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Beyond the Stigma of War: Russian Migrants in Kazakhstan's Labour Market

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Abstract

In this study, we investigate the employers' attitude towards Russian migrants in Kazakhstan's labor market. We conduct a field experiment by sending over 1600 fictitious job applications to real job openings posted on one of the largest job search portals in the country. The job applicants included a local Kazakh, a local Russian, a migrant from Kyrgyzstan, and a migrant from Russia. We found significant differences in employment outcomes across ethnic groups in the selected occupations. Specifically, Russian migrants were significantly less likely to receive an interview invitation. Interestingly, sympathy towards Russian applicants was weakest for occupations located more than 830 km from the Russian borders and those requiring high-skilled workers. Our findings provide evidence for less favorable attitudes towards migrant workers from Russia during the Russia-Ukraine conflict.

Key words: discrimination, labour market, migrant workers, field experiment.

JEL codes: C93, J71, J78, J64

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1 Introduction

Prejudice and discrimination against migrant workers are still a significant issue in many societies. It affects individuals and communities in various areas of life, including employment, education, healthcare, and housing. Despite ongoing efforts to combat discrimination, racial inequality is still apparent in different aspects of the labor market. It remains a significant barrier to equal opportunities and social justice, hindering the full realization of human rights (Bertrand and Mullainathan (2004)).

The mobilization announced in Russia on 21 September 2022 caused many thousands of Russians fit to join the army to flee the country. As a result, it created humanitarian problems not only for the migrants themselves but also for the host countries. Kazakhstan, which shares the longest continuous border in the world with Russia, became one of the main destinations for the Russian migrants. According to official statistics, around 420,000 Russians have entered Kazakhstan since the mobilization started. Some of the migrants used Kazakhstan as a transit country to move to other destinations like Turkey, Uzbekistan, Kyrgyzstan, and Azerbaijan. Others found employment in Kazakhstan and decided to stay in the country.

The present study aims to investigate whether employers in Kazakhstan view job seekers from Russia differently from domestic workers, particularly in the context of the Russia-Ukraine conflict. The arrival of migrant workers can affect the local job market in different ways. On the one hand, it can lead to social tensions by displacing local workers. On the other hand, it can also bring benefits, such as an opportunity to leverage the influx of skilled workers and businesses in sectors like education, medicine, consulting, and IT, which typically face a shortage of qualified candidates.

Employers' attitudes play a crucial role in the integration of foreigners into the host country's labour market. Some people believe that Russian specialists are more skilled than domestic ones in certain sectors, and that the quality of education in Russia is better than that obtained in educational institutions in Kazakhstan. [1] These perceptions can negatively affect the employment prospects of domestic workers, even if they possess similar skills. The quality of education in Russia is also viewed favorably when compared to Kazakhstan, with Russia ranking 36th among the best

[1] Studying in Russia is a prestigious and advantageous experience because of the country's well-regarded reputation for educational excellence (Amini and Commander (2012)).

countries for education according to a ranking system, while Kazakhstan ranks lower. (USNews Ranking (2022)). However, opinion polls suggest that only a small part of the population in Kazakhstan, primarily the elderly, support the Russia-Ukraine war (Demoscope (2022, 2023)). This stance may negatively impact employers' perceptions of Russian immigrants.

The purpose of this study is to analyze if there is any discrimination against migrant job seekers from Russia in comparison to local job searchers during the hiring process, especially in the context of the ongoing war in Ukraine. To conduct this research, a field experiment was conducted by submitting fictitious job applications with random characteristics to advertised job openings on a large job search website in Kazakhstan. The difference in finding jobs between native and migrant job seekers could be attributed to ethnic or immigrant discrimination. In order to consider these factors, four identical applications were submitted to job openings with the only difference being the ethnicity and birth country of the applicant - a local Kazakh, a Russian from Kazakhstan, a Russian from Russia, and a Kyrgyz from Kyrgyzstan. The ethnicity of the applicant was indicated by their name - a Kazakh-sounding male name, a Russian-sounding male name, and a Kyrgyz-sounding male name. This will help to determine the extent of discrimination in the labor market against Russian immigrants. The data was collected during the months of January and February 2023 by applying for job vacancies in five different occupations, such as cashiers, accountants, programmers, managers, and administrators in several regions of Kazakhstan.

In total, over 1600 job applications were sent, the responses to which were used to assess the extent of differential treatment of job applicants of different ethnic groups by the differences in the number of invitations for an interview. Our analysis revealed that Russian applicants were less likely to be offered employment compared to Kazakh applicants. Additionally, we found that the alternative fictitious applicants were more likely to receive interview invitations. We also observed that the relative call-back rate for a Russian applicant is higher for lower-level positions than for higher-level positions. Furthermore, our regression analysis indicated that the ethnic difference in call-backs is linked to job location-specific characteristics and the proportion of CVs reviewed by employers for each applicant.

2 Literature review

2.1 Ethnic discrimination in the labour market: Empirical patterns

Discrimination based on race, ethnicity, gender, sexual orientation, age, or national origin is a major social issue. This problem is prevalent in both developed and developing countries, affecting various aspects of life such as employment, public goods and services, education and healthcare access, rental housing, and social attitudes. Discrimination in any form can have a negative impact on people's opportunities, well-being, and employment outcomes. After reviewing the research literature closely related to our study, we found the following research themes.

There are several sources of discrimination identified in the literature. Studies suggest that employer, employee, and consumer discrimination rank among the main sources of discrimination (see Becker (1957); Altonji and Blank (1999)). Employer discrimination is the primary form of discrimination in the labour market which may happen at various stages of employment with its most evident forms being related to hiring (for review, see Neumark (2012, 2018)) and employer decisions that affect earnings and career advancement of members of discriminated groups (Blinder (1973); Bratsberg and Terrell (1998)). Employee discrimination occurs when members of some social groups, usually privileged or majority groups, are prejudiced against members of other groups, usually minority or disadvantaged groups. For example, there is a compensating wage premium for whites for working with blacks (Ragan and Tremblay (1988); Carrington and Troske (1998)). Studies show significant evidence of customer discrimination: the value of baseball cards of black and Hispanic players is significantly lower than that of comparable white players (Nardinelli and Simon (1990)), attendance at home games is positively related to the share of white players on the roster of NBA teams (Kahn and Sherer (1988)).

The implications of discrimination for labour market outcomes has been the focus of extensive research (Baert (2018); Bertrand and Duflo (2017)). The negative impact of discrimination on labour market performance can bring about a decrease in earnings and employment opportunities. Regarding the former, extensive evidence shows that discrimination reduces earnings of disadvantaged groups (Neumark et al. (1996); Charles and Guryan (2008)). The adverse effect of discrimination on employment opportunities is usually experienced in the recruitment process

when employer decisions are influenced by characteristics of job applicants (Quillian et al. (2017)). As such, white names can receive more call-backs for interviews than similarly qualified blacks in the US labor market, and this discriminatory behavior may vary across job vacancies (Bertrand and Mullainathan (2004); Kline et al. (2022)). Employer decisions about interview invitations may be also influenced by the applicant's sexual orientation. For example, gay applicants in Greece are found to have a significantly lower chance of receiving an invitation for an interview (Drydakis (2009)).

Another strand of the labour market discrimination literature is the one suggesting the presence of discrimination against migrant workers in host countries. Many of these studies provide evidence on discrimination against immigrants during recruitment and hiring processes. Turkish migrants in Germany experience sizable levels of discrimination in application for internship, so migrants have to send 14% more applications than native workers (Kaas and Manger (2012)). Job applicants with African-sounding names are significantly less likely to be asked for an interview in Ireland (McGinnity and Lunn (2011)). Foreign named resumes elicited much less callbacks than similar resumes with native-sounding names in Canada (Oreopoulos (2011)). There may also exist discrimination against migrants in Australia at the initial stages of employment, with Chinese and Middle Eastern migrants submitting 50% more applications in order to receive the same number of callbacks as native candidates (Booth et al. (2011)).

2.2 Correspondence tests

The correspondence test approach, also known as the simulation of communication between job applicants and employers, is a method used to detect discrimination at the initial stages of hiring. This experimental method is regarded as the most efficient strategy for detecting workplace discrimination (Neumark (2018); Baert (2018)). The correspondence test is a form of real-life social experiment that can provide statistical data on discriminatory treatment. The methodology provides a unique opportunity to conduct tests by highlighting the circumstances in which unequal treatments occur and providing a powerful means of isolating causal mechanisms. In this method, two or more individuals are matched for all relevant characteristics except for the one that is

expected to lead to discrimination (Riach and Rich (2002)). The pseudo-job seekers are typically matched on demographic attributes, such as age, sex, job experience, education, and marital status. The goal is to produce pairs of testers who are identical in all relevant characteristics so that any systematic difference in treatment within each pair can be attributed only to the effects of the group characteristic. To ensure similarity between the applications, all characteristics except ethnicity are kept constant between the pairs of applications. Employers' reactions are then typically measured by written responses or call-backs. Researchers are able to understand which characteristics are important to employers and when those characteristics are similar enough to make majority and minority applicants indistinguishable. Therefore, applicants must be contrasted based on all pertinent characteristics.

Previous correspondence testing studies have already provided noteworthy insights and documented a significant relationship between ethnicity and several economic outcomes. Jowell and Prescott-Clarke (1970) who first introduced correspondence testing revealed that Asian employees faced a net discrimination within the English labour market relative to the British-born employees. Moreover, studies conducted by the International Labour Organization using correspondence tests found that minorities experience significant discrimination in the labour markets of major European regions (Bovenkerk (1992)). Minorities usually experience discrimination at the initial stage for interview selection. For example, individuals from both non-native and ethnic minority backgrounds in Greece encounter similar limitations in accessing certain occupations and are often placed in lower-paying job positions (Drydakis (2010) and Drydakis (2017)). Arabs in Sweden faced a net discrimination of 29% in the recruitment process (Carlsson and Rooth (2007)).

Comparable patterns are observed in the US and Australian labour markets (Kline et al. (2022)). Bertrand and Mullainathan (2004) conducted a correspondence test in the USA by constructing two sets of matched resumes reflecting applicant pools of two skill levels. In an experiment conducted in Chicago and Boston, researchers used African-American and majority-American names to signal the race of male and female job applicants. The study focused on job advertisements for sales, administrative support, clerical, and customer service positions, and revealed that equally qualified applicants with majority-sounding names were 50% more likely to

receive positive responses from employers than those with African-American names. Similarly, in Melbourne, Australia, Riach and Rich (2002) used correspondence tests to investigate the level of discrimination faced by Vietnamese and Greek applicants for various positions including clerk, sales representative, and secretary. The study found that Vietnamese applicants faced a high level of net discrimination (27%), while the discrimination against Greek applicants was relatively low (8%).More generally, all these studies examining discrimination against ethnic minorities rely on the fact that within a country-specific context employers might pose constrains and display biases against ethnic minorities because still many people hold stereotypes and believe that ethnic minorities and people of color are dangerous, lazy, less intelligent, and the like (Delgado and Stefancic (2023)).

Our study differs from previous research in that it explores employers' attitudes towards Russian immigrants during the war conflict which may influence employers' perceptions of these migrants since such developments couldn't but resonate much worldwide, including Kazakhstan. Our field experiment was carried out in February 2023, approximately 1 year after the beginning of the war conflict, to capture its more long-standing effects on Kazakhstani employers' attitudes to Russian migrants. Therefore, we believe that the timing and the country represent an appropriate experimental field for our investigation.

3 Research context and experimental design

3.1 Advantages of the setting of Kazakhstan

Kazakhstan and Russia are important neighbors and allies in the post-Soviet region due to their shared border of 7.5 thousand kilometers. This long border has a significant impact on their relationship, which extends to the economy, politics, and national security. The 2021 census of Kazakhstan shows that Russians make up 15.54% of the total population, making them the second-largest ethnic group in the country. After the collapse of the USSR, the existing industrial chains across the region were disrupted. This resulted in a need for a common market, due to the high level of economic and transport interdependence between countries. In 2014, Russia and Kazakhstan established the Eurasian Economic Union, which now has five member states: Belarus, Kazakhstan,

Russia, Armenia, and Kyrgyzstan. The union promotes the free movement of goods and services, and it has common policies for macroeconomic regulation, transport, industry, agriculture, energy, foreign trade, investment, customs, technical regulation, competition, and antitrust regulation.

In September 2022, Russia declared a partial mobilization for the war in Ukraine. This caused a large number of people to leave the country, with many heading to Kazakhstan due to its geographic and socio-economic factors. At the border, thousands of Russians waited in lines that were kilometers long to enter Kazakhstan. While some used Kazakhstan as a transit country to migrate to other countries, many found new employment and decided to stay in Kazakhstan. Official statistics suggest that one-third of the newcomers are still present in the country. The influx of Russians had an impact on the local markets, leading to an increase in rental costs, which resulted in some local tenants being evicted by landlords who preferred to "replace" them with Russians. The influx of newcomers also increased the supply of labor in the market. According to HeadHunter.kz, the number of active resumes on the portal increased by 31% in just one week following the mobilization. Most of the migrants from Russia found employment primarily in the service sector (72%), followed by industry (16%), construction (9%), and agriculture (2%) (Figure 1).

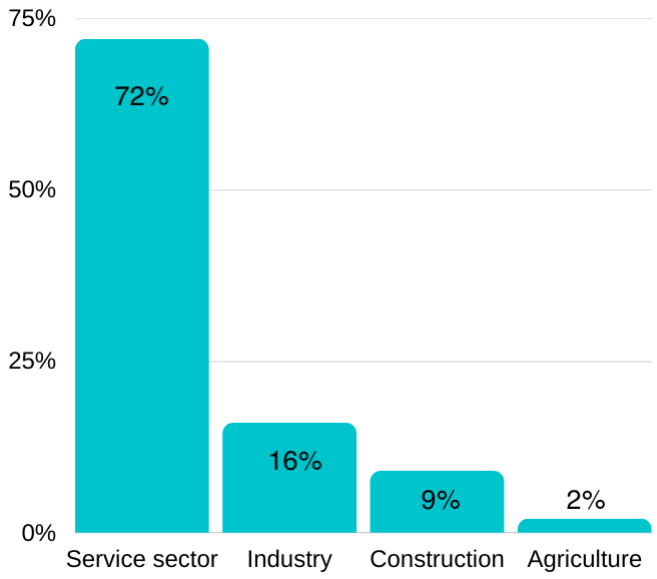


Figure 1: Distribution of migrant workers from Russia across main industries
Source: Data of the Ministry of Labor and Social Protection of the Republic of Kazakhstan

According to our experimental design, we send separate CVs for a Russian born in Kazakhstan and a Russian immigrant. We do this to distinguish between labour market biases against ethnic minorities and migrants. Kazakhstan offers a unique setting for ethnicity-related studies being a multi-ethnic country. There has been a substantial Russian population in Kazakhstan since the 19th century. Although the size of ethnic Russians has reduced since the breakup of the Soviet Union, they represent the second-largest ethnic group in the country. Figure 2 shows the distribution of Russians across regions in Kazakhstan. Low values (the light grey area) reflect low shares of Russians, while high values (the dark grey area) imply high shares of ethnic Russians. As seen, Russians are more concentrated in the northern regions of the country closer to the border with Russia. In East Kazakhstan, Karaganda, Kostanay, North Kazakhstan, and Pavlodar, Russians amount to about two-thirds of the total population of the regions. In our empirical analysis, we employ these variations in the share of Russians between regional populations. Sending two CVs for individuals of the same ethnicity but from different countries of birth allows us to disentangle discrimination against two distinct groups.

Figure 2: Distribution of ethnic Russians across regions in Kazakhstan

Source: Based on the data compiled by the Bureau of National Statistics of Kazakhstan, the figure presents the shares of ethnic Russians across regions of the country. Low values (light grey) reflect low shares of the Russian population in the region, while high values (dark grey) imply high shares of Russians. Table A2 provides detailed information about the distribution of ethnic Russians across regions in Kazakhstan.

3.2 Experimental design

While the war started in February 2022, our field experiment was carried out in January 2023, almost eleven (11) months after the beginning of the war conflict, to capture its more long-standing aspects on employer behavior in the labour market of Kazakhstan. [2] This period is considered as the third phase of the war in Ukraine. During this period all employment advertisements found on a popular online job portal of Kazakhstan were screened by the research team. We randomly identified over 1600 job ads, all over Kazakhstan, which offered a variety of vacancies in white-collar occupations (office workers) and pink-collar occupations (sales managers, cashiers). We chose these types of jobs because we concentrated on low and medium-skilled jobs in the private

[2] We have obtained ethical approval from the University where the second author is affiliated. We observed that in field experiments on discrimination, researchers often skip performing power calculations to avoid alerting potential employers in the field. It has been determined that a minimum of 1,000 applications is necessary to obtain reliable results. Note that the study has not been pre-registered.

sector as these groups are expected to be more at risk of ethnic discrimination (Drydakis (2012) and Eurobarometer, 2007).

The next step of the experimental design is to generate templates of curricula vitae to be sent. Following the seminal paper of Riach and Rich (2002), we constructed four applicants similar in human capital applying for a job by sending curriculum vitae using different emails. Without using resumes of actual job searchers, the difficulty is to create a set of representative and realistic resumes. To accomplish this, we begin altering the resumes of real job seekers just enough to make unique resumes for our job pseudo-job seekers. The modifications preserve the format and realism of the original resumes without compromising their owners. As is commonly done in Kazakhstan, all applicants indicated their birthplace at the beginning of their resumes. The Kazakh applicant stated that he had been born in Almaty, Kazakhstan, while the Russian applicant was born in Novosibirsk, Russia. Moreover, for the purposes of the study we constructed two additional fictitious applications. One of them stated that he had been born in Bishkek, Kyrgyzstan and another applicant was Russian and a native of Almaty, i.e. a native Russian. At the initial stage of the research, we prepared templates of CVs of fictitious job searchers. All CVs have 6 sections: 1) A person's name and contact information (e-mail address), 2) Personal information (date and place of birth), 3) Work experience (previous employers and employment period), 4) Education (the names of schools attended and years of graduation), 5) Skills (language and computer skills), and 6) Hobbies. The migrant status is signaled by place of birth and place of previous work. Each job applicant is assigned relevant work experience for his job. For example, a programmer is assigned job experience at a software development company. The applicants' human capital characteristics are identical: they are the same age, have work experience within similar occupations prior to their job search, obtained educational degrees from similarly ranked colleges in their countries of birth, have a similar level of language and computer skills. Given that only one application was sent to each firm, the applications were identical in every respect except name, e-mail address and birthplace. As marital status may affect employment chances, it was useful that such information is typically provided in job applications by Kazakhstani people. In the experiment we identified all fictitious candidates as single.[3] For more information on the applicants' education and work

[3]The measure of discrimination did not become confounded with the effects of marital status (Weichselbaumer

experience please see Table A1 in the Appendix.

Two types of vacancies are identified in our analysis: low-skilled and high-skilled job positions. Low-skilled vacancies include those for cashiers, administrators, and sales managers, while high-skilled vacant job positions are for accountants and programmers. We restrict ourselves to these vacancies because of the high demand for them. Another reason for which we selected these occupations is that they belong to the service sector which provided employment for over 70% of Russian immigrants (see Figure 1). Next, we selected over 1600 job openings posted on the online job search platform and selected only those which were one week old since their announcement. Then we randomly assigned numbers from 1 to 1600 to the selected job vacancies. In accordance with the numerical order, each sampled job was ascribed one of the four job applications: one from a native Kazakh, one from a native Russian, one from a Kyrgyz immigrant and one from a Russian immigrant. We assign ethnicity (Russian or Kazakh or Kyrgyz) to distinguish between racial discrimination and discrimination against immigrants. This sampling produces a sample size of approximately 1630 job applications.

We also restricted ourselves to three ethnic groups: Russians, Kazakhs and Kyrgyz. Since there is a clear distinction between the names of the three ethnicities, the ethnic affiliation of the job applicants is conveyed by their names which are chosen to be the most frequent ones in these ethnic groups. The reason for including the Kyrgyz immigrant in our analysis is our intention to isolate bias against Russian immigrants from bias against immigrants in general. Workers from Kyrgyzstan represent a sizable share of migrant workers in Kazakhstan. Economic upturns experienced by Kazakhstan have allowed Kyrgyz workers to find jobs in large numbers regardless of their skill levels. Each of the 5 occupation categories used in our experiment receives applications with distinct names, which are randomly assigned to avoid name effects. We used the most common male names for Kazakh, Russian, and Kyrgyz job applicants. Ethnicity and migrant status are signaled not only by the applicants' names but also by place of birth and location of the educational organization (university or vocational school) they graduated from.

The job applicants applying for high-skilled jobs (vacancies for programmers and accountants) have a university degree. The job seekers applying for other job vacancies are graduates of VETs.

(2019)).

Each fictitious applicant is ascribed an additional set of characteristics reflecting the level of his language and computer skills. For example, we randomly assign different combinations of the following sets of skills: C++, Java, SQL, PHP, HTML to programmers. The random assignment of all these skills is done automatically. All the applicants have basic computer skills (MS Office: Word and Excel) and an average level of English language proficiency. Our experiment randomly distributes other applicant characteristics such as date of birth and hobby. The day and month of birth are randomly assigned to each job searcher. Similarly, the combination of interests from the set of hobbies including traveling, reading, fishing, and playing sports is randomly ascribed to applicants. In our study, we confined ourselves to applicants who are males and aged 26-27 years. We didn't allow variation in age and focused on male applicants because we would like to distinguish between discrimination based on place of birth and gender-based and age discrimination.

We prepared CVs of the job searchers based on the aforementioned experimental design and submitted them to job openings using the online job search platform. We provided addresses and e-mail addresses while applying for job vacancies. All the applicants are assigned addresses from one city (Almaty) to account for potential biases of employers against certain locations. The fictitious applicant could be contacted for interview via e-mail or platform message. We allowed a gap of 2-3 days between consecutive applications to minimize the chance of detection by employers. We tracked employer call-backs and if the job searcher was contacted within 30 days of applying for a job vacancy, we treated it as a successful outcome.

Following Carpusor and Loges (2006), we used a random assignment procedure to submit the requests. Each employer was approached by only one of the applicants. The alternative procedure used in previous experiments, known as matched application, consists of sending at least two emails by different nationalities for the same online job advertisement within a short period of time. We felt that this method could put applications at risk of not being seriously considered if the emails with the CVs were perceived to be too similar (Weichselbaumer (2014)). This risk could be particularly serious in the Kazakhstani labour market, where many job ads on the web are apparently posted by a small number of employers. In practice, we assigned each applicant a number from 1 to 4 and followed this order cyclically, making them apply to all job vacancies

meeting our criteria, from the most recently posted ad to the oldest, until we reached the desired number of contacts for each big city for our sample to be representative of the country's labour market. We are aware that the cyclical order followed in sending the applications with different names may introduce some time-related non-randomness (Baldini and Federici (2011)). To check for this, we always included in the regressions a whole set of dummy variables for the day of the week in which each email was sent. Further, we also verified with the Kolmogorov–Smirnov test that the distributions of the days of the week when the ads were sent are similar across the four different applicants. Finally, we also computed the correlation coefficients between the identities and the observable variables and found that none of them was significant at the 5% level.

To match the response to the correct resume-ad pair, we utilize the information contained within the content of the message left by the employer, such as the name of the applicant, company name, and contact phone number.[4] Similar to the methodology used in Drydakis and Vlassis (2010), we recorded the monthly salary for job vacancies that advertised such information. This allowed us to examine whether ethnicity played a role in the distribution of wages, given a positive response to the job application.

Under this experimental design, we were able to capture employer attitudes towards the Kazakh vs. Russian applicant, to separate the effect of Russian ethnicity from other intrinsic characteristics of being raised in Russia by adding in the analysis the Russian born in Kazakhstan, which may be correlated with the applicants' productive aspects (Heckman and LaFontaine (2006)), and to test whether employers' bias against other ethnicities holds (Kazakh vs Kyrgyz).

4 Descriptive statistics

In total our sample consists of 1630 applications to firms.[5] The last row of Table 1 presents the aggregated results of the experiment. Correspondence tests evaluate only the initial stage of the hiring process, which is the call for an interview, not considering the final stage of determining

[4]Due to the use of fictitious addresses, any attempts by employers to contact applicants via postal mail cannot be measured in our experiment. Nonetheless, several human resource managers confirmed that postal mail is a rare or non-existent means for employers to contact applicants and arrange interviews.

[5]We aimed to send 412 emails per applicant. But we had some missing values due to some stuck unsent email items. Hence, we successfully sent 412 emails for the Kazakh, 405 for the Kyrgyz, 408 for the the Russian and 405 for the native Russian born in Kazakhstan.

who is actually hired. As a result, there are two possible interview scenarios in our research: the candidate, in each case, may be invited or not. Thus, we find that the call-back rates differ per applicant. The applicants with the Kazakh name were the most successful (see Table 1, column "All occupations"). They received positive feedback from 26 % of all the companies he applied to, followed by the applicants with the Kyrgyz name who was contacted by 24,8 % of the firms. This difference is not statistically significant (t = 0.338, p = 0.367). Based on our experimental design, we also find that the native Russian applicants had a positive response rate of 22,7%, while the Russian applicants 16,7%. Given the Kazakh applicants are used as a reference group, these differences are statistically significant (t = 1.831, p = 0.095 and t = 3.175, p = 0.001). [6]

With regards to our primary ethnic groups, specifically the Kazakh and Russian applicants, we observe that in almost all occupations the outcomes were significant at the 1% and 5% significance levels. Despite being constructed to have a uniform appearance, for potential employers the applicants had a distinctive appearance. In all the high-skilled occupations the Russian applicants were found to face significant constraints in the selection process, in particular the greatest occupational access constraints were observed for the positions of programmers, which constitute the high-status sector.

		Invitations by ethnicity					Net discrimination		
Outcomes	Applic.	Response (%)	Kazakhs	Russians	Native Russians	Kyrgyz	t-test	t-test	t-test
Occupations	[1]	[2]	[3]	[4]	[5]	[6]	[3] - [4]	[3] - [5]	[3] - [6]
Accountant	316	0.181	0.188	0.113	0.275	0.143	0.075*	-0.087**	0.045
Administrator	310	0.184	0.200	0.150	0.125	0.250	0.050*	0.075*	-0.050*
Cashier	327	0.254	0.301	0.215	0.219	0.284	0.086**	0.082*	0.017
Programmer	347	0.130	0.138	0.015	0.134	0.230	0.123***	0.004	-0.092*
Sales Manager	330	0.385	0.456	0.361	0.359	0.353	0.095***	0.097**	0.103**
	1630	0.227	0.260	0.169	0.227	0.248	0.091***	0.033*	0.012

Table 1: Aggregated results of the correspondence tests
Source: The field experiment data. The authors' calculations. Notes: The null hypothesis is that "both individuals are unfavorably treated equally often," that is i.e. [3] = [4]. ∗, ∗∗, and ∗∗∗ denote the 10%, 5 % and 1 % significance levels, respectively.

[6] The statistical significance of any finding of main interest was also determined using the chi-squared test (Heckman and Siegelman (1993)).

Figure 3 illustrates the mean values of the logarithm of informal wage offers on the part of employers. Our sample consists of 369 wage offers. While all candidates had similar levels of education and work experience, the data suggest that the Russian applicants (i.e., Rus.) were offered lower informal wages than the other applicants. This difference seems to be higher for the low-skilled occupations (i.e., administrators, cashiers, and sales managers) (Figure A1, Appendix). A potential explanation for this result may lie in the nature of tasks requiring high levels of skill, which are often highly specialized. Therefore, if an employer provides a favorable response following the evaluation of a highly skilled individual's application, this may result in less unequal treatment in the wage offer, compared to a similar scenario involving occupations with lower skill requirements (Goldberg et al. (1996); Carlsson and Rooth (2007)).

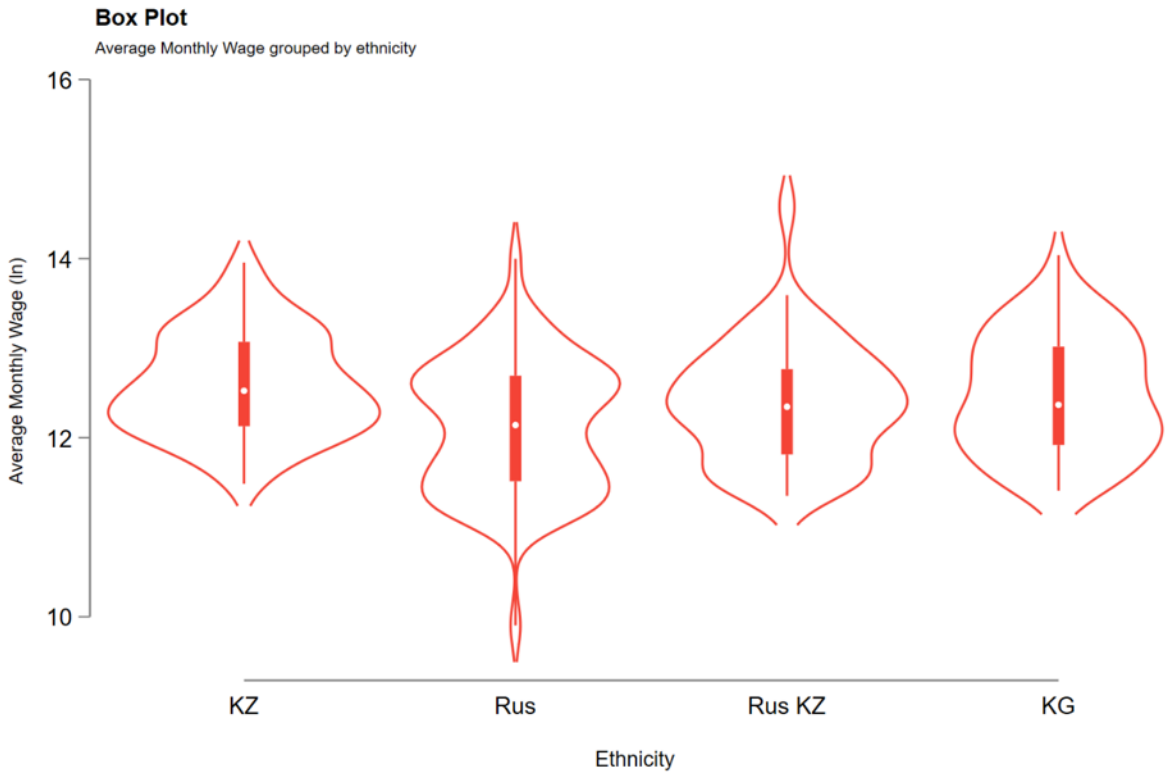


Figure 3: Distribution of offered salaries by candidate.
Source: The field experiment data. Notes: The vertical axes represent measures in euros (ln). The vertical boxes indicate the interquartile range, the thick horizontal markers represent the median, and the whiskers the most extreme data points. The outer shape illustrates the density distribution of observations.

5 Model

To assess the presence of differential treatment of job applicants of different ethnic groups in the labour market of Kazakhstan, we use the following econometric specification estimated by a logit model:

$$Y_i(positive\,response = 1) = \alpha + \beta_1 K_i + \beta_2 \mathrm{X}_i + \delta_c + \gamma_d + e_{i1} \tag{1}$$

where Y is the latent variable reflecting the probability of a fictitious applicant receiving a positive response, i.e. an invitation for a job interview, α is a constant, K is a binary variable indicating whether the applicant is a Kazakh (=1) or otherwise i.e., a Russian migrant, a Russian born in Kazakhstan or an individual from Kyrgyzstan. X is a vector of job-specific characteristics (i.e., job type and occupation category). We also control for the date when we sent the enquiry messages by embedding in the model γ_d which includes the day effects. Lastly, δ_c denotes regional fixed effects and e_{i1} is the idiosyncratic error term. The control variables X_i, δ_c and γ_d are included in (1) to avoid potential omitted variable bias in the regression. β_1 is our estimated coefficient of interest, providing an estimate of employers' attitudes toward Russian applicants. Provided that all the characteristics except ethnicity across the applicants are controlled for, the latter wasn't expected to be correlated with the error term in each equation. If $\hat{\beta} = 0$ the Russian migrant and an applicant of different ethnicity have the same probability of receiving an interview invitation. If $\hat{\beta} < 0$ an applicant of another ethnicity has a higher probability of receiving a positive response to his application regarding a job interview than the Russian migrant. Lastly, if $\hat{\beta} > 0$ an applicant of another ethnicity has a lower probability of being invited for a job interview than the Russian migrant. We estimate Eq.(1) under the context of three possible scenarios for potential applicants. First, we compare call-backs for Kazakhs and Russian migrants to capture employers' attitudes to different applicants. Second, we also consider call-back responses for native Russians born in Kazakhstan to capture potential differences in employers' attitudes coming from a country-specific exogenous event. Furthermore, as a robustness exercise we include call-backs for applicants from Kyrgyzstan to support our hypotheses that in general, Kazakh employers do not discriminate against foreign workers. Equation (1) is estimated simultaneously for all job

types for each case of pairs of applicants. Since the explanatory variable is a categorical/binary variable, the reported marginal effects indicate the discrete change in the probability of receiving an interview offer, $\frac{\partial prob(Positive\,response=1)}{\partial X_i}$. To have a comprehensive understanding of the estimated effects, we tested a set of four models. One model controls only for differences in ethnicity between applicants (specification 3), while the remaining ones control also for job type, occupation category and common time effects (days) via time dummies, defined according to the date of application submission (see Petit (2007)). In addition, to capture the effect of ethnicity on offered wages, we estimate OLS regressions, namely a Mincer-type equation linking Kazakhstani employers' monthly salary to applicants' ethnicity (Bertrand and Mullainathan (2004)). The variable of main interest is the one signaling the applicant's ethnicity. The dependent variable was derived from the online job portal and conditional on employers' positive responses to job applications. Hence, the following econometric model was estimated:

$$Log_i(salary\,per\,month) = \alpha + \beta_1 K_i + \beta_2 \mathrm{X}_i + \delta_c + \gamma_d + e_{i2} \tag{2}$$

where, similarly to Eq. (1), K is a categorical variable indicating whether the applicant is a Kazakh (=1) or otherwise i.e., a Russian migrant, a native Russian born in Kazakhstan or an individual born in Kyrgyzstan. X is a vector of job-specific characteristics (i.e., job type and occupation category). We also control for the date when we sent the enquiry messages by embedding in the model γ_d which includes day-specific effects. Lastly, δ_c stands for regional fixed effects and e_{i2} is the idiosyncratic error term. A statistically significant negative coefficient (β_1) would imply employers' bias in the form of lower wages. Since wage offers were expected to be correlated for each applicant, to correctly analyze the data, those correlations needed to be considered. In the estimations that follow we report standard errors (in brackets) being adjusted for clustering on workplace. But were employers interested in getting full CV information or were their decisions mainly driven by ethnicity? We took advantage of our CV structure and the features of the online job portal and we used one more variable which reflects the percentage of CVs screened by employers. The structure of our CV has ethnicity information at the beginning, followed by demographics, skills, previous job experience and hobbies. For interpretation purposes we adopt

a fractional logit model where the ratio of CV length screened by employers to the total length of CVs is utilized as the dependent variable. The fractional logit regression can be used to model a variable that takes on values within a bounded range.[7] Hence, similarly to Eq (1) and (2), we use the following econometric specification:

$$CL_i(percentage) = \alpha + \beta_1 K_i + \beta_2 \mathrm{X}_i + \delta_c + \gamma_d + e_{i3} \tag{3}$$

where, similarly to previous Eq. (1) and (2), K is a dummy variable indicating whether the applicant is a Kazakh (=1) or otherwise i.e., a Russian migrant, a Russian born in Kazakhstan or an individual born in Kyrgyzstan. X is a vector of job-specific characteristics (i.e., job type and occupation category). γd includes the day effects and δ_c includes regional fixed effects. Lastly, e_{i3} is the idiosyncratic error term. A statistically significant positive coefficient (β_1) would signal that employers screen more curriculum information provided by the Russian applicants compared to the Kazakh ones. Consequently, we can gain a better understanding of the decision-making processes of employers regarding sending a job interview response or not.

6 Estimations

Table 2 presents the main results for our call-back regressions. All the specifications, except specification (3) include controls for occupation, region, and time effects with logit marginal effects reported. Column (1) shows that the estimated probability of migrant Russian applicants receiving an interview invitation was lower by 7.7% than that for Kazakh job searchers. To test the effects of different ethnic backgrounds, in the regression presented in column (2) we also included Russian applicants born in Kazakhstan. Interestingly, although the estimated probability of native Russians being invited for an interview is lower by 1.6 % than that for Kazakh applicants, the result is not statistically significant. Thus, we argue that employers' negative bias is mainly driven by prejudice against migrant job seekers from Russia.

Lastly, column (3) and (4), include the full set of ethnic candidates. We do not observe any patterns of negative attitudes toward Kyrgyz applicants, signaling that Kazakhstani employers do

[7] The values of this variable range between 0 and 1 and thus a fractional response model (e.g., fractional logit) is adopted, instead of linear regression techniques.

not discriminate, in general, against job applicants with a migrant origin. The results in Table 2 show that the effects found for Russian migrants is robust to adding the control variables. Hence, the unfavorable treatment of migrant job seekers from Russia cannot be explained by characteristics of either specific firms or jobs these pseudo-job seekers applied to in the randomized application design.

	[1]	[2]	[3]	[4]
Russian	-0.077***	-0.078***	-0.090***	-0.077***
	(0.025)	(0.026)	(0.028)	(0.025)
Native Russian		-0.016	-0.022	-0.016
		(0.028)	(0.030)	(0.028)
Kyrgyz			-0.011	-0.017
			(0.030)	(0.029)
Region fixed effects	✓	✓		✓
Day fixed effects	✓	✓		✓
Job fixed effects	✓	✓		✓
R-squared	0.254	0.221	0.010	0.189
N	787	1206	1630	1630

Table 2: Logit estimations of the probability of call-back for an interview for each applicant, marginal effects

Source: The field experiment data. The authors' calculations.

Notes: The Kazakh applicants are the reference group. Standard errors are in parentheses. $*$, $**$, and $***$ denote the 10%, 5% and 1% significance levels, respectively.

Table 3 presents the results from OLS wage regressions. As shown in column (1), negative bias towards Russian migrants is 0.397 (i.e., 39.7 %) and statistically significant. Lower occupational access of job applicants from Russia compared to that of Kazakh job seekers appeared to be linked to employers' unfavorable treatment, resulting also in wage differentials in the subsequent of the selection process. Moreover, column (2), reveals a statistically insignificant wage gap for native Russians. A similar pattern is observed for job applicants from Kyrgyzstan as well (column 3 and 4).

	[1]	[2]	[3]	[4]
Russian	-0.397**	-0.407**	-0.461**	-0.420**
	(0.097)	(0.090)	(0.110)	(0.092)
Native Russian		-0.168	-0.193*	-0.178
		(0.109)	(0.077)	(0.106)
Kyrgyz			-0.106	-0.067
			(0.054)	(0.043)
Region fixed effects	✓	✓		✓
Day fixed effects	✓	✓		✓
Job fixed effects	✓	✓		✓
R-squared	0.250	0.225	0.059	0.243
N	173	261	352	352

Table 3: Monthly wage differentials (the OLS estimates)
Source: The field experiment data. The authors' calculations.
Notes: The dependent variable is in logarithmic terms. The Kazakh applicants are the reference group. Standard errors are in parentheses. ∗, ∗∗, and ∗∗∗ denote the 10%, 5% and 1% significance levels, respectively.

Next, we explored potential sources of bias against job applicants by occupational skill level and geographical distance between employment positions and the Russian borders. Table 4 suggests that while there were differences in the call-back rates for different jobs, employers' unfavorable attitudes were strongest toward Russian migrants, especially for high-skilled jobs. In the professions of programmers or accountants, Russian migrant job seekers had a 9 % lower probability of getting an invitation for a job interview than Kazakh applicants (column 1). This effect holds with and without controls and with embedding also native Russian applicants and job applicants from Kyrgyzstan. Interestingly, we observe a small effect for native Russians, but only in the case of low-skilled occupations. One explanation for this finding may be that high-skilled job tasks are often very specific in nature and hence individual productivity is more evident when reading a highly skilled individual's application when compared to that of a low-skilled individual. The findings from Goldberg et al. (1996) suggest that a greater diffusion of discriminatory behavior is expected in low and semi-skilled jobs compared to high-skilled jobs. Figure A1 illustrates that the pattern of wage disparities caused by discriminatory practices is mainly in low-skilled occupations (Appendix). In high-skilled occupations when employers invited Russian migrants for job interviews this could have been a sign that they were not prone to practicing any discriminatory treatment (including wage discrimination) against them in cases of tentative hiring.

	[1]	[2]	[3]	[4]
Panel A: Low-skilled jobs				
Russian	-0.078*	-0.076*	-0.082**	-0.073*
	(0.043)	(0.042)	(0.040)	(0.039)
Native Russian		-0.071*	-0.082*	-0.071*
		(0.041)	(0.040)	(0.041)
Kyrgyz			-0.035	-0.019
			(0.042)	(0.042)
R-squared	0.240	0.257	0.052	0.212
N	456	714	967	967
Panel B: High-skilled jobs				
Russian	-0.090***	-0.098***	-0.101***	-0.098***
	(0.029)	(0.028)	(0.033)	(0.029)
Native Russian		0.014	0.042	0.015
		(0.039)	(0.041)	(0.038)
Kyrgyz			0.029	0.022
			(0.041)	(0.040)
R-squared	0.224	0.201	0.033	0.162
N	329	489	663	663
Region fixed effects	✓	✓		✓
Day fixed effects	✓	✓		✓

Table 4: Logit estimations of the probability of call-back for an interview for each applicant, marginal effects by occupational skill level
Source: The field experiment data. The authors' calculations Notes: The Kazakh applicants are the reference group. Standard errors are in parentheses. ∗, ∗∗, and ∗∗∗ denote the 10%, 5% and 1% significance levels, respectively.

In Table 5 we report the effect of the geographical distance between employment positions and the Russian borders on the response rates. Since we have revealed a clear pattern of employer bias against Russian migrants, the idea is that this tendency of prejudice on the part of Kazakhstani employers may vary due to differences in geographical distances between the city where the job is located and the country job applicants from which are subject to relatively unfavorable treatment in the labour market (i.e., Russia). To investigate this relationship, we calculated these distances by using Google Maps data, namely the fastest highway driving distances between the location of the job and the Russian boarders in kilometers. Next, we split the sample into subsets by calculating the mean distance and assigning each observation to the group that was closer to that mean. In Table 5 we observe a negative effect of distance on Russian migrants which are statistically insignificant for occupations located below 830 km from the Russian borders (Panel

A). This effect becomes larger and statistically significant at the 1% level for occupations located in cities more than 830 km from the Russian borders (Panel B). Offered salaries follow the same pattern (Figure A2, Appendix). We do not find evidence of employer bias against native Russians and job applicants from Kyrgyzstan in both cases.

	[1]	[2]	[3]	[4]
Panel A: Occupations distance < 830 km				
Russian	-0.038	-0.041	-0.068*	-0.042
	(0.035)	(0.037)	(0.042)	(0.037)
Native Russian		-0.003	-0.012	-0.003
		(0.037)	(0.043)	(0.038)
Kyrgyz			0.041	0.052
			(0.046)	(0.043)
R-squared	0.182	0.179	0.095	0.153
N	334	517	693	693
Panel B: Occupations distance >= 830 km				
Russian	-0.088***	-0.101***	-0.103***	-0.109***
	(0.033)	(0.035)	(0.038)	(0.034)
Native Russian		-0.036	-0.041	-0.033
		(0.039)	(0.040)	(0.039)
Kyrgyz			-0.044	-0.026
			(0.040)	(0.041)
R-squared	0.282	0.244	0.070	0.218
N	486	708	937	937
Region fixed effects	✓	✓		✓
Day fixed effects	✓	✓		✓

Table 5: Logit estimations of the probability of call-back for an interview for each applicant, marginal effects by distance from the Russian border
Source: The field experiment data. The authors' calculations Notes: The Kazakh applicants are the reference group. Standard errors are in parentheses. ∗, ∗∗, and ∗∗∗ denote the 10%, 5% and 1% significance levels, respectively.

Finally, we utilized the unique feature offered by the job advertisement platform, namely the disclosure of the percentage of a job candidate's CV that is viewed by employers. We used this feature as a means of assessing employer attitudes toward job applicants and examining whether they are contingent upon the ethnic background of the applicant. As the variable of main interest here was percentage values ranging between 0 and 1, a fractional response model was adopted instead of linear regression techniques. For interpretation purposes we employed a fractional logit model where the percentage of observed time spent on each applicant's CV by employers is used

as the dependent variable. Table 6 presents the marginal effects of the proportion of CVs that employers reviewed for each applicant. Surprisingly, the data show that employers allocated more time to review CVs of Russian migrants. All the specifications reveal a positive and statistically significant effect for Russian migrants and native Russians at the 1% and 5% levels of significance, respectively.

	[1]	[2]	[3]	[4]
Russian	0.108***	0.115***	0.110***	0.110***
	(0.024)	(0.025)	(0.024)	(0.024)
Native Russian		0.063**	0.051**	0.057**
		(0.026)	(0.025)	(0.026)
Kyrgyz			0.007	0.002
			(0.026)	(0.026)
R-squared	0.040	0.039	0.025	0.035
N	174	258	351	351
Region fixed effects	✓	✓		✓
Day fixed effects	✓	✓		✓
Job fixed effects	✓	✓		✓

Table 6: Fractional logit estimates, marginal effects.
Source: The field experiment data. The authors' calculations.
Notes: The Kazakh applicants are the reference group. Standard errors in parentheses estimated by the Delta method. $*$, $**$, and $***$ denote the 10%, 5% and 1% significance levels, respectively.

Figure 4 illustrates the relationship between offered monthly salaries and the proportion of CVs that employers reviewed before providing their positive response by ethnicity. In general, we find a positive association between the proportion of reviewed CVs and the level of offered salaries, indicating that higher proportions of reviewed CVs are generally associated with higher salary offers. This pattern appears to be more pronounced among Russian migrants.

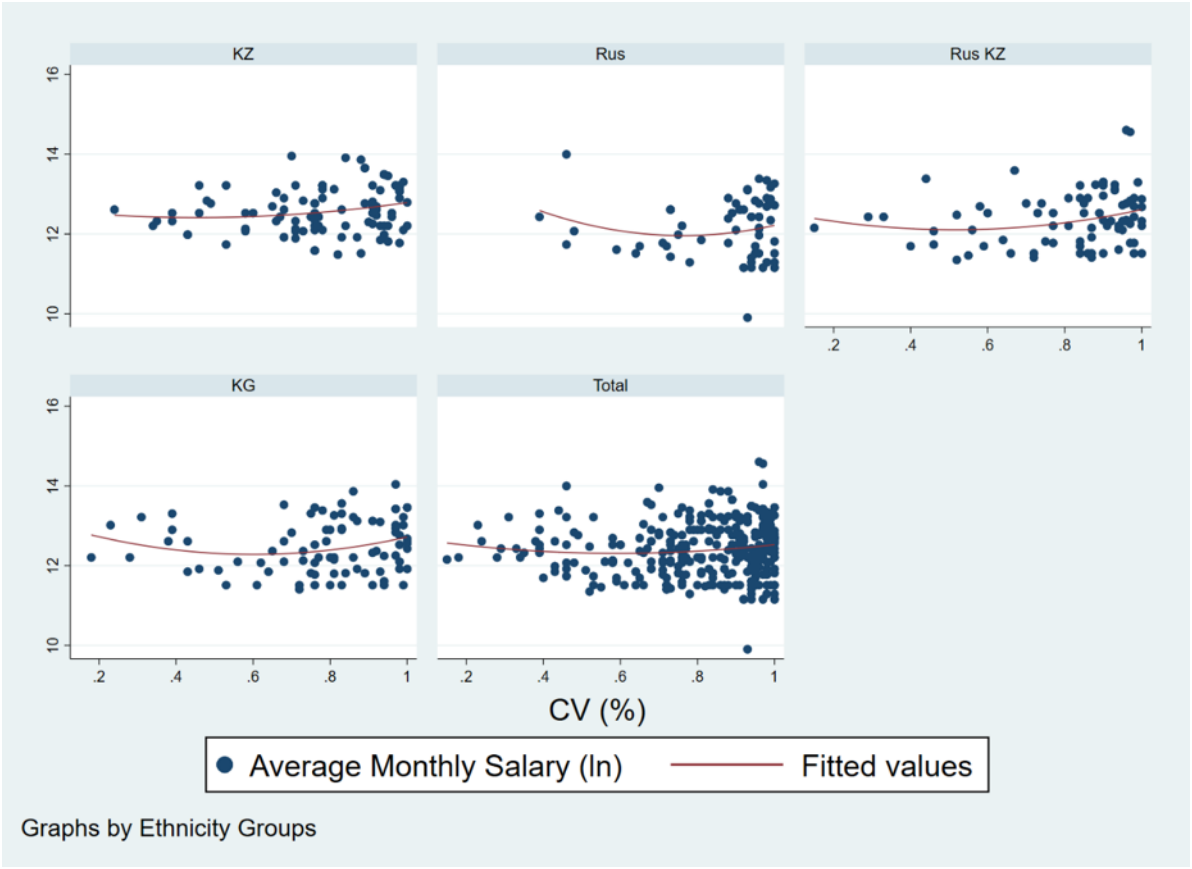
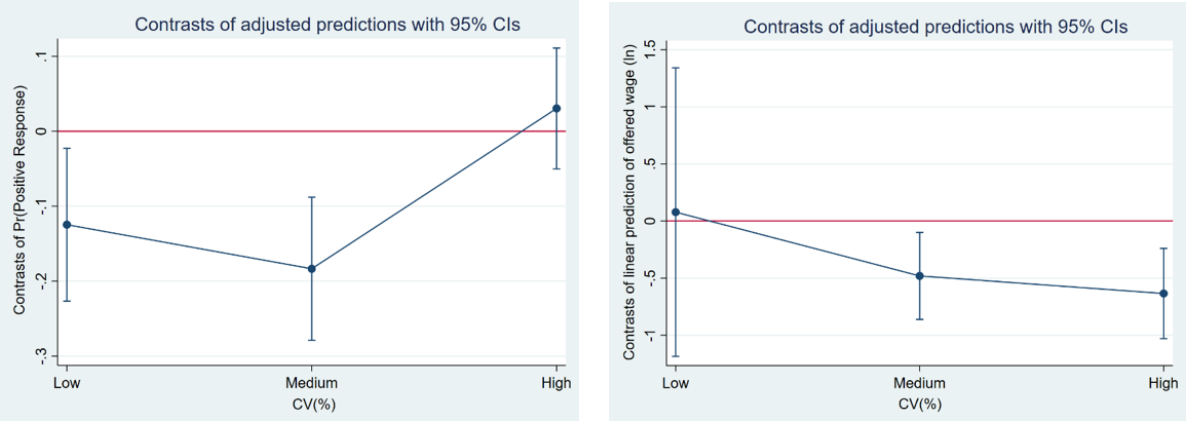


Figure 4: Offered monthly salary by the proportion of CVs that employers reviewed before their positive response.
Source: The field experiment data. Notes: KZ denotes the Kazakh applicant, Rus stands for the applicant from Russia, Rus Kaz denotes the native Russian applicant and KG indicates the applicant from Kyrgyzstan.

Lastly, we compare the response rates and offered monthly salaries by the proportion of CVs that employers reviewed before providing their positive response for our main groups of interest (i.e., Kazakh applicants vs. Russian migrants). The findings presented in Figure 5 indicate that negative employer bias is reduced when employers invest more time in reviewing applicants' CVs. Specifically, the results show a higher probability of Russian migrants receiving interview invitations, and a subsequent decrease in the wage gap between Kazakh and Russian applicants during the next stage of the hiring process.



(a) the Kazakh applicants **(b)** the applicants from Russia

Figure 5: Differences in response rates and offered monthly salaries by the proportion of CVs that employers reviewed before their positive response.
Source: The field experiment data. Notes: Differences are presented for KZ (the Kazakh applicants) in the left panel, Rus (the applicants from Russia) in the right panel.

7 Discussion

The results of the present study can be interpreted through the lens of existing theories of preference and statistical discrimination. While both theories could explain the observed ethnic differences in call-backs, it is important to consider the consistency of each theory with the other findings of our study. Our findings suggest that there is variation in the relative call-backs across occupations and that certain workplace and recruiter characteristics have ethnic-specific effects on call-back rates. One possible explanation based on statistical discrimination theories is that ethnic minority members may experience biased attitudes because employers view their productivity with less precision (Becker (1957)). However, since both education and work experience can be easily verified from the application the probability of such bias is reduced. Nonetheless, it is possible that workplaces and recruiters use ethnicity as a proxy for unobservable individual productivity.

Can we link our findings to the ongoing conflict between Russia and Ukraine? To address this question and provide evidence we initially compared local Kazakh applicants with Russian migrants. Our analysis indicates that migrant job seekers from Russia experienced lower occupational access compared to Kazakh applicants, which was accompanied by a corresponding wage gap. This suggests that lower occupational access was further expressed through lower wage offers for migrant

job applicants from Russia. Such a result is also in line with Beckerian employee and/or customer discrimination (see Becker (1957)) and other field experiments investigating ethnic discrimination in labour markets using experimental data (Carlsson and Rooth (2007); Weichselbaumer (2019); Drydakis and Vlassis (2010)).

But to what extent can we argue that these effects are linked to the war event? To test general negative attitudes toward Russians on the part of Kazakhstani employers we utilized the experimental context and incorporated native Russians into the analysis.[8] Interestingly, our analysis does not provide wages, based solely on ethnic prejudice. Lastly, to ensure the validity of our results, we further investigated potential sources of employer bias that may have influenced our findings. Specifically, we explored whether the observed disparities in employment outcomes for workers of different ethnic origins could be attributed to general bias against foreign workers as well as whether or not they may be due to uncertainty about the migrant's intent of working for a long time in the country. Thus, we decided to include a job applicant from another neighboring country, Kyrgyzstan. Again, our analysis provides no evidence of unfavorable attitudes toward the Kyrgyz applicants in terms of either call-back rates or offered wages.

As demonstrated by Heckman (1998), the use of correspondence tests to identify employer discrimination cannot exclusively indicate the presence of taste discrimination. Employers may also use group information to evaluate job applicants, leading to statistical discrimination. For example, if employers believe that there is a systematic difference in reliability and job stability between applicants of different ethnic backgrounds, they may discriminate against a particular group of applicants in terms of access to job opportunities and wages. Such discrimination is not necessarily the result of exogenous preferences but may instead reflect profit-maximizing behavior by risk-averse employers. As a result, job seekers of a particular ethnic group may experience significantly lower call-back rates than local job seekers, whether due to employer bias or employer perception that being in this group indicates lower productivity.

To develop appropriate policies and accurately specify empirical models, it is crucial to have a comprehensive understanding of the nature of differential treatment of different social groups by employers in labour markets resulting from an exogenous shock such as a war event. Such an

[8]There has been a substantial population of Russians in Kazakhstan since the 19th century.

understanding is essential for interpreting the findings of the analysis provided by our study and identifying effective interventions to address the observed disparities in employment outcomes.

We contend that the war has led to unequal treatment of Russian migrants. However, the experimental design cannot conclusively determine the role of the war because the experiment was conducted only after the war had already begun. To accurately measure the impact of the war, an experiment would need to be conducted in two distinct periods: one before the war started and another after the war started. It is possible that employer biases towards migrants from Russia (not related to war) could explain the lower callback rate observed in this group. Nonetheless, analysis of opinion polls among the population of Kazakhstan shows that there is a negative sentiment towards the Russian-Ukraine war and migrants from Russia. Approximately 33% of Kazakhstani citizens reported a negative change in their attitude towards Russia due to the Russian-Ukrainian conflict (Demoscope (2023)). Additionally, a recent study found that Russian migrants faced discrimination in the rental housing market during the war with Ukraine (Mourelatos and Oikarinen (2023)). Therefore, the role of the war should not be underestimated when interpreting the results of the current study.

8 Conclusion

This study examines employer attitudes towards job seekers of different ethnic origins in the labour market in Kazakhstan. We used correspondence testing, an experimental technique, to measure the degree of ethnic-based employer prejudice in hiring practices. The study was conducted in the context of the Ukraine-Russia war, which is considered an exogenous shock. Negative employer bias may exist towards job applicants from countries involved in the war due to prejudice against workers from respective ethnic groups, as well as weak legal protection and enforcement of labour rights. Migrant workers from such countries may experience exclusion from job opportunities, unequal treatment, and other forms of unfair labour practices in the host country, which can further exacerbate the negative impact of war on their livelihoods and well-being.We found that the interview call-back rate for job applications was 26% for native-born Kazakh applicants, 25% for job seekers from Kyrgyzstan, 23% for native Russians born in Kazakhstan, and 17% for mi-

grant job seekers from Russia. These results suggest that Russian migrants had an approximately 8% lower probability of being invited for a job interview than Kazakh applicants, assuming all other human capital characteristics were held constant. We did not find any evidence of employer prejudice against applicants of other origins. This indicates that the ongoing war may have triggered negative employer bias toward migrant job seekers from the country at war. This shows that war events can be considered exogenous shocks that can have far-reaching effects on the labour market and broader economy, not only in the countries directly involved but also in neighboring countries and those with established economic ties. In our case, the use of Kazakhstan as a setting was advantageous as it has a close relationship with Russia, including strong economic ties characterized by extensive trade, joint investment projects, and cooperation in many other fields. The economic integration between the two countries has led to increased employee mobility, with workers seeking job opportunities and better wages across borders in a range of sectors, including energy, manufacturing, finance, and services. Therefore, the design, timing, and location of our field experiment allowed us to link employer attitudes with the ongoing Russia-Ukraine war.

Recently, several neighboring countries have experienced a significant influx of Russian migrants who wish to enter their labor markets. As highlighted in this article, addressing employer bias has become a pressing issue. It is crucial to take action to promote fairness, equity, and inclusivity in the labor market. We need to ensure that all individuals have equal access to opportunities and are not held back by prejudices or bias.

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Appendix A Description of the data

Table A1 shows a shortened version of the CVs sent in response to online job vacancies. As seen, both the native Kazakhs and the native Russians are graduates from the educational institutions of Kazakhstan. The ethnicity of the applicants is implied by their names. The non-native applicants from Russia and Kyrgyzstan graduated from the educational organizations in their home countries. All the applicants have six years of work experience in the same or related occupation as the job they applied for.

	Kazakh	Russian from Kazakhstan	Russian from Russia	Kyrgyz migrant
First Name	Kazakh-sounding name	Russian-sounding name	Russian-sounding name	Kyrgyz-sounding name
Last Name	Kazakh-sounding name	Russian-sounding name	Russian-sounding name	Kyrgyz-sounding name
Birthplace	Kazakhstan	Kazakhstan	Russia	Kyrgyzstan
Email	Kazakh nicknames	Russian nicknames	Russian nicknames	Kazakh nicknames
Sex	Male	Male	Male	Male
Marital Status	Unmarried	Unmarried	Unmarried	Unmarried
Year of Birth (day and month of birth are randomly assigned)	1995	1995	1995	1995
Current Address	Location in Kazakhstan	Location in Kazakhstan	Location in Kazakhstan	Location in Kazakhstan
Education	College in Kazakhstan (graduation in 2016)	College in Kazakhstan (graduation in 2016)	College in Russia (graduation in 2016)	College in Kyrgyzstan (graduation in 2016)
Skills	Good knowledge of English and P/C	Good knowledge of English and P/C	Good knowledge of English and P/C	Good knowledge of English and P/C
Professional Experience	Firm (in Kazakhstan) From 2016 to 2017	Firm (in Kazakhstan) From 2016 to 2017	Firm (in Russia) From 2016 to 2017	Firm (in Kyrgyzstan) From 2016 to 2017
	Firm (in Kazakhstan) From 2018 to 2022	Firm (in Kazakhstan) From 2018 to 2022	Firm (in Russia) From 2018 to 2022	Firm (in Kyrgyzstan) From 2018 to 2022
Hobby	A combination of interests from the set of hobbies including traveling, reading, fishing, and playing sports is randomly assigned to applicants.			

Table A1: Curriculum Vitae; Short Version

Table A2 shows distribution of Russian population across regions in Kazakhstan.

	Total (in thousand)	Russian (in thousand)	%
Akmola Region	782	210	26,9%
Aktobe Region	906	67	7,4%
Almaty	2030	415	20,4%
Almaty Region	2146	229	10,7%
Atyrau Region	673	30	4,5%
East Kazakhstan Region	1341	430	32,1%
Jambyl Region	1199	87	7,3%
Karaganda Region	1348	391	29,0%
Kostanay Region	833	280	33,6%
Kyzylorda Region	814	12	1,5%
Mangystau Region	735	31	4,2%
North Kazakhstan Region	540	240	44,4%
Astana	1234	118	9,6%
Pavlodar Region	756	223	29,5%
Turkistan Region	2054	27	1,3%
West Kazakhstan Region	675	109	16,1%

Table A2: Distribution of Russian population across regions in Kazakhstan
Source: Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan

Appendix B Additional Graphs

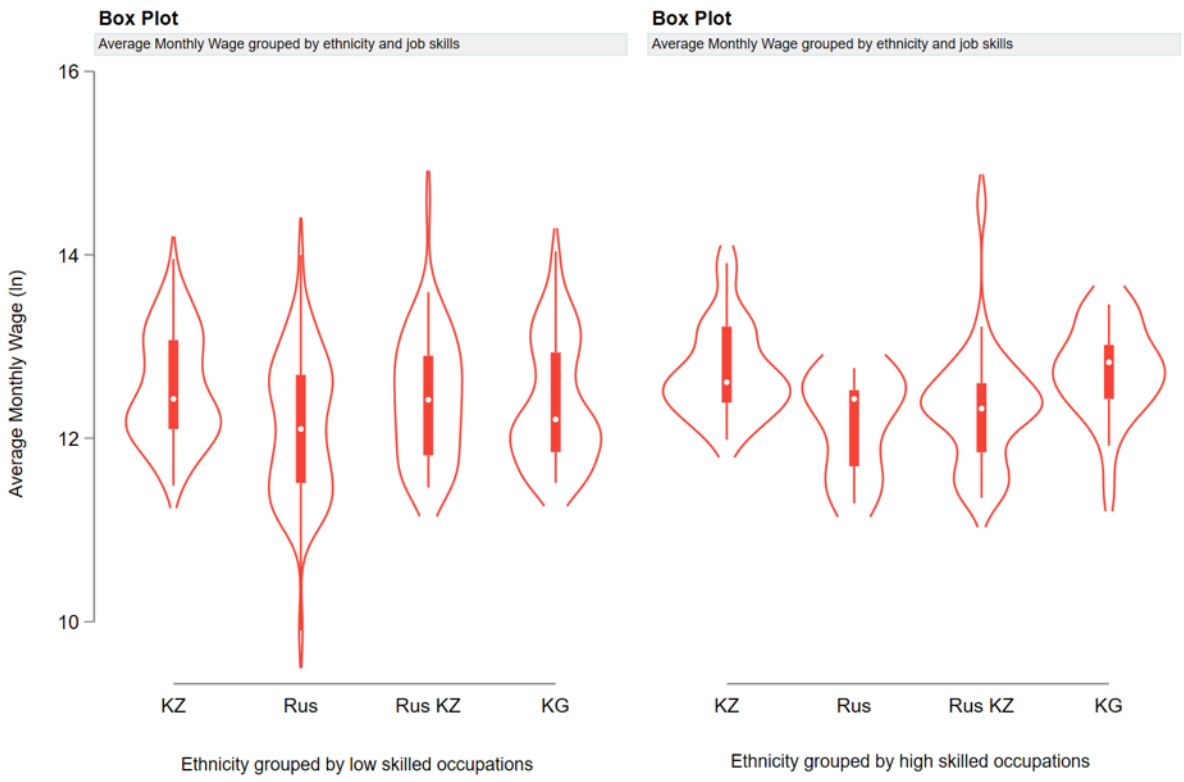

Figure A1: Distribution of offered salaries by occupations' skill category
Source: The field experiment data. Notes: The vertical axes represent measures in euros (ln). The vertical boxes indicate the interquartile range, the thick horizontal markers show the median, and the whiskers indicate the most extreme data points. The outer shape illustrates the density distribution of observations.

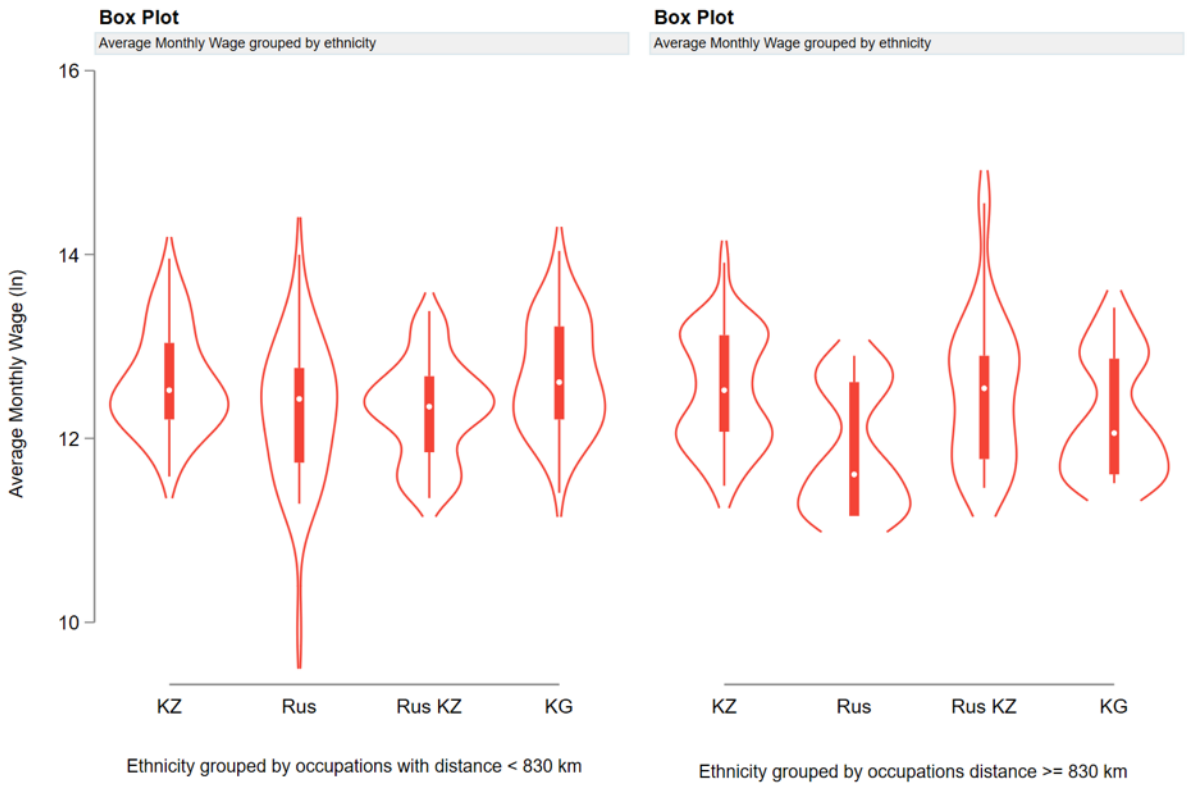

Figure A2: Distribution of offered salaries by geographical distance from the Russian borders. Source: The field experiment data. Notes: The vertical axes represent measures in euros (ln). The vertical boxes indicate the interquartile range, the thick horizontal markers show the median, and the whiskers indicate the most extreme data points. The outer shape illustrates the density distribution of observations.