Refugee Migration to Germany Revisited: Lessons on the Integration of Asylum Seekers

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Introduction

"Germany is a strong country. [...] We have achieved so much, we will make it! We will make it, and where we face obstacles, we have to overcome them, we have to work on it."

Chancellor Angela Merkel, August 31, 2015

Germany's role in the global refugee migration process

Germany has emerged as the main destination for refugees among the high income countries in 2015 and the following years:

- 1.6 million asylum applications have been lodged there from 2015 to 2018, compared to 3.9 millions in the EU-28 (Eurostat, 2019)
- The total asylum seeker and refugee population numbered 1.4 millions there by the end of 2017 (1.6 millions by the end of 2018), compared to 3 millions in the EU-28 and 5 millions in all high-income countries (UNHCR, 2019; BAMF, 2019)
- The share in the global population of concern (2 percent of 71.4 millions) and the population of concern living abroad (6 percent of 23 millions) is nevertheless still moderate (UNHCR, 2019)

Global and high income country refugee stocks
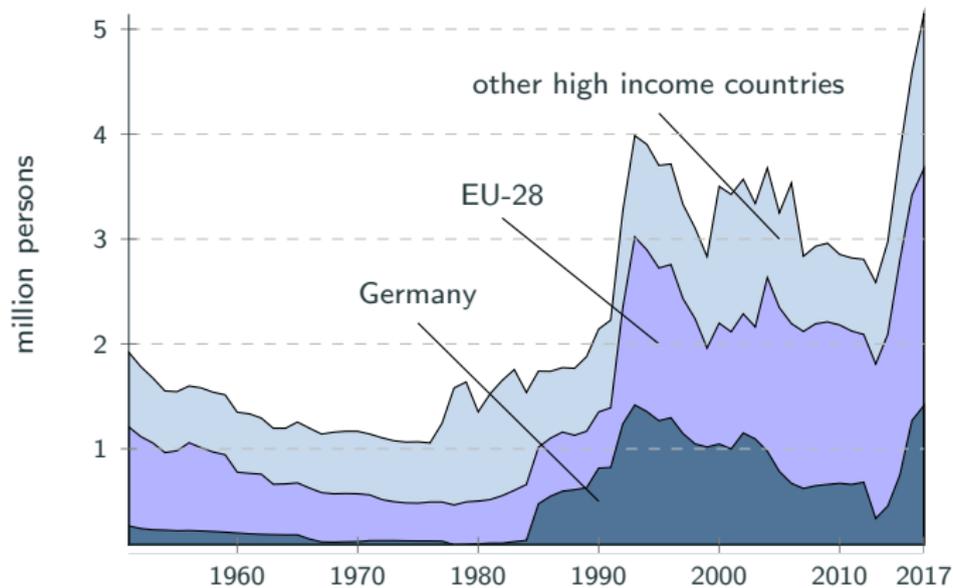## 1951 - 2017
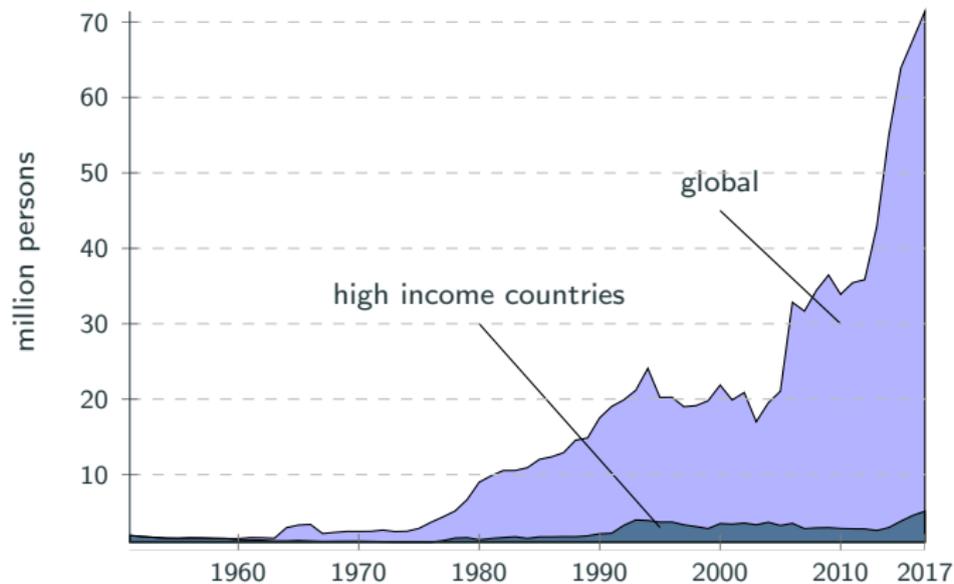
Sources: UNHCR (2018), Refugee Database, Geneva; own calculations.

Refugee stocks in Germany, EU-28 and high income countries
1951 - 2017

Sources: UNHCR (2018), Refugee Database, Geneva; own calculations.

Refugee arrivals* in Germany, 1/2013 - 12/2018

September 5, 2015:
Merkel's Hungary decision

March 9, 2016:
Closure of Western-Balkan-Route

March 27, 2016:
EU-Turkey-Agreement
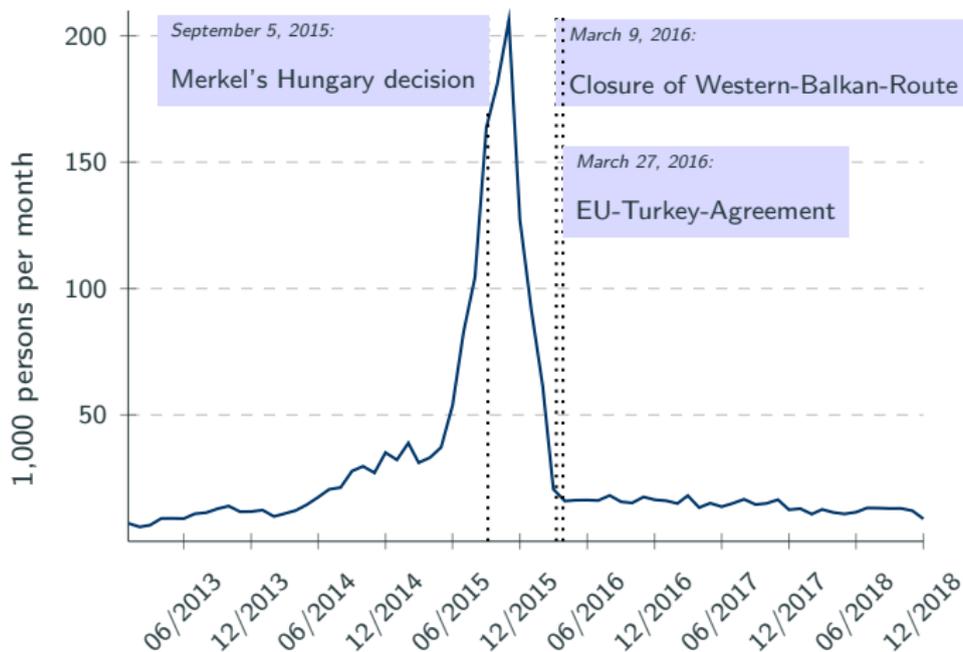
* 1/2013 - 12/2016: BAMF-EASY-records; 1/2017 - 12/2018: first-time asylum applications.
Sources: BAMF, EASY-Statistics, special provisipns; BAMF asylum statistics; own calculations.

Angela Merkel considered the sudden refugee immigration surge as the main challenge of her cancellorship in her summer press conference 2015

In this study, we adress the following questions related to this challenge:

1. How have war, persecution and flight affected the structure of the refugee population in Germany and their prerequisites for integration?

2. What do we know so far about the integration of refugees into the German labor market and other areas of society?

3. How do selected policy issues – asylum policies, dispersal policies, language programs and health care policies affect integration?

Our database

Beyond some macro and register data from social security records, we base our analysis on a unique data source, the IAB-BAMF-SOEP-Refugee Survey in Germany

The IAB-BAMF-SOEP-Refugee Survey is a longitudinal household survey

- of meanwhile some 7,500 refugees in age 18+, plus some 5,600 children living in these refugee households who arrived from 1/2013 to 12/2016
    - 4,465 have been surveyed in the first wave 2016
    - 2,630 of these have been surveyed again in a second wave 2017
    - 2,965 have participated the first time in a refreshment sample or as household members in 2017
- survey instruments have been translated into all main mother languages and the survey is conducted face-2-face (CAPI)

In the analysis presented here we use some 5,544 persons out of the 5,595 persons surveyed in 2017

Questionnaires of the survey

The personal-biographical- (450 questions) and the household questionnaire (100 questions) cover inter alia the following topics:

- education-, employment- and migration biographies
- refugee migration motives and refugee migration process
- education, cognitive abilities, behavioral characteristics, values & attitudes
- physical and mental health
- asylum procedures, registration
- language acquisition, human capital investment, program participation
- labor market integration, unemployment- and welfare benefits
- housing, infrastructure access

War, persecution and flight

Why are origin country and forced migration risks relevant?

Refugees differ from other migrants in many respects since they are inter alia

- exposed to war, persecution and other human rights violations which may have involved existential risk and trauma,
- forced to conduct a risky and costly refugee migration process which may has again triggered personal losses and trauma,
- less prepared to migration and, as a consequence, have lower access to financial, social and informational ressources which may facilitate integration.

For any analysis of the integration prospects of refugees and aslum seekers it is therefore useful to investigate first their exposure to origin country- and refugee migration risks in order to understand the mechanisms behind self-selection and the prerequisites to integration

Self-reported refugee migration motives

Shares of respondents who name motive in % (multiple responses possible)

| Motive	%
war, persecution, forced recruitment	88
war	71
persecution	46
forced recruitment	41
discrimination	41
total economic motives	41
personal economic situation	36
general economic situation	28
family- and friends related motives	17
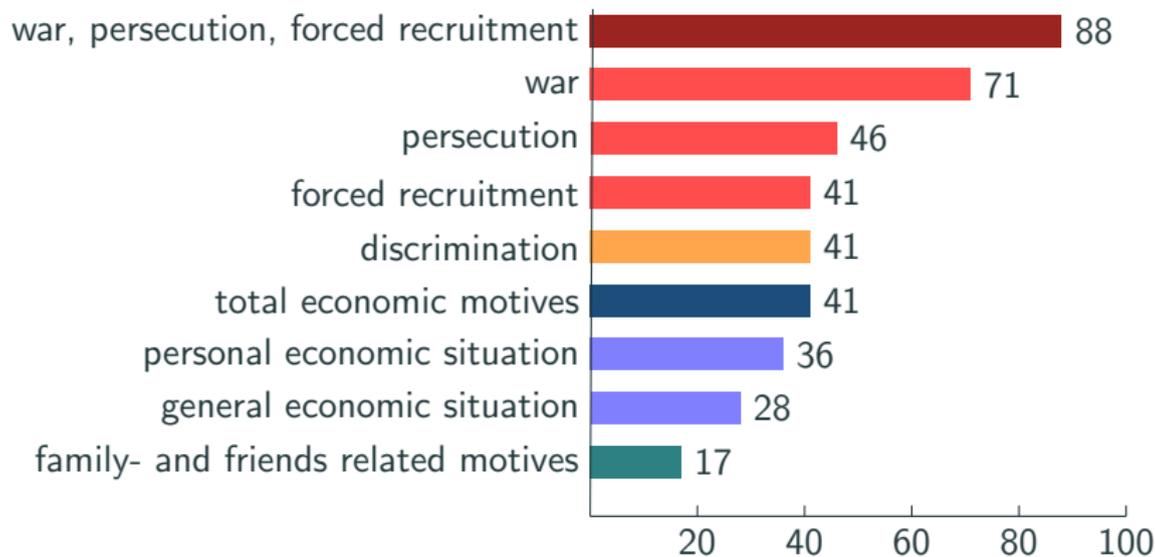
Notes: Darker bars comprise all persons who have at least named one motive of the motive group.

Sources: IAB-BAMF-SOEP-Survey of Refugees, 2017, weighted.

Origin country exposure to war and armed conflict

Country-of-origin-shares weighted by German refugee population 2018 in %
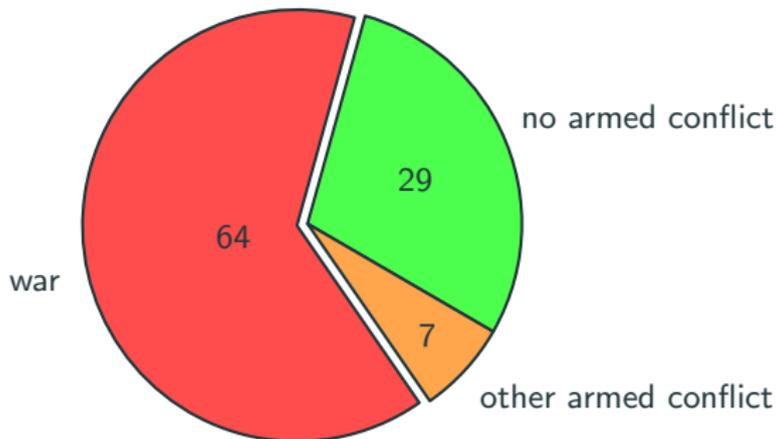
Source: Uppsala Conflict Data Program 2018, own calculations.

Origin country exposure to political terror

Country-of-origin-shares weighted by German refugee population 2018 in %
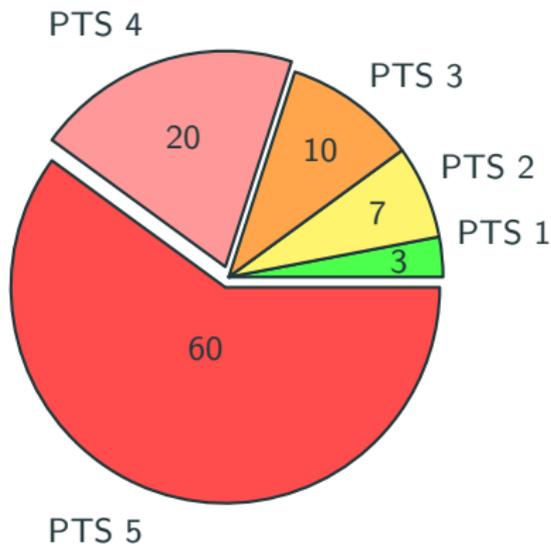
Notes: PTS 1: secure rule of law. PTS 2: Limited imprisonment for non-violent political activities. PTS 3: Widespred imprisonment for non-violent poitical activites. PTS 4: Political terror is common. PTS 5: Political terror has affected whole population.

Source: Political Terror Scale 2018, US State Department Classification; own calcuations.

First-instance decisions on
asylum applications, 2015 - 2018
Shares of total decisions in %

Legal status of population with
refugee background, 12-31-2018
Shares of refugee population in %

approved
50
34
16
declined
formal decisions

protection status
66
11
19
4
tolerated
in procedure
obligated to leave

Source: BAMF Asylum Statistics, own
calculations.
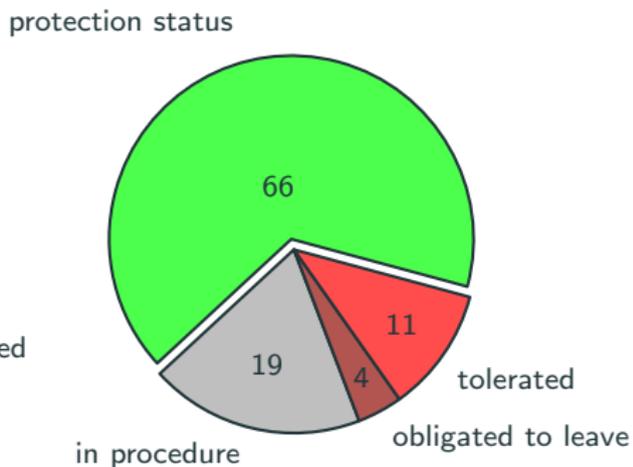
Source: Central Register of Foreigners, own
calculations.

Refugee migration costs

Costs in EUROs by quarter of departure

costs in EUROs

total costs

costs for smugglers

8,000

6,000

4,000

2,000

06/2014 09/2014 12/2014 03/2015 06/2015 09/2015 12/2015
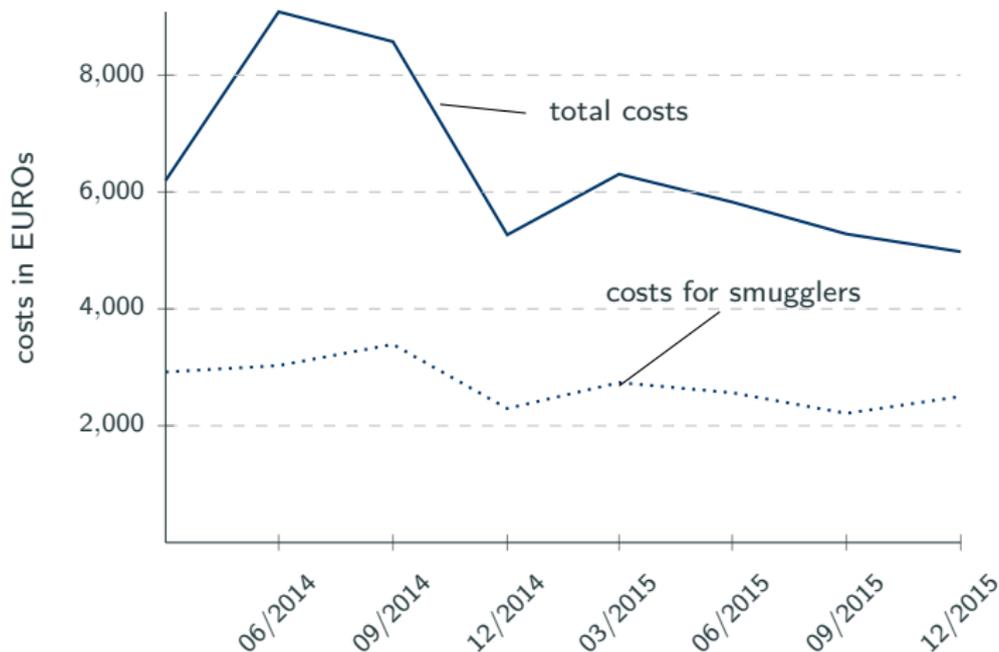
Sources: IAB-BAMF-SOEP-Survey of refugees 2017 waves (weighted); own calculations.

Refugee migration risks

Share of respondents who expierenced respective event in %

All routes

betrayal	27
imprisonment	23
violence	22
blackmail	16
robbery	16
shipwrecking	15

Sea routes

betrayal	29
violence	26
imprisonment	24
shipwrecking	20
blackmail	18
robbery	18
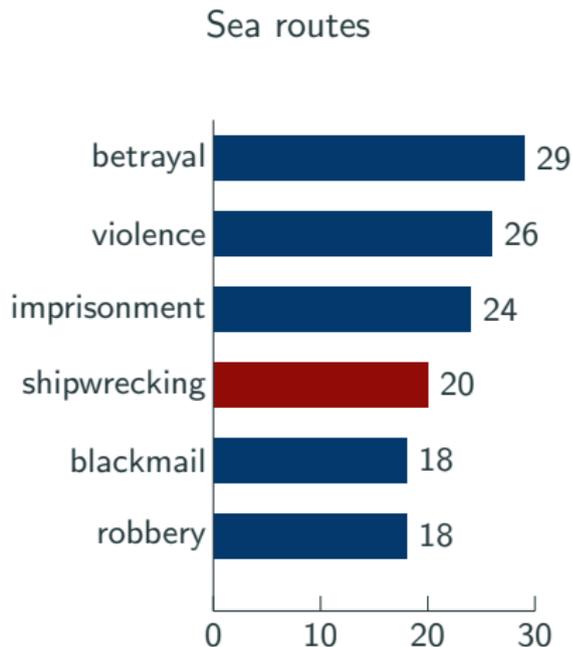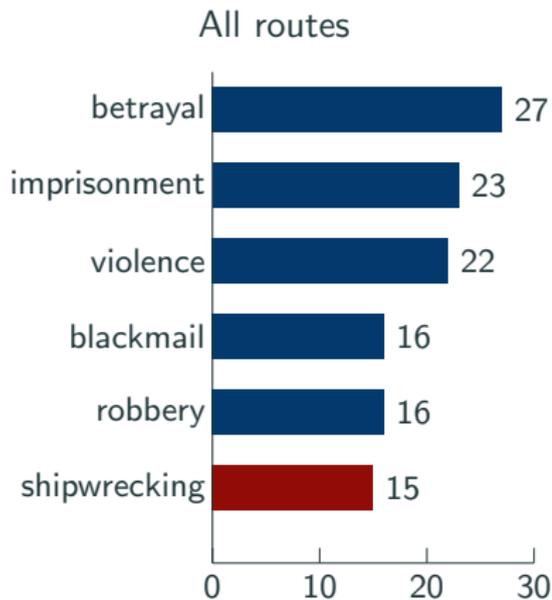
Notes: Multiple answers possible.
Sources: IAB-BAMF-SOEP-Survey of Refugees, 2017, weighted.

Self-selection

Dimensions of self-selection

Experiences of war and persecution, displacement and the refugee migration costs and risks affect the forced- and self selection of refugees along different dimensions:

- skills, other abilities and socio-economic status (Aksoy/Poutvaara, 2019; Guichard, 2017)
- gender and demographic selection
- behavioral characteristics such as self-confidence, risk preferences and reciprocity (Brücker et al., 2016; Kroh & Schupp, 2016)
- religious affiliations, convictions and values (Brücker et al., 2016; Kroh & Schupp, 2016)

Refugee self-selection theories

The Roy-Borjas-model predicts that relative returns of education and other abilities in conjunction with migration costs determine self-selection of migrants (Borjas, 1987; Brücker & Defoort, 2011; Grogger & Hanson, 2011)

Aksoy & Poutvaara (2019) predict that origin country risk excerts a positive skill-selection impact if (i) non-economic risks are equally distributed across the population and (ii) (log) wages are affected by the origin country risk

Conversely, refugee migration risk excerts a negative skill-selection impact if (i) non-economic migration risks are equally distributed across refugees and (ii) (log) wages at destination are affected by migration risk

Education of refugees compared to sending country average

Highest educational degree, share in %

Syria | Iraq | Afghanistan

Legend:
- tertiary
- upper secondary
- lower secondary
- primary
- no

Syria — refugees: tertiary 23, lower secondary 25, upper secondary 20, primary 24, no 8
Syria — home population: tertiary 9, upper secondary 10, lower secondary 21, primary 42, no 18
Iraq — refugees: tertiary 17, upper secondary 12, lower secondary 18, primary 30, no 23
Iraq — home population: tertiary 8, upper secondary 5, lower secondary 6, primary 25, no 56
Afghanistan — refugees: tertiary 11, upper secondary 17, lower secondary 14, primary 31, no 27
Afghanistan — home population: tertiary 4, upper secondary 16, lower secondary 7, primary 13, no 60

Source: Guichard, 2017.

Education gap to German population

Highest educational degree, shares in %

Schooling degrees

- upper secondary
- secondary
- primary

	refugees	German population average
upper secondary	36	40
secondary	23	55
primary	41	5

Professional degrees

- university / college
- vocational
- no

	refugees	German population average
university / college	11	18
vocational	6	59
no	83	23
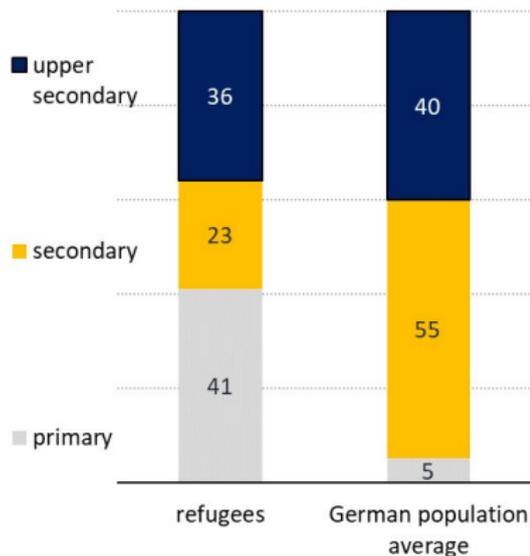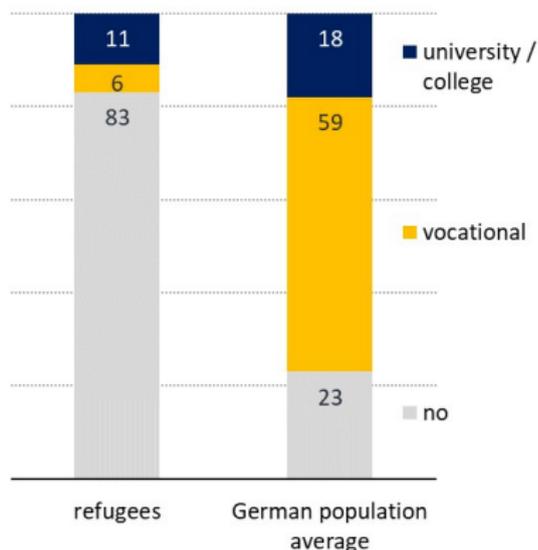
Sources: IAB-BAMF-SOEP-Survey of Refugees, 2017, weighted, Microcensus, 2018.

Behavioral characteristics

Identification with behavioral item on a scala from 0 to 10

	refugees	with migration background	w/o migration background
risk preference	3,91	4,83	5,05
self confidence	6,23	5,83	5,56
locus of control	3,1	4,6	4,6
positive reciprocity	6,62	6,02	5,81
negative reciprocity	1,89	2,66	2,8

■ refugees ■ with migration background ■ w/o migration background
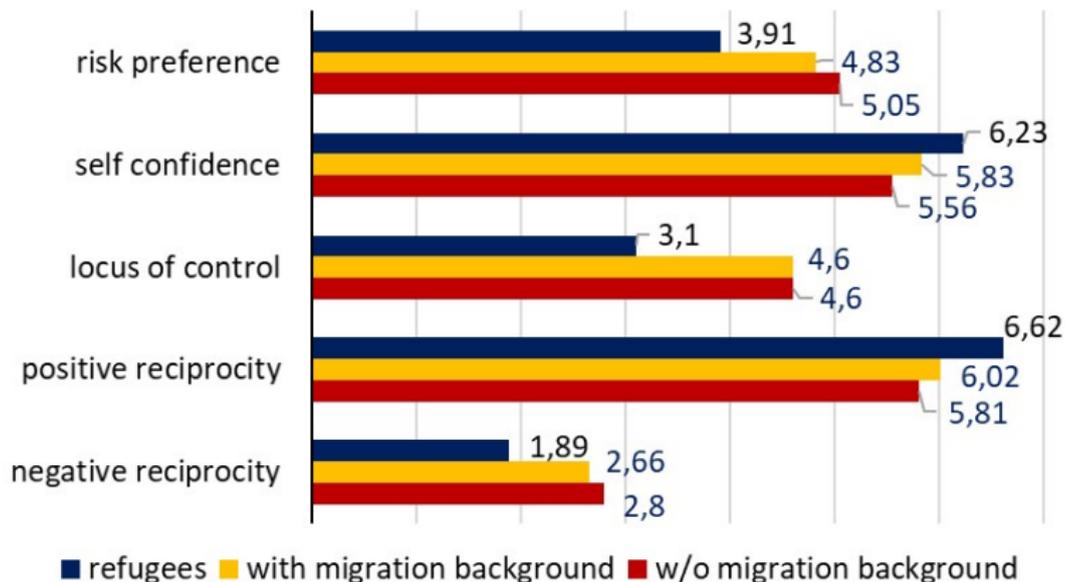
Sources: IAB-BAMF-SOEP-Refugee Survey, 2017, weighted; SOEP.

Value selection: democracy, civil rights and rule of law

Agree largely or totally with respective statement, shares in %

,

agree with statement:

determination of government in free elections
- home population: 89
- refugees: 98
- Germans w/o migration background: 91

support of strong leaders w/o parliamentary control
- home population: 46
- refugees: 21
- Germans w/o migration background: 22

belongs to democracy:

respect of civil rights
- home population: 80
- refugees: 97
- Germans w/o migration background: 83

taxing rich und redistribution to poor
- home population: 63
- refugees: 85
- Germans w/o migration background: 70

religious leaders shall enforce laws
- home population: 52
- refugees: 18
- Germans w/o migration background: 9

■ home population ■ refugees ■ Germans w/o migration background

Implications for integration and inclusion

Although efugees have higher education and a higher socio-economic status on average compared to the sending country population, there is a substantial educational gap with respect to the host country population. This is particularly true for professional degrees, such that they are "not a perfect match" for the demands in the German labor market (Dustmann, Fasani, Frattini & Schönberg, 2017)

But: 70 percent of the male refugees and 37 percent of the females have work experience. The complexity of tasks performed by the refugee labor force prior to migration resembles largely that of the German labor force

The behavioral characteristics distingush the refugee population considerably in comparison to other population groups in Germany. Most of thesee behavioral characteristics of the refugee population are positively correlated with professional status and wages (Brenzel & Laible, 2017; Barrick & Mount, 1991; Salgado, 1997)

State of labor market integration

Labor market disadvantages of refugees

Labor market integration of refugees takes longer than that of other immigrant groups – if employment rates converge at all (Brücker et al., 2015; Fasani & Frattini, 2016)
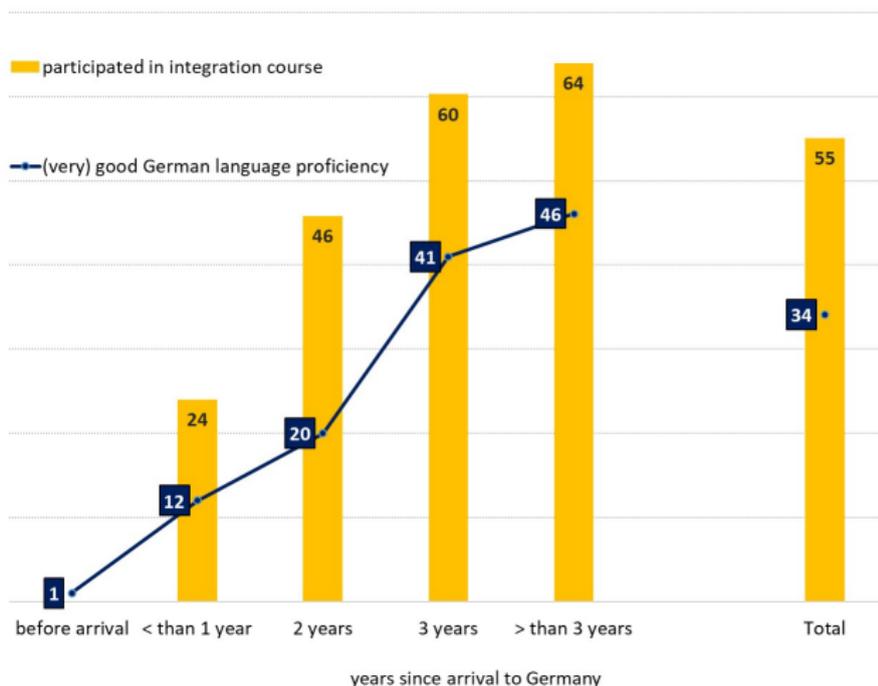
This is caused by various factors:

- **mismatch** between skills and abilities of refugees and labor demand in destination countries
- **poor preparation** of forced migrants
- **legal uncertainty** caused by asylum procedures and legal status
- **institutional hurdles**, employment bans and constrained labor mobility
- and many others ....

Stylized facts on the state of integration in Germany

- 80 percent of the refugees participated in language programs, 50 percent in integration courses (Brücker et al., 2019)
- the German language proficiency tends to increase continously starting from very low levels
- the completion of language- and labor market programs is positively correlated with employment probabilities
- the employment rates tend to increase faster compared to previous refugee immigration episodes in Germany: about 35 percent of the working-age refugees who barrived since the begin of 2015 were employed in October 2018(BA-Statistik)
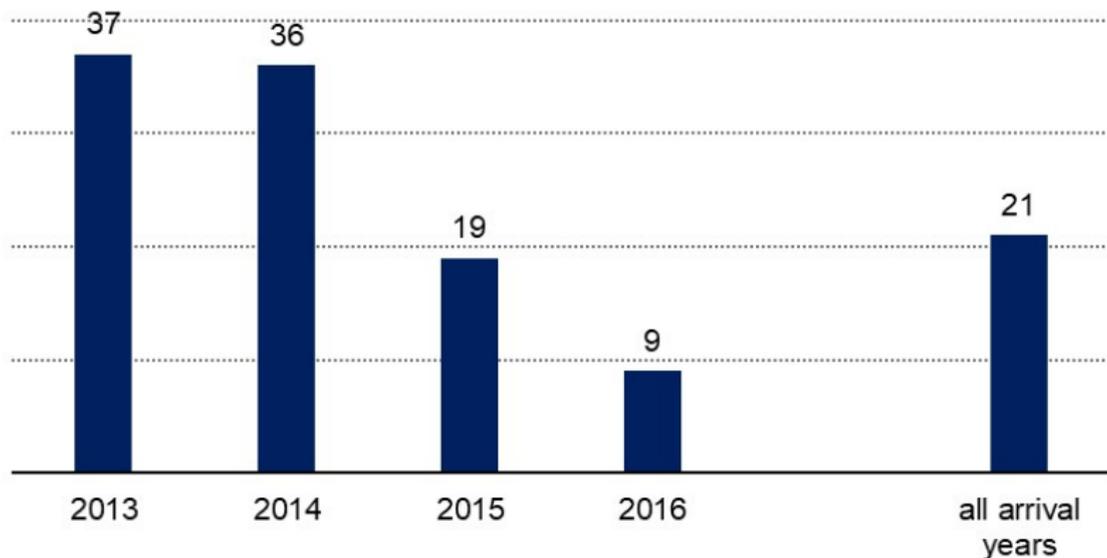- there is a substantial gender-gap in employment rates

Integration course participation and language proficiency

Shares with completed integration course and (very) good German language proficiency in %

- participated in integration course
- (very) good German language proficiency

	before arrival	< than 1 year	2 years	3 years	> than 3 years	Total
participated in integration course		24	46	60	64	55
(very) good German language proficiency	1	12	20	41	46	34

years since arrival to Germany

Source: IAB-BAMF-SOEP-Refugee Survey, 2017, weighted.

25

Employment rates by year of arrival, 2nd half-year 2017

2013	2014	2015	2016	all arrival years
37	36	19	9	21

Source: IAB-BAMF-SOEP-Refugee Survey, 2017, weighted.

Skill mismatch

Current job is adequate, above or below qualification, shares in %

	specialists / experts	skilled workers	semi-/unskilled workers	all
below qualification	81	45		31
adequate	19	52	51	44
above qualification		3	49	25
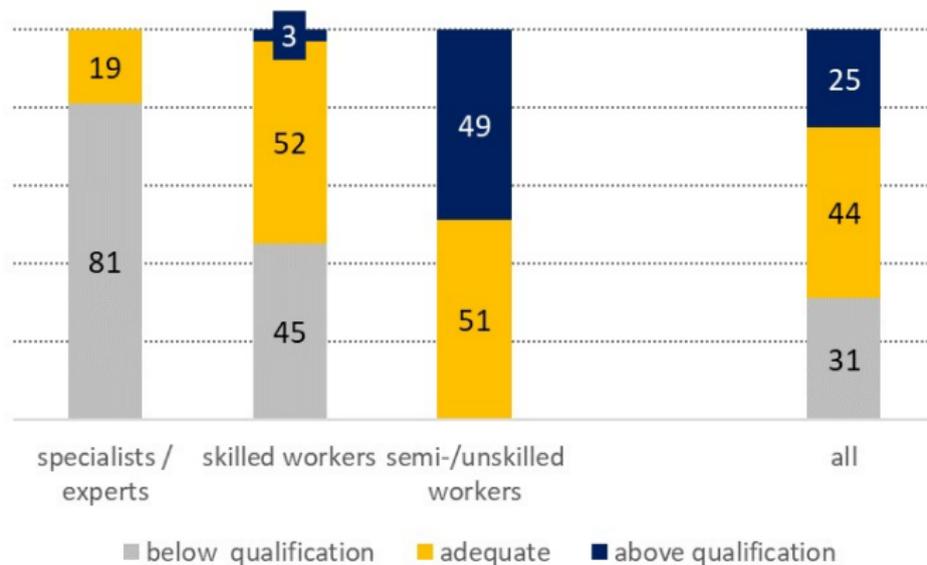
Source: IAB-BAMF-SOEP-Refugee Survey, 2017, weighted.

Asylum policies

Motivation

Outcome and duration of asylum procedure determine ...

- ... staying prospects
- ... economic & social integration (legal restrictions & incentives).
    - e.g. devaluation of human capital, depress in working aspirations

Scant empirical evidence

- lengthy asylum procedures reduce employment probability
  (Hainmueller, Hangartner, Lawrence, 2016)
    - BUT: only approved refugees long time since arrival

Institutional setting

BAMF *"integrated refugee management"*: three country clusters

1. good prospects to remain (SYR, IRQ, IRN, ERI, SOM)
2. safe country of origin (West Balkan countries, GHA, SEN)
3. others (Dublin cases, complex cases)

Labor market access

- unlimited for approved refugees
- work permit for asylum-seekers and tolerated refugees after blocking period of 3 months

Language program access

- unlimited for approved refugees
- asylum-seekers with good prospects to remain and tolerated refugees may apply for publicly funded programs

Empirical method

Survival models for transition rate to first job and transition rate to first (any) language program

Sample

- labor market: 86,740 person-month observations (3,605 persons)
- language programs: 53,802 person-month observations (3,471 persons)

Explanatory variables of interest

- monthly status of asylum application (pending/ approved/ rejected)
- months in asylum procedure

Results (relative hazard ratio)

Transition into ...	First job	First language course
Duration (in months) of asylum procedure	0.98***	0.98***
Outcome of asylum applicaton (Ref.: Pending)		
Approved	1.27**	1.75***
Rejected	0.96	1.77***
Country group of origin (Ref.: Good perspectives to remain)		
Safe countries of origin	3.82***	0.61*
Other countries of origin	1.40***	0.93
Language course in Germany (Ref.: Not (yet) enrolled)		
Currently enrolled	0.81*	
Course completed	1.98***	
Course completed and enrolled in the next course	1.19	
Entered first job		0.67***
Control variables	Yes	Yes
Unobserved heterogeneity	Yes	Yes
Person observations	3,605	3,471

Significance level *** p<0.001, ** p<0.01, * p<0.05 (two-tailed test).

Conclusion

Lengthy asylum procedures impede *both* refugees' entry into employment & language programs

Approval of application accelerates labor market entry; decision on application accelerates language program entry

Refugees from safe countries of origin prioritize labor market entry

- improve staying prospects, earn money in time left

Refugees with good prospects to remain prioritize enrolment in language courses

- long-run investment in human capital; improve chances for successful, sustainable integration

Dispersal policies

Motivation

Public debate: concerns about ...

- ... ethnic ghettos & parallel societies
- ... displacement effects on labor and housing markets
  (Kürschner & Kvasnicka, 2018)

Empirical evidence: dispersal policies may harm labor market integration
(Edin et al. 2003, 2004; Damm, 2009; Fasani et al., 2018)

- ↑ job search costs, ↓ job matching efficiency
- ↑ spatial mismatch (Aslund, Östh, Zenou, 2010)
- ↓ spatial concentration/clustering of refugees
  - valuable resources through co-ethnic networks
  - less investment in language proficiency and other
    country-specific human and social capital

Institutional setting

Initial placement policies for asylum-seekers: *Königsteiner Schlüssel*

- annually updated, tax- and population based regional distribution

Asylum-seekers & those rejected face very strict residency obligation incl. travel ban (*"Residenzpflicht"*, §56 Residence Act)

Free choice of residency after asylum approval before Integration Act of Aug-6-2016, but thereafter:

- residency obligation for further 3 years even after approval
- in several Federal States: more restrictive place-obligation even at the district- (county-) & municipality level
- exceptions for employees with at least 15 weekly working hours and 700 EUROs monthly income

Survival models for transition rate to the first job

Sample

- refugees approved since Jan-2015: 66,102 person-month observations (2,964 persons)

Treatment

- geographical & temporal variation in implementation of the law
- approval in restrictive treatment state after reform or up to 6 months before due to retrorespective application of obligation

Results (relative hazard ratio)

	Model 1	Model 2	Model 3
Treatment: Approved in treatment state after reform or up to 6 months before	0.715**	1.046	0.560***
Approved	1.080	1.065	1.079
Local unemployment rate (Ref.: < 20th percentile)			
20th − 80th percentile		0.790	
X Treatment		0.686	
> 80th percentile		0.720	
X Treatment		0.403**	
Local population size (Ref.: ≤ 50th percentile)			
> 50th percentile			1.044
X Treatment			1.658*
Control variables	Yes	Yes	Yes
FE for time, region, approval-date	Yes	Yes	Yes
Person-observations	2,964	2,964	2,964

Significance level *** $p<0.01$, ** $p<0.05$, * $p<0.10$ (two-tailed test).

Conclusion

Adverse labor market effects of the "restrictive" small-scale, i.e., local implementation of the residency obligation for approved refugees

Evidence for perpetuation of a spatial mismatch. Particularly negative effects for regions (counties / municipalities) with unfavorable labor market conditions in terms of

- small labor markets (low population density) and
- high unemployment rates.

Language programs

Motivation

Language acquisition is a crucial first step in successful integration of refugees

- refugees often arrive without host country's language proficiency
- early investments in language courses for refugees are necessary
- significant future economic benefits for the host society (tax contributions and lower welfare expenditures)

Empirical evidence suggests strong link between language skills and migrants' labor market opportunities (e.g., Bleakly and Chin, 2004; Chiswick, 1978)

- scant empirical evidence for refugees

Institutional setting

BAMF Integration courses

- pre-existing language training program offered by the federal office for Migration and Refugees (BAMF)
- 600 hours of instructions (general integration course), standardized curriculum
- estimated costs: 2.9 Euros per participant per hour

BA language training program

- temporary, ad-hoc language training program administered by the federal Employment Agency (BA) to meet demand during the 2015 crisis
- 320 hours of instructions, no standardized curriculum, rapid roll-out
- estimated costs: 4.8 EUROs per participant per hour (in total 400 million EUROs)

Empirical method

Database: Integrated Employment Biography (IEB)

- administrative data for all asylum-seekers arrived between Jun-2015 and Jun-2016
- male refugees, aged 18-35 at arrival

Analysis of BA program

- regression discontinuity design (RDD) on employment probability
  - comparison of refugees around the cut-off date of program eligibility
- treatment = refugees from SYR, IRN, IRQ, ERI registered on or before December 31, 2015 (intention-to-treat effect)
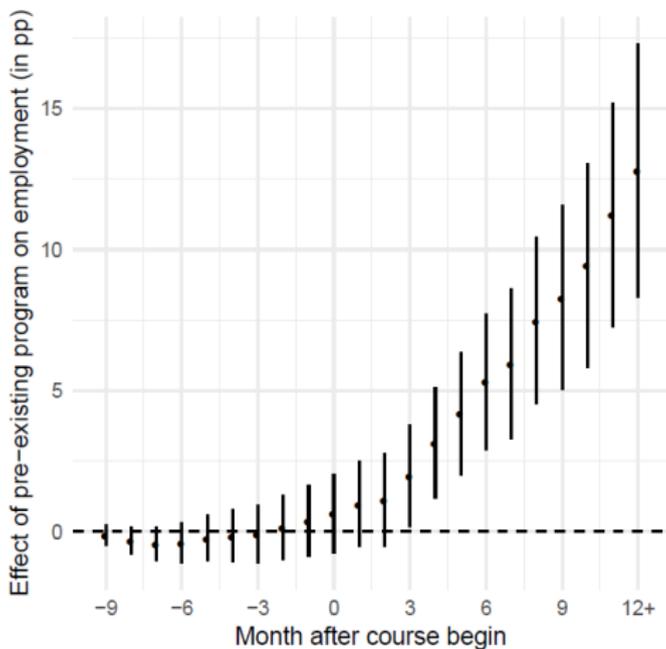
Analysis of BAMF program

- interactive fixed-effect regression (Bai, 2009) on employment probability
- comparison of refugees enrolled into courses at different points in time

Results: change in probability of employment in %-points

BA language program

Integration courses

Conclusion
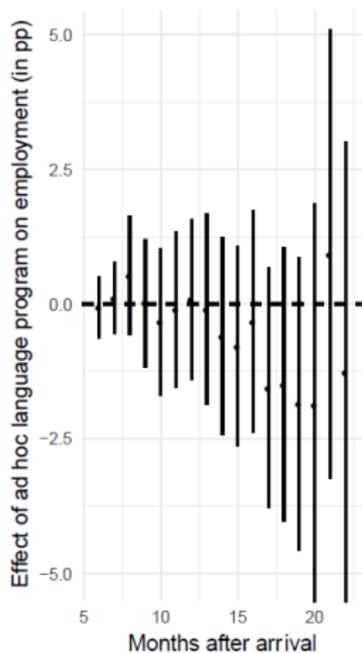
Sizable gains in terms of higher employment rates for refugees participated in the pre-existing comprehensive language program ("Integration course")

No discernible gains for refugees eligible for the ad hoc language program (BA language training program)

- ad hoc program may have lacked quality and quantity of instructions necessary for sufficient German proficiency
- selection into preexisting program is more positive

Health policies

High relevance of health status for individual

- education achievement (Baird et al., 2016)
- economic integration (Chatterji et al., 2011)
- social inclusion (Steptoe et al., 2015)

Adverse economic and fiscal effects through, e.g., fewer hours worked or absenteeism (Hanna, Oliva, 2015)

Asylum-seekers & those rejected have only limited access to the health system through a restrictive administrative approval procedure in the first 15 months of stay

Since Oct-2015: asylum procedure acceleration law opens the possibility for regional administrations, in cooperation with the statutory health insurance funds, to issue electronic health cards (eHC) to asylum-seekers before the end of the 15-month period.

- Regional & temporal variation in access to health care: quasi-experimental setting

Cross-sectional OLS for logged health indicators:

- PCS: physical component summary scale
- MCS: mental component summary scale
- PHQ-4: symptoms of depressive illness and anxiety
- RHS-13: refugee health screener

Three "first access paths" to the health system (if at all):

- via policy change → **treatment**
- via asylum approval
- via duration of stay (15 months) or
- not eligible

Sample: 7,384 persons out of which 11% got the eHC through the reform

Results

	log PCS	log MCS	log PHQ-4	log RHS-13
Eligibility to eHC				
(Ref.: via policy change)				
Via status approval	-0.00	-0.03	-0.06	0.37***
Via duration of stay	-0.01	-0.04	0.08	0.31**
Non-eligible	0.00	-0.07**	0.07	
Controls	Yes	Yes	Yes	Yes
FE for origin country & 1st district	Yes	Yes	Yes	Yes
Person-observations	5,087	5,087	3,086	1,805

Significance level *** p<0.01, ** p<0.05, * p<0.10.

Conclusion

No effects on physical health (no group differences at all)

- Young age structure of refugee population

Higher mental well-being through health care access, irrespective of access path

No clear picture with regard to depression symptoms and anxiety

Highly significant treatment effect on emotional distress

- Early access through the reform reduces the risk of post-traumatic stress disorder substantially

Conclusions

Conclusions

1.6 million asylum applications between 2015 and 2018: big challenge for German society and economy

Overwhelming share of refugees has legitim reasons for protection
$\rightarrow$ will stay in Germany

Available evidence points towards favorable self-selection of refugees, but education gap in terms of professional degrees, missing German language proficiency and other factors are severe impediments to integration

Still, considerable progress has been achieved in last four years

How can policies foster integration? Our paper has discussed four selective, but highly relevant policy variables

Asylum procedures

Fast asylum procedures and approval of asylum claims facilitate labor market integration and language program participation

Therefore, asylum policies should strive for efficient and rapid asylum procedures to ensure (early) legal certainty for asylum-seekers and employers

The German office in charge for asylum procedures (BAMF) introduced a cluster system stratifying country-of-origin-groups according to their staying prospects

- overall length of asylum procedures ↓
- however, prolongation for non-prioritized groups → economic & social costs

⇒ Social and economic costs could have been reduced by lifting legal restrictions on program participation and labor market access for non-prioritized persons

Dispersal policies

Political concerns about ghetto formation and parallel societies

Residency obligation for refugees restricts secondary migration for further three years after approval

Evidence shows negative effects for labor market integration two years after reform

- particularly harmful in economically unfavorable regions

Policy alternatives

- allow free of movement for refugees at least after approval of applications
- prevent 'inefficient' initial distribution $\rightarrow$ match refugees' skills and regional labor demand (Bansak et al. 2018)
- reduce allocative inefficiency by introducing a 'negative residency obligation in municipalities where threshold level is exceeded

Language programs

Comparison of two major programs

- Well-established BAMF Integration Courses versus ad hoc, temporary language program of Federal Employment Agency (BA)

Although jury on crucial 'success-component' stands out, well-established, high-quality and comprehensive language & integration courses seem to work in contrast to ad hoc programs

Substantial gains for individual integration, higher tax and social security contributions and less welfare expenditures for host country, while expenditures of language programs are relatively low

Health policies

Initial evidence points towards high need for health care among refugees

However, asylum-seekers are virtually excluded, not only in Germany but around the world

Policy should open up early treatment options, in particular for mental and post-traumatic disorders

- fundamental prerequisite for integration into labor markets and society
- relief of the welfare state: early detection, avoidance of follow-up costs of treatment