

Employment Gaps Between Refugees, Migrants and Natives: Evidence from Austrian Register Based Labour Market Data

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Abstract

This paper analyses labour market integration in Austria of non-European refugees originating from middle and low income countries for the period 2009-2018. We assess their probability of being employed in comparison to non-humanitarian migrants, European third country immigrants and natives. We draw on a register based panel dataset covering the complete labour market careers of all individuals residing in Austria. We control for macro level explanatory variables (e.g. the labour market situation at the time and the place of settlement) and individual characteristics. The analysis shows that initial refugee employment gaps are large in the first years when labour market access is difficult. After a period of seven years the unconditional gap between refugees and natives declines to 30 percentage points, similar to the one of non-humanitarian migrants, but the gap is still further decreasing. After controlling for a set of additional explanatory variables, the conditional gap amounts to only 10 percentage points at the same time. Moreover, our analysis provides insights into differences between employment gaps across population subgroups of immigrant groups and natives by gender, age and education level.

Keywords: Refugees; Migrants; labour market participation; longitudinal research

JEL classification: J61, J15, F22

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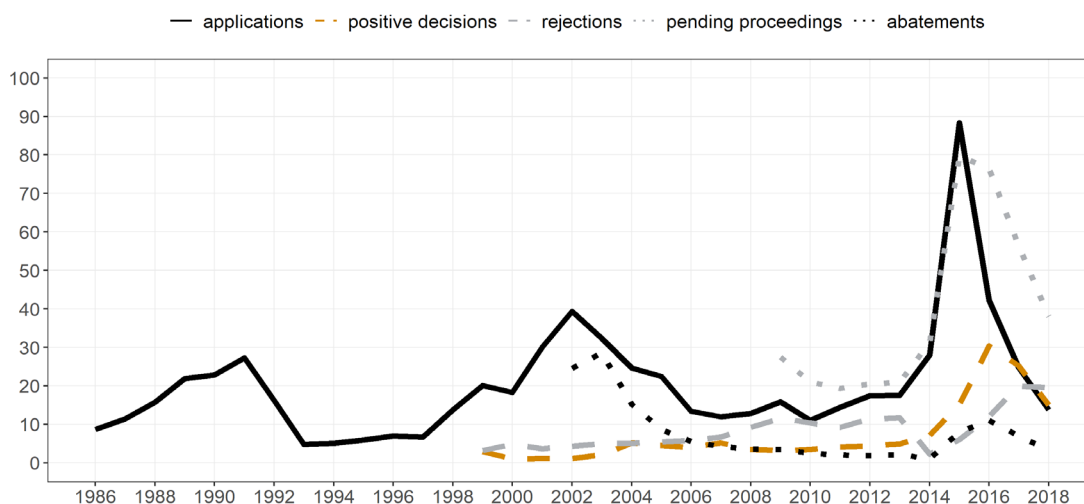
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1. Introduction

Labour market integration of migrants is obviously an important topic for all countries of the European Union. With the fall of the Iron Curtain in 1989 and the EU enlargement, migration within Europe (particularly from East to West) and immigration from non-European destinations increased after a period of rather low migration flows on the continent. About 9.5% of the population residing in the 15 “old” EU countries in 2018 held foreign citizenships while 14.4% were foreign born. 37% of those were born in another EU country while the others originated from countries outside of the EU28. The employment rate of the latter population group has usually been below average. In 2014, for example, it amounted to 56.8% for the working age (15-64) population in the EU15 which is considerably lower than for the native population with 66.1% while migrants from other EU28 countries attained an even higher employment rate with 67.6%.

A short history of the recent immigration to Austria shows that the share of the resident population with foreign citizenship was particularly low at the beginning of the 1960s at only 1.4%. Refugees coming from Hungary, following the uprising of 1956, then Czechoslovakia (1968), Poland (1981) as well as Jewish migrants from the Soviet Union (from 1973 onwards) were relatively small in number and many of those emigrated further to other countries like Germany, the US, Canada or Israel. In the period from the beginning of the 1960s up to the first oil crisis 'guest-worker' immigration was promoted due to a shortage of labour and was based on recruitment agreements with Spain, Turkey and Yugoslavia (Biffi et al., 1997). Up to 1974 the share of foreign citizens increased to about 4% and then stagnated over the following 15 years. Thereafter, the breakdown of the socialist regimes in Eastern Europe and wars in Former Yugoslavia resulted in strongly rising numbers of migrants and asylum seekers and thus in an increase of residents with foreign citizenship to 9% in 1995.

Figure 1 / Asylum applications and decisions in Austria, 1986-2018



Source: Austrian Ministry of Interior, Eurostat, own calculations.

Subsequently, immigration and asylum policies became more restrictive. Thus, after the EU accession of Austria in 1995, immigration increased mostly from EU countries, particularly from Germany and Eastern European EU Members after 2004. From the latter region, it became even stronger following 2011 and 2014, the dates when the transition periods, limiting full access to EU labour markets, expired for the new member states of the EU. The period 2000-2005 also saw an increase of asylum applications due to rising numbers of refugees from Afghanistan in addition to asylum seekers from Chechnya and Kosovo. In 2014, the inflow of refugees surged again, mostly from Afghanistan, Syria, Iraq and Iran. However, it then declined again from 2016 onwards up to the end of 2018 when it fell back to the rather low level experienced ten years earlier. In 2018, 15.7% of the resident population of Austria held foreign citizenship; 8.6% were born in another EU country and 10.5% outside the EU28.

Figure 1 depicts the three waves of asylum applications in Austria over the past 30 years. Only a small share of those having arrived in Austria in search for refugee status have been granted asylum (including humanitarian or subsidiary protection status). The majority has been rejected or decisions are still pending or have been abated since the refugees have already left the country or their place of residence could not be determined. Moreover, we can see that refugees have to wait for considerable periods until cases are decided by public authorities due to capacity constraints in the administration. At the end of 2018, about 37,000 persons were waiting for a decision on their asylum application. Although the authorities should decide within 6 months after the application has been submitted in the regular asylum procedure, e.g. in 2017, the average duration of the procedure was 16.5 months (The Expert Council for Integration, 2018). If the application is rejected the asylum seeker can appeal to the courts and then the asylum procedure can last a couple of years. For these reasons alone we should thus expect very low employment rates of refugees in the first two years after arriving in Austria.

In general, refugees have limited access to the labour market in the first years after arriving in the host country. In Austria, refugees can work without specific work permits only after having been granted asylum status (subsidiary or humanitarian protection alike). Refugees can work during the asylum application procedure after a 3-months waiting period, and to a limited extent, in seasonal jobs in agriculture and tourism, in private households or engage in voluntary activities. Up to October 2018, asylum seekers below the age of 25 could also start an apprenticeship in occupations with labour shortages which provided a possibility of labour market access; however, this was abolished when a new government came in. In addition, refugees can work as self-employed by registering a trade. However, income exceeding EUR 110 to EUR 240 per month (the exact amount depends on the province of residence) results in a reduction or withdrawal of basic care support (Grundversorgung). During the asylum procedure refugees receive basic care covering the provision of housing and food, some pocket money and additional allowances e.g. for clothes. When living in private accommodation, the maximum amount of benefits, including allowances for accommodation and food, can amount up to about EUR 400 per month (amount in 2018) for a single refugee. Some or all of this benefit can be lost if the above stated income threshold is exceeded.

The research literature shows that longer spells of inactivity after arrival in the host country have detrimental effects on the labour market integration of refugees later on, e.g. in the case of the Netherlands (Bakker et al., 2014) and Switzerland (Hainmueller et al., 2016), while Hvidtfeldt et al. (2018) found that labour market integration for Denmark is only postponed by the waiting period for the asylum status. A negative long-lasting outcome was reported by Marbach et al. (2018) which showed

that an increase of the waiting period for refugees from Former Yugoslavia resulted in negative effects for this entry-cohort on employment and job search intensity for up to 10 years after arrival in Germany.

In this analysis, we explore the labour market integration of non-European refugees who came from middle and low-income countries and arrived in Austria between 2009 and 2018. More specifically, we assess differences in the probability of being in work in comparison to non-humanitarian migrants, European third country immigrants and natives. A recently released register-based labour market dataset allows us to provide novel insights in this context. Most importantly, our panel data make it possible to follow individuals from their arrival onwards. The panel data further enable us to shed light on heterogeneous effects across population subgroups by means of gender, age and education.

2. Literature review

Generally, research on immigrant-native labour market gaps gained significant ground with the papers of Chiswick (1978) and Borjas (1985) who focused on the labour market assimilation of immigrants in the US, while e.g. Zimmermann (2005), Kahanec and Zaiceva (2009), Kahanec, Zaiceva and Zimmermann (2011) analysed immigrant-native gaps in European labour markets. The literature has identified various determinants of native-immigrant labour market gaps, like years since immigration (Chiswick, 1978; Borjas, 1985; Kahanec, Zaiceva and Zimmermann, 2011), date of immigration i.e. the cohort effect, (Borjas, 1985), country of birth and gender (Adsera and Chiswick, 2007) and lack of citizenship rights (Fougère and Safi, 2009, Constant and Zimmermann, 2005, Kahanec and Zaiceva, 2009). Moreover Guzi, Kahanec and Kurekova (2015) and Huber (2015) analysed the effect of labour market institutions and migration policies in European countries on labour market integration of immigrants. However most, including the above-mentioned literature, focused on wage gaps, with the exception of Corluy and Verbist (2014) who analysed the effect of education on employment gaps for EU and non-EU migrant groups in Belgium.

In the Austrian context, only a few papers are available on the decomposition of native-immigrant labour market gaps which, however, focused almost exclusively on the so-called 'wage discrimination'. For instance, Hofer, Titelbach, Winter-Ebmer and Ahammer (2017) found an unexplained wage gap of close to 4 log percent for men on average, which is smaller for low wage earners but increases along the wage distribution. They found no evidence for wage convergence of migrants towards the native population over time. Grandner and Gstach (2015) found higher rates of wage discrimination; however, using different (EU SILC) data and no information on occupation. Hofer, et.al. (2013) showed that wage discrimination seems to be higher for migrants from Western Balkan countries compared to those from EU countries.

Following the strong increase of asylum applications of refugees in Europe from 2014 onwards, several authors started to analyse the labour market careers of refugees who arrived before this period. They looked at differences in labour market participation between refugees, other migrant groups and the native populations, particularly in Europe. Based on data for 20 EU countries from labour force survey ad-hoc modules (2008 and 2014), Fasani et al. (2018) found large gaps in employment probabilities between refugees, migrants and natives after controlling for gender, age, education and regions of origin. Gaps between refugees and non-European immigrants amount to 30 percentage points in the first three years after arrival. However, convergence takes place and gaps become statistically insignificant after 15 years of residence in the host country while gaps between refugees and EU migrants only after more than 20 years (Fasani et al., 2018). Analysis applying register based data was performed by various authors on individual European countries in recent years. Luik et al. (2018) applied data for Sweden from the 2011 population register. They found that human capital, demographic (age, gender) and information at the time of arrival in Sweden could only explain a small part of the employment gap and concluded that humanitarian and family migrants have less transferable human capital compared to labour migrants. The differences between refugees are explained to a large part by length of stay in Sweden and much less by country of origin.

Bakker et al. (2017) examined the difference between refugees and other types of migrants, i.e. economic and family reunion migrants, based on register data for the Netherlands. By performing a dynamic logistic regression, they found a negative 'refugee entry effect' compared to other migrants, which however diminishes over time. Household composition and density of residence area are found to play a role in the likelihood of being employed. Coming from a country at (civil) war, having children and arriving at a higher age in the Netherlands reduced the probability of having a job, while having acquired a qualification in the host country and being male increases the odds. Nevertheless, they could control for differences in educational attainment levels and the register based data on refugees were limited to the period after asylum status had been acquired (Bakker et al., 2017).

Ruiz and Vargas-Silva (2018) analysed labour market integration of refugees having settled in the UK before 2006 using detailed LFS cross-sectional data. They found large employment gaps that however decreased fastest in the case refugees compared to other groups of migrants. They also analysed two channels that could explain differences between refugees and other migrants. Self-reported mental health problems limiting work were much higher for the refugee group and lower proficiency of English at the time of arrival also resulted in worse outcomes (Ruiz and Vargas-Silva, 2018).

For Denmark, Schultz-Nielsen (2017) demonstrated that refugees (and their family members) improve their labour market participation within the first years of their stay, however, after about a decade men in particular seem to fall behind compared to both natives and other immigrants.

Similar results were found for Finland. However, the data does not provide information on educational attainment levels of the individuals which should be considerably lower in the case of the refugee population compared to natives and other migrants. An interesting result is that labour market integration was faster in the first years after arrival for later cohorts. Thus, most probably integration policies and instruments were also improved over time in order to foster faster labour market access (Sarvimäki, 2017).

3. Data and sample construction

To conduct the analysis presented in this paper, we use the 'Register-based Labour Market Career' data from Statistics Austria for the period 2009-2018¹. The dataset covers the labour market career of the total Austrian resident population, including refugees and other migrants. It combines information from various administrative registers, such as the central social security register, the unemployment register and the central population register. In the labour market career data, each person is assigned a unique activity status for each day. In the cases of persons being in more than one labour status at the same time, for instance a student that is also employed, the following hierarchy is applied according to the Labour Force Concept of the International Labour Organisation:

1. Compulsory military service, voluntary military service, compulsory community service
2. Employed, at work
3. Employed, but temporarily not at work
4. Unemployed
5. Persons receiving a pension
6. Students
7. Other currently not economically active persons

To obtain a harmonised and adjusted series of labour market careers, Statistics Austria applies further steps in the data preparation process². The main data preparation steps are summarised in Statistik Austria (2017).

We then use these harmonised data to construct a quarterly panel dataset for the period Q1 2009 to Q3 2018, which gives information on the labour market statuses and the actual days in these statuses within the respective quarter. In a further step, we enrich these panel data with further register data. This allows us to use additional individual information about the year and country of birth, sex, education, family status and household structure³ (number of children and the age of the youngest child), district of main residence and its urbanisation degree. Since data on the household structure, which represents a crucial determinant of labour market activity, are only available from 2011 onwards, we restrict our econometric analysis to the period Q1 2011 to Q3 2018.

After having constructed a comprehensive panel data set, we identify our groups of main interest, namely *refugees* and *non-humanitarian migrants*. Since we are particularly interested in the labour market experience of immigrants with rather similar characteristics to those refugees that arrived in Austria in the years 2014-2018, we finally choose subgroups of immigrants: non-European refugees and

¹ Register-based labour market career data comprise information for the period 01.01.2009 to 30.09.2018 on a daily basis.

² To reduce fluctuation some smoothing is applied. For data privacy protection reasons, the statistical disclosure control method of "Target Swapping" is used on a part of the data. Therefore, in particular for cell values ≤ 30 , no reliable assertions can be made.

³ For the period 2011-2014, data are available on a yearly basis for these variables, while for 2015-2018 on a quarterly basis.

non-humanitarian migrants as well as European refugees and non-humanitarian migrants. To do so, we select foreign-born individuals who arrived in Austria in the years 2009-2018. Importantly, the data enable us to follow individuals from their arrival onwards. We determine the year when a person appears for the first time in the labour market career data as the year of arrival. *Refugees* are defined as foreign-born individuals who arrived between 2009 and 2018 and were registered in basic care. By contrast, *non-humanitarian migrants* are all others with a foreign country of birth who came to Austria between 2009 and 2018 and did not make use of basic care support. So, we match refugees and migrants who arrived in Austria at the same time. In order to obtain a homogeneous group of individuals, as far as possible, we only select individuals born in non-high income countries⁴. Thus, and because we want to extract the potential impact of free movements of people within the EU, we exclude individuals from all EU countries. The distinction between the European and non-European group of countries of origin is obvious; however, we also included Russia in the latter category, since most of the refugees from there belong to the group of Chechens. We further only select individuals in the age bracket 20-50 in the year of arrival to focus on the core working age population. The majority of the refugees came from the countries Syria, Afghanistan, Iraq and Iran. These four countries of origin account for almost 60% of the total pool of refugees over that period. Nevertheless, we cover refugees from more than 100 countries. Among non-humanitarian migrants, we find high numbers of individuals who emigrated from Serbia, Bosnia, Turkey, Russia (in particular Chechnya), Kosovo, North Macedonia, Ukraine and China.

We also compare the groups of incoming individuals with Austrian-born individuals from the same age cohort. In order to minimise the size of the sample and to make estimations feasible, we draw a 10% random sample of the Austrian-born individuals from each of the 126 Austrian districts. We apply weights in our regressions to make the sample representative again⁵.

In total, we register 87,719 non-European refugees, 7,122 European refugees, 132,308 non-European migrants and 124,753 European (non-EU) migrants who arrived in Austria between 2009 and 2018. Table 1 provides an overview of our sample with respect to gender, age and education. Here, we consider individuals when they appear for the first time in the panel data.

Table 1 / Composition of sample, persons at year of arrival

		NE-REF	E-REF	NE-MIG	E-MIG	Natives
Sex	<i>Female</i>	29.1	32.3	46.3	46.0	49.4
	<i>Male</i>	70.9	67.7	53.7	54.0	50.6
Age	<i>20-30</i>	60.1	52.1	60.0	55.5	31.3
	<i>30-40</i>	28.2	33.4	27.7	27.0	30.4
	<i>40-50</i>	11.7	14.5	12.3	17.4	38.3
Education	<i>L</i>	38.3	26.4	20.9	26.1	13.1
	<i>ML</i>	24.1	17.4	15.2	15.0	54.1
	<i>MH</i>	8.4	5.8	11.0	7.6	19.8
	<i>H</i>	7.5	6.5	8.8	3.8	13.1
	<i>NA</i>	21.7	43.9	44.0	47.6	-

Notes: NE-REF – non-European refugees; E-REF – European refugees; NE-MIG – non-European migrants; E-MIG – European migrants; L – low; ML – medium-low; MH – medium-high; H – high; NA – not available.

Source: Statistics Austria, own calculations.

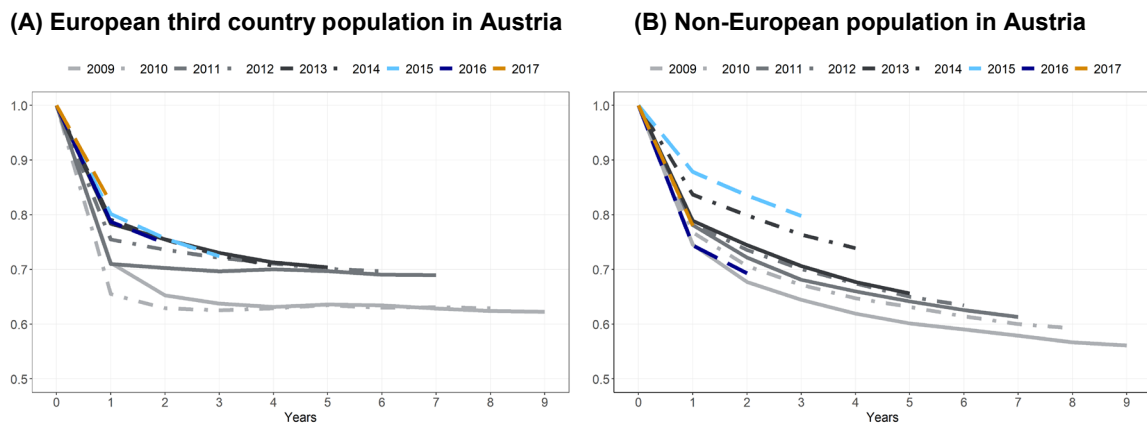
⁴ Non-high income countries are defined according to the World Bank as those with a per-capita income annual gross national income below USD 12,375 at purchasing power parities (value 2018).

⁵ We do some checks to test whether the random draws give reliable results. We compare the results of a cross-section regression, once with the entire population and once with the random draws. The estimated coefficients predominantly coincide.

We find that both groups of non-humanitarian migrants show rather balanced shares of men and women. In contrast, refugees are biased with respect to gender, with about 70% of male individuals. The age structure is nearly balanced among the native population between the three age groups. As expected, we see much higher shares of younger individuals in all four immigrant groups; the shares of the age cohort '20-30' ranges between 52 and 60%. As concerns education, we lack information for a large number of individuals in the immigrant groups. Among immigrants, interestingly, non-European refugees show the highest share of individuals with available information on education level. In the other immigration groups, between 44 and 48% of individuals do not provide any education information. Furthermore, we find comparatively higher shares in the lower education groups (L and ML) in the immigrant groups, while higher shares in the medium education groups (ML and MH) among natives. Natives further show a relatively high share of highly educated (H) compared to immigrant groups.

As already discussed, in this analysis we are focused on non-European and European refugees and non-humanitarian migrants who arrived in Austria between 2009 and 2018. In doing so, we exploit information on the particular year of arrival.

Figure 2 / Attrition rate of migration population in Austria by entrance year



Source: Statistics Austria, own calculations.

In Figure 2 we can see the development of sample attrition over the years for the European third country population (A) in Austria (comprising refugees and other migrants) and non-European refugees and migrants (B). In the non-European group (B), about 30% of the immigrants that had an official place of residence in Austria in the year of arrival had already left the country two years after arrival. Some of those, however, might have stayed illegally. After five years, the group of remaining individuals drops below 60% and keeps shrinking. In the case of European third country humanitarian and non-humanitarian migrants (A), more than 60% stay at least eight years. In more recent years (when the labour market situation in Austria improved) the share of permanent residents tends towards 70%. We would assume that those who find a way into the Austrian labour market have a higher tendency to become permanent residents. However, when testing for this kind of sample bias due to attrition in our analysis, we did not find a significant effect.⁶

⁶ In order to test the effect of sample bias due to attrition, we conducted the regression analysis only for those individuals of the immigrant groups, who remained in Austria from arrival until the last period of analysis (third quarter of 2018). Thus, we exclude any immigrant who moved abroad over the period 2009-2018. The patterns of employment gaps were found to be very similar.

4. Methodology

In this analysis, we investigate the labour market integration of recently arrived refugees and migrants in Austria over time. To do so, we explore differences in the probability of being in work between refugees and migrants who arrived in the period 2009-2018, and of individuals who were born in Austria. More formally, we estimate the specification in the following form using quarterly panel data for the period Q1 2011 to Q3 2018:

$$y_{iqt} = \sum_{j=0}^7 M_{iat-j}^E \phi_j^E + \sum_{j=0}^7 M_{iat-j}^{NE} \phi_j^{NE} + \sum_{j=0}^7 R_{iat-j}^E \rho_j^E + \sum_{j=0}^7 R_{iat-j}^{NE} \rho_j^{NE} + \mathbf{X}'_{iqt} \boldsymbol{\beta} + \gamma_t + \mu_q + \vartheta_d + \epsilon_{iqt}, \quad (1)$$

where y_{iqt} denotes a dummy variable indicating whether an individual i is in work in quarter q in year t . Being in work is defined as a labour market status of either employed, self-employed or marginally employed for at least 10 days in a quarter. Importantly, this allows us to capture the entire spectrum of ways individuals become integrated into (formal) work.

The variables M_{iat-j}^E , M_{iat-j}^{NE} , R_{iat-j}^E and R_{iat-j}^{NE} are the variables of main interest. They indicate for migrants (M) and refugees (R), being born in European non-EU (E) and non-European (NE) countries, the time of arrival in Austria in the year $t - j$ individually defined for each arrival cohort a . In total, we consider for each group seven year lags, $j \in [0,7]$. ϕ_j^E , ϕ_j^{NE} , ρ_j^E and ρ_j^{NE} are the corresponding coefficients that measure differences in the probability of being in work between migrants and refugees from European and Non-European countries, respectively, and Austrian-born individuals.

\mathbf{X}_{iqt} is a vector of explanatory variables. On the one hand, we control for individual and household characteristics, including age, gender, educational attainment, the number of children, the age of the youngest child and the household type. We further use information on cumulated days spent by individuals in education and training programs provided by the Austrian public employment service (AMS). Both variables only refer to the period from 2009 onwards. On the other hand, we include labour market indicators at the district level, such as unemployment rate, activity rate and shares of employed individuals in manufacturing, tourism as well as agriculture in total employment. In this respect, we use information on the industry of the employer that is available for employed individuals. This also allows us to take the general conditions in local labour markets into account. Regional dummies further account for the degree of urbanisation of districts. Moreover, we consider the share of individuals born in non-EU and non-high income countries relative to the total residence population in each district. To account for time-specific effects, we include year fixed effects γ_t and quarter fixed effects μ_q . ϑ_d additionally controls for district-specific time-invariant characteristics.

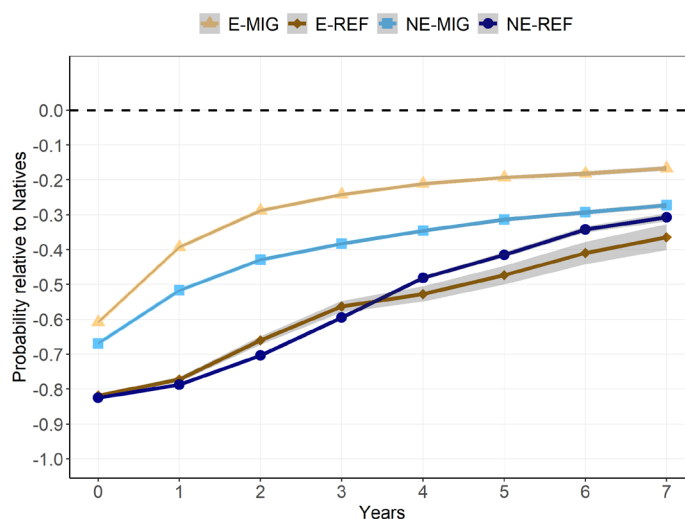
Finally, ϵ_{iqt} is the remaining error term. We cluster standard errors by individuals to allow for correlation across time. Specification (1) is estimated as a linear probability model for all individuals and separately by gender, age cohorts and educational attainment in order to highlight heterogeneous effects across population subgroups.

5. Empirical results

We now turn to our econometric analysis. We start by discussing the estimation results of Specification (1) for the total sample. In this respect, we are particularly interested in the results of the immigration-native employment gaps over time. It is worthwhile looking first at these gaps without incorporating other explanatory variables. This allows capturing the overall unconditional employment gaps that prevail between immigrants and natives in Austria. The full set of regression results is reported in Table A.1 in the Appendix.

Figure 3 depicts the unconditional⁷ difference in employment probabilities of refugees and migrants, both from European non-EU countries and non-European (non-high income) countries in comparison to natives depending on the year since arrival in Austria. In the year of arrival, the access to the labour market is restricted for asylum seekers. Accordingly, their employment probability is almost zero and their employment gap (difference in employment probability to natives) is therefore above 0.8. For humanitarian migrants, it takes quite a long time to gain ground in the Austrian labour market. After four years the employment gap has declined to 50 percentage points and after seven years it amounts to 30 percentage points, however still decreasing.

Figure 3 / Development of employment gaps compared to natives, unconditional



Notes: The grey areas indicate the 95% confidence interval. E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees.

Source: Statistics Austria, own calculations.

Migrants from non-European countries (these are persons that immigrated for work, study or family reunion reasons and hold respective permits) have, in principle, instant access to the labour market at least after having applied for a work permit. Accordingly, this group shows lower employment gaps soon

⁷ In the unconditional estimations, we apply only year and quarter fixed effects.

after arrival and two years thereafter the difference in employment probability is already down to about 40 percentage points. However, after seven years refugees have caught up with the non-humanitarian migrants from the same group of countries. Non-European refugees show even lower employment gaps than European non-EU refugees from four years after arrival onwards – it is an interesting switchover.

Other migrants from European non-EU source countries (particularly West-Balkan countries) show a decline of the employment gap below 20 percentage point four years after arrival in Austria while the employment gap for non-European (non-high income) countries remains at about 30 percentage points.

After the unconditional results, we move on to analyse the results for the full baseline specification. Here, we introduce explanatory variables at the individual and the district level, as discussed above. Before we embark on a detailed discussion of the conditional immigrant-native employment gaps, we summarise the results regarding our additional covariates.

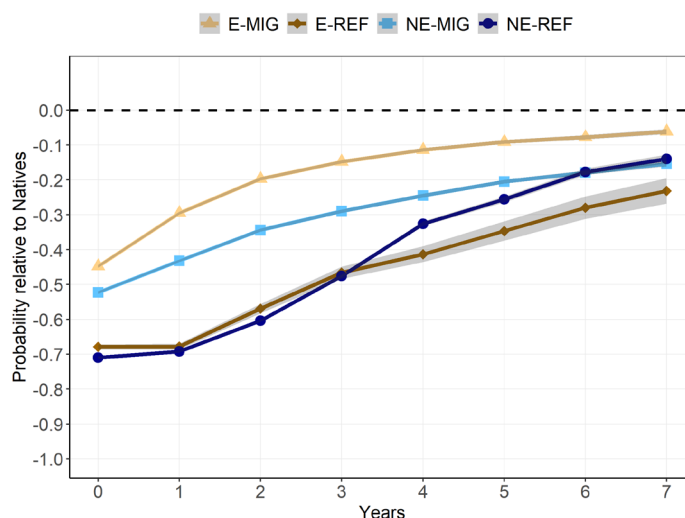
The conditional results of the regressions are obviously driven by natives accounting for the majority of observations. The coefficients of the standard explanatory variables are almost all significant and show the expected signs (see Appendix Table A.1, Column (2)). In detail, the likelihood of being employed rises with age but at a decreasing rate. Women have on average a 6 percentage points lower probability to work compared to men. A surprising result is that low-medium educated persons (those not having finished upper secondary schooling) show a higher likelihood of employment in comparison to low educated (the base group) than persons with medium-high educational attainment. Highly educated persons, however, reveal on average the highest probability of being in employment. People living in partnership show a higher work propensity than single households as well as those living without partner but with other family members (parents or children). The higher the number of children living in a household, the lower the employment propensity of both parents, when other effects are controlled for. The results further suggest a lower probability of being in work for individuals having a child in the age up to five years, compared to individuals without children; whereas a statistically significant higher probability when the child is older⁸. Persons who spent more days in education or training (earlier during the observation period)⁹ show a slightly lower probability to work. This is due to the fact that people who were in education or training in an earlier period are obviously more likely than others to remain unavailable for the labour market in the following periods too compared to the average population in the age group 20-50 years. However, the result for training might be affected by a selection bias: those who have a lower probability to be in work in general, like the unemployed, will be offered training by the public employment service. The effect of training on the probability to be in work for the individual person will be further examined below when we present the results of regressions with individual fixed effects. The conditional probability to be employed is also lower in urban and intermediate regions compared to sparsely populated ones. However, this can also be the result of a selection bias as the unemployed are likely to move to cities in their search for a job. In districts where manufacturing is an important industry for employment of the resident population, we find a slightly higher probability to be employed. No statistically significant effect on employment is found for the importance of the tourism or agricultural industries. The estimated coefficient for the unemployment rate shows the expected result: an increase

⁸ We re-run Specification (1) by population subgroup including gender (see Chapter 5.2). The impact of the age of the youngest child was found to be very different for women and men: While women with children up to the age of 10 years reduce the employment intensity, those with older children are relatively more in work compared to women without children on average. Men, however increase their work intensity also with younger children.

⁹ We consider here only training financed by the public employment service in the analysed period 2011-2018.

of one percentage point in the local unemployment rate reduces the individuals' probability of being in work by 0.4 percentage points on average. A higher activity rate at the district level is related to the exact opposite effect. Interestingly, a higher share of migrants (only non-EU migrants and refugees from non-rich countries are considered) in a district goes along with a higher (conditional) employment probability of 0.4 percentage points.

Figure 4 / Development of employment gaps compared to natives, conditional results



Notes: The grey areas indicate the 95% confidence interval. E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees.

Source: Statistics Austria, own calculations.

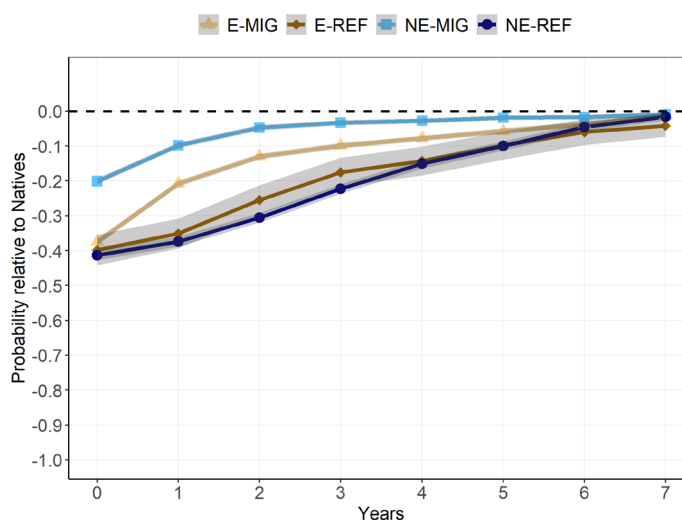
Figure 4 shows the conditional output for the four groups of immigrants, i.e. differences in the characteristics of the groups, e.g. lower shares of female persons, higher shares of young people, etc. are accounted for¹⁰. This results in lower employment gaps for all immigrant groups. For non-European refugees, the difference declines to 30 percentage points four years after arrival and 15 percentage points after seven years. At that time refugees with the same characteristics (as we have controlled for these) have even caught up with non-humanitarian migrants from the same groups of countries and fare better in comparison to European non-EU refugees (same switchover we observed earlier). European migrants from non-EU countries have almost closed the conditional employment gap with the native population within seven years after arrival, when it amounts to only 6 percentage points.

Since our data have a panel structure, we further estimate Specification (1) applying individual fixed effects as well. This allows us to control not only for observed circumstances and characteristics (gender, age, education, number of children, etc.), but also for non-observed time-invariant characteristics of the individuals. As we are also interested in permanent immigrant-native gaps, we did not apply individual fixed-effects in our baseline specification. Notwithstanding, it is useful to explore to what extent immigrant-native gaps change when we account for additional time-invariant individual non-observables. The full set of results for Specification (1) with individual fixed-effects is provided in the Appendix (see Column (3) in Table A.1).

¹⁰ The corresponding regression results can be found in Table A.1 in the Appendix.

Compared to the results discussed above, we find interesting additional conclusions based on the covariates. Individuals living with their partner have, as found out above, a higher probability to work. However, when they move together with their partners, the probability decreases on average. This may be due to a general higher household income, which can mitigate the pressure to work. An increase in the number of kids in turn is associated with a higher probability of being in work. This might be related to the necessity of a higher household income. However, for refugees and migrants in general this is not the case (see Column (3) in Table A.2). Furthermore, moving to more urban regions increases on average the probability of being in work. Interestingly, we also find important changes for days spent in education and training. After controlling for unobserved time-invariant individual characteristics, the results for both variables turn from negative to positive. This is not that surprising as individuals fixed effects principally account partly for the selection process. Accordingly, investments in education and training play an important role in improving an individual's employment record.

Figure 5 / Development of employment gaps compared to natives, individual fixed effects



Notes: The grey areas indicate the 95% confidence interval. E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees.

Source: Statistics Austria, own calculations.

Turning to the corresponding employment gaps in Figure 5, we find much lower gaps in all four immigrant groups in comparison to the results above. This illustrates that unobserved permanent differences between the individuals account for a large part of the employment gaps. Potential explanations for that can be permanent differences in e.g. language proficiency and the health condition of immigrants. Not surprisingly, differences between the four immigrant groups also become smaller. Nonetheless, we still find a catching-up in the probability of being in work for all immigrant groups, though the paths of employment gaps become generally flatter compared to the results discussed above. Potential explanations for the remaining gaps are in general not only an acculturation process in order to find the way into the labour market of the host society, but also transient health or linguistic problems (see for example Ruiz and Vargas-Silva, 2018) that are expected to be more pronounced in the first period after the arrival. Figure 5 thus depicts that refugees face a larger handicap in general in respect to integrating to the labour market compared to other immigrant groups. On the other hand, we

can also see that the catching up of refugees is relatively faster, after accounting for permanent differences.

5.1. DIFFERENCES IN EFFECTS OF EXPLANATORY VARIABLES BETWEEN NATIVES AND REFUGEES

In order to examine whether individual characteristics and circumstances have different effects on the employment probabilities for specific individual groups of non-EU refugees and migrants, we estimate Specification (1) with group interaction terms. The conditional results are depicted in the Appendix in Table A.2 (Column (2)) for natives and individual types of migrants (European non-EU refugees or migrants and non-European refugees or migrants from non-high income countries). For non-European refugees, the group we are particularly interested in, we find a lower probability of employment at an older age. Female refugees have a considerably lower probability to work compared to men than in the case of natives. Considering educational attainment levels, we observe reverse probabilities compared to natives. The higher the education levels, the lower the probability of refugees to be in employment. This underlines the difficulty in transferring skills particularly for the higher educated, as also found by Basilio et al. (2017), which also leads to a greater hesitancy of this group to accept jobs for which they feel they are overqualified. For highly qualified persons, furthermore, a higher level of command of the language of the host country might be necessary to find an adequate job than is the case for the lower skilled searching for manual work. Moreover, the highly skilled might also invest in the first years after arrival in additional education (see e.g. Friedberg, 2000; Duvander, 2001; Parasnis et al, 2008; Kanas and van Tubergen, 2009).

Coming to further variables: persons in partnership have a lower probability to work compared to singles in the case of refugees. This might also be a special effect for persons coming in the context of family unification. Somewhat surprising is that persons with children up to the age of 2 years show a higher employment probability on average, whereas all others having children (also relevant to children above the age of 15) show a lower propensity to work. Those having spent more time in education or training in Austria have a higher likelihood to be employed. In urban and intermediate density regions the chance to be in work is higher. In districts with relatively higher employment shares in manufacturing, refugees show a slightly higher probability to be in work. The effect of tourism is much stronger: a higher labour demand by 1 percentage point in tourism at the district level increases the likelihood of refugees to be employed by 0.4 percentage points. A higher activity rate shows the same effect on work probability for refugees and natives. A higher unemployment rate in a district, on the other hand, lowers the employment probability much more for refugees compared to Austrian natives. The positive relationship between a higher share of migrants in the district and employment probability is the same for refugees and other migrant groups as for natives. The results of the interaction terms for the other groups of migrants and refugees will not be discussed here in detail; however, they can be examined in the Appendix in Table A.2 Column (2)¹¹.

¹¹ The detailed results for the individual fixed effects are also available in the Appendix in Table A.2 in Column (3).

5.2. POPULATION SUBGROUPS

The data used in our analysis further allow us to explore immigrant-native gaps separately by population subgroup. In doing so, we analyse differences between men and women, age cohorts and educational attainment groups. Importantly, we compare the subgroup of migrants and refugees with the corresponding subgroup of natives. The full set of unconditional and conditional results, complete with individual fixed-effects, is provided in the Appendix (see Tables A.3-A.11).

5.2.1. Gender

Recent empirical results for Austria suggest that women in particular struggle to enter the labour market among the group of refugees (Konle-Seidl, 2018). To shed light on differences in the employment gaps by gender, we estimate Specification (1) separately for men and women. Figure 6 plots the gaps for men (A) and women (B), conditional on our set of explanatory variables.

Overall, we find different as well as common patterns by comparing the two graphs. In fact, female immigrants show on average a lower probability of being employed than female natives. For males, we observe a lower gap between immigrants and natives in all four immigrant groups over time. While the immigrant-native gap still ranges from 8 to 28 percentage points for women after seven years in Austria, the corresponding gap for men is in the range between 0 and 18 percentage points.

Similar to the patterns for the total sample, male humanitarian immigrants have on average a worse employment record than male non-humanitarian immigrants, especially in the first years after their arrival. However, male humanitarian immigrants catch up with both non-humanitarian immigrants and natives over time.

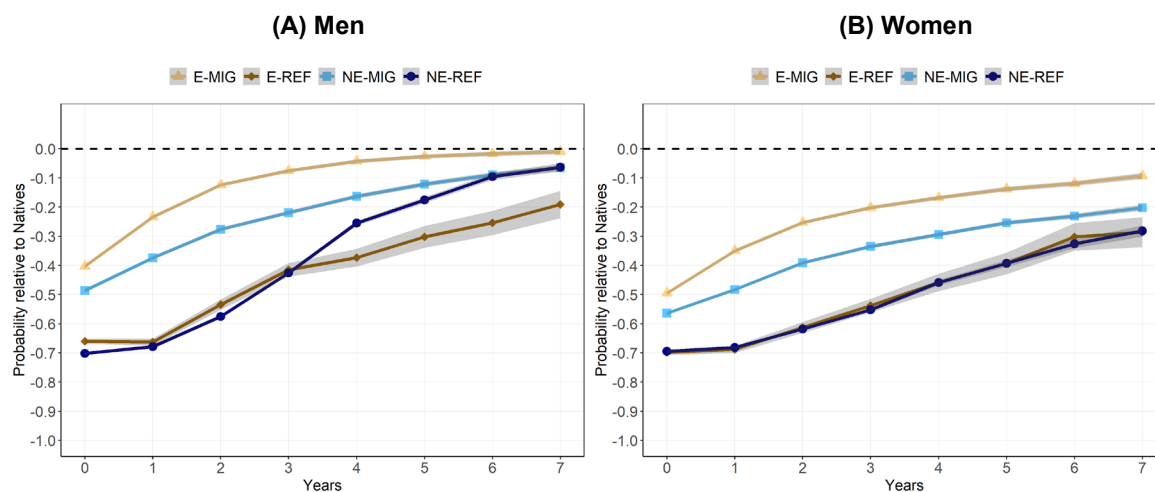
The individual employment paths for males are rather equal to those of the total sample. In particular, the probability of non-European male refugees being employed after the third year in Austria increases swiftly. Thus, they experience a better labour market integration than European (non-EU) refugees. Interestingly, non-European male refugees completely catch up with non-European migrants after six years. This pattern is not visible for women. Here, we find more or less the same labour market performances for both humanitarian immigrant groups which are worse than for non-humanitarian immigrants over the total time span.

As concerns non-humanitarian immigrants, we see similar paths for both women and men which, however, evolve at different levels. In particular, European (non-EU) male migrants significantly improve their labour market performance over time as the gap relative to male natives almost disappears after five years of residence in Austria.

We also estimate Specification (1) by gender with individual-fixed effects. Overall, migrants perform again better than both non-European and European refugees. After also controlling for permanent unobserved differences among men and women, we find larger employment gaps for male as compared to female refugees in the first years after arrival. Accordingly, in particular among women, (observed and unobserved) permanent differences control for a large part of the employment gaps. This is not surprising as we can see in Figure 6 that employment gaps among women are comparatively persistent

over time. This, in turn, means that men in fact catch up faster and to a greater extent in comparison to female immigrants.

Figure 6 / Employment gaps by gender, conditional results



Notes: The grey areas indicate the 95% confidence interval. E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees.

Source: Statistics Austria, own calculations.

5.2.2. Age cohorts

In a next step, we examine differences across age cohorts. To do so, we estimate Specification (1) separately for individuals aged 20-30, 31-40 and above 40. Figure 7 (A, B, and C) contrasts the immigrant-native employment gaps by each age cohort.

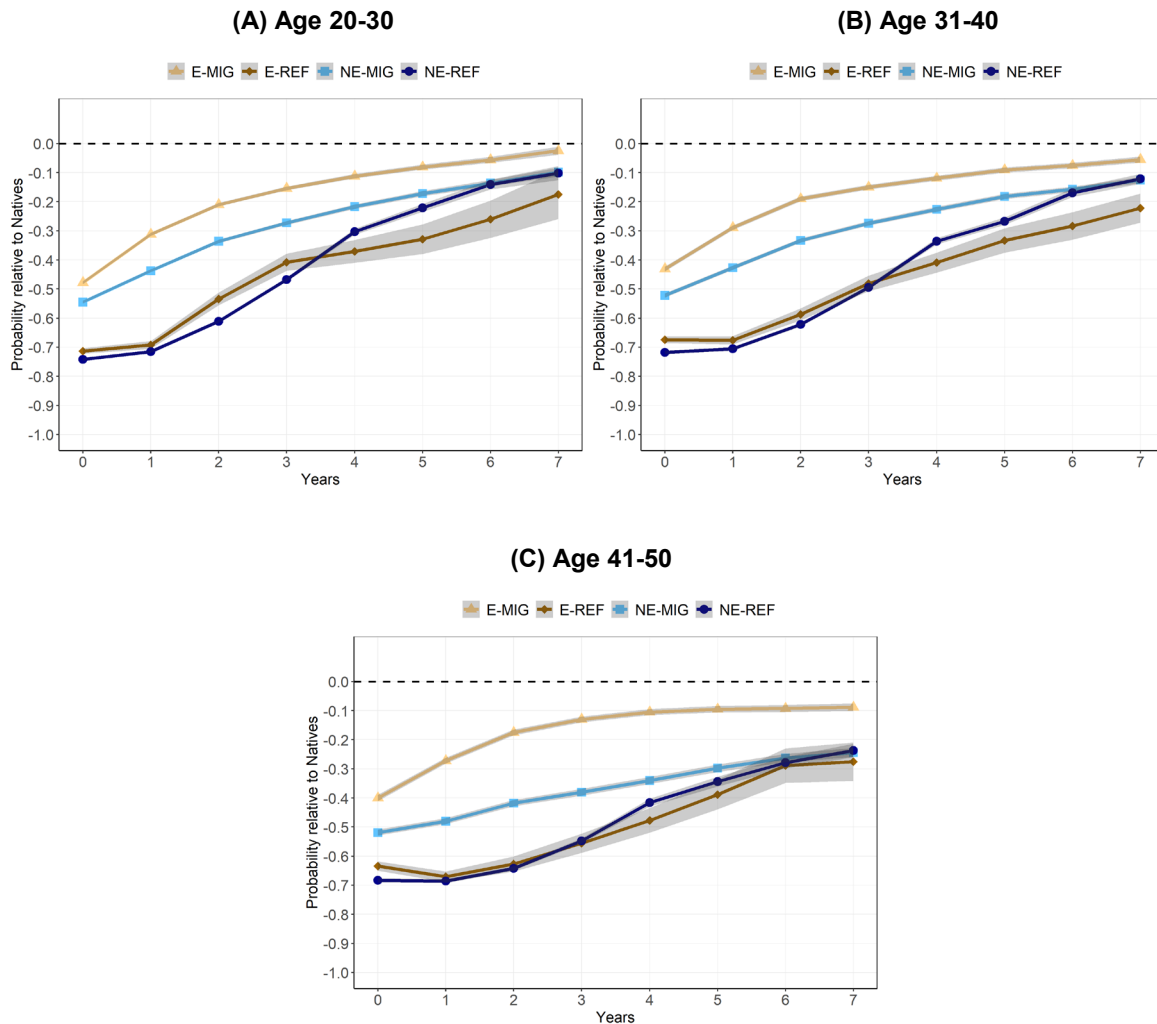
As can be seen, the patterns are almost the same when we compare (A) and (B). Accordingly, the labour market performance does not differ much between individuals in the age between 20 and 30 and between 31 and 40. We see again a catching-up in the probability of being in work for both groups, non-humanitarian immigrants and in particular refugees, over time.

The differences between employment gaps for individuals above 40 years and those of younger cohorts however are substantial. They show a much higher immigrant-native gap than individuals younger than 40 years. It is only for European non-humanitarian migrants that the gaps look quite similar for all age cohorts. Even though we also observe a catching-up in the labour market performance of non-European migrants and European and non-European refugees above 40 years, the immigrant-native gap – amounting to about 25 percentage points – is considerably higher not only in comparison to the younger age cohorts, but also as compared to older European non-humanitarian migrants.

The results for the estimation of Specification (1) by age cohort with individual fixed effects highlight the differences in the catching-up process: younger non-European refugees reduce their employment gap by 0.5 (i.e. the difference in employment probability between those and natives is reduced by 50 percentage points) while individuals older than 40 years only by 0.25. In general, taking into account both observed and unobserved permanent differences, catching up for individual immigrants is shown to

be slower than expected from unconditional and conditional regressions (see Table A.5-7, Column (1)-(3)).

Figure 7 / Employment gaps by age groups, conditional results



Notes: The grey areas indicate the 95% confidence interval. E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees.

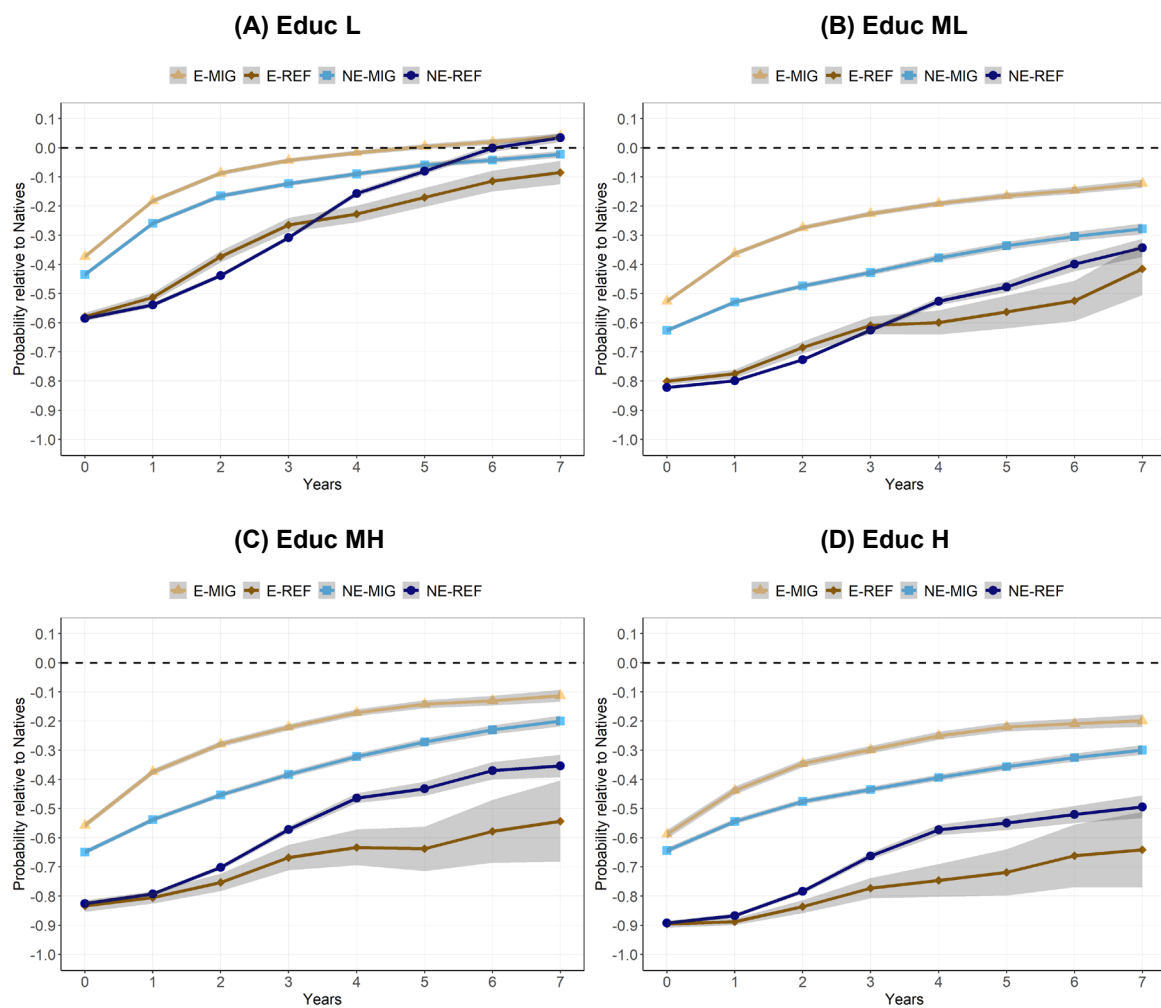
Source: Statistics Austria, own calculations.

5.2.3. Educational attainment levels

Our data further allow examining immigration-native gaps by educational attainment level. However, as already discussed above, we lack information on educational attainment for a number of refugees and non-humanitarian migrants. Since those individuals cannot be ascribed to one of the four educational attainment groups, we cannot consider them in this population subgroup analysis. We stress that this might cause a selection bias in our results. Nevertheless, it is worthwhile looking at differences across educational attainment based on available observations.

Figure 8 shows the conditional immigrant-native employment gaps for individuals with low (Educ L), medium-low (Educ ML), medium-high (Educ MH) and high (Educ H) educational levels. Overall, we find substantial differences when we compare the results between the four educational attainment groups. Interestingly, immigration-native gaps tend to be higher the more we climb up the education ladder.

Figure 8 / Employment gaps by educational attainment levels, conditional results



Notes: The grey areas indicate the 95% confidence interval. E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees.

Source: Statistics Austria, own calculations.

In particular, the highly educated show the largest immigrant-native employment gaps in all four immigrant groups. One should however keep in mind that the average employment probability of highly educated natives is with 0.881 (unconditional including year and quarter fixed effects) still much higher than the one of low educated natives (0.672).

Surprisingly, the low educated immigrants exhibit the best labour market performance compared to their native counterparts. We see hardly any difference in the probability of being in work after six years in Austria relative to natives in the case of all analysed immigrant groups. European non-humanitarian and non-European refugees even reveal a higher probability compared to the low educated natives, which is

statistically significant. In the case of low-medium and medium-highly educated immigrants, the development of employment gaps ranges between the ones for low-educated and highly educated individuals.

European non-humanitarian immigrants again tend to reveal a better employment record in comparison with non-European non-humanitarian immigrants in all education levels. As concerns humanitarian immigrants, we find the common pattern that individuals from non-European countries show a better performance than individuals from European countries after the third year in Austria, i.e. the switchover we observed previously as well.

By applying individual fixed effects, we also explore immigrant-native employment gaps by educational attainment levels, additionally taking into account non-observed permanent differences between individuals. Overall, immigrant-native employment gaps become smaller the higher we move up the education levels. Accordingly, permanent differences control for a tremendous part of the immigrant-native gaps in the case of highly educated individuals. This means that the latter group shows the lowest speed in catching-up over the observation period. Again, we find a flattening in the catching-up process of immigrants for all educational attainment levels when we account additionally for unobserved and observed permanent differences among individuals.

5.3. EMPLOYEES AND SELF-EMPLOYMENT

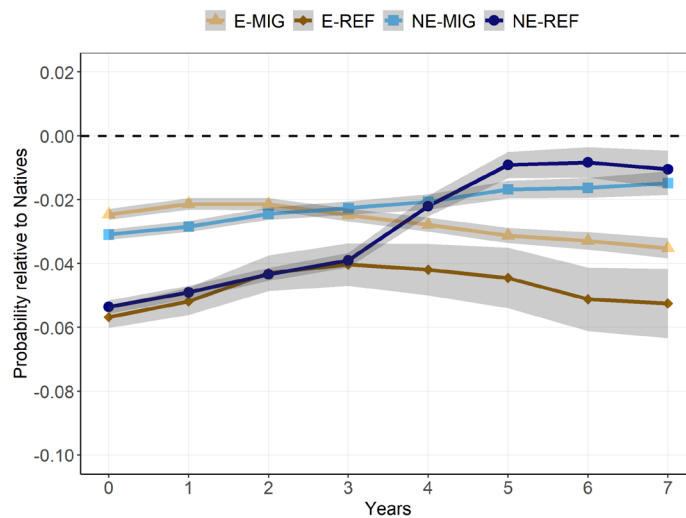
So far, we have explored labour market integration from an overall perspective, including being either employed, self-employed or marginally employed. In order to examine the paths of the different immigrant groups into the labour market in more detail, we estimate Specification (1) not only for the probability of being in work, but also for two specific types of employment, namely being an employee and being self-employed.

The employee status comprises full-time and part-time jobs but not marginal employment in our analysis. The latter category considers jobs with a monthly income below EUR 438.05 (in 2018). From Table A.12 in the Appendix, we can see that the development of the gaps in the probability of being an employee is very similar to those of being in work for the four immigrant groups. The only obvious difference is that the gaps are somewhat lower. Since the average probability of being an employee is obviously with 0.705 lower than the one of being in work (i.e. employed and self-employed), i.e. 0.826 for the Austrian native population (age group 20-50), the gaps for refugees and migrants are also lower. Likewise, the gaps in the probability of being an employee show the same patterns as for being in work in all population subgroups of gender, age and educational attainment level. However, the gap levels are also somewhat smaller.

In addition to the separate analysis for employees, we also estimate Specification (1) by focusing exclusively on self-employment. The probability of being self-employed is with 0.085 for the native population obviously considerably lower than the one of being an employee. This is also the case for the immigration groups and therefore probability gaps are also lower. However, the development of the latter, as depicted in Figure 9, is very interesting. Conditional on other explanatory variables, a rather large part of non-European migrants, and particularly refugees, take the chance of opening their own business in order to integrate into the labour market. Five years after arrival, the conditional self-

employment gap of refugees in comparison to natives is almost closed. European migrants however find this option similarly attractive in the first years but opt out more often in the course of their stay in Austria. The set of regression results for self-employment can be found in the Appendix in Table A.13.

Figure 9 / Gaps in probabilities of self-employment, conditional results



Note: The grey areas indicate the 95% confidence interval; E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; natives average probability over the period 2009-2018: 0.0847.

Source: Statistics Austria, own calculations.

By focusing on self-employment by gender, the analysis shows further interesting results for population subgroups. The immigrant-native gaps for men look very similar to those of the total sample. In particular, male non-European refugees show a significant increase in the probability of being self-employed after the third year in Austria. The probability is even higher in comparison to male natives after the fourth year. The pattern for women looks completely different: For all immigrant groups, we find rather constant immigrant-native gaps over time where refugees perform worse than non-humanitarian migrants.

The oldest age cohort again shows larger immigrant-migrant gaps in comparison to younger cohorts over the total time span. The patterns for younger cohorts correspond largely to those of the total sample. Especially the youngest (aged 20-30) non-European refugees reveal a high probability of being self-employed that is even higher than for natives after the third year in Austria.

We also find interesting results for self-employment among educational attainment levels. Lower educated individuals show a higher performance in self-employment in general as compared to more highly educated individuals. Interestingly, for both lower educated non-European refugees and non-European non-humanitarian migrants, the probability of being self-employed increases over time. In contrast, immigrant-native gaps for self-employment are rather constant among higher educated individuals.

6. Summary and conclusions

In this paper, we focus on the development of labour market careers of refugees from non-European non-high income countries who arrived in Austria over the period 2009-2018. From this, we expected to draw conclusions on the labour market prospects of those numerous refugees in particular who arrived in the years 2015-2017. We track their integration into the Austrian labour market and compare their performance with the ones of the native population and other migrants. The latter are made up of refugees from European non-EU destinations and non-humanitarian migrants (i.e. 'normal migrants' comprising labour and family-reunion migrants) originating from European non-EU countries and from non-European regions.

Our analysis draws on a register based panel dataset covering the labour market career of the total Austrian resident population, including refugees and other migrants. It is enriched with individual register based information on demographic characteristics (year and country of birth, gender, education, family status and household structure) and labour market information regarding the district of residence. In order to examine refugee-native (and immigrant-native) gaps in employment, we first estimate unconditional probability differences for total employment which considered as being in work for at least 10 days per quarter as a full-time or part-time employee or self-employed or marginally employed. Since access to the labour market is strongly restricted for refugees when they arrive, non-European humanitarian migrants (as well as those from European third countries) have very low employment rates in the first years after arrival. Our estimates show that after four years their employment gap (relative to natives) has declined to 50 percentage points and after seven years it amounts to 30 percentage points, however, it is still decreasing and non-European refugees have caught up with other migrants from the same groups of countries.

In order to correct for the different structure of the refugee and migrant population in comparison to natives, we examine the conditional employment gaps in order to assess the labour market performance of immigrants. To do so, we control for a set of additional explanatory variables at the individual as well as the district level. We find that although the conditional employment gap of non-Europeans refugees is large at the beginning, it is reduced to 15 percentage points after 7 years and that of European third country migrants to 5 percentage points.

The results of our conditional regressions for population subgroups show that gaps between men and women (compared to their native counterparts) are larger for non-European refugees and non-humanitarian migrants. Men also show a faster catching up than women. In the case of European third country migrants the difference between women and men is also somewhat higher compared to natives.

Older aged cohorts (in the 40-50 years bracket) fare worse. All analysed migrant groups except for European non-humanitarian migrants feature a conditional employment gap which amounts to about 25 percentage points even seven years after arrival. While younger cohorts continue to catch-up in comparison to natives at the end of the observation period, the employment gaps for the older age groups stabilise four to seven years after arrival.

The regression results for the educational attainment group point to a considerable immigrant-native employment gap for highly educated individuals. Conversely, we find a strong catching-up in the labour market performance for lower skilled individuals.

The results of the regression with interaction terms moreover show a couple of interesting and important differences between non-European refugees and the Austrian native population. Refugees living in partnership have a lower employment probability than singles which is the opposite of what we observe in the native population. While natives are more likely to remain absent from the labour market only when having children up to the age of 6 years, they increase their work intensity afterwards compared to singles whereas the likelihood of refugees with children to stay in inactivity remains higher.

The more time refugees have spent in education or training in Austria (financed by the public employment service) the higher the probability to be in work. This is also the case for those that reside in urban or intermediate regions as compared to those in rural districts. In districts with a higher share of employment in manufacturing, as well as in tourism, refugees fare better. A higher unemployment rate in a district of one percentage point decreases the employment probability of refugees by 0.75 percentage points, which is almost double the rate of natives. Higher shares of European and non-European third country migrants in a district are positively related with the chances to find a job for all immigrant groups even when controlled for sample selection bias due to mobility patterns of refugees and migrants by applying individual fixed effects.

Apart from immigrant-native gaps for total employment, we also examine those for the probability of being an employee and being self-employed. A relatively large segment of non-European refugees and other migrants take the chance of opening their own business in order to integrate into the labour market. Five years after arrival, the conditional self-employment gap of refugees in comparison to natives is almost closed. European migrants find this option similarly attractive but only in the first years after arrival and opt out more often thereafter.

From the detailed analysis of immigrant-native employment gaps, we find that refugees need a rather long time to integrate in the Austrian labour market. However, the employment gaps are similar to those found for the Netherlands (Bakker et al., 2017). Catching up of non-European male refugees and migrants is considerably faster; particularly when we consider the higher employment gaps for older age groups that cannot integrate properly in the labour market any more after migration. This seems to reflect a very strong incentive of non-European refugees in particular to get a foothold in the Austrian labour market. Compared to European (non-EU) refugees and migrants, there is less of a prospect of returning home and linkages with the home country are likely to have been broken more dramatically.

For non-European female migrants, however, the relative probability of being in paid employment is rather low. We would expect that specific offers for women concerning child-care and consultation services on how to reintegrate in the labour market after maternity leave could help in this respect. All in all, the results show that education and training measures help in increasing the employment probabilities of all refugees and other migrants.

Of particular concern is that the employment probability of the non-European tertiary educated is rather depressed not only when compared to natives but also to the low educated from the same regions of origin. The chance to use their employment potentials fully is low in Austria. This may be due to the need

for high (host country) language competence for high skilled jobs. More generally, this seems to be related to problems with transferability of skills and an incentive to look longer for a job that matches one's educational attainment level; but it could also be due to discrimination in the labour market and other non-observed characteristics of this group of immigrants.

Literature

- Adsera, A. and B.R. Chiswick, 2007. *Are there gender and country of origin differences in immigrant labor market outcomes across European destinations?* Journal of Population Economics, 20(3), 495–526.
- Bakker, L., Dagevos, J., and G. Engbersen, 2014, *The Importance of Resources and Security in the Socio-Economic Integration of Refugees. A Study on the Impact of Length of Stay in Asylum Accommodation and Residence Status on Socio-Economic Integration for the Four Largest Refugee Groups in the Netherlands*. J. Int. Migr. Integr. 15, 431–448.
- Bakker, L., Dagevos, J., and G. Engbersen, 2017, *Explaining the refugee gap: a longitudinal study on labour market participation of refugees in the Netherlands*. J. Ethn. Migr. Stud. 43, 1775–1791.
- Basilio, L., Bauer, T.K., and A. Kramer, 2017, *Transferability of Human Capital and Immigrant Assimilation: An Analysis for Germany*, Labour, 31(3), 255-264.
- Biffl, G., Deutsch, E., Lutz, H and M. Marterbauer, 1997, *Ökonomische und strukturelle Aspekte der Ausländerbeschäftigung in Österreich*, Österreichisches Institut für Wirtschaftsforschung, Wien.
- Borjas, G., 1985, *Assimilation, Changes in Cohort Quality, and the Earnings of Immigrants*, Journal of Labor Economics, 3, 463-89.
- Chiswick, B. R., 1978, *The effect of Americanization on the earnings of foreign-born men*. The Journal of Political Economy, 86(5), 897-921.
- Constant, A. F., and K. F. Zimmermann, 2005, *Legal Status at Entry, Economic Performance, and Self-employment Proclivity: A Bi-national Study of Immigrants*. IZA Discussion Papers, 1910.
- Corluy, V. and G. Verbist, 2014, *'Can education bridge the gap? Education and the Employment Position of Immigrants in Belgium'*. ImPRovE Discussion Paper No. 14/02, Antwerp.
- Dustmann, Ch. and T. Frattini, 2011, *Immigration: The European Experience*, Centre for Research and Analysis of Migration Discussion Paper Series No. 22/11.
- Duvander, A.-Z. (2001). *Do country-specific skills lead to improved labor market positions? An analysis of unemployment and labor market returns to education among immigrants in Sweden*; Work and Occupations, 28(2), 210-33
- The Expert Council for Integration (2018), *Integration Report 2018*, Federal Ministry for Europe, Integration and Foreign Affairs (BMEIA), Vienna.
- Fasani, F., Frattini, T., and L. Minale, 2018, *(The Struggle for) Refugee Integration into the Labour Market: Evidence from Europe*.
- Fougere, D. and M. Safi, 2009, *Naturalization and employment of immigrants in France (1968-1999)*. International Journal of Manpower, 30(1/2), 83–96.
- Friedberg, R.M. (2000). *You Can't Take It With You? Immigrant Assimilation and the Portability of Human Capital*; Journal of Labor Economics, 18, 221-251.
- Guzi, M., Kahanec, M. and L.M. Kurekova, 2015, *'What Explains Immigrant-Native Gaps in European Labor Markets: The Role of Institutions'*, IZA Discussion Paper No. 8847, Bonn.
- Hainmueller, J., Hangartner, D. and D. Lawrence, 2016, *When lives are put on hold: Lengthy asylum processes decrease employment among refugees*, Science Advances, 2(8).

- Hofer, H., Titelbach, G., Weichselbaumer, D. and R. Winter-Ebmer, 2013, ‚Diskriminierung von MigrantInnen am österreichischen Arbeitsmarkt‘, Studie im Auftrag des BMASK, IHS, Wien.
- Hofer, H., Titelbach, G., Winter-Ebmer, R., and Ahammer, A., 2017, ‚Wage discrimination against immigrants in Austria?‘. *Labour*, 31(2), 105-126.
- Huber, P., 2015, *What Institutions help immigrants integrate?*, WWWFOR Europe Working Paper No 77.
- Hvidtfeldt, C., Schultz-Nielsen, M.L., Tekin, E. and M. Fosgerau, 2018, *An estimate of the effect of waiting time in the Danish asylum system on post-resettlement employment among refugees: Separating the pure delay effect from the effects of the conditions under which refugees are waiting*. *PLoS ONE* 13(11): e0206737.
- Kahanec, M. and A. Zaiceva, 2009, *Labor market outcomes of immigrants and non-citizens in the EU: An East-West comparison*. *International Journal of Manpower*, 30(1/2), 97–115.
- Kahanec, M., Zaiceva, A. and K.F. Zimmermann, 2011, *Ethnic minorities in the European Union: An overview*. In *Ethnic Diversity in European Labor Markets: Challenges and Solutions*. Cheltenham: Edward Elgar Publishing.
- Kanas, A. and F. van Tubergen (2009). *The Impact of Origin and Host Country Schooling on the Economic Performance of Immigrants; Social Forces*, 88, 893-915.
- Konle-Seidl, R., 2018, *Integration of Refugees in Austria, Germany and Sweden: Comparative Analysis*. European Parliament, Policy Department A: Economic and Scientific Policy.
- Luik, M-A., Emilsson, H. and P. Bevelander, 2018, *The Male Immigrant–Native Employment Gap in Sweden: Migrant Admission Categories and Human Capital*, *Journal of Population Research* 35, no. 4 (1 December 2018): 363–98.
- Marbach, M., J. Hainmueller, J. and D. Hangartner, 2018, *The long-term impact of employment bans on the economic integration of refugees*, 4(9).
- Parasnis, J., D. Fausten and R. Cheo (2008). *Do Australian qualifications help? The effect of host country qualification on migrant participation and unemployment*; *Economic Record*, 84(s1), S131-S140.
- Ruiz, I., and C. Vargas-Silva, 2018, *Differences in labour market outcomes between natives, refugees and other migrants in the UK*. *J. Econ. Geogr.* 18, 855–885.
- Sarvimäki, M., 2017, *Labor market integration of refugees in Finland*, *Nordic Economic Policy Review* 1/2017: Labour Market Integration in the Nordic Countries, Nordisk Ministerråd.
- Schultz-Nielsen, M.L., 2017, *Labor market integration of refugees in Denmark*, *Nordic Economic Policy Review* 1/2017: Labour Market Integration in the Nordic Countries, Nordisk Ministerråd.
- Statistik Austria, 2017, *Methodenhandbuch zu den Erwerbsmerkmalen der Abgestimmten Erwerbsstatistik sowie der Registerzählung*.
- Wauters, B. and J. Lambrecht (2008). *Barriers to refugee entrepreneurship in Belgium: towards an explanatory model*; *Journal of Ethnic and Migration Studies*, 34(6), 895-915.
- Zimmermann, K. F., 2005, *European Migration: What Do We Know?* (p. 676). Oxford: Oxford University Press.

Appendix

Appendix Table A.1 / Regression results, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-0.818*** (0.00210)	-0.679*** (0.00328)	-0.398*** (0.0217)
European refugees 1	-0.772*** (0.00358)	-0.678*** (0.00428)	-0.351*** (0.0215)
European refugees 2	-0.660*** (0.00602)	-0.569*** (0.00659)	-0.255*** (0.0212)
European refugees 3	-0.563*** (0.00820)	-0.466*** (0.00866)	-0.176*** (0.0210)
European refugees 4	-0.527*** (0.0108)	-0.413*** (0.0112)	-0.143*** (0.0206)
European refugees 5	-0.473*** (0.0135)	-0.347*** (0.0138)	-0.0983*** (0.0202)
European refugees 6	-0.410*** (0.0160)	-0.280*** (0.0161)	-0.0603*** (0.0185)
European refugees 7	-0.364*** (0.0185)	-0.232*** (0.0182)	-0.0417*** (0.0156)
European migrants 0	-0.608*** (0.00143)	-0.448*** (0.00201)	-0.375*** (0.00444)
European migrants 1	-0.393*** (0.00177)	-0.295*** (0.00203)	-0.208*** (0.00424)
European migrants 2	-0.288*** (0.00195)	-0.197*** (0.00210)	-0.130*** (0.00410)
European migrants 3	-0.242*** (0.00212)	-0.148*** (0.00223)	-0.0991*** (0.00401)
European migrants 4	-0.211*** (0.00233)	-0.114*** (0.00242)	-0.0781*** (0.00393)
European migrants 5	-0.193*** (0.00262)	-0.0911*** (0.00269)	-0.0573*** (0.00384)
European migrants 6	-0.182*** (0.00301)	-0.0779*** (0.00306)	-0.0375*** (0.00367)
European migrants 7	-0.167*** (0.00353)	-0.0613*** (0.00357)	-0.0125*** (0.00310)
Non-European refugees 0	-0.825*** (0.000612)	-0.710*** (0.00172)	-0.413*** (0.00731)
Non-European refugees 1	-0.787*** (0.000821)	-0.692*** (0.00169)	-0.374*** (0.00717)
Non-European refugees 2	-0.704*** (0.00126)	-0.604*** (0.00185)	-0.306*** (0.00706)
Non-European refugees 3	-0.595*** (0.00176)	-0.476*** (0.00222)	-0.223*** (0.00693)
Non-European refugees 4	-0.481*** (0.00290)	-0.326*** (0.00330)	-0.151*** (0.00683)
Non-European refugees 5	-0.415*** (0.00382)	-0.256*** (0.00415)	-0.0996*** (0.00666)
Non-European refugees 6	-0.342*** (0.00454)	-0.177*** (0.00485)	-0.0456*** (0.00633)
Non-European refugees 7	-0.307*** (0.00577)	-0.140*** (0.00605)	-0.0161*** (0.00554)
Non-European migrants 0	-0.669*** (0.00129)	-0.523*** (0.00189)	-0.201*** (0.00424)
Non-European migrants 1	-0.517*** (0.00165)	-0.432*** (0.00193)	-0.0982*** (0.00406)
Non-European migrants 2	-0.429*** (0.00194)	-0.344*** (0.00210)	-0.0476*** (0.00392)
Non-European migrants 3	-0.383*** (0.00218)	-0.290*** (0.00231)	-0.0334*** (0.00383)
Non-European migrants 4	-0.346*** (0.00245)	-0.245*** (0.00256)	-0.0278*** (0.00376)
Non-European migrants 5	-0.314*** (0.00276)	-0.205*** (0.00286)	-0.0189*** (0.00367)

ctd.

Appendix Table A.1 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 6	-0.293*** (0.00315)	-0.179*** (0.00324)	-0.0169*** (0.00351)
Non-European migrants 7	-0.273*** (0.00371)	-0.154*** (0.00380)	-0.00903*** (0.00299)
Age	-	0.0286*** (0.000338)	0.0257*** (0.000435)
Age × Age	-	-0.000387*** (4.49e-06)	-0.000335*** (4.69e-06)
Female	-	-0.0631*** (0.000826)	-
Educ ML	-	0.147*** (0.00168)	0.0360*** (0.00262)
Educ MH	-	0.138*** (0.00179)	0.0891*** (0.00332)
Educ H	-	0.212*** (0.00187)	0.175*** (0.00389)
Educ NA	-	0.0123*** (0.00286)	0.0464 (0.0354)
Partner HH	-	0.0486*** (0.00135)	-0.00516*** (0.000980)
Family HH	-	-0.0382*** (0.00185)	-0.0176*** (0.00147)
Other HH	-	-0.0835*** (0.00209)	-0.0167*** (0.00122)
HH NA	-	-0.236*** (0.00340)	-0.142*** (0.00658)
# of kids	-	-0.0106*** (0.000633)	0.00743*** (0.000585)
Age of youngest kid: 0-2	-	-0.178*** (0.00176)	-0.193*** (0.00169)
Age of youngest kid: 3-5	-	-0.0202*** (0.00183)	-0.0230*** (0.00191)
Age of youngest kid: 6-9	-	0.00386** (0.00189)	-0.0165*** (0.00177)
Age of youngest kid: 10-14	-	0.0271*** (0.00186)	-0.0110*** (0.00159)
Age of youngest kid: >15	-	0.0293*** (0.00163)	-0.00356*** (0.00130)
Days in education	-	-0.000223*** (1.60e-06)	0.000272*** (3.33e-06)
Days in AMS-training	-	-0.000497*** (6.52e-06)	0.000369*** (9.72e-06)
Intermediate region	-	-0.0121*** (0.00110)	0.00402** (0.00167)
Urban region	-	-0.0475*** (0.0107)	0.0438*** (0.0154)
Share manuf. jobs	-	0.000811*** (0.000308)	0.000187 (0.000284)
Share agricul. jobs	-	-0.000702 (0.00169)	0.00340** (0.00155)
Share tourism jobs	-	-0.000200 (0.000202)	-0.000934*** (0.000186)
Unemployment rate	-	-0.00436*** (0.000196)	-0.00527*** (0.000177)
Activity rate	-	0.00437*** (0.000231)	0.00508*** (0.000207)
Share of foreign-born (non-EU & non-rich)	-	0.00416*** (0.000454)	0.000509 (0.000417)
Observations	14,229,186	14,229,186	14,229,186
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.2 / Regression results, interaction terms for immigrant groups, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-	-0.402***	-0.228
	(-)	(0.0220)	(0.152)
European refugees 1	-	-0.380***	-0.207
	(-)	(0.0217)	(0.134)
European refugees 2	-	-0.302***	-0.146
	(-)	(0.0213)	(0.116)
European refugees 3	-	-0.228***	-0.0969
	(-)	(0.0210)	(0.0980)
European refugees 4	-	-0.199***	-0.0791
	(-)	(0.0208)	(0.0797)
European refugees 5	-	-0.150***	-0.0440
	(-)	(0.0211)	(0.0612)
European refugees 6	-	-0.100***	-0.0165
	(-)	(0.0199)	(0.0431)
European refugees 7	-	-0.0661***	-0.0129
	(-)	(0.0169)	(0.0247)
European migrants 0	-	-0.389***	-0.295***
	(-)	(0.00510)	(0.0356)
European migrants 1	-	-0.246***	-0.142***
	(-)	(0.00494)	(0.0313)
European migrants 2	-	-0.154***	-0.0757***
	(-)	(0.00469)	(0.0269)
European migrants 3	-	-0.107***	-0.0547**
	(-)	(0.00458)	(0.0226)
European migrants 4	-	-0.0747***	-0.0419**
	(-)	(0.00448)	(0.0183)
European migrants 5	-	-0.0510***	-0.0293**
	(-)	(0.00438)	(0.0141)
European migrants 6	-	-0.0362***	-0.0188*
	(-)	(0.00420)	(0.00982)
European migrants 7	-	-0.0194***	-0.00386
	(-)	(0.00354)	(0.00537)
Non-European refugees 0	-	-0.476***	-0.304***
	(-)	(0.00793)	(0.0584)
Non-European refugees 1	-	-0.450***	-0.284***
	(-)	(0.00788)	(0.0514)
Non-European refugees 2	-	-0.387***	-0.240***
	(-)	(0.00774)	(0.0443)
Non-European refugees 3	-	-0.292***	-0.176***
	(-)	(0.00759)	(0.0373)
Non-European refugees 4	-	-0.183***	-0.108***
	(-)	(0.00759)	(0.0303)
Non-European refugees 5	-	-0.120***	-0.0643***
	(-)	(0.00751)	(0.0233)
Non-European refugees 6	-	-0.0542***	-0.0214
	(-)	(0.00718)	(0.0164)
Non-European refugees 7	-	-0.0193***	-0.00263
	(-)	(0.00622)	(0.00940)
Non-European migrants 0	-	-0.398***	-0.150***
	(-)	(0.00538)	(0.0323)
Non-European migrants 1	-	-0.291***	-0.0562**
	(-)	(0.00518)	(0.0284)

ctd.

Appendix Table A.2 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 2	-	-0.212***	-0.0146
	(-)	(0.00486)	(0.0244)
Non-European migrants 3	-	-0.163***	-0.00487
	(-)	(0.00471)	(0.0205)
Non-European migrants 4	-	-0.119***	-0.00113
	(-)	(0.00460)	(0.0166)
Non-European migrants 5	-	-0.0811***	0.00437
	(-)	(0.00445)	(0.0127)
Non-European migrants 6	-	-0.0535***	0.00163
	(-)	(0.00420)	(0.00893)
Non-European migrants 7	-	-0.0278***	0.00202
	(-)	(0.00353)	(0.00492)
Age	-	0.0288***	0.0255***
	(-)	(0.000348)	(0.000441)
Age × NE-MIG	-	0.0101***	0.00637
	(-)	(0.00139)	(0.00456)
Age × E-MIG	-	-0.00411***	0.0127***
	(-)	(0.00128)	(0.00486)
Age × NE-REF	-	-0.0120***	0.0514***
	(-)	(0.000958)	(0.00762)
Age × E-REF	-	-0.0139***	0.0304
	(-)	(0.00449)	(0.0217)
Age × Age	-	-0.000389***	-0.000332***
	(-)	(4.61e-06)	(4.76e-06)
Age × Age × NE-MIG	-	-0.000192***	6.10e-05**
	(-)	(2.01e-05)	(2.91e-05)
Age × Age × E-MIG	-	4.24e-05**	-9.76e-06
	(-)	(1.82e-05)	(2.78e-05)
Age × Age × NE-REF	-	0.000110***	-0.000589***
	(-)	(1.39e-05)	(3.49e-05)
Age × Age × E-REF	-	0.000146**	-0.000227
	(-)	(6.42e-05)	(0.000142)
Female	-	-0.0584***	-
	(-)	(0.000852)	(-)
Female × NE-MIG	-	-0.150***	-
	(-)	(0.00278)	(-)
Female × E-MIG	-	-0.143***	-
	(-)	(0.00258)	(-)
Female × NE-REF	-	-0.0755***	-
	(-)	(0.00214)	(-)
Female × E-REF	-	-0.0694***	-
	(-)	(0.00911)	(-)
Educ ML	-	0.162***	0.0350***
	(-)	(0.00180)	(0.00278)
Educ ML × NE-MIG	-	-0.260***	-0.00497
	(-)	(0.00425)	(0.00724)
Educ ML × E-MIG	-	-0.180***	0.0304***
	(-)	(0.00369)	(0.00602)
Educ ML × NE-REF	-	-0.222***	0.00760
	(-)	(0.00281)	(0.00970)
Educ ML × E-REF	-	-0.254***	-0.0591*
	(-)	(0.0111)	(0.0357)
Educ MH	-	0.153***	0.0963***
	(-)	(0.00191)	(0.00361)

ctd.

Appendix Table A.2 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Educ MH × NE-MIG	-	-0.229***	-0.0673***
	(-)	(0.00445)	(0.00772)
Educ MH × E-MIG	-	-0.160***	-0.0375***
	(-)	(0.00451)	(0.00770)
Educ MH × NE-REF	-	-0.202***	-0.0485***
	(-)	(0.00342)	(0.00945)
Educ MH × E-REF	-	-0.276***	-0.119**
	(-)	(0.0130)	(0.0486)
Educ H	-	0.229***	0.185***
	(-)	(0.00199)	(0.00428)
Educ H × NE-MIG	-	-0.272***	-0.133***
	(-)	(0.00459)	(0.00858)
Educ H × E-MIG	-	-0.212***	-0.111***
	(-)	(0.00536)	(0.00929)
Educ H × NE-REF	-	-0.301***	-0.149***
	(-)	(0.00359)	(0.0106)
Educ H × E-REF	-	-0.394***	-0.133**
	(-)	(0.0120)	(0.0534)
Educ NA	-	-0.228***	0.0664
	(-)	(0.0283)	(0.0493)
Educ NA × NE-MIG	-	0.0954***	-0.103
	(-)	(0.0285)	(0.0685)
Educ NA × E-MIG	-	0.132***	-
	(-)	(0.0285)	(-)
Educ NA × NE-REF	-	0.182***	-
	(-)	(0.0284)	(-)
Educ NA × E-REF	-	0.144***	-
	(-)	(0.0301)	(-)
Partner HH	-	0.0482***	-0.00524***
	(-)	(0.00138)	(0.00101)
Partner HH × NE-MIG	-	-0.0199***	0.0177***
	(-)	(0.00453)	(0.00361)
Partner HH × E-MIG	-	-0.0238***	0.0209***
	(-)	(0.00434)	(0.00347)
Partner HH × NE-REF	-	-0.0713***	-0.0119***
	(-)	(0.00548)	(0.00439)
Partner HH × E-REF	-	-0.0371	-0.0207
	(-)	(0.0259)	(0.0197)
Family HH	-	-0.0372***	-0.0170***
	(-)	(0.00189)	(0.00151)
Family HH × NE-MIG	-	0.0586***	0.0223***
	(-)	(0.00759)	(0.00585)
Family HH × E-MIG	-	-0.0209***	0.00256
	(-)	(0.00693)	(0.00562)
Family HH × NE-REF	-	-0.00775	-0.0184***
	(-)	(0.00701)	(0.00587)
Family HH × E-REF	-	-0.00790	-0.0443*
	(-)	(0.0331)	(0.0250)
Other HH	-	-0.0746***	-0.0125***
	(-)	(0.00231)	(0.00131)
Other HH × NE-MIG	-	-0.101***	-0.0159***
	(-)	(0.00483)	(0.00352)
Other HH × E-MIG	-	-0.0660***	-0.0229***
	(-)	(0.00501)	(0.00364)

ctd.

Appendix Table A.2 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Other HH × NE-REF	-	-0.0822***	-0.0742***
	(-)	(0.00459)	(0.00348)
Other HH × E-REF	-	-0.147***	-0.104***
	(-)	(0.0204)	(0.0157)
HH NA	-	-0.397***	-0.111***
	(-)	(0.0134)	(0.0129)
HH NA × NE-MIG	-	0.183***	-0.0143
	(-)	(0.0142)	(0.0146)
HH NA × E-MIG	-	0.0812***	-0.0876***
	(-)	(0.0142)	(0.0140)
HH NA × NE-REF	-	0.221***	0.0175
	(-)	(0.0142)	(0.0163)
HH NA × E-REF	-	0.171***	-0.0446
	(-)	(0.0253)	(0.0302)
# of kids	-	-0.00958***	0.00805***
	(-)	(0.000663)	(0.000633)
# of kids × NE-MIG	-	-0.0307***	-0.0168***
	(-)	(0.00210)	(0.00163)
# of kids × E-MIG	-	-0.0158***	-0.0179***
	(-)	(0.00218)	(0.00182)
# of kids × NE-REF	-	-0.00854***	-0.0180***
	(-)	(0.00110)	(0.00104)
# of kids × E-REF	-	-0.0197***	-0.0157***
	(-)	(0.00544)	(0.00456)
Age of youngest kid: 0-2	-	-0.181***	-0.200***
	(-)	(0.00185)	(0.00179)
Age of youngest kid: 0-2 × NE-MIG	-	0.0467***	0.105***
	(-)	(0.00490)	(0.00406)
Age of youngest kid: 0-2 × E-MIG	-	0.00223	0.0778***
	(-)	(0.00475)	(0.00428)
Age of youngest kid: 0-2 × NE-REF	-	0.0866***	0.160***
	(-)	(0.00527)	(0.00460)
Age of youngest kid: 0-2 × E-REF	-	0.105***	0.157***
	(-)	(0.0243)	(0.0204)
Age of youngest kid: 3-5	-	-0.0206***	-0.0258***
	(-)	(0.00190)	(0.00200)
Age of youngest kid: 3-5 × NE-MIG	-	-0.0326***	0.0174***
	(-)	(0.00674)	(0.00557)
Age of youngest kid: 3-5 × E-MIG	-	-0.00927	0.0273***
	(-)	(0.00642)	(0.00593)
Age of youngest kid: 3-5 × NE-REF	-	-0.0344***	0.0125**
	(-)	(0.00575)	(0.00533)
Age of youngest kid: 3-5 × E-REF	-	-0.0155	0.0172
	(-)	(0.0280)	(0.0233)
Age of youngest kid: 6-9	-	0.00244	-0.0183***
	(-)	(0.00195)	(0.00185)
Age of youngest kid: 6-9 × NE-MIG	-	0.00787	0.0168**
	(-)	(0.00818)	(0.00679)
Age of youngest kid: 6-9 × E-MIG	-	0.0137*	0.0340***
	(-)	(0.00731)	(0.00693)
Age of youngest kid: 6-9 × NE-REF	-	-0.0416***	0.0143**
	(-)	(0.00628)	(0.00573)
Age of youngest kid: 6-9 × E-REF	-	0.00529	0.0348
	(-)	(0.0303)	(0.0268)

ctd.

Appendix Table A.2 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Age of youngest kid: 10-14	-	0.0254***	-0.0120***
	(-)	(0.00192)	(0.00166)
Age of youngest kid: 10-14 × NE-MIG	-	0.000628	-0.00146
	(-)	(0.00874)	(0.00720)
Age of youngest kid: 10-14 × E-MIG	-	0.0346***	0.0296***
	(-)	(0.00732)	(0.00688)
Age of youngest kid: 10-14 × NE-REF	-	-0.0527***	0.00765
	(-)	(0.00708)	(0.00621)
Age of youngest kid: 10-14 × E-REF	-	-0.0143	0.0112
	(-)	(0.0348)	(0.0278)
Age of youngest kid: >15	-	0.0286***	-0.00409***
	(-)	(0.00168)	(0.00136)
Age of youngest kid: >15 × NE-MIG	-	-0.0563***	-0.0222***
	(-)	(0.00742)	(0.00556)
Age of youngest kid: >15 × E-MIG	-	-0.0204***	0.000448
	(-)	(0.00622)	(0.00515)
Age of youngest kid: >15 × NE-REF	-	-0.0410***	-0.00140
	(-)	(0.00671)	(0.00554)
Age of youngest kid: >15 × E-REF	-	-0.0434	0.0100
	(-)	(0.0306)	(0.0236)
Days in education	-	-0.000224***	0.000277***
	(-)	(1.62e-06)	(3.49e-06)
Days in education × NE-MIG	-	3.73e-05***	-0.000164***
	(-)	(5.41e-06)	(6.70e-06)
Days in education × E-MIG	-	4.38e-05***	-0.000159***
	(-)	(7.38e-06)	(9.53e-06)
Days in education × NE-REF	-	0.000209***	-0.000237***
	(-)	(2.38e-05)	(3.00e-05)
Days in education × E-REF	-	0.000229**	-0.000429***
	(-)	(0.000108)	(0.000114)
Days in AMS-training	-	-0.000512***	0.000380***
	(-)	(6.86e-06)	(1.05e-05)
Days in AMS-training × NE-MIG	-	0.000304***	-4.79e-05**
	(-)	(1.88e-05)	(2.29e-05)
Days in AMS-training × E-MIG	-	0.000209***	-0.000129***
	(-)	(2.58e-05)	(3.21e-05)
Days in AMS-training × NE-REF	-	0.000486***	-0.000166***
	(-)	(1.20e-05)	(1.42e-05)
Days in AMS-training × E-REF	-	0.000339***	-4.38e-05
	(-)	(5.98e-05)	(6.47e-05)
Intermediate region	-	-0.0125***	0.00370**
	(-)	(0.00112)	(0.00173)
Intermediate region × NE-MIG	-	0.0379***	-0.00725
	(-)	(0.00494)	(0.00547)
Intermediate region × E-MIG	-	-0.0159***	-0.00828
	(-)	(0.00451)	(0.00567)
Intermediate region × NE-REF	-	0.0363***	0.00865***
	(-)	(0.00235)	(0.00297)
Intermediate region × E-REF	-	0.0248**	0.0116
	(-)	(0.00969)	(0.00997)
Urban region	-	-0.0498***	0.0434***
	(-)	(0.0106)	(0.0155)
Urban region × NE-MIG	-	0.000953	-0.00874
	(-)	(0.00765)	(0.00875)

ctd.

Appendix Table A.2 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Urban region × E-MIG	-	0.00796	-0.00716
	(-)	(0.00709)	(0.00893)
Urban region × NE-REF	-	0.0700***	0.0317***
	(-)	(0.00514)	(0.00593)
Urban region × E-REF	-	0.0604***	0.0309
	(-)	(0.0207)	(0.0207)
Share manuf. jobs	-	0.000785**	0.000172
	(-)	(0.000309)	(0.000285)
Share manuf. jobs × NE-MIG	-	0.000166	-0.000694
	(-)	(0.000335)	(0.000496)
Share manuf. jobs × E-MIG	-	0.00239***	-0.000107
	(-)	(0.000305)	(0.000536)
Share manuf. jobs × NE-REF	-	0.000851***	0.000812**
	(-)	(0.000192)	(0.000320)
Share manuf. jobs × E-REF	-	0.000880	-0.000193
	(-)	(0.000783)	(0.000910)
Share agricul. jobs	-	0.00126	0.00341**
	(-)	(0.00170)	(0.00156)
Share agricul. jobs × NE-MIG	-	-0.0418***	0.00517
	(-)	(0.00565)	(0.00585)
Share agricul. jobs × E-MIG	-	-0.0554***	0.00716
	(-)	(0.00530)	(0.00596)
Share agricul. jobs × NE-REF	-	0.00300	0.00648*
	(-)	(0.00284)	(0.00388)
Share agricul. jobs × E-REF	-	-0.0314***	-0.0252*
	(-)	(0.0117)	(0.0130)
Share tourism jobs	-	-0.000233	-0.000927***
	(-)	(0.000203)	(0.000189)
Share tourism jobs × NE-MIG	-	0.00531***	0.00237***
	(-)	(0.000539)	(0.000510)
Share tourism jobs × E-MIG	-	0.00892***	0.00730***
	(-)	(0.000492)	(0.000541)
Share tourism jobs × NE-REF	-	0.00374***	-0.000671
	(-)	(0.000340)	(0.000448)
Share tourism jobs × E-REF	-	-0.00236*	-0.00432***
	(-)	(0.00137)	(0.00143)
Unemployment rate	-	-0.00395***	-0.00513***
	(-)	(0.000197)	(0.000178)
Unemployment rate × NE-MIG	-	-0.00559***	-0.00243***
	(-)	(0.000521)	(0.000358)
Unemployment rate × E-MIG	-	-0.00786***	-0.00565***
	(-)	(0.000495)	(0.000376)
Unemployment rate × NE-REF	-	-0.00762***	-0.00744***
	(-)	(0.000348)	(0.000343)
Unemployment rate × E-REF	-	-0.00449***	-0.00652***
	(-)	(0.00143)	(0.00110)
Activity rate	-	0.00393***	0.00493***
	(-)	(0.000232)	(0.000208)
Activity rate × NE-MIG	-	0.00175***	0.00167***
	(-)	(0.000372)	(0.000318)
Activity rate × E-MIG	-	0.00791***	0.00253***
	(-)	(0.000384)	(0.000338)
Activity rate × NE-REF	-	0.00333***	0.00360***
	(-)	(0.000313)	(0.000295)

ctd.

Appendix Table A.2 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Activity rate × E-REF	-	0.00414***	0.00271***
	(-)	(0.00119)	(0.000914)
Share of foreign-born (non-EU & non-rich)	-	0.00445***	0.000405
	(-)	(0.000456)	(0.000418)
Share of foreign-born (non-EU & non-rich) × NE-MIG	-	0.00182***	-0.000636*
	(-)	(0.000358)	(0.000337)
Share of foreign-born (non-EU & non-rich) × E-MIG	-	0.00169***	0.00161***
	(-)	(0.000344)	(0.000357)
Share of foreign-born (non-EU & non-rich) × NE-REF	-	0.00405***	0.00206***
	(-)	(0.000266)	(0.000290)
Share of foreign-born (non-EU & non-rich) × E-REF	-	0.00127	0.000563
	(-)	(0.00112)	(0.000950)
Observations	-	14,229,186	14,229,186
Year-FE	-	YES	YES
Quarter-FE	-	YES	YES
District-FE	-	YES	YES
Individual-FE	-	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.3 / Regression results for men, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-0.846*** (0.00300)	-0.660*** (0.00447)	-0.412*** (0.0259)
European refugees 1	-0.789*** (0.00503)	-0.663*** (0.00589)	-0.361*** (0.0257)
European refugees 2	-0.643*** (0.00823)	-0.534*** (0.00890)	-0.245*** (0.0252)
European refugees 3	-0.519*** (0.0111)	-0.415*** (0.0117)	-0.154*** (0.0249)
European refugees 4	-0.481*** (0.0148)	-0.373*** (0.0152)	-0.127*** (0.0244)
European refugees 5	-0.415*** (0.0183)	-0.302*** (0.0185)	-0.0719*** (0.0231)
European refugees 6	-0.369*** (0.0206)	-0.254*** (0.0207)	-0.0520** (0.0208)
European refugees 7	-0.296*** (0.0237)	-0.191*** (0.0233)	-0.0229 (0.0182)
European migrants 0	-0.605*** (0.00202)	-0.403*** (0.00286)	-0.338*** (0.00562)
European migrants 1	-0.348*** (0.00247)	-0.234*** (0.00284)	-0.162*** (0.00534)
European migrants 2	-0.205*** (0.00261)	-0.124*** (0.00284)	-0.0856*** (0.00514)
European migrants 3	-0.144*** (0.00273)	-0.0753*** (0.00293)	-0.0602*** (0.00500)
European migrants 4	-0.106*** (0.00290)	-0.0426*** (0.00308)	-0.0412*** (0.00483)
European migrants 5	-0.0879*** (0.00322)	-0.0262*** (0.00338)	-0.0260*** (0.00464)
European migrants 6	-0.0770*** (0.00370)	-0.0171*** (0.00382)	-0.0114*** (0.00433)
European migrants 7	-0.0670*** (0.00432)	-0.00991** (0.00440)	0.00346 (0.00371)
Non-European refugees 0	-0.857*** (0.000777)	-0.702*** (0.00237)	-0.468*** (0.00902)
Non-European refugees 1	-0.806*** (0.00108)	-0.679*** (0.00236)	-0.419*** (0.00884)
Non-European refugees 2	-0.699*** (0.00166)	-0.575*** (0.00254)	-0.340*** (0.00867)
Non-European refugees 3	-0.562*** (0.00223)	-0.426*** (0.00297)	-0.241*** (0.00846)
Non-European refugees 4	-0.427*** (0.00352)	-0.255*** (0.00422)	-0.155*** (0.00833)
Non-European refugees 5	-0.348*** (0.00457)	-0.176*** (0.00521)	-0.0916*** (0.00810)
Non-European refugees 6	-0.271*** (0.00526)	-0.0956*** (0.00590)	-0.0341*** (0.00765)
Non-European refugees 7	-0.236*** (0.00659)	-0.0633*** (0.00719)	-0.00630 (0.00670)
Non-European migrants 0	-0.674*** (0.00184)	-0.486*** (0.00273)	-0.173*** (0.00574)
Non-European migrants 1	-0.475*** (0.00244)	-0.374*** (0.00281)	-0.0571*** (0.00547)
Non-European migrants 2	-0.353*** (0.00285)	-0.276*** (0.00304)	-0.0124** (0.00527)
Non-European migrants 3	-0.292*** (0.00315)	-0.219*** (0.00330)	-0.00830 (0.00513)
Non-European migrants 4	-0.238*** (0.00351)	-0.163*** (0.00363)	-0.00639 (0.00501)
Non-European migrants 5	-0.198*** (0.00388)	-0.121*** (0.00399)	-0.00262 (0.00487)
Non-European migrants 6	-0.168*** (0.00437)	-0.0894*** (0.00446)	-0.00283 (0.00466)

Appendix Table A.3 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 7	-0.143*** (0.00511)	-0.0655*** (0.00523)	-0.00425 (0.00391)
Age	- (-)	0.0258*** (0.000446)	0.0265*** (0.000524)
Age × Age	- (-)	-0.000361*** (5.87e-06)	-0.000372*** (5.73e-06)
Educ ML	- (-)	0.152*** (0.00236)	0.0235*** (0.00318)
Educ MH	- (-)	0.137*** (0.00252)	0.0753*** (0.00440)
Educ H	- (-)	0.204*** (0.00263)	0.152*** (0.00520)
Educ NA	- (-)	0.00939** (0.00409)	0.0478 (0.0321)
Partner HH	- (-)	0.0672*** (0.00177)	0.00511*** (0.00118)
Family HH	- (-)	-0.0727*** (0.00257)	-0.0198*** (0.00187)
Other HH	- (-)	-0.0909*** (0.00271)	-0.0152*** (0.00150)
HH NA	- (-)	-0.254*** (0.00463)	-0.131*** (0.00875)
# of kids	- (-)	-0.00446*** (0.000706)	-0.00469*** (0.000630)
Age of youngest kid: 0-2	- (-)	0.00392** (0.00184)	-0.00200 (0.00139)
Age of youngest kid: 3-5	- (-)	0.00181 (0.00213)	-0.00291* (0.00158)
Age of youngest kid: 6-9	- (-)	0.0104*** (0.00218)	-0.00591*** (0.00172)
Age of youngest kid: 10-14	- (-)	0.0258*** (0.00218)	-0.00144 (0.00175)
Age of youngest kid: >15	- (-)	0.0405*** (0.00201)	0.00661*** (0.00153)
Days in education	- (-)	-0.000234*** (2.21e-06)	0.000262*** (4.63e-06)
Days in AMS-training	- (-)	-0.000546*** (1.00e-05)	0.000353*** (1.42e-05)
Intermediate region	- (-)	-0.0197*** (0.00134)	-0.000996 (0.00192)
Urban region	- (-)	-0.0799*** (0.0131)	-0.00327 (0.0191)
Share manuf. jobs	- (-)	-3.88e-05 (0.000367)	-0.000691** (0.000325)
Share agricul. jobs	- (-)	0.00501** (0.00203)	0.00604*** (0.00179)
Share tourism jobs	- (-)	-0.000166 (0.000245)	-0.000750*** (0.000219)
Unemployment rate	- (-)	-0.00367*** (0.000257)	-0.00431*** (0.000226)
Activity rate	- (-)	0.00399*** (0.000297)	0.00423*** (0.000258)
Share of foreign-born (non-EU & non-rich)	- (-)	0.00541*** (0.000591)	0.00186*** (0.000524)
Observations	7,355,405	7,355,405	7,355,405
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.4 / Regression results for women, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-0.793*** (0.00244)	-0.698*** (0.00492)	-0.372*** (0.0366)
European refugees 1	-0.764*** (0.00451)	-0.688*** (0.00623)	-0.324*** (0.0363)
European refugees 2	-0.708*** (0.00775)	-0.613*** (0.00927)	-0.260*** (0.0361)
European refugees 3	-0.651*** (0.0107)	-0.538*** (0.0116)	-0.204*** (0.0355)
European refugees 4	-0.600*** (0.0144)	-0.458*** (0.0149)	-0.155*** (0.0351)
European refugees 5	-0.561*** (0.0185)	-0.393*** (0.0185)	-0.122*** (0.0356)
European refugees 6	-0.482*** (0.0240)	-0.302*** (0.0236)	-0.0602* (0.0332)
European refugees 7	-0.477*** (0.0269)	-0.286*** (0.0259)	-0.0645** (0.0274)
European migrants 0	-0.616*** (0.00198)	-0.495*** (0.00272)	-0.406*** (0.00647)
European migrants 1	-0.438*** (0.00243)	-0.350*** (0.00275)	-0.244*** (0.00620)
European migrants 2	-0.363*** (0.00273)	-0.253*** (0.00282)	-0.158*** (0.00598)
European migrants 3	-0.326*** (0.00300)	-0.202*** (0.00301)	-0.121*** (0.00588)
European migrants 4	-0.301*** (0.00333)	-0.168*** (0.00330)	-0.101*** (0.00579)
European migrants 5	-0.279*** (0.00376)	-0.138*** (0.00371)	-0.0773*** (0.00573)
European migrants 6	-0.264*** (0.00430)	-0.119*** (0.00425)	-0.0548*** (0.00556)
European migrants 7	-0.243*** (0.00505)	-0.0932*** (0.00500)	-0.0221*** (0.00468)
Non-European refugees 0	-0.794*** (0.000981)	-0.695*** (0.00243)	-0.272*** (0.0123)
Non-European refugees 1	-0.780*** (0.00113)	-0.681*** (0.00232)	-0.246*** (0.0121)
Non-European refugees 2	-0.753*** (0.00153)	-0.618*** (0.00247)	-0.198*** (0.0120)
Non-European refugees 3	-0.716*** (0.00221)	-0.552*** (0.00295)	-0.163*** (0.0118)
Non-European refugees 4	-0.658*** (0.00406)	-0.459*** (0.00459)	-0.132*** (0.0117)
Non-European refugees 5	-0.604*** (0.00560)	-0.393*** (0.00599)	-0.0971*** (0.0115)
Non-European refugees 6	-0.549*** (0.00721)	-0.326*** (0.00747)	-0.0600*** (0.0111)
Non-European refugees 7	-0.509*** (0.00958)	-0.282*** (0.00969)	-0.0334*** (0.00969)
Non-European migrants 0	-0.666*** (0.00176)	-0.564*** (0.00254)	-0.234*** (0.00598)
Non-European migrants 1	-0.556*** (0.00215)	-0.483*** (0.00253)	-0.136*** (0.00572)
Non-European migrants 2	-0.494*** (0.00251)	-0.391*** (0.00268)	-0.0713*** (0.00549)
Non-European migrants 3	-0.455*** (0.00284)	-0.335*** (0.00295)	-0.0473*** (0.00538)
Non-European migrants 4	-0.427*** (0.00320)	-0.294*** (0.00328)	-0.0394*** (0.00529)
Non-European migrants 5	-0.398*** (0.00363)	-0.254*** (0.00370)	-0.0272*** (0.00517)
Non-European migrants 6	-0.381*** (0.00415)	-0.231*** (0.00422)	-0.0249*** (0.00497)

ctd.

Appendix Table A.4 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 7	-0.358*** (0.00487)	-0.202*** (0.00496)	-0.0108** (0.00426)
Age	- (-)	0.0311*** (0.000509)	0.0280*** (0.000676)
Age × Age	- (-)	-0.000420*** (6.83e-06)	-0.000337*** (7.28e-06)
Educ ML	- (-)	0.139*** (0.00233)	0.0501*** (0.00429)
Educ MH	- (-)	0.135*** (0.00249)	0.101*** (0.00498)
Educ H	- (-)	0.211*** (0.00256)	0.193*** (0.00574)
Educ NA	- (-)	0.00685* (0.00391)	0.152 (0.123)
Partner HH	- (-)	0.0188*** (0.00202)	-0.0231*** (0.00153)
Family HH	- (-)	-0.0203*** (0.00261)	-0.00510** (0.00206)
Other HH	- (-)	-0.0755*** (0.00323)	-0.0210*** (0.00198)
HH NA	- (-)	-0.224*** (0.00489)	-0.173*** (0.00932)
# of kids	- (-)	-0.0170*** (0.000985)	0.0158*** (0.000942)
Age of youngest kid: 0-2	- (-)	-0.348*** (0.00257)	-0.389*** (0.00256)
Age of youngest kid: 3-5	- (-)	-0.0494*** (0.00285)	-0.0770*** (0.00302)
Age of youngest kid: 6-9	- (-)	-0.0107*** (0.00293)	-0.0534*** (0.00288)
Age of youngest kid: 10-14	- (-)	0.0212*** (0.00287)	-0.0343*** (0.00252)
Age of youngest kid: >15	- (-)	0.0270*** (0.00247)	-0.0166*** (0.00196)
Days in education	- (-)	-0.000220*** (2.19e-06)	0.000280*** (4.75e-06)
Days in AMS-training	- (-)	-0.000458*** (8.30e-06)	0.000354*** (1.31e-05)
Intermediate region	- (-)	-0.00583*** (0.00169)	0.00542** (0.00252)
Urban region	- (-)	-0.0309* (0.0164)	0.0882*** (0.0247)
Share manuf. jobs	- (-)	0.00185*** (0.000484)	0.00112** (0.000454)
Share agricul. jobs	- (-)	-0.00686*** (0.00264)	0.00102 (0.00247)
Share tourism jobs	- (-)	-0.000309 (0.000315)	-0.00110*** (0.000296)
Unemployment rate	- (-)	-0.00513*** (0.000290)	-0.00625*** (0.000267)
Activity rate	- (-)	0.00483*** (0.000347)	0.00598*** (0.000318)
Share of foreign-born (non-EU & non-rich)	- (-)	0.00334*** (0.000672)	-0.000394 (0.000635)
Observations	6,873,781	6,873,781	6,873,781
R-squared	0.049	0.166	0.083
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.5 / Regression results for age cohort 20-30, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-0.752*** (0.00309)	-0.713*** (0.00482)	-0.476*** (0.0546)
European refugees 1	-0.697*** (0.00559)	-0.692*** (0.00684)	-0.415*** (0.0544)
European refugees 2	-0.557*** (0.00983)	-0.534*** (0.0108)	-0.280*** (0.0542)
European refugees 3	-0.444*** (0.0138)	-0.408*** (0.0146)	-0.185*** (0.0536)
European refugees 4	-0.429*** (0.0188)	-0.371*** (0.0196)	-0.153*** (0.0534)
European refugees 5	-0.404*** (0.0242)	-0.329*** (0.0253)	-0.127** (0.0530)
European refugees 6	-0.333*** (0.0307)	-0.260*** (0.0320)	-0.0763 (0.0526)
European refugees 7	-0.248*** (0.0412)	-0.175*** (0.0422)	-0.0344 (0.0420)
European migrants 0	-0.552*** (0.00194)	-0.478*** (0.00252)	-0.431*** (0.00952)
European migrants 1	-0.339*** (0.00240)	-0.312*** (0.00267)	-0.251*** (0.00932)
European migrants 2	-0.248*** (0.00272)	-0.210*** (0.00286)	-0.173*** (0.00915)
European migrants 3	-0.204*** (0.00308)	-0.154*** (0.00318)	-0.138*** (0.00902)
European migrants 4	-0.173*** (0.00355)	-0.112*** (0.00362)	-0.114*** (0.00892)
European migrants 5	-0.155*** (0.00425)	-0.0811*** (0.00425)	-0.0911*** (0.00886)
European migrants 6	-0.142*** (0.00525)	-0.0559*** (0.00522)	-0.0651*** (0.00870)
European migrants 7	-0.125*** (0.00679)	-0.0246*** (0.00678)	-0.0306*** (0.00757)
Non-European refugees 0	-0.762*** (0.000999)	-0.742*** (0.00216)	-0.490*** (0.0161)
Non-European refugees 1	-0.716*** (0.00129)	-0.715*** (0.00220)	-0.442*** (0.0160)
Non-European refugees 2	-0.624*** (0.00193)	-0.611*** (0.00261)	-0.362*** (0.0159)
Non-European refugees 3	-0.500*** (0.00275)	-0.468*** (0.00329)	-0.266*** (0.0158)
Non-European refugees 4	-0.373*** (0.00466)	-0.303*** (0.00515)	-0.181*** (0.0157)
Non-European refugees 5	-0.293*** (0.00633)	-0.221*** (0.00677)	-0.109*** (0.0155)
Non-European refugees 6	-0.218*** (0.00796)	-0.141*** (0.00835)	-0.0501*** (0.0151)
Non-European refugees 7	-0.184*** (0.0115)	-0.102*** (0.0121)	-0.0120 (0.0132)
Non-European migrants 0	-0.605*** (0.00174)	-0.545*** (0.00242)	-0.237*** (0.00950)
Non-European migrants 1	-0.451*** (0.00223)	-0.437*** (0.00257)	-0.127*** (0.00931)
Non-European migrants 2	-0.373*** (0.00268)	-0.336*** (0.00292)	-0.0763*** (0.00915)
Non-European migrants 3	-0.331*** (0.00315)	-0.273*** (0.00334)	-0.0605*** (0.00903)
Non-European migrants 4	-0.293*** (0.00376)	-0.217*** (0.00388)	-0.0513*** (0.00894)
Non-European migrants 5	-0.266*** (0.00453)	-0.172*** (0.00462)	-0.0420*** (0.00880)
Non-European migrants 6	-0.252*** (0.00575)	-0.136*** (0.00578)	-0.0332*** (0.00854)

Appendix Table A.5 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 7	-0.240*** (0.00769)	-0.0983*** (0.00765)	-0.0164** (0.00764)
Age	- (-)	0.206*** (0.00275)	0.0507*** (0.00266)
Age × Age	- (-)	-0.00376*** (5.41e-05)	-0.000941*** (5.18e-05)
Female	- (-)	-0.0428*** (0.00124)	- (-)
Educ ML	- (-)	0.169*** (0.00227)	0.0303*** (0.00336)
Educ MH	- (-)	0.112*** (0.00243)	0.153*** (0.00430)
Educ H	- (-)	0.250*** (0.00284)	0.274*** (0.00528)
Educ NA	- (-)	0.0259*** (0.00373)	0.0336*** (0.0115)
Partner HH	- (-)	0.0198*** (0.00156)	-0.00864*** (0.00164)
Family HH	- (-)	-0.0268*** (0.00414)	-0.0223*** (0.00457)
Other HH	- (-)	-0.0753*** (0.00223)	-0.0212*** (0.00196)
HH NA	- (-)	-0.220*** (0.00422)	-0.159*** (0.00974)
# of kids	- (-)	-0.00433*** (0.000994)	0.00584*** (0.00110)
Age of youngest kid: 0-2	- (-)	-0.292*** (0.00271)	-0.247*** (0.00305)
Age of youngest kid: 3-5	- (-)	-0.0761*** (0.00368)	-0.0248*** (0.00445)
Age of youngest kid: 6-9	- (-)	-0.0313*** (0.00466)	-0.0240*** (0.00530)
Age of youngest kid: 10-14	- (-)	-0.0224*** (0.00489)	-0.0230*** (0.00546)
Age of youngest kid: >15	- (-)	-0.0292*** (0.00410)	-0.0177*** (0.00464)
Days in education	- (-)	-0.000257*** (1.80e-06)	0.000264*** (3.56e-06)
Days in AMS-training	- (-)	-0.000490*** (8.91e-06)	0.000372*** (1.45e-05)
Intermediate region	- (-)	-0.0224*** (0.00164)	0.00211 (0.00255)
Urban region	- (-)	-0.0842*** (0.0173)	0.0130 (0.0248)
Share manuf. jobs	- (-)	-0.000592 (0.000734)	-0.00301*** (0.000654)
Share agricul. jobs	- (-)	-0.00886** (0.00419)	-0.00577 (0.00371)
Share tourism jobs	- (-)	0.00185*** (0.000475)	0.000254 (0.000427)
Unemployment rate	- (-)	-0.00495*** (0.000442)	-0.00683*** (0.000389)
Activity rate	- (-)	0.00515*** (0.000518)	0.00721*** (0.000453)
Share of foreign-born (non-EU & non-rich)	- (-)	0.00827*** (0.000983)	0.00457*** (0.000963)
Observations	4,697,870	4,697,870	4,697,870
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.6 / Regression results for age cohort 31-40, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-0.831*** (0.00357)	-0.674*** (0.00588)	-0.402*** (0.0369)
European refugees 1	-0.786*** (0.00592)	-0.676*** (0.00718)	-0.361*** (0.0362)
European refugees 2	-0.689*** (0.00946)	-0.587*** (0.0103)	-0.285*** (0.0353)
European refugees 3	-0.589*** (0.0129)	-0.481*** (0.0133)	-0.206*** (0.0353)
European refugees 4	-0.539*** (0.0166)	-0.409*** (0.0171)	-0.175*** (0.0348)
European refugees 5	-0.466*** (0.0209)	-0.333*** (0.0210)	-0.114*** (0.0341)
European refugees 6	-0.422*** (0.0239)	-0.283*** (0.0236)	-0.0798*** (0.0295)
European refugees 7	-0.359*** (0.0262)	-0.222*** (0.0250)	-0.0408* (0.0234)
European migrants 0	-0.605*** (0.00280)	-0.431*** (0.00401)	-0.358*** (0.00843)
European migrants 1	-0.391*** (0.00337)	-0.289*** (0.00390)	-0.200*** (0.00798)
European migrants 2	-0.282*** (0.00361)	-0.190*** (0.00392)	-0.122*** (0.00757)
European migrants 3	-0.243*** (0.00378)	-0.150*** (0.00402)	-0.0980*** (0.00726)
European migrants 4	-0.217*** (0.00398)	-0.119*** (0.00416)	-0.0783*** (0.00690)
European migrants 5	-0.196*** (0.00429)	-0.0907*** (0.00443)	-0.0514*** (0.00655)
European migrants 6	-0.188*** (0.00472)	-0.0754*** (0.00480)	-0.0347*** (0.00599)
European migrants 7	-0.173*** (0.00528)	-0.0550*** (0.00530)	-0.0101** (0.00489)
Non-European refugees 0	-0.839*** (0.00110)	-0.718*** (0.00321)	-0.368*** (0.0129)
Non-European refugees 1	-0.804*** (0.00144)	-0.705*** (0.00310)	-0.339*** (0.0125)
Non-European refugees 2	-0.725*** (0.00214)	-0.622*** (0.00323)	-0.281*** (0.0122)
Non-European refugees 3	-0.614*** (0.00292)	-0.494*** (0.00375)	-0.205*** (0.0117)
Non-European refugees 4	-0.492*** (0.00465)	-0.336*** (0.00530)	-0.140*** (0.0113)
Non-European refugees 5	-0.429*** (0.00588)	-0.267*** (0.00641)	-0.103*** (0.0106)
Non-European refugees 6	-0.336*** (0.00673)	-0.169*** (0.00723)	-0.0471*** (0.00960)
Non-European refugees 7	-0.290*** (0.00810)	-0.121*** (0.00851)	-0.0189** (0.00803)
Non-European migrants 0	-0.675*** (0.00245)	-0.522*** (0.00359)	-0.185*** (0.00763)
Non-European migrants 1	-0.513*** (0.00302)	-0.427*** (0.00351)	-0.0794*** (0.00720)
Non-European migrants 2	-0.415*** (0.00339)	-0.333*** (0.00365)	-0.0251*** (0.00674)
Non-European migrants 3	-0.364*** (0.00364)	-0.274*** (0.00385)	-0.0111* (0.00641)
Non-European migrants 4	-0.328*** (0.00392)	-0.226*** (0.00410)	-0.0107* (0.00609)
Non-European migrants 5	-0.295*** (0.00421)	-0.182*** (0.00436)	-0.00349 (0.00576)
Non-European migrants 6	-0.278*** (0.00457)	-0.157*** (0.00468)	-0.00744 (0.00534)

Appendix Table A.6 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 7	-0.255*** (0.00519)	-0.126*** (0.00526)	-0.00158 (0.00437)
Age	- (-)	-0.0327*** (0.00395)	0.00123 (0.00366)
Age × Age	- (-)	0.000473*** (5.53e-05)	5.99e-05 (5.09e-05)
Female	- (-)	-0.132*** (0.00140)	- (-)
Educ ML	- (-)	0.143*** (0.00333)	0.0182*** (0.00660)
Educ MH	- (-)	0.154*** (0.00352)	0.00209 (0.00729)
Educ H	- (-)	0.188*** (0.00353)	0.0376*** (0.00819)
Educ NA	- (-)	0.00602 (0.00474)	0.0431 (0.0421)
Partner HH	- (-)	0.0382*** (0.00202)	-0.0122*** (0.00186)
Family HH	- (-)	-0.0247*** (0.00341)	-0.0153*** (0.00359)
Other HH	- (-)	-0.0995*** (0.00364)	-0.0186*** (0.00230)
HH NA	- (-)	-0.269*** (0.00620)	-0.141*** (0.0127)
# of kids	- (-)	-0.0233*** (0.00118)	0.00617*** (0.00122)
Age of youngest kid: 0-2	- (-)	-0.121*** (0.00264)	-0.155*** (0.00279)
Age of youngest kid: 3-5	- (-)	0.0360*** (0.00278)	0.0153*** (0.00310)
Age of youngest kid: 6-9	- (-)	0.0626*** (0.00297)	0.0214*** (0.00322)
Age of youngest kid: 10-14	- (-)	0.0804*** (0.00328)	0.0183*** (0.00353)
Age of youngest kid: >15	- (-)	-0.00717* (0.00387)	-0.00349 (0.00377)
Days in education	- (-)	-0.000168*** (4.08e-06)	0.000254*** (1.55e-05)
Days in AMS-training	- (-)	-0.000466*** (1.09e-05)	0.000487*** (2.23e-05)
Intermediate region	- (-)	-0.0118*** (0.00183)	0.00555* (0.00321)
Urban region	- (-)	-0.0286 (0.0182)	0.0819*** (0.0282)
Share manuf. jobs	- (-)	-0.000630 (0.000699)	-0.000444 (0.000601)
Share agricul. jobs	- (-)	-0.000163 (0.00379)	0.00350 (0.00321)
Share tourism jobs	- (-)	-0.00114** (0.000451)	-0.00129*** (0.000388)
Unemployment rate	- (-)	-0.00509*** (0.000407)	-0.00559*** (0.000342)
Activity rate	- (-)	0.00507*** (0.000478)	0.00519*** (0.000396)
Share of foreign-born (non-EU & non-rich)	- (-)	0.00317*** (0.000978)	-0.00294*** (0.000917)
Observations	3,848,388	3,848,388	3,848,388
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.7 / Regression results for age cohort 41-50, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(1)	(2)
European refugees 0	-0.852*** (0.00500)	-0.634*** (0.00791)	-0.298*** (0.0440)
European refugees 1	-0.821*** (0.00732)	-0.671*** (0.00908)	-0.267*** (0.0436)
European refugees 2	-0.747*** (0.0119)	-0.627*** (0.0129)	-0.210*** (0.0424)
European refugees 3	-0.669*** (0.0157)	-0.556*** (0.0164)	-0.155*** (0.0409)
European refugees 4	-0.608*** (0.0210)	-0.477*** (0.0213)	-0.115*** (0.0387)
European refugees 5	-0.540*** (0.0261)	-0.388*** (0.0258)	-0.0548 (0.0366)
European refugees 6	-0.454*** (0.0299)	-0.289*** (0.0296)	-0.0195 (0.0326)
European refugees 7	-0.454*** (0.0333)	-0.275*** (0.0329)	-0.0383 (0.0297)
European migrants 0	-0.640*** (0.00339)	-0.400*** (0.00520)	-0.361*** (0.00882)
European migrants 1	-0.410*** (0.00424)	-0.272*** (0.00495)	-0.209*** (0.00823)
European migrants 2	-0.276*** (0.00453)	-0.175*** (0.00488)	-0.120*** (0.00776)
European migrants 3	-0.222*** (0.00463)	-0.130*** (0.00495)	-0.0803*** (0.00746)
European migrants 4	-0.199*** (0.00487)	-0.105*** (0.00513)	-0.0564*** (0.00706)
European migrants 5	-0.194*** (0.00528)	-0.0951*** (0.00552)	-0.0382*** (0.00664)
European migrants 6	-0.192*** (0.00587)	-0.0922*** (0.00607)	-0.0224*** (0.00606)
European migrants 7	-0.189*** (0.00665)	-0.0884*** (0.00679)	-0.00450 (0.00501)
Non-European refugees 0	-0.854*** (0.00134)	-0.683*** (0.00374)	-0.285*** (0.0157)
Non-European refugees 1	-0.826*** (0.00177)	-0.686*** (0.00349)	-0.257*** (0.0154)
Non-European refugees 2	-0.771*** (0.00259)	-0.642*** (0.00365)	-0.228*** (0.0150)
Non-European refugees 3	-0.695*** (0.00355)	-0.548*** (0.00441)	-0.189*** (0.0145)
Non-European refugees 4	-0.605*** (0.00590)	-0.416*** (0.00670)	-0.149*** (0.0140)
Non-European refugees 5	-0.547*** (0.00784)	-0.344*** (0.00851)	-0.107*** (0.0134)
Non-European refugees 6	-0.496*** (0.00916)	-0.279*** (0.00982)	-0.0700*** (0.0122)
Non-European refugees 7	-0.456*** (0.0112)	-0.237*** (0.0116)	-0.0412*** (0.0104)
Non-European migrants 0	-0.720*** (0.00338)	-0.519*** (0.00499)	-0.210*** (0.00932)
Non-European migrants 1	-0.583*** (0.00441)	-0.480*** (0.00507)	-0.124*** (0.00874)
Non-European migrants 2	-0.491*** (0.00506)	-0.418*** (0.00540)	-0.0763*** (0.00824)
Non-European migrants 3	-0.449*** (0.00546)	-0.380*** (0.00577)	-0.0599*** (0.00788)
Non-European migrants 4	-0.417*** (0.00578)	-0.340*** (0.00609)	-0.0475*** (0.00756)
Non-European migrants 5	-0.382*** (0.00619)	-0.298*** (0.00651)	-0.0307*** (0.00722)
Non-European migrants 6	-0.353*** (0.00668)	-0.263*** (0.00703)	-0.0195*** (0.00658)

Appendix Table A.7 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(1)	(2)
Non-European migrants 7	-0.337*** (0.00732)	-0.244*** (0.00771)	-0.0140*** (0.00527)
Age	- (-)	0.0735*** (0.00221)	0.0683*** (0.00151)
Age × Age	- (-)	-0.000825*** (2.31e-05)	-0.000760*** (1.55e-05)
Female	- (-)	-0.0387*** (0.00134)	- (-)
Educ ML	- (-)	0.127*** (0.00266)	0.00203 (0.00680)
Educ MH	- (-)	0.152*** (0.00299)	-0.0160* (0.00873)
Educ H	- (-)	0.193*** (0.00289)	0.0188** (0.00891)
Educ NA	- (-)	-0.0272*** (0.00772)	0.00487 (0.0124)
Partner HH	- (-)	0.0649*** (0.00227)	0.00541*** (0.00167)
Family HH	- (-)	0.000547 (0.00299)	0.00291 (0.00205)
Other HH	- (-)	-0.115*** (0.00452)	-0.00949*** (0.00204)
HH NA	- (-)	-0.264*** (0.00824)	-0.0759*** (0.0130)
# of kids	- (-)	-0.00792*** (0.000992)	-0.00318*** (0.000828)
Age of youngest kid: 0-2	- (-)	-0.0435*** (0.00342)	-0.0533*** (0.00342)
Age of youngest kid: 3-5	- (-)	0.00165 (0.00319)	0.00156 (0.00302)
Age of youngest kid: 6-9	- (-)	0.0131*** (0.00290)	-0.00183 (0.00247)
Age of youngest kid: 10-14	- (-)	0.0331*** (0.00264)	0.00137 (0.00198)
Age of youngest kid: >15	- (-)	0.0351*** (0.00226)	0.00775*** (0.00153)
Days in education	- (-)	-0.000341*** (9.11e-06)	0.000131*** (2.06e-05)
Days in AMS-training	- (-)	-0.000593*** (1.27e-05)	0.000441*** (2.05e-05)
Intermediate region	- (-)	-0.00682*** (0.00170)	0.00144 (0.00315)
Urban region	- (-)	-0.0393** (0.0163)	0.00872 (0.0300)
Share manuf. jobs	- (-)	0.00129*** (0.000379)	0.00166*** (0.000343)
Share agricul. jobs	- (-)	-3.92e-05 (0.00204)	0.00333* (0.00185)
Share tourism jobs	- (-)	-0.000687*** (0.000243)	-0.00106*** (0.000220)
Unemployment rate	- (-)	-0.00400*** (0.000246)	-0.00447*** (0.000220)
Activity rate	- (-)	0.00347*** (0.000288)	0.00396*** (0.000256)
Share of foreign-born (non-EU & non-rich)	- (-)	0.000808 (0.000607)	0.000585 (0.000549)
Observations	5,682,928	5,682,928	5,682,928
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.8 / Regression results for low educated, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-0.651*** (0.00516)	-0.579*** (0.00658)	-0.540*** (0.0265)
European refugees 1	-0.579*** (0.00696)	-0.513*** (0.00745)	-0.461*** (0.0259)
European refugees 2	-0.431*** (0.00991)	-0.373*** (0.00988)	-0.329*** (0.0251)
European refugees 3	-0.319*** (0.0123)	-0.265*** (0.0120)	-0.234*** (0.0248)
European refugees 4	-0.283*** (0.0149)	-0.227*** (0.0142)	-0.188*** (0.0243)
European refugees 5	-0.229*** (0.0173)	-0.170*** (0.0161)	-0.127*** (0.0240)
European refugees 6	-0.174*** (0.0193)	-0.114*** (0.0179)	-0.0771*** (0.0217)
European refugees 7	-0.143*** (0.0221)	-0.0847*** (0.0200)	-0.0512*** (0.0178)
European migrants 0	-0.395*** (0.00335)	-0.373*** (0.00388)	-0.481*** (0.00692)
European migrants 1	-0.183*** (0.00334)	-0.182*** (0.00371)	-0.268*** (0.00639)
European migrants 2	-0.0893*** (0.00329)	-0.0870*** (0.00362)	-0.171*** (0.00602)
European migrants 3	-0.0478*** (0.00344)	-0.0433*** (0.00377)	-0.127*** (0.00579)
European migrants 4	-0.0230*** (0.00367)	-0.0172*** (0.00398)	-0.0984*** (0.00558)
European migrants 5	-0.00446 (0.00401)	0.00431 (0.00429)	-0.0713*** (0.00539)
European migrants 6	0.00903** (0.00452)	0.0202*** (0.00475)	-0.0471*** (0.00514)
European migrants 7	0.0264*** (0.00517)	0.0392*** (0.00536)	-0.0179*** (0.00436)
Non-European refugees 0	-0.665*** (0.00199)	-0.585*** (0.00436)	-0.528*** (0.0100)
Non-European refugees 1	-0.610*** (0.00216)	-0.539*** (0.00391)	-0.470*** (0.00948)
Non-European refugees 2	-0.515*** (0.00255)	-0.438*** (0.00372)	-0.382*** (0.00904)
Non-European refugees 3	-0.400*** (0.00301)	-0.308*** (0.00402)	-0.285*** (0.00866)
Non-European refugees 4	-0.272*** (0.00415)	-0.157*** (0.00498)	-0.185*** (0.00842)
Non-European refugees 5	-0.195*** (0.00511)	-0.0800*** (0.00571)	-0.118*** (0.00812)
Non-European refugees 6	-0.119*** (0.00575)	-0.00155 (0.00630)	-0.0518*** (0.00764)
Non-European refugees 7	-0.0833*** (0.00715)	0.0342*** (0.00752)	-0.0154** (0.00670)
Non-European migrants 0	-0.442*** (0.00346)	-0.435*** (0.00395)	-0.362*** (0.00690)
Non-European migrants 1	-0.266*** (0.00352)	-0.259*** (0.00386)	-0.181*** (0.00630)
Non-European migrants 2	-0.186*** (0.00353)	-0.165*** (0.00383)	-0.102*** (0.00584)
Non-European migrants 3	-0.152*** (0.00374)	-0.123*** (0.00404)	-0.0761*** (0.00560)
Non-European migrants 4	-0.123*** (0.00403)	-0.0897*** (0.00432)	-0.0601*** (0.00542)
Non-European migrants 5	-0.0957*** (0.00438)	-0.0589*** (0.00465)	-0.0393*** (0.00521)
Non-European migrants 6	-0.0827*** (0.00490)	-0.0419*** (0.00513)	-0.0304*** (0.00494)

ctd.

Appendix Table A.8 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 7	-0.0655*** (0.00563)	-0.0225*** (0.00581)	-0.0150*** (0.00420)
Age	- (-)	0.0210*** (0.00108)	0.0233*** (0.00131)
Age × Age	- (-)	-0.000288*** (1.46e-05)	-0.000360*** (1.39e-05)
Female	- (-)	-0.0749*** (0.00304)	- (-)
Partner HH	- (-)	0.105*** (0.00514)	0.00988*** (0.00300)
Family HH	- (-)	-0.0625*** (0.00659)	-0.00969** (0.00409)
Other HH	- (-)	-0.149*** (0.00620)	-0.0265*** (0.00309)
HH NA	- (-)	-0.332*** (0.00924)	-0.153*** (0.00902)
# of kids	- (-)	-0.0205*** (0.00186)	0.000521 (0.00144)
Age of youngest kid: 0-2	- (-)	-0.177*** (0.00571)	-0.162*** (0.00469)
Age of youngest kid: 3-5	- (-)	-0.00848 (0.00674)	0.000703 (0.00544)
Age of youngest kid: 6-9	- (-)	0.0442*** (0.00696)	0.00581 (0.00533)
Age of youngest kid: 10-14	- (-)	0.0671*** (0.00657)	0.00302 (0.00466)
Age of youngest kid: >15	- (-)	0.0473*** (0.00529)	0.00651* (0.00358)
Days in education	- (-)	-0.000408*** (1.55e-05)	0.000328*** (2.07e-05)
Days in AMS-training	- (-)	-0.000602*** (1.53e-05)	0.000203*** (1.72e-05)
Intermediate region	- (-)	-0.0263*** (0.00417)	0.00262 (0.00439)
Urban region	- (-)	0.0135 (0.0483)	0.0642 (0.0409)
Share manuf. jobs	- (-)	-0.00194** (0.000917)	-0.00171** (0.000825)
Share agricul. jobs	- (-)	-0.00642 (0.00543)	-0.00603 (0.00477)
Share tourism jobs	- (-)	-0.00141** (0.000621)	-0.00276*** (0.000556)
Unemployment rate	- (-)	-0.00726*** (0.000580)	-0.00878*** (0.000504)
Activity rate	- (-)	0.00733*** (0.000683)	0.00815*** (0.000589)
Share of foreign-born (non-EU & non-rich)	- (-)	0.00677*** (0.00134)	0.00114 (0.00120)
Observations	2,909,948	2,909,948	2,909,948
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.9 / Regression results for medium-low educated, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-0.851*** (0.00453)	-0.801*** (0.00560)	-0.328*** (0.0524)
European refugees 1	-0.816*** (0.00684)	-0.775*** (0.00741)	-0.295*** (0.0521)
European refugees 2	-0.728*** (0.0102)	-0.685*** (0.0103)	-0.205*** (0.0517)
European refugees 3	-0.650*** (0.0152)	-0.609*** (0.0150)	-0.138*** (0.0516)
European refugees 4	-0.647*** (0.0209)	-0.599*** (0.0205)	-0.123** (0.0501)
European refugees 5	-0.610*** (0.0286)	-0.563*** (0.0282)	-0.0900* (0.0509)
European refugees 6	-0.561*** (0.0348)	-0.525*** (0.0344)	-0.0566 (0.0483)
European refugees 7	-0.447*** (0.0465)	-0.415*** (0.0448)	0.00165 (0.0437)
European migrants 0	-0.575*** (0.00370)	-0.526*** (0.00397)	-0.385*** (0.00901)
European migrants 1	-0.400*** (0.00378)	-0.363*** (0.00386)	-0.222*** (0.00860)
European migrants 2	-0.313*** (0.00394)	-0.274*** (0.00390)	-0.155*** (0.00832)
European migrants 3	-0.268*** (0.00432)	-0.226*** (0.00423)	-0.124*** (0.00812)
European migrants 4	-0.236*** (0.00480)	-0.191*** (0.00468)	-0.101*** (0.00789)
European migrants 5	-0.216*** (0.00541)	-0.165*** (0.00529)	-0.0730*** (0.00754)
European migrants 6	-0.200*** (0.00614)	-0.146*** (0.00603)	-0.0435*** (0.00702)
European migrants 7	-0.180*** (0.00711)	-0.123*** (0.00696)	-0.0165*** (0.00578)
Non-European refugees 0	-0.860*** (0.000995)	-0.822*** (0.00246)	-0.354*** (0.0177)
Non-European refugees 1	-0.832*** (0.00130)	-0.799*** (0.00244)	-0.323*** (0.0176)
Non-European refugees 2	-0.765*** (0.00205)	-0.727*** (0.00275)	-0.261*** (0.0175)
Non-European refugees 3	-0.670*** (0.00316)	-0.625*** (0.00357)	-0.183*** (0.0175)
Non-European refugees 4	-0.593*** (0.00675)	-0.526*** (0.00694)	-0.144*** (0.0173)
Non-European refugees 5	-0.543*** (0.00928)	-0.477*** (0.00948)	-0.112*** (0.0169)
Non-European refugees 6	-0.468*** (0.0118)	-0.399*** (0.0121)	-0.0672*** (0.0158)
Non-European refugees 7	-0.419*** (0.0153)	-0.343*** (0.0157)	-0.0337** (0.0132)
Non-European migrants 0	-0.679*** (0.00328)	-0.626*** (0.00362)	-0.201*** (0.00920)
Non-European migrants 1	-0.579*** (0.00347)	-0.529*** (0.00369)	-0.117*** (0.00889)
Non-European migrants 2	-0.527*** (0.00398)	-0.474*** (0.00408)	-0.0768*** (0.00871)
Non-European migrants 3	-0.483*** (0.00477)	-0.428*** (0.00480)	-0.0561*** (0.00854)
Non-European migrants 4	-0.438*** (0.00574)	-0.378*** (0.00571)	-0.0413*** (0.00840)
Non-European migrants 5	-0.400*** (0.00666)	-0.336*** (0.00663)	-0.0245*** (0.00812)
Non-European migrants 6	-0.372*** (0.00767)	-0.304*** (0.00770)	-0.0145* (0.00755)

Appendix Table A.9 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 7	-0.349*** (0.00913)	-0.278*** (0.00919)	-0.00611 (0.00650)
Age	- (-)	0.0208*** (0.000438)	0.0247*** (0.000575)
Age × Age	- (-)	-0.000301*** (5.85e-06)	-0.000329*** (6.23e-06)
Female	- (-)	-0.0726*** (0.00113)	- (-)
Partner HH	- (-)	0.0503*** (0.00193)	-0.00410*** (0.00134)
Family HH	- (-)	-0.00948*** (0.00247)	-0.00995*** (0.00194)
Other HH	- (-)	-0.0570*** (0.00313)	-0.00954*** (0.00170)
HH NA	- (-)	-0.339*** (0.0108)	-0.128*** (0.0134)
# of kids	- (-)	-0.00709*** (0.000836)	0.00818*** (0.000779)
Age of youngest kid: 0-2	- (-)	-0.172*** (0.00246)	-0.181*** (0.00238)
Age of youngest kid: 3-5	- (-)	-0.0213*** (0.00246)	-0.0180*** (0.00260)
Age of youngest kid: 6-9	- (-)	0.00361 (0.00251)	-0.0107*** (0.00234)
Age of youngest kid: 10-14	- (-)	0.0286*** (0.00242)	-0.00291 (0.00205)
Age of youngest kid: >15	- (-)	0.0355*** (0.00211)	0.00155 (0.00165)
Days in education	- (-)	-0.000398*** (1.12e-05)	0.000154*** (2.05e-05)
Days in AMS-training	- (-)	-0.000504*** (8.62e-06)	0.000435*** (1.49e-05)
Intermediate region	- (-)	-0.00665*** (0.00139)	0.00382* (0.00225)
Urban region	- (-)	-0.0215 (0.0165)	0.0677*** (0.0235)
Share manuf. jobs	- (-)	0.000362 (0.000384)	0.000571 (0.000363)
Share agricul. jobs	- (-)	0.00416** (0.00204)	0.00675*** (0.00193)
Share tourism jobs	- (-)	-0.000733*** (0.000255)	-0.00128*** (0.000242)
Unemployment rate	- (-)	-0.00541*** (0.000249)	-0.00567*** (0.000231)
Activity rate	- (-)	0.00500*** (0.000286)	0.00516*** (0.000265)
Share of foreign-born (non-EU & non-rich)	- (-)	0.000284 (0.000644)	-0.00113* (0.000601)
Observations	6,287,692	6,287,692	6,287,692
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.10 / Regression results for medium-highly educated, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-0.788*** (0.00856)	-0.834*** (0.0102)	-0.350*** (0.118)
European refugees 1	-0.765*** (0.00840)	-0.805*** (0.0105)	-0.314*** (0.118)
European refugees 2	-0.721*** (0.0133)	-0.753*** (0.0148)	-0.274** (0.118)
European refugees 3	-0.646*** (0.0200)	-0.668*** (0.0217)	-0.214* (0.118)
European refugees 4	-0.615*** (0.0277)	-0.633*** (0.0304)	-0.186 (0.118)
European refugees 5	-0.625*** (0.0359)	-0.638*** (0.0382)	-0.178 (0.117)
European refugees 6	-0.566*** (0.0502)	-0.578*** (0.0539)	-0.139 (0.108)
European refugees 7	-0.537*** (0.0605)	-0.543*** (0.0696)	-0.170** (0.0771)
European migrants 0	-0.583*** (0.00450)	-0.557*** (0.00481)	-0.293*** (0.0140)
European migrants 1	-0.397*** (0.00473)	-0.374*** (0.00485)	-0.115*** (0.0135)
European migrants 2	-0.313*** (0.00484)	-0.279*** (0.00482)	-0.0608*** (0.0131)
European migrants 3	-0.264*** (0.00531)	-0.221*** (0.00518)	-0.0456*** (0.0128)
European migrants 4	-0.222*** (0.00602)	-0.171*** (0.00581)	-0.0335*** (0.0125)
European migrants 5	-0.200*** (0.00708)	-0.142*** (0.00683)	-0.0291** (0.0122)
European migrants 6	-0.191*** (0.00835)	-0.130*** (0.00814)	-0.0256** (0.0115)
European migrants 7	-0.178*** (0.0104)	-0.113*** (0.0102)	-0.00457 (0.00953)
Non-European refugees 0	-0.791*** (0.00174)	-0.826*** (0.00329)	-0.339*** (0.0258)
Non-European refugees 1	-0.757*** (0.00227)	-0.793*** (0.00336)	-0.310*** (0.0256)
Non-European refugees 2	-0.683*** (0.00343)	-0.702*** (0.00418)	-0.257*** (0.0253)
Non-European refugees 3	-0.577*** (0.00486)	-0.572*** (0.00563)	-0.185*** (0.0248)
Non-European refugees 4	-0.489*** (0.00780)	-0.464*** (0.00860)	-0.137*** (0.0243)
Non-European refugees 5	-0.447*** (0.0112)	-0.432*** (0.0120)	-0.102*** (0.0231)
Non-European refugees 6	-0.388*** (0.0142)	-0.370*** (0.0150)	-0.0613*** (0.0213)
Non-European refugees 7	-0.373*** (0.0185)	-0.354*** (0.0193)	-0.0515*** (0.0186)
Non-European migrants 0	-0.657*** (0.00354)	-0.649*** (0.00400)	-0.183*** (0.0119)
Non-European migrants 1	-0.548*** (0.00374)	-0.538*** (0.00401)	-0.0948*** (0.0115)
Non-European migrants 2	-0.480*** (0.00411)	-0.453*** (0.00421)	-0.0527*** (0.0112)
Non-European migrants 3	-0.426*** (0.00474)	-0.383*** (0.00474)	-0.0353*** (0.0109)
Non-European migrants 4	-0.383*** (0.00552)	-0.322*** (0.00546)	-0.0290*** (0.0106)
Non-European migrants 5	-0.346*** (0.00643)	-0.272*** (0.00638)	-0.0298*** (0.0103)
Non-European migrants 6	-0.314*** (0.00757)	-0.230*** (0.00758)	-0.0271*** (0.00973)

Appendix Table A.10 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 7	-0.289*** (0.00922)	-0.200*** (0.00931)	-0.0198** (0.00816)
Age	- (-)	0.0501*** (0.000732)	0.0288*** (0.000991)
Age × Age	- (-)	-0.000645*** (9.94e-06)	-0.000347*** (1.09e-05)
Female	- (-)	-0.0434*** (0.00168)	- (-)
Partner HH	- (-)	0.0371*** (0.00260)	-0.00882*** (0.00216)
Family HH	- (-)	-0.0362*** (0.00392)	-0.0123*** (0.00366)
Other HH	- (-)	-0.0446*** (0.00372)	-0.00976*** (0.00269)
HH NA	- (-)	-0.343*** (0.0177)	-0.138*** (0.0217)
# of kids	- (-)	-0.00800*** (0.00138)	0.00823*** (0.00145)
Age of youngest kid: 0-2	- (-)	-0.224*** (0.00387)	-0.243*** (0.00417)
Age of youngest kid: 3-5	- (-)	-0.0488*** (0.00400)	-0.0394*** (0.00477)
Age of youngest kid: 6-9	- (-)	-0.0286*** (0.00415)	-0.0317*** (0.00445)
Age of youngest kid: 10-14	- (-)	-0.00484 (0.00415)	-0.0278*** (0.00409)
Age of youngest kid: >15	- (-)	0.00319 (0.00368)	-0.0136*** (0.00346)
Days in education	- (-)	-0.000281*** (2.44e-06)	0.000201*** (4.05e-06)
Days in AMS-training	- (-)	-0.000433*** (1.58e-05)	0.000391*** (3.03e-05)
Intermediate region	- (-)	-0.0739*** (0.0194)	-0.0204 (0.0325)
Urban region	- (-)	-0.0137*** (0.00233)	-0.00148 (0.00389)
Share manuf. jobs	- (-)	0.00418*** (0.000837)	0.000980 (0.000713)
Share agricul. jobs	- (-)	-0.0133*** (0.00444)	-0.00715* (0.00380)
Share tourism jobs	- (-)	0.00110** (0.000539)	0.000376 (0.000468)
Unemployment rate	- (-)	-0.00455*** (0.000511)	-0.00562*** (0.000432)
Activity rate	- (-)	0.00538*** (0.000625)	0.00634*** (0.000530)
Share of foreign-born (non-EU & non-rich)	- (-)	0.00484*** (0.00107)	0.00332*** (0.000952)
Observations	2,596,869	2,596,869	2,596,869
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.11 / Regression results for highly educated, total employment

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
European refugees 0	-0.874*** (0.00399)	-0.896*** (0.00598)	-0.147*** (0.0524)
European refugees 1	-0.869*** (0.00385)	-0.888*** (0.00571)	-0.134** (0.0521)
European refugees 2	-0.823*** (0.0106)	-0.836*** (0.0112)	-0.0928* (0.0513)
European refugees 3	-0.764*** (0.0166)	-0.773*** (0.0175)	-0.0541 (0.0505)
European refugees 4	-0.748*** (0.0262)	-0.746*** (0.0281)	-0.0477 (0.0511)
European refugees 5	-0.727*** (0.0385)	-0.719*** (0.0396)	-0.0138 (0.0504)
European refugees 6	-0.665*** (0.0524)	-0.662*** (0.0536)	-0.00883 (0.0515)
European refugees 7	-0.645*** (0.0642)	-0.641*** (0.0647)	-0.0417 (0.0529)
European migrants 0	-0.578*** (0.00721)	-0.588*** (0.00738)	-0.124*** (0.0163)
European migrants 1	-0.423*** (0.00676)	-0.438*** (0.00681)	-0.00784 (0.0154)
European migrants 2	-0.338*** (0.00639)	-0.346*** (0.00627)	0.0300** (0.0148)
European migrants 3	-0.300*** (0.00658)	-0.298*** (0.00635)	0.0278* (0.0142)
European migrants 4	-0.263*** (0.00705)	-0.250*** (0.00679)	0.0247* (0.0136)
European migrants 5	-0.246*** (0.00789)	-0.220*** (0.00761)	0.0177 (0.0129)
European migrants 6	-0.246*** (0.00901)	-0.209*** (0.00869)	0.00243 (0.0117)
European migrants 7	-0.246*** (0.0109)	-0.199*** (0.0107)	-0.00348 (0.00986)
Non-European refugees 0	-0.870*** (0.00161)	-0.892*** (0.00357)	-0.230*** (0.0276)
Non-European refugees 1	-0.842*** (0.00222)	-0.867*** (0.00360)	-0.210*** (0.0274)
Non-European refugees 2	-0.770*** (0.00353)	-0.784*** (0.00434)	-0.166*** (0.0269)
Non-European refugees 3	-0.671*** (0.00507)	-0.663*** (0.00588)	-0.109*** (0.0262)
Non-European refugees 4	-0.606*** (0.00818)	-0.573*** (0.00900)	-0.0797*** (0.0257)
Non-European refugees 5	-0.584*** (0.0111)	-0.550*** (0.0117)	-0.0585** (0.0251)
Non-European refugees 6	-0.557*** (0.0140)	-0.520*** (0.0147)	-0.0466** (0.0233)
Non-European refugees 7	-0.534*** (0.0186)	-0.494*** (0.0194)	-0.0250 (0.0202)
Non-European migrants 0	-0.631*** (0.00478)	-0.644*** (0.00504)	0.0293** (0.0119)
Non-European migrants 1	-0.531*** (0.00457)	-0.544*** (0.00471)	0.0834*** (0.0114)
Non-European migrants 2	-0.471*** (0.00462)	-0.476*** (0.00462)	0.0870*** (0.0109)
Non-European migrants 3	-0.437*** (0.00497)	-0.435*** (0.00489)	0.0676*** (0.0105)
Non-European migrants 4	-0.406*** (0.00551)	-0.394*** (0.00539)	0.0441*** (0.00997)
Non-European migrants 5	-0.377*** (0.00621)	-0.356*** (0.00607)	0.0300*** (0.00938)
Non-European migrants 6	-0.355*** (0.00702)	-0.325*** (0.00688)	0.0148* (0.00878)

Appendix Table A.11 / ctd.

Dependent variable:	More than 10 days within a quarter in work		
	(1)	(2)	(3)
Non-European migrants 7	-0.337*** (0.00845)	-0.299*** (0.00837)	0.00821 (0.00727)
Age	- (-)	0.00778*** (0.000959)	0.0226*** (0.00118)
Age × Age	- (-)	-0.000108*** (1.20e-05)	-0.000250*** (1.25e-05)
Female	- (-)	-0.0584*** (0.00173)	- (-)
Partner HH	- (-)	0.0214*** (0.00229)	-0.0131*** (0.00211)
Family HH	- (-)	-0.0543*** (0.00383)	-0.0189*** (0.00363)
Other HH	- (-)	-0.0570*** (0.00415)	-0.0186*** (0.00280)
HH NA	- (-)	-0.357*** (0.0173)	-0.168*** (0.0216)
# of kids	- (-)	-0.00164 (0.00156)	0.00971*** (0.00147)
Age of youngest kid: 0-2	- (-)	-0.171*** (0.00369)	-0.197*** (0.00368)
Age of youngest kid: 3-5	- (-)	-0.00961** (0.00375)	-0.0422*** (0.00432)
Age of youngest kid: 6-9	- (-)	0.00587 (0.00404)	-0.0381*** (0.00407)
Age of youngest kid: 10-14	- (-)	0.0196*** (0.00419)	-0.0332*** (0.00387)
Age of youngest kid: >15	- (-)	-0.00437 (0.00387)	-0.0234*** (0.00342)
Days in education	- (-)	-0.000137*** (2.80e-06)	0.000430*** (1.23e-05)
Days in AMS-training	- (-)	-0.000409*** (2.23e-05)	0.000658*** (4.96e-05)
Intermediate region	- (-)	-0.0520*** (0.0166)	0.0139 (0.0381)
Urban region	- (-)	0.00112 (0.00266)	0.0150*** (0.00439)
Share manuf. jobs	- (-)	0.00107 (0.000783)	8.52e-05 (0.000711)
Share agricul. jobs	- (-)	-0.00298 (0.00480)	-0.00211 (0.00432)
Share tourism jobs	- (-)	-0.000620 (0.000498)	-0.000589 (0.000449)
Unemployment rate	- (-)	-0.00230*** (0.000454)	-0.00208*** (0.000407)
Activity rate	- (-)	0.00214*** (0.000540)	0.00181*** (0.000482)
Share of foreign-born (non-EU & non-rich)	- (-)	0.00544*** (0.000972)	0.00298*** (0.000880)
Observations	2,047,828	2,047,828	2,047,828
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	NO
Individual-FE	NO	NO	NO

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.12 / Regression results, employees

Dependent variable:	More than 10 days within a quarter being an employee		
	(1)	(2)	(3)
European refugees 0	-0.703*** (0.00171)	-0.596*** (0.00301)	-0.337*** (0.0211)
European refugees 1	-0.672*** (0.00287)	-0.599*** (0.00367)	-0.304*** (0.0209)
European refugees 2	-0.593*** (0.00525)	-0.520*** (0.00584)	-0.237*** (0.0207)
European refugees 3	-0.504*** (0.00748)	-0.423*** (0.00797)	-0.165*** (0.0206)
European refugees 4	-0.462*** (0.0101)	-0.361*** (0.0106)	-0.131*** (0.0203)
European refugees 5	-0.412*** (0.0128)	-0.298*** (0.0131)	-0.0946*** (0.0199)
European refugees 6	-0.343*** (0.0155)	-0.226*** (0.0157)	-0.0526*** (0.0185)
European refugees 7	-0.299*** (0.0183)	-0.180*** (0.0179)	-0.0361** (0.0157)
European migrants 0	-0.532*** (0.00141)	-0.421*** (0.00202)	-0.353*** (0.00462)
European migrants 1	-0.358*** (0.00178)	-0.296*** (0.00209)	-0.217*** (0.00444)
European migrants 2	-0.260*** (0.00202)	-0.198*** (0.00221)	-0.140*** (0.00431)
European migrants 3	-0.209*** (0.00222)	-0.141*** (0.00237)	-0.103*** (0.00423)
European migrants 4	-0.174*** (0.00245)	-0.0987*** (0.00257)	-0.0781*** (0.00413)
European migrants 5	-0.151*** (0.00276)	-0.0691*** (0.00286)	-0.0559*** (0.00402)
European migrants 6	-0.141*** (0.00318)	-0.0536*** (0.00325)	-0.0384*** (0.00384)
European migrants 7	-0.126*** (0.00373)	-0.0337*** (0.00378)	-0.0145*** (0.00325)
Non-European refugees 0	-0.711*** (0.000670)	-0.619*** (0.00183)	-0.369*** (0.00764)
Non-European refugees 1	-0.689*** (0.000773)	-0.613*** (0.00175)	-0.347*** (0.00750)
Non-European refugees 2	-0.630*** (0.00113)	-0.547*** (0.00184)	-0.297*** (0.00738)
Non-European refugees 3	-0.538*** (0.00162)	-0.436*** (0.00220)	-0.224*** (0.00726)
Non-European refugees 4	-0.443*** (0.00271)	-0.305*** (0.00321)	-0.154*** (0.00719)
Non-European refugees 5	-0.386*** (0.00362)	-0.247*** (0.00405)	-0.106*** (0.00703)
Non-European refugees 6	-0.313*** (0.00444)	-0.169*** (0.00482)	-0.0470*** (0.00671)
Non-European refugees 7	-0.278*** (0.00571)	-0.130*** (0.00606)	-0.0128*** (0.00583)
Non-European migrants 0	-0.587*** (0.00125)	-0.487*** (0.00188)	-0.159*** (0.00440)
Non-European migrants 1	-0.466*** (0.00161)	-0.413*** (0.00193)	-0.0768*** (0.00423)
Non-European migrants 2	-0.392*** (0.00190)	-0.330*** (0.00211)	-0.0319*** (0.00410)
Non-European migrants 3	-0.355*** (0.00215)	-0.282*** (0.00232)	-0.0207*** (0.00402)
Non-European migrants 4	-0.324*** (0.00243)	-0.239*** (0.00257)	-0.0183*** (0.00394)
Non-European migrants 5	-0.296*** (0.00276)	-0.202*** (0.00288)	-0.0118*** (0.00384)
Non-European migrants 6	-0.277*** (0.00317)	-0.175*** (0.00327)	-0.0104*** (0.00366)

ctd.

Appendix Table A.12 / ctd.

Dependent variable:	More than 10 days within a quarter being an employee		
	(1)	(2)	(3)
Non-European migrants 7	-0.262*** (0.00374)	-0.152*** (0.00384)	-0.00744** (0.00311)
Age	-	0.0286***	0.0239***
Age × Age	(-)	(0.000434)	(0.000499)
Female	-	-0.000419***	-0.000339***
	(-)	(5.80e-06)	(5.30e-06)
	-	-0.0492***	-
	(-)	(0.00116)	(-)
Educ ML	-	0.140***	0.0419***
	(-)	(0.00192)	(0.00291)
Educ MH	-	0.0978***	0.0798***
	(-)	(0.00213)	(0.00368)
Educ H	-	0.192***	0.285***
	(-)	(0.00233)	(0.00451)
Educ NA	-	0.0229***	0.0587*
	(-)	(0.00278)	(0.0344)
Partner HH	-	0.0517***	-0.00258**
	(-)	(0.00175)	(0.00114)
Family HH	-	-0.0165***	-0.0135***
	(-)	(0.00249)	(0.00165)
Other HH	-	-0.104***	-0.0204***
	(-)	(0.00233)	(0.00136)
HH NA	-	-0.222***	-0.130***
	(-)	(0.00332)	(0.00622)
# of kids	-	-0.0368***	0.00322***
	(-)	(0.000886)	(0.000650)
Age of youngest kid: 0-2	-	-0.183***	-0.229***
	(-)	(0.00237)	(0.00190)
Age of youngest kid: 3-5	-	-0.0214***	-0.0407***
	(-)	(0.00274)	(0.00215)
Age of youngest kid: 6-9	-	0.00710**	-0.0306***
	(-)	(0.00281)	(0.00202)
Age of youngest kid: 10-14	-	0.0291***	-0.0180***
	(-)	(0.00273)	(0.00183)
Age of youngest kid: >15	-	0.0313***	-0.00656***
	(-)	(0.00228)	(0.00145)
Days in education	-	-0.000251***	0.000187***
	(-)	(1.83e-06)	(3.11e-06)
Days in AMS-training	-	-0.000453***	0.000268***
	(-)	(7.13e-06)	(9.86e-06)
Intermediate region	-	0.0105***	0.00624***
	(-)	(0.00158)	(0.00190)
Urban region	-	-0.0179	0.0143
	(-)	(0.0149)	(0.0178)
Share manuf. jobs	-	0.00189***	0.000696**
	(-)	(0.000353)	(0.000325)
Share agricul. jobs	-	0.000867	0.00462***
	(-)	(0.00191)	(0.00175)
Share tourism jobs	-	-0.000180	-0.000539**
	(-)	(0.000231)	(0.000213)
Unemployment rate	-	-0.00520***	-0.00530***
	(-)	(0.000224)	(0.000202)
Activity rate	-	0.00584***	0.00596***
	(-)	(0.000265)	(0.000238)
Share of foreign-born (non-EU & non-rich)	-	0.00569***	0.00479***
	(-)	(0.000521)	(0.000472)
Observations	14,229,186	14,229,186	14,229,186
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

Source: Statistics Austria, own calculations.

Appendix Table A.13 / Regression results, self-employed

Dependent variable:	More than 10 days within a quarter being self-employed		
	(1)	(2)	(3)
European refugees 0	-0.0857*** (0.00119)	-0.0568*** (0.00170)	0.0187*** (0.00724)
European refugees 1	-0.0778*** (0.00182)	-0.0518*** (0.00214)	0.0232*** (0.00703)
European refugees 2	-0.0682*** (0.00255)	-0.0430*** (0.00279)	0.0278*** (0.00694)
European refugees 3	-0.0633*** (0.00309)	-0.0403*** (0.00332)	0.0281*** (0.00700)
European refugees 4	-0.0647*** (0.00380)	-0.0419*** (0.00404)	0.0231*** (0.00685)
European refugees 5	-0.0656*** (0.00449)	-0.0445*** (0.00472)	0.0206*** (0.00687)
European refugees 6	-0.0712*** (0.00468)	-0.0512*** (0.00496)	0.0125* (0.00657)
European refugees 7	-0.0703*** (0.00502)	-0.0525*** (0.00544)	0.00816* (0.00490)
European migrants 0	-0.0778*** (0.000583)	-0.0246*** (0.000858)	0.00906*** (0.00182)
European migrants 1	-0.0693*** (0.000676)	-0.0213*** (0.000888)	0.0118*** (0.00176)
European migrants 2	-0.0655*** (0.000753)	-0.0214*** (0.000942)	0.0114*** (0.00172)
European migrants 3	-0.0647*** (0.000822)	-0.0248*** (0.00101)	0.00831*** (0.00168)
European migrants 4	-0.0639*** (0.000906)	-0.0278*** (0.00110)	0.00591*** (0.00163)
European migrants 5	-0.0636*** (0.00101)	-0.0312*** (0.00120)	0.00382** (0.00156)
European migrants 6	-0.0618*** (0.00118)	-0.0329*** (0.00136)	0.00273* (0.00146)
European migrants 7	-0.0604*** (0.00140)	-0.0352*** (0.00157)	0.00121 (0.00118)
Non-European refugees 0	-0.0846*** (0.000531)	-0.0536*** (0.00104)	0.0166*** (0.00404)
Non-European refugees 1	-0.0773*** (0.000600)	-0.0490*** (0.00101)	0.0198*** (0.00397)
Non-European refugees 2	-0.0707*** (0.000682)	-0.0434*** (0.00102)	0.0201*** (0.00392)
Non-European refugees 3	-0.0645*** (0.000815)	-0.0390*** (0.00114)	0.0183*** (0.00389)
Non-European refugees 4	-0.0485*** (0.00134)	-0.0220*** (0.00162)	0.0174*** (0.00388)
Non-European refugees 5	-0.0374*** (0.00186)	-0.00911*** (0.00207)	0.0180*** (0.00389)
Non-European refugees 6	-0.0357*** (0.00218)	-0.00832*** (0.00239)	0.0115*** (0.00374)
Non-European refugees 7	-0.0343*** (0.00274)	-0.0105*** (0.00292)	0.00439 (0.00315)
Non-European migrants 0	-0.0824*** (0.000529)	-0.0309*** (0.000818)	-0.0122*** (0.00214)
Non-European migrants 1	-0.0728*** (0.000630)	-0.0284*** (0.000849)	-0.00837*** (0.00209)
Non-European migrants 2	-0.0644*** (0.000756)	-0.0244*** (0.000938)	-0.00615*** (0.00205)
Non-European migrants 3	-0.0593*** (0.000875)	-0.0226*** (0.00105)	-0.00625*** (0.00203)
Non-European migrants 4	-0.0542*** (0.00103)	-0.0207*** (0.00119)	-0.00563*** (0.00199)
Non-European migrants 5	-0.0472*** (0.00122)	-0.0168*** (0.00137)	-0.00303 (0.00194)
Non-European migrants 6	-0.0433*** (0.00143)	-0.0163*** (0.00157)	-0.00269 (0.00184)

ctd.

Appendix Table A.13 / ctd.

Dependent variable:	More than 10 days within a quarter being self-employed		
	(1)	(2)	(3)
Non-European migrants 7	-0.0384*** (0.00176)	-0.0148*** (0.00188)	-0.00136 (0.00150)
Age	- (-)	0.00909*** (0.000297)	0.0108*** (0.000267)
Age × Age	- (-)	-7.49e-05*** (4.04e-06)	-9.81e-05*** (2.89e-06)
Female	- (-)	-0.0415*** (0.000855)	- (-)
Educ ML	- (-)	0.0191*** (0.00112)	-0.00512*** (0.00114)
Educ MH	- (-)	0.0263*** (0.00129)	-0.00456*** (0.00135)
Educ H	- (-)	0.0441*** (0.00157)	-0.00251 (0.00179)
Educ NA	- (-)	0.00705*** (0.00107)	-0.00909*** (0.00276)
Partner HH	- (-)	0.000857 (0.00120)	0.000815 (0.000618)
Family HH	- (-)	-0.0166*** (0.00178)	-0.00269*** (0.000889)
Other HH	- (-)	0.00603*** (0.00136)	0.000582 (0.000690)
HH NA	- (-)	-0.00560*** (0.00141)	-0.00650** (0.00287)
# of kids	- (-)	0.0215*** (0.000707)	0.00301*** (0.000359)
Age of youngest kid: 0-2	- (-)	-0.0101*** (0.00174)	0.00149* (0.000903)
Age of youngest kid: 3-5	- (-)	-0.00693*** (0.00212)	0.00350*** (0.00110)
Age of youngest kid: 6-9	- (-)	-0.0113*** (0.00218)	0.00402*** (0.00114)
Age of youngest kid: 10-14	- (-)	-0.00769*** (0.00212)	0.000908 (0.00106)
Age of youngest kid: >15	- (-)	-0.00636*** (0.00171)	-0.000503 (0.000820)
Days in education	- (-)	-2.00e-05*** (1.04e-06)	1.46e-07 (1.05e-06)
Days in AMS-training	- (-)	-4.66e-05*** (3.31e-06)	7.20e-05*** (3.94e-06)
Intermediate region	- (-)	-0.0270*** (0.00119)	-0.00244** (0.000955)
Urban region	- (-)	-0.0462*** (0.0108)	0.00802 (0.00931)
Share manuf. jobs	- (-)	-0.000445** (0.000187)	-0.000249 (0.000180)
Share agricul. jobs	- (-)	-0.00130 (0.00104)	0.000137 (0.000984)
Share tourism jobs	- (-)	-0.000565*** (0.000118)	-0.000596*** (0.000113)
Unemployment rate	- (-)	0.000323*** (0.000116)	0.000323*** (0.000108)
Activity rate	- (-)	0.000210 (0.000137)	2.51e-05 (0.000126)
Share of foreign-born (non-EU & non-rich)	- (-)	-0.000456* (0.000274)	-0.00175*** (0.000250)
Observations	14,229,186	14,229,186	14,229,186
Year-FE	YES	YES	YES
Quarter-FE	YES	YES	YES
District-FE	NO	YES	YES
Individual-FE	NO	NO	YES

Notes: E-MIG – European Migrants; E-REF – European Refugees; NE-MIG – Non-European Migrants; NE-REF – Non-European Refugees; AMS – Austrian Public Employment Service; HH – household; NA – not available; standard errors are clustered at the individuals level; *** p<0.01, ** p<0.05, * p<0.1.

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