What explains Immigrant-Native gaps in European Labour Markets:
The role of institutions

Martin Guzi

Martin Kahanec

Lucia Mýtna Kureková

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The demographic background

- **Demographic change presents nearly all EU states with formidable challenges:**
  - Ageing populations
  - Scarcity of skilled labor
  - Dynamic loss in the economy (innovation deficits)
  - Financial risks in social security systems
- **Financial and economic crisis added to the difficulties:**
  - Rising risk aversion
  - Economic decline
  - Negative attitudes toward immigration and new Fortress Europe
- **And the immigration crisis has added xenophobic/nationalistic/racist fuel to the debates**

Skill gaps and demand for migrants in the EU

Mobility and immigration are needed

- Replacement and newly emerging jobs (both high skilled and low skilled)

- Fill in shortages and skill deficiencies

**IZA Expert Survey on High-Skilled Labor Immigration**:

- A survey of 234 labor market experts from Europe;

- 89.0% - the EU needs at least as many immigrants as it has now, and 57.7% - the EU needs more or many more immigrants

- Less conviction that the EU needs additional low-skilled immigration (60.7 and 27.3%)

- However, 96.7% - the EU needs at least as many high-skilled migrants, and 80.3 % - the EU needs more or many more high-skilled migrants

The EU needs migrants from outside

Gross immigration, non-EU, % population
Legal and illegal immigration in the context

Migration flows to EU27 destination countries from Europe, by European regions of origin, 1990-2010
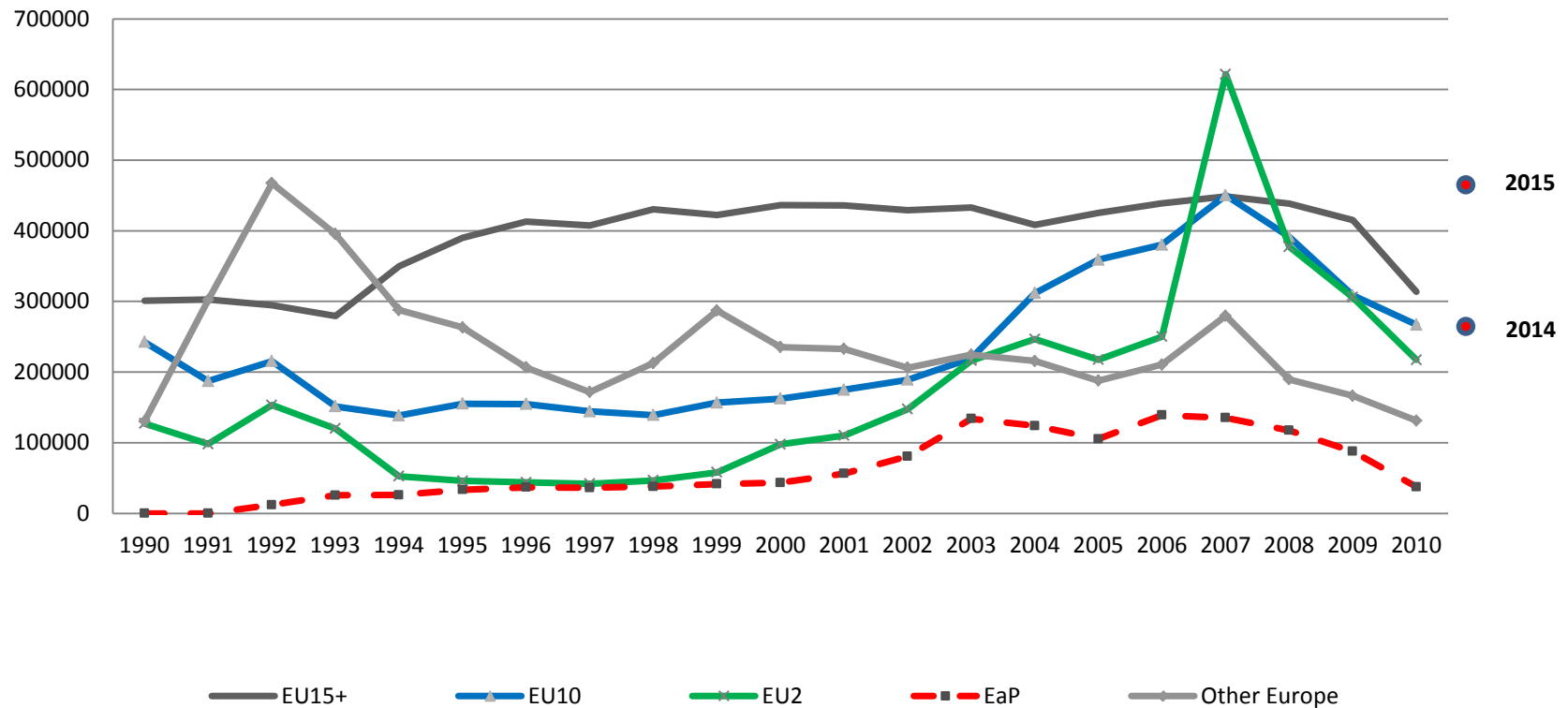
Unskilled immigrants? No, rather skilled!

c) Percent high-educated EUN immigrants and natives
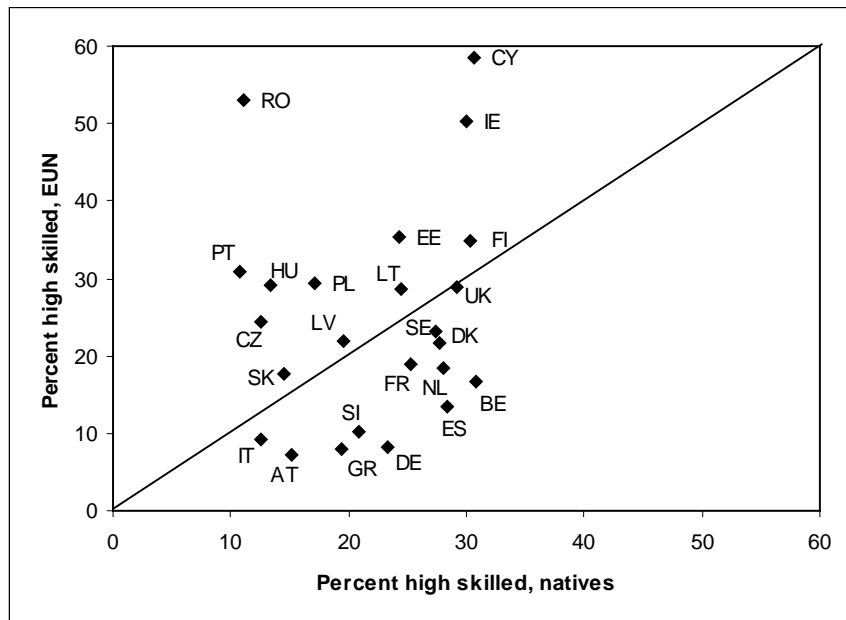
d) Percent high-educated other immigrants and natives
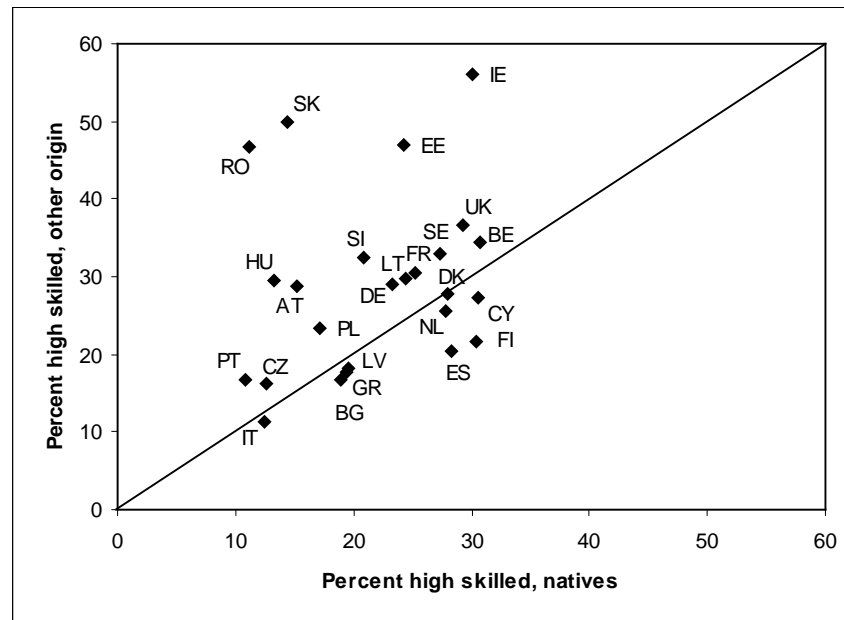
Non-EU immigrants well-educated, especially in NMSs.

Tertiary education. Source: Kahanec, 2012. EU LFS 2010

Educated...but brain waste!

c) Percent high-skilled EUN immigrants and natives
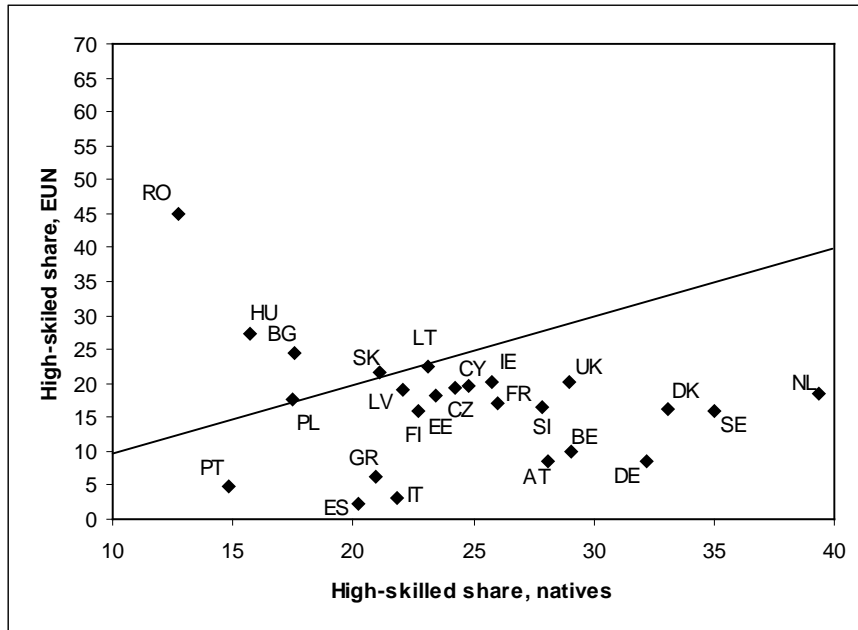
d) Percent high-skilled other immigrants and natives
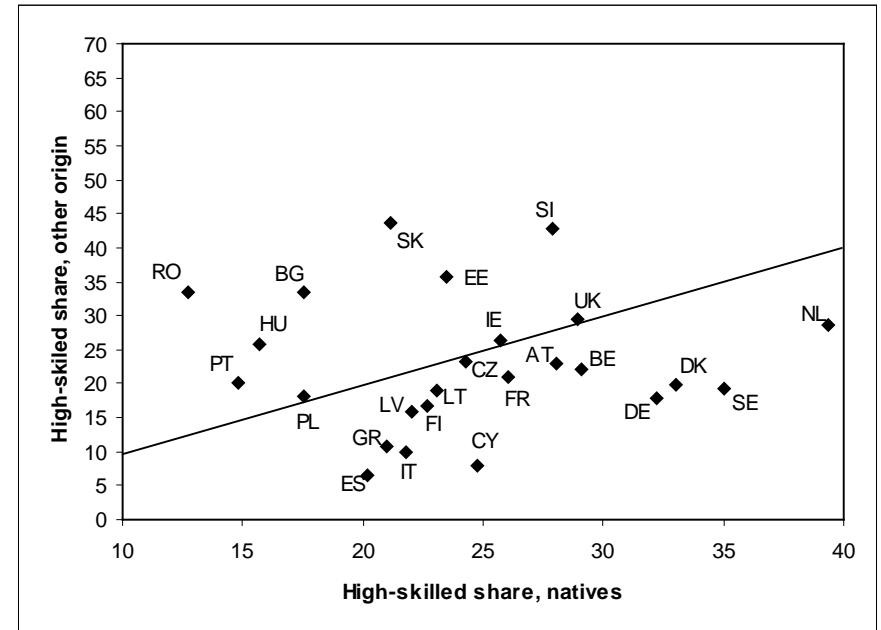
Non-EU immigrants more often work in less-skilled occupations (especially ES, IT, AT, DE, SE, NL), except for some NMSs.

ISCO 1-3. Source: Kahanec, 2012. EU LFS 2010

Motivation

- "Immigrant surplus" depends on economic potential of immigrants and the efficiency on how they use it in the host country

- Immigrants' social and demographic background only partially explain the existing immigrant-native differences in the labor market (e.g. Cangiano 2012)

- Immigrant-natives gaps arise due to imperfect adjustment and threaten the cohesion of receiving societies.

Immigrant-native LM gaps

- Gaps in LM outcomes
  - Explainable differences
    - Selection upon entry
    - Human/social/ethnic capital differences
  - **Differences among (observably) equal individuals**
    - **Different behavior/treatment in the LM**

Can we "explain the unexplained"?

The role of institutions

- Dustmann and Frattini (2012) find that job prospects for recent immigrants are worse in countries with stricter employment protection

- Huber (2015) finds that immigrants have difficulties finding employment in countries with more centralized wage bargaining and stricter regulations.

- Bergh (2015) finds collective bargaining to have a robust impact on labor market gaps

This paper

VoC framework covers a range of institutional areas that influence the working and living environment of immigrants and natives.

1. Labor market regulation regime
2. Skill regime
3. Welfare state regime
4. Production regime

These contextual variables may explain some gaps

We look at different outcomes to evaluate chances of getting a job but also the quality of the jobs of immigrants.

1. Labor market regulation regime

- Stronger unionization may ensure equal employment conditions for immigrants; in case of non-inclusive trade unions, immigrants are pushed to secondary market

- less rigid labor market (EPL) may have positive effects on employment of immigrants but at the cost of temporary or low-skilled employment

- Regulation through collective agreements similar effects

Indicators of social dialogue in Europe

Source: ICTWSS 2015

2. Skill regime

- Skill regime affects the nature of labor supply and competition in the labor market
- general skills regimes put less emphasis on skill certification that is supportive of immigrant integration
- specific skills are provided within companies (dual education) and are less transferable
- skills regimes are distinguished by the share of students enrolled in vocational secondary education

3. Welfare state regime

– Access to welfare is highly regulated

– Generous welfare regimes give advantage to natives but targeted welfare policy help disadvantaged groups and also immigrants

– Active labor market policies may increase labor market prospects of immigrants
(e.g. Heinesen et al 2011; Clausen et al. 2009)

4. Production regime

- Structure of the economy determines the supply and demand conditions and hence affects the demanded profile of immigrants
- The higher share of services and agriculture may provide more employment (but low-skilled, temporary?) opportunities for immigrants relative to natives.
- More open economies may provide more favorable conditions to immigrant employment

Other factors

- the composition of immigrant population in the receiving countries
- Current inflows of immigrants relative to native population
- GDP pc, unemployment rate controls for business cycle

Stats: Institutional and structural variables

	min	max	mean	sd
Union density	5.65	77.71	30.04	19.41
Collective bargaining coverage	14.49	100.00	65.58	26.46
EPL - regular contract	1.03	4.42	2.39	0.63
EPL - temporary contract	0.38	3.75	1.76	0.91
% GDP in agriculture	0.29	6.05	2.20	1.15
% GDP in manufacturing	12.13	39.03	27.12	5.78
% GDP in service	57.08	87.53	70.68	6.36
Export as % of GDP	19.30	181.80	59.63	33.41
The share of VET	0.01	0.52	0.28	0.10
OECD active labor market policy % GDP	0.05	1.96	0.64	0.38
OECD social public expenditure % GDP	12.70	32.00	23.62	4.18
Migration rate from EU-15	0.01	0.84	0.23	0.18
Migration rate from EU-12	0.02	0.83	0.20	0.23
Migration rate from other Europe	0.01	0.92	0.23	0.22
Migration rate from Africa	0.00	0.54	0.17	0.14
Migration rate from Asia	0.00	0.29	0.08	0.07
Inflow of immigrants, per 1000	0.46	37.33	7.71	7.36
Per-capita GDP	18292	97410	37276	14578
Unemployment rate	2.80	26.30	8.44	4.02

Source: ICTWSS, OECD, Eurostat, Unesco, World Bank (2004-2013, 19 countries)

Methodology

1st Stage

Outcome equation for natives
The same for for immigrants
Oaxaca-Blinder-Yun decomposition

→ Panel of unexplained gaps

2nd Stage

Explain the unexplained gaps in a FE model

Databases

- EU-LFS 2004-2013 (19 countries)
- Demographic variables: education, gender, age and geographic distribution.
- Immigrants distinguished by origin and years since arrival
- Four labor market outcomes:
  - Labor market participation
  - Unemployment status
  - Low-skill employment (ISCO-9 jobs)
  - Temporary contract
- ICTWSS, OECD, Eurostat, Unesco, World Bank

Labor market outcomes

	Natives	Migrants all	Migrants EU-15	Migrants NMS	Migrants other Europe	Migrants Africa	Migrants Asia
Participation rate	0.71	0.72	0.73	0.77	0.69	0.67	0.68
Unemployment rate	0.08	0.14	0.08	0.13	0.15	0.20	0.10
Low-skill jobs	0.09	0.19	0.10	0.24	0.27	0.21	0.18
Temporary contract	0.14	0.19	0.12	0.19	0.17	0.21	0.16

% of gap that remains unexplained							
Participation rate		33	56	29	56	63	65
Unemployment rate		89	94	95	92	80	72
Low-skill jobs		89	73	87	99	96	71
Temporary contract		98	77	82	89	87	61

Source: EU-LFS 2004-2013, 19 countries

Findings from the first stage

- A smaller part of the immigrant–native gap defining the quality of employment is explained by workers' characteristics, and the larger part is due to other factors.

- These outcomes may point at various omitted variables, such as discrimination, differences in preferences, behavior (eg strategic behavior on the part of migrant workers or their employers aimed at reducing the costs of labor), or other

Employment

	Baseline	EU-15	EU-NMS	Europe	Africa	Asia	YSM 1-5	YSM 6-10	YSM 10+
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Union density	-0.0009	0.0027	0.0006	-0.0032	-0.0068 **	-0.0025	0.0097	-0.0003	-0.0007
	(0.001)	(0.003)	(0.002)	(0.003)	(0.003)	(0.004)	(0.007)	(0.003)	(0.002)
Collective bargaining coverage	0.0001	0.0003	-0.0017 **	-0.0002	0.0011	-0.0015	-0.0042 *	-0.0002	0.0004
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)
EPL - regular contract	-0.0009	-0.0477	0.0576 **	-0.0339	-0.028	-0.0835	0.1175 *	0.051 *	0.0003
	(0.008)	(0.042)	(0.025)	(0.035)	(0.027)	(0.055)	(0.069)	(0.026)	(0.011)
EPL - temporary contract	0.0121	-0.1009 **	-0.0265	-0.0201	0.0089	0.0222	0.247 ***	-0.1217 ***	-0.0026
	(0.012)	(0.039)	(0.025)	(0.042)	(0.023)	(0.048)	(0.051)	(0.041)	(0.009)
The share of VET	-0.0097	-0.0493	0.0078	-0.2512 **	0.0138	-0.0221	0.0941	-0.0269	0.0285
	(0.032)	(0.076)	(0.071)	(0.115)	(0.053)	(0.118)	(0.116)	(0.072)	(0.026)
Export as % of GDP	0.0003	0.0003	-0.0004	-0.0014	-0.002 *	0.0003	-0.004 *	0.0005	-0.0002
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.000)
% GDP in agriculture	0.0018	-0.0022	-0.0195	0.0053	-0.0074	0.0301	-0.0315	0.0011	-0.0054
	(0.004)	(0.017)	(0.012)	(0.013)	(0.015)	(0.027)	(0.055)	(0.020)	(0.011)
% GDP in manufacturing	-0.0015	-0.001	0.0003	0.0057	0.0119 ***	-0.0016	0.0125	0.0006	-0.0002
	(0.001)	(0.005)	(0.004)	(0.006)	(0.004)	(0.006)	(0.009)	(0.005)	(0.002)
OECD ALMP % GDP	-0.0107	0.0071	0.0087	-0.0187	-0.0037	-0.0061	0.0701	0.0406	0.012
	(0.010)	(0.034)	(0.026)	(0.028)	(0.020)	(0.028)	(0.047)	(0.027)	(0.012)
OECD SOEX % GDP	0.0019	-0.0047	-0.0015	0.0032	0.0072	0.0032	0.0244 **	0.0056	-0.0023
	(0.002)	(0.007)	(0.004)	(0.005)	(0.005)	(0.008)	(0.011)	(0.005)	(0.003)
Migration rate from EU-15	0.0575	-0.1631	0.2188	-0.5372	-0.6063 **	-0.0113	0.2466	-0.4138	-0.0933
	(0.155)	(0.372)	(0.262)	(0.477)	(0.306)	(0.499)	(1.145)	(0.505)	(0.304)
Migration rate from EU-12	-0.2184 *	0.1704	0.4446 **	0.1154	-0.5361 **	0.4958	-0.2369	-0.2952	0.0526
	(0.116)	(0.321)	(0.218)	(0.267)	(0.268)	(0.437)	(0.576)	(0.357)	(0.194)
Migration rate from other Europe	-0.3169 **	-0.0489	0.6838 **	0.558	-0.0644	0.4163	0.2329	-0.5029	0.3551
	(0.146)	(0.403)	(0.273)	(0.431)	(0.327)	(0.584)	(1.008)	(0.421)	(0.255)
Migration rate from Africa	-0.1319	0.0478	0.5556 **	0.1551	0.0067	0.3551	-0.0622	-0.6174	-0.0162
	(0.146)	(0.308)	(0.254)	(0.375)	(0.270)	(0.614)	(1.265)	(0.543)	(0.313)
Migration rate from Asia	-0.1557	-0.0283	0.482	0.1434	-0.0833	-0.0784	-1.0395	-0.5099	-0.0768
	(0.153)	(0.434)	(0.324)	(0.391)	(0.333)	(0.554)	(1.238)	(0.397)	(0.241)
Inflow of immigrants, per 1000	-0.0005	-0.0028	0.0027 *	-0.002	-0.0013	-0.0006	0.0073 *	-0.0035 *	-0.0007
	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.004)	(0.002)	(0.001)
Per-capita GDP	-0.0686	-0.2063	0.0081	0.112	-0.0665	0.346	0.5698	0.0368	-0.0165
	(0.047)	(0.266)	(0.119)	(0.136)	(0.129)	(0.322)	(0.586)	(0.195)	(0.131)
Unemployment rate	-0.0007	-0.0059 *	-0.0017	-0.0024	-0.0025	0.0015	0.01 *	-0.0049	0.0015
	(0.001)	(0.003)	(0.002)	(0.004)	(0.002)	(0.004)	(0.005)	(0.003)	(0.001)
N	187	178	187	167	172	166	112	106	114
r2	0.92	0.73	0.86	0.8	0.92	0.77	0.83	0.93	0.95

Unmployment

	Baseline	EU-15	EU-NMS	Europe	Africa	Asia	YSM 1-5	YSM 6-10	YSM 10+
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Union density	**-0.0011**	**0.0009**	**-0.0006**	**0.0013**	**0.0096 ***	**0.0007**	**-0.0092 *****	**-0.0002**	**0.0026**
	(0.001)	**(0.001)**	**(0.002)**	**(0.002)**	**(0.005)**	**(0.002)**	**(0.003)**	**(0.003)**	**(0.002)**
Collective bargaining coverage	**0.0001**	**-0.0004**	**0.0001**	**0.0006**	**-0.0007**	**-0.0003**	**0.0003**	**-0.0004**	**0.0001**
	(0.000)	**(0.000)**	**(0.001)**	**(0.001)**	**(0.002)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**
EPL - regular contract	**0.0096**	**0.0249 *****	**-0.0041**	**-0.012**	**0.0091**	**0.0961 ****	**0.0212**	**0.0121**	**-0.0206 ***
	(0.010)	**(0.007)**	**(0.029)**	**(0.016)**	**(0.042)**	**(0.041)**	**(0.020)**	**(0.015)**	**(0.012)**
EPL - temporary contract	**-0.0006**	**-0.0029**	**-0.0246**	**-0.0064**	**-0.0238**	**-0.0322**	**-0.0078**	**0.0028**	**-0.0031**
	(0.006)	**(0.008)**	**(0.024)**	**(0.016)**	**(0.073)**	**(0.023)**	**(0.043)**	**(0.036)**	**(0.011)**
The share of VET	**-0.0126**	**0.0067**	**-0.0034**	**-0.0262**	**0.0646**	**0.0017**	**-0.0703**	**-0.0019**	**-0.0284**
	(0.033)	**(0.018)**	**(0.073)**	**(0.081)**	**(0.096)**	**(0.066)**	**(0.050)**	**(0.052)**	**(0.037)**
Export as % of GDP	**0.0004**	**-0.0001**	**-0.0029 ****	**-0.0005**	**0.0018 ***	**-0.0004**	**0.0001**	**-0.0015**	**-0.0005**
	(0.000)	**(0.000)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**
% GDP in agriculture	**-0.0068**	**0.0092 ****	**0.0022**	**0.0101**	**0.0168**	**-0.0014**	**0.0539 ****	**-0.0152**	**0.0223 ***
	(0.005)	**(0.004)**	**(0.010)**	**(0.010)**	**(0.030)**	**(0.010)**	**(0.026)**	**(0.028)**	**(0.012)**
% GDP in manufacturing	**-0.0006**	**0.0002**	**0.0096 ****	**-0.0029**	**-0.0015**	**0.0037**	**-0.0013**	**0.004**	**-0.0018**
	(0.001)	**(0.001)**	**(0.005)**	**(0.003)**	**(0.009)**	**(0.004)**	**(0.004)**	**(0.004)**	**(0.003)**
OECD ALMP % GDP	**-0.0164 ****	**0.0051**	**-0.0001**	**0.0106**	**0.0988 ****	**0.0328**	**0.0311**	**0.0305**	**-0.0135**
	(0.007)	**(0.007)**	**(0.021)**	**(0.015)**	**(0.044)**	**(0.021)**	**(0.021)**	**(0.019)**	**(0.014)**
OECD SOEX % GDP	**0.0008**	**-0.0028 ****	**0.0042**	**-0.0021**	**-0.0083**	**-0.0045**	**0.0034**	**0.0032**	**-0.0019**
	(0.002)	**(0.001)**	**(0.004)**	**(0.004)**	**(0.008)**	**(0.003)**	**(0.004)**	**(0.004)**	**(0.003)**
Migration rate from EU-15	-0.0739	0.087	0.513 *	0.3747	0.3839	-0.6263 **	0.2594	0.3371	0.0671
	(0.142)	(0.100)	(0.293)	(0.324)	(0.491)	(0.312)	(0.363)	(0.379)	(0.331)
Migration rate from EU-12	0.0167	0.037	0.3358	0.1149	0.8489	-0.2887	0.4836 *	0.3441	-0.064
	(0.096)	(0.083)	(0.249)	(0.214)	(0.622)	(0.251)	(0.280)	(0.310)	(0.160)
Migration rate from other Europe	-0.0178	-0.0421	0.3361	0.1218	0.0255	-0.4141	1.0478 ***	0.76 **	0.2565
	(0.127)	(0.113)	(0.289)	(0.280)	(0.442)	(0.276)	(0.360)	(0.307)	(0.277)
Migration rate from Africa	-0.1744	0.0664	0.3034	0.3149	0.4941	-0.5573 *	-0.1962	0.3751	0.3441
	(0.145)	(0.108)	(0.335)	(0.312)	(0.501)	(0.321)	(0.434)	(0.382)	(0.341)
Migration rate from Asia	-0.0096	-0.1533	0.4238	0.1249	-0.7805	-0.7091 **	-0.8751 ***	-0.3204	0.0943
	(0.128)	(0.115)	(0.314)	(0.244)	(0.875)	(0.304)	(0.327)	(0.347)	(0.216)
Inflow of immigrants, per 1000	-0.0007	-0.0006	-0.0012	0.0001	0.0049	0.0003	-0.0024	-0.0001	0.0006
	(0.001)	(0.000)	(0.002)	(0.001)	(0.004)	(0.001)	(0.002)	(0.001)	(0.001)
Per-capita GDP	0.0609	-0.1001 **	0.1631	-0.0619	0.2643	-0.284 **	0.3951 **	0.1458	-0.1905
	(0.059)	(0.044)	(0.134)	(0.139)	(0.253)	(0.121)	(0.159)	(0.168)	(0.135)
Unemployment rate	-0.0032 ***	0	0.0032	0.0056 ***	0.0122 ***	-0.0031	0.0027	0.0023	0.001
	(0.001)	(0.001)	(0.002)	(0.002)	(0.004)	(0.002)	(0.002)	(0.003)	(0.001)
N	187	149	173	161	157	135	102	102	114
r2	0.77	0.96	0.77	0.85	0.73	0.91	0.97	0.91	0.8

Low-skill

	Baseline	EU-15	EU-NMS	Europe	Africa	Asia	YSM 1-5	YSM 6-10	YSM 10+
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Union density	**-0.0022** *	**-0.0008**	**-0.0023**	**0.0001**	**0.001**	**-0.0034**	**0.0015**	**0.001**	**0.0024**
	(0.001)	**(0.001)**	**(0.003)**	**(0.002)**	**(0.003)**	**(0.003)**	**(0.006)**	**(0.003)**	**(0.001)**
Collective bargaining coverage	**0.0009** **	**-0.0002**	**-0.0012**	**-0.0008**	**-0.0011**	**-0.0032** **	**-0.0045** ***	**-0.0011**	**-0.0004**
	(0.000)	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.000)**
EPL - regular contract	**-0.0054**	**0.0029**	**0.0256**	**0.015**	**-0.0217**	**0.2634** ***	**-0.0092**	**0.035** **	**-0.0123**
	(0.011)	**(0.014)**	**(0.043)**	**(0.023)**	**(0.020)**	**(0.065)**	**(0.044)**	**(0.016)**	**(0.009)**
EPL - temporary contract	**-0.0148**	**0.0236** *	**0.0124**	**0.0316**	**0.0304**	**0.0324**	**-0.0034**	**-0.1294** ***	**-0.0179** *
	(0.010)	**(0.014)**	**(0.022)**	**(0.021)**	**(0.019)**	**(0.038)**	**(0.082)**	**(0.044)**	**(0.010)**
The share of VET	**-0.0173**	**0.0563** *	**-0.2056** *	**0.014**	**-0.0134**	**0.1726** ***	**0.0325**	**0.1435** **	**0.0541** *
	(0.048)	**(0.031)**	**(0.123)**	**(0.070)**	**(0.064)**	**(0.059)**	**(0.101)**	**(0.068)**	**(0.031)**
Export as % of GDP	**0.0005**	**-0.0005**	**0.0013**	**-0.0009**	**0**	**-0.0017**	**0.0022**	**0.0024** **	**0.0004**
	(0.000)	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.001)**	**(0.002)**	**(0.001)**	**(0.001)**
% GDP in agriculture	**0.0045**	**-0.0145** *	**-0.012**	**0.0281** ***	**-0.0346** ***	**0.0063**	**-0.0328**	**-0.0296**	**-0.0152** **
	(0.005)	**(0.007)**	**(0.013)**	**(0.010)**	**(0.012)**	**(0.015)**	**(0.037)**	**(0.020)**	**(0.007)**
% GDP in manufacturing	**-0.0038** **	**-0.0014**	**-0.0028**	**0.0072** **	**-0.0053**	**0.0022**	**0.0035**	**0.0013**	**-0.0006**
	(0.002)	**(0.002)**	**(0.005)**	**(0.003)**	**(0.004)**	**(0.005)**	**(0.009)**	**(0.005)**	**(0.002)**
OECD ALMP % GDP	**0.0428** ***	**-0.0126**	**-0.0445**	**-0.0268**	**0.0029**	**-0.0233**	**-0.001**	**-0.014**	**-0.0349** **
	(0.013)	**(0.012)**	**(0.028)**	**(0.020)**	**(0.024)**	**(0.027)**	**(0.037)**	**(0.018)**	**(0.017)**
OECD SOEX % GDP	**-0.0014**	**-0.0006**	**0.0001**	**0.0084** **	**-0.0001**	**0.0046**	**0.0166** **	**-0.0004**	**-0.0007**
	(0.002)	**(0.002)**	**(0.005)**	**(0.003)**	**(0.004)**	**(0.005)**	**(0.008)**	**(0.005)**	**(0.002)**
Migration rate from EU-15	0.4236 **	-0.4345 **	0.004	-0.0912	-0.9334 ***	-0.4438	0.9783	-0.0394	-0.2789
	(0.173)	(0.187)	(0.406)	(0.271)	(0.295)	(0.375)	(0.759)	(0.378)	(0.278)
Migration rate from EU-12	-0.0577	-0.1507	0.25	0.2799	-0.5928 **	-0.4035	2.1092 ***	0.1224	-0.1788
	(0.155)	(0.160)	(0.357)	(0.264)	(0.249)	(0.333)	(0.625)	(0.304)	(0.240)
Migration rate from other Europe	0.0019	-0.3432 *	0.3171	-0.1329	-1.0046 ***	-0.2953	1.893 ***	-0.0285	0.228
	(0.184)	(0.198)	(0.448)	(0.276)	(0.365)	(0.343)	(0.658)	(0.316)	(0.279)
Migration rate from Africa	0.1657	-0.4731 **	0.0563	0.328	-0.8975 ***	-0.2499	1.7353 **	0.2139	0.071
	(0.171)	(0.185)	(0.410)	(0.280)	(0.284)	(0.436)	(0.771)	(0.391)	(0.236)
Migration rate from Asia	-0.4765 **	-0.1447	0.8595 *	0.4407	-0.1207	-0.3805	2.2669 ***	0.7168 *	0.4824 *
	(0.202)	(0.206)	(0.505)	(0.317)	(0.361)	(0.354)	(0.802)	(0.371)	(0.261)
Inflow of immigrants, per 1000	-0.0003	-0.0015 **	-0.0007	-0.0007	-0.0036 **	0.0002	0.0011	-0.0025	0.001
	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.003)	(0.002)	(0.001)
Per-capita GDP	-0.0626	0.0695	-0.0017	0.1174	0.2091	-0.2719	-0.0232	0.1397	0.1033
	(0.054)	(0.072)	(0.138)	(0.103)	(0.174)	(0.224)	(0.250)	(0.151)	(0.080)
Unemployment rate	-0.0004	0.0009	-0.0027	-0.0006	-0.0007	0.001	-0.0096 *	-0.0034	0.0012
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.005)	(0.003)	(0.002)
N	187	148	169	158	149	134	102	102	113
r2	0.95	0.87	0.89	0.95	0.86	0.93	0.87	0.94	0.96

	Baseline		EU-15	EU-NMS		Europe		Africa		Asia		YSM 1-5		YSM 6-10		YSM 10+	
	(1)		(2)	(3)		(4)		(5)		(6)		(7)		(8)		(9)	
Union density	0.001		-0.0007	-0.0057	*	0.0015		0.0003		0.0029		-0.0025		0.0055		0.0008	
	(0.001)		(0.002)	(0.003)		(0.003)		(0.002)		(0.004)		(0.005)		(0.004)		(0.002)	
Collective bargaining coverage	0.0018	***	-0.0007	-0.0033	**	-0.0029	**	-0.0002		-0.0009		0.0002		-0.0002		-0.0005	
	(0.001)		(0.001)	(0.001)		(0.001)		(0.001)		(0.001)		(0.002)		(0.001)		(0.000)	
EPL - regular contract	-0.0206		0.0165	0.0621		0.0733	**	0.0099		-0.0149		0.0641		-0.0021		-0.0124	
	(0.021)		(0.021)	(0.044)		(0.036)		(0.033)		(0.064)		(0.039)		(0.022)		(0.012)	
EPL - temporary contract	-0.0013		0.0275	0.0505		0.0677	**	0.0073		0.1461	**	-0.1271		-0.0401		-0.0088	
	(0.029)		(0.019)	(0.051)		(0.027)		(0.023)		(0.067)		(0.097)		(0.049)		(0.011)	
The share of VET	0.0614		0.0179	-0.2281	**	0.0003		0.0311		-0.0685		-0.0107		0.0349		0.0381	
	(0.055)		(0.051)	(0.110)		(0.089)		(0.062)		(0.087)		(0.097)		(0.053)		(0.039)	
Export as % of GDP	0.0002		-0.0005	-0.0031	**	0.0004		-0.0005		0.0011		-0.002		-0.0036	***	-0.0003	
	(0.001)		(0.000)	(0.001)		(0.001)		(0.001)		(0.002)		(0.002)		(0.001)		(0.000)	
% GDP in agriculture	-0.0256	***	0.0038	0.0455	***	0.0643	***	0.0052		-0.0031		0.0138		-0.0073		-0.0143	**
	(0.007)		(0.010)	(0.017)		(0.014)		(0.013)		(0.023)		(0.027)		(0.027)		(0.006)	
% GDP in manufacturing	-0.0028		0	0.0089	**	0.0067		0.0103	**	-0.0138	*	0.0052		0.0142	***	-0.0003	
	(0.002)		(0.003)	(0.005)		(0.005)		(0.005)		(0.008)		(0.007)		(0.005)		(0.002)	
OECD ALMP % GDP	-0.0089		0.0004	-0.0388		0.0543	**	0.0456	*	0.0143		0.044		0.0184		-0.0232	*
	(0.014)		(0.019)	(0.032)		(0.024)		(0.024)		(0.033)		(0.037)		(0.021)		(0.012)	
OECD SOEX % GDP	-0.0085	***	-0.0023	0.0088		0.012	**	0.0001		-0.0072		0.003		0.0048		0.0014	
	(0.003)		(0.003)	(0.006)		(0.006)		(0.005)		(0.006)		(0.007)		(0.005)		(0.002)	
Migration rate from EU-15	-0.1772		-0.2796	0.5247		0.3513		-0.6662		0.5499		-1.6726	**	0.0022		-0.4211	*
	(0.260)		(0.215)	(0.505)		(0.521)		(0.438)		(0.699)		(0.653)		(0.485)		(0.246)	
Migration rate from EU-12	-0.089		-0.1021	0.111		0.2793		-0.4631		0.7326		-1.2528	**	0.0131		-0.3537	*
	(0.208)		(0.185)	(0.424)		(0.466)		(0.340)		(0.600)		(0.531)		(0.297)		(0.187)	
Migration rate from other Europe	0.0975		-0.2257	-0.3798		-0.4235		-0.7267	*	0.5365		-1.2902	**	-0.1177		-0.4969	**
	(0.287)		(0.243)	(0.532)		(0.525)		(0.431)		(0.603)		(0.631)		(0.371)		(0.211)	
Migration rate from Africa	-0.2929		-0.2257	0.4441		1.1599	*	-0.5308		1.4916		-1.9607	**	0.3161		-0.3423	
	(0.268)		(0.231)	(0.580)		(0.662)		(0.381)		(0.900)		(0.769)		(0.432)		(0.239)	
Migration rate from Asia	0.1254		-0.3377	0.2157		-0.5305		-0.341		0.515		0.7729		0.5311		0.0937	
	(0.215)		(0.313)	(0.498)		(0.477)		(0.371)		(0.581)		(0.760)		(0.423)		(0.254)	
Inflow of immigrants, per 1000	-0.0018	*	0	-0.0022		0.0054	**	0.0031	*	0.0033		0.0002		0.0033	*	0.0002	
	(0.001)		(0.001)	(0.002)		(0.002)		(0.002)		(0.002)		(0.003)		(0.002)		(0.001)	
Per-capita GDP	0.0582		-0.0672	-0.0765		-0.1027		-0.1682		0.2778		-0.1267		-0.2328		0.0087	
	(0.071)		(0.092)	(0.153)		(0.196)		(0.215)		(0.307)		(0.242)		(0.179)		(0.064)	
Unemployment rate	0.0047	*	0.0009	-0.0077	**	-0.0029		-0.003		0.0068		-0.0049		-0.0041		-0.0007	
	(0.003)		(0.002)	(0.003)		(0.003)		(0.003)		(0.004)		(0.005)		(0.003)		(0.001)	
N	186		153	172		151		146		137		102		102		112	
r2	0.84		0.85	0.86		0.92		0.78		0.8		0.91		0.93		0.88	

Institutional variables - findings

	Effect on gap	Labor participation	Unemployment	Low skill job	Temporary contract
Union density	POSITIVE				
	NEGATIVE	Africa	YSM1-5		
Collective bargaining coverage	POSITIVE			Baseline	Baseline
	NEGATIVE	NMS		Asia, YSM1-5	NMS, Europe
EPL - regular contract	POSITIVE	NMS	EU15, Asia	Asia, YSM6-10	Europe
	NEGATIVE				
EPL - temporary contract	POSITIVE	YSM1-5			Europe, Asia
	NEGATIVE	EU15, YSM6-10		YSM6-10	

Unionization discourages participation, but improves the prospects of those who participate

Employment protection of regular contracts encourages participation, but makes it hard to find a (good) job.

However, for temporary contracts less clear patterns emerge.

Institutional/contextual variables

	Effect on gap	Labor participation	Unemployment	Low skill job	Temporary contract
The share of VET	POSITIVE			Asia, YSM6-10	
	NEGATIVE	Europe			NMS
Export as % of GDP	POSITIVE			YSM6-10	
	NEGATIVE		NMS		NMS, YSM6-10
% GDP in agriculture	POSITIVE		EU15, YSM1-5	Europe	NMS, Europe
	NEGATIVE			Africa, YSM10+	Baseline, YSM10+
% GDP in manufacturing	POSITIVE	Africa	NMS	Europe	NMS, Africa, YSM6-10
	NEGATIVE			Baseline	
OECD ALMP % GDP	POSITIVE		Africa	Baseline	Europe
	NEGATIVE		Baseline	YSM10+	
OECD SOEX % GDP	POSITIVE	YSM1-5		Europe, YSM1-5	Baseline
	NEGATIVE		EU15		

Complex patterns emerge for structural, supply/demand variables. Needs further study how these effects relate to migrants' human capital etc

ALMPs hurt some more vulnerable groups (African, far-European, but advantage established immigrants (YSM10+)

Social expenditures encourage participation of recent arrivals, enable EU15 immigrants to find a job, but lower the quality of employment of recent arrivals and far-European immigrants.

Concluding remarks

- We show that institutional settings matters to the integration of immigrants

- Limitations: endogenity of institutions?