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Research Report

Wiiw studies on the integration of Middle Eastern refugees in Austria, based on FIMAS surveys and register-based labour market career data

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wiiw Studies on the Integration of Middle Eastern Refugees in Austria, Based on FIMAS Surveys and Register-based Labour Market Career Data

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Abstract

This Policy Note reports on the analyses undertaken in a number of wiiw Working Papers that are the output of two projects financed by the Anniversary Fund of the Austrian National Bank (Project no. 18474 and no. 17166). Four of the papers are based on survey data from the FIMAS dataset, which has been compiled over the years by the International Centre for Migration Policy Development (ICMPD), together with wiiw, and which document the experiences of recent waves of refugees from Afghanistan, Iran, Iraq and Syria. The topics covered in these four papers are as follows. First, an analysis of the pattern of occupational status loss (or gain) that refugees experience in the course of the move from their home countries to the destination country (Austria), focusing on the move from the jobs they had prior to the move, to their first job in Austria and then to their second or current job. Second, an examination of the effectiveness of two of the labour market integration programmes offered by the Austrian public employment service (AMS): the Competence Check and the Voluntary Integration Year programme. Third, an investigation into the interrelationships between aspects of the 'social integration' and the 'labour market integration' of refugees. Fourth, an analysis of the factors determining (or related to) the mental health problems that this wave of refugees has had to cope with. A fifth paper is based on the register-based labour market career data provided by Statistics Austria: it examines a number of issues (job entry, job quality, job stability) related to the trajectories of refugees' labour market experiences in Austria, compared to other non-European migrants from low- and medium-income countries.

Keywords: Refugees, labour market integration, occupational trajectories, refugee integration programmes, social integration, mental health

JEL classification: C13, C41, F22, H43, I10, J15, J24, J62, J68

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1. INTRODUCTION

Austria has a long history of immigration. Owing to its geographical position between the blocs, the country was for decades the most important reception country for refugees and migrants in Europe. It has experienced several refugee waves, mainly from neighbouring countries, such as Hungary in 1956, Czechoslovakia and Poland in 1968 and 1981, and Yugoslavia during the Balkan crisis of the 1990s. However, the refugee wave seen in 2015-2016 was one of the largest since the Second World War. Alongside Germany and Sweden, Austria has taken in the largest number of asylum seekers per capita in the EU: in 2015, 17 asylum applications per 1,000 inhabitants were filed in Sweden, 10 per 1,000 in Austria and 6 per 1,000 in Germany. Furthermore, the refugee wave of 2015-2016 was also the first significant refugee inflow from outside Europe – Afghans, Syrians, Iraqis and Iranians lodged the most applications for asylum, together accounting for 76% of all applications in Austria in 2015 (BMI, 2016).

Against this backdrop, the major challenge has been to promote the integration – most notably the labour market integration – of refugees. Effective and rapid economic integration is not only beneficial for the refugees, but also for the host country and society (Konle-Seidl and Bolits, 2016). Even though labour market access is severely restricted when refugees first arrive in Austria, they seem to find their way into employment over time. Forstner et al. (2019) show that the longer refugees stay in Austria, the better their labour market performance. Also, Jestl et al. (2022) report that those non-European refugees who arrived in Austria in the period 2009-2018 have, on average, made significant progress over time in their employment rates, making big strides in catching up with native Austrians. At first glance, these results present an overall positive outlook for the economic assimilation of refugees in Austria.

While applying for asylum, refugees have very limited access to the labour market (after their arrival in the host country). Only once they obtain asylum status (subsidiary or humanitarian protection status) are refugees allowed to work without a specific permit. During the asylum application procedure, following a three-month waiting period, they can work, but only in particular areas, such as seasonal jobs in agriculture and tourism, private households, or charitable and voluntary activities. Until October 2018, asylum seekers below the age of 25 could also start an apprenticeship in shortage occupations. In addition, refugees can become self-employed, by registering a trade; this is possible three months after the start of their asylum application procedure.¹ The impact of the restricted access to the labour market for humanitarian immigrants to Austria in the initial period after their arrival is documented by Jestl et al. (2022): in the first two years after arrival, the probability of finding a job was almost zero for those

¹ During the asylum application, refugees receive public 'basic care' support (*Grundversorgung*), which covers the provision of housing and food, some pocket money and additional allowances (e.g. for clothing). However, if earned income exceeds a certain threshold (the amount depends on the province of residence), individuals face a reduction or withdrawal of the basic care support.

individuals. Accordingly, only a few asylum seekers found their way onto the Austrian labour market during the asylum procedure. Thereafter, however, refugees showed a remarkable improvement in their labour market performance and went a long way towards catching up with Austrian-born individuals and other (non-humanitarian) migrants.

This Policy Note summarises the main results and policy recommendations that arise from research undertaken in the context of two projects financed by the Anniversary Fund of the Austrian National Bank (Projects no. 18474 and no. 17166). Four of the papers are based on survey data from the FIMAS dataset, which has been compiled by the International Centre for Migration Policy Development (ICMPD) and wiiw over several years and documents the experiences of recent waves of refugees from Afghanistan, Iran, Iraq and Syria.² One of those papers analyses the pattern of occupational status loss/gain involved in the move from the home country to the destination country (i.e. Austria); i.e. it examines the move from the type of job that a refugee had prior to migration to his/her first and then the second (or current) job in Austria. Another paper examines the effectiveness of two labour market integration programmes offered by the Austrian public employment service (AMS). A third paper investigates the interrelationships between aspects of the social and labour market integration of refugees. A fourth analyses the extent of mental health problems which this group of refugees has to cope with: it looks at those factors related to a person's mental health and considers which factors might moderate the severity of such problems. A fifth paper compares the labour market experiences of a group of refugees with those of other migrants from low- to medium-income countries; it uses another database that has recently become available – the register-based labour market career data provided by Statistics Austria.

In line with other studies, the papers covered in this Policy Note relate to the following special features, which distinguish the integration of refugees from the labour market integration of migrants more generally:

- › Refugees have to go through an asylum application procedure, which delays their entry onto the labour market, although some limited employment possibilities do exist, and access to labour markets also varies from country to country.
- › In many instances, refugees have little chance to prepare for migration, so they arrive with less information about the host country; moreover, that host country may not even be the country they would have chosen in the first place; and most likely the co-ethnic social networks available to support them in their first integration steps will be smaller (and of more recent origin).
- › Refugees might come from countries with which the host country is less familiar: there may be a lack of administrative procedures or programmes of integration (or those that exist may not be that well tailored to the needs of the particular wave of integration); similarly, the host country's society may be less familiar with the particular group of refugees compared to more familiar groups of migrants.
- › Refugees often arrive having experienced serious trauma, which can affect their mental (and sometimes also their physical) health.

² Colleagues from the University of Graz, ZSI, the WU and the University of Vienna have assisted in this survey work at various points in time. Furthermore, we acknowledge the cooperation and financial support in this endeavour from the AMS and various other ministerial and regional authorities. We wish to thank the following: Bundesministerium für Europa, Integration und Äußeres über die Nationale Integrationsförderung, Nationale Integrationsförderung des BKA; Land Tirol, Land Vorarlberg, Stadt Wien (MA 17 - Integration und Diversität), Stadt Graz (Abteilung Bildung und Integration), AMS Österreich, AMS Wien, AMS Tirol, AMS Steiermark, Österreichischer Städtebund.

In what follows, we provide a brief overview of the main research questions and the findings of the five papers and then report on the policy conclusions that can be drawn from this research. First, however, some information on the datasets used in the studies.

2. THE DATABASES USED IN THE STUDIES

2.1. FIMAS survey data

The FIMAS dataset was used in the majority of the wiiw Working Papers discussed in this Policy Note.

The FIMAS database is created from a set of surveys of recognised refugees and persons with subsidiary protection status, mostly from Syria, Afghanistan, Iraq and Iran, aged between 15 and 64, and resident in Austria. It is a unique longitudinal survey dataset with a one-year re-interview interval: currently, five survey waves are available. The FIMAS surveys were carried out by the International Centre for Migration Policy Development (ICMPD) in cooperation with the Vienna Institute for International Economic Studies (wiiw) and the University of Graz.³ The following waves of the survey were used in four of the studies reported in this Policy Note: wave 2 (FIMAS+INTEGRATION: interviews conducted between December 2017 and April 2018); wave 3 (FIMAS+INTEGRATION²: March to May 2019); wave 4 (FIMAS+YOUTH: October to December 2020); and wave 5 (FIMAS+WOMEN: February to April 2021). Wave 1 was disregarded in the papers surveyed for the Policy Note owing to the very small number of persons with any employment record in wave 1.

These four surveys contain samples of, respectively, 1,640, 2,403, 3,650 and 2,839 recognised refugees and beneficiaries of subsidiary protection. Panellists (those who responded to at least two surveys) numbered only around 100 in the second wave, over 300 in the third wave, over 700 in the fourth wave and over 800 in the fifth wave.

As regards modes of data collection, wave 2 of the survey (FIMAS+INTEGRATION) employed four modes: computer assisted self-administered and personal interviews (CASI), carried out at various relevant establishments (public employment services, counselling and training centres for migrants, etc.) in Vienna, Salzburg, Graz, Linz and Innsbruck (i.e. in Austria's capital and other Austrian cities). Second, refugees were invited via mail or email in order to extend the coverage of the survey. Therefore, an invitation to complete the online version of the survey (computer-assisted web interview – CAWI) was sent to addresses provided by Austria's public employment service (the AMS). This second part of the survey was based on a stratified random sample of refugees registered in the AMS database. In wave 3 (FIMAS+INTEGRATION²), the CASI mode was applied in the case of only about 10% of the interviews; the remainder were again web based (CAWI). In wave 4 (FIMAS+YOUTH) and wave 5 (FIMAS+WOMEN), partly because of the Covid-19 restrictions that were in place, only the CAWI data-collection mode was applied. Assistance was available (if required) from Farsi- and Arabic-speaking interviewers via telephone (computer-assisted telephone interview – CATI).

³ More detailed information on the methodology and the sample of individual surveys is provided in the following publications of ICMPD. On FIMAS+INTEGRATION²: Baumgartner et al. (2020); FIMAS+YOUTH: Baumgartner et al. (2021); and on FIMAS+WOMEN: Baumgartner et al. (2023).

Apart from demographic and household characteristics, the FIMAS questionnaire focused specifically on labour market issues, and additionally covered various spheres of refugee life, from which we selected those that are associated with social integration, qualifications, language proficiency, migration experiences (including discrimination), mental health and the housing situation. Demographic characteristics comprised age (in the 15-65 years bracket), gender and detailed information on household structure. Thus, we know not only whether a person had a partner, and the number and age of any children, but also whether they lived in the same household at the time of the interview.

2.2. Register-based labour market career data

This is a dataset that has only relatively recently become available: it combines information from multiple administrative registers, such as the central social security register, the unemployment register and the central population register. It covers the entire Austrian population, provides detailed information about activity status at the personal level,⁴ and – importantly for us – also allows people with refugee status to be traced. Refugees appear in the data as soon as they receive a social security number, which occurs days or weeks after the start of the asylum application procedure. As soon as a refugee enters Austrian territory, that person must apply for asylum – at which point the asylum procedure begins. The Austrian state is obliged to support the asylum seeker: this is done via the basic care support scheme, which is how ‘refugees’ are captured in this dataset. The dataset, however, does not include information about what decision is reached as regards the asylum application.

The particular study reviewed in this Report by Stefan Jestl and Maryna Tverdostup that uses this database (see section 3.1) also identifies a second group of migrants that are of interest for comparative purposes: they are called ‘other migrants’. This group is composed of individuals born in low- and middle-income non-European countries who came to Austria in 2014-2016 but were never registered under the basic care support scheme. They are expected to appear in the data as soon as they register their place of residence with the Austrian authorities – something they are obliged by law to do within three months of their arrival in Austria. ‘Other migrants’ may be individuals who have migrated for work, study or family reunion reasons. As the database does not provide information on admission classes, we cannot directly distinguish between reasons for migration in the data.

By exploiting information about registrations under the basic care package, Jestl and Tverdostup are able to distinguish between refugees and other migrants, even when they are from the same country. As they focus on immigrants from low- and middle-income non-European countries, this makes the group of refugees and other migrants more comparable. One drawback in the chosen comparison, however, may be that any immigrants who have moved to join a refugee in Austria for family reunification reasons are not registered for basic care and are thus captured in the group of other migrants. As these individuals generally gain a residence permit upon arrival, they have immediate access to the labour market – unlike refugees, whose labour market access is severely restricted as long as they are asylum applicants. For the study, the focus is on refugees and other migrants who are aged between 20 and 50 on arrival (to capture the core working-age population) and who are registered as having arrived in Austria in the period 2014-2016. This amounted to 55,539 refugees and 45,361 other migrants.

⁴ As regards activity status, the labour force concepts of the International Labour Organization are applied, which cover the following: compulsory service; employed, at work; employed, but temporarily not at work; unemployed; persons receiving a pension; students; and other statuses.

The panel dataset allows refugees and other migrants to be followed from the time of their arrival onwards. Overall, the monthly panel dataset constructed provides information for the period from January 2014 to May 2021. In the Jestl and Tverdostup study, the authors only consider individuals from the pool of refugees and other migrants who stayed in Austria from arrival until May 2021. This leaves 39,883 refugees and 16,078 other migrants in the dataset who provide continuous information from arrival until May 2021.

Most of the refugees who arrived in Austria between 2014 and 2016 and stayed in the country came from Syria, Afghanistan, Iraq and Iran: those countries account for almost 90% of the total stock of refugees in the final sample used in the study. In total, refugees from 80 low- and middle-income non-European countries were registered in the database.⁵ In the group of other (non-humanitarian) migrants, we find large numbers who were born in Turkey, Chechnya, Iran, China, India, and also Syria and Afghanistan. In sum, there are more than 100 countries of origin in this ('other') immigrant group.

3. MAIN RESEARCH QUESTIONS ADDRESSED AND FINDINGS OF THE FIVE PAPERS

3.1. Stefan Jestl and Maryna Tverdostup: The labour market entry and integration of refugees and other migrants in Austria⁶

This paper looks at certain less frequently considered aspects of the labour market integration of refugees. In particular, it analyses issues of job quality and job stability, and looks at how the quality of the first job secured upon entry to the destination country's labour market has longer-term effects on labour market performance. The paper analyses the experiences of refugees from Syria, Afghanistan, Iraq and Iran, comparing them with the experiences of 'other migrant' groups from non-European low- and medium-income countries.⁷ For both groups, the authors track those people who came to Austria in the years 2014-2016 (when the bulk of refugees came from the Middle East), who were in the age group 15-64 when they arrived, and who had found a job during their stay in Austria. The authors track these people's labour market experiences until May 2021, which is the cut-off point for their observations.

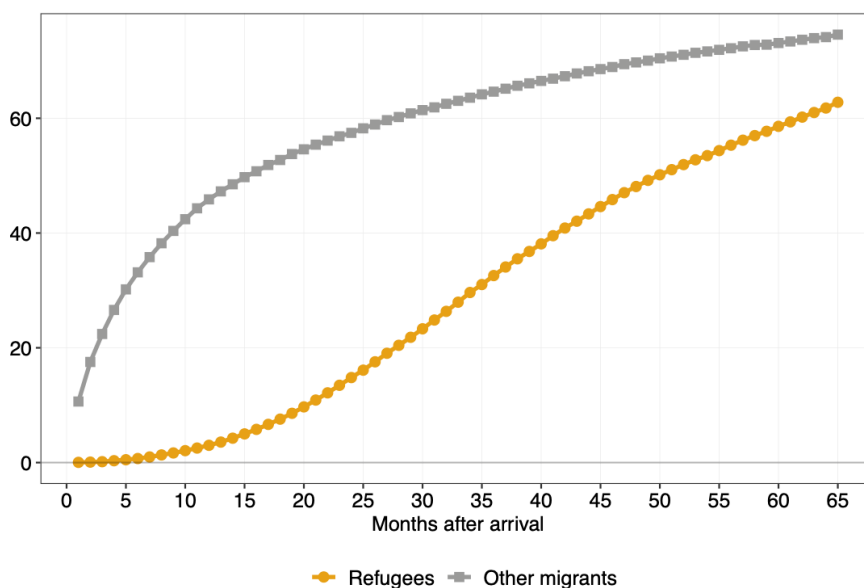
The overall employment record of these two groups of migrants can be seen in Figure 1.

The figure shows the cumulative share of immigrants who found their first job in the months following their arrival in Austria. As can be seen, other (non-humanitarian) migrants entered the job market immediately upon arrival, but refugees struggled to find a job at the very beginning. However, after a difficult start (especially after the asylum procedure), refugees increased their employment participation considerably and substantially narrowed the gap with other migrants. After 18 months in Austria, refugees outstripped other migrants in terms of the number of new job entries. However, although the refugees were catching up fast, they still lagged behind more than five years after arrival.

⁵ This includes Somalia, Chechnya, Nigeria, Turkey, Pakistan and India.

⁶ See wiiw Working Paper: S. Jestl and M. Tverdostup, '[The Labour Market Entry and Integration of Refugees and Other Migrants in Austria](#)', wiiw Working Paper, No. 231, Vienna, November 2023.

⁷ For a definition of these 'other migrant' groups, see section 2.2.

Figure 1 / Cumulative share of immigrants who entered employment, over time after arrival

Notes: The graph shows the proportions of refugees and other migrants who got a job during the period of observation. The entry job is defined as either full- or part-time employment, marginal employment or self-employment.

Source: Statistics Austria. Own calculations and illustration.

The study then asks whether there were any specific characteristics of individuals or their family situation that affected the **timing of immigrants finding their first job in Austria**, and whether there were any significant differences between the group of 'refugees' and that of 'other migrants'. The following are the main findings regarding this question:

- › *The position of women*: female 'other migrants' and – even more so – female refugees faced great difficulty in integrating into the Austrian labour market (see also the earlier study by Jestl et al., 2022); here, the number of children and the age of the youngest child had a significant impact on the speed of job entry.
- › *The position of highly educated immigrants*: the group of highly educated immigrants found employment more slowly than their lower-educated counterparts. This finding is in line with previous studies on Austria (Jestl et al., 2022). One possible difficulty well-educated immigrants may encounter is the need for a high level of (host-country) language competence for highly skilled jobs. More generally, it is also likely to be related to problems with the transferability of skills (e.g. Basilio et al., 2017) and the incentive they have to take longer looking for a job that matches their educational attainment level.
- › *Labour market competition between refugees, recently arrived immigrants and earlier immigrants*: the results indicate that, in districts where manufacturing is an important employment industry for the resident population, immigrants were slower to find a job. Interestingly, we find a similar effect in Austrian districts where tourism is more important – but only in the case of refugees. In general, this may indicate greater competition for jobs on the labour market between recently arrived immigrants, earlier immigrants and Austrian-born individuals. The study also finds similar effects for the local unemployment rate for both other migrants and refugees: the higher the local unemployment rate, the more strained are local labour markets and the longer immigrants need to find their first job.

- › *The role of social networks*: if there is a higher share of migrants in the district, that has an interesting differential impact on refugees and other migrants in terms of the time it takes them to find employment. Whereas it seems to be related to longer job search for refugees, for other migrants it is associated with faster job entry. These results suggest that other migrants tend to have better access to (or make better use of) social (migrant) networks to find job opportunities. By contrast, refugees seem to be less able (or unable) to benefit from such networks. This is in line with the argument that refugees do not have the same opportunity to choose their destination and have less access to pre-existing social networks. For refugees, the result may also indicate greater competition on the labour market for jobs between recently arrived refugees and earlier immigrants.

The next question asked in the study refers to the **type of job** that the different groups of migrants find as a first job, and – again – whether there are differences between the two groups:

- › The study finds that *older refugees* are less likely to get a full-time job as an entry job, while *older other migrants* are more likely to take a full-time job than are younger individuals. Moreover, older other migrants experience a lower probability of finding a marginal job and a higher probability of self-employment, compared to the group of refugees.
- › For both immigrant groups, we observe that *women* are less likely than men to find a full-time job. On the other hand, they are more likely to get a part-time or marginal job. Furthermore, female immigrants tend less often to become self-employed. Linked with this, the study finds that *living in a multiple-person household and having children* seems to be associated with a lower likelihood of taking a full-time job.
- › For educational attainment levels, we find (as expected) that *immigrants with a high level of education* are less likely to take a marginal job than are lower-educated immigrants. Interestingly, considering all the other covariates, higher-educated refugees are statistically no more or less likely to find a full-time job than are lower-educated refugees.

Table 1 presents further characteristics of immigrants' first jobs. The first panel pertains to the industry type of immigrants' first jobs. The first jobs of refugees and of other migrants in Austria were found in almost the same labour market segments: both groups tended to have their first job in the service sector – particularly accommodation & hospitality, wholesale & retail trade, and administrative & support services (which include activities of employment placement agencies and temporary employment agencies, support and cleaning activities).

Moreover, the regional structure of job entries seems quite similar for refugees and other migrants: around 60% of immigrants' first jobs were in urban regions.

Finally, the table shows the average real gross monthly wages of immigrants' entry jobs (deflated to prices in 2016):⁸ on average, refugees earned EUR 1,202 a month and other migrants EUR 1,543. Considering the total monthly wage distribution for Austria during 2017-2020, immigrants are placed above the 30th percentile. The higher monthly wage of other migrants relative to refugees is also to be found if we compare the average monthly wages of immigrants by employment type: the biggest difference is for full-time jobs, while the wages for part-time entry jobs are almost the same.

⁸ The availability of information about wages for self-employed immigrants is limited. The study, therefore, does not report average wages for this employment type.

Table 1 / Characteristics of immigrants' first job

			<i>Refugees</i>	<i>Other migrants</i>
Industry	<i>in %</i>	<i>Agriculture</i>	1.7	0.3
		<i>Manufacturing</i>	6.8	7.0
		<i>Wholesale & retail trade</i>	11.2	12.9
		<i>Transport</i>	4.4	3.6
		<i>Accommodation & hospitality</i>	23.9	26.2
		<i>IT & finance</i>	1.2	4.5
		<i>Administrative & support services</i>	20.3	14.0
		<i>Others</i>	26.9	27.3
		<i>Not available</i>	3.7	4.1
		Region	<i>in %</i>	<i>Urban</i>
<i>Non-urban</i>	42.5			37.6
Real monthly wage	<i>in EUR</i>	<i>Full-time employment</i>	1,836	2,546
		<i>Part-time employment</i>	1,170	1,188
		<i>Other employment</i>	1,578	1,726
		<i>Marginal employment</i>	308	437
		<i>Self-employment</i>	-	-
		<i>Total</i>	1,202	1,543

Notes: The table shows the proportions of the type of employment that immigrants have as a first job. Other employment covers spells of being an employee, but information is not available on whether the job is full time or part time. Marginal employment refers to jobs where the payment does not exceed a certain threshold (between EUR 425.70 and EUR 475.86 a month in the period 2017-2021). Availability of wage information for self-employment is limited. Agriculture covers the NACE Rev-2 code A, Manufacturing the code C, Wholesale & retail trade the code G, Transport the code H, Accommodation & hospitality service the code I, IT & finance the codes J and K, and Administrative & support services the code N. Others include all remaining industries (B, D, E, F, L, M, O-T).

Source: Statistics Austria. Own calculations.

The next question refers to the **duration of the first job**:

- › Overall, the study finds that the average number of days in employment was around 250 for refugees and 470 for other migrants. Hence, other migrants held their first job for longer on average, even though they found their first employment in similar job types and industries (see above).

The most interesting findings are the following regarding *job duration across educational groups*:

- › In all regressions, the reference group for job type is part-time employment. Among other migrants, there is a consistent trend across education groups of quickly *leaving marginal jobs*. After controlling for other explanatory variables, highly educated other migrants ended their marginal employment relatively soon – possibly because a better opportunity came along. Interestingly, this finding is not mirrored in the corresponding results for refugees. While low-educated refugees quit marginal jobs sooner than part-time jobs, highly educated refugees held on to their marginal jobs for a similar length of time as part-time jobs. This may indicate a lack of job opportunities for highly educated refugees, compared to other migrants.

Table 2 / Average duration (days) of immigrants' entry job

		<i>Refugees</i>	<i>Other migrants</i>
Sex	<i>Male</i>	255.5	532.7
	<i>Female</i>	219.3	407.2
Education	<i>Low</i>	245.5	361.4
	<i>Medium-low</i>	241.3	541.2
	<i>Medium-high</i>	257.5	395.5
	<i>High</i>	294.9	723.3
Age	<i>20-29</i>	249.9	412.1
	<i>30-39</i>	253.3	523.4
	<i>40-50</i>	235.1	583.9
Job type	<i>Full-time employment</i>	258.8	416.6
	<i>Part-time employment</i>	362.6	699.2
	<i>Other employment</i>	152.1	272.9
	<i>Marginal employment</i>	117.3	211.5
	<i>Self-employment</i>	461.5	775.6
Total		249.3	468.5

Notes: The table summarises the average duration – measured in days – of immigrants' entry jobs, by population subgroup. All covariates refer to the time of arrival.

Source: Statistics Austria. Own calculations.

The final question addressed in the Jestl and Tverdostup paper refers to '**job stability**': whether migrants remain for a longer or shorter period in the same labour market status (i.e. in employment, unemployment or inactivity); and, taking another indicator, how many different jobs they hold over the observation period.

Table 3 gives an overview of these indicators of 'job stability'.

Table 3 / Average values for job stability indicators

	<i>Refugees</i>	<i>Other migrants</i>
<i>Number of jobs</i>	3.5	3.9
<i>Total days in work</i>	712.2	1,288.5
<i>Total days in unemployment</i>	237.5	121.8
<i>Total days in inactivity</i>	125.1	245.8

Notes: The table reports average values for the four job stability indicators for refugees and other migrants. All variables are measured within the period starting from the job entry until May 2021.

Source: Statistics Austria. Own calculations.

The detailed multivariate regression analysis shows the following:

- › On average, *older refugees* tended to have fewer jobs and spent fewer days employed, but more days unemployed. Among other migrants, older immigrants spent more time in both employment and unemployment.⁹

⁹ Note that inactivity excludes days immigrants spent in education. Other migrants below the age of 30 spent a relatively long time in education. This was not found for refugees.

- › In line with what has been mentioned above, we find that *female immigrants* who joined the labour market experienced greater job instability (i.e. fewer days in employment and more days in unemployment) than male immigrants, on average.
- › Regarding education, *highly educated immigrants* tended to have a better labour market performance than lower-educated immigrants. Accordingly, even though highly educated immigrants struggled to enter the Austrian job market, those who found a job showed the expected stronger labour market performance.
- › The number of *days spent in public employment service training and in education before job entry* influenced the future labour market path of immigrants. Specifically, among refugees they increased the number of days in work and reduced the number of days of inactivity, and reduced the number of jobs taken on average.
- › The study also found that *refugees* who took a *full-time job as their first job in Austria* had fewer jobs, stayed longer in employment, and spent fewer days in unemployment and inactivity, on average. Similarly, refugees who became self-employed as their first job after arrival had a relatively large number of days in employment and less time in unemployment. By contrast, *refugees who started with marginal employment in Austria* tended to have more jobs over time and spent considerably less time in employment. Moreover, marginal employment as the entry job was not associated with a greater number of days in unemployment, but was associated with more time spent inactive.
- › The results for *other migrants* tend to be similar to those for refugees. Those other migrants who took a full-time job as their entry job showed relatively pronounced job stability, with fewer days spent in unemployment and inactivity. Also, other migrants who became self-employed as their first step in the Austrian job market showed relatively strong labour market performance. Conversely, those other migrants who entered the Austrian job market via marginal employment spent fewer days in employment, but more days in inactivity; and they had more jobs.
- › The results suggest that *higher-quality entry jobs* – in terms of working hours and wages (i.e. full-time jobs) – tended to be linked to job stability among immigrants, while *lower-quality entry jobs* (i.e. marginal jobs) were associated with greater job instability. *Self-employment* seemed also to be associated with job stability. For both immigrant groups, taking a *marginal job as the entry job* was linked to a lower number of days in full-time employment over the immigrants' stay in Austria. Also, starting with a marginal job after arriving in Austria was associated with staying in marginal employment for a longer time after exiting the entry job.

3.2. Sandra Leitner: Occupational trajectories among refugees in Austria: the role of co-ethnic and Austrian social networks in job search¹⁰

This paper analyses the dynamics of *occupational status* changes that refugees experience when they first manage to enter the labour market (gain employment) and subsequently when they change jobs. Hence, the paper studies changes in ‘occupational status’ (from the last job in the home country to the first job in Austria; and from the first to the current job in Austria) – i.e. not simply the employment experience – whereby ‘occupational status’ is constructed by way of an ISEI Index (see Box 1). This type of dynamic has, in the literature, often been found to assume a ‘U-shaped’ form, with a significant downgrading of status (associated with the job) when migrants first find employment in the host country, compared to the occupational status they enjoyed in their country of origin; this is then followed by a recovery, once they are able to move on to higher-status jobs. The reason behind this ‘U-shaped’ pattern (which could also be an inverse ‘J’ or even an ‘L’) is the difficulty that migrants face initially in utilising the human capital/skills/expertise that they had acquired back home in the new conditions of a foreign labour market. The problem is related to recognition of formal qualifications, or of acquired expertise; a lack of the necessary complementary skills; and the disadvantage that migrants face in utilising the matching procedures in finding jobs (information flows, overcoming administrative hurdles, etc.) to which the native labour force has more privileged access on the host country’s labour market. Discrimination can also play a role.

BOX 1 / INTERNATIONAL SOCIO-ECONOMIC INDEX

The FIMAS surveys collect detailed information on the socio-economic characteristics of refugees, as well as on the characteristics of their jobs and how they were found. A key variable in the analysis is the International Socio-Economic Index (ISEI) (Ganzeboom et al., 1992; Ganzeboom and Treiman, 1996), which is derived from information on educational attainment and income. In the study, this information was extracted from the survey and assigned to the three-digit ISCO-08 codes for respondents’ occupations in the four waves. It is a continuous measure of occupational status that has several advantages: first, it facilitates quantitative comparison of the occupational status of persons from different countries of origin; second, it avoids subjective and arbitrary choices of what constitutes occupational gains or losses; third, it allows the capture of occupational mobility even over short time periods; and fourth, as a one-dimensional continuous measure, it is more amenable to multivariate analysis than are categorical variables (such as the ISCO classification).

¹⁰ See wiiw Working Paper: S. M. Leitner, ‘[Occupational Trajectories Among Refugees in Austria: The Role of Co-ethnic and Austrian Social Networks in Job Search](#)’, wiiw Working Paper, No. 232, Vienna, November 2023.

There are two specific issues that are particularly emphasised in this study:

- (i) The role of co-ethnic networks for the type of employment patterns that refugees follow. Sandra Leitner writes:

‘Although co-ethnic networks prove important for immigrants to find employment (see, for example, Patacchini and Zenou, 2012), their impact on job quality is less clear and often also negative (Kazempur, 2006; van Tubergen, 2011; Kalter and Kogan, 2014; Alaverdyan and Zaharieva, 2022) as information about job opportunities from co-ethnic networks is limited and determined by the labour market situation and success of its tenured members (i.e. previous migrants) (Yamauchi and Tanabe, 2006) – often anchored in the secondary segment of the labour market (Simón et al., 2014) – and therefore often unrelated to immigrants’ previous experience or training (Ottaviano and Peri, 2006).’ (Leitner, wiiw Working Paper 232, p. 10)

- (ii) The role of job search strategies (see also Box 2). Sandra Leitner writes:

‘[The study] uses detailed information on different job search strategies. In addition to co-ethnic and native social networks, these include the Public Employment Service, NGOs, private agents, social networks on the internet, advertisements in printed media or online, and direct applications – for the first and the current job, and exploits the fact that job search strategies are used not only as stand-alone strategies but often also in combination with other strategies – in our sample of refugees particularly as strategy pairs – which then allows us to identify more complex patterns and draw a more nuanced picture of what differentiates a beneficial from a detrimental strategy or strategy pair.’ (Leitner, wiiw Working Paper 232, p.11)

BOX 2 / JOB SEARCH STRATEGIES

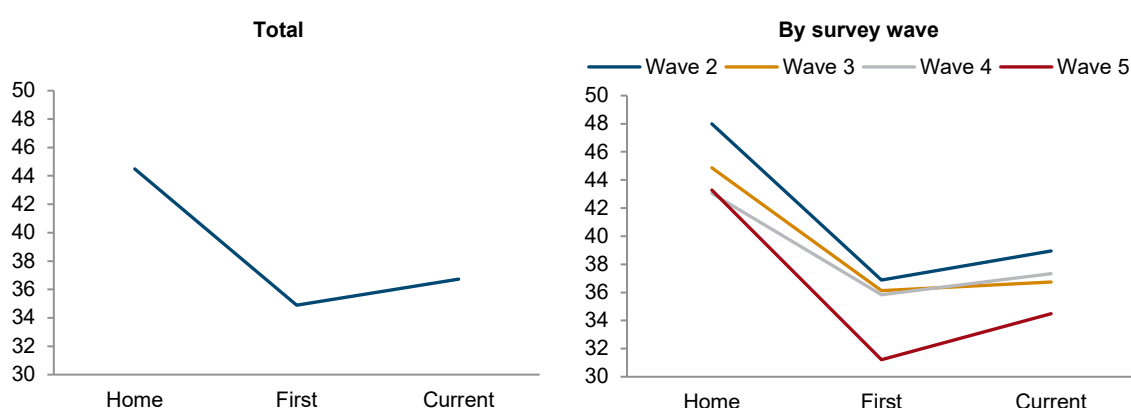
The information regarding *job search strategies* used to find the first and subsequent jobs is based on the following question posed in the FIMAS survey: ‘How did you find your first job in Austria?’ The answer options are: (i) the AMS; (ii) help through NGOs, clubs, refugee shelter, language school; (iii) private agents as *institutional actors*; (iv) social network on the internet (e.g. Facebook, Twitter, Xing, LinkedIn); (v) advertisement in the newspaper or on the internet; (vi) direct/blind applications to potential employers without advertising as different *media*; (vii) family, friends or acquaintances from your country of origin; (viii) friends or acquaintances from Austria as the *social context*; and (ix) other – as an open question – which was recoded to fit one of the other options, if possible. Multiple answers were possible. In this way, the study tests whether family, friends or acquaintances from their own country of origin (co-ethnic social networks) and friends or acquaintances from Austria (Austrian social networks) contribute – possibly in different ways – to refugees’ occupational change during the first transition. Moreover, to make full use of the nature of this multiple response variable, the study takes into account the fact that each job search strategy can be used alone, as well as in combination with one or more other strategies.

Figure A.1 in the Annex illustrates the frequency of the combinations of job search strategies by transition period. It shows that, irrespective of the transition period considered, social networks with Austrians, co-ethnic social networks and the AMS were the three job search strategies used most frequently, while NGOs were used least frequently. Between the first and the second transition, the

frequency of social networks with Austrians dropped substantially. Nonetheless, it remained one of the three most common job search strategies. Moreover, strategy pairs were most common for social networks with Austrians and direct applications during the first transition, and for co-ethnic social networks and the AMS during the second transition.

For the analysis, the information on refugee occupational status at three different points in time is used: namely, the occupational status of (i) the *last* job in the country of origin; (ii) the *first* job in Austria; and (iii) the *current* job in Austria. Figure 2 gives an overview of the dynamic of average occupational status positions obtained by the group of refugees in the four FIMAS surveys used in this study. It shows average population-weighted ISEI scores at the three points in time.¹¹ The left-hand panel refers to all respondents in the sample and highlights the fact that the occupational trajectories of refugees in Austria generally follow the expected U-shaped pattern, with a pronounced initial loss between the last job in the home country and the first job in Austria of around ten ISEI score points, and a mild recovery of around two ISEI score points between the first and the current job in Austria.

Figure 2 / Occupational trajectory



Note: Unconditional, weighted values are reported. ISEI scores on the vertical axis. Wave 2 refers to FIMAS+INTEGRATION, conducted between 12/2017 and 04/2018; wave 3 to FIMAS+INTEGRATION², conducted between 03/2019 and 05/2019; wave 4 to FIMAS+YOUTH, conducted between 10/2020 and 12/2020; and wave 5 to FIMAS+Women, conducted between 01/2022 and 03/2022.

Source: FIMAS+INTEGRATION, FIMAS+INTEGRATION², FIMAS+YOUTH, FIMAS+Women, own calculations.

As the final sample consists of respondents from four different survey waves that were conducted in four consecutive years – including the Covid-19 years of 2020-2022 – the right-hand panel shows average population-weighted ISEI scores by survey wave, so as to shed light on potential survey-specific trajectories. It shows that – except for respondents in the fourth wave, which was conducted in 2020, a year in which Austria experienced two strict lockdowns (March-May 2020 and November 2020-February 2021) – occupational trajectories follow similar U-shaped patterns that mainly differ by the level of ISEI scores. Specifically, ISEI scores of respondents from the second wave are highest for all three points in time, while the occupational trajectories of respondents from all subsequent waves not only lie below it, but also below one another, suggesting that the average occupational status declines at

¹¹ These refer to gross scores, not controlling for compositional differences in basic sociodemographic characteristics (such as gender, age on arrival, level of education, etc.)

all three points in time with each subsequent wave of the survey. However, the occupational trajectories of respondents from the fourth wave differ somewhat, as the first transition between the last job in the home country and the first job in Austria is flatter, particularly compared with the second and the fifth survey waves.

Apart from the descriptive assessment illustrated in Figure 2 above, the study's multivariate regression analysis yields the following results:

- › *Occupational trajectories* among refugees in Austria follow a U-shaped pattern, with a strong occupational downgrading between the last job in the home country and the first job in Austria, followed by a moderate occupational recovery between the first and the current job in Austria.¹² Specifically, for every ISEI point lost between the last job in the home country and the first job in Austria, there is an improvement of only 0.2 ISEI points between the first and the current job in Austria. However, there are no differentiated effects of the previous occupational downgrade on subsequent occupational mobility by either length of stay, age, gender, pre-migration education, residential status or country of birth. On the other hand, the study finds that length of time spent in Austria before starting a first job is important and is associated with a significantly higher level of occupational status of the first job in Austria.
- › *Social networks* in job search play a differentiated role. During the first transition, co-ethnic social networks are associated with stronger occupational downgrading, while social networks with Austrians have no effect. Hence, although probably helpful in finding employment, co-ethnic networks lead to a significant loss of refugees' occupational status. During the second transition, however, neither of the two social networks has any impact.
- › *Job search strategies* can be used either as a stand-alone strategy or in combination with other strategies; they can – in a number of important instances – have different impacts, depending on how they are used. Thus, when used exclusively, co-ethnic social networks have an adverse effect, with occupational downgrading during the first transition and lower occupational upgrading during the second transition. However, in combination with the AMS (in both transitions) or NGOs (only during the first transition), co-ethnic social networks can be beneficial, with lower occupational downgrading during the first transition and higher occupational upgrading during the second transition.
- › The analysis also helped to identify some groups that are particularly affected and *vulnerable*: for instance, arriving in a new country at a more advanced age has an adverse effect on occupational trajectories, probably because older people are slower to adapt to a new environment, so that older refugees not only suffer stronger occupational downgrading during the first transition, but also weaker occupational upgrading during the second. Furthermore, a higher level of education proves difficult to

¹² In fact, the estimates from Leitner's analysis show that the transferability of the occupational status between the last job in the home country and the first job in Austria is very limited. This can be seen from the coefficient for the ISEI index of the last job in the home country which, in the context of the general occupational downgrade observable during the first transition, can lie between 0 and -1. While the former indicates zero change in occupational status and, consequently, perfect transferability of the occupational status of the last job in the home country to the first job in Austria, the latter indicates a total loss of the occupational status of the last job in the home country. We observe a coefficient of -0.818, which suggests that 81.8% of each ISEI point of the last job in the home country is lost in transition, while only the remaining 18.2% can be transferred to the first job in Austria. This is comparable to what is found in the literature. For instance, Akresh (2008) looks at legal immigrants in the US aged 18 and over, and points to similar but gender-specific effects. Although male immigrants can transfer around 25% of their pre-migration occupational status to the US, female immigrants can transfer only 18%. Similarly, Simón et al. (2014) find for foreign-born immigrants aged 16 and over that only around 15% of each ISEI point of the last job in the home country can be transferred to Spain.

transfer and, as expected, is associated with stronger occupational downgrading during the first transition. In contrast to the typical findings in the literature, however, it does not facilitate subsequent occupational upgrading.

- › As a complement to the 'job quality' analysis in the Jestl and Tverdostup study, this study finds that the type of job also matters for the second transition. Refugees who hold a part-time job as a first job experience a lower upgrade in the second transition than do those who were in full-time employment.
- › A somewhat unexpected finding is that those who have completed some education in Austria seem to be penalised in terms of occupational status recovery (over the time horizon of the observation period), as they miss out on on-the-job training and learning, unlike those who enter the labour market sooner.

3.3. Michael Landesmann and Sandra Leitner: Various domains of integration of refugees and their interrelationships: a study of recent refugee inflows in Austria¹³

This study investigated the interrelationships between two important aspects of the integration of refugees in Austria: namely labour market integration and social integration. While labour market integration is captured in terms of being in paid employment¹⁴ (as compared to being unemployed or inactive), social integration distinguishes between social networks and their ethnic composition and social capital. The analysis uses the FIMAS dataset (particularly refugee waves 2 and 3, which addressed the integration processes of refugees who arrived in Austria prior to the Covid-19 pandemic; see section 2.1 of this report). It covers around 4,000 refugees from Syria, Iraq, Afghanistan and Iran who had arrived in Austria since 2010. It finds an important causal link between social integration and paid employment, and shows that social networks that include Austrians are particularly important for labour market integration. This has some important implications, since factors that affect refugees' social integration with Austrians also have a further impact through this channel on their employment prospects. The study also finds that social networks involving Austrians and co-ethnic social networks are complementary: this is important, in that stronger linkages with the co-ethnic community do not hinder, but rather complement, contacts with non-co-ethnics (predominantly Austrians).

The concept of social integration (SI) and its relationship to labour market integration (LMI): SI takes place along many channels, such as through cultural interaction, neighbourhood relations, participation in leisure activities and the involvement of children in the educational system. In the context of our study, SI can, furthermore, itself contribute to LMI. To capture SI, we follow other studies (e.g. Cheung and Phillimore, 2014) and draw a distinction between the concept of *social networks* and that of *social capital*. *Social networks* refer to interactions that take place with people from the host society, or individuals from the migrant/refugee's place of origin (co-ethnics), or with migrants/refugees from other countries. In quantitative research such as ours, a network is defined by how wide and how intensive the interaction is with members of a particular network. In the context of integration, this is important, since

¹³ This study was published as wiiw Working Paper no. 168 with the title '[Various Domains of Integration of Refugees and their Interrelationships: A Study of Recent Refugee Inflows in Austria](#)'; a new, reworked version can be obtained from the authors and the current overview of this research refers to this new version of the paper.

¹⁴ In this study, we do not distinguish by type or quality of employment but acknowledge that refugees are disadvantaged in the labour market and often take on part-time, temporary or lower-status jobs (Krahn et al., 2000). See, however, the study covered in section 3.1 in this report, which addresses the issue of 'job quality'.

social networks can assist integration processes, given that they provide information and other forms of support to help new arrivals navigate a foreign, unfamiliar place. This study takes into account the ethnic composition of social networks and differentiates between *co-ethnic networks* (with people from the same country of birth) and *non-co-ethnic networks* (mainly Austrians). The distinction by ethnic composition allows for a more nuanced and differentiated look at the roles that the various networks play in integration. *Social capital* is a concept that was developed by Putnam (1995, 2002) and refers to the direct mobilisation of resources that a social context can potentially offer a person. It considers whether a person has actual access – through the social capital he/she has built up – to support in particular circumstances (e.g. getting information on job vacancies, interacting with the public authorities, forming social contacts, etc.).¹⁵ Social capital is closely linked to social networks, but both the potential to provide support and the nature of this support depend very much on the type of social network in which an individual situates him/herself, personality characteristics, and the particular position which he/she occupies in the network.

The study builds on previous research into refugees' LMI and SI, but also addresses additional aspects that have so far attracted little attention. In particular, this study contributes to the existing literature by simultaneously studying the causal relationships between the LMI and SI of refugees. In many studies, both domains of integration are analysed separately (Fasani et al., 2022; Ibrahim et al., 2010; Lamba and Krahn, 2003; Martinovic et al., 2009a, b; Robila, 2018). There are, of course, some studies that do look at the impact of one domain on the other (Kanas et al., 2011, 2012; Franzen and Hangartner, 2006; Lancee, 2010; Martén et al., 2019), but so far we have found none that tests for causality running both ways. Prevailing interdependencies between both domains of integration are important from a policy perspective, as, for instance, LMI can be accelerated by means of both LMI and SI policies and measures.

'Refugees' in this study refer to those who have already received a positive decision on asylum or subsidiary protection, and thus exclude those whose asylum application is pending. They therefore have (formally) full access to the Austrian labour market, as well as to social insurance (like the resident – 'home' – population), plus they get further institutional support through general labour market policy institutions and through specific integration programmes designed for refugees (on the latter, see section 3.5 below). The study had to limit itself to studying the issues of LMI and SI on a sample of *male refugees* only, as female refugees were not adequately represented in the pre-Covid waves of Middle Eastern refugees.

Methodology to take account of interrelationships between the two domains of integration (LMI and SI): in order to test causal interrelationships between the two domains of integration, the study adopts an instrumental variables (IV) approach. Ideally, we would have had a panel dataset to test for causal relationships. But given the constraints of our dataset (a cross-section dataset compiled from the pooled information of two waves of the FIMAS survey), we had to rely on finding appropriate instruments. As regards testing for a causal relationship between social integration (as the endogenous variable) and labour market integration (as the outcome variable), we used sports club membership density for social

¹⁵ Given the information contained in the FIMAS survey, *social capital* is measured by means of six survey questions which capture whether respondents 'know someone in Austria who ...' (1) 'would help you move or renovate your apartment'; (2) 'would draw your attention to a job vacancy'; (3) 'you could discuss personal problems with'; (4) 'would assist you in completing a form from public authorities'; (5) 'would lend you 200 Euro'; or (6) 'you could have a pleasant time with over coffee or tea'. By construction, this set of questions refers to the total social network and does not differentiate between social capital related either to people from the same country of origin or to Austrians (or migrants from a third country).

networks with Austrians and with co-ethnics, and football club density for social capital. Club membership lends itself well as a relevant instrument for SI, as sports clubs (and football clubs, in particular) can be a focal point where refugees can meet new people and develop their social networks (Doidge et al., 2020; Makarova and Herzog, 2014) not only with natives, but also with other refugees and migrants. In Austria, people with a migration background account for a non-negligible share of club members (Expert Council for Integration, 2018), which can facilitate integration with other migrants and refugees. Furthermore, Austrian policy makers attribute an important role for SI to clubs – particularly sports clubs – which is stipulated in the Federal Sports Promotion Act (§§ 1 and 2)¹⁶ and reflected in the financial support and awards given each year to clubs for innovative and successful integration initiatives for migrants, such as the ‘Annual Integration Prize for Sports’. Sports clubs (and football clubs in particular) are of particular importance for the sample of male refugees that we study in our analysis, since male refugees participate more actively in sports clubs than do their female counterparts (Stura, 2019). In principle, membership of clubs could also serve the purpose of supporting members to increase their employment opportunities by, for instance, providing assistance with CV writing and interview techniques, as in different ‘Sport Plus’ initiatives (for an overview, see European Commission, 2017). However, in the Austrian case this is not stated as an explicit aim of the clubs we included in our analysis. Any informal support in this direction would come via social networks and social capital (McDonald et al., 2019) and therefore justifies our approach. Hence, the suggested instruments seem appropriate instruments for SI.

As regards testing for a causal relationship in the other direction – i.e. labour market integration (the endogenous variable) being a factor facilitating social integration (the outcome variable) – we used two variables that capture a person’s *past* labour market experience prior to arrival in Austria: whether a person had ever held a job for more than two months prior to arrival in Austria; and whether a person had worked during the period they were fleeing. Moreover, as a third instrument we use the economic situation of the household relative to other households in the home country *before* migration. All three instruments are considered to be relevant, as past labour market experience is found to be a good predictor of current labour market status, due to acquired experience and human capital in previous jobs. Moreover, wealth and related savings reduce the urgency of job search and the probability of transiting into employment (Algan et al., 2003; Bloemen and Stancanelli, 2001; Bloemen, 2002). The instruments’ relevance will be established during our empirical analysis. Both of the first two instruments (which are related to a person’s *past* labour market experience) are exogenous, since, unless previous employers or co-workers form part and parcel of a refugee’s current social network in Austria, they exclusively affect SI only through LMI. In fact, it is reported that most Middle Eastern refugees travel either with family members or alone (REACH, 2016): there is little evidence that they migrate with former employers or co-workers who could later constitute their social networks. For a similar reason, the third instrument (related to the household’s economic situation *before* migration) is also exogenous, since we argue that – apart from family, which is excluded from our definition of SI – there is no evidence that a refugee’s pre-flight and current social networks in Austria overlap; hence, it would only affect SI through LMI.

¹⁶ https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2017_I_100/BGBLA_2017_I_100.html.

Results obtained in this study

On the relationship between SI and LMI: the results show that socially more integrated refugees are also more likely to be in paid employment, rather than being inactive. Furthermore, the employment effects of SI tend to be stronger for social networks than for social capital. We also find that the ethnic composition of social networks matters greatly, and that stronger social networks with Austrians are of particular importance for the likelihood of a refugee being in paid employment, while refugees with stronger social networks involving Austrians and with more social capital are less likely to be unemployed. Conversely, co-ethnic social networks have no statistically significant relationship with the probability of being in paid employment.

On the relationship between LMI and SI: looked at the other way round, our results show that refugees in paid employment are socially more integrated than are unemployed (or inactive) refugees. This, however, only holds for SI with Austrians: there are no statistically significant effects of successful LMI for SI with co-ethnic networks. Moreover, refugees in paid employment also have more social capital.

Complementarity between social networks: we also looked at the relationship between refugees' co-ethnic networks and their networks with Austrians. The two networks could be complementary, so that refugees with stronger (weaker) co-ethnic networks could also have stronger (weaker) networks with Austrians; or they could be substitutes for one another, so that refugees with stronger co-ethnic networks could have weaker networks with Austrians (or vice versa). Particularly in the case of the recent wave of refugees in Austria, which was the first significant influx of refugees from the Middle East, we might expect that, in the initial phase after arrival, refugees would have a particular incentive to build up networks with both co-ethnics and natives in parallel. Consistent with this hypothesis, our results show that the networks are complementary, but the relationship is rather weak. Further analysis shows that the complementarity between the networks differs across ethnic groups and only holds for Syrian refugees.

Additional factors relevant for SI: the results point to differences by religious affiliation and country of birth: while Christians are socially better integrated with Austrians and have more social capital, Muslims are socially more integrated with co-ethnic networks. Moreover, compared to refugees from Afghanistan, those from either Iran or Syria are socially less integrated with Austrians. Refugees from Syria are socially more integrated with co-ethnic networks.

Additional factors relevant for LMI: consistent with previous studies, the probability of being in paid employment increases with the length of stay in Austria, or is higher among refugees who are better educated (have at least a high-school leaving certificate, i.e. *Matura*), indicating that better education facilitates the transition into employment. We also find that the probability of being in paid employment (compared to being inactive) is lower among recognised refugees than among refugees who have been granted subsidiary protection; this suggests that recognised refugees have a more secure time horizon regarding their stay in Austria and hence are more inclined to undergo further education and training than are those who have been granted subsidiary protection.

Analysis of causal relationships between SI and LMI – accounting for endogeneity: as discussed above, we applied IV procedures to account for endogeneity, in order to establish causality between the two domains of integration. We first checked carefully for the relevance of the instruments we chose. In the

case of examining the *causal effect of SI on LMI*, we used as an instrument club membership density (sports and football clubs) at the provincial level, and found that sports club membership density was significantly associated with some measures of SI: higher sports club membership density is associated with significantly higher SI with Austrians; still significantly associated (though less so) with social capital; and not significantly related to co-ethnic networks. Further examination also showed that social capital could not – in the context of our IV analysis – be considered endogenous. Since the instrument for SI with co-ethnic networks was insignificant, the findings could furthermore not be used to infer endogeneity. Hence, the results from the IV analysis only allow for a causal interpretation of the relationship between social networks with Austrians and LMI. The upshot of this analysis is therefore that a causal relationship can be shown: we found that better SI with Austrians leads to a higher probability of being employed and a lower probability of being unemployed. Hence, an important role is attributable to sports clubs, which facilitate male refugees' SI with Austrians and are thereby indirectly also beneficial for those refugees' LMI.

As regards checking on a *causal effect of LMI on SI*, our analysis was less successful. As outlined above, we used two instruments that captured whether a person had ever had a job before arriving in Austria or had worked while fleeing, and another instrument that captured the economic situation of the household before flight (relative to others in the home country). However, our statistical analysis showed that none of the instruments could predict the probability of being in paid employment in Austria.¹⁷ Hence, no inferences could be drawn as to the potential causality running from LMI to SI.

Summary and conclusions

In line with previous studies, the analysis conducted in this study shows that LMI and SI are interrelated, so that socially more integrated refugees are also more likely to be in paid employment. It also shows that refugees in paid employment are socially better integrated with Austrians.

Beyond that, the analysis also addresses the inherent *endogeneity between LMI and SI* and investigates the causal relationship between the two domains of integration. It finds an important causal link and shows that social networks with Austrians facilitate LMI, in terms of better opportunities for finding paid employment. In contrast to the strong relevance of social networks with Austrians, our results show no specific support from co-ethnic networks in terms of finding employment. This finding deviates from some studies, which acknowledge the importance of 'ethnic enclaves' in this respect (Martén et al., 2019; Damm, 2009; Edin et al., 2003). This result may be a consequence of the limitation of the instrument that we were able to use in our analysis; or it might reflect the actual weakness of co-ethnic networks in furthering employment prospects for this particular group of refugees. Despite this, the robust result with respect to the importance of Austrian networks for LMI should support policies that enhance social network development with Austrians as a key to the transition of refugees into employment.

The analysis also addresses the relationship between refugees' co-ethnic networks and their networks with Austrians and shows that the two networks are *complementary, rather than substitutes*. This is important, since stronger linkages with the co-ethnic community do not hinder, but actually complement,

¹⁷ We have tried several other potential instruments for LMI, either from the survey (e.g. employment status prior to migration, whether flight was financed by odd jobs, particular job characteristics that are considered important, etc.) or from external sources (e.g. regional unemployment rate (general, migrants), regional self-employment rate for migrants (by country of birth), etc.); however, these all turned out to be of limited or no statistical relevance.

contacts with non-co-ethnics, predominantly Austrians. This result is mainly reflective of the group of recent refugees from the Middle East that we study who, during the early phase of integration, build their networks and socially integrate with both groups in parallel.

In many respects, our analysis points to the particular circumstances and challenges that the group of recent refugees faces during the early phases of integration. Hence, future longitudinal research will – over the next survey waves – study whether the relative importance of different social networks (as well as their relationships to each other) and labour market prospects change over time, as the same group of refugees moves on to the next stages of integration. Furthermore, future research can deepen the analysis of whether aspects of social and labour market integration and their interaction operate in different ways for different groups (by age, qualifications, gender, etc.) and for different types of jobs.

3.4. Sebastian Leitner: Development of mental distress of refugees in Austria during their economic and social integration in 2017-2022¹⁸

Mental health problems are a serious barrier to the integration of immigrants into host societies (Aroian et al., 1998). Refugees in particular are exposed to various risk factors for mental health problems before, during and after migration. Pre-migration risk factors for mental distress are persecution, exposure to potentially traumatic events in person or as a witness, and exposure to, or involvement in, armed conflict. Many refugees have to face economic hardship, including having their basic needs not met. Pre-migration risk factors include exposure to physical harm and life-threatening conditions during migration. Separation from family members and from support networks are additional stressors. Post-migration risk factors are manifold and include uncertainty about the asylum application, unmet health needs, anxiety for family members left behind, lack of close relationships, lack of social integration including difficulties in entering the labour market, recognition of qualifications, loss of social status and difficult socio-economic conditions, including unsatisfactory housing conditions (Priebe et al., 2016; Giacco and Priebe, 2018). These particular risk factors for mental distress among refugees overlap with the general acculturative stress experienced by immigrants relating to unfamiliarity with the tasks of daily living, unfamiliar (or very limited) occupational options, language barriers, discrimination and feeling marginalised in the new surroundings or social structure (e.g. Aroian et al., 1998).

This paper examines the level of mental distress, and thus the likelihood of mental disorders among adult refugees who have recently arrived in Austria – particularly from Afghanistan, Iraq, Iran and Syria. He draws on primary data from four waves (2-5) of the FIMAS refugee survey database. It assesses the levels of mental distress of these groups of refugees and examines the moderating effects of stressors and supportive factors for resilience, by applying a multivariate pooled and panel regression analysis.

How is mental distress measured? See Box 3 on the Kessler Index.

¹⁸ See wiiw Working Paper: S. Leitner, '[Development of Mental Distress of Refugees in Austria During their Economic and Social Integration in 2017-2022](#)', wiiw Working Paper, No. 233, Vienna, November 2023.

BOX 3 / THE KESSLER INDEX

In order to measure the level of mental distress, the Kessler-10 scale (K-10) was applied in all four waves of the FIMAS survey (i.e. waves 2-5). The K-10 scale is a simple measure of non-specific psychological distress, and therefore does not focus on a specific mental health diagnosis, such as depression or anxiety disorder (Kessler et al., 2002). It has been applied in the case of the US National Health Interview Survey and the Australian National Health Survey and comprises ten questions about mental distress symptoms experienced during the previous four weeks. For example: 'In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?' or '... about how often did you feel that everything was an effort?'. Answers are based on a five-item Likert scale, from 'none of the time' (1) to 'all of the time' (5). The scores for the ten items are then summed, yielding a minimum total score of 10 and a maximum of 50. A score of 20-24 is interpreted as indicating risk of a mild form of mental distress; 25-29 – risk of having a moderate mental health problem; and 30 and above – risk of a severe mental health problem at the time of the interview. The distinction between moderate and severe mental health problems follows the Global Assessment of Functioning (GAF) Scale (Aas, 2011): moderate forms of mental health problems are likely when persons show symptoms like occasional panic attacks or flat affect¹⁹ and circumstantial speech; severe mental health problems are evident when at least serious symptoms (e.g. suicidal ideation, severe obsessional rituals) or any serious impairment in social or occupational functioning (e.g. no friends, unable to keep a job) are present.

The following factors are identified in this study as potentially influencing the state of mental health:

- › Close relationships with relatives and friends are known to help people cope with stressful episodes in their lives. Refugees were asked in the survey if they knew anyone in Austria who would help them in different circumstances. One relevant question was whether they had anyone with whom they could discuss personal problems. This information has been used as a dummy variable.
- › Having contact with people outside the inner family circle fosters the integration of individuals into society. In order to measure the extent of the social network of a person, the refugees were asked: 'How many people do you know in Austria whom you feel close to?' Thus, the question covers only the inner circle of persons the refugee knows well, not random acquaintances. The study differentiates between the network comprising people from the same country of origin and those from other countries (including persons from Austria).
- › Educational attainment levels: there is *no prior* hypothesis in this regard as to whether higher or lower educational attainment levels might be related to higher or lower levels of mental stress, or whether different factors might relate differently to mental health for different educational groups. However, it is of interest to test empirically for such differences.²⁰
- › Economic and social integration into the host society are fostered by employment, but also by, for example, the housing situation. The study includes a dummy variable if the respondent was working, irrespective of whether it was paid employment or voluntary work. In order to have a measure for

¹⁹ Strong reduction in emotional expressiveness (such as monotonous voice and/or diminished facial expressions).

²⁰ Information on educational attainment was classified according to ISCED 2011. However, the information was originally supplied according to the national schooling system in the country of origin. Conversion into the ISCED classification was in some instances, particularly in the case of Afghanistan, ambiguous.

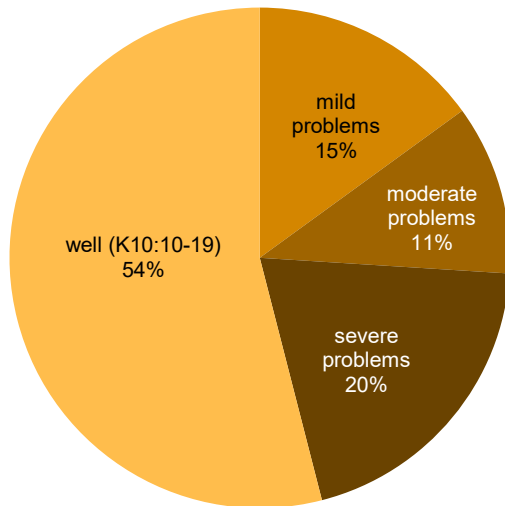
subjective housing quality, the survey allows the use of subjective information on satisfaction with the housing situation; this involved an 11-item Likert scale from 'very unsatisfied' (0) to 'very satisfied' (10).

- › The data also cover information on acculturative stress. On the one hand, discrimination that had been experienced was measured on a five-item Likert scale from 'never' to 'very often'. On the other hand, inability to communicate in the host country's language – something that hampers refugees in finding their way in society – was also reported. The study uses information from the questions: 'How well do you understand German' and '... speak German'. In both cases, a five-item Likert scale was applied, ranging from 'not at all' to 'like my mother tongue'.
- › The majority of the refugees interviewed had been granted asylum or the status of subsidiary protection. However, some were still in the asylum application procedure, which is captured by a dummy variable. Since, in recent years, a declining number of asylum seekers have received a positive decision on their asylum application (Eurostat, 2023), we expect refugees to experience the asylum application procedure as a state of limbo and therefore a stressful period.

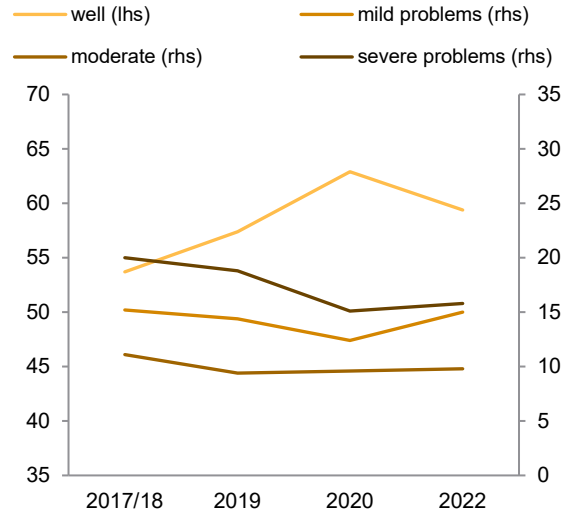
Using the quantitative assessment of mental stress in the form of the Kessler Index (see Box 3), Sebastian Leitner obtained the following information regarding this indicator.

Figure 3 / Indication of mental health problems in the refugee population surveyed

3a / FIMAS+INTEGRATION: 2017/18



3b / FIMAS waves 2-5



Note: Shares calculated applying probability weights - based on the Kessler-10 scale for measuring mental distress.
Source: FIMAS surveys (interview year): FIMAS+INTEGRATION (2017/18), FIMAS+INTEGRATION² (2019), FIMAS+YOUTH (2020), FIMAS+Women (2022), own calculations.

Descriptive results (applying survey weights) show that in the case of the FIMAS+INTEGRATION survey (refugees were interviewed in the period December 2017 to April 2018), 20% of respondents stated a level of mental distress that suggests a severe mental health problem at the time of interview (see Figure 3a). A further 11% were likely to have moderate mental health problems, while another 15% were slightly stressed. The remaining refugees – i.e. about 54% of respondents – stated no or only negligible symptoms of mental distress, and can be regarded as having been unstressed. In general (see Table 4), women are on average more at risk than men of having moderate or severe (i.e. clinically relevant)

problems (34.7% and 29.4%, respectively, in 2017/18). Also, in the general population in Austria and other European countries, women display a significantly higher risk than men for certain mental health diseases (Kerkenaar et al., 2013). Among refugees, younger age groups (15-24: 34.4%; 25-34: 31.2%) show significantly higher risk levels than middle and older age groups (35-44: 27.1%; 45-60: 26.3%). In our sample, refugees from Iran are those most affected by moderate or severe problems (42.9%); they are followed by refugees from Iraq (39.6%), Syria (31.4%) and Afghanistan (28.3%). Refugees who immigrated in 2015 show a higher level of mental distress than those who arrived in the years before that or shortly afterwards; meanwhile, those who arrived shortly before the interview (i.e. in 2018-2021) also revealed quite high levels of mental distress in the first two waves of the FIMAS survey.

Following the results over time (i.e. the data of waves 2-5), we can see that the share of respondents who stated medium or severe mental distress decreased over time until 2020, but in 2022 the level measured by the K-10 scale increased again somewhat (Figure 3b). Refugees might have been adversely affected by the Covid restrictions in effect in the years 2020-2022. The development over time is fairly similar for all population subgroups.

The shares of refugees observed with mental health problems may seem high, but they are in line with the results of refugee surveys performed in other countries where the Kessler-10 scale has been applied to measure mental distress, such as Australia (De Maio et al., 2014).

In what follows, we present the results obtained from the regression analysis undertaken in the study by Sebastian Leitner. Let us introduce these, however, with the following caveat. In considering the results, one needs to be careful about interpreting the relationships between dependent and 'explanatory' variables: the issue of endogeneity and possible reverse causality can play an important role here (i.e. mental health itself can affect some of the variables, such as likelihood of finding employment, ability to integrate socially both with the co-ethnic group and the host society, perception of discrimination, etc.). Hence, in most of the econometric analysis, Sebastian Leitner prefers to interpret the results as being of a 'correlate' nature, rather than speaking strictly of determinants of the state of mental health. Only in the more restricted sample of panellists (i.e. refugees who responded to a sequence of surveys and thus can be traced through time) can some initial attempt be made to pin down causal relationships. We shall return to the results from the panel analysis further down.

Table 4 / Descriptive results of the FIMAS survey waves 2-5, respondents arrived 2011-2021

		FIMAS waves – Interview year				FIMAS waves – Interview year			
		2017/18	2019	2020	2022	2017/18	2019	2020	2022
Sample observations									
Total	9,949	1,534	2,236	3,459	2,720	1,534	2,236	3,459	2,720
With K-10 score	8,364	1,412	2,084	2,667	2,201	1,412	2,084	2,667	2,201
	Subgroups, in % (without weights)	K-10 score, mean value (survey weights applied)				K-10: moderate or severe mental health problems, in % (survey weights applied)			
Total population		20.9	20.5	19.1	19.7	31.1	28.2	24.7	25.6
Gender									
Men	62.7	20.3	19.8	17.9	19.0	29.4	25.8	19.3	23.9
Women	37.3	22.3	21.7	21.1	20.9	34.7	32.7	33.6	28.6
Age group									
15-24	29.4	21.6	21.8	19.9	19.9	34.4	34.1	27.9	27
25-34	35.4	20.6	20.7	18.1	19.7	31.2	28.2	20.4	25.8
35-44	25.0	20.0	18.4	19.0	19.7	27.1	21.6	24.3	24.4
45-65	10.2	21.4	20.2	20.0	18.9	26.3	25.7	29.7	23.6
Male									
15-24	27.3	21.1	21.4	18.5	19.2	32.2	31	22.3	26.2
25-34	38.4	20.2	20.2	17.6	19.1	30.6	26.7	17.6	23.8
35-44	23.9	18.8	17.6	17.0	19.6	21.4	19.1	16.1	24.4
45-65	10.5	20.2	18.5	18.8	17.1	26.4	21.4	24.8	17
Female									
15-24	33.0	22.6	22.6	21.8	21.0	38.9	39.8	35.6	28.1
25-34	30.5	21.2	21.8	19.1	21.0	32.5	31.4	26.1	30.5
35-44	26.9	22.2	19.9	22.5	20.0	37.3	25.7	38.3	24.5
45-65	9.7	23.4	22.9	21.5	22.1	26.3	32.3	36.4	35.1
Country of origin									
Afghanistan	21.0	20.7	21.2	18.9	20.2	28.3	28.5	23.1	26
Iraq	8.8	22.9	22.0	20.1	18.6	39.6	34.7	32.3	21.6
Syria	56.9	20.8	19.6	18.9	19.3	31.4	26.4	24.7	25.9
Iran	13.1	23.1	21.4	19.6	21.0	42.9	31	24.5	25.5
Year of arrival									
2011-2013	10.3	20.8	20.3	19.6	22.1	28.1	27.5	26.6	33.7
2014	13.6	20.2	18.7	17.7	19.6	29.2	24.7	20.7	27.2
2015	47.6	20.9	21.1	18.8	19.5	32.1	29.2	23	24.2
2016	13.2	20.8	21.0	20.1	19.1	30.8	29.7	28.8	23.8
2017	6.2	20.8	17.6	19.4	18.3	29.5	19.7	25.8	20.4
2018-2021	9.0	23.9	22.9	19.9	19.9	38.2	42.8	29.2	27.5

Source: FIMAS surveys – ICMPD (interview year): FIMAS+INTEGRATION (2017/18), FIMAS+INTEGRATION² (2019), FIMAS+YOUTH (2020), FIMAS+Women (2022), own calculations applying survey weights.

In the full sample, Sebastian Leitner tries out a number of different specifications, so that results differ somewhat across these econometric estimations. But we offer some of the highlights without going into too much detail:

- › A very robust finding (throughout the analysis) is that *women* are more mentally distressed than men.
- › The *younger age group* (15-24) is more affected by mental health problems than older age groups: this is a less robust result.

- › The level of mental distress does not significantly decline with *time after a person's arrival in Austria*; this depends on other factors affecting the living conditions of refugees – referred to below.
- › The *family context* is important: being in a partnership or having children and living with them in the same household significantly reduces the level of distress. By contrast, if partners have been left behind in the home or a foreign country, worry about their safety might increase the risk of mental health problems.
- › Having a proper place to live has an important effect on individuals' well-being. Accordingly, satisfaction with the *housing situation* is significantly correlated with mental distress levels. Similarly, having the possibility to work is an important way of experiencing self-efficacy. Those who have a *job or do voluntary work* experience lower levels of mental distress.
- › *Language proficiency* is significantly associated with mental health: the greater the language skills (subjective assessment of speaking and listening comprehension in German), the lower the conditional level of distress among refugees.
- › Finally, having arrived in Austria, refugees might (subjectively) experience *discrimination*. The study finds that the more frequently discrimination is experienced, the higher the level of distress among refugees.

As mentioned above, the findings regarding the relationship between the mental stress variable and the other 'explanatory' factors should be interpreted as correlates, rather than causal relationships. However, the availability of a set of panellists (i.e. persons who participated in more than one survey and can therefore be traced across time) allows some testing of causality. Sebastian Leitner finds the following interesting results:

'... when analysing only panellists, the number of observations shrinks – in the case of a base model specification to 2,8151 based on 1,191 individuals. Since we control now for all time-invariant differences between individuals, we can in a first step show that mental distress of our respondents declines over time after arriving in Austria. A year of stay in the host country results in a decrease of about 2.8% of the Kessler-10 scale on average. Applying a probit panel regression, we find an annual decrease of 1.6% of the probability that respondents have a moderate or severe mental health problem per year of stay in Austria. However, when we include those relevant explanatory variables that can change over time for individuals, the coefficient of years since arrival decreases and becomes insignificant. Our interpretation is, that it is not the elapsing time as such that results in an improvement of the refugee's mental health situation, but the enhanced living conditions that can make a change. The coefficient of most relevant explanatory variables, like living with the partner and one's children, having a larger network of people from the same country of origin, working, having a better proficiency of the German language, feeling discriminated and being more satisfied with the housing situation are significant and show the expected sign. In this regression model we ruled out the influence of omitted characteristics of respondents. However, we cannot rule out endogeneity in the case of some variables. Therefore, we calculated the first differences for the set of explanatory variables and performed again a probit panel regression model. In the case of social network with persons from the same country of origin, the results suggest a causal interpretation, i.e., an increase of the extent of the network results in a decrease of mental distress. Furthermore, experienced discrimination causally results in a worsening of the mental health state on average. In the case of working, language proficiency or housing satisfaction such an

interpretation is not possible. We thus assume that dependent (mental distress) and independent variables interact in both directions.’ (Leitner, Sebastian, 2023, p.15)

3.5. Isilda Mara: Labour market integration programmes for refugees in Austria: do they really work and for whom? ²¹

The effectiveness of labour market integration programmes tailored to migrants (and more recently refugees) is a highly relevant topic for policy makers, as well as in the academic community (Alho, 2021; Anderson, 2013; Anger et al., 2022; Bacher et al., 2020; Hernes et al., 2022; de Lange et al., 2021). In the EU context – and especially in Austria – several policy actions and active labour market policies have been introduced with the goal of helping refugees find a pathway into the labour market of the host country. Given Austria’s long experience of accepting and hosting refugees – from Hungary and Czechoslovakia in the late 1950s and the 1960s; from Bosnia in the early 1990s; from Afghanistan and Syria over the last decade; and more recently from Ukraine – it is of paramount importance to evaluate the effectiveness of such recent policies.

It was especially the wave of refugees from 2015 onward, following the crisis in North Africa and the Middle East, that lent urgency to the need to come up with a number of policy actions and support programmes to facilitate the entry into the labour market of refugees and to assist them in getting a job that fits their skill levels and at the same time meets the labour market needs of Austria. A number of schemes, one of them called *Competence Check (KCH)*, were introduced with the goal of assessing the skills and qualifications of refugees, determining what they needed to acquire or to improve their professional skills and equipping them with those skills that are in demand on the local labour market. In addition, other programmes, such as *Voluntary Integration Year (IY)*, focus on skills assessment and work and training programmes that are open not only to refugees who have already been granted asylum (from 2014 onwards), but also to asylum seekers (Ortlieb et al., 2021; Mara and Vidovic, 2021).

The effectiveness of labour market integration programmes for refugees is challenged by the interplay of several issues in the host country and the refugees’ country of origin. The destination country’s macroeconomic context and the approach followed by its policy makers regarding the labour market integration of refugees are essential in determining their path towards integration. Furthermore, essential prerequisites for the successful integration of refugees include their socio-demographic characteristics, their skills and qualifications profiles, and their physical and psychological readiness for entering and adjusting to the host country’s labour market.

Some evaluation of labour market integration programmes tailored to refugees in Austria has already been done (Ortlieb et al., 2021; Mara and Vidovic, 2021; Bacher et al., 2020). The focus of these studies has been on assessing the labour market access of refugees by looking at the probability of their entering the labour market, depending on a set of individual characteristics, destination country features and participation in different labour market integration programmes added as an additional explanatory variable – without, however, properly applying policy evaluation techniques.

²¹ See wiiw Working Paper: I. Mara, ‘[Labour Market Integration Programmes for Refugees in Austria: Do they Really Work and for Whom?](#)’, wiiw Working Paper, No. 234, Vienna, November 2023.

Isilda Mara's paper follows a distinct approach – namely, matching methods – to evaluating the effectiveness of two of the integration programmes implemented in Austria. This amounts to using a quasi-experimental approach to estimate the treatment effects for persons who participated in (and completed) such programmes, compared to a control group. The study relies on the use of two waves (the fourth and fifth waves) of the FIMAS survey of refugees in Austria, which includes refugees who arrived in Austria from 2010 onwards from Afghanistan, Iran, Iraq and Syria. The study focuses on an assessment and evaluation of the role of two integration programmes – the Competence Check (KCH) and Voluntary Integration Year (IY; referred to in the following as Integration Year) – both of which were designed to assist refugees into employment (see Box 4 for more details). These schemes are assessed in terms of their effectiveness with regard to different subgroups, such as those distinguished by gender, age and level of education.

BOX 4 / SELECTED LABOUR MARKET INTEGRATION PROGRAMMES FOR REFUGEES AND ASYLUM SEEKERS

Competence Check: The Competence Check (KCH) is a tool used to assess the skills, qualifications and linguistic knowledge of recognised refugees, whose competences are not apparent from their documents. It is offered in the mother tongue of the refugees involved (e.g. Farsi/Dari, Arabic, Russian and French) and in German for those with sufficient German language skills; it takes 5-7 weeks to complete. The aim of the Competence Check is to recognise existing skills and qualifications, and to determine any additional need for qualifications. It also provides refugees with information about employment and the Austrian education system. Between August 2015 and December 2018, Competence Checks were carried out on 18,667 unemployed recognised refugees, of whom 14,362 (77%) were men and 4,315 (23%) were women. More than half of those interviewed originated from Syria, 20% were from Afghanistan, 8% from Iraq, 7% from Iran and 14% from other countries (European Union, 2017; Gatterbauer, 2018).

Voluntary Integration Year: From 2016, the possibility of undertaking a voluntary integration year (*Freiwilliges Integrationsjahr* – IY) has been open to anybody who has been granted refugee status or subsidiary protection status, who has held that status for a maximum of two years and who has claimed the needs-based minimum income (Pfeffer, 2017). In parallel, the obligatory Integration Year Act (*Integrationsjahrgesetz* – IJG) became effective from September 2017. This law focuses on the provision of active labour market policy measures for refugees; also it was envisaged that those asylum seekers who are highly likely to be granted asylum should be able to access labour market policy measures, including work training programmes, from January 2018 onwards.²²

The study finds that these integration programmes have been particularly useful in assisting the most vulnerable refugees to enter the labour market. The study finds especially positive effects for women – particularly those with low education; meanwhile, the effects for men are less robust across different levels of education. For most subgroups broken down by age and gender, we also find women benefiting more than men, with younger age cohorts deriving benefit especially from the IY; meanwhile, the oldest age cohorts seem to have benefited from participation in both KCH and IY.

²² https://www.ams.at/content/dam/download/integrationsjahr/001_EN_Integrationsjahr.pdf

The econometric analysis presented in the study proceeds in two stages: first, it analyses possible differences across subgroups in terms of the likelihood of participating in and completing the two programmes; and secondly, it analyses the impact of participation in the programme on the probability of gaining employment. Here are some of the more detailed results.

On participation in the two integration programmes: the results for KCH suggest that men have a greater likelihood of completing the programme than women; furthermore, men in the age group 25-34 are more likely than women in the same age group to complete the KCH, while the opposite is true of older age cohorts. This is likely because of the greater involvement of women in childcare, particularly in the age group 25-34. For IY, more limited gender differences were detected with regard to programme completion. However, both men and women with more than two children are less likely to have completed the IY (though the effect is greater among women) than those with fewer children. As concerns education, the findings indicate that persons with medium and high levels of education are more likely to have completed the KCH than are those with a low level of education; in terms of size, this effect is greater among men than among women. However, if we look at IY, we find the opposite is the case: here the findings show positive and significant effects for women in these educational categories, but not for men. Being in good health seems to matter for the completion of these integration programmes, with the effect higher for men than for women. German language skills are relevant for the completion of either of the integration programmes, and the effect is much stronger for women than for men. The results also indicate that those refugees who have spent longer in the country are more likely to have completed an integration programme, particularly KCH.

On the impact of participation in the two programmes on getting employed: the study assesses the treatment effects in two ways – an ATE (average treatment effect) and an ATT (average treatment effect on the treated). The difference between these two effects is that ATT captures the average treatment effect just on those treated, while ATE captures the average treatment effect on the *total population* – i.e. the counter-factual situation, in which the total refugee population (in the survey sample) is treated.

The following are the results, *first with regard to the effectiveness of the KCH programme.*

ATE is positive and significant for the total sample, as well as for both men and women, although the effect is larger for women than for men. As such, the probability of gaining employment after completing the KCH increases by 8.5 percentage points for women and by 6.4 percentage points for men, although men in general have a much higher likelihood than women of being employed. Hence, our findings support the view that although men have a better chance of gaining employment than women, completion of the KCH is more beneficial for women than for men.

The breakdown by level of education also points to some positive effects, especially for those with a low level of education, both as concerns ATE and ATT. By contrast, we find no significant effect on those with a medium or a high level of education. When the results are broken down further by gender, we find that the positive effect on those with a low level of education is mainly driven by women, both as concerns ATE and ATT. There are no significant effects for men. Thus, completing the Competence Check increases the likelihood of a woman with a low level of education getting a job by 11 percentage points, from 31% to 42%. Hence, our results suggest that completing the KCH may help especially poorly educated women gain employment.

When it comes to age, the estimation results for the different age groups indicate that ATT is positive and marginally significant for the age group 25-34 (with the younger age group 19-24 being the base group), and the breakdown by gender within this age group indicates positive and significant effects for men, but not for women. As concerns ATE, we find that the older age group 45-65 has positive and significant ATEs for both women and men. This suggests that alongside young refugees, the oldest may benefit from completing the KCH programme, which helps them evaluate their professional qualifications and improve their skills in line with the labour market needs of the host country.²³

The results with regard to the effectiveness of the IY programme: the estimation results for the total sample, as well as separately for men and women, show that the probability of obtaining employment is overall positively affected by the completion of the IY. However, the breakdown then shows that this is true for women, but not for men. Specifically, the ATE and ATT for women indicate that their chances of employment increase by 16 and 11 percentage points, respectively. As with the KCH, the treatment effects for sub-samples by level of education show that those with a low level of education benefit most, and among those with a low level of education it is women who are the main beneficiaries of the IY.

Estimation (ATT) results by age category indicate that it is especially younger persons in the age cohort 19-24 who benefit most and who are more likely to get a job after completing the IY – 16 percentage points more likely. Though a positive and significant ATT is observed generally, the effect is higher for women, who benefit from a 20 percentage point increase (as against only a 12 percentage point increase for men). The ATE results, in contrast, indicate that it is especially the older age cohorts aged 35-44 and 45-65 – both men and women – who are likely to benefit and who experience a greater probability of obtaining employment.²⁴

Overall assessment: the positive findings for the effects of integration programmes on the employability of women, the low educated and older age cohorts suggest that such programmes do work and support especially those groups that are more disadvantaged in the labour market and getting access to a job. On the other hand, the study does not find any significant results for those with higher levels of education; consequently, one cannot say – on the basis of this study – that these programmes have been addressing the needs of this group. Rather, they seem to work especially for those in a more vulnerable labour market situation. To assist medium- and high-skilled refugees in gaining employment, job programmes would have to be designed around the needs of these subgroups in relation to the requirements of the Austrian labour market.

²³ We should mention, however, that the number of observations for the older age groups in our sample was quite low and the fit of the matching procedures was rather low for this age group.

²⁴ See, however, previous footnote, regarding age group 45-65.

4. SUMMING UP POLICY CONCLUSIONS FROM THE FIVE STUDIES

There are important policy conclusions to be drawn from the four studies covered in this Policy Note.

The Jestl and Tverdostup study on *job quality and job stability* – which compared the labour market features of the 2014-2016 group of refugees with those of ‘other migrants’ from low- and medium-income non-European countries – revealed that refugees were slower to find a first job and held that initial job for a shorter time, on average, even though the characteristics of the first jobs appear strongly aligned with those of other migrants. Furthermore, when other migrants entered the labour market in a marginal job, they tended to quit it sooner than refugees, who tended to hold marginal jobs for as long as full-time and part-time jobs.

Importantly, highly educated other migrants had the most stable initial jobs, whereas *refugees with higher education* did not reveal any notable advantage in terms of initial job duration. This finding suggests that high educational qualifications of refugees do not facilitate their rapid employment: quite the reverse – they are associated with longer job search time and less-stable entry jobs. The significant difficulties faced by migrants – and especially refugees – over recognition of their qualifications and prior work experience likely explain this disadvantage. Among other migrants, the proportion of those moving to Austria specifically for work (and with their educational credentials already recognised before relocation) may be relatively high, whereas refugees may lack formal proof of educational achievements or spend years getting their qualifications recognised.

Although refugees, especially highly educated ones, struggle to enter the Austrian labour market, they show a major improvement in their labour market performance once they do find their first job. However, the *type of first job appears to be a strong predictor of further labour market success* for both refugees and other migrants. Those migrants who took a full-time entry job had, on average, fewer subsequent jobs, spent fewer days in unemployment or inactivity, and had longer spells of employment. For both groups of immigrants, marginal jobs as entry jobs appear to leave a long-lasting trace on their employment outcomes, as those immigrants spent fewer days in full-time employment after their entry jobs. Thus, our results indicate that *higher-quality entry jobs (in terms of work hours and wages) and self-employment* are strongly linked to longer-term job stability for both groups of immigrants.

Sandra Leitner’s study also showed that refugees with higher levels of education – either medium or high – experienced particularly severe downgrading of their occupational status when they acquired their first job in Austria. This finding points to *very limited transferability of higher education* – something that is well documented in the literature (e.g. Akresh, 2008; Bauer and Zimmermann, 1999; Chiswick et al., 2005). Leitner also finds no evidence of a stronger recovery of occupational status (from the first to the current job in Austria) of persons with higher levels of education, compared to other pre-migration educational attainment categories of refugees. This – together with Isilda Mara’s findings that, in terms of the likelihood of finding employment, those with a higher level of education did not benefit from participation in the two labour market programmes she analysed – seems to indicate that specific attention needs to be focused on the labour market integration of highly educated refugees, and that some of the specific labour market integration programmes are not very effective for this group of refugees (though they are for other groups).

The delayed labour market entry of refugees, less-stable initial jobs and a tendency to stay in *low-quality (marginal) employment for a longer time may leave a long-lasting impact on the employment success of*

refugees and hamper their access to stable, higher-quality jobs in the future. From the policy perspective, this finding showcases the importance of simplified labour market access for refugees in the first year(s) following their arrival in Austria, and suggests that better-tailored active labour market policies are needed to improve the quality of refugees' entry jobs. As the asylum application procedure takes years, those refugees awaiting a decision lose years of job experience and incur skills depreciation, which may be most pronounced among highly educated refugees. Faster job access has multiple benefits for the state, as it reduces pressure on the public 'basic care' support system and helps combat labour shortages. For refugees, earlier job entry would allow them to acquire the skills and knowledge needed in the Austrian labour market, including language skills. Apart from improving the economic well-being of refugees, faster job entry could also improve their mental health.

Yet the mere right to take employment may not be enough for newly arrived refugees, as their knowledge of the host country's labour market may be limited, and they may lack the skills demanded locally. Hence, the early provision of *active labour market policies* is pivotal, and those should go beyond language courses. Access to re-education and requalification programmes, as well as additional training to support existing qualifications, may improve the quality of refugees' entry jobs, as they will acquire the skills and training most needed on the local labour market. Again, Isilda Mara's investigation into the effectiveness of two of the labour market integration programmes suggests that such programmes do work and do support especially those groups that are most disadvantaged in the labour market (women, those with low education, and some of the younger and older age cohorts) in getting access to a job.

There are some interesting findings with regard to the role that co-ethnic networks play in labour market integration, occupational status dynamics and more generally well-being in the case of the particular group of refugees studied in the papers. *Co-ethnic networks do seem to play a multi-faceted role*: on the one hand, they are important for a first successful entry into the labour market; on the other hand, there is a danger that they could contribute to keeping refugees in low-status jobs and trapped in specific low-quality job segments on the labour market. It is important for policy schemes to find a good balance in this trade-off, and then dynamically attempt to move migrants/refugees out of these low-status jobs (see also next paragraph on this issue). There is another positive contribution that co-ethnic networks provide, as Sebastian Leitner points out in his contribution: they are an important factor in mitigating the mental stress faced by refugees.

The analysis in Sandra Leitner's paper regarding the use of *single or combined job search strategies* is important from a policy perspective, and also sheds further light on the contribution that co-ethnic networks can make, if combined with other supports: the analysis shows that job search strategies matter, especially when they are used in combination. Specifically, social networks and certain institutions are beneficial when used together. Co-ethnic social networks, when used exclusively, are associated with greater occupational downgrading; but when they are used together with either the AMS or NGOs, they are associated with less-pronounced occupational downgrading. Similarly, Austrian social networks used in tandem with the AMS are also associated with lower occupational downgrading. These findings suggest that both types of institutions – the AMS and NGOs – generate important additional value added to job search strategies that are otherwise solely based on social networks. The AMS, for instance, provides information and advice, job referrals, German language courses, training and further education courses; many NGOs offer job counselling services and help with learning German, adapting skills or finding jobs. With the additional support and resources from both institutions, social network-based search strategies are beneficial in terms of lower occupational downgrading. One possible factor

in this could also be that AMS and NGO support counteracts possible co-ethnic 'ghettoisation' in low-wage, low-status segments of the labour market.

Michael Landesmann and Sandra Leitner's study established an important *causal link between social integration (SI) – proxied by the extent and intensity of social networks as well as the utilisation of supports through the acquisition of 'social capital' - and labour market integration (LMI)*. To establish such a causal link is difficult if one does not have access to a proper panel data set (we had to use a pooled set of cross-section survey data) and depends on the potency of instruments used in an IV analysis. Nonetheless, we were able to establish such a link by using information on 'club membership' (and specifically 'sports club' membership) as one of the instruments we tried. The results show that LMI benefits not only directly from a number of factors that directly impact employment prospects (such as the participation in certain labour market programmes which the study by Isilda Mara shows) but also indirectly through the channel of social integration. In this study it was specifically the social integration via social networks with Austrians (i.e. through club membership) that contributed to LMI. From a policy perspective this means that attention should be paid to this channel as well, even if the focus is mostly on supporting the refugee population's successful access to jobs. Another important result obtained in this study was that SI with co-ethnic networks (i.e. migrants/refugees from the same country of origin) did not affect negatively SI with non-co-ethnic networks (predominantly Austrians) but that these two types of *social networks operated in a complementary manner*. This might be due to the specific groups of refugees and periods under study, so that in the case of refugees coming from countries from which little prior migration occurred and furthermore the fact that we study the early phase of LMI, there is a tendency for social networks to be built up concurrently with co-ethnics and the host population. At closer examination such complementarity between SI with co-ethnics and non-co-ethnics could be established specifically for Syrian refugees and this can be interpreted that – particularly in this early phase of social and economic integration of this group of refugees – the danger of a possible 'ghettoisation' with negative impacts on LMI could not be found. Overall, the study points to an important area of research which analyses the interdependent linkages between various aspects of SI and LMI. This line of research can and should be expanded in future work in a number of ways: such as examining further aspects of social integration (through schools, through neighbourhoods, gender-specific SI measures, etc.) and, similarly, to also investigate additional features of LMI (such as differentiating the analysis across sub-groups distinguished by age, gender, and educational attainment; or analysing as the specific issue of qualification-adequate employment) and how SI and LMI operate longitudinally in different phases of integration of refugees in the host society and economy. This type of analysis will benefit specifically from the compilation of further survey waves, specifically when it will yield a (statistically) satisfactory panel data-set.

There are some important findings from Sebastian Leitner's analysis of the *mental health of refugees* – somethings that is recognised as an important issue in the literature, due to the trauma that refugees might have experienced. First of all, there is a worrying level of mental stress found in the study: Leitner finds that between 25% and 31% (depending on the waves of the survey) of refugees had symptoms that suggest moderate or severe mental health problems. Psychotherapy is recommended for these individuals. In severe cases, a combination with psychiatric treatment is needed.

Women demonstrate higher risk levels, and when investigating the effects of *stressors on the mental health situation*, Sebastian Leitner found a positive association with potentially traumatic events during the migration to Austria, but also with the (subjective) experience of discrimination in Austria. On the

other hand, the results reveal a couple of *mitigating factors* that foster resilience: living with one's partner and children in the same household; proficiency in the German language; being employed (including volunteer work); having more supportive relationships; and satisfaction with the housing situation.

In general, the literature suggests that the prevalence of *mental health problems could be a serious barrier to the social and economic integration of refugees*. According to the German National Academy of Sciences Leopoldina, refugees' mental health problems can, for example, lead to 'a high drop-out rate in language courses or the fact that many refugees cannot actively shape their everyday lives' (German National Academy of Sciences Leopoldina, 2018, p. 8, own translation). Furthermore, the mental health problems of parents also have a significant positive association with children internalising and externalising behavioural problems (van Ee et al., 2016).

Experts recommend that barriers to *access to health care* should be lowered for refugees in Austria (Kohlenberger et al., 2019). In particular, adequate funding should be provided for easily accessible psychosocial services, taking into account refugees' cultural backgrounds and specific needs (mother-tongue therapists and interpreters). Facilities and organisations offering such services already exist, at least in most urban regions of Austria (e.g. Hemayat, SINTEM Caritas). Sustainable funding should be guaranteed, since we see that these services are required on a long-term basis: the regression analysis shows that the length of stay in Austria only gradually reduces the level of mental distress.

Early *access to the labour market is also effective at reducing mental distress*, but is currently highly restricted for asylum seekers. In general, early labour market access not only encourages self-efficacy and reduces the costs of public support for refugees (in Austria, the so-called *Grundversorgung*), but also has positive effects on their later careers. Furthermore, recognition of qualifications and improvement of skills (via training, etc.) reduce the loss of human capital, support general well-being and counteract the feeling of loss of status.

Family reunion and housing conditions that allow families to live together foster well-being and help people adjust to life in the host country. Language proficiency was found to be significantly related to stress levels. The funding of a sufficiently large number of language courses to facilitate interaction with the host population would support closer contact with the host society. There is a variety of routes to such closer contact: fostering inclusive housing, leisure activities or training measures.

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ANNEX

Table A.1 / Least squares regression – job stability for refugees

Dependent variable:	Refugees			
	Number of jobs (1)	Days in work (2)	Days in unemployment (3)	Days in inactivity (4)
Age: 30-39	-0.133*** (0.0356)	-17.85*** (5.003)	21.70*** (4.008)	0.638 (3.375)
Age: >39	-0.430*** (0.0449)	-85.45*** (6.924)	82.08*** (5.739)	6.501 (4.603)
Female	-0.643*** (0.0435)	-118.6*** (6.466)	8.507* (5.053)	92.67*** (5.206)
Medium-low education	-0.253*** (0.0464)	-27.64*** (6.544)	-32.28*** (4.885)	46.98*** (4.961)
Medium-high education	-0.218*** (0.0448)	-2.625 (6.444)	-18.00*** (5.456)	1.140 (3.854)
High education	-0.493*** (0.0461)	22.35*** (7.326)	-36.22*** (6.053)	2.629 (4.717)
Education not available	0.416 (0.809)	62.56 (74.96)	-84.30* (47.55)	-45.60 (75.34)
Partner household	-0.141** (0.0704)	-10.73 (10.63)	-19.52** (8.676)	22.46*** (6.754)
Other family household	-0.0903 (0.107)	-15.52 (16.00)	3.157 (13.14)	5.429 (10.50)
Other household	0.0720 (0.0536)	-35.38*** (7.514)	-21.20*** (6.227)	50.26*** (4.339)
Household not available	0.387 (0.873)	162.0* (96.30)	-37.85 (54.04)	-39.15 (90.32)
# of children	-0.0101 (0.0187)	-11.46*** (2.812)	4.695** (2.285)	5.555*** (1.880)
Age of youngest child: 0-2	-0.00186 (0.0771)	-0.447 (11.85)	3.839 (9.561)	-4.078 (8.035)
Age of youngest child: 3-5	0.0113 (0.0921)	17.17 (13.96)	-0.0507 (11.29)	-13.54 (9.351)
Age of youngest child: 6-9	-0.120 (0.0936)	17.86 (14.62)	0.0272 (11.98)	-20.87** (9.958)
Age of youngest child: 10-14	0.109 (0.102)	36.70** (16.10)	-0.561 (13.12)	-41.14*** (10.09)
Age of youngest child: >14	0.130 (0.108)	36.37** (16.55)	-28.00** (13.42)	-10.81 (11.07)
Share manufacturing jobs	-0.0802 (0.0565)	-12.39 (8.169)	12.35* (6.587)	-16.19*** (5.083)
Share agricultural jobs	-0.0895 (0.125)	83.05*** (21.63)	31.88** (12.83)	-52.61*** (18.24)
Share tourism jobs	-0.0417* (0.0220)	17.90*** (3.236)	-0.287 (2.513)	-2.708 (2.224)
Share of foreign-born (non-Europe & non-rich)	-0.140** (0.0561)	-53.68*** (8.771)	-16.23** (7.162)	16.93*** (5.607)
Unemployment rate	-0.00319 (0.0139)	27.61*** (2.067)	-5.158*** (1.624)	-9.143*** (1.385)
Days in PES training prior to job entry	-0.000149** (7.16e-05)	0.0744*** (0.0106)	-0.00640 (0.00876)	-0.0476*** (0.00685)
Days in education prior to job entry	-0.000263** (0.000115)	0.0253 (0.0190)	-0.0300** (0.0137)	-0.0572*** (0.0121)
Days until job entry	-0.00208*** (5.22e-05)	-0.579*** (0.00800)	-0.205*** (0.00614)	-0.148*** (0.00592)
Entry job: full-time employment	-0.185*** (0.0443)	46.61*** (6.926)	-26.47*** (5.720)	-16.72*** (3.895)
Entry job: other employment	-0.0177 (0.0560)	-48.89*** (8.682)	-30.29*** (7.140)	34.32*** (5.519)
Entry job: marginal employment	0.757*** (0.0495)	-112.6*** (7.275)	9.113 (5.987)	89.12*** (4.628)
Entry job: self-employment	-0.886*** (0.0725)	62.41*** (12.06)	-122.6*** (7.934)	48.33*** (9.325)
Constant	7.948*** (0.742)	1,439*** (114.6)	444.0*** (89.81)	633.8*** (83.63)
Observations	25,012	25,012	25,012	25,012
District fixed effects	Y	Y	Y	Y
Country of birth fixed effects	Y	Y	Y	Y
Year of arrival fixed effects	Y	Y	Y	Y

Notes: This table reports the estimation results of Specification 2 using an ordinary least squares estimation for refugees. Robust standard errors in parentheses. Age cohort 20-29, male, lower education, single, no children, and entry job: part-time employment are the variables omitted from the regression. PES – public employment services. All covariates refer to the time of the immigrants' job entry. * p<0.1, ** p<0.05, *** p<0.01.

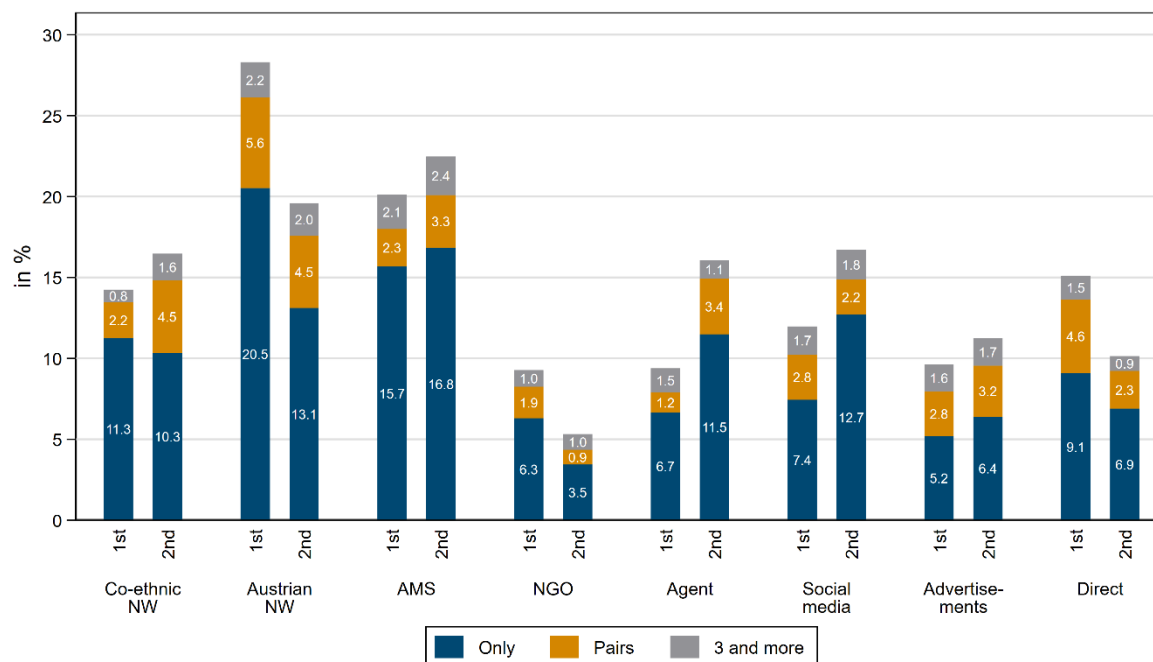
Source: Statistics Austria. Own calculations.

Table A.2 / Least squares regression – job stability for other migrants

<i>Dependent variable:</i>	<i>Other migrants</i>			
	<i>Number of jobs</i> (1)	<i>Days in work</i> (2)	<i>Days in unemployment</i> (3)	<i>Days in inactivity</i> (4)
<i>Age: 30-39</i>	-0.101* (0.0601)	23.79*** (9.210)	15.57*** (4.468)	-11.84 (7.778)
<i>Age: >39</i>	-0.230*** (0.0882)	59.48*** (13.75)	27.94*** (7.101)	-55.85*** (11.73)
<i>Female</i>	-0.900*** (0.0557)	-298.3*** (10.33)	16.57*** (4.704)	263.4*** (8.889)
<i>Medium-low education</i>	-0.865*** (0.0834)	35.07*** (12.40)	-56.53*** (5.754)	9.139 (11.05)
<i>Medium-high education</i>	-0.804*** (0.0878)	-6.956 (13.99)	-44.64*** (6.593)	-42.98*** (11.39)
<i>High education</i>	-1.369*** (0.0797)	42.33*** (13.24)	-45.38*** (6.741)	-24.58** (11.02)
<i>Education not available</i>	-1.241*** (0.343)	-168.7*** (63.38)	-45.00* (25.60)	13.72 (36.07)
<i>Partner household</i>	0.695*** (0.102)	-77.71*** (16.05)	36.70*** (7.060)	74.66*** (12.92)
<i>Other family household</i>	0.559*** (0.173)	-55.36** (28.17)	23.59* (13.56)	33.16 (23.51)
<i>Other household</i>	0.435*** (0.106)	-56.17*** (17.23)	8.977 (7.200)	-3.393 (13.31)
<i>Household not available</i>	0.214 (0.672)	52.41 (96.94)	-13.00 (25.87)	-70.07 (56.20)
<i># of children</i>	0.0481 (0.0501)	5.065 (7.843)	-4.801 (4.298)	-2.946 (6.542)
<i>Age of youngest child: 0-2</i>	-0.343*** (0.115)	22.28 (17.64)	18.46** (9.115)	-41.99*** (15.23)
<i>Age of youngest child: 3-5</i>	-0.302* (0.175)	-31.12 (27.24)	34.66** (14.91)	-16.10 (22.90)
<i>Age of youngest child: 6-9</i>	0.00468 (0.180)	-2.653 (27.13)	10.80 (14.24)	-25.83 (23.63)
<i>Age of youngest child: 10-14</i>	-0.0240 (0.175)	7.050 (28.75)	28.54* (15.30)	-54.76** (25.26)
<i>Age of youngest child: >14</i>	-0.122 (0.166)	1.604 (25.96)	15.86 (12.71)	-9.137 (22.11)
<i>Share manufacturing jobs</i>	0.0176 (0.0883)	32.20** (12.89)	3.311 (6.165)	-26.37** (10.94)
<i>Share agricultural jobs</i>	-0.216* (0.120)	-4.630 (19.18)	-12.58 (7.658)	30.09** (14.80)
<i>Share tourism jobs</i>	-0.0738* (0.0413)	0.531 (5.802)	-4.296 (2.803)	19.71*** (4.758)
<i>Share of foreign-born (non-Europe & non-rich)</i>	-0.219*** (0.0624)	-99.33*** (9.765)	1.112 (4.641)	5.485 (8.140)
<i>Unemployment rate</i>	-0.0320 (0.0239)	8.042** (3.761)	-1.789 (1.733)	1.825 (3.102)
<i>Days in PES training prior to job entry</i>	0.000207 (0.000239)	0.0769 (0.0493)	0.191*** (0.0374)	-0.256*** (0.0346)
<i>Days in education prior to job entry</i>	0.000138* (8.25e-05)	-0.0376** (0.0149)	-0.0151** (0.00602)	-0.0616*** (0.0113)
<i>Days until job entry</i>	-0.00147*** (7.97e-05)	-0.661*** (0.0130)	-0.0744*** (0.00629)	-0.136*** (0.0109)
<i>Entry job: full-time employment</i>	-0.584*** (0.0734)	59.98*** (11.47)	-17.94*** (5.788)	-22.98** (9.598)
<i>Entry job: other employment</i>	0.0535 (0.116)	-0.444 (18.67)	-16.20* (9.435)	12.64 (15.20)
<i>Entry job: marginal employment</i>	0.766*** (0.0792)	-86.37*** (12.44)	-27.67*** (5.948)	59.75*** (10.65)
<i>Entry job: self-employment employment</i>	-0.855*** (0.124)	97.13*** (19.88)	-87.47*** (7.378)	3.826 (17.38)
<i>Constant</i>	7.441*** (1.469)	1,532*** (248.3)	253.2** (98.30)	718.1*** (236.4)
<i>Observations</i>	12,117	12,117	12,117	12,117
<i>District fixed effects</i>	Y	Y	Y	Y
<i>Country of birth fixed effects</i>	Y	Y	Y	Y
<i>Year of arrival fixed effects</i>	Y	Y	Y	Y

Notes: This table reports the estimation results of Specification 2 using an ordinary least squares estimation for other migrants. Robust standard errors in parentheses. Age cohort 20-29, male, lower education, single, no children, and entry job: part-time employment are the variables omitted from the regression. PES – public employment services. All covariates refer to the time of the immigrants' job entry. * p<0.1, ** p<0.05, *** p<0.01.

Source: Statistics Austria. Own calculations.

Figure A.1 / Frequency of combinations of job search strategies, by transition period

Note: 'Only' refers to individually used strategies only, 'pairs' to pairwise use, and '3 and more' to combinations of strategies involving three or more job search strategies. The difference to 100% indicates the frequency of 'not used'. Moreover, 1st and 2nd refer to the first and second transition, respectively. Weights were used.

Source: FIMAS+INTEGRATION, FIMAS+INTEGRATION², FIMAS+YOUTH, FIMAS+Women, own calculations.

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