

# The Labour Market Integration of Refugees in Germany: Evidence from a Field Experiment<sup>a</sup>

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## Abstract

The project evaluates the causal effect of a job-matching programme on the employment of recently arrived refugees in Germany. Refugees typically require longer time than other immigrants to be successful in the host country's labour market. While skills, obtained through education and work experience, certainly play an important role, the job search process itself requires institutional knowledge and social networks, which recently arrived refugees often lack. Our field experiment evaluates to what extent easing matching frictions for job-seeking refugees affects their labour market integration. We interviewed around 400 job-seeking refugees who attended job-counselling sessions of a Munich-based NGO. Each participant was then randomly allocated either to the treatment group or to the control group. For the treatment group, the NGO identifies potentially suitable employers and, upon agreement with a job-seeker, sends a CV to those employers. This treatment can isolate the effect of matching frictions, while it has no effect on the underlying skills of participants. We track individuals over time by conducting follow-up surveys of both the treatment group and the control group every six months. Preliminary results show a positive and significant treatment effect on employment after twelve months since the start of the intervention.

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# 1 Introduction

The number of asylum seekers entering Germany in 2015-2017 is unprecedented after World War II. In the period January 2015-August 2017, the German Federal Office for Migration and Refugees processed almost 1.5 million first asylum applications. Around half of the applicants received a positive decision (BAMF 2017) and are, therefore, likely to stay in Germany, at least in the short and medium term. Despite entering for non-economic reasons, many of the recently arrived refugees can be active in the German labour market. The economic integration of refugees is important not just for their own well-being and for the impact on the government's budget, but also as a crucial element that shapes the public view on refugee migration. This in turn affects what types of policies and political parties will gain support.

According to the German Federal Employment Agency, as of September 2017, about 500,000 refugees and asylum seekers were registered with the Public Employment Services (PES) as job-seekers, among them 188,000 were classified as unemployed.<sup>1</sup> The performance of earlier refugee cohorts shows that the labour market integration of refugee migrants happens at a relatively slow pace: on average, it takes about fifteen years to reach the employment level comparable to that of other immigrants (Brücker et al. 2016a; Kosyakova and Fendel 2017). The labour market integration of refugee migrants is often more challenging than that of economic migrants due to at least two overarching reasons: a potential lack of skills and frictions in the labour market.<sup>2</sup> Economic considerations are not the primary reason for refugee migration: as a rule, refugees are forced to leave countries in distress and have fewer possibilities to prepare for migration by learning the language or acquiring the necessary skills. In addition, destination countries cannot select refugees based on how well their skills match with the needs of their labour market. Therefore, a lack of country-specific and job-related skills and qualifications might hinder labour market integration of refugees, especially in the first years after arrival. Moreover, many refugees suffer from war and flight-related stress, trauma and depression, which might make them psychologically unable to participate in the labour market.<sup>3</sup> The lack of relevant information, undeveloped social networks, uncertainty concerning residence status, and legal barriers pose further obstacles that are likely to be more serious for refugees than for other immigrants. While both a lack of skills and labour market frictions slow down economic integration, it is essential to separately investigate their roles, as addressing different types of obstacles often requires different policy solutions.

In this paper, we focus on the role of matching frictions. We use a Randomised Controlled Trial (RCT) to estimate the causal effect of an intervention that eases matching frictions faced

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<sup>1</sup>Other registered job-seekers either already had a job, an internship, or attended full-time integration classes (BA 2017).

<sup>2</sup>Dustmann et al. (2016) and Keller (2016) summarise some challenges that refugees face in the labour markets.

<sup>3</sup>For instance, Alpak et al. (2015) find that around one third of Syrian refugees experience post-traumatic stress disorder.

by refugees and asylum seekers.<sup>4</sup> The participants of our study are refugees who arrived in Munich between 2014 and 2017. We meet the participants during regular job-counselling sessions of a Munich-based NGO, which provides job search support for refugees. Over the period May 2016-September 2017, we personally interviewed about 400 job-seeking refugees and collected data on their education, skills, work experience, job search behaviour, expectations concerning their labour market performance in Germany, as well as several measures of their social integration. All participants of the job-counselling sessions receive a German CV and basic job search information. In a second step, we randomly allocate each participant to either the treatment group or the control group. Those who are part of the treatment group, in addition to the core support provided by the NGO, benefit from the NGO's job-matching services. The CV profiles of the participants in the treatment group are added to a database, which the NGO's employees use for matching with potential employers. Once the NGO identifies a potential match between a job seekers and a vacancy, the NGO (upon agreement of a job-seeker) forwards his or her CV to an employer.

The treatment effects we estimate are based on follow-up surveys conducted six months and twelve months after the baseline interviews. The preliminary results presented in this draft are based on a subsample of the original sample: the six- and twelve-month intervals have not passed for all candidates, so that our dataset is not yet complete. The results show that the treatment has positive effects on the incidence of contact with a German employer (albeit not precisely estimated) and on employment. The effects, however, become noticeable only after twelve months since the start of the intervention. After six months, there is no statistical difference in outcomes between the treatment and control group. Future analysis of the complete dataset will allow us to add robustness to these preliminary findings, and to investigate the heterogeneity of treatment effect, as well as potential trade-offs associated with early employment. The latest point is of relevance in the current policy discussion, where it is sometimes pointed out that while some types of jobs may be a stepping stone for better future opportunities, other jobs might impede skill accumulation (in particular, language skills) and thereby future quality of employment.

Thematically, our project contributes to the literature on economic integration of refugees (see Bevelander (2016) for an overview of the recent research in this area) and of immigrants in general. Most studies find that refugees' labour market integration lags behind that of other migrants both in terms of unemployment and of wages. Using data from different host countries, Chiswick and Miller (1994), Cortes (2004), Constant and Zimmermann (2005), Jaeger (2006), Aydemir (2011) and Dustmann et al. (2016) compare short-term labour market outcomes of immigrants arriving with different visa types. They conclude that refugees perform worse than migrants that arrive via student, employment or family reunion visas.

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<sup>4</sup>Further in the text, unless the distinction is necessary, we will refer to 'refugees' to denote both asylum seekers and recognised refugees in our study.

There is empirical evidence, however, showing that many refugees (conditional on staying in the destination country) eventually succeed in improving their labour market integration. Keller (2016) finds that refugees in Germany catch-up with other immigrants in terms of employment after approximately 12 years, and in terms of wages after around 17 years. This might be due to the long-term residency perspective refugees take. As refugees often cannot return to their country of origin and can obtain permanent residency relatively fast, they are likely to invest in human capital in the first years after arrival. Cortes (2004) even finds that refugees outperform other migrant groups in the United States due to initially higher investments in human capital. More generally, Dustmann and Görlach (2016) and Adda et al. (2014) illustrate that the expected residency duration positively affects human capital investment decisions and thus labour market outcomes.

As suggested by Dustmann et al. (2016), specific proactive policies can accelerate the labour market integration of refugees. Several studies, many of which use datasets from Scandinavian countries, evaluated specific policies targeting the integration of refugees into the labour market. Clausen et al. (2009) analyse the effect of different integration policies on the job search duration for refugees and family reunification migrants. Using administrative data from Denmark and a timing-of-events duration model, they find that wage subsidies are the most effective policy to integrate newly arrived refugees into the labour market. They further find that an improvement in language skills significantly improves refugees' labour market entry. Also using Danish data, Rosholm and Vejlin (2010) look at how incentives influence the extent to which refugees take up work. They find that lowering income transfers for refugees only increases their labour force participation two years after having obtained residency. During the first two years, refugees have very few job opportunities. After having learned the language for two years, however, they are more likely to enter the labour market if their benefits are cut. Andersson Joona et al. (2015) evaluate a Swedish labour market reform aimed at supporting refugees in finding employment faster. Using a difference-in-difference design around the introduction of the reform, they do not find any significant short-term results of increased support by the Public Employment Agency. We are not aware of any work that evaluates the effects of easing matching frictions for refugees using a credible identification strategy.

We believe that the contribution of this paper to the existing literature is twofold. First, we provide a rigorous evaluation of a job matching service for refugees through a randomised controlled trial. Using a clean identification strategy is important in this context, since comparing refugees who voluntarily decide to access services of an NGO with other refugees creates a selection bias: there might be unobserved factors that drive the decision to contact such service providers and at the same time affect labour market outcomes. We show that refugees do not know where to look for work and that this friction can be alleviated by a job matching service in certain cases. This suggests that policies targeted at facilitating labour market entry may be effective. Second, we provide new data and descriptive statistics on recently arrived refugees

and their short-term integration outcomes. This evidence covers the largest inflow of refugees to Germany since World War II. In 2015-17, Germany became also one of the largest refugee-receiving countries in the developed world. We thus study a large and very relevant case of refugees' labour market integration. The feasibility of refugee labour market integration is a large controversy in German and European politics and is likely to have important effects on political outcomes as well (Dustmann et al. 2016).

The paper is structured as follows. The subsequent Section provides background information about the legal framework for refugees to access the labour market in Germany. Section 3 explains the experimental set-up and Section 4 describes the limitations of the study. Section 5 provides descriptive characteristics of participants at the baseline and Section 6 presents preliminary results. Section 7 concludes and outlines our future work.

## 2 Institutional framework

The following section provides a short overview of the legal framework that regulates labour market access of refugees and asylum seekers in Germany. A distinction has to be made between asylum seekers, recognised refugees, rejected refugees under the national ban on deportation (i.e. geduldet or 'tolerated' individuals), and rejected refugees subject to deportation.

In Germany, the asylum process in 2015-2017 on average took about seven months, with significant variation in procedural duration across nationalities and date of arrival.<sup>5</sup> During the asylum process, asylum seekers (with the exception of those coming from 'safe countries of origin') have general labour market access but are subject to several restrictions. Since 2014, asylum seekers are allowed to start working three months after arrival in Germany. This is typically the time when they live in the initial reception centres in the state to which they were allocated by a distribution rule ("Königsteiner Schlüssel" in German). After three months, they are supposed to move into a new accommodation, so called community accommodation, which are located in the same state but might be in a different municipality. After this move, asylum seekers register with their new municipality and are *eligible* to receive a work permit.<sup>6</sup> An asylum seeker can receive an actual work permit if 1) he or she receives a job offer from a German employer; 2) this job offer is approved by the Foreigners Office ("Ausländerbehörde"). The approval is requested by the employer and takes on average two to three weeks to obtain. The Foreigners Office checks that an adequate wage is paid ("salary review") and that there is no EU citizen that could be hired instead ("priority review"). An issued work permit is, thus, valid for a specific employment only and terminates with a job separation. An additional restriction is

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<sup>5</sup>For Syrian nationals, for example, it was on average much faster and took around four months. In contrast, for Afghan nationals, the average duration of procedures constituted 14 months, for nationals of Pakistan and Iran - more than 15 months (AIDA Country Report for Germany).

<sup>6</sup>Due to space constraints, many asylum seekers stay in the initial reception centres for up to six months and during this time they are not allowed to take up employment.

that work for temporary employment agencies and self-employment are not permitted for asylum seekers. The priority review and the prohibition to work for temporary employment agencies no longer apply to asylum seekers who have been in Germany for more than 15 months. In the framework of the new Integration Law (in force since 2016), some of the above restrictions were lifted *for all asylum seekers* in the majority of German municipalities. In Munich, however, all restrictions are still in place. To summarise, for most asylum seekers, work is possible after three months since arrival subject to fulfilling a number of bureaucratic steps.

There are three possible outcomes for an asylum application: 1) being recognised as entitled to protection (e.g. under the Geneva convention or the subsidiary protection regime), 2) rejected but being under the national ban on deportation (geduldet or 'tolerated' status), 3) rejected and subject to deportation. Recognised refugees have unlimited access to the labour market and are treated like German nationals in terms of employment laws.<sup>7</sup> Rejected asylum seekers, whose deportation is, however, currently not feasible receive a temporary permission to stay in Germany ('Duldung' or national ban on deportation). This status is issued for a year and subject to reexamination. Individuals under this legal status are eligible to obtain a work permit and face the same restrictions as asylum seekers. Finally, rejected asylum seekers who do not obtain the 'Duldung' status lose their right to work and face deportation.

### 3 Experimental set-up

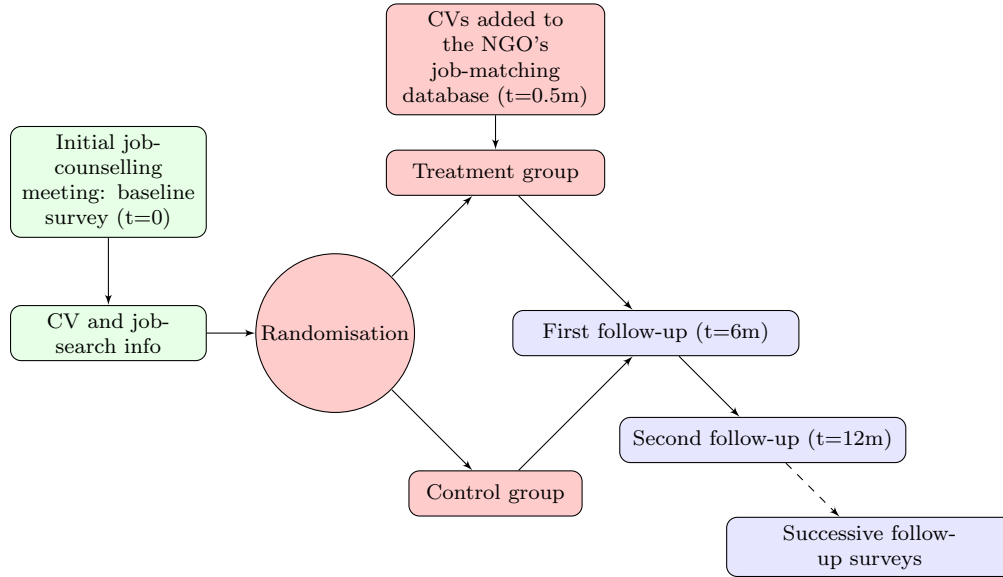
Our experimental set-up can be divided into three stages: 1) the initial job-counselling meeting, 2) the treatment stage and 3) the follow-up stage. The difference between the treatment and the control group is made during the second stage. Through randomisation, half of participants become eligible to receive, on top of the core support, additional job-matching services. We conducted the first and the second stages in Munich from May 2016 until September 2017. The first follow-up survey begins six months after the first job-counselling meeting and is conducted from November 2016 to March 2018. The second follow-up survey is conducted one year after the first meeting and thus runs from May 2017 until September 2018.<sup>8</sup> Figure 1 provides a graphical overview of the timeline of the experiment. The first stage (the initial job-counselling meeting) is illustrated in green, the second stage (treatment stage) in red and the third stage (follow-up stage) in blue.

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<sup>7</sup>In 2015-August 2017, 50 percent of asylum applicants were recognised. For the non-European top 10 source countries, the recognition rate varies from 4 percent for Pakistan to 98 percent for Syrian nationals. Source: BAMF (2017).

<sup>8</sup>The experimental design was approved by the Ethics commission of the Economics faculty of the University of Munich.

Figure 1: **Timeline of the experiment**



### 3.1 General information about the partner NGO

To conduct the experiment we collaborate with a Munich-based NGO that assists job-seeking refugees. The NGO was founded in 2015 and currently counts six employees and about 20 part-time volunteers. It is financed through donations, and in 2016 it had a small budget of around 50,000 Euros. The NGO conducts weekly job-counselling sessions in Munich, during which it helps job-seekers with CV preparation and advises on basic legal and cultural specificities of the German labour market. In addition, the NGO organises a number of support activities, including CV photo-shoots, computer classes and social activities. The NGO has established a network of local partners including the Munich Employment Agency and Job Centre, the Chamber of Commerce, other initiatives for refugees, and social workers. Through its network, the NGO receives information about open vacancies, which it can then use for job-matching. During the time of the experiment, our research group participated in all regular job-counselling sessions of the NGO and organised (on behalf of the NGO) a number of additional sessions at different locations in and around Munich.

### 3.2 Participants

The participants of the experiment are job-seeking refugees who come to the job-counselling sessions of the NGO. In addition, three eligibility rules apply to ensure that the participants qualify to enter the German labour market. First, they have to be eligible to obtain a work permit. Asylum-seekers usually obtain work permits three months after arrival in Germany. This excludes refugees from “safe origin countries” (Bosnia-Herzegovina, Macedonia, Serbia,

Montenegro, Albania, Kosovo, Ghana, and Senegal). Consequently, the NGO cannot effectively support them in the job search and they are thus excluded from our analysis.<sup>9</sup> In our sample, we, therefore, have both asylum seekers and already recognised refugees.<sup>10</sup> Second, participants must be able to communicate in a language spoken by the members of the NGO or our research team. These languages include Arabic, Dari, English, Farsi, French, German, Italian, Kurdish and Russian and cover around 98 percent of the refugees that come to job-counselling sessions.<sup>11</sup> Third, participants must be 18 years of age or older. The NGO does not include under-age refugees in its target group as it is probably better for them to attend an educational institution. Additionally, the age restriction is necessary for us to obtain the participation consent.<sup>12</sup> These restrictions imply that our sample is not representative of the refugee population at large. We believe that this was to some extent unavoidable, given that we need participants to voluntarily take part in the sessions and be willing and qualified to enter the German labour market. We also believe, however, that this is the natural population for evaluating a job-matching programme.

### 3.3 Set-up of the experiment

#### First stage: Initial job-counselling session

The first stage of the experiment consists of job-counselling sessions, which are jointly organised by the NGO and our research team. The regular sessions take place once a week in the centre of Munich. The participants can easily reach the location by public transportation. In addition, we have organised several sessions in a support centre for refugees (provided by Caritas) and in two big refugee accommodation facilities in Munich. The NGO advertises the sessions through social workers, Facebook, word of mouth, and partner organisations. The main incentives for refugees to come to these sessions are receiving a CV in German (which they can then forward to employers or to the job centre), as well as acquiring basic information on their job-search process.<sup>13</sup> The standard NGO's procedures apply for all sessions. The flyer for these sessions and some pictures can be found in the Appendix.

During the job-counselling sessions, the interviewers (the volunteers of the NGO and our research team) conduct one-to-one interviews with job-seeking refugees to collect the information

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<sup>9</sup>At the time of writing, there is an active debate whether Algeria, Morocco, and Tunisia should be declared as "safe origin countries" or not. There is no political consensus yet and we have not excluded these nationalities. However, the number of refugees from these countries in Munich has been very small and so far none of our participants are nationals of any of these countries.

<sup>10</sup>Again, for brevity, unless a distinction is necessary we will use 'refugees' to denote all participants of the study.

<sup>11</sup>We met five candidates, whom we had to send away because they only spoke Urdu or Pashto. These are likely to be candidates with relatively little formal education, who would not have a good chance to integrate into the German labour market and who would need to focus on German classes first.

<sup>12</sup>To comply with the data protection laws of Bavaria, every participant needs to sign a data protection agreement (available in the Appendix). Refugees below the age of 18 cannot legally sign the data protection agreement.

<sup>13</sup>These are important services provided by the NGO. However, our identification strategy does not allow to causally assess the effectiveness of these services.



needed to prepare their CVs. After collecting the CV data, the interviewers ask questions from a baseline survey to determine the job-search behaviour, salary expectations, and job preferences of the participants. Additionally, the interviewers ask the participants about their family circumstances, their social integration, and their progress in studying German. The complete baseline survey can be found in the Appendix.

In general, it takes the NGO around two weeks to process the collected information and to prepare the CV. The finished CV includes a participant's personal picture and copies of the work permit and certificates, if available. The NGO sends out the CV to all participants as a pdf attachment by email two weeks after their session. If participants do not have an email address, the NGO sends it to them as a pdf attachment via the text messaging application "WhatsApp" and, if possible, to the responsible social worker. The pdf attachment is accompanied by an email text, which encourages participants to search for a job: *there is a chance that we match you with a possible employer from our database. ....While we do our best to support you in the job search, we cannot guarantee that we can find you a suitable employer, this is why we highly encourage you to keep searching for a job on your own.* In addition, the email contains a number of practical advices, e.g. to register with the public employment services and to search on websites that publish vacancies such as *monster.de* and *stepstone.de*. The email also recommends every participant to continue to learn German as this would greatly improve their chances of finding a job. The complete email text can be found in the Appendix.

## **Second Stage: Treatment**

During the treatment stage, we randomly assign half of the study's participants to the treatment group. We add the CVs of the treatment group to the NGO's database for job-matching. During May 2016-September 2017, additional 207 CVs were thus added to the database, which initially comprised around 100 profiles. The NGO's employees use this database to search for suitable candidates every time a new job vacancy arrives. The NGO usually finds out about new vacancies through its network, primarily through the Munich Public Employment Services and the Chamber of Commerce. In addition to the available offers, the NGO employees specifically look for other vacancies (online and through their personal networks) that could fit the candidates in the database. Once the NGO identifies a potential match, it informs the candidate about the vacancy and, upon agreement, sends the CV to the employer. It is important to note that while this intervention reduces the matching frictions between employers and job-seekers, it does not affect the skill set of participants in any way.

Participants in both treatment and control group can receive information support from the NGO (e.g. about interview or hiring process) and have full access to all other NGO services and activities. After the second follow-up survey (i.e. one year after the initial job-counselling meeting), the profiles of the control-group participants are also added to the job-matching database.

To determine which candidates are allocated to the treatment and the control group, we randomise for each session separately, thereby insuring that for each session we have the same number of participants in the treatment and in the control group. For every session, participants are ranked by a random number generator and the upper 50 percent of participants are allocated to the treatment.<sup>14</sup> As the sessions take place at different locations and time and individuals in the same session are more likely to be similar, we believe that this procedure helps us in having people with similar characteristics in the treatment and in the control group. Therefore this provides a useful (albeit weak) stratification. People who attend the regular job-counselling sessions are likely to differ from those who get interviewed directly in their accommodation facilities, while participants from different accommodations might have access to varying degrees of support services through local social workers, etc. Moreover, it is logistically impossible to reach and to interview all potential participants within a short time span. This means that a single randomisation of all candidates would not be feasible. We conduct this session-based individual randomisation every two weeks, so that new profiles are added to the matching database twice a month. We thereby guarantee a stable flow for the NGO and ensure that the treatment starts at about the same time after the first meeting with the participants.<sup>15</sup> Table A1 in the Appendix provides a balance table on personal and labour market characteristics to provide evidence that the randomisation has worked well and created two comparable groups.

### **Third Stage: Follow-Ups**

During the next stage, we contact all participants of the treatment and the control group after six months and again after one year to ask them about their labour market experience in Germany and to measure their economic and social integration. Our research team contacts the participants by phone. Participants who found a job were asked about the details of their new work and how they obtained it. Participants without a job were asked about their job search behaviour and their challenges. Everyone was additionally asked about their integration outcomes and progress in studying German. The follow-up questionnaires are in the Appendix.

## **4 Limitations**

### **4.1 Selection**

The refugees that are taking part in our experiment are not representative of all refugees living in Germany for several reasons: our eligibility criteria, their motivation to come to our sessions and a focus on refugees residing in Munich. This selection has implications for external validity.

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<sup>14</sup>If the number of candidates is odd, the additional person is randomly allocated to the control or the treatment group.

<sup>15</sup>On average, every week we meet with 15 new job-seekers during the job-counselling sessions.

An expansion of the programme or a different setting might lead to different results. However, it does not impact the internal validity of the experiment as we randomise over equally selected participants.

First, our sample is selected due to our eligibility criteria, we only work with refugees who are eligible to obtain a work permit. This excludes all refugees from safe countries of origin. We argue that this is the relevant group to study labour market integration. Refugees from safe countries of origin are legally excluded from the labour market and thus cannot benefit from job matching support. We had to reject around three percent of candidates due to this restriction (all coming from Senegal). For legal reasons, we also have to focus on refugees aged 18 or above.<sup>16</sup> This is the relevant target group as refugees below the age of 18 are typically recommended to attend an educational institution and only refugees aged 18 or above are encouraged to integrate into the labour market. We had to send away around two percent of candidates due to this restriction. Our last eligibility criterion excluded participants that did not speak any of the languages our team speaks. This has excluded around four percent of participants.

The second reason why our sample is selected is that the refugees who came to the NGO's job-counselling sessions are likely to be different from those who did not, and these differences are likely to matter for most of the outcomes that we are interested in. One obvious difference is motivation. It takes extra effort to come to the NGO's job-counselling sessions and we expect our candidates to be positively selected on motivation to find a job, which in its turn maybe imply higher motivation to learn German and to exert more effort in job search. Other reasons for a selected sample might be educational background, extroversion, foreign language ability or psychological well-being. Furthermore, in our way of reaching candidates, we are focusing on refugees living in communal accommodation. By targeting this group, we exclude those that have the means to support themselves or who have already a network of family or friends. We thus focus on the ones asking for support, which is a very policy relevant group of refugees.

We can make a rough estimation of the percentage of all refugees in Munich that take part in our experiment. There have been around 12,000 refugees in Munich at the end of 2015. If we restrict this to men of working age, then we have a pool of potential candidates of 6,000. Further subtracting refugees without a work permit and from safe countries of origin restricts the pool to around 5,000.<sup>17</sup> We thus have a participation rate of around eight percent of relevant and eligible candidates in Munich.<sup>18</sup>

## 4.2 Attrition

We are aware that sample attrition could be high when working with this population. We concentrate our efforts on obtaining contact details that do not change over time. Besides

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<sup>16</sup>In 2015, 31 percent of arriving refugees in Germany were below 18 years old.

<sup>17</sup>There are around 4,000 asylum seekers registered with the Munich branch of the Federal Employment Agency.

<sup>18</sup>Numbers are taken from the Munich municipality. Estimations are only rough approximations.

obtaining the email address and phone number of participants, we also ask if we can contact them via WhatsApp or Facebook. One advantage in this respect is that we provide everybody with some support (CV in German and basic job search information). The treatment group is rather easy to follow up with. As the NGO offers additional support activities, the control group also has an incentive to stay in touch with the NGO. Preliminary results suggest that our attrition rate is around 30 percent for the first follow-up survey and 40 percent for the second follow-up survey. Importantly, the attrition rate is independent of the treatment status.

### 4.3 Non-compliance

There are two form of non-compliance we need to be aware of. The first case happens if participants who have been allocated to the control group receive the treatment. This case can be excluded as the experiment design does not make it possible for the control group to be added to the database. Participants are not aware of the internal organisation of the NGO and can not push for their CV to be included. The second case happens if the participants of the treatment group do not receive the treatment. This could happen if the NGO does not find a suitable job match for a participant (e.g. because of lacking skills) or if the NGO matches treated participants but they do not attend job interviews or reject the offer. This happens, for instance, if participants attend full-time German classes or if they get an asylum rejection and hence lose the right to obtain a work permit. These cases of non-compliance will bias the estimates of treatment effects downward.

### 4.4 Spillovers

Spillovers could occur if a candidate from the treatment group finds work and then recommends his friend, who is in the control group, to his employer. If this person then gets hired, he has received spillovers from the treatment group. The best we can do in this situation is to observe the spillover.<sup>19</sup> These spillovers are interesting in themselves and can be analysed further. As these types of spillovers imply that the control group receives (part of) the treatment too, this would bias the estimated effect downward.

### 4.5 Displacement effects

One worry in labour market experiments is that participants of the treatment group obtain jobs that might have been filled by the control group in the absence of our experiment. If there is a limited number of jobs and both control and treatment group are competing for these jobs, then this is a valid concern. Crepon et al. (2013) find that displacement effects are particularly strong in labour markets with high unemployment. We think that displacement effects are

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<sup>19</sup>We ask the name of the company in the follow-up survey and we also ask how the person has found the work.

of limited importance in the context of our experiment for two reasons. First, Munich has a very low unemployment rate and 207 people in our treatment group seem small given the large number of vacancies in Munich. Second, most companies indicated that they would be willing to hire additional people if they have the required German and technical skills. So the amount of vacancies does not seem to be the limiting factor. However, if one thinks about expanding the programme in terms of size or in another location, then one would need to take general equilibrium effects into consideration.

#### **4.6 Ethical concerns**

Doing experiments with a vulnerable group of people is a sensitive issue and we needed to ensure that we do not harm anyone participating in our experiment. It was critical to make sure that people in the control group are not put in an unfair position and we did not deprive them from finding a job. We ensured this in two ways. First, we collected many more CVs than the NGO could match to the available vacancies. The NGO is newly established, has less than 10 full-time staff and thus limited capacity. We made sure that at any time they had more suitable CVs than open positions. Thus, they were already working at full capacity with the treatment group. Second, the participants in the control group will be added to the database one year later (i.e. after the second follow-up survey). Through this phased-in design we ensured that everyone receives the treatment in the end, timing being the only difference. Furthermore, we provided both the control and the treatment groups with a CV in German and valuable information on the job search in Munich and we made sure to communicate to the control group in a way that they did not expect a guaranteed job from the NGO. We also guaranteed compliance with the recommendations from the Ethics commission of the Faculty of Economics at the University of Munich.

To ensure that we follow data protection requirements of the Bavarian government and the university, we had a consent declaration of every participant that specified that we were allowed to use their data for research purposes (see appendix B). This form is in accordance with Bavarian Data Protection Law. We treated the data in a pseudonymised way and made sure that no confidential data is distributed to third persons. We saved the personal identification in a separate place and only merged it for follow-up purposes.

### **5 Summary of baseline characteristics**

This section presents descriptive statistics of the individual characteristics of the participants, their job search behaviour, expectations and perceptions of integration. All this information was collected during the first stage, when questions related to the CV were asked and the baseline survey was administered. There is currently very little information available about

the characteristics of recently arrived refugees in Germany. In particular, there is only one report by Brücker et al. (2016b) on education levels, labour market history, expectations and integration of the recent refugee wave. Their report documents interview answers of 2,349 refugees in Germany. The results are largely in line with our descriptive statistics and there are no contradictory findings. However, one has to keep in mind that our study has low numbers of observations and possibly a selected sample, so it is difficult to extrapolate this information to the population of all recent refugees in Germany.

## 5.1 Personal characteristics

Table 1 shows baseline characteristics of participants: gender, age, family situation, months spent in Germany, education, knowledge of German and English, status of asylum application, and initial intentions to return. Countries of origin with more than fifty observations are listed separately (Afghanistan, Nigeria, Syria). Other African<sup>20</sup> and Asian<sup>21</sup> countries are grouped.

Table 1 shows that most participants are young unmarried men without children. Two-thirds come from three countries of origin: Nigeria, Syria, and Afghanistan. The majority arrived in 2015 and, on average, had been in Germany for ten months at the time of the baseline survey.

On average, the survey participants have 11 years of schooling; 50 percent graduated from a middle or a high school and 30 percent have attended a university. Only 5 percent of the participants have no formal education.<sup>22</sup>

In terms of education, there is substantial heterogeneity across countries. Refugees from countries that until recently had a well functioning educational system, for instance Syria, have relatively high levels of education. The average years of education for Syrian refugees is 13.8 years and only 1 percent report no schooling, while more than 60 percent of Syrians have attended a university. Participants from poorer countries and countries in distress for more than a decade, such as Afghanistan or Iraq, have much worse educational attainments.

As Table 1 illustrates, at the time of the first meeting, over 80 percent of participants had not completed their asylum procedure. The only exception are Syrians, among whom almost 60 percent had already received a positive decision. This is in line with the statistics on the duration of asylum procedures in Germany.

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<sup>20</sup>Other African country include: Congo, Eritrea, Mali, Sierra Leone, Somalia, Tanzania and Uganda.

<sup>21</sup>Other Asian countries include China, Iran, Iraq, Jordan, Myanmar, Pakistan, Palestine, Turkey and the United Arab Emirates.

<sup>22</sup>Compared with the recent representative survey of asylum seekers and refugees in Germany, the sample of job seekers in our study is somewhat positively selected. On average, 9 percent of the IAB-BAMF-SOEP survey participants have no formal education, 58 percent graduated from a middle or high school, and 19 percent attended a university (Brücker et al. 2016b).

Table 1: **Descriptive statistics by country at the baseline (initial job-counselling session)**

	Afghanistan	Nigeria	Syria	r_Africa	r_Asia	Total
Female	0.0411	0.0753	0.0120	0.113	0.0385	0.0577
Age	24.17	28.27	31.15	26.01	29.74	27.84
Married	0.219	0.226	0.313	0.200	0.288	0.247
Family in Germany	0.356	0.183	0.434	0.138	0.231	0.268
Have children	0.137	0.258	0.241	0.300	0.327	0.249
Months in Germany	10.44	7.430	13.54	10.04	10.27	10.27
No schooling	0.0411	0.0430	0.0120	0.113	0.0385	0.0499
Primary completed	0.0959	0.226	0.0964	0.188	0.192	0.160
Secondary started	0.219	0.140	0.108	0.200	0.212	0.171
Secondary completed	0.384	0.484	0.169	0.300	0.212	0.320
Attended university	0.260	0.108	0.614	0.200	0.346	0.299
German $\geq$ B1	0.205	0.0215	0.301	0.138	0.154	0.160
English $\geq$ B1	0.151	0.710	0.325	0.625	0.346	0.451
Asylum seeker	0.959	0.914	0.410	0.887	0.865	0.801
Recognised	0.0411	0.0645	0.590	0.113	0.115	0.192
Registered with PES	0.274	0.204	0.349	0.188	0.308	0.260
Intention to return	0.322	0.269	0.458	0.250	0.250	0.314
Treatment	0.438	0.516	0.494	0.500	0.577	0.501
Observations	73	93	83	80	52	381

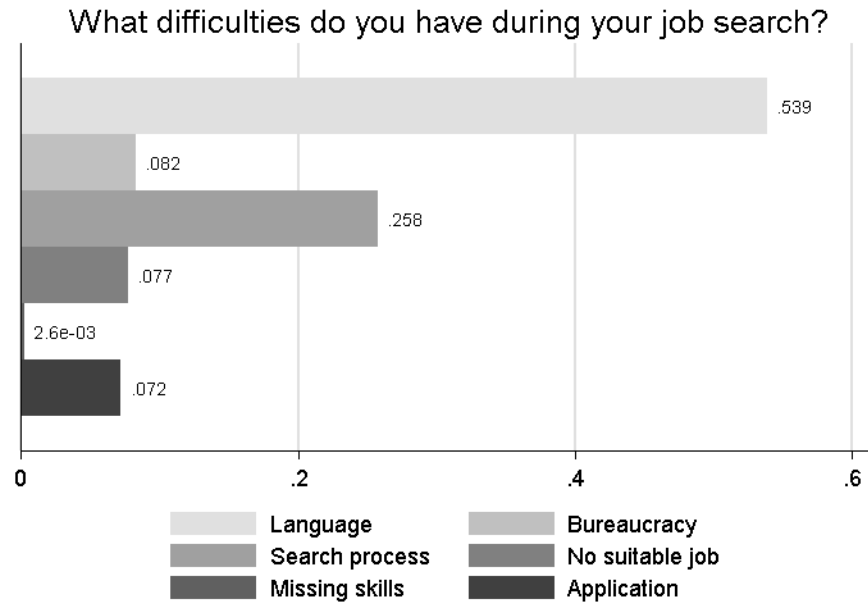
**Note:** Countries of origin with more than 50 observations are listed separately (Afghanistan, Nigeria, Syria). Other African countries include: Congo, Eritrea, Mali, Sierra Leone, Somalia, Tanzania and Uganda. Other Asian countries include China, Iran, Iraq, Jordan, Myanmar, Pakistan, Palestine, Turkey and the United Arab Emirates. Observations with non-missing values for all variables.

## 5.2 Job search behaviour and expectations

Besides individual characteristics, refugees were also asked about their job search behaviour and about their expectations of working in Germany. The descriptive statistics provide interesting insights about the challenges refugees face during the search and about their expectations of labour market integration.

Around half of the refugees had already actively looked for work before attending the CV preparation session. Figure 3 and Table 2 show that the most common ways to search for work are to ask friends (24 percent) or to directly approach employers (21 percent). About a quarter of refugees have registered as looking for work with Public Employment Service (PES) and 17 percent are actively using PES to find work. Relatively few participants (21 percent) are searching for work online. There is, however, a large heterogeneity across nationalities. While almost 50 percent of Syrians are using the Internet during their job search, only 6.5 percent of job-seekers from Afghanistan are searching for work in the Internet. This is due to both unavailability of computers for refugees and their ignorance about online job searches and applications. Figure 2 shows what refugees perceive as their difficulties during the job search. More than a quarter (26 percent) of refugees indicated that they do not know where to search for a job. This is the second largest difficulty after the language barrier (54 percent).

Figure 2: Difficulties during job search

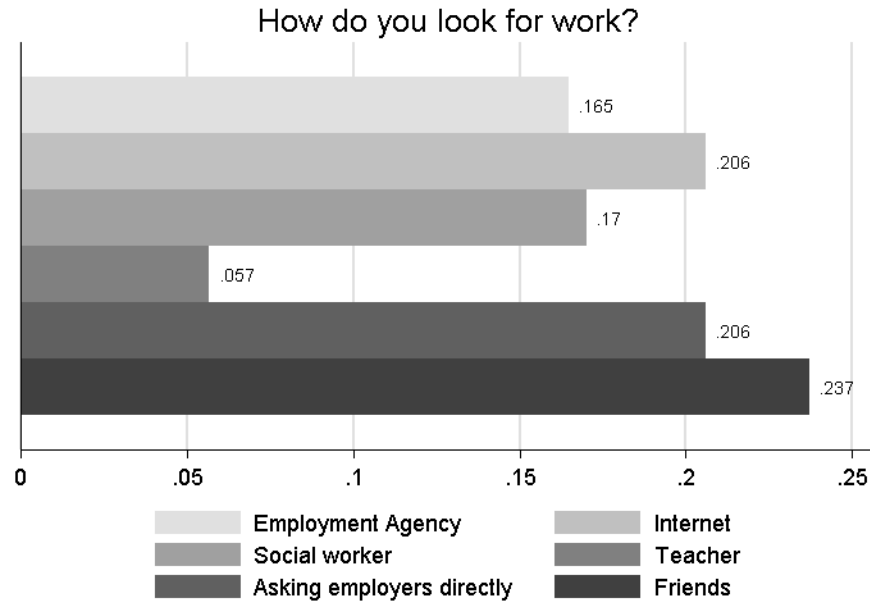


**Note:** This figure shows the share of individuals who name these difficulties during their job search.

Another challenge is the unavailability of school, university or vocational certificates. Majority (69 percent) of participants do not have the original certificate of their highest degree



Figure 3: **Job search channels**



**Note:** This figure shows the share of individuals who have used the named channels during their job search.

with them in Germany. This percentage is lower for participants that have attended university (29 percent) and graduated from university (33 percent). In all three cases, the unavailability of original documents will be an administrative challenge for further academic or professional career of refugees.

On average, refugees would accept a job that pays a monthly net wage of, at least, 1,330 Euro. Majority (65 percent) would be willing to work for less than the minimum wage. This again varies by country of origin. Refugees from Afghanistan have the highest reservation net wage with 1,660 Euro, whereas refugees from Nigeria or other African countries would accept a job that pays slightly more than 1000 Euro. Syrians would, on average, accept a job offer that pays minimum 1400 Euro. It is interesting to note that the initial reaction of most refugees to this question is “I do not know”. Due to language barriers, unfamiliarity with the system of online job search and applications and unfamiliarity with the German labour market in general, refugees seem to have difficulties to look for work without support.

The descriptive statistics thus provide some preliminary evidence that both missing skills, mainly language skills, and frictions in the labour market hinder refugees labour market integration. The presence of a matching friction is illustrated by the fact that 26 percent of refugees report unfamiliarity with the job search process as a difficulty to find employment. This friction is alleviated for the treatment group as CVs are sent directly to suitable employers. The randomised controlled trial thus evaluates if such matching frictions can be alleviated for refugees through the services provided by the NGO.

Table 2: Search behaviour by country at the baseline (initial job-counselling session)

	Afghanistan	Nigeria	Syria	r_Africa	r_Asia	Total
Employed	0.0645	0.0595	0.181	0.0725	0.0870	0.0959
Received an offer	0.226	0.167	0.313	0.174	0.174	0.215
Contact with employer	0.274	0.155	0.349	0.159	0.283	0.241
Min wage to accept an offer	1659.7	1187.6	1395.4	1096.6	1348.9	1326.1
Difficulty: Language	0.516	0.536	0.675	0.362	0.630	0.544
Difficult: Search process	0.242	0.155	0.241	0.290	0.283	0.235
Search with PES	0.129	0.179	0.217	0.116	0.196	0.169
Search in Internet	0.0645	0.179	0.470	0.145	0.196	0.224
Ask social worker	0.0806	0.226	0.157	0.130	0.239	0.166
Directly approach employers	0.194	0.226	0.277	0.0290	0.370	0.212
Ask friends	0.194	0.179	0.422	0.174	0.174	0.238
Observations	62	84	83	69	46	344

**Note:** Countries of origin with more than forty observations are listed separately (Afghanistan, Nigeria, Syria). Other African countries include: Congo, Eritrea, Mali, Sierra Leone, Somalia, Tanzania and Uganda. Other Asian countries include Iran, Iraq, Pakistan, Palestine and the United Arab Emirates. The total estimates slightly differ from those presented above as we consider only observations with non-missing values for all reported variables.

### 5.3 Perceptions of social integration

Although the integration of refugees is a key policy objective, there is neither a unique definition of integration, nor a clear way of measuring it (Ager and Strang 2008).<sup>23</sup> In practice, integration has different facets and we use a number of different questions to proxy the social integration.<sup>24</sup> These questions are the following:

- Did you make new friends in Germany?
  - Multiple answer options: Yes, from Germany; Yes, from my country; Yes, from other countries; No.
- Do you already feel at home in Germany?
  - Answer scale from 0 to 5, 0 meaning not at all and 5 meaning completely.
- Have you ever been invited to the house of a German?
  - Answer options: Yes or No.
- What activities do you do outside of the community accommodation?
  - Multiple answer options: Study/German; sports; meeting friends; shopping; or other activities.
- Level of German as assessed by interviewer
  - Answer options: Absolute Beginner, A1, A2, B1, B2, C1.

We then combine answers to the above questions to construct an integration index. The index ranges from 0 to 5. A value of five is obtained if an individual fulfills all five integration criteria: has German friends, feels at home in Germany, has been invited to a house of a German, participates in social activities, and speaks German at least at B1 level. We attribute equal weights to each integration component. Table 3 shows self-reported measures of integration by country of origin.

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<sup>23</sup>The economic literature has sometimes used the earnings gap between natives and foreigners to measure integration. However, as earnings typically take more than a decade to assimilate for refugees and most of our participants are not working yet, this project focuses on other outcomes with a more short-term view and a stronger focus on the integration into the German society.

<sup>24</sup>We took inspiration for some questions from the European Social Survey and the Longitudinal Survey of Immigrants to Canada. The questions were then adapted to the specific context of refugees in Germany.

Table 3: **Integration by country at the baseline (initial job-couselling session)**

	Afghanistan	Nigeria	Syria	r_Africa	r_Asia	Total
Integration index, 0-5	2.436	2.141	3.127	2.502	2.492	2.538
German friends	0.397	0.516	0.733	0.588	0.509	0.556
Feel at home, 0-5	4.301	4.400	3.744	4.088	4.226	4.147
Invited to a German house	0.356	0.305	0.663	0.463	0.453	0.447
Social activities, 0-5	2.466	1.674	2.674	1.988	2.132	2.173
German $\geq$ B1	0.205	0.0211	0.314	0.138	0.151	0.163
Learning German: hours/week	9.756	7.836	9.750	7.910	9.549	8.873
Observations	73	95	86	80	53	387

**Note:** The integration index is described in details in subsection 5.3 of this paper. German friends indicates the percentage of people indicating that they have German friends. Feel at home is a subjective measure ranging from 0 to 5, 5 being the highest. Invited is an indicator measuring if the person has ever been invited to the house of a German. Active corresponds to the number of indicated social activities (min 0, max 4). German means that the person has at least reached level B1. Countries of origin with more that forty observations are listed separately (Afghanistan, Nigeria, Syria). Other African country include: Congo, Eritrea, Mali, Sierra Leone, Somalia, Tanzania and Uganda. Other Asian countries include Iran, Iraq, Pakistan, Palestine and the United Arab Emirates. we consider only observations with non-missing values for all reported variables.

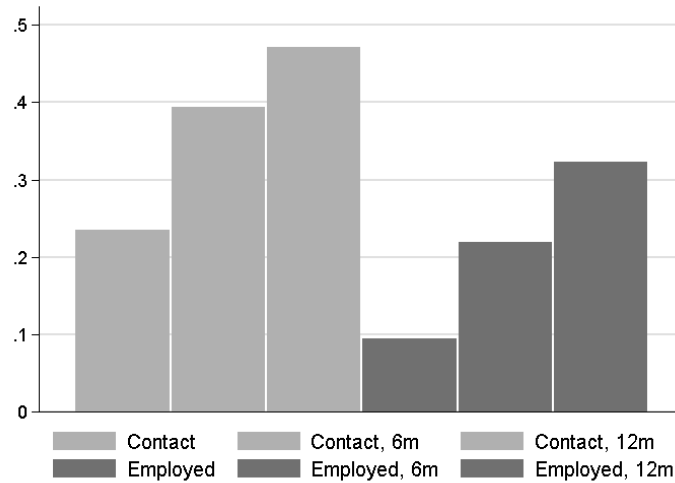
## 6 Preliminary Results from Follow-up Surveys

The following results come from the first and second follow-up surveys that we conducted in November 2016-January 2018. Over this time, we completed 282 first follow up surveys and 102 second follow up surveys. Therefore, the presented results are preliminary. At this stage, it is difficult to draw solid conclusions due to the incomplete results and, in the case of the second survey, still small sample size. Over the next few months we will be able to update these results relying on larger sample sizes, and will be able to run other and richer specifications.

We conduct the follow-up surveys by contacting the participants by phone six (and then again twelve) months later to question them about their current labour market status.<sup>25</sup> If they found work, we ask them about the details of their work, how they found it and how satisfied they are with different aspects of their work. If they did not find work, we ask them about their search behaviour and experiences so far. There is also the possibility that they are currently neither working nor looking for work and in this case we ask them about the reason for being out of the labour force. In addition, we ask questions to identify their level of social integration,

<sup>25</sup>We have no opportunity to independently verify the obtained information, except in a few cases in which the NGO is in contact with the employer. We assume that the obtained information is correct as the refugees have very little incentives to lie and can benefit from obtaining an updated CV.

Figure 4: **Labour market outcome at the baseline, six and twelve months after the initial session**



**Note:** This figure shows the share of individuals reporting to be employed (having at least one interview with a German employer) at the baseline ( $n = 388$ ), six ( $n=282$ ) and twelve months ( $n=102$ ) after. The pattern holds also when we restrict the sample to participants with completed second follow-up surveys.

progress in German language and expectations for the future.<sup>26</sup> So far, we have reached about 70% of participants for the first follow-up survey and about 25% of participants - for the second follow-up. As Figure 5 in the Appendix shows, there are no significant differences in response rates among treatment and control groups.

Table 4 presents results of the first follow-up survey. After six months, the effect of the treatment is insignificant both for the chance of having a work-related contact with a German employer (i.e. for a job interview, job offer or work) and for the chance of being employed. Meanwhile, other controls have intuitively correct signs: probability of a work-related contact and employment increases in education as well as in the knowledge of German at the baseline. It seems that the job-matching intervention of the NGO did not have much of a short-term impact. Hence, while matching frictions do present an obstacle to employment, other constraints (such as missing qualifications or German skills or uncertain legal status) are likely to bind in the short run. We will investigate the importance of these constraints upon completion of the data collection.

At the time of our second follow-up, one year after the first contact with the NGO, around 30 percent of refugees were employed. However, only half of employed refugees in our sample have full-time positions. Around half of those who found employment have jobs in cleaning, personal care, or gastronomy. Missing language skills and a lack of information about the application process seem to be important factors preventing a more successful and faster labour market integration.

<sup>26</sup>The complete questionnaires can be found in the Appendix.

Table 4: **Work-related contact with employer and employment, first follow-up survey (6 months after the initial job-counselling session)**

	(1)	(2)	(3)	(4)
	interview_6m	interview_6m	working_6m	working_6m
Treatment	0.00387 (0.0596)	0.0279 (0.0592)	-0.0519 (0.0506)	-0.0371 (0.0512)
Medium-skilled, isced 2-3		0.180** (0.0790)		0.160** (0.0683)
High-skilled, isced 4-5		0.268*** (0.0891)		0.131* (0.0770)
Received an offer		0.119 (0.0751)		0.0537 (0.0650)
Recognised		0.126 (0.0955)		0.112 (0.0827)
German>=B1		0.156* (0.0900)		0.109 (0.0778)
Observations	269	269	269	269
R-squared	0.000	0.091	0.004	0.058
Ymean	0.394	0.394	0.220	0.220
Ysd	0.489	0.489	0.415	0.415
Additional controls		months in Germany country of origin		months in Germany country of origin

**Note:** Dependent variables: *interview* denotes any work-related contact with a German employer (i.e. for a job interview, job offer or work); *working* is a dummy that equals one if a participant has a full-time or part-time job, undergoes training (Ausbildung) or has an internship.

Table 5: **Work-related contact with employer and employment, second follow-up survey (12 months after the initial job-counselling session)**

	(1)	(2)	(3)	(4)
	interview_12m	interview_12m	working_12m	working_12m
Treatment	0.128 (0.0996)	0.164 (0.111)	0.185** (0.0924)	0.183* (0.102)
Medium-skilled, isced 2-3		0.128 (0.152)		-0.0288 (0.140)
High-skilled, isced 4-5		0.107 (0.171)		0.00959 (0.158)
Recognised		-0.0198 (0.242)		-0.111 (0.223)
Received an offer		0.143 (0.156)		-0.0672 (0.143)
German>=B1		-0.278 (0.180)		-0.132 (0.166)
Observations	101	101	101	101
R-squared	0.016	0.093	0.039	0.129
Ymean	0.471	0.471	0.324	0.324
Ysd	0.502	0.502	0.470	0.470
Additional controls		months in Germany country of origin		months in Germany country of origin

**Note:** Dependent variables: *interview* denotes any work-related contact with a German employer (i.e. for a job interview, job offer or work); *working* is a dummy that equals one if a participant has a full-time or part-time job, undergoes training (Ausbildung) or has an internship.

Table 5 presents results of the job-matching intervention after twelve months from the baseline interview. Our sample size so far is small (we have completed about 25 percent of second follow-up surveys) and the conclusions can be thus only preliminary. Effects of the intervention both for work-related contact with an employer and for employment are much larger compared to the results after six months. In the case of employment, they are also statistically significant and large in magnitude: the job-matching treatment of the NGO increases the probability of employment by 18 percentage points, which is more than half of the average employment rate in our sample. To check that the estimated effects are not driven by the selection of participants into the second follow-up survey, we re-run the regressions with the data from the first follow-up survey but limiting the sample only to the participants with completed second follow-ups. Table A2 shows that, also for the restricted sample, there is no significant treatment effect on work-related contacts or employment after the first six months.<sup>27</sup>

## 7 Concluding Remarks

This paper describes a project that is still work in progress. Therefore, we can only venture to offer some tentative conclusions. We try to provide new insights into the labour market integration of recently arrived refugees in Germany. Apart from the lack of language skills and professional qualifications, matching frictions are likely to hinder labour market integration, given that refugees are understandably uninformed and badly prepared to engage in searching for employment in Germany. Our preliminary results illustrate the impact of these matching frictions and suggest that there is scope to increase employment of refugees by providing job-matching support. At the same time, it appears that the returns from such support measures (in form of higher employment rate) do not realise in the short run: in our field study, we detect a significant effect twelve months after the treatment begins, while there is no impact after the first six months.

Upon completion of the data collection, we intend to analyse heterogeneity of the treatment effect by skill group and legal status. This will allow us to see to what extent missing skills and uncertainty around residency in Germany constrain employment opportunities of recently arrived refugees.

We also aim at identifying the mechanisms through which the job-matching treatment increases employment rates. The treatment may modify the outcomes of participants by 1) creating awareness of job opportunities and reducing search time, 2) creating a better job match (more likely to result in stable employment), 3) serving as a referral to the employer or 4) supporting the job-search effort - an interview organised by the NGO, even if it does not result in a job, might encourage job seekers to search further. Identifying the channel(s) is relevant for

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<sup>27</sup>A larger treatment coefficient for work-related contact might still pose a concern, however, it is imprecisely estimated and before obtaining more observations we cannot provide more insights.

policymaking. Therefore, we will additionally investigate a number of supplementary variables, such as the number of applications sent, job characteristics, and job satisfaction. To shed more light on the channels, we plan to conduct a number of qualitative interviews with participants and employers.

As an extension to this work, we plan to analyse more general integration outcomes of refugees. In particular, we aim to test, whether earlier (and/or better) employment also leads to enhanced social integration outcomes in the short run or whether there is a certain trade-off. For instance, early job-matching can 'push' refugees in accepting a low-skill job at the expense of properly learning German language. The treatment status can hereby serve as an instrumental variable for employment. The key outcome variables will be the components of the integration index. Additionally, we can study refugees' housing conditions and reported stress, happiness and optimism levels. Detailed statistical model specifications can be found in the pre-analysis plan in the Appendix and has been uploaded on the American Economic Association's registry for randomised controlled trials.

## References

- Adda, Jerome, Joseph-Simon Gorlach, and Christian Dustmann (2014). *Migrant Wages, Human Capital Accumulation and Return Migration*. 2014 Meeting Papers 679. Society for Economic Dynamics.
- Ager, Alastair and Alison Strang (2008). "Understanding Integration: A Conceptual Framework". *Journal of Refugee Studies* 21 (2), pp. 166–191.
- Alpak, Gokay et al. (2015). "Post-traumatic stress disorder among Syrian refugees in Turkey: A cross-sectional study". *International Journal of Psychiatry in Clinical Practice* 19 (1), pp. 45–50.
- Andersson Joona, Pernilla, Alma W. Lanninger, and Marianne Sundström (2015). *Improving the Integration of Refugees: An Early Evaluation of a Swedish Reform*. IZA Discussion Papers 9496. Institute for the Study of Labor (IZA).
- Aydemir, Abdurrahman (2011). "Immigrant selection and short-term labor market outcomes by visa category". *Journal of Population Economics* 24 (2), pp. 451–475.
- BA (2017). *Migrations-Monitor: Personen im Kontext von Fluchtmigration (Monatszahlen)*. Bundesagentur fuer Arbeit.
- BAMF (2017). *Aktuelle Zahlen zu Asyl (08/2017)*. Nueremberg: Federal Office for Migration and Refugees.
- Bevelander, Pieter (2016). "Integrating refugees into labor markets". *IZA World of Labor*, p. 269.
- Brücker, Herbert, Paul Schewe, and Steffen Sirries (2016a). "Eine vorläufige Bilanz der Fluchtmigration nach Deutschland". *IAB Aktuelle Berichte* (19). Institute for Employment Research (IAB).



- Brücker, Herbert, Nina Rother, and Jürgen Schupp (Hrsg.) (2016b). *IAB-BAMF-SOEP Befragung von Geflüchteten: Überblick und erste Ergebnisse*. Forschungsbericht 29, Nürnberg: Bundesamt für Migration und Flüchtlinge.
- Chiswick, Barry R. and Paul W. Miller (1994). “The determinants of post-immigration investments in education”. *Economics of Education Review* 13 (2), pp. 163–177.
- Clausen, Jens et al. (2009). “The effect of integration policies on the time until regular employment of newly arrived immigrants: Evidence from Denmark”. *Labour Economics* 16 (4), pp. 409–417.
- Constant, Amelie F. and Klaus F. Zimmermann (2005). *Legal Status at Entry, Economic Performance, and Self-employment Proclivity: A Bi-national Study of Immigrants*. IZA Discussion Papers 1910. Institute for the Study of Labor (IZA).
- Cortes, Kalena E. (2004). “Are Refugees Different from Economic Immigrants? Some Empirical Evidence on the Heterogeneity of Immigrant Groups in the United States”. *The Review of Economics and Statistics* 86 (2), pp. 465–480.
- Crepon, Bruno et al. (2013). “Do Labor Market Policies have Displacement Effects? Evidence from a Clustered Randomized Experiment”. *The Quarterly Journal of Economics* 128 (2), pp. 531–580.
- Dustmann, Christian and Joseph-Simon Görlach (2016). “The Economics of Temporary Migrations”. *Journal of Economic Literature* 54 (1), pp. 98–136.
- Dustmann, Christian et al. (2016). *The Economics and Politics of Refugee Migration*. CReAM Discussion Paper Series 1616. Centre for Research and Analysis of Migration (CReAM), Department of Economics, University College London.
- Jaeger, David A. (2006). *Green Cards and the Location Choices of Immigrants in the United States, 1971-2000*. IZA Discussion Papers 2145. Institute for the Study of Labor (IZA).
- Keller, Nicolas (2016). *The Economic Integration of Refugees: New Evidence from Germany*. Tech. rep. University of Heidelberg.
- Kosyakova, Yuliya and Tanja Fendel (2017). “Ökonomische und soziale Integration von Geflüchteten in Deutschland. Mögliche Lehren aus vergangenen Erfahrungen”. *Geographische Rundschau* (3), pp. 30–37.
- Rosholm, Michael and Rune Vejlin (2010). “Reducing income transfers to refugee immigrants: Does start-help help you start?” *Labour Economics* 17 (1), pp. 258–275.

# Appendix

## Additional Tables

Table A1: **Balance table**

	(1) Treatment = 0	(2) Treatment = 1	(3) Diff. T-C
Female	0.0640 [0.245]	0.0531 [0.225]	-0.01
Age	27.09 [7.453]	28.36 [7.327]	1.27
Married	0.217 [0.413]	0.257 [0.438]	0.04
Family in Germany	0.259 [0.439]	0.267 [0.443]	0.01
Have children	0.228 [0.421]	0.262 [0.441]	0.03
Months in Germany	10.17 [8.423]	10.19 [9.269]	0.01
No schooling	0.0640 [0.245]	0.0388 [0.194]	-0.03
Primary completed	0.153 [0.361]	0.175 [0.381]	0.02
Secondary completed	0.325 [0.470]	0.330 [0.471]	0.00
Attended university	0.266 [0.443]	0.316 [0.466]	0.05
German $\zeta$ =B1	0.167 [0.374]	0.150 [0.358]	-0.02
English $\zeta$ =B1	0.473 [0.500]	0.454 [0.499]	-0.02
Asylum seeker	0.808 [0.395]	0.812 [0.392]	0.00
Recognised	0.182 [0.387]	0.184 [0.388]	0.00
Registered with PES	0.254 [0.436]	0.262 [0.441]	0.01
Intention to return	0.291 [0.405]	0.338 [0.423]	0.05
Employed	0.0881 [0.284]	0.103 [0.304]	0.01
Received an offer	0.259 [0.439]	0.179 [0.385]	-0.08
Contact with employer	0.233 [0.424]	0.236 [0.426]	0.00
Min wage to accept an offer	1,301 [560.5]	1,351 [717.4]	49.57
Integration index, 0-5	2.591 [1.132]	2.472 [1.143]	-0.12
Learning German: hours/week	8.456 [7.360]	9.242 [8.447]	0.79
Observations	168	170	338

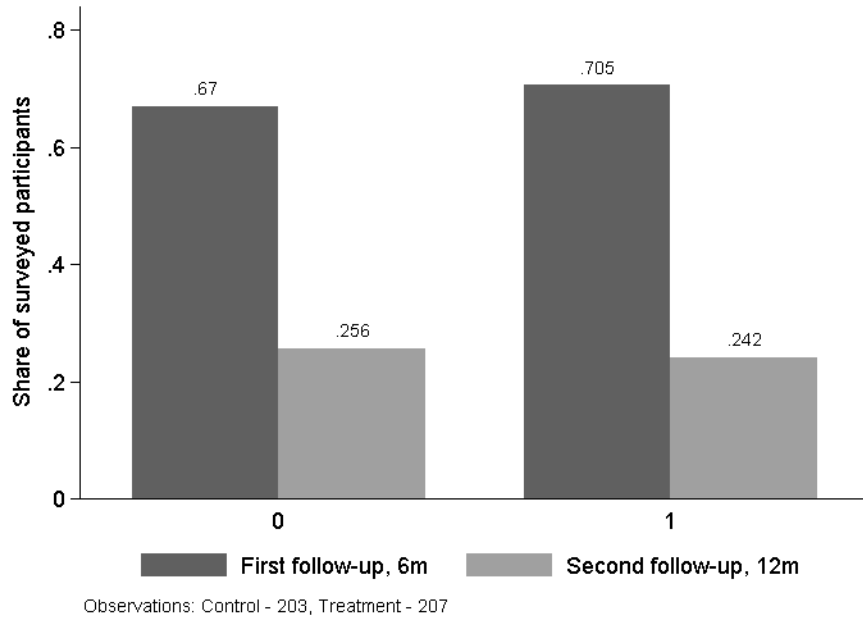
**Note:** This table shows average values for the treatment and the control group and their differences for all relevant variables in Column 3. Standard errors are reported in brackets. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A2: **Work-related contact with employer and employment, first follow-up survey (6 months after the first meeting), only participants with completed second follow-up**

	(1)	(2)	(3)	(4)
	interview_6m	interview_6m	working_6m	working_6m
Treatment	0.131 (0.0994)	0.167 (0.105)	-0.00972 (0.0811)	0.0240 (0.0871)
Medium-skilled, isced 2-3		0.185 (0.145)		0.198 (0.120)
High-skilled, isced 4-5		0.200 (0.169)		0.162 (0.140)
Syria		-0.0341 (0.216)		-0.0888 (0.179)
Nigeria		0.188 (0.167)		-0.0832 (0.138)
Afghanistan		0.155 (0.174)		0.0318 (0.144)
r_Africa		-0.0686 (0.178)		-0.0442 (0.147)
Received an offer		0.138 (0.159)		0.202 (0.131)
German>=B1		-0.00547 (0.182)		-0.0719 (0.151)
Observations	93	93	93	93
R-squared	0.019	0.136	0.000	0.092
Ymean	0.355	0.355	0.183	0.183
Ysd	0.481	0.481	0.389	0.389
Additional controls		months in Germany country of origin		months in Germany country of origin

**Note:** Dependent variables: *interview* denotes any work-related contact with a German employer (i.e. for a job interview, job offer or work); *working* is dummy that equals one if a participant has a full-time or part-time job, undergoes training (Ausbildung) or has an internship.

Figure 5: **Responses in the follow-up surveys by treatment status**



**Note:** This figure shows the shares of responses for the first and second follow-up surveys. 0 denotes Control. 1 - Treatment.

## Questionnaire for refugees looking for work

---

Applicant's ID:

\_\_\_\_\_

Volunteer name:

\_\_\_\_\_

Date:

\_\_\_\_\_

### Job search

1. When did you arrive in Germany ?

\_\_\_\_\_

2. When did you start to look for a job in Germany?

After arrival  After getting the work permit  Not yet

3. How do you look for work? (up to 3 answers)

Arbeitsagentur  Internet  Social worker  Teacher  Asking employers/shops directly  Friends/relatives  Other \_\_\_\_\_

4. Have you registered at the Arbeitsagentur as looking for a job?

Yes  No

4.1. When?

\_\_\_\_\_

4.2. How many times were you there?

\_\_\_\_\_

5. How many hours per week do you spend searching for a job?

0  1 – 4  5 – 8

9 – 12  > 12

6. What difficulties do you have during your job search? (up to 3 answers)

Language  Many rules  Don't know where to search  No suitable job  Missing skills  Job application  Other \_\_\_\_\_

7. Have you been in contact with a German employer?

Yes  No

If yes, how?

Informal meeting  Job interview  Job offer  Work

Other \_\_\_\_\_

8. Have you already received one or more offers? (up to 3 answers)

Yes  No

8.1. From whom?

Arbeitsagentur  Employer directly  From the camp/housing  Friends/relatives  Other \_\_\_\_\_

8.2. For what kind of work?

Full-time work  Part-time work  Internship

Other \_\_\_\_\_

9. Did you accept the offer?

Yes  No

If not, why?

Low wage  Does not match your skills: too easy  too hard

Not full-time  Too far

Other \_\_\_\_\_

10. If you already had an internship/job in Germany, what were the reasons to leave it?

Contract is over  Small wage  Didn't like it  Moving location

Other \_\_\_\_\_

**Job expectations and interests**

1. **In which jobs would you like to work?** (up to 3 answers)

IT/Software Developer  Engineer  Construction worker  Cleaning services worker  Security  Bar/restaurant  Manufacturing  Administrative work  Personal care  Car mechanic  Sales person  Other

---

2. **Are there any jobs you would never do?** (up to 3 answers)

IT/Software Developer  Engineer  Construction worker  Cleaning services worker  Security  Bar/restaurant  Manufacturing  Administrative work  Personal care  Car mechanic  Sales person  Other

---

3. **What is the minimum monthly wage for you to accept a full time job offer?** \_\_\_\_\_

4. **The minimum monthly wage in Germany is about netto 1000 Euro per month. If it were dropped to 700 Euro, would you work for this wage?**

Yes  No

5. **Do you wish to get education or continue your education?**

University  School  Berufsausbildung (job training)  No

6. **Do you have experience being self-employed before arrival to Germany?** Yes  No

7. **Do you think you will be self-employed in Germany?** Yes  No

**Integration**

- 1. **Do you have family in Germany?** Yes  No
- 2. **Are you married?** Yes  No
- 3. **Is your husband/wife here in Germany?** Yes  No
- 3.1. Is he/she working in your home country? Yes  No
- 3.2. Is he/she looking for a job in Germany? Yes  No
- 4. **Can we contact him/her regarding job assistance?** Yes, at: \_\_\_\_\_ No
- 5. **In your family, who do you think should look for a job here in Germany in the future?**  
You only  Your partner only  You and your partner
- 6. **Do you have children?** Yes  No   
How many? \_\_\_\_\_  
In Germany? Yes  No   
How old are they? \_\_\_\_\_ years
- 8. **Are you planning for your wife and/or children to join you in Germany?** Yes  No
- 9. **What is the highest education of your father?**  
No school  Primary School  Secondary School  University
- 10. **Do you want to stay in Munich?** Yes, forever   
Yes, a few years  No   
Don't know
- 10.1. **Would you move for work?** Yes, within Germany   
Yes, within Europe  No   
Don't know
- 10.2. **Do you want to return to your country once it is safe?** Yes  No   
Don't know
- 11. **What was the main reason for choosing Germany as your destination as opposed to Italy, France or the UK? (up to 3 answers)**  
Relatives/friends  Jobs  Safety  Good reputation   
Asylum possibilities  Other \_\_\_\_\_
- 12. **Did you make new friends in Germany?** Yes  No
- 12.1. **Where are these people from?**  
Your country Yes  No   
Germany Yes  No   
Other country Yes  No
- 13. **You already feel at home in Germany**  
1 (Not at all)  2  3  4  5 (Completely)   
Yes  No
- 14. **Have you ever been invited to the house of a German?**
- 15. **What activities do you do outside of the GU?**  
Study/German  Sport  Shopping  Meeting with people  None  Other \_\_\_\_\_

16. **Since coming to Germany, have you ever felt treated with less courtesy or respect because you are a refugee?**

Never  Sometimes  Often  All the time

**Organisational details**

1. **For how long have you learned German (in months)?** \_\_\_\_\_

2. **Are you currently in a class?**

Yes  No

2.1. If yes, where? Language school  Courses by volunteers  Other \_\_\_\_\_

3. **At what day and time is your class?** \_\_\_\_\_

4. **How many hours per week do you learn German on your own?** \_\_\_\_\_

5. **Do you have the certificate of your highest degree?**

Yes, original  Yes, copy

No

6. **Do you have a bank account set-up?**

Yes  No

7. **How did you hear about this session?**

Internet  Flyer  Social worker  Friends

Teacher  Other \_\_\_\_\_

8. **We would like to stay in touch and see how we can best support you in your job search. How can we best reach you?**

Phone \_\_\_\_\_

What's app \_\_\_\_\_

E-Mail \_\_\_\_\_

Facebook \_\_\_\_\_

Phone number/E-mail address of friend or family member \_\_\_\_\_





## Follow-up questionnaire for refugees looking for work

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Applicant's Name:

\_\_\_\_\_

Applicant's ID:

\_\_\_\_\_

Volunteer name:

\_\_\_\_\_

Gender:

\_\_\_\_\_

Date:

\_\_\_\_\_

### Job search

1. Are you currently working?

Yes  No  Not looking

#### Job search - not found

If no, continue here

2. Would you like to work?

Yes  No

3. How do you look for work? (up to 3 answers)

Arbeitsagentur (employment office/job center)  Internet  Social worker

Teacher  Asking employers/shops directly  Friends/relatives  Other

\_\_\_\_\_

4. Have you registered at the Arbeitsagentur (employment office/job center) as looking for work?

Yes  No

4.1. When?

\_\_\_\_\_

4.2. How many times were you there?

\_\_\_\_\_

5. How many hours per week do you spend searching for work?

0  1 – 4  5 – 8   
9 – 12  > 12

6. What difficulties do you have during your job search? (up to 3 answers)

Language  Many rules  Don't know where to search  No suitable job

Missing skills  Job application  Other \_\_\_\_\_

7. Have you been in contact with a German employer?

Yes  No

If yes, how?

Informal meeting  Job interview  Job offer  Work  Other

\_\_\_\_\_

0  1 – 4  5 – 8

7. How many times did you send or give your CV to an employer?

9 – 12  > 12

Yes  No

8. Have you already received one or more offers? (up to 3 answers)

8.1. From whom?

Arbeitsagentur  Employer directly  From the camp/housing

Friends/relatives  Other \_\_\_\_\_

8.2. For what kind of work?

Full-time work  Part-time work  Internship  Ausbildung/job training

Other \_\_\_\_\_

9. Did you accept the offer?

Yes  No

If not, why?

Low wage  Does not match your skills: too easy  too hard

Not full-time  Too far

Other \_\_\_\_\_

---

**Job search - found**

If yes, continue here

1. **How did you find your work?** (up to 3 answers)

Arbeitsagentur  Internet  Social worker  Teacher/School  Asking employers/shops directly  SIR  Friends/relatives  Previous employer  Other \_\_\_\_\_

\_\_\_\_\_

2. **When did you start working?**

\_\_\_\_\_

3. **What is the name of the company?**

\_\_\_\_\_

3. **What is your position in the company?**

4. **In which sector is the work?**

IT/Software Developer  Engineer  Construction worker  Cleaning services worker  Security  Bar/restaurant  Manufacturing  Administrative work  Personal care  Car mechanic  Sales person  Other \_\_\_\_\_

5. **What type of work is it?**

Normal job  Mini-job (part-time, 1 E job)  Internship  Ausbildung  Other \_\_\_\_\_

\_\_\_\_\_

6. **What is the net salary? (What you receive every months on your bank account)**

\_\_\_\_\_

7. **What is the gross salary? (Before tax and other deductions)**

\_\_\_\_\_

8. **For how long is the contract? (in months)**

\_\_\_\_\_

9. **How many hours do you work per week? (Full time is 40)**

Yes  No

10. **Is the job too easy for you?**

11. **Which languages do you speak at work?**

German  English  Arabic  Other

12. **Are you the only refugee in your work place?**

Yes, the only one  No, one more  No, several  Don't know

13. **How happy are you with your colleagues?**

1 (Not at all)  2  3  4  5 (Completely)

---

14. **How happy are you with the salary?**

1 (Not at all)  2  3  4  5 (Completely)

15. **How happy are you with the tasks at work?**

1 (Not at all)  2  3  4  5 (Completely)

16. **How long does it take you to arrive at work (in minutes)?**

---

Yes  No

17. **Are you looking for better work?**

18. **Why did the work end?**

I quit  fired  contract ended  legal issues  other

---

### Not looking

If not looking, continue here

1. **Why are you not looking for work?** (up to 3 answers)

Studying German  In School  At university  Taking care of family   
Medical reasons  net salary not high enough  Enough money  Uncertainty about asylum process  no work permit  Other \_\_\_\_\_

Yes  No

2. **Will you look for work in the future?**

2.1. If yes, when (date)

---

**Integration**

1. **Did someone from your family join you in Germany in the last six months?** Yes  No
2. **Do you want to stay in Munich?** Yes, forever   
Yes, a few years  No   
Don't know
- 2.1. **Would you move for work?** Yes, within Germany   
Yes, within Europe  No   
Don't know
- 2.2. **Do you want to return to your country once it is safe?** Yes  No   
Don't know   
Yes  No
3. **Did you make new friends in Germany?**
- 3.1. **Where are these people from?**
- Your country Yes  No   
Germany Yes  No   
Other country Yes  No
4. **Did the refugees you are in contact with find work**  
Yes, many  A few  One  No one
5. **Do you feel at home in Germany**  
1 (Not at all)  2  3  4  5 (Completely)
6. **How is your life now compared to 6 months ago?**  
Better  Worse  Same
6. **How will your life be in six months?**  
Better  Worse  Same
7. **Have you ever been invited to the house of a German?**  
Yes  No
8. **Do you still live at \*address from CV\*?**  
Yes  No
- 8.1 **If no, where do you live now?**  
apartment alone or with own family  apartment with flatmates  another  
GU/camp
- 8.2 **What is your new address?**
9. **What activities do you do outside of your house?**  
Study/German  Sport  Shopping  Meeting with people  None  Other \_\_\_\_\_
10. **Since coming to Germany, have you ever felt treated with less courtesy or respect because you are a refugee?**  
Never  Sometimes  Often  All the time

**Organisational details**

1. **For how long have you learned German (in months)?**

\_\_\_\_\_

2. **In Deutsch: Bist du gerade im Kurs?**

Yes  No

2.1. Welches Niveau? (A1, A2, B1, B2, C1)

\_\_\_\_\_

2.2. Wann und wieviel?

\_\_\_\_\_

\_\_\_\_\_

2.1. Interviewer estimate (A1, A2, B1, B2, C1)

3. **How many hours per week do you learn German on your own?**

\_\_\_\_\_

Yes  No

4. **Did you already get your asylum decision?**

4.1. If yes, what is the outcome?

accepted for 3 years  accepted for 1 year  rejected but can stay  rejected and have to leave

4.1. When?

\_\_\_\_\_

5. **How much do you agree or disagree with the following statements?**

5.1. **I am happy that I came to Germany.**

1 (Not at all)  2  3  4  5 (Completely)

5.3. **I will (still) be working in the next 6 months.**

1 (Not at all)  2  3  4  5 (Completely)

5.3. **Compared to what you expected, ist your life better, worse or as expected?**

Worse  equal  better

5.3. **What did you know about the life of a refugee in Germany before you came?**

Worse information  exact information  better information

5.6. **I need to focus on studying German before finding a job.**

Yes  No

5.7. **I had wrong information about Germany before I came.**

Yes  No

5.10. **What is the most important thing the German government could do to improve your situation?**

Facilitate family reunification  Faster asylum decision  Job finding support  Better German courses  Better housing  free movement  Other

\_\_\_\_\_

## Excerpt of the Pre-analysis plan

### A Analysis

The analysis is divided into two parts, one focusing on labour market outcomes and one on further integration and self-reported satisfaction outcomes. Below, we focus on each of the parts separately, emphasizing the effects where our treatment could have an impact. As very effectively discussed in Olken (2015)<sup>28</sup> that is intrinsic in projects like ours.

#### A.1 Labour Market Outcomes

The hypothesis we would like to test here is simply whether participants in the treatment group have better labour market outcomes in the short (6 months) and medium (12-24 months) term compared to those in the control group. Evidence of positive effects would suggest that matching frictions between German employers and job-seeking refugees exist, and that the employment of refugees does not only depend on the skills they possess, but also on their possibility to be considered by employers who are trying to fill a vacancy. Overcoming these frictions may then facilitate labour market integration of refugees in Germany.

We consider two sets of variables. First, we look at a series of standard labour market outcomes, which can provide experimental evidence of a treatment effect. Second, we investigate a series of ancillary variables, which are useful to provide some (non-experimental) way of learning about the relative importance of different underlying mechanisms.

Main variables:

- Employed (at the point of the follow-up survey)
- Duration of employment (in months from the randomization day to the day of the follow-up survey)
- Wage (monthly (gross and net) wage at the point of the follow-up survey or in the last employment)

We define "employment" broadly as being in a paid job, internship, or vocational training. We might also consider each of the outcomes separately.

Once the main effect is established, it is important to understand what drives the result. The treatment may modify the outcomes of the participants by 1) creating awareness of the job opportunity, 2) reducing the search time, 3) enhancing the quality of the match or 4) serving as a referral to the employer. Identifying the channel(s) is relevant for policy-making. We would also like to check for alternative mechanisms, i.e. whether the treatment (rather than or together with removing matching friction) modified the skills of participants, their knowledge of the local labour market, or job-search behaviour. This might happen through job interviews, for instance.

Supplementary variables

- Time until the first interview/trial/employment offer
- Number of job interviews for the first job (invited, happened)
- Number of job trials for the first job (invited, happened)
- Number of applications for the first job
- Where searched for vacancies (indicator variable as in the baseline survey)
- Job/skill match (an indicator variable: overqualified/ok/underqualified, based on observables, can measure for jobs they apply to and for the job they actually get)
- Self reported job satisfaction, self reported match quality
- Reservation wage (at the point of the follow-up)

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<sup>28</sup>Olken (2015), Promises and Perils of Pre-Analysis Plans, *Journal of Economic Perspectives*, Volume 29, Number 3, Pages 6180

- Difficulty in the job search (indicator variable as in the baseline survey)
- (Ask employers to see if they consider our treatment as a referral, if refugees contacted them directly)

## A.2 Integration Outcomes

The hypothesis we would like to test is whether earlier (better) employment leads to better integration outcomes in the short- and medium-term. The treatment will serve as an instrumental variable for employment.

Main variables (measures of integration):

- Intention to stay (dummy variable)
- Knowledge of German language (indicator variable)
- Local acquaintances (dummy)
- Activities: study, sport, shopping, meeting with friends (total number)
- Feel at home (indicator on Likert scale)
- Integration index:  $\geq A2German + German\ friends + Invited + Activities + Feel\ home$
- Any other investment in human capital (as driving license)?
- Housing conditions
- Stress, happiness and optimism levels

These outcomes directly correspond to questions in the follow-up survey. Because many of these questions are included in the initial (pre-treatment) survey as well, these variable can be analysed both in levels and in changes.<sup>29</sup>

## A.3 Network Effects

Two measures of network: 1) proxy - address (camp) and nationality, 2) directly ask in the follow-up survey, if their friends participated in the NGO's CV sessions and if, yes, ask for the names.

Possible outcomes: spillovers within the network, sharing information about vacancies and referrals. This would allow us to evaluate the extent to which results depend on whether contacts/friends of the focal individual have been treated as well. In addition, this also allows us to evaluate the extent to which knowledge of a friend being treated has any effect.

## A.4 Inclusion Rules

All observations, for which we have CV information, pre- and post-treatment survey, will be included in the analysis. Participants who are not eligible for the experiment (see eligibility rules in Section 3.2) will be excluded from the analysis.

## A.5 Statistical Model Specifications

We will start by comparing the means between the treatment and the control group as the treatment should be orthogonal to the covariates.

We will complement the analysis with OLS regressions with treatment as the main independent variable. Although these may be too demanding given our sample size, we will include some specifications in which we add location and time fixed effects to our regressions: as the entry into the experiment spans over several months and locations, we expect significant differences between the locations over time, which will lower precision of the

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<sup>29</sup>Clearly, because of the randomisation the two results should be identical, but adding pre-treatment levels as controls might lead to more precise estimates, which could be important given our limited sample size.

unconditional estimates. The coefficient of the treatment variable will, hence, measure the "intention-to-treat" effect within a given location for a given time.

For medium-term labour market outcomes and integration results, we will estimate both "intention-to-treat" effects and LATE using the treatment variable as an instrument for (earlier) employment.

We then will perform heterogeneity analysis and robustness checks with covariates (education, years of work experience, region of origin), for which the balance tests indicates significant differences.

There might be an opportunity to merge our data with some data from the lab, where some of our Arab speaking candidates have participated in an experiment. We could potentially get measures of risk taking and time preferences. However it is not yet clear if enough people will be part of both studies so that a meaningful analysis is feasible.

We intend to cluster observations at the location and time level. We have conducted CV preparation sessions around five different locations: EWH, Kammerspiele, Gruenwald, Caritas, Bayernkaserne.

## A.6 Balance Tables

We will present balance Tables for the following variables: Country of origin (largest countries of origin), months in Germany, family in Germany, years of education, years of work experience, date of job search start, previous contact with employer, received job offer previously, uses Internet in job search, has language difficulties in job search process, does not know where to search, level of German, currently in German class, integration index, return intention. These all correspond to questions in the pre-treatment survey.

## A.7 Heterogeneity

For both labour market and integration outcomes, there are several interesting dimensions of heterogeneity, which we intend to analyse. First, by nationality or by nationality group.<sup>30</sup> We might be able to analyse the countries with many refugees (Syria, Afghanistan and Nigeria) separately, while the rest of the countries can be grouped as other Arab countries, other Asian countries, other Subsaharan African Countries.

Another dimension of heterogeneity will be the level of education. Here, we can group people according to the highest school level completed (no school, primary completed and some secondary, secondary completed and some university, university completed).

Other interesting dimensions of heterogeneity will be age group, single refugees versus refugees that came with their family, asylum opportunities, and duration of stay in Germany.

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<sup>30</sup>Given our sample size, it is unlikely that we will be able to get meaningful results if we analyse each individual country of origin separately.



## Consent form

### Consent form: University of Munich

Researchers at the University of Munich (Giesing Yvonne, Nadzeya Laurentsyeva) and the Ifo Institute (Michele Battisti) are planning a research project to study the integration of job-searching refugees in the German labour market. The purpose is to find out how refugees can be integrated into the labor market, which characteristics are especially important and how this impacts further integration.

The datasets that contain information about your CV and questions about integration in Germany are analysed in Munich in a pseudonymous form and information that allows personal reference will be stored separately for data security reasons. Only employees of the research team of the University of Munich and the Ifo Institute will have access to the data. The data will be saved on local files on computers of the LMU and the Ifo.

Your personal data is used only for this research project. It will not be passed to third parties for other purposes. As soon as the research purpose permits, the information that creates a personal reference will be anonymised or destroyed for data security reasons. The data is processed pseudonymously, so that no identification of individuals is possible. Anonymised and aggregated results will be published.

Your consent is voluntary. By withholding your consent you incur no disadvantages. You can revoke your consent for the future at any time and request deletion or destruction of your data. I have received the information about the research project. I agree with the intended use of my data and currently have no further questions. For questions I can write to [yvonne.giesing@econ.lmu.de](mailto:yvonne.giesing@econ.lmu.de)

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Date, Place, Signature

## E-Mail

Dear *NAME*,

Kindly find your German CV attached to this email.

There is a chance that we match you with a possible employer from our database. If we find an employer that is looking for someone with your qualifications, we will send your CV and they will contact you directly. While we do our best to support you in the job search, we cannot guarantee that we can find you a suitable employer, this is why we highly encourage you to keep searching for a job on your own.

Here are some job-search tips for you:

- Register at the Agentur für Arbeit The Agentur für Arbeit helps job-seekers by providing advice and finding job vacancies.
- To register, you need to go there in person, once you have your work permit, and fill a form. Do not forget to take your ID (Ausweis) and certificates if available!
- To get the address of the Agentur für Arbeit in your area, visit this link <https://www.muenchen.de/rathaus/dienstleistungsfinder> search for “Arbeitsvermittlung” and then give in your address.
- Please, visit their website for further information: [www.arbeitsagentur.de](http://www.arbeitsagentur.de)
- Use job-search websites Many people in Germany find jobs online, so you can additionally look for jobs using websites like:
  - <http://www.monster.de>
  - <http://www.stepstone.de>
  - <http://www.jobpilot.de>
  - <http://www.jobboerse.de>
- Continue to learn German, as this will greatly improve your chances of finding a job

If you find an employer through your own search and need support in preparing for the interview or in understanding the contract, please, contact us at this email address (*e-mail address*) and we would be happy to assist you.

In order to be able to contact you regarding possible job vacancies and other activities, it is extremely important for us to have your updated contact details (e-mail, phone, and whatsapp number). Please, let us know as soon as you change any of your contact details.

Please also like our Facebook Page to stay updated about new events:

*Link to Facebook page*

If your friends are also looking for a job, please recommend them to meet us every Thursday 3-5pm at *address*.

We wish you good luck and best regards,

Your *NGO* Team