -> extrapolation to predict East-West migration;
- in the EU context: analyses of migration flows into one destination country, specifically Germany;
- On the basis of obtained coefficients forecasts: => problems related to (double) out-of-sample forecasts and the assumption of invariance of migration behavior across a space.

### Motivation

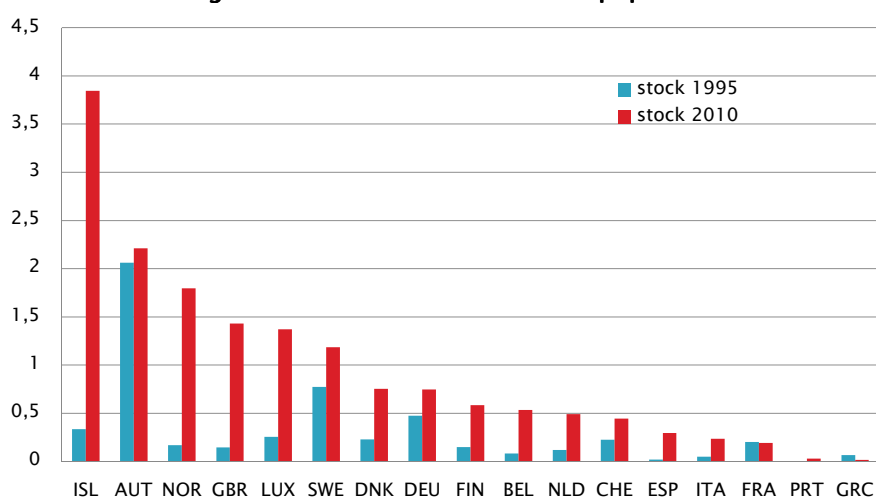
- In this paper:
  - I use actual numbers of CEE emigrants = true behavior of CEE emigrants,
  - Extended time series 1995 – 2010
  - I exploit a “natural experiment”: different timing of lifting of restrictions to the free movement of workers on migration
    - ⇒ I estimate a difference-in-differences and triple DDD estimator on the flow of migrants from 8 CEECs and Bulgaria and Romania into 18 EEA+CH countries .

### Data description

- Immigration flows and foreign population stock into 42 destinations from all world source countries.
- For 27 destinations data collected from national statistical offices
- for 6 OECD countries from OECD International Migration Database (Chl, Isr, Kor, Mex, Rus and Tur)
- For 9 others from Eurostat (Bul, Cro, Cyp, Est, Lv, Ltv, Mal, Rom and Slo)
- Period: 1980 to 2010.
- **In this paper – focus on EEA+CH destinations and migration from CEE new EU members over time 1995-2010**
- Additional control variables
  - Economic variables
  - Demographic variables,
  - Distance variables:
    - Physical – distance in km
    - Linguistic proximity constructed by Adsera&Pytlikova (forthcoming) based on Ethnologue
    - Neighboring dummy
- Sources: WB-WDI, ILO, OECD
- Unbalanced panel.

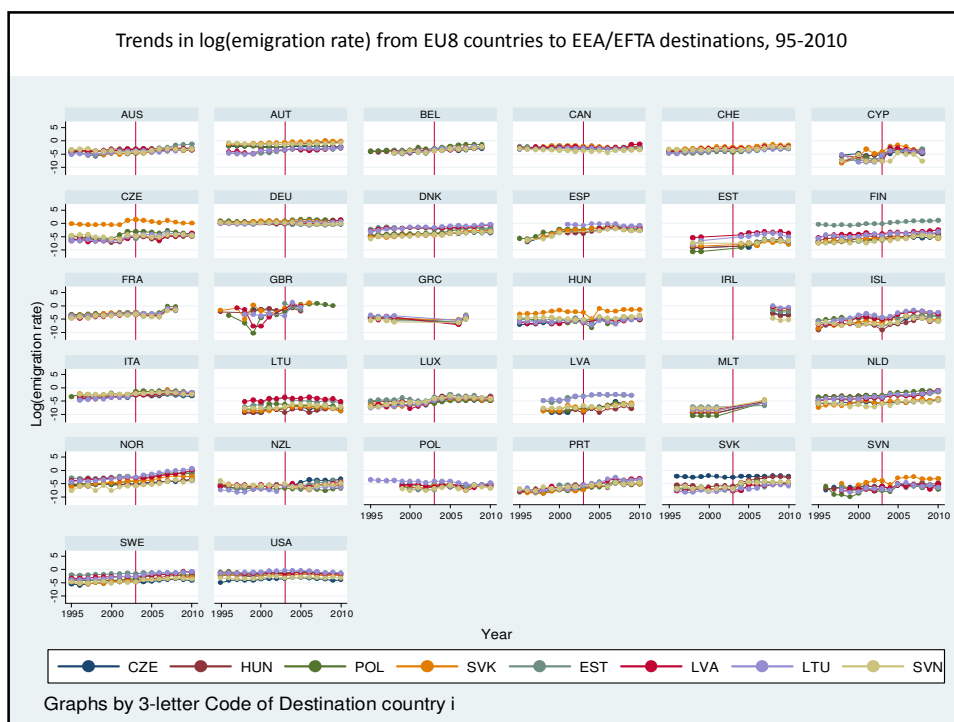
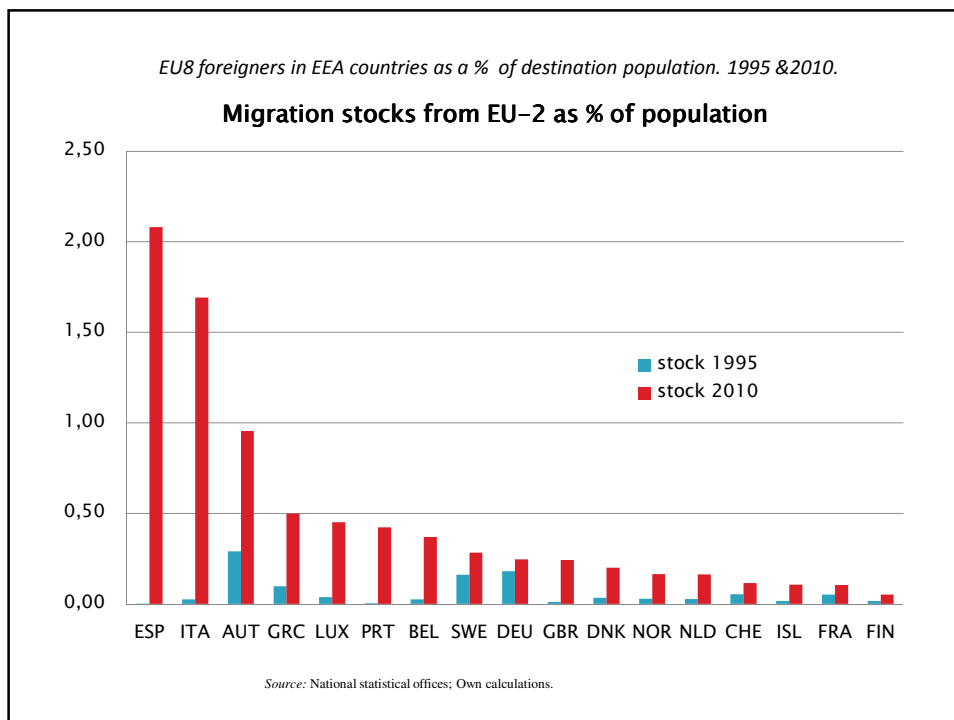
EU8 foreigners in EEA countries as a % of destination population. 1995 & 2010.

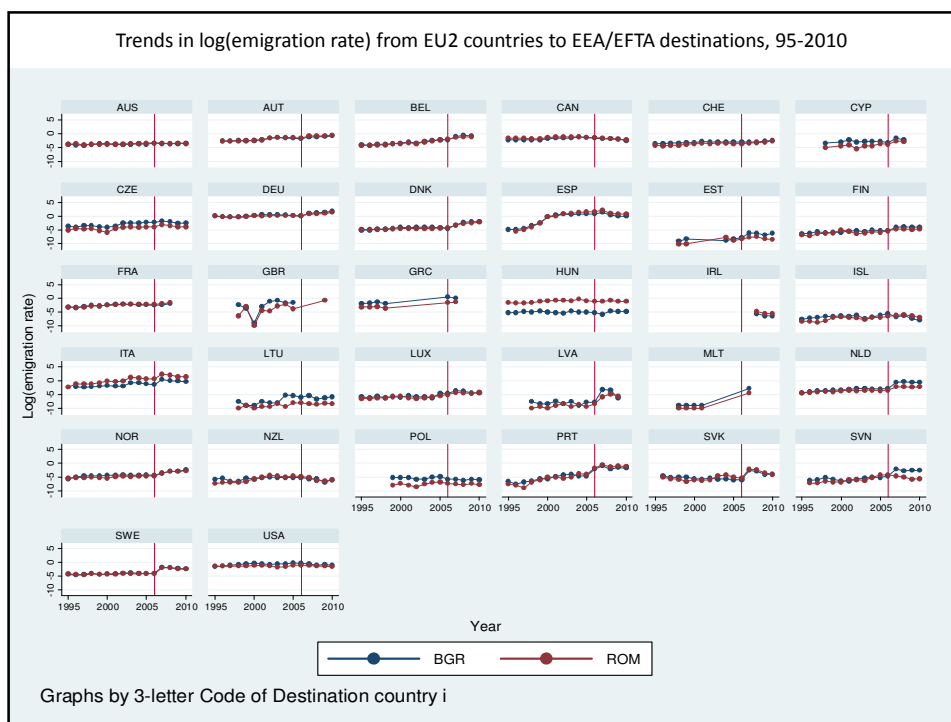
#### Migration stocks from EU-8 as % of population



Source: National statistical offices; Own calculations.







## Model

The basic DD econometric model has the following form:

$$\ln m_{ijt} = \gamma_0 + \delta_j + \delta_i + \theta_t + \gamma_2 OPEN_{ij} + \gamma_3 \ln(GDP_j)_{t-1} + \gamma_4 \ln(GDP_i)_{t-1} + \gamma_5 \ln(GDP_i)_{t-1}^2 + \gamma_6 \ln u_{jt-1} + \gamma_7 \ln u_{it-1} + \gamma_8 \ln s_{ijt-1} + \gamma_9 \ln lingprox_{ij} + \gamma_{10} \ln dist_{ij} + \gamma_{11} neighbour + \varepsilon_{ijt}$$

- **mijt** - emigration rate = gross migration flow per source country population,
- **full set of year dummies, and destination and country of origin effects**
- **OPENij** - a Labour Market Opening policy variable, to be equal to 1 if there is a free movement of workers between a particular destination and source country, and 0 otherwise.
- **GDPj, GDPi, GDPi2** - GDP per capita, PPP, constant 2005 US\$
- **Uj, Ui** - unemployment rates
- **Sijt-1** is stock of immigrants per source country population
- **Lingprox**– linguistic proximity index
- **distij** is distance in km
- **Neighbour**
- **Robust st errors clustered** on the level of pair of countries
- All vars in logs except dummies and ling proximity index.

Overview of policy changes with respect to lifting restrictions on the access to labor market for workers from the new EU 2004 member states

EEA/EFTA countries	Lifting restrictions on free movement of workers	Treatments and Controls	Pre-treatment period	Post-treatment period
<b>Austria</b>	May 2011	Control	1995-2010	-
Belgium	May 2009	Treatment	1995-2008	2009-2010
Denmark	May 2009	Treatment	1995-2008	2009-2010
Finland	May 2006	Treatment	1995-2005	2006-2010
France	July 2008	Treatment	1995-2007	2008-2010
<b>Germany</b>	May 2011	Control	1995-2010	-
Greece	May 2006	Treatment	1995-2005	2006-2010
Iceland	May 2006	Treatment	1995-2005	2006-2010
Ireland	May 2004	Treatment	1995-2003	2004-2010
Italy	July 2006	Treatment	1995-2005	2006-2010
Luxembourg	November 2007	Treatment	1995-2007	2008-2010
Netherlands	May 2007	Treatment	1995-2006	2007-2010
Norway	May 2009	Treatment	1995-2008	2009-2010
Portugal	May 2006	Treatment	1995-2005	2006-2010
Spain	May 2006	Treatment	1995-2005	2006-2010
Sweden	May 2004	Treatment	1995-2003	2004-2010
<b>Switzerland</b>	May 2011	Control	1995-2010	-
UK	May 2004	Treatment	1995-2003	2004-2010

Overview of policy changes with respect to lifting restrictions on the access to labor market for workers from Bulgaria and Romania

EEA/EFTA countries	Lifting restrictions on free movement of workers	Treatments and Controls	Pre-treatment period	Post-treatment period
<b>Austria</b>	January 2014	Control	1995-2010	-
<b>Belgium</b>	January 2014	Control	1995-2010	-
Denmark	May 2009	Treatment	1995-2008	2009-2010
Finland	January 2007	Treatment	1995-2006	2007-2010
<b>France</b>	January 2014	Control	1995-2010	-
<b>Germany</b>	January 2014	Control	1995-2010	-
Greece	January 2009	Treatment	1995-2008	2009-2010
<b>Iceland</b>	January 2012	Control	1995-2010	-
<b>Ireland</b>	January 2014	Control	1995-2010	-
<b>Italy</b>	January 2012	Control	1995-2010	-
<b>Luxembourg</b>	January 2014	Control	1995-2010	-
<b>Netherlands</b>	January 2014	Control	1995-2010	-
<b>Norway</b>	January 2014	Control	1995-2010	-
Portugal	January 2009	Treatment	1995-2008	2009-2010
Spain	January 2009 (Aug 2011)	Treatment	1995-2008	2009-2010
Sweden	January 2007	Treatment	1995-2006	2007-2010
<b>Switzerland</b>	January 2014	Control	1995-2010	-
<b>UK</b>	January 2014	Control	1995-2010	-
<b>Robustness:</b>				
Hungary	January 2009	Treatment	1995-2006	2007-2010
Other EU8 dest	January 2007	Treatments	1995-2006	2007-2010

### **EU enlargement effect on migration**

Model with both, the labour market openings and the EU enlargement effects:

$$\ln m_{ijt} = \gamma_0 + \delta_j + \delta_i + \theta_t + \gamma_1 EUenl_{ij} + \gamma_2 OPEN_{ij} + \gamma_3 \ln(GDP_j)_{t-1} + \gamma_4 \ln(GDP_i)_{t-1} + \gamma_5 \ln(GDP_i)_{t-1}^2 + \gamma_6 \ln u_{jt-1} + \gamma_7 \ln u_{it-1} + \gamma_8 \ln s_{ijt-1} + \gamma_9 lingprox_{ij} + \gamma_{10} \ln dist_{ij} + \gamma_{11} neighbour + \varepsilon_{ijt}$$

- **EUenlij** - the EU enlargement policy dummy,
  - equal to 1 for pairs of 17 EEA destination countries and the EU8 and EU2 source countries for the period after year 2004 and 2007, respectively.
  - equal to 0 for the pre-treatment period for those pair of countries, and for pairs of the non-EU destinations - Australia, Canada, New Zealand, Switzerland and USA - and the EU8- and EU2- source countries.
- In addition, I run the econometric models above with pairs of country fixed effects in order to capture (unobserved) traditions, historical and cultural ties between a particular pair of destination and origin countries:

$$\ln m_{ijt} = \gamma_0 + \delta_{ij} + \theta_t + \gamma_1 EUenl_{ij} + \gamma_2 OPEN_{ij} + \gamma_3 \ln(GDP_j)_{t-1} + \gamma_4 \ln(GDP_i)_{t-1} + \gamma_5 \ln(GDP_i)_{t-1}^2 + \gamma_6 \ln u_{jt-1} + \gamma_7 \ln u_{it-1} + \gamma_8 \ln s_{ijt-1} + \gamma_9 lingprox_{ij} + \gamma_{10} \ln dist_{ij} + \gamma_{11} neighbour + \varepsilon_{ijt}$$

Difference-in-Differences analyses of labour market openings of EU countries on migration flows from new EU10 member states, 22 destinations, years 1995-2010.

VARIABLES	EU8+EU2		EU8		EU2	
<b>LMO</b>	<b>0.378***</b>	<b>0.353***</b>	<b>0.298***</b>	<b>0.348***</b>	<b>0.536***</b>	<b>0.524*</b>
Dest & Origin FE	YES		YES		YES	
Pair of country FE	YES		YES		YES	
Constant	-89.043***	-93.528***	-116.716***	-131.480***	456.667	496.926
Observations	2,424	2,424	1,910	1,910	514	514
Adjusted R-sq	0.861	0.905	0.868	0.9111	0.896	0.8976

Dependent Variable: Ln(Emigration Rate). Controls included: networks, economic and distance variables, time dummies. Robust standard errors clustered on country pairs level, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; The sample of destinations consists of the "old" 17 EEA countries and 5 non-EU countries: Australia, Canada, New Zealand, Switzerland and the United States.

Difference-in-Differences analyses, Controls for the EU enlargement in order to separate the labour market openings effects from the EU enlargement effects, 22 destinations, years 1995-2010.

VARIABLES	EU8+EU2		EU8		EU2	
<b>LMO</b>	0.290***	0.268***	0.248**	0.282***	0.363**	0.353
<b>EUenl</b>	0.308***	0.334***	0.169	0.246**	0.798***	0.818***
Dest & Origin FE	YES		YES		YES	
Pair of country FE	YES		YES		YES	
Constant	-90.909***	-96.769***	-117.518***	-133.533***	425.877	475.934
Observations	2,424	2,424	1,910	1,910	514	514
Adjusted R-sq	0.862	0.9065	0.868	0.9116	0.899	0.9012

Dependent Variable: Ln(Emigration Rate). Controls included: networks, economic and distance variables, time dummies. Robust standard errors clustered on country pairs level, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; The sample of destinations consists of the "old" 17 EEA countries and 5 non-EU countries: Australia, Canada, New Zealand, Switzerland and the United States.

### Triple difference (DDD) estimator –2004 EU-8

- similarly as in DD, but add:
  - Non-experimental group of source countries:
    - Russia, Croatia, Albania and Ukraine sources
  - post-treatment period varies according to the different time of lifting restrictions

DDD analyses of labour market openings and EU enlargements; Period: 1995-2010. Experimental groups of source countries: Albania, Croatia, Russia and Ukraine.

VARIABLES	EU8+EU2+4CEECs		EU8+4CEECs		EU2+4CEECs	
<b>LMO</b>	0.237***	0.338***	0.233**	0.385***	-0.051	0.401*
<b>EUenl</b>	0.594***	0.637***	0.548***	0.596***	1.142***	1.238***
Dest & Origin FE	YES		YES		YES	
Pair of country FE	YES		YES		YES	
Constant	-22.903	-35.511**	-4.795	-25.343	-17.699	-27.292
Observations	3,110	3,110	2,596	2,596	1,200	1,200
Adjusted R-sq	0.861	0.9081	0.864	0.9130	0.886	0.9133

Dependent Variable: Ln(Emigration Rate). Controls included: networks, economic and distance variables, time dummies. Robust standard errors clustered on country pairs level, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; The sample of destinations consists of the "old" 17 EEA countries and 5 non-EU countries: Australia, Canada, New Zealand, Switzerland and the United States.

TESTING VALIDITY: Placebo tests: period 1995-2003; placebo enlargement year for EU8=1997; placebo for EU2=2000

VARIABLES	EU8+EU2		EU8+EU2	
<b>LMO</b>	0.140	0.093	0.123	0.091
<b>EUenl</b>			0.121	0.018
Dest & Origin FE	YES		YES	
Pair of country FE	YES		YES	
Constant	-131.288***	-162.262***	-121.079***	-160.794***
Observations	1,239	1,239	1,239	1,239
Adjusted R-sq	0.856	0.9175	0.856	0.9175

Dependent Variable: Ln(Emigration Rate). Controls included: networks, economic and distance variables, time dummies. Robust standard errors clustered on country pairs level, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### SUMMARY:

- A positive effect of labour market openings on migration:
  - migrants move to countries with greater formal labor market access over those in which their access is restricted.
  - The relationships hold even in the most restrictive models with economic and distance indicators, existing immigrant stocks and country or country pair FE.
    - in models without networks, the coefficients on DD and DDD are always significant positive;
    - It holds also for 32 destinations
    - It holds even if I control for the overall effect of the “EU entry” on migration.
  - the estimated “EU entry” effect is positive and significant in all DD and DDD model specifications, and it is larger than the “labour market opening” effect.

## Labor Market Laws and intra-European Migration: The Role of the State in Shaping Destination Choices

By **John Palmer**, *Princeton University* and **Mariola Pytlikova** *VSB-TU,  
IZA, CELSI and CReAM*

**Forthcoming in the *European Journal of Population***

- ⇒ Use an employment rights index collected by John Palmer to evaluate how *granting employment rights law* influence migration.
- ⇒ We study immigrants *multiple choices*
- ⇒ We study potential *mechanisms* behind
  
- ⇒ WE FIND:
- ⇒ migrants are attracted to destinations that give them *greater formal labor market access*.
- ⇒ Decreasing *restrictions in one destination diverted migrants from other potential destinations*.
- ⇒ The effect of destination labor market access is:
  - ⇒ weaker for destinations with *larger existing co-national networks*, and for migrants from *linguistically closer countries* and from countries with *higher average education*.

### How do CEE fare? Post-enlargement evidence

- Main sending countries:
  - **UK:** Poland, Slovakia, Lithuania,
  - **Ireland:** Poland, Lithuania, Latvia
  - **Sweden:** Poland, Lithuania, Estonia
- Sectoral distribution of immigrants:
  - **UK:** hotels and restaurants, manufacturing, agriculture/construction
  - **Ireland:** construction, manufacturing, hotels and restaurants
  - **Sweden:** health care, trade, manufacturing



### How do CEE fare? Post-enlargement evidence

- Characteristics of post-enlargement immigrants:

- **UK:**

- young,
- males,
- single,
- rel. highly educated (with qualifications),
- higher empl. rate than of natives and non-EU migrants.
- Earn less than natives, later arrivals earn less than earlier arrivals.

### How do CEE fare? Post-enlargement evidence

- Characteristics of post-enlargement immigrants:

- **Ireland:**

- high Labour Force Participation rate (90%),
- higher empl. rate than of natives and non-EU migrants.
- No earnings data for Irish vs. foreign workers

### How do CEE fare? Post-enlargement evidence

Characteristics of post-enlargement immigrants:

– **Sweden:**

- Immigration of males increased more than females (previously more females),
- secondary and higher education,
- lower empl. rate and hours worked than of natives, but higher than of non-EU migrants (partly explained by lags in registration of returning migrants)
- Monthly earnings are 10% less than of natives. Later arrivals earn less than earlier arrivals
- CEE are not overrepresented in the welfare state schemes (which was the focus of the pre-enlargement debate in Sweden)

### THE NEXT LECTURE – by Daniel on 6.2.2015 Advanced models of labor supply

#### OUR NEXT LECTURE – on 11.2.2015

- **Role of immigration policies**
- **Impacts of migration and ethnic diversity on firms and economies - effects on productivity, innovation, exporting, entrepreneurship, trade and FDI behaviour, and remittances**