



Refugee labor market integration at scale: Evidence from Germany's fast-track employment program

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Governments face persistent challenges in integrating refugees into the local labor market, and many past interventions have shown limited impact. This study examines the Job-Turbo program, a large-scale initiative launched by the German government in 2023 to accelerate employment among refugees—primarily individuals from Ukraine and eight other major countries of origin. Using monthly administrative panel data from Germany's network of public employment service offices and a difference-in-differences design, we find that the program significantly increased both caseworker–refugee contact and job placements over a 23-mo follow-up period. Among Ukrainian refugees, the exit-to-job rate nearly doubled. Effects were broad-based—spanning demographic subgroups, unemployment durations, skill levels, regions, and local labor-market conditions—and were concentrated in regular, unsubsidized employment. The program also raised both the rate and share of placements followed by sustained employment, consistent with improved placement quality. Other refugee groups saw meaningful gains as well, but increases in job placements were concentrated among males and in low-skilled jobs, with only limited effects for females. We detect no negative spillovers on contact rates or exit-to-job rates for unemployed German or other immigrant job seekers, finding no evidence of resource reallocation or displacement. The results offer insights for governments responding to displacement crises. They indicate that intensified job-search assistance—embedded within the early stage of integration and implemented at scale through public employment infrastructure—can meaningfully improve refugees' labor-market outcomes, even amid significant arrivals.

refugee integration | labor market policy | job search assistance

Over recent decades, Europe and other regions have repeatedly confronted large-scale displacement, marked by pronounced rises in the number of people fleeing conflict and persecution (1). The issue of refugee integration has regained urgency following Russia's invasion of Ukraine, which displaced over 11 million Ukrainians, with around 6 million seeking refuge across Europe (2).

Labor market integration constitutes a central—and often protracted—challenge in the resettlement process. Refugees typically face a range of structural and informational barriers to employment, including limited host-country language proficiency, nonrecognition of foreign credentials, weak social networks, and unfamiliarity with local job search norms (3, 4). In addition, psychological distress resulting from forced displacement may inhibit job readiness and employment stability (5). Consequently, refugees typically experience longer job search durations and lower employment rates than both native-born individuals and other migrant populations (3).

These disadvantages can have lasting consequences. Research highlights the importance of an “integration window”—a critical early period after arrival that strongly predicts long-term outcomes (6). Missing this window due to prolonged unemployment can hinder future employment prospects and depress wages, leading to enduring effects for both refugees and host societies (7–9).

Designing integration policies that are both effective and cost-efficient remains a persistent policy challenge. Many well-intentioned programs have produced limited results. Large-scale job training initiatives, for example, often fail to generate sustained employment effects and are costly to administer (10, 11). Wage subsidies—while among the more effective short-term instruments—are constrained by substantial fiscal costs and limited uptake among both employers and refugees (10, 12–14).

Given the importance of host-country language proficiency for employment, many European countries prioritize intensive language and integration courses before labor market entry. These programs can improve job-finding rates, especially for low-skilled and subsidized jobs (15–18), but they are costly, delay employment, and are hard to scale during large and sudden arrivals (17). Some governments have also introduced “integration contracts” to incentivize engagement

Significance

This study provides rare large-scale evidence on accelerating refugee labor-market integration. Using high-frequency administrative data and a quasi-experimental design, we evaluate Germany's 2023 Job-Turbo — a nationwide program in a major European host country that prioritizes early labor-market entry through targeted job-search support. We find sizable, sustained increases in unsubsidized job placements across regions and demographic groups. Effects are broad-based for Ukrainian refugees, while for other refugees they concentrate in low-skill placements among men. These gains stand in contrast to the limited impacts of earlier interventions and challenge the prevailing qualification-first model, which postpones employment pending extensive credentialing. Our findings speak to scalable labor-market policy during refugee inflows and demonstrate that intensified job-search counseling can meaningfully accelerate early labor-market integration.

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with host-country norms and improve employment. Yet, evidence shows limited and short-lived economic effects (19). Others have adopted punitive approaches—such as cutting benefits—to spur job search, but these have shown minimal employment impact and may have unintended consequences, including heightened refugee poverty and increases in subsistence crime (20–22).

In this study, we examine the effects of the Job-Turbo initiative—a program designed to accelerate refugees' entry into the labor market after having finished the integration courses. Launched by the German Federal Ministry of Labour and Social Affairs (BMAS) and the Federal Employment Agency (BA) in response to hosting over 1.2 million Ukrainian refugees, the program targets employable refugees who have completed an integration course and are receiving basic income support. The core feature of the Job-Turbo program is intensified engagement between Public Employment Service (PES) caseworkers and refugee jobseekers, with the aim of increasing both the frequency and quality of employment counseling to facilitate transitions from unemployment into work (23, 24).

Studying the impact of the Job-Turbo is important for both theoretical and policy reasons. From a theoretical perspective, our study contributes to the growing literature on the role of employment counseling. Existing research has shown that intensified counseling can improve job search outcomes in a variety of settings (25–32). Some studies find that early, mandatory counseling is particularly effective—especially for low-skilled jobseekers (33, 34). In the German context, ref. 35 find that improving the ratio of PES caseworkers to jobseekers in a pilot program significantly increased employment rates.

However, aside from two studies of small pilot programs that provided intensified counseling to refugees in Germany and Sweden and documented positive employment effects (36, 37), the existing literature has focused primarily on citizens or long-term residents. Whether these findings generalize to refugees remains uncertain. Refugees often face more substantial barriers to employment, including language obstacles, unrecognized qualifications, and trauma, which may limit the effectiveness of counseling interventions. At the same time, while refugees may be unfamiliar with the host country's job search processes, they may be highly motivated to enter the labor market quickly—among other reasons to facilitate family reunification—suggesting that caseworker support could play an especially effective role in helping them navigate a new and complex labor market.

From a policy perspective, the Job-Turbo program is notable for its scale and ambition. Unlike the small pilots studied by refs. 36 and 37, the Job-Turbo targeted about 400,000 registered unemployed refugees across Germany's nationwide network of job centers during our study period (23). It represents an innovative public investment by a leading European refugee-host country to accelerate labor-market integration amid a large-scale displacement crisis.

The program is particularly significant because it marked a modest paradigm shift in Germany's integration strategy. It departed both from Germany's earlier approach and from Scandinavian models (e.g., Norway and Sweden) that typically prioritize education and language acquisition before labor-market entry (38). By contrast, Job-Turbo adopted a middle path between “qualification-first” and “work-first” models (23, 39). Evidence on its effects therefore offers valuable lessons for countries seeking effective strategies to integrate refugees and other migrant jobseekers.

1. Materials and Methods

1.1. Setting.

1.1.1. Job centers. Germany's job centers are public agencies that help jobseekers—particularly unemployed recipients of Citizen's Benefit (*Bürgergeld*) under Social Code Book II (*SGB II*), the country's basic income support—find work and receive training. Operated by the BA in partnership with local municipalities,

they are distributed throughout the country (*SI Appendix, Fig. A.1*). Job centers offer services such as job placement, career counseling, and financial support. They also assist with enrollment in vocational training, and language and integration programs, particularly for migrants and refugees. At the frontline are PES caseworkers (*Arbeitsvermittler* or *Fallmanager*), who develop personalized employment plans with clients and provide ongoing guidance. Meetings typically occur as needed to track progress and adjust strategies. Caseworkers act as both advisors and enforcers—supporting clients while ensuring participation in work-related activities. Caseworker-client interactions at job centers occur through multiple channels, including phone and video calls, as well as in-person meetings for initial assessments and guidance on qualifications, integration, and job placement. Contacts at job centers often involve translators or other forms of language support, especially when working with refugees or immigrants who may not yet be fluent in German.

1.1.2. The Job-Turbo program. The arrival of more than one million Ukrainian refugees placed significant pressure on Germany's labor market and social services. Under the European Union's Temporary Protection Directive, Ukrainian refugees were granted access to employment, welfare, and education services. Job centers played a central role in supporting their integration into the labor market.

To accelerate this process, the German government launched the Job-Turbo initiative. The program was formally announced at a press conference on October 18, 2023, by the BMAS and the BA, which also appointed a special representative to oversee implementation (40). At the job center level, the initiative targeted all refugees receiving benefits under Social Code Book II (*SGB II*) who were completing, or had nearly completed, an integration course. These courses consist of 700 teaching units (each 45 min), comprising 600 units of language instruction and 100 units of social, political, and cultural orientation in Germany (23, 41). Besides Ukrainians, the main refugee groups were from Afghanistan, Eritrea, Iran, Iraq, Nigeria, Pakistan, Somalia, and Syria.

The Job-Turbo restructured the conventional German integration pathway by encouraging immediate labor market entry upon course completion, even without full recognition of foreign qualifications or without achieving the B2 language certificate. Participants were expected to pursue additional training while employed, thereby adopting a hybrid “work-first” and “qualification-first” approach (23, 39).

The program was designed around three phases: 1) orientation and early language acquisition, primarily through integration courses; 2) rapid entry into employment or training to reinforce language skills and gain experience; and 3) progression toward skilled employment. The core emphasis was on phase two—job placement. At the October 2023 press conference, BMAS and BA announced that job centers should intensify counseling for refugees immediately after completion of their integration course and prioritize rapid job placement. This announcement was followed by an internal mandatory directive issued by the BA on January 5, 2024. The directive stipulated that, after completing the language training portion of the course, refugees should enter a structured follow-up process with their caseworkers to facilitate labor market entry. Counseling was to be significantly intensified for six months, with contacts scheduled approximately every six weeks. The first counseling session was to occur between four weeks before and four weeks after the end of the integration course (24). Implementation was centrally monitored by the special representative, who convened monthly meetings with all job center directors.

The policy shift embodied in the Job-Turbo—emphasizing intensified counseling and immediate labor market entry after the integration course—was intended as a permanent reform. The initiative remains in effect, though the mandate of the special representative and centralized monitoring concluded in July 2024 (*SI Appendix, Table A.1* presents a timeline of the Job-Turbo program).

1.2. Data. We use monthly administrative panel data from the BA, covering job placement services and labor market outcomes at the job center level. Our study period spans from October 2022—one year prior to the program's launch—through August 2025, providing 23 monthly follow-up observations starting when the Job-Turbo began in October 2023. Additional data details are provided in *SI Appendix*. Our main analysis focuses on the full population of 300 BA-operated job centers. We exclude the 104 job centers that are operated independently by local municipalities (so-called *Optionskommunen*)

due to missing data on counseling contacts and uncertainty about program participation. However, we report limited results for these centers in [SI Appendix](#).

For the main analysis, we focus on individuals officially registered as unemployed under SGB II, dividing them into four mutually exclusive groups. The treatment groups consist of unemployed individuals from Ukraine and from eight major refugee-origin countries, referred to as Ukrainian refugees and other refugees, respectively. For comparison, we employ two control groups that are not eligible for the Job-Turbo program. Our primary control group comprises other immigrants–unemployed individuals with citizenship from countries outside the principal refugee origins, primarily migrants from both EU and non-EU countries.

As a secondary control group, we include *Germans*, encompassing both native-born and naturalized citizens who are unemployed. By comparing labor-market outcomes before and after the introduction of the Job-Turbo across these groups, we estimate the program’s impact on refugee integration.

1.3. Statistical Analysis. We estimate the average treatment effect on the treated (ATT) of the Job-Turbo program using a difference-in-differences framework. Let $D_{i,j,t}$ indicate whether group i in job center j is treated in month t (coded 1 in posttreatment months for the treated groups and 0 otherwise). Let $Y_{i,j,t}(1)$ and $Y_{i,j,t}(0)$ denote the potential outcomes with and without treatment, respectively. The ATT for group i in month t is

$$ATT_{i,t} = \mathbb{E} \left[Y_{i,j,t}(1) - Y_{i,j,t}(0) \mid D_{i,j,t} = 1 \right].$$

To estimate the ATT, we employ the interactive fixed-effects (IFE) imputation estimator (42), which models untreated potential outcomes as

$$Y_{i,j,t}(0) = \alpha + \gamma_{ij} + \xi_t + \lambda'_{ij} f_t + \varepsilon_{i,j,t},$$

where γ_{ij} are job-center-by-group fixed effects, ξ_t are month fixed effects, and $\lambda'_{ij} f_t$ are interactive fixed effects capturing heterogeneous loadings λ_{ij} on latent common factors f_t (43). We fit this model on the untreated observations ($D_{i,j,t} = 0$), use it to impute the counterfactual $\hat{Y}_{i,j,t}(0)$ for treated observations, and then estimate unit-by-time treatment effects $\hat{\tau}_{i,j,t} = Y_{i,j,t}(1) - \hat{Y}_{i,j,t}(0)$. The ATT is obtained by averaging $\hat{\tau}_{i,j,t}$ over the treated observations ($D_{i,j,t} = 1$). This estimator allows treatment effects to vary across units and time. We define the treatment indicator $D_{i,j,t}$ so that October 2023 is coded as the first month in which the Job-Turbo is active for the treatment groups, reflecting the program’s launch at the press conference on October 18, 2023.

This specification addresses three broad sources of confounding: i) unobserved time-invariant group-job-center heterogeneity via γ_{ij} ; ii) month-specific shocks common to all units via ξ_t ; and iii) unobserved, time-varying forces with heterogeneous impacts captured by the low-rank factor term $\lambda'_{ij} f_t$ (43). Importantly, the IFE imputation estimator generalizes the simpler two-way fixed-effects (TWFE) imputation model (42, 44),

$$Y_{i,j,t}(0) = \alpha + \gamma_{ij} + \xi_t + \varepsilon_{i,j,t}$$

which requires the parallel trends assumption that treated units are on the same trajectory as the untreated units. By augmenting TWFE with the factor component $\lambda'_{ij} f_t$, the IFE specification relaxes this requirement, allowing common shocks (e.g., macro or sectoral shocks) to load differently across groups and job centers. Operationally, IFE imputes $\hat{Y}_{i,j,t}(0)$ in a way that embeds each unit’s estimated exposure to these factors and then forms $\hat{\tau}_{i,j,t} = Y_{i,j,t}(1) - \hat{Y}_{i,j,t}(0)$; averaging $\hat{\tau}_{i,j,t}$ yields the ATT after being purged of heterogeneous responses to common shocks. Therefore, although the IFE estimator introduces additional complexity, we prefer it over the TWFE estimator because it offers greater robustness to accommodate time-varying confounders. Similar low-rank structures are used in synthetic control and matrix-completion approaches to address time-varying confounders (45–47).

The key identifying assumption is conditional parallel trends for untreated potential outcomes: conditional on γ_{ij} , ξ_t , and the factor structure $\lambda'_{ij} f_t$, treated

and control groups would have followed parallel trends in the absence of the Job-Turbo. Substantively, net of potential deviations captured by the factor structure, unemployed Ukrainians and other refugees would have exhibited trajectories in contact and exit-to-job rates similar to those of the control groups (e.g., other unemployed immigrants and, in robustness checks, unemployed Germans) within the same job centers and months. This assumption is plausible because both treated and control samples consist of individuals who are registered as unemployed and face similar local labor-market conditions. We assess the validity of this assumption by examining pretreatment deviations from parallel trends in all plots and also a series of placebo checks.

In implementation, we estimate factors and loadings using pretreatment and never-treated observations, and select the optimal number of factors r by cross-validation to minimize mean squared prediction error (see [SI Appendix](#) for details). Across specifications, cross-validation selects at most one factor, and most often selects zero. When $r = 0$ is chosen, the estimator reduces to the TWFE model. Uncertainty is quantified via a block bootstrap with 500 replications (42).

Finally, we assess robustness by replicating the core specifications using alternative estimators, including the simpler TWFE imputation estimator and the matrix completion estimator (46).

1.4. Outcomes. We analyze several outcome measures. To assess whether the program increased counseling intensity between caseworkers and the unemployed, we examine the *contact rate*, defined as the number of registered unemployed job-center clients with at least one contact in a given month, divided by the stock of unemployed individuals in the previous month. To evaluate job-placement success, we use the *exit-to-job rate*, defined as the number of individuals transitioning from unemployment into employment, divided by the unemployed stock in the previous month (28, 35, 48, 49). This metric captures placements into Germany’s regular, competitive labor market and excludes fully subsidized positions.

Beyond overall placements, we disaggregate exits by job-skill level (low-skilled, skilled, high-skilled), employment type (regular versus marginal), and subsidy status. We also examine exits by sustained-employment outcomes, prior unemployment duration, and transitions to other statuses such as training, apprenticeships, or labor-force exit. Heterogeneity analyses cover gender, age, and region. Data for exits by skill level, employment type, subsidy status, and unemployment duration are available through June 2025 (two months shorter than the main outcomes). Sustained-employment outcomes require observing employment status 3, 6, or 12 mo after placement, so the observation window is correspondingly shorter: through March 2025 for 3-mo sustained employment, December 2024 for 6-mo, and June 2024 for 12-mo. Detailed variable definitions appear in [SI Appendix, section C](#).

1.5. Descriptive Statistics. [SI Appendix, Table A.2](#) presents descriptive statistics for all 300 job centers operated by the BA. In 2023, prior to the launch of the Job-Turbo, the average job center served approximately 4,347 registered unemployed persons with 185 full-time equivalent (FTE) staff—corresponding to an average caseload of 23 unemployed per staff member. On average, the population of unemployed consisted of 11% Ukrainian refugees, 13% other refugees, 20% other immigrants, and 56% German nationals. The average vacancy-to-unemployed ratio was 0.37, reflecting weak labor demand. Additional descriptive statistics are provided in [SI Appendix, Table A.3 and Fig. A.2](#).

2. Results

2.1. Main Effects. We begin by estimating the effects of the Job-Turbo program on the contact and exit-to-job rates for unemployed Ukrainian and other refugees, using other unemployed immigrants as the control group. [Fig. 1](#) presents the ATT estimates from the IFE model, and [SI Appendix, Tables A.4 and A.5](#) provide the corresponding numerical results.

For unemployed Ukrainian refugees, the Job-Turbo increased the contact rate by 15 percentage points per month (95% CI: [8.3, 21.6]), a 54% rise relative to the preprogram average of 28%. Over the 23-mo follow-up period, this corresponds to roughly 490,588 additional

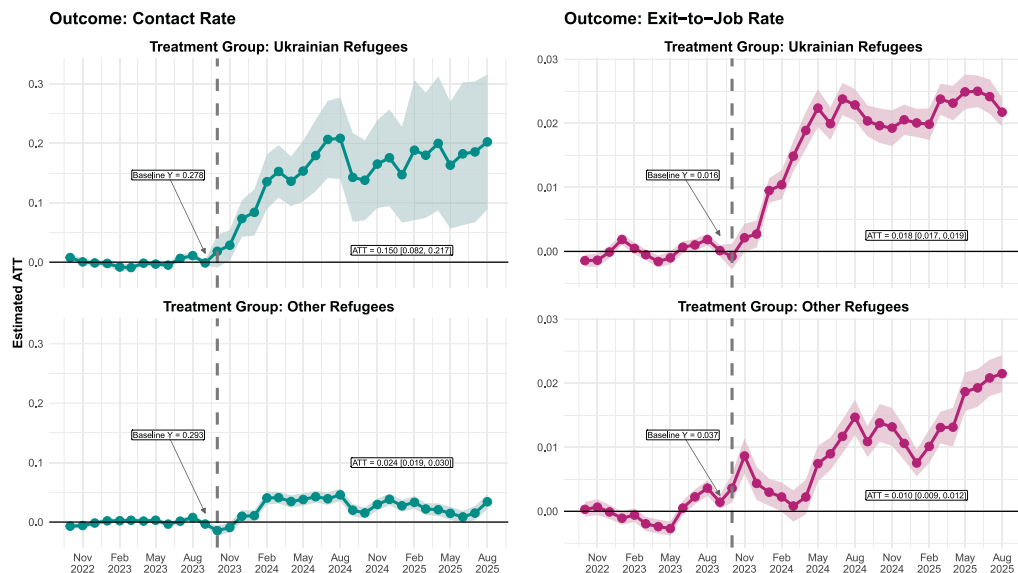


Fig. 1. Effects of the Job-Turbo on contact and exit-to-job rates for Ukrainian and other refugees. Panels report ATT estimates with 95% CIs from the IFE estimator for the contact rate (Left) and the exit-to-job rate (Right), by refugee group. Treatment groups are unemployed Ukrainian refugees (Top) and unemployed other refugees (Bottom); the control group is unemployed other immigrants. Estimates use data from 300 BA-operated job centers. Cross-validated optimal factor counts for the IFE models (Top-Left to Bottom-Right) are $r^* = 1$, $r^* = 0$, and $r^* = 0$. The dashed vertical line marks the launch of the Job-Turbo in October 2023. Baseline Y is the average outcome for the treatment group in September 2023. The ATT reported in each text box is the average treatment effect on the treated over the full posttreatment period with its 95% CI.

instances of unemployed clients being reached by a caseworker across the 300 BA-operated job centers (see *SI Appendix, section F* for details on the estimation of totals). The effect on the exit-to-job rate is an increase of 1.8 percentage points per month (95% CI: [1.7, 1.9]), representing a 113% increase over the pretreatment average of 1.6% and yielding an estimated 58,270 additional job placements across these centers during the 23-mo follow-up.

These effects build gradually after the program’s launch in October 2023, rise further following the internal directive issued to job centers in January 2024, and remain elevated through August 2025. A slight decline in the contact rate effects emerges beginning in July 2024, when centralized monitoring ended, but the effects remain. Contact rates increase first, followed by gains in employment—consistent with the idea that intensified counseling takes time to translate into job placements. The persistent pattern indicates that the Job-Turbo produced not only a rapid but also a sustained impact on exit-to-job rates over the 23-mo follow-up, rather than simply triggering a short-term spike in engagement or employment transitions.

For other refugees, the Job-Turbo increased the contact rate by 2.4 percentage points per month (95% CI: [1.8, 3.1]), an 8% increase over the 29% baseline. The exit-to-job rate rose by 1 percentage point (95% CI: [0.9, 1.2]), or 28% above the pretreatment mean of 3.7%. These effects translate into approximately 101,088 additional instances of clients being reached and 43,532 job exits over the 23-mo follow-up period. While smaller than those for Ukrainian refugees, these impacts remain substantial and statistically significant. In the *Mechanisms* section below, we further analyze the differences in effects on the contact rate and exit rates across the two groups.

Our main findings remain robust across a range of alternative specifications. Using unemployed Germans as a secondary control group produces similar results (*SI Appendix, Fig. A.3*). The one notable difference is that the effect on the contact rate for Ukrainian refugees is somewhat smaller in magnitude.

Estimates from simpler two-way fixed effects models (*SI Appendix, Figs. A.4 and A.5*) and from matrix-completion methods (*SI Appendix, Figs. A.6 and A.7*) align with those from the IFE model. Results are also robust to holding the denominator fixed at its pretreatment value (*SI Appendix, Figs. A.12 and A.13*), confirming that findings are not

driven by posttreatment changes in the size of the unemployment pool. Effects are also consistent across job centers with differing volumes of unemployed individuals (*SI Appendix, Figs. A.14–A.17*), ruling out the possibility that estimates are driven by unusually small or large centers. We also conduct a series of placebo checks in which the Job-Turbo program is artificially assumed to have begun prior to its actual implementation. Across all specifications, the placebo ATT estimates are substantially smaller than their corresponding posttreatment estimates. Some pretrends appear in the contact-rate outcomes for Ukrainian refugees and in the exit-to-job outcomes for other refugees, particularly in specifications with extended placebo windows, though the posttreatment estimates remain considerably larger in all cases (see *SI Appendix* for details; *SI Appendix, Figs. A.18–A.25*).

2.2. Heterogeneous Effects by Age and Gender. How did the Job-Turbo program affect different subgroups of refugees? Prior research highlights the particular challenges older and female refugees face when integrating into host-country labor markets (4, 50–53).

Fig. 2 presents ATT estimates for unemployed Ukrainian refugees (compared with other unemployed immigrants), disaggregated by age and gender. In the preprogram period, the female share was about 68% among unemployed Ukrainian refugees, 42% among other unemployed refugees, 51% among other unemployed immigrants, and 42% among unemployed German nationals. Age distributions were broadly comparable across the four groups—most had the smallest share at ages 15 to 25 and the largest in the mid-career bands (25 to 45)—with only modest deviations: Other refugees skewed slightly younger (with their smallest share at ages 55 to 65 rather than 15 to 25), while German nationals were relatively even but somewhat higher in the oldest group (55 to 65).

For Ukrainian refugees, the program significantly increased both contact and exit-to-job rates across all subgroups. Effects were somewhat smaller for the youngest (15 to 25) and oldest (55 to 65) cohorts, but otherwise similar across genders. Among female Ukrainian refugees, the monthly exit-to-job rate rose by 1.2 percentage points (95% CI: [0.9, 1.6]) for ages 15 to 25, 1.5 points (95% CI: [1.3, 1.7]) for ages 25 to 35, 2.0 points (95% CI: [1.8, 2.1]) for ages 35 to 45, 2.0 points (95% CI: [1.8, 2.2]) for ages 45 to 55, and 1.0 point (95% CI: [0.9, 1.1]) for

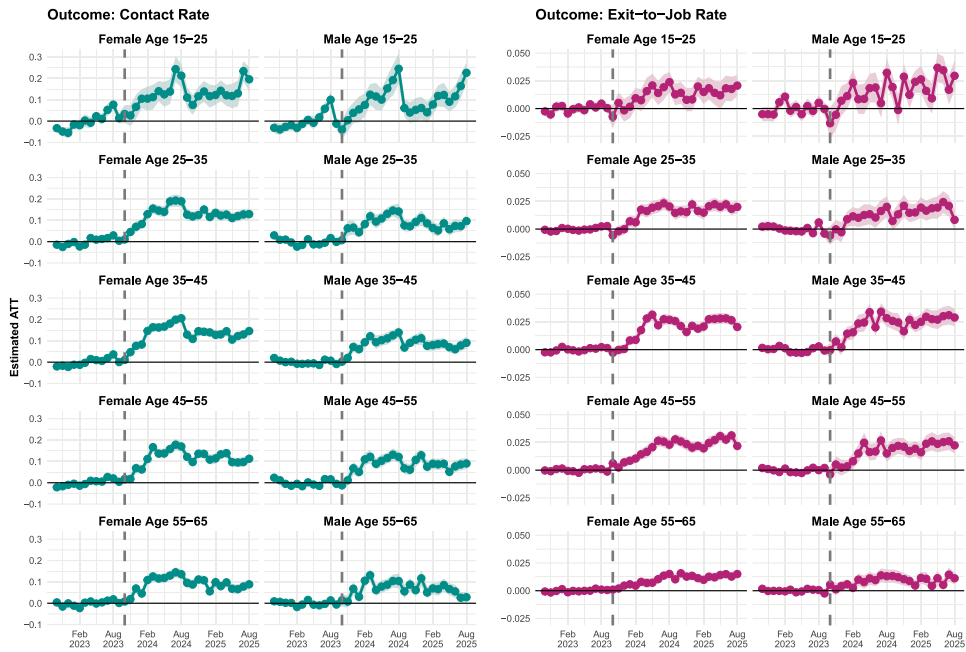


Fig. 2. Effects of the Job-Turbo by gender and age for Ukrainian refugees. Panels report ATT estimates with 95% CIs from the IFE estimator for the contact rate (Left) and the exit-to-job rate (Right), disaggregated by age and gender. The treatment group is unemployed Ukrainian refugees; the control group is unemployed other immigrants. Estimates use data from 300 BA-operated job centers.

ages 55 to 65. For male Ukrainian refugees, the corresponding increases were 1.6 percentage points (95% CI: [1.1, 2.1]) for ages 15 to 25, 1.3 points (95% CI: [0.9, 1.6]) for ages 25 to 35, 2.3 points (95% CI: [2.0, 2.5]) for ages 35 to 45, 1.7 points (95% CI: [1.4, 2.0]) for ages 45 to 55, and 0.9 points (95% CI: [0.7, 1.1]) for ages 55 to 65.

For other refugees (SI Appendix, Fig. A.26), contact-rate effects are fairly uniform across subgroups. Exit-to-job effects are more heterogeneous, with the largest gains among younger men: 2.2 percentage points (95% CI: [1.7, 2.7]) for ages 15 to 25, 1.8 points (95% CI: [1.4, 2.2]) for ages 25 to 35, and 1.1 points (95% CI: [0.8, 1.4]) for ages 35 to 45; impacts taper at older ages but remain statistically significant. Effects for women are much smaller, with CIs that include zero for ages 25 to 35 and 35 to 45; women aged 45 to 55 show a statistically significant but economically modest increase of 0.3 percentage points (95% CI: [0.2, 0.5]), while the youngest female cohort (15 to 25) exhibits a modest gain of about 0.5 points (95% CI: [0.1, 0.8]). Overall, these findings indicate that among other refugees, men—especially those under 45—benefited most from the Job-Turbo in terms of rapid transitions from unemployment to regular employment, whereas female refugees experienced much smaller and often statistically insignificant improvements. Similar patterns appear when unemployed German nationals are used as the control group (SI Appendix, Figs. A.27 and A.28).

2.3. Heterogeneous Effects by Region and Labor Market Tightness. Next, we examine whether the Job-Turbo's effects vary across job centers. As shown in SI Appendix, Figs. A.29–A.32, the program produced consistently positive impacts on both contact and exit-to-job rates across the ten administrative regions (*Regionaldirektionsbezirke*).

For unemployed Ukrainian refugees, the estimated increase in the contact rate ranges from 8.9 percentage points (95% CI: [7.3, 10.5]) in Bavaria to 15.2 percentage points (95% CI: [13.2, 17.2]) in North Rhine–Westphalia. The exit-to-job rate effects range from 1.2 percentage points (95% CI: [0.9, 1.4]) in Berlin–Brandenburg to 2.2 percentage points (95% CI: [1.9, 2.5]) in Bavaria. The largest percentage gains over baseline occur in Baden–Württemberg and the smallest in Nord. Comparable regional patterns emerge for other refugees and when Germans are used as the control group.

We also examine variation by labor market tightness, measured by the vacancy-to-unemployed ratio. Job centers are grouped into terciles based on their pretreatment ratios: low (0.18), medium (0.29), and high (0.62). As shown in SI Appendix, Figs. A.33–A.36, the program's effects were consistent across all terciles. Exit-to-job rate impacts were slightly larger in tighter labor markets, while contact rate increases were somewhat smaller.

For unemployed Ukrainian refugees, the program increased the monthly contact rate by 12.4 percentage points (95% CI: [11.1, 13.7]), 12.3 percentage points (95% CI: [8.1, 16.4]), and 8.6 percentage points (95% CI: [6.9, 10.3]) in the low, medium, and high labor market tightness terciles, respectively. Correspondingly, the exit-to-job rate increased by 1.5 percentage points (95% CI: [1.3, 1.6]) in the low tercile, 1.7 percentage points (95% CI: [1.5, 1.8]) in the medium tercile, and 2.2 percentage points (95% CI: [2.0, 2.5]) in the high tercile, indicating that stronger labor demand may amplify the employment effects of intensified counseling. Similar patterns appear for other unemployed refugees and when unemployed Germans are used as the control group.

2.4. Heterogeneous Effects by Job Skill Levels and Employment Types. Did the Job-Turbo disproportionately direct refugees into low-skilled employment? Prior research shows that refugees often experience substantial skill downgrading, working in jobs well below their qualifications and competencies (4, 54). To assess this concern, we examine the program's impact on exit-to-job rates by job skill level—low-skilled, skilled, and high-skilled—as shown in Fig. 3. The classification of job skill levels follows the German Classification of Occupations (55): low-skilled jobs involve routine work with no formal training; skilled jobs require vocational training; and high-skilled jobs encompass complex and highly complex tasks requiring advanced technical qualifications or a university degree.

For Ukrainian refugees, the Job-Turbo significantly increased exits across all job skill levels: 0.84 percentage points (95% CI: [0.75, 0.93]) for low-skilled jobs, 0.75 percentage points (95% CI: [0.70, 0.80]) for skilled jobs, and 0.1 percentage points (95% CI: [0.08, 0.12]) for high-skilled jobs. These correspond to relative increases of 102%, 170%, and 60% over pretreatment rates, respectively. For other refugees, the effects were smaller and concentrated in low-skilled jobs. The effects were 0.68

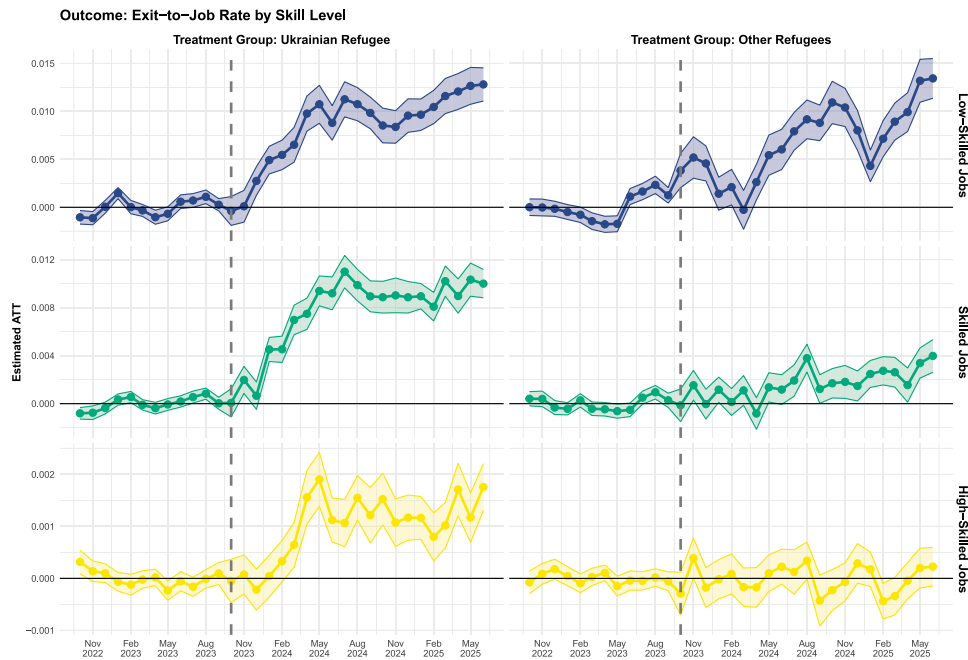


Fig. 3. Effects of the Job-Turbo by job-skill level for Ukrainian and other refugees. Panels report ATT estimates with 95% CIs from the IFE estimator for the exit-to-job rate, disaggregated by job-skill level: low-skilled (*Top*), skilled (*Middle*), and high-skilled (*Bottom*). Treatment groups are unemployed Ukrainian refugees (*Left*) and unemployed other refugees (*Right*); the control group is unemployed other immigrants. Estimates use data from 300 BA-operated job centers.

percentage points (95% CI: [0.59, 0.78]) for low-skilled jobs (a 31% increase) and 0.16 percentage points (95% CI: [0.11, 0.21]) for skilled jobs (a 15% increase), with no discernible effect on high-skilled job exits. Results are similar when using German nationals as the control group (*SI Appendix, Fig. A.37*).

We also examine program impacts by employment type—distinguishing between regular jobs subject to social security contributions and marginal employment (so-called Mini-Jobs, where earnings do not exceed the marginal earnings threshold). *SI Appendix, Fig. A.38* shows that for Ukrainian refugees, the Job-Turbo increased exits to regular employment by 1.7 percentage points (95% CI: [1.5, 1.8]) and to marginal employment by 0.03 percentage points (95% CI: [0.02, 0.04]). These effects represent relative increases of 119% and 92%, respectively, compared to pretreatment baselines—though the vast majority of exits occurred into regular jobs. For other refugee groups, the program raised exits to regular employment by 0.8 percentage points (95% CI: [0.7, 1.0]), corresponding to a 25% increase, and to marginal employment by 0.02 percentage points (95% CI: [0.01, 0.03]), a 27% increase. Results are similar when using German nationals as the control group (*SI Appendix, Fig. A.39*).

2.5. Effects on Exits to Non-Job Outcomes. A potential concern with the Job-Turbo—as with any active labor market program—is that it may have raised exit-to-job rates by prompting some refugees to leave the labor force, thereby systematically shrinking the number of jobseekers.

SI Appendix, Fig. A.40 shows ATT estimates for nonjob exits, including exits from the labor force, apprenticeships, training programs, and for other reasons (comprising mostly the termination of need for assistance). We find no significant effect on labor force exits or apprenticeships for either Ukrainian or other refugees. However, the program somewhat increased exits into training programs: by 1.0 percentage points (95% CI: [0.6, 1.4]) for Ukrainian refugees—equivalent to a 7% increase over the baseline—and by 0.7 percentage points (95% CI: [0.5, 0.9]) for other refugees, representing a 10% increase. These effects taper over time. For Ukrainian refugees, the Job-Turbo also reduced exits for other reasons by -1.0 percentage points

(95% CI: [-1.1 , -0.9]), which is consistent with a shift toward job placements. For other refugees, effects on exits for other reasons were close to zero and statistically insignificant.

These findings suggest that Job-Turbo boosted both employment and training participation without encouraging labor force withdrawal. Results are broadly similar when Germans are used as the control group (*SI Appendix, Fig. A.41*), with one notable difference being a small but statistically significant decrease in labor-force exits with this secondary control group.

2.6. Effects by Sustained Employment. Did the Job-Turbo facilitate sustained employment or primarily lead to short-term placements? One potential concern is that caseworkers, under pressure to boost placement rates, may have prioritized speed over placement quality—resulting in early job separations.

We assess two outcomes related to sustained employment. First, we examine the exit-to-job rate conditional on continuous employment—that is, transitions into employment followed by at least 3, 6, or 12 mo of uninterrupted employment (which may include job switches without an intervening spell of unemployment). As shown in *Fig. 4*, the Job-Turbo increased exit rates for Ukrainian refugees by 1.4 percentage points (95% CI: [1.3, 1.5]) for exits followed by at least 3 mo of continuous employment (116% above baseline), 1.2 percentage points (95% CI: [1.1, 1.3]) for 6 mo (118%), and 0.8 percentage points (95% CI: [0.7, 0.9]) for 12 mo (93%).

For other refugees, the respective increases were 0.6 percentage points (95% CI: [0.5, 0.7]), 0.4 percentage points (95% CI: [0.3, 0.5]), and 0.2 percentage points (95% CI: [0.1, 0.2]), corresponding to gains of 21%, 18%, and 9%, respectively. Similar patterns are observed when using German nationals as the control group (*SI Appendix, Fig. A.42*).

Second, we analyze the share of job exits resulting in sustained employment—a proxy for placement quality, indicating whether the marginal placement induced by the Job-Turbo is more likely to lead to lasting employment. If placement quality had declined, we would expect this share to fall. *SI Appendix, Fig. A.43* shows, if anything, the opposite: For Ukrainian refugees, sustained employment shares increased by 3.0 percentage points (95% CI: [1.9, 4.1]) at 3 mo, 5.4 percentage points

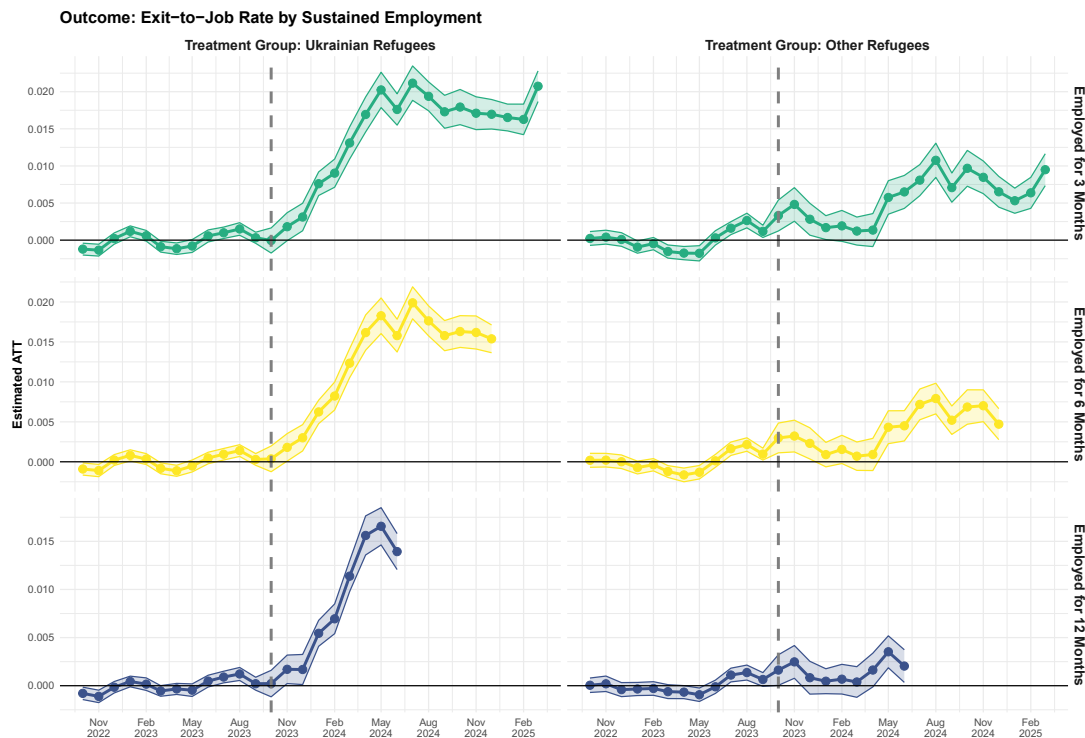


Fig. 4. Effects of the Job-Turbo by sustained employment for Ukrainian and other refugees. Panels report ATT estimates with 95% CIs from the IFE estimator for the exit-to-job rate, conditional on minimum continuous employment durations. The *Top* panel considers exits followed by at least 3 mo of continuous employment; the *Middle*, at least 6 mo; and the *Bottom*, at least 12 mo. Treatment groups are unemployed Ukrainian refugees (*Left*) and unemployed other refugees (*Right*); the control group is unemployed other immigrants. Estimates use data from 300 BA-operated job centers.

(95% CI: [4.0, 6.9]) at 6 mo, and 7.0 percentage points (95% CI: [5.3, 8.6]) at 12 mo—corresponding to relative gains of 3.5%, 7.4%, and 11.2%, respectively. For other refugees, we find no statistically significant effects on sustained employment shares at 3 or 6 mo, and a borderline insignificant negative effect of -1.5 percentage points (95% CI: $[-3.1, 0.2]$) at 12 mo, suggesting slightly weaker employment durability at the intensive margin. Results are similar when using German nationals as the secondary control group (*SI Appendix, Fig. A.44*), with one difference: For other refugees, there is a very small but statistically significant negative effect on sustained employment shares at both 6 and 12 mo.

Overall, these findings indicate that the Job-Turbo not only raised initial job placements but also improved the durability of employment, particularly for Ukrainian refugees. The program's impacts thus reflect genuine gains in sustained employment rather than short-lived or low-quality placements.

2.7. Effects by Duration of Unemployment. Was the Job-Turbo equally effective for individuals with varying lengths of prior unemployment? Duration dependence is well documented: The likelihood of re-employment declines as unemployment lengthens, due to factors like skill loss, lower search intensity, and negative employer perceptions (56, 57). Analyzing heterogeneous effects by duration helps assess whether the program mitigated these structural barriers.

We estimate program impacts on exit-to-job rates by baseline unemployment duration. This also serves as a robustness check by controlling for differences in unemployment history across groups. This is important because, on average, Ukrainian refugees—and to a lesser extent other refugees—have been unemployed for a shorter period than the other groups. We define four categories: short-term (under 3 mo), moderately short-term (3 to under 6 mo), medium-term (6 to 12 mo), and long-term unemployed (over 12 mo). Results, shown in *Fig. 5*, indicate that the Job-Turbo was effective across a wide range of unemployment durations.

For Ukrainian refugees, the Job-Turbo program significantly increased exit-to-job rates across all unemployment durations. Specifically, it raised exit rates by 1.8 percentage points (95% CI: [1.6, 2.0]) for those unemployed less than 3 mo, 1.8 percentage points (95% CI: [1.6, 2.0]) for 3 to 6 mo, 1.5 percentage points (95% CI: [1.3, 1.6]) for 6 to 12 mo, and 0.7 percentage points (95% CI: [0.6, 0.8]) for those unemployed for over 12 mo. These effects correspond to relative gains of 99%, 126%, 133%, and 114%, respectively, compared to pretreatment levels.

Effects for other refugees follow a similar pattern, though somewhat smaller in magnitude. The Job-Turbo increased exit-to-job rates by 1.3 percentage points (95% CI: [1.1, 1.5]) for those unemployed for less than 3 mo, 1.0 percentage points (95% CI: [0.8, 1.2]) for 3 to 6 mo, 0.6 percentage points (95% CI: [0.5, 0.8]) for 6 to 12 mo, and 0.2 percentage points (95% CI: [0.1, 0.3]) for those unemployed longer than 12 mo. These effects correspond to relative gains of 26%, 28%, 24%, and 15%, respectively, compared to pretreatment levels. Similar patterns hold when using Germans as the control group (*SI Appendix, Fig. A.45*).

2.8. Spillover Effects. Could the gains from the Job-Turbo program for refugees have come at the expense of nonrefugee job seekers—namely, German nationals and other immigrants? We focus on two potential spillover mechanisms. First, resource reallocation: If job centers were operating near capacity, they may have redirected counseling and placement resources toward refugees without proportional increases in staffing. Second, competition-induced displacement: Increased job search activity among refugees may have intensified competition for available jobs, potentially crowding out other job seekers when local labor demand is relatively inelastic. While such spillovers are important for understanding overall program impacts, they are rarely quantified. Notable exceptions include (35, 48, 58, 59), who find mixed evidence on displacement effects.

To examine spillovers, we leverage the idea that any negative externalities—via resource reallocation or displacement—should be

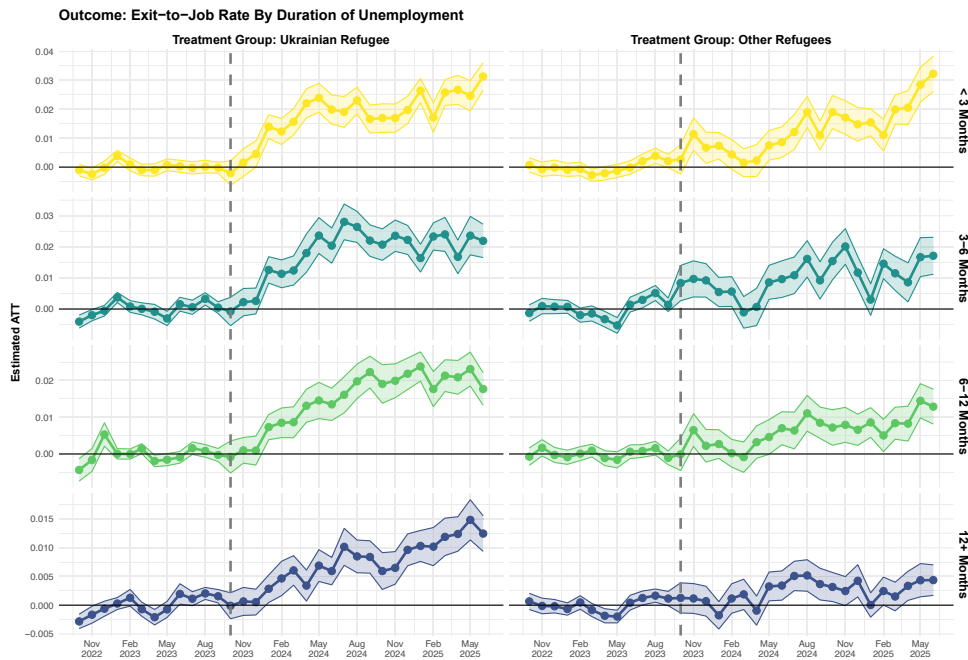


Fig. 5. Effects of the Job-Turbo by unemployment duration for Ukrainian and other refugees. Panels report ATT estimates with 95% CIs from the IFE estimator for the exit-to-job rate, disaggregated by unemployment duration. From *Top to Bottom*: under 3 mo; 3 to under 6 mo; 6 to under 12 mo; and 12 mo or more. Treatment groups are unemployed Ukrainian refugees (*Left*) and unemployed other refugees (*Right*); the control group is unemployed other immigrants. Estimates use data from 300 BA-operated job centers.

most pronounced in job centers with a higher pretreatment share of refugee clients. These centers faced a larger, refugee-focused operational shock, diverting counselor time and channeling more refugee applicants into the same local vacancy pool; using pretreatment shares proxies for exposure without postprogram contamination. If spillovers exist, outcomes for nonrefugees—such as contact and exit-to-job rates—should deteriorate more in these centers following the rollout of the Job-Turbo.

To test for spillover effects, we estimate separate regression models for German nationals and for other immigrants. Each model includes an interaction between the pretreatment refugee client share and a posttreatment indicator, along with controls for the interaction of the posttreatment indicator with other pretreatment job center characteristics: overall size (total clients), labor market tightness (vacancy-to-unemployed ratio), workload (client-to-staff FTE ratio), and baseline performance (pretreatment contact and exit rates). All specifications incorporate job center and year-month fixed effects (see *SI Appendix* for details). Evidence of negative spillovers would appear as a negative, statistically significant coefficient on the interaction between the pretreatment refugee share and the posttreatment indicator, indicating that nonrefugee job seekers fared worse in centers with larger refugee populations after the Job-Turbo rollout.

SI Appendix, Table A.9 shows no such pattern. For both German job seekers and other immigrants, the coefficients on the interaction between the pretreatment refugee share and the posttreatment indicator are near zero and statistically insignificant across all outcomes: overall contact rates, the aggregate exit-to-job rate, and exit-to-job rates disaggregated by low-skilled, skilled, and high-skilled placements. In other words, postprogram changes in these measures for nonrefugee job seekers are indistinguishable between job centers with high versus low refugee concentrations. *SI Appendix, Figs. A.46–A.54* corroborate these findings through a graphical analysis that leverages the joint distribution of relevant moderators and plots outcome time series by refugee share tercile. Even in job centers that combined a high pretreatment refugee share with signs of capacity constraints or weak labor demand, we find no evidence of reduced contact rates or exit-to-job rates for nonrefugee job seekers consistent with resource reallocation or competition-driven displacement. We note, however, that our spillover analysis is limited

to contact and employment outcomes for unemployed nonrefugees; we do not examine potential effects on other labor market outcomes such as wages or unemployment duration, nor do we assess spillovers for individuals who are already employed.

3. Mechanisms

What mechanisms account for the impacts of the Job-Turbo program? Like many labor-market interventions, the Job-Turbo bundles intensified counseling, early activation (with the potential for sanctions), credential deferral, wage subsidies, and employer engagement. We examine various channels to gauge their potential contributions to the observed effects.

3.1. Wage Subsidies. One potential mechanism is the expanded use of wage subsidies. In Germany, subsidies comprise employer grants (*Eingliederungszuschüsse*) and jobseeker incentives (*Einstiegs geld*), both shown to improve employment outcomes (13, 60–62). Fig. 6 shows that the Job-Turbo increased exits to both subsidized and unsubsidized jobs. For Ukrainian refugees, most gains are in unsubsidized employment (increase of 1.2 percentage points; 95% CI [1.1, 1.3]); subsidized exits also rose by 0.42 percentage points (95% CI [0.39, 0.46]), and the subsidized share of exits increased by 9 percentage points (95% CI [7.9, 10.0]). Note that the large majority of exits are into unsubsidized jobs. Among other refugees, increases are smaller in both unsubsidized (0.73 percentage points; 95% CI [0.63, 0.84]) and subsidized jobs (0.09 percentage points; 95% CI [0.06, 0.12]), with no detectable change in the subsidized share. These patterns suggest that subsidies played at most a limited role in explaining the overall placement gains from the Job-Turbo.

3.2. Sanctions. Prior research shows that sanctions—and even sanction warnings—can shorten unemployment spells and raise exits to employment, possibly at the cost of lower postunemployment job duration and earnings (e.g., refs. 63–65). In our setting, however, sanctions are unlikely to explain the effects: As documented in *SI Appendix, Fig. A.56*, sanction rates for refugees were very low, and

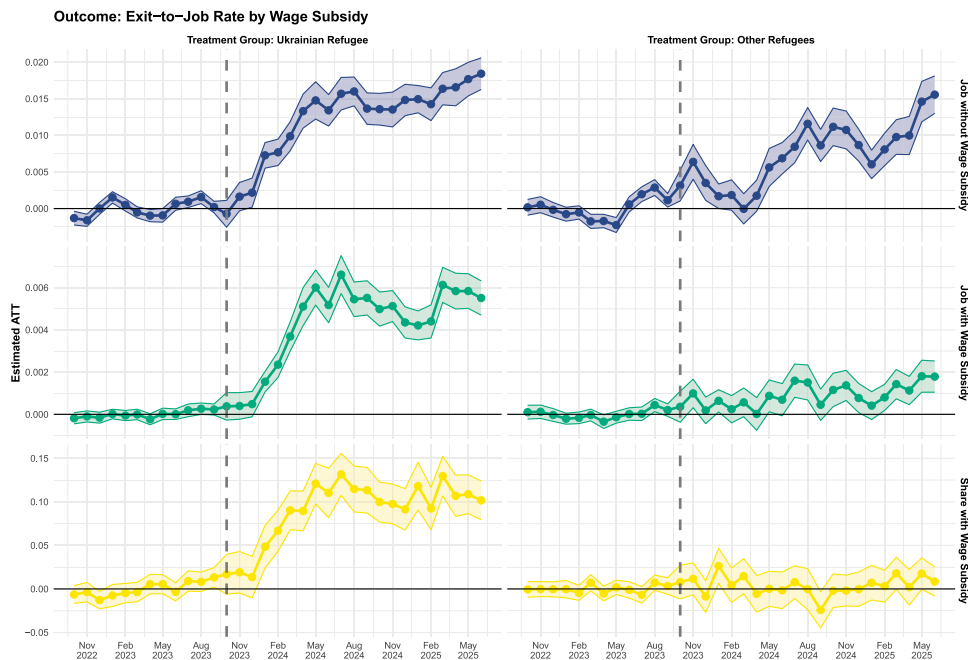


Fig. 6. Effects of the Job-Turbo by job type with and without wage subsidies for Ukrainian and other refugees. Panels report ATT estimates with 95% CI from the IFE estimator for exit-to-job rates, disaggregated by job type. The *Top* panel shows exits to jobs without wage subsidies; the *Middle*, jobs with wage subsidies; and the *Bottom*, the share of exits involving a wage subsidy. Treatment groups are unemployed Ukrainian refugees (*Left*) and unemployed other refugees (*Right*); the control group is unemployed other immigrants. Estimates use data from 300 BA-operated job centers.

although they rose slightly in the postperiod, the increase was similar across all four groups.

3.3. Counseling Intensity. Previous research shows that counseling can enhance job finding by reducing information and search frictions, increasing vacancy referrals, providing structured application support and interview preparation, and facilitating targeted employer outreach. These mechanisms help jobseekers identify suitable vacancies, prepare strong applications, and sustain both search effort and motivation (29, 31–33, 48, 66). Fig. 7 shows that while we observe an increase in clients contacted per caseworker around the Job-Turbo rollout, the average staffing levels across job centers remained flat. This suggests that existing caseworkers absorbed the added workload, likely through productivity gains, efficiency improvements, or overtime. These findings are consistent with survey evidence reporting increased caseworker workloads under the Job-Turbo (67).

As staffing was stable, we can estimate the additional workload per caseworker induced by the Job-Turbo. Based on our calculations, the program generated about 591,676 additional instances of unemployed refugee clients being reached by a caseworker over 23 mo across the 300 BA-operated job centers—an average of 25,725 per month, or about 86 per job center. With an average of 185 FTE staff per center prerollout, this corresponds to approximately 0.46 additional clients contacted per FTE per month. Against a baseline of about 1,181 monthly client contacts (6.4 per FTE), this is a 7.2% increase that was absorbed without measurable staffing changes.

If preperiod slack had driven the rise in contacts, effects should be larger in centers with low client-to-staff ratios; instead, *SI Appendix, Figs. A.57–A.60* show similar impacts across that distribution. Likewise, *SI Appendix, Figs. A.61–A.64* show comparable effects in centers with and without refugee- or employer-specialized teams, pointing away from specialization (and an associated increase in counseling quality) as the primary driver.

Assuming that the Job-Turbo program influences job exit only through increased counseling, we estimate an instrumental-variables (IV) model to quantify the marginal return to counseling. Specifically, we regress the exit-to-job rate on the contact rate with job-center-by-group

and month fixed effects, instrumenting contacts with the Job-Turbo rollout indicator (*SI Appendix, Tables A.6–A.8 and Fig. A.65*).

For Ukrainian refugees overall, the local average treatment effect (LATE) indicates that a 1-percentage-point increase in the contact rate raises the exit-to-job rate by about 0.16 percentage points (95% CI [0.145, 0.174]). For other refugees, the response is roughly 2.7 times as large—about 0.43 percentage points per 1-percentage-point contact increase (95% CI [0.35, 0.52]). Conditional on the same rise in contact intensity, exits therefore increase more for other refugees than for Ukrainians.

Comparing our LATE estimates to prior studies is complicated by differences in interventions and outcome measures, and the magnitudes are therefore not directly comparable. Still, our estimates are somewhat larger but broadly consistent with prior evidence (32, 33, 35). For example, ref. 35 show that halving the caseworker-to-unemployed ratio increases monthly reemployment by 1.5 percentage points, while Schiprowski (32) find that missing a single meeting lengthens unemployment by about 5%. Other studies report more limited impacts (34, 48, 66). Overall, this suggests that our estimates fall toward the upper end of this broad range.

The aggregate effects conceal marked gender heterogeneity. Among Ukrainians, the LATEs are nearly identical for women and men—around 0.15 percentage points (95% CI [0.13, 0.16]) and 0.18 percentage points (95% CI [0.16, 0.20]) per 1-percentage-point contact increase, respectively. For other refugees, however, the gap is striking: about 0.10 percentage points for women (95% CI [0.053, 0.136]) versus roughly 0.62 percentage points for men (95% CI [0.457, 0.786]).

Two insights follow. First, Ukrainians' larger total exit response to the Job-Turbo program reflects a stronger first stage: The program raised the share of clients contacted far more for them than for other refugees. However, the marginal return of contact is actually higher for other refugees. The heavier increase in contacts for Ukrainians is consistent with implementation priorities: Although the January directive to job centers referenced all refugees, the program was conceived and branded to address the large number of Ukrainian arrivals, making it plausible that job-center caseworkers focused more attention on this group.

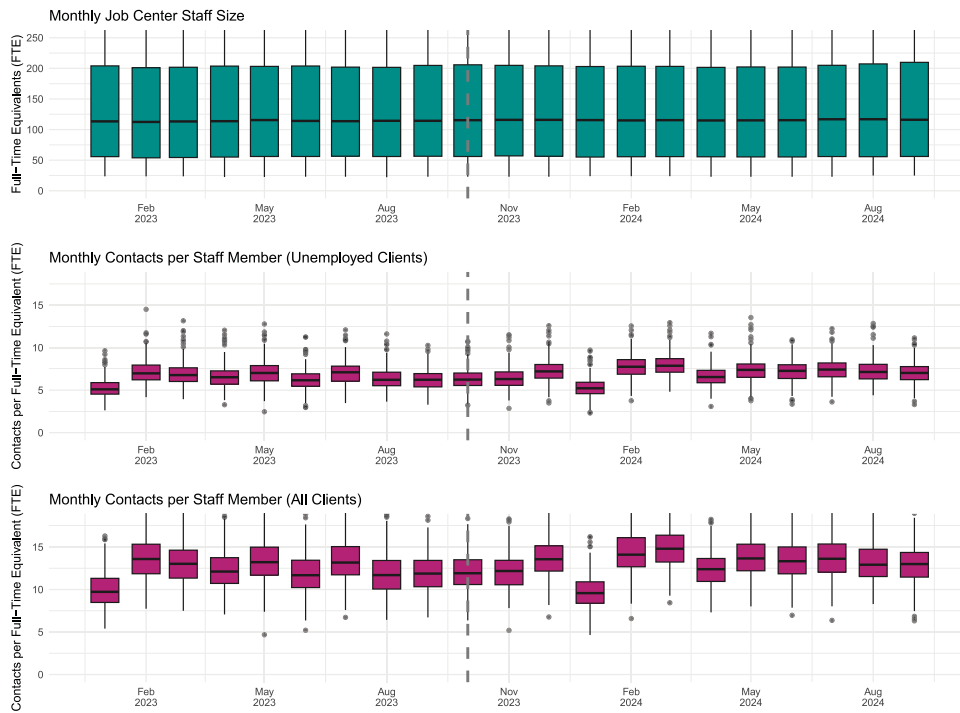


Fig. 7. Job center staffing before and after the Job-Turbo. The *Top* panel shows the monthly distribution of job-center staff size (full-time equivalents, FTE). The *Middle* and *Bottom* panels show the monthly distribution of clients contacted per FTE across job centers for unemployed clients and for all clients, respectively. Estimates use data from 300 BA-operated job centers.

Second, while additional contacts produce economically meaningful gains across groups, gender patterns diverge sharply: Effects are nearly uniform by gender for Ukrainians, but among other refugees men benefit far more. This pronounced gender gap aligns with evidence that refugee women often face a “triple disadvantage”—as migrants, as refugees, and as women (18, 51, 68). Barriers include i) childcare responsibilities that reduce labor-market participation; ii) slower language acquisition and weaker networks, as women begin language courses later, complete them less often, and have fewer contacts with Germans; and iii) lower transferability of human capital, since refugee women are more likely to have worked in regulated sectors such as health and education where foreign credentials are difficult to recognize and German proficiency is essential (68). In contrast, refugee men more often have experience in male-dominated industries such as transport, construction, agriculture, and certain manufacturing, which require fewer certifications and weaker language skills.

In our data, men and women among other refugees have similarly low education levels compared with Ukrainians, and their job placements are concentrated in low-skill sectors that are strongly gender-segregated. Ukrainian refugees—women and men alike—have substantially higher educational attainment and more diverse occupational backgrounds (69). Consistent with this, their placements span low-skill, skilled, and high-skill jobs and are therefore less constrained by Germany’s gender segregation in low-skilled employment. Since higher-skill jobs demand recognized credentials, language proficiency, and sector-specific adaptation, counseling yields fewer immediate exits for Ukrainians. For other refugees, the same counseling more readily converts into low-skill job placements in male-dominated sectors. These structural differences, reinforced by childcare constraints, can help explain why counseling generates larger exit-to-job gains for men among other refugees, but uniform gains across genders among Ukrainian refugees. Supporting this interpretation, *SI Appendix, Fig. A.66* shows that Job-Turbo effects for Ukrainians are relatively uniform across all three job skill levels for both genders, whereas for other refugees the impacts are concentrated in low-skill placements for men.

It is important to note that the IV estimates rest on an exclusion restriction: conditional on the two-way fixed effects, the Job-Turbo influences exits only through increases in counseling contacts. If the program also raised exits via other channels, those noncounseling gains would be misattributed to counseling, biasing the LATE upward. Under the plausible assumption that any such channels, if anything, increase exits, our LATEs are best interpreted as an upper bound on the causal effect of increased counseling intensity on exits. In addition, the IV coefficients identify local average treatment effects for compliers—job-center-by-group observations whose contact intensity shifted with the rollout—so external validity is limited.

Despite these limitations, the balance of evidence points to intensified counseling as one important mechanism behind the observed improvements in job placement, with subsidies and sanctions playing, at most, ancillary roles. We do *not* claim, however, that counseling intensity is the sole operative channel. While we can largely rule out sanctions and find only a limited role for subsidies, other components of the Job-Turbo—such as enhanced employer engagement, changes in integration strategies, or complementary activation tools—may also have contributed to the overall effects. Because these channels are difficult to isolate with our data, our estimates should be read as highlighting the important role of counseling, not as excluding additional mechanisms.

4. Conclusion

This study examines the effects of Germany’s Job-Turbo—a large-scale initiative to accelerate refugee integration through intensified employment counseling. The program substantially increased caseworker–client contact and job placements, with especially large effects for Ukrainian refugees. Effects were broad-based—spanning age, gender, region, labor-market tightness, skill levels, and employment types—and extended to the long-term unemployed. Moreover, the gains were durable: Program-induced exits were more likely to be followed by continuous employment at three, six, and twelve months. We also find smaller but meaningful gains for other refugees, concentrated in low-skilled placements among

males. Finally, we find no evidence of negative spillovers on contact rates or exit-to-job rates for unemployed German or other immigrant job seekers within our observation window, whether through resource reallocation or displacement—though we cannot rule out spillovers on other outcomes such as wages or on groups beyond the unemployed.

To what contexts do these findings generalize? They apply most directly to settings akin to Germany during the study window: A comparatively well-educated Ukrainian caseload with swift work and mobility rights under the European Union's Temporary Protection Directive, and highly mobilized labor market institutions (nationwide PES, standardized courses, centralized monitoring). Comparable effects are most likely where i) public employment services can rapidly scale contact intensity and mobilize caseworkers for short-run additional effort, and ii) refugees gain prompt legal access to work and are encouraged to enter the labor market quickly. The macroeconomic backdrop also matters: The study period did not coincide with a boom; unemployment rose modestly in 2024. Detecting sizable gains in this environment suggests counseling can be effective even in softening labor markets, though magnitudes may attenuate in deep downturns and could strengthen in tighter markets with more vacancies. Because the additional contacts were largely absorbed by existing staff, sustaining or replicating similar effects may require additional staffing and durable operational investments.

Heterogeneity patterns also caution against blanket extrapolation. For Ukrainians, effects are large and strikingly uniform across age, region, job skill levels, and unemployment duration. It would be wrong, however, to infer that the program was effective only for Ukrainians: We also find meaningful gains for other refugees, although concentrated among younger men. Consistent with our IV estimates, conditional on an additional contact the exit response is stronger for other refugees than for Ukrainians. This suggests that the counseling “technology” can transfer to other male refugee groups facing similar search frictions. By contrast, the weaker response among women in the other-refugee group underscores the limits of counseling alone: The low conversion of contacts into exits likely reflects a “triple disadvantage” and structural barriers that counseling cannot easily overcome without complementary support.

Our study has several limitations. First, we rely on job-center-by-nationality-group aggregates rather than individual-level panel data, which limits our ability to study heterogeneity beyond the disaggregation by gender, age, region, prior unemployment duration, and job-skill levels reported here. Second, the study is observational. We estimate effects using a difference-in-differences design with interactive fixed effects to absorb time-invariant confounders, common shocks, and their estimated interactions; nonetheless, unobserved time-varying differences across groups may persist and could bias the estimates. Although our results are robust across a range of specifications and across two control groups, individual-level panels would allow finer control of potential time-varying confounders, including residency status and months since arrival, which we can expect to correlate with labor market outcomes. Better yet, future work should leverage experimental approaches to evaluate intensified job-search assistance for refugees (e.g., ref. 11). Third, our observation window spans only 23 mo after the launch of the Job-Turbo, allowing us to assess short- to medium-term impacts but not longer-run outcomes; whether these gains persist beyond our study period remains an open question.

Our findings contribute to theory by extending the relevance of employment counseling to refugee populations, who face distinct

informational and structural barriers. While much prior work concerns citizens or long-term residents (25–32, 35), we show that intensified counseling can improve both job-finding rates and the durability of employment for refugees, consistent with models emphasizing early institutional engagement and structured job search support.

From a policy perspective, the results suggest that early, active, and scalable employment support can be an effective and fiscally viable tool for refugee integration at scale. A marginal cost–benefit analysis (SI Appendix, section H) indicates that under standard assumptions after 12 mo the average savings in welfare expenditures and additional tax revenue per newly employed refugee begin to exceed program costs, with benefits accumulating thereafter. These findings stand in contrast to many integration programs with more limited impacts and challenge the prevailing “qualification-first” paradigm dominant in many European countries by showing that a pragmatic middle path—prioritizing early labor market entry after basic language training—can yield sizable and sustained gains. This is consistent with existing evidence suggesting that government policies that boost labor market access early in the integration journey are particularly impactful (6–9). However, facilitating rapid entry into the labor market and the (on-the-job) acquisition of language skills are not mutually exclusive, and how best to combine these approaches to catalyze sustainable employment in jobs matching the varied skills of refugees is an important question for future research.

Finally, an important next step is to understand when and for whom contacts are most effective. Progress will require micro-data linking refugees to caseworkers and to employers so that researchers can study heterogeneity by job seeker characteristics, caseworker practices, and the match between the two. Such evidence can inform how to target counseling, which complementary services to bundle, and what operational investments are needed to sustain effects without overextending frontline staff.

Data, Materials, and Software Availability. Replication code and redacted data, consistent with confidentiality requirements, are available at <https://doi.org/10.7910/DVN/SX5LQ2> (70).

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The authors declare no competing interest.

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