

# Refugee Migration Into the EU and Germany: Current Developments and Labour Market Challenges

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Herbert Brücker

Institute for Employment  
Research (IAB) and  
University of Bamberg,  
CrEAM and IZA

# The global picture



- UCDP (2015) reports that the number of violent conflicts has increased globally, particularly in the European neighbourhood
  - 54,000 fatalities in the Syrian war 2014
  - 13,000 fatalities in the Iraq war 2014
  - 12,000 fatalities in the Afghan war 2014
  - 4,300 fatalities in the Ukrainian war 2014
- Freedom House (2016) reports that the number of free country tends to decline
  - Particularly in the Middle East, North-East Africa and some Eastern European countries Freedom House reports poor levels of political freedom and civil liberties
- UNHCR (2015a) counts 59.5 million refugees in 2014, one-third of those residing in other countries
- An additional 4.2 millions were newly displaced In the 1<sup>st</sup> half of 2015, 839,000 of those into other countries (UNHCR, 2015b)

## The global picture (cont.)



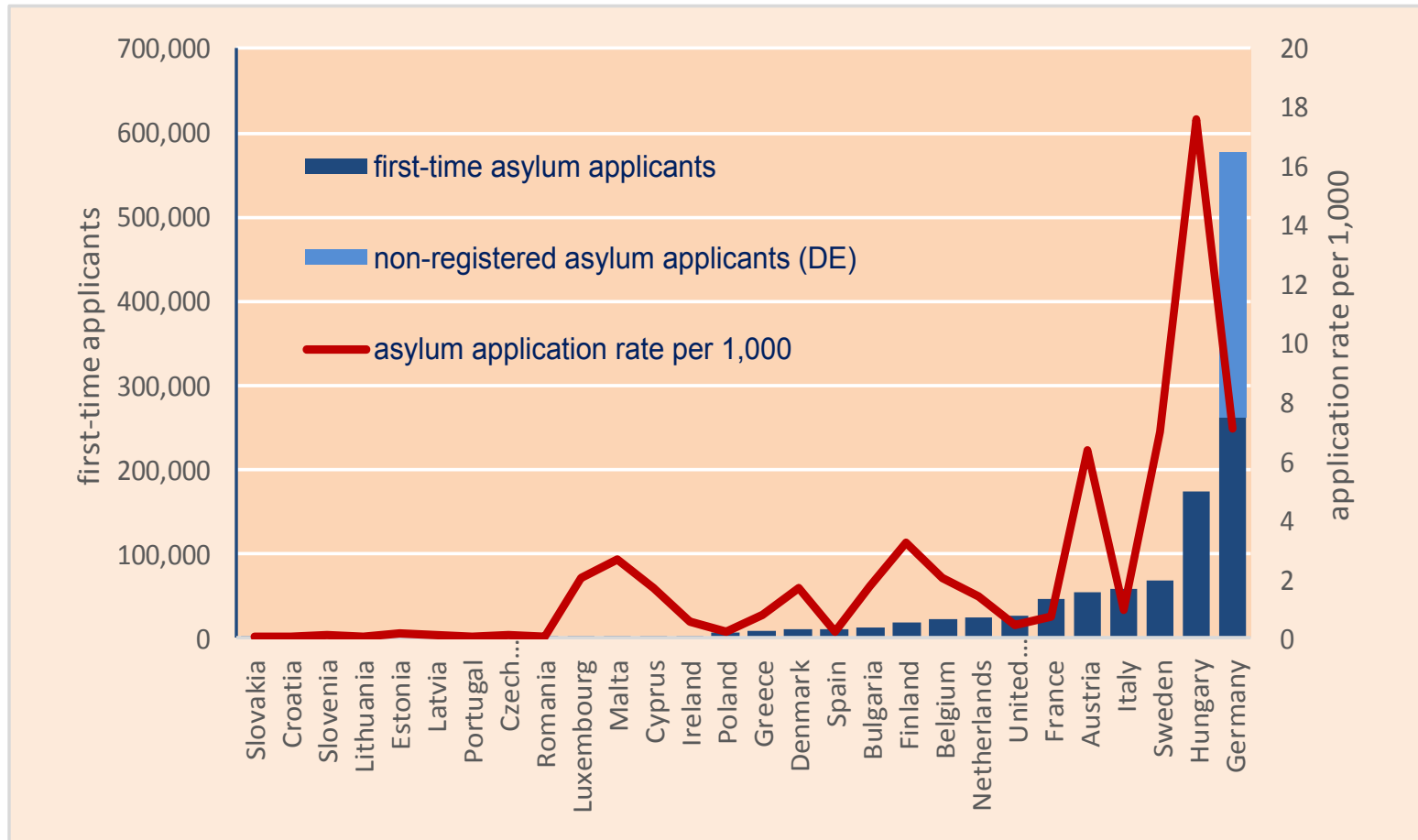
- Economic support for refugees has declined in per capita terms until recently according to UNHCR (2015c)
  - UNHCR received 1.06 billion USD in 1<sup>st</sup> half of 2015, relative to 4.53 billion USD budgeted
  - Economic support by hosting countries in the neighbourhood of the conflict countries declined
  - Food assistance for 1.6 million refugees was reduced in 2015
  - 750,000 children are not attending school
  - e.g. 86 per cent of refugees in Jordan live from less than 3.6 USD per day

## The European picture

- Europe is geographically a natural destination for refugee migration from the Middle East and Northern Africa
  - Distance Damascus-Passau approx. 3,300 km
- The EU reports 563,000 first-time asylum applicants in 2014 and 814,000 Jan. – Sep. 2015 (Eurostat 2016). The annual figure can be estimated to be around 1.2-1.3 millions
  - there are approx. 450,000 non-registered asylum seekers on top of this in Germany alone
- The allocation of asylum seekers across EU member countries is extremely unequal varying between 0 and 18 asylum seekers per 1,000

# EU-28: asylum applications, Jan. – Sep. 2015

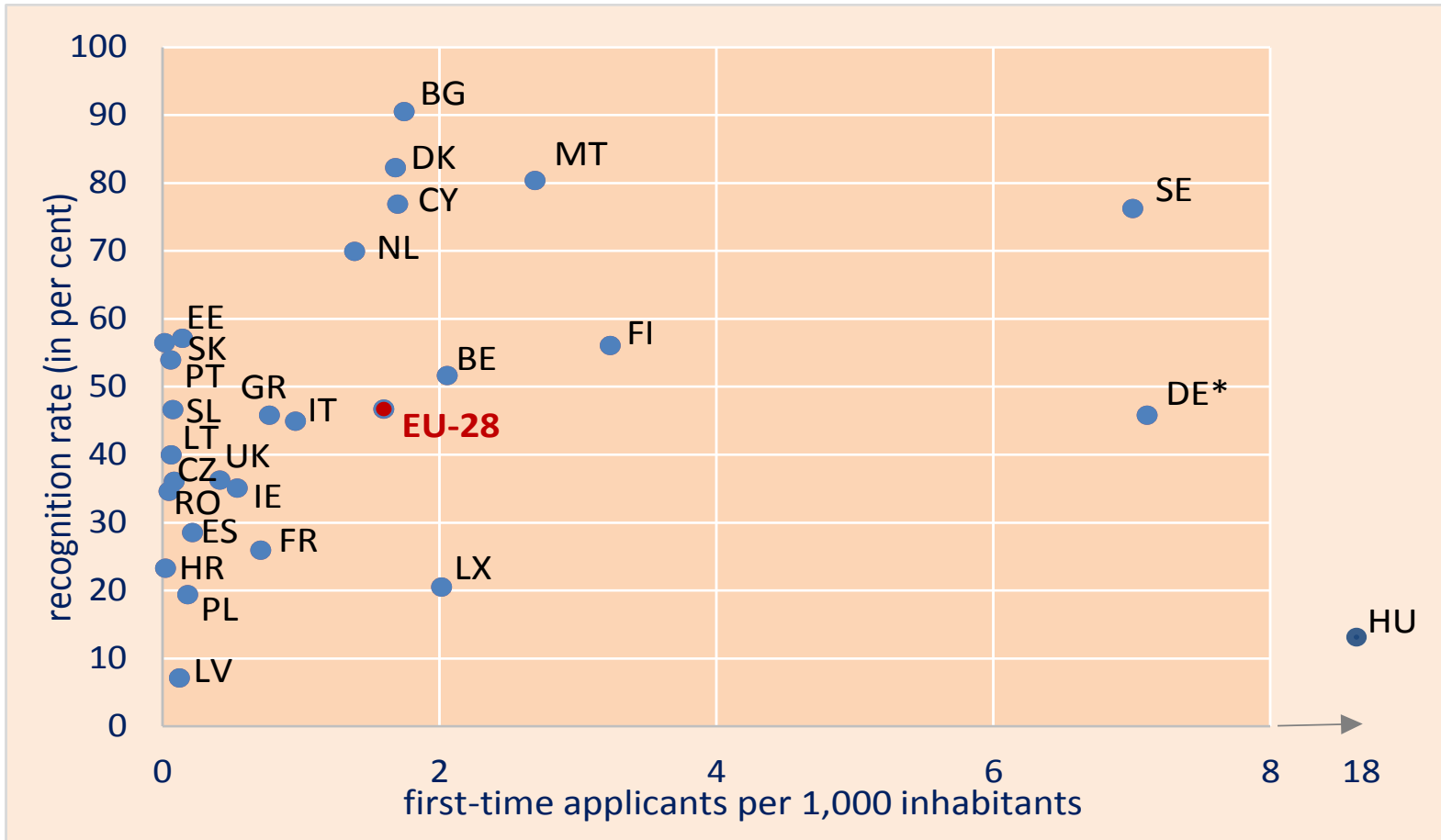
Asylum applications (left axis) and application rate per 1,000 (right axis)



Sources: Eurostat, own calculations.

# High and increasing recognition rates

Recognition- and first-time asylum application rates, Jan. – Sep. 2015



Sources: Eurostat, own calculations.

Notes: Recognition rates are based on positive decisions relative to the total number of decisions.

DE\* uses German first-time registrations instead of first-time asylum applications.

## The European picture (cont.)

- Dublin-Agreement failed eventually
  - Poor incentives to enforce the Dublin-Agreement and keep high humanitarian standards for countries at the external EU borders
  - European Court of Justice forbids replacement of refugees according to the Dublin Agreement to Greece
  - Refugees report human rights abuses in transit countries, among them one EU Member State (Hungary)
- Outlook
  - Open issue whether agreement with Turkey and tighter controls of sea-border in Greece will work
  - Attempts to close Balkan-route via unilateral border closures
  - This is likely to create new migration routes, higher migration risks, higher expenditures for trafficking, but might reduce overall migration levels
  - Poor perspectives for European quotas and other redistribution mechanisms

# The European coordination failure



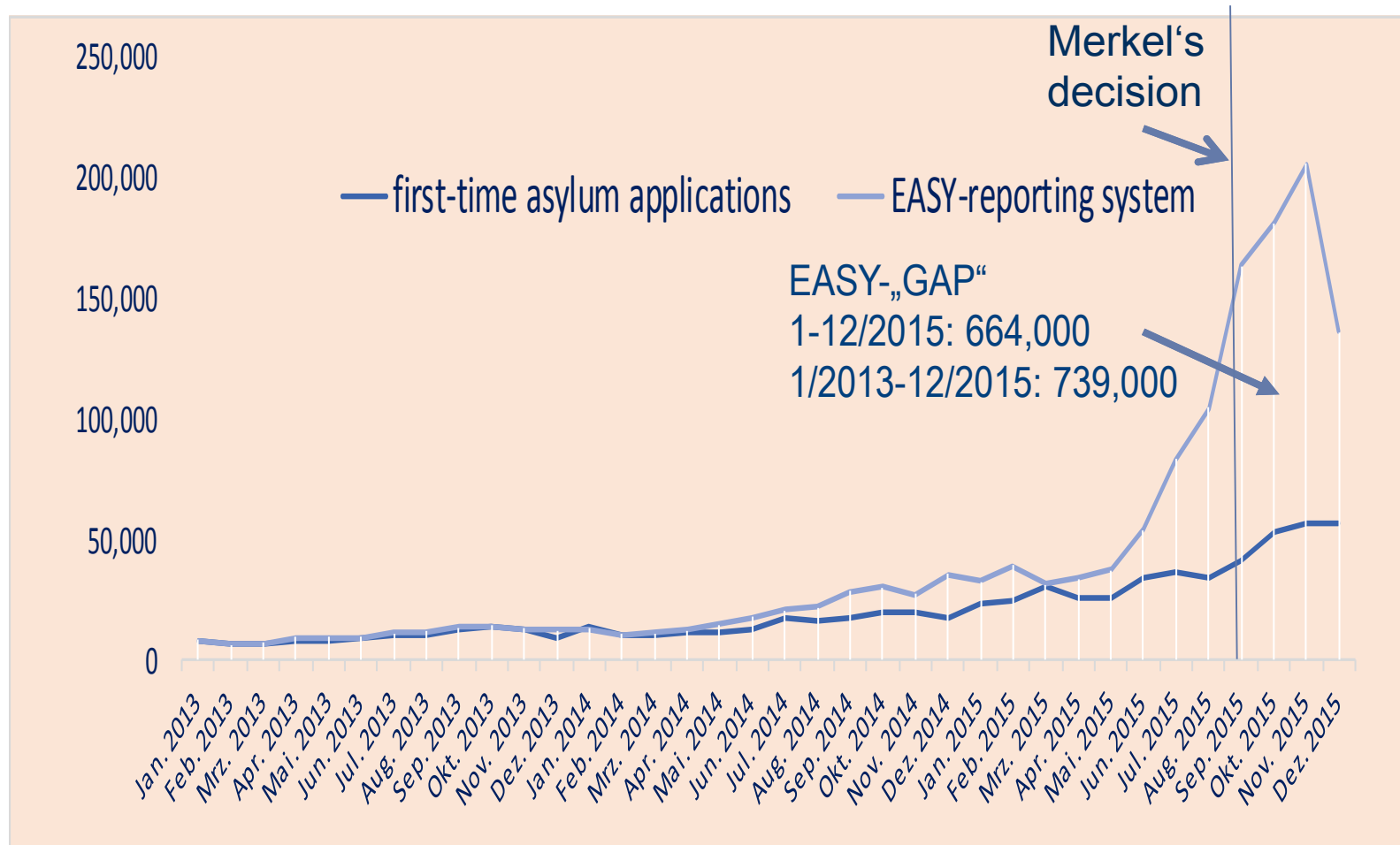
- Reconsider the Hatton (EP 2004) model of asylum policies
  - There is no equilibrium of non-coordinated national asylum policies which keep humanitarian standards at the preferred level due to spill-overs to other countries
    - Tighter immigration policies in one country increases influx into other countries above optimal level
    - This results in tighter immigration policies there which create in turn additional spill-overs to other countries
    - The only stable equilibrium are tight asylum policies in all countries, such that the competitive outcome is below the collectively preferred outcome in terms of humanitarian standards
  - Thus, non-coordinated national asylum policies will result in a “race-to-the-bottom” which describes pretty well the current situation in the EU



- Surge in refugee immigration in 2015
  - Poor data since registration lags and is incomplete
  - EASY-System reports influx of 1.1 million refugees in 2015
  - 477,000 asylum applications have been registered in 2015
  - Net influx can be estimated to stand at approx. 800.000
  - Influx has substantially increased in 2<sup>nd</sup> half of 2015 and achieved its peak at a monthly influx of 206,000 in November 2015
  - The monthly figure declined to 97,000 in January 2016
- But: influx has increased before Merkel's decision on admitting asylum-seekers from Hungary in September 2015 (and Merkel's famous refugee selfie)

# Refugee migration into Germany, 1/2013 – 12/2015

## EASY-arrival reports and newly registered asylum-seekers per month



Sources: Federal Office for Migration and Refugees, own calculations.

# Explanations for refugee migration surge

- Economic: good economic and labour market conditions relative to other EU Member States since 2010
- Institutional:
  - liberalisation of asylum-seeker law in January 2015 (e.g. work permits 3 months after arrival)
  - borders were kept open for refugees such that their applications can be processed in Germany
  - small numbers of re-placements according Dublin-Agreement
- Values: still higher preference for humanitarian migration in population compared to EU average, albeit scepticism has increased substantially
- Deteriorating conditions in other countries: tighter asylum policies and border closures in other EU Member States

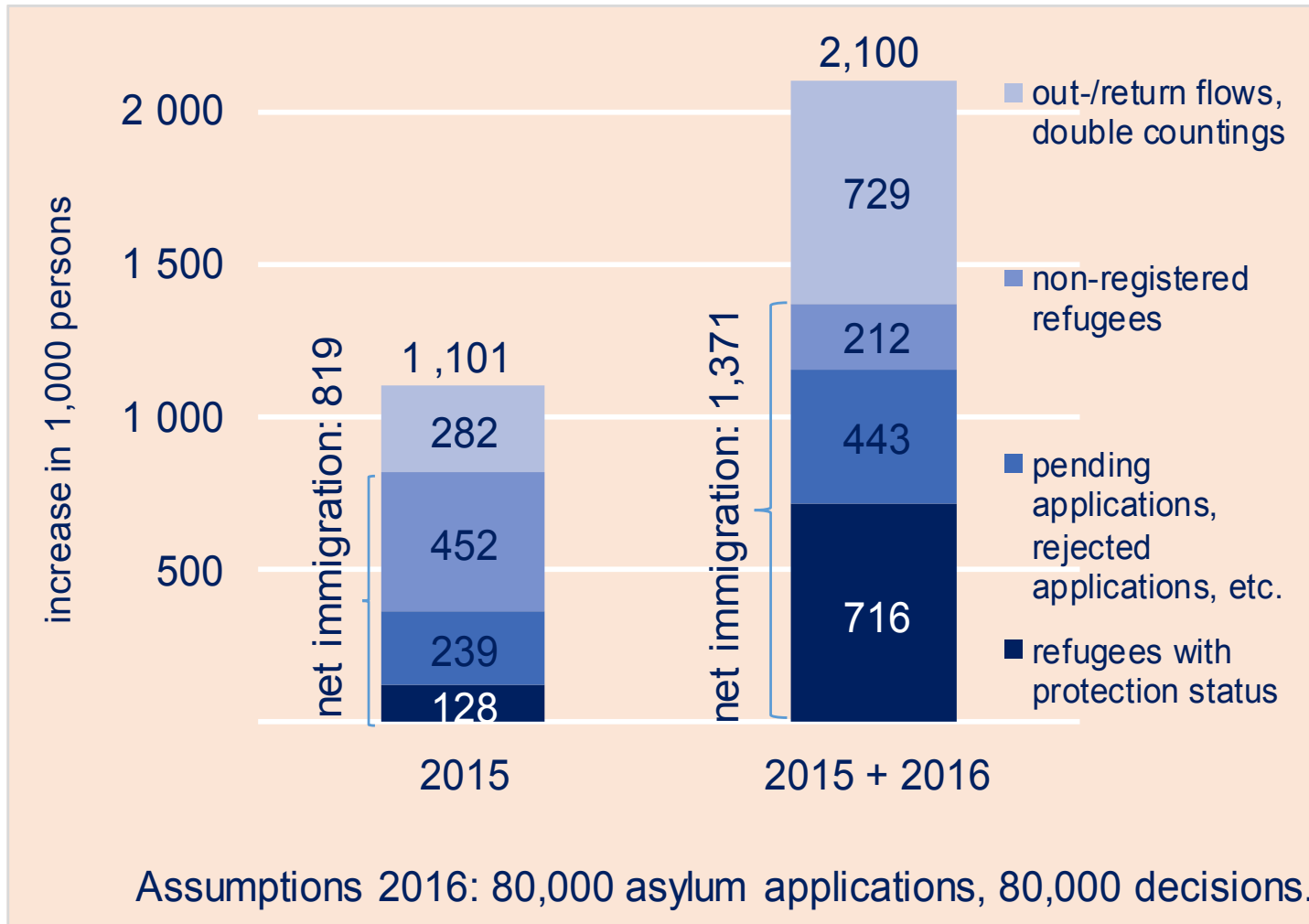
# Tighter asylum conditions in the course of 2015/16



- Increasing number of ‘safe countries of origin’ with fast-track decisions
  - Balkan countries, some African countries, Northern Africa soon
- Tighter conditions for refugees from safe countries of origin
  - no participation in integration programs
  - no work permits
- Shift from monetary to non-monetary assistance
- Limited access to medical care
- Tight residence obligations hamper regional mobility and visits
- Reduced standards in terms of housing, care, etc.

- Out of a gross influx of 1.1 million refugees approximately 800.000 reside still in Germany
- 71 per cent of the asylum applicants and 78 per cent of the refugees with an accepted protection status are in working age
- Although asylum seekers have a limited labour market access three month after arrival, they have only a realistic employment chance after clarification of their asylum status
- Hiring decisions can be considered as an investment (Bentolila/Bertola, 1990). The option value of waiting is increasing with legal uncertainty (Dixit/Pindyck, 1991), such that hiring rates are pretty low before the asylum process is settled

# Estimated gross and net refugee immigration into Germany 2015 und 2016



Sources: Federal Office for Migration and Refugees, own estimates and calculations.

- Thus, the labour supply of refugees in the formal sector depends inter alia on the scale of net immigration and three main institutional factors:
  - the rate at which asylum seekers are registered
  - the rate at which asylum applications are settled
  - the protection rate
- Institutional limitations are a main bottleneck at present:
  - 92,000 refugees arrived according to the EASY-System in 1/2016
  - 52,000 have been registered as asylum seekers in 1/2016
  - 49,000 applications have been settled in 1/2016
  - ~ 450,000 refugees residing in Germany are not registered (1/2016)
  - 371,000 asylum applications are pending (1/2016)
- Nevertheless, the number of registrations and decisions on applications tends to increase

# Labour supply: three scenarios for Germany

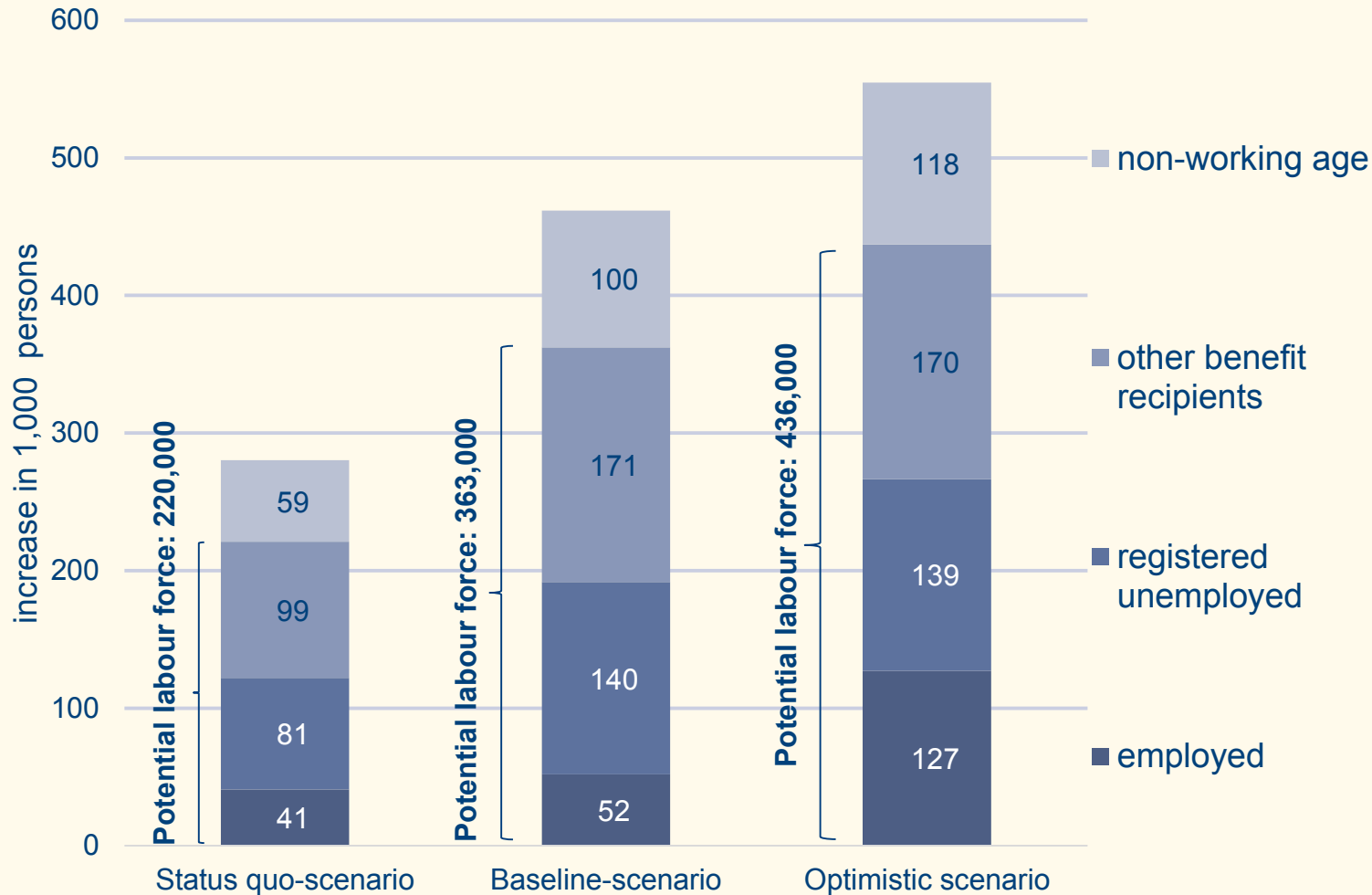


- Status-quo: 50,000 registrations, 50,000 decisions
- Baseline: 80,000 registrations, 80,000 decisions
- Optimistic: 80,000 registrations, 100,000 decisions
- Other assumptions:
  - gross inflow of 1,0 million asylum seekers 2016
  - protection rate of 0.67 (average for last three month)
  - guesstimates of outmigration rates, employment hazard rates, job destruction rates, etc.
  - age structure for individuals with protection status remains constant (78 % in working age)



# Status quo-, baseline- and optimistic-labour supply scenario

annual average 2016



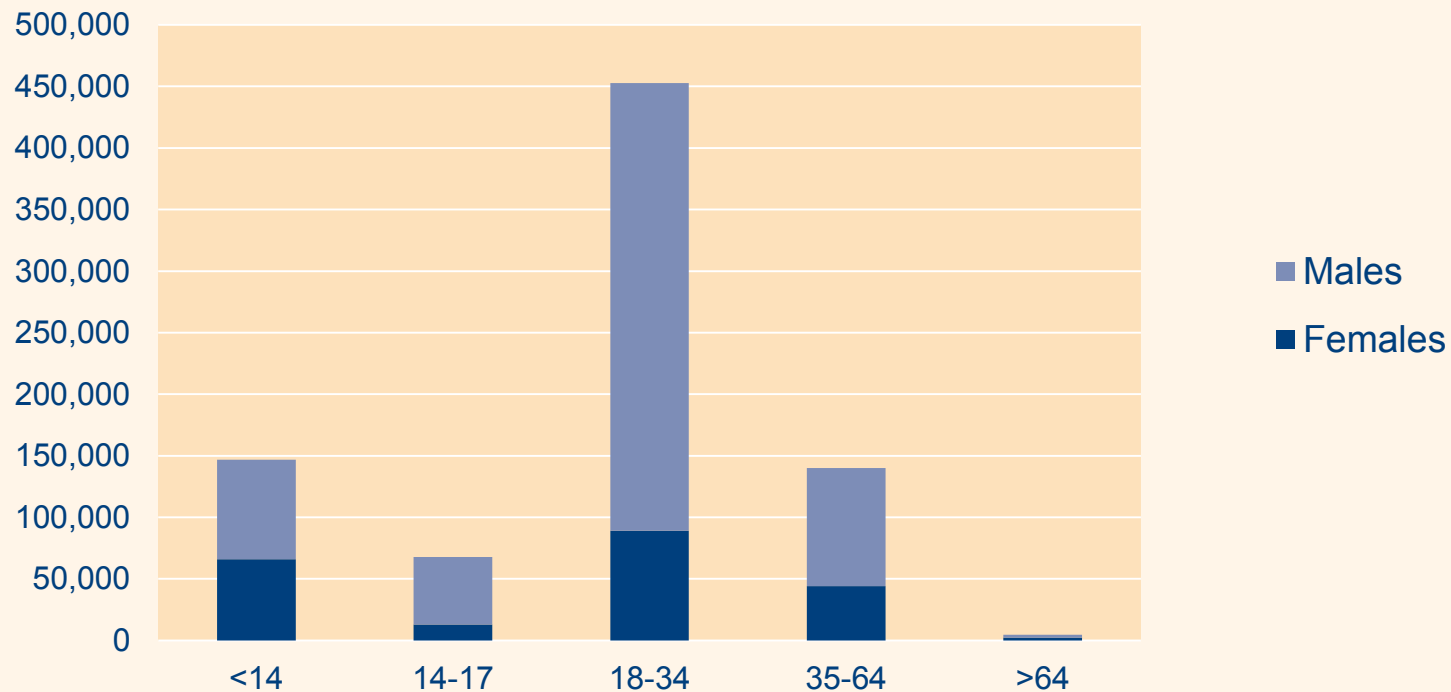
Source: Own calculations.

- Demographic characteristics of refugees in EU and Germany are very similar
- EU first-time asylum applicants (Jan.-Sep. 2015)
  - 82 per cent are below 35, 26 per cent below 18 years old
  - 74 per cent are male
- German first-time asylum applicants (2015)
  - 81 per cent are below 35, 26 per cent below 16 years old
  - 70 per cent are male
- German refugees with protection status (2015)
  - 78 per cent are below 35, 21 per cent below 16 years old
  - 74 per cent are male

# EU asylum seekers are disproportionately young

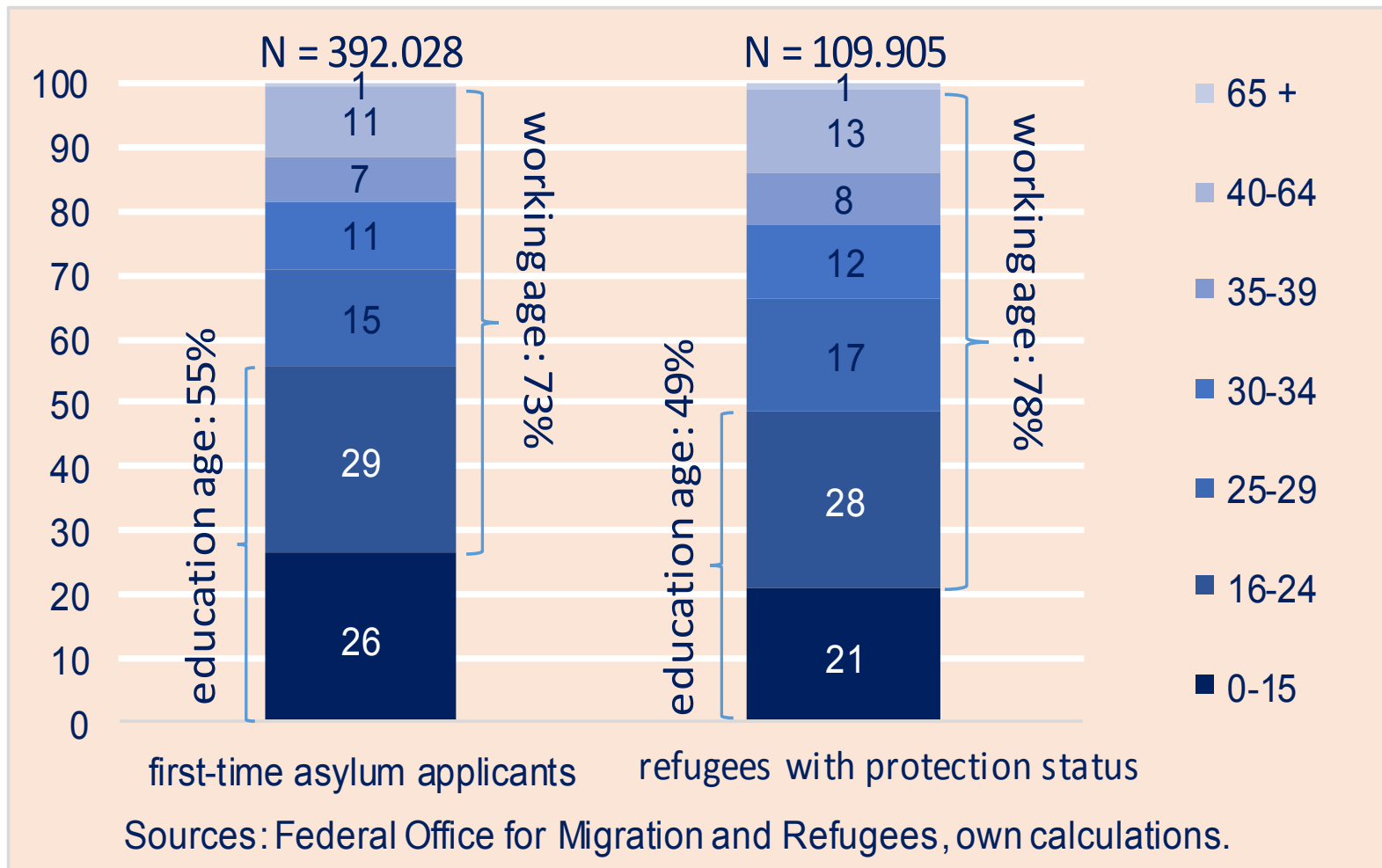
## First-time asylum applications by gender and age

EU-28, Jan.-Sep. 2015



Source: Eurostat, own presentation.

# Age structure of German asylum applicants and refugees with protection status, 1-12/2015



- The Roy-Borjas-model predicts that migrants are self-selected depending on
  - relative returns to skills and other abilities (Borjas, AER 1987)
  - relative migration costs (Brücker/Defoort, JIM 2009; Chiswick, 1999; Grogger/Hanson, JDE 2008)
- Empirical evidence suggests that migration costs are crucial and affect self-selection bias substantially (Brücker et al. , OUP 2012)
  - the ratio of individuals with a university-/college-degree in the OECD's migrant population relative to the home population exceeds that of the ratio of individuals w/o vocational degree among the migrant population to the home population by a factor of 4
  - the difference is increasing the lower the income of the sending country

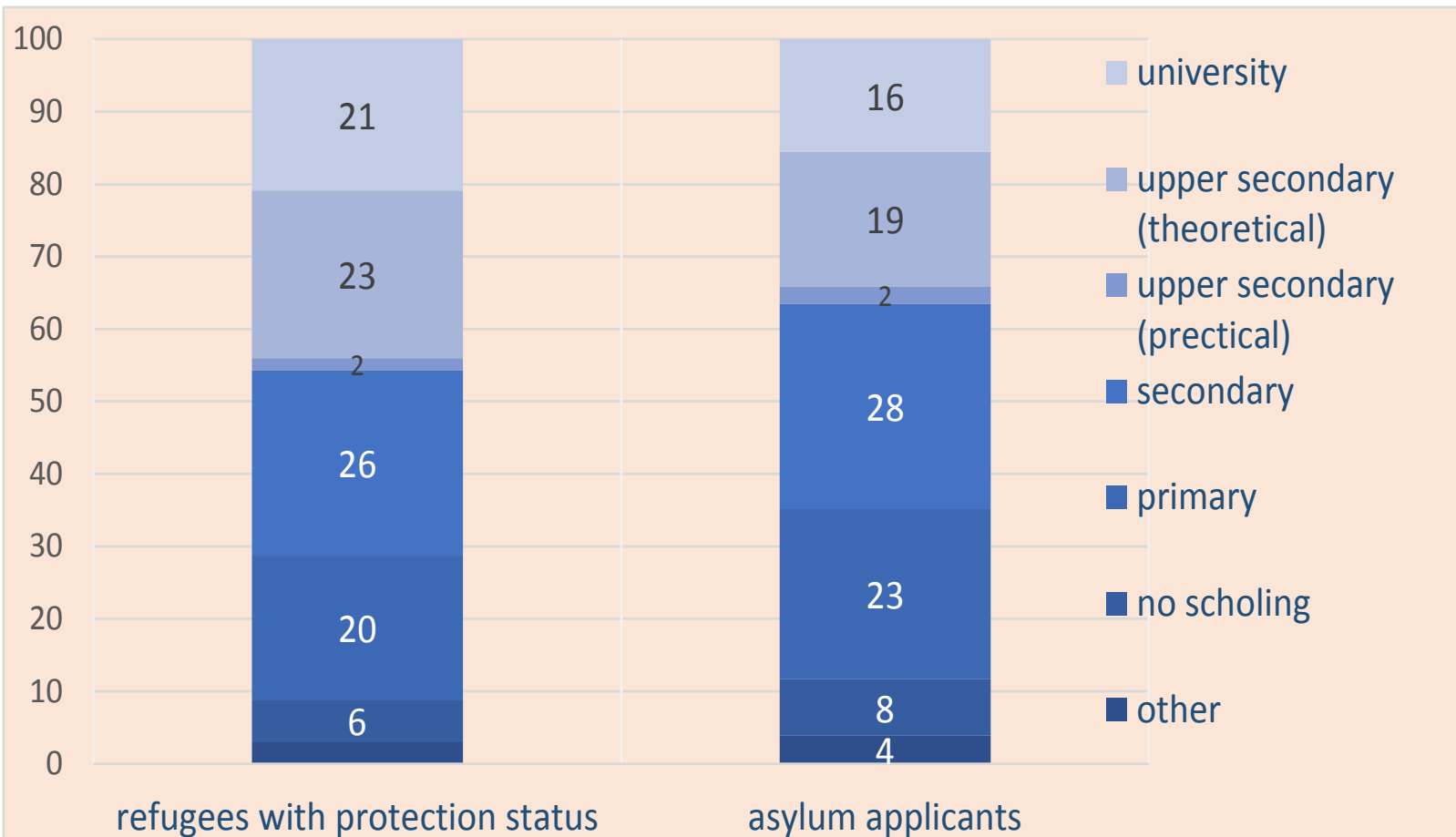
## Self-selection of refugees (cont.)

- High migration costs for refugees
  - migration costs for refugees are higher than those of regular migrants (e.g. trafficking, no visa, etc.)
  - migration risks are higher as well
  - financial and other resources are declining in the course of wars and persecution
- Hence, it is likely that the self-selection is in case of refugee migration more positive than in case of regular migration
  - this was e.g. the case for the surviving Jewish population in Nazi-Germany and the occupied territories in WW II
- It is thus hard to justify that average human capital characteristics of the sending country population apply to human capital characteristics of refugee population (e.g. Wössmann, 2015, 2016)

# Educational attainment of refugees

- **Austria:** Refugees with residence permit or subsidiary protection registered with AMS (12,500 in 9/2015)
  - Low education (ISCED 1 or 2): ~ 82%
  - Medium education (ISCED 3 or 4): ~10%
  - High education (ISCED 3 or 4): ~ 5%
  
- **Germany:** 200,000 asylum seekers weighted by protection probability and surveyed between 01.01.-31.12.2015
  - University: 21%
  - Upper Secondary 25%
  - Secondary: 26%
  - Primary: 20%
  - None: 6%
  
- **Sweden (2009):** Refugees with residence permit
  - Low education (ISCED 1 or 2): 43%
  - Medium education (ISCED 3 or 4): 33%
  - High education (ISCED 5 or 6): 24%

# Education structure of refugees with a protection status and asylum seekers, 1-12/2015



Sources: Federal Office of Migration and Refugees; own calculations.



## The challenge: labour market integration

- Past experience demonstrates that labour market integration of refugees takes time
- Anglo-Saxonian countries such as UK tend to integrate refugees faster than Continental-European countries (e.g. Germany) or Scandinavian countries (e.g. Denmark, Sweden)
- This reflects general integration patterns: employment rates of immigrants relative to the native population are higher in UK or the US compared to Germany or Scandinavian countries
- This can be traced back to labour market institutions and educational systems

# Comparative evidence from selected EU countries

## Employment rates of refugees

Years after arrival/recognition (in percent)

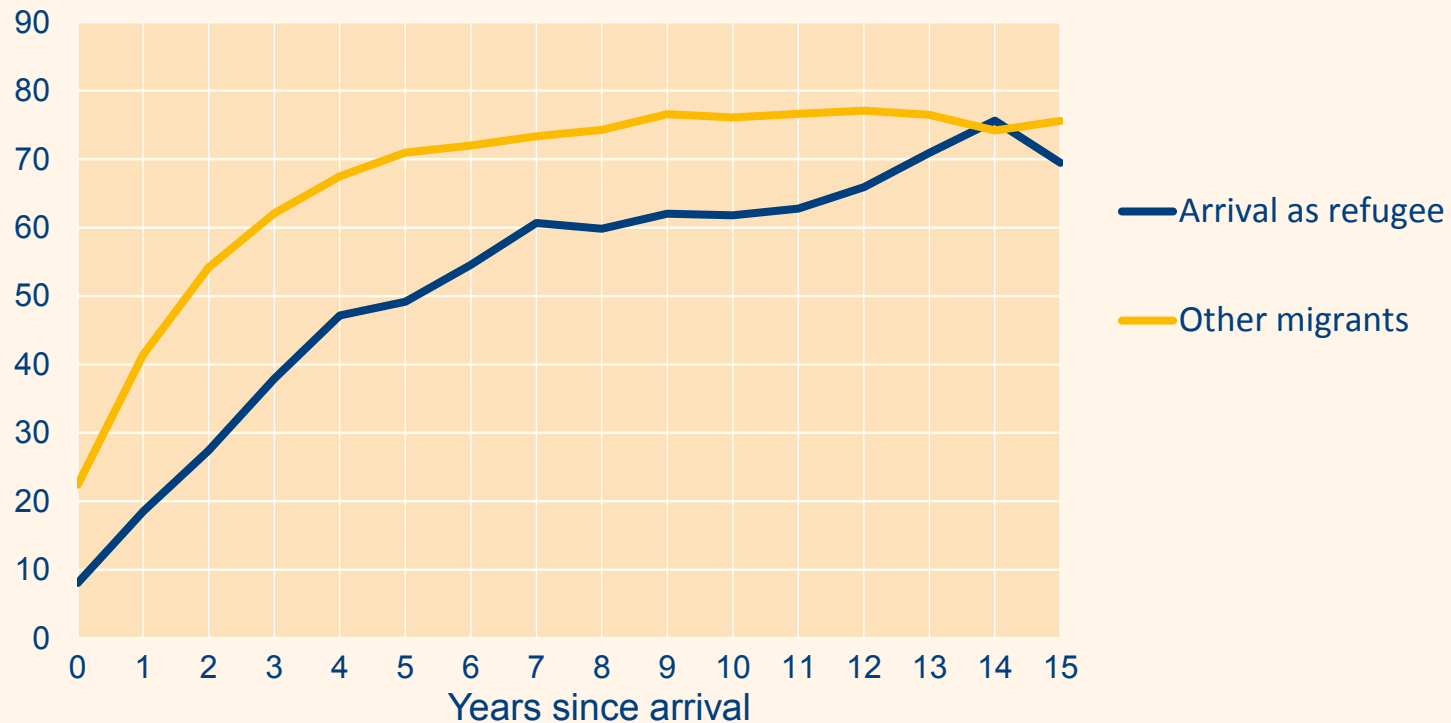
Years...	... since arrival			... since recognition	
	Germany	Sweden (Men)	Sweden (Women)	Denmark	UK
<b>1</b>	19	14	8	15	43
<b>2</b>	27	24	14	32	49
<b>5</b>	49	49	32	63	n.a.
<b>10</b>	62	56	50	75	n.a.

Sources: Germany: IAB-SOEP Migration-Panel; Sweden: 1997-2010 yearly average STATIV, Statistics Sweden; Denmark: 1999-2007 yearly averages, Statistics Denmark; Rates refer to refugees and reunified family members in employment and education ; UK: Survey of New Refugees in the United Kingdom; 2/2005-3/2007:Employment rates after 15 and 21 months

# Evidence from Germany: Labour market integration takes time

## Employment rates of refugees and other migrants

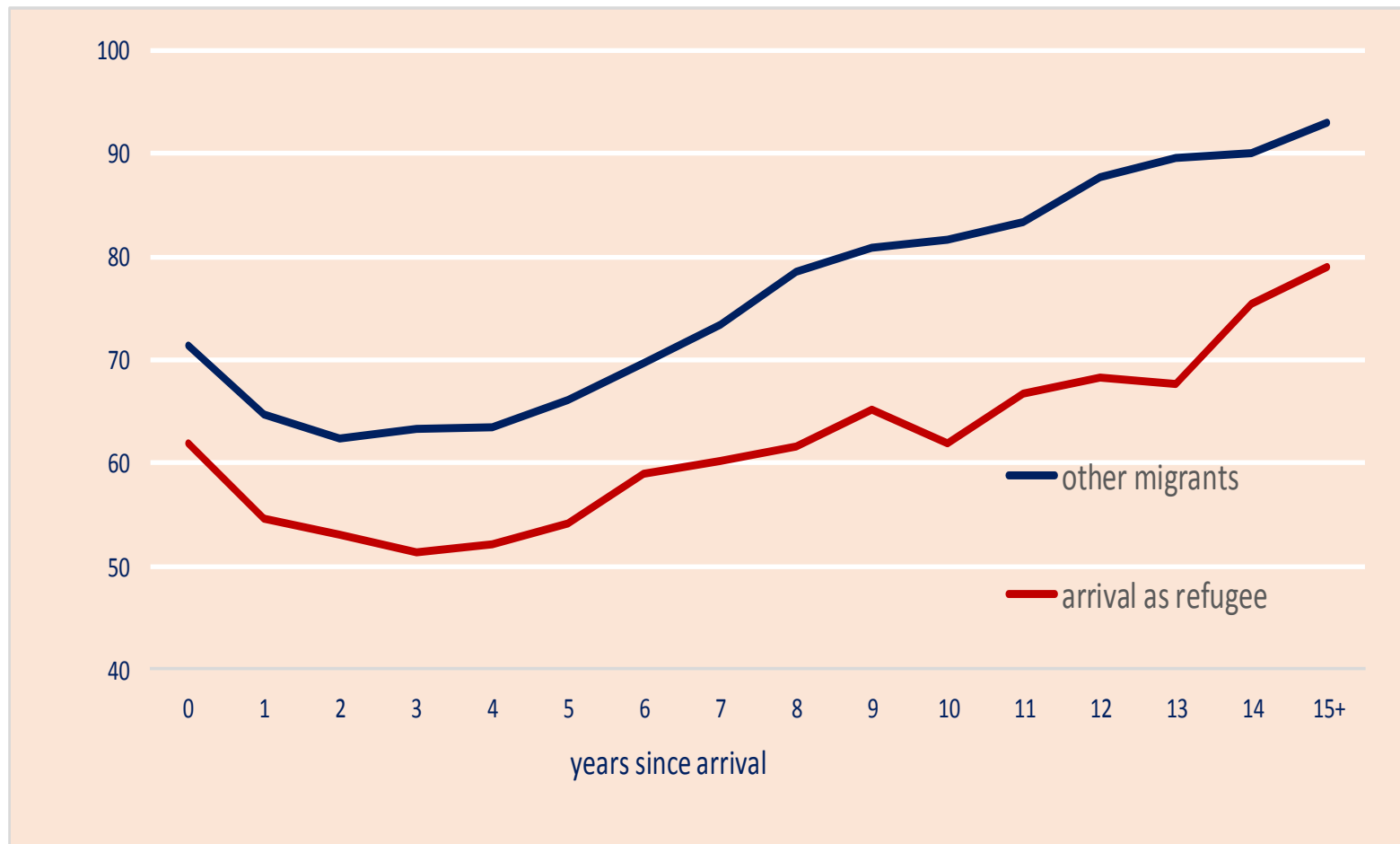
Percent



Source: IAB-SOEP-Migration-Sample, own calculations.

# Unconditional wage assimilation

Daily earnings in % of the median earnings of natives in the same year



Source: own calculations based on IAB-SOEP-Migration Sample.

- Past experience suggests for Germany that very good or good German language proficiency increases employment probability of refugees by between 16 and 29 percentage points compared to an individual with no or poor language proficiency.
- But language proficiency has no significant impact on wages
- A vocational training or university degree obtained in Germany increases employment probability by between 18 and 23 percentage points
- Obtaining a degree in Germany increases wages by between 5 and percent 22 percent
- Small number of observations might impair results

# Probit-estimate of employment probability

Dependent variable: employed = 1, N = 744 persons, individual FE



	Model 1		Model 2		Model 3	
	Coef.	SE	Coef.	SE	Coef..	SE
German language proficiency	0.165***	(0.051)	0.157***	(0.051)	0.296**	(0.132)
Skilled worker (degree abroad)	0.105**	(0.48)	0.109**	(0.49)	0.102**	(0.48)
Skilled worker (degree in DE)	0.209***	(0.057)	0.659***	(0.141)	0.212***	(0.056)
10-15 years since arrival	0.084	(0.069)	0.099	(0.072)	0.074	(0.073)
16+ years since arrival	0.021	(0.070)	0.047	(0.047)	0.065	(0.065)
Degree in DE x 10-15 years			-0.422**	(0.164)		
Degree in DE x 16+ years			-0.481***	(0.157)		
Language prof. x 10-15 years					0.004	(0.146)
Language prof. x 16+ years					-0.124	(0.139)
Age	0.050***	(0.011)	0.049***	(0.011)	0.052***	(0.011)
Age sq.	-0.001***	(0.000)	-0.001***	(0.000)	-0.001***	(0.000)
Female	-0.233***	(0.011)	-0.237***	(0.011)	-0.235***	(0.011)
R <sup>2</sup>	0.24		0.24		0.25	

# Wage regression of refugee workers

Dependent variable: log daily wage, N = 396 persons, individual FE



	Model 1		Model 2		Model 3	
	Coef.	SE	Coef.	SE	Coef.	SE
German language proficiency	0.092	(0.103)	0.077	(0.103)	0.347	(0.246)
Skilled worker (degree abroad)	0.106	(0.091)	0.112**	(0.089)	0.108**	(0.091)
Skilled worker (degree in DE)	0.219	(0.147)	0.884**	(0.408)	0.216	(0.146)
10-15 years since arrival	0.259	(0.158)	0.342**	(0.157)	0.349***	(0.191)
16+ years since arrival	0.305*	(0.158)	0.369**	(0.157)	0.392**	(0.191)
degree in DE x 10-15 years in D			-0.845*	(0.461)		
degree in DE x 16+ years in DE			-0.659	(0.433)		
Language prof. x 10-15 years					-0.300	(0.298)
Language prof. x 16+ years					-0.275	(0.268)
Age	0.068***	(0.031)	0.063***	(0.031)	0.065***	(0.031)
Age sq.	-0.001**	(0.000)	-0.001**	(0.000)	-0.001**	(0.000)
Female	-0.838***	(0.100)	-0.849***	(0.100)	-0.837***	(0.099)
R <sup>2</sup>	0.40		0.41		0.41	

# Labour market effects in Germany

- Assuming that gross immigration of refugees numbers 1.1 millions in 2015 and 1.0 million in 2016 the potential labour force will increase by
  - 360,000 persons in the baseline scenario (+ 0.8 per cent) in 2015
  - 650,000 persons in the baseline scenario (+ 1.4 per cent) in 2018
- We estimate labour market effects here assuming a 1 per cent shock
- Based on empirically estimated elasticities based on a structural model with imperfect labour markets (Brücker/Jahn, ScJE 2012; Brücker et al., EER 2014)

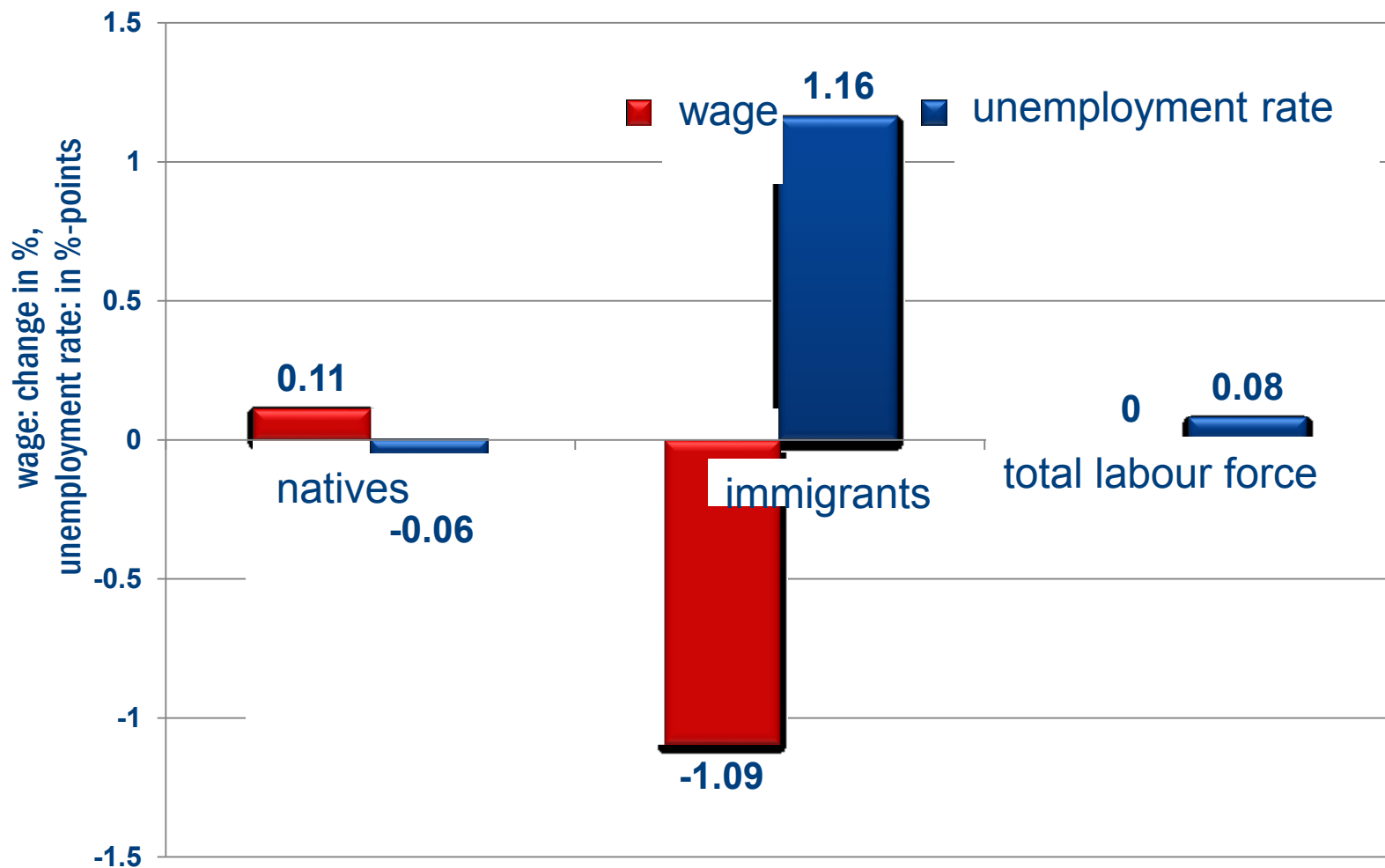


## Sketch of model

- Supply-side is modelled based on empirically estimated wage-setting-curves for different groups in the labour market
  - Wages adjust to unemployment rates and, hence, to labour supply shocks, albeit imperfectly
- Demand-side is modelled based on a production-function approach in the spirit of Borjas (QJE 2003) and Ottaviano/Peri (JEEA 2012) employing a nested-CES-production function
- Distinguishes labour by education, work experience and natives and foreigners
- Capital-output-ratio remains constant at least in long-run (Kaldor, 1962)
- We find rather small elasticities of substitution between natives and foreigners, also compared to DK and UK
- Use this elasticities to simulate 1 per cent refugee migration shock applying skill structure of current refugee immigration

# Effects of immigration of 1% of the labour force in DE

## Assuming average skill- and work experience of refugees



Sources: Simulation based on Brücker/Hauptmann/Jahn/Upward (EER 2014).

# Conclusions



- Failure of co-ordinating asylum policies in Europe has resulted in diversion of refugee migration flows towards Germany
- Prospects are uncertain, border closures might result in both reduced aggregate migration flows and new and more risky migration routes
- “Race-to-the-bottom” scenario is both theoretically and politically likely
- Impact of refugee immigration on labour supply depends heavily on institutional settings and capabilities
- Human capital characteristics depend on self-selection of refugees

## Conclusions (cont.)

- Theoretical arguments and very first evidence suggest that refugees are positively self-selected relative to home population
- But major short-comings in terms of vocational training, quality of education and transferability of human capital
- Micro-evidence from previous refugee migration suggest that labour market integration and wage assimilation lasts longer compared to other forms of migration
- Host-country language proficiency and acquiring educational degrees in host countries facilitates labour market integration
- Macro-impact of additional labour supply is small, but distributional effects might be considerable, particularly on other immigrants

**Thank you!**

Prof. Dr. Herbert Brücker  
Institute for Employment Research (IAB)  
of the Federal Employment Agency (BA)

Contact:  
[herbert.bruecker@iab.de](mailto:herbert.bruecker@iab.de)