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ABSTRACT

The Dutch labor market is characterized by high levels of flexibilization and foreign-born workers' participation. This study contributes to the literature on the labor market integration of migrants by establishing an innovative link between migration background and temporary employment. Using the LISS panel data 2008-2017 for the Dutch population, I investigate whether first-generation migrants are more likely to be temporarily employed than Dutch natives. In addition, I explore whether education, language problems, and active social contacts influence it. The findings show that non-western migrants are more likely to be temporarily employed than western migrants and Dutch natives. Language problems are the main mechanism increasing migrants' probability of being temporarily employed, while higher education and active social contacts appear to be irrelevant.

Keywords: temporary employment, immigrants, language problems.

JEL classification: J15, J61, Z13.

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1. Introduction

The Dutch labor market is experiencing two contemporaneous phenomena: an increasing number of workers in non-standard forms of employment (flexibilization) and rising participation of people with a migration background to the labor force (OECD, 2019). In this study, I contribute to the current literature on migrants in flexible labor markets by studying whether first-generation migrants are more likely to be temporarily employed than Dutch natives. Furthermore, I analyze some of the mechanisms that affect migrants' likelihood to be temporarily employed.

Temporary forms of employment are characterized by weak employment protection legislation (EPL), and their diffusion is widespread in high-income countries (Boeri et al., 2020; ter Weel, 2018). Temporary forms of employment allow both the employee and the employer to manage their work relationship with more flexibility. Ultimately, especially for the youth, they should work as a trampoline to more permanent jobs. However, if the employer has no interest in shifting to permanent employment, temporary forms of employment can create a more fragile labor market or even a dual labor market. Marginalized workers end up trapped in a loop of temporary occupations and have little or no career perspectives (Barbieri & Cutuli, 2015; Boeri et al., 2020; Bolhaar et al., 2018; Buiskool et al., 2016).

The Netherlands has the fifth highest share of temporary workers as a percentage of the total labor force in the EU (Eurostat, 2019). Most importantly, since 2008, the share of temporary workers versus permanent workers has always been rising (CBS, 2018). This may be because the overall costs to hire and dismiss a permanent worker are much higher than the corresponding costs for a temporary employee (OECD, 2019). The wedge in employment and dismissal costs may push employers towards heavy reliance on temporary jobs (Bolhaar et al, 2018; Hartog & Salverda, 2018).

First-generation migrants, defined as Dutch residents born abroad, make up 12.5% of the local population. Including second-generation migrants, defined as Dutch residents with at least one parent born abroad, the percentage becomes 23.6% (CBS, 2018). The current composition of the migrant population in the Netherlands is heavily influenced by the arrival in the 1960's-1970's of guest-workers from Morocco and Turkey, who were encouraged to come to work in the booming Dutch economy. From the 80' to the 2000', the Netherlands welcomed people from the former Dutch colonies (Dutch Caribbean and Suriname) and refugees from eastern-European countries, the Balkans, Afghanistan, Iraq, and Somalia (Schrover, 2010). As a result of this, 56% of the Dutch residents with a migration background have a non-western background. Contrary to this trend, most of those who arrived in 2018 and 2019 came from other EU member states (CBS, 2018).

The vulnerability of migrants in the Dutch labor market has been studied by Bijwaard & Veenman (2007); their evidence shows that non-western migrants are the ethnic group that, on average, needs more time to transit from unemployment to employment. Possible reasons for this disadvantage are low education, poor language proficiency, and lack of inter-ethnic social contacts (Bijwaard & Veenman, 2007; Chiswick & Wang, 2019; Lancee, 2010; van Ours & Veenman, 2006; Zorlu & Hartog, 2008).

According to the existing literature, attaining higher education in non-western countries appears to have no positive effect on the integration of migrants in the Dutch labor market (Hartog & Zorlu, 2008, 2009). Instead, obtaining education in the Netherlands, the EU, or a former Dutch colony, is found to have a significant positive effect on employment chances (Bevelander & Veenman, 2006; van Ours & Veenman, 2006). Language problems are found to have a major negative impact on the employability and earnings of migrants, especially when they come from non-western countries (Chiswick & Wang, 2019; Yao & van Ours, 2015). Regarding social contacts, the results are mixed. Inter-ethnic contacts seem to have a positive effect on migrants' job prospects; however, intra-ethnic contacts do not (Chiswick & Wang, 2019; Lancee, 2010; Martinovic et al., 2009). Migrating at a younger age appears in the literature as an important predictor of both language proficiency and higher educational attainment, with consequent better labor market outcomes (Chiswick & Wang, 2019; Yao & van Ours, 2015; Zorlu, 2013).

The above-mentioned studies have investigated the position of migrants in the labor market by looking at outcomes such as employment, hours of work, and wages. However, the question of whether migrants are more likely to be temporarily employed remains unanswered. In the present work, I investigate whether first-generation migrants are more likely to be temporarily employed than natives, and, besides, I explore whether the mechanisms pointed at by the literature can explain migrants' involvement in temporary jobs. The main hypothesis is that the acquisition of higher education outside the Netherlands, language barriers, and lack of active social contacts, lead first-generation migrants towards temporary employment. By tackling this issue, this is the first study to explore how migration background influences temporary employment in the Netherlands, while, at the same time, assessing the role of education, language, and active social contacts.

To conduct the empirical analysis, I use data from a representative sample of the Dutch population provided by the Longitudinal Study for the Social Sciences (LISS) for the period 2008-2017. I start by estimating the effect of having a first-generation migration background on the probability of being temporarily employed. Relying on OLS, I control for demographic factors, profession, sector of employment, and the three integration variables that may affect a worker's labor market position: education, language problems, and active social contacts. Second, I test whether these integration variables influence migrants' chances of being temporarily employed. To do so, I perform the same estimations, but interacting each integration variable with the dummy variable for migration background, while keeping the others as controls. For both stages of the analysis, I initially compare the whole pool of migrants with natives and subsequently distinguish between migrants with western and non-western backgrounds.

The findings show that first-generation migrants are eight percentage points more likely to be temporarily employed than natives, with a particularly strong effect for migrants with a non-western background. First-generation migrants who report having problems with reading and/or speaking Dutch

are significantly more likely to be temporarily employed than those who do not. Again, this effect is particularly strong for migrants with a non-western background.

The measurement of language problems is known to suffer from two potential biases. The first derives from omitted variables and reverse causality, since it may be that unobserved characteristics affect the type of employment and that the type of employment influences their propensity to learn Dutch. The second derives from measurement errors, since potential over- or underreporting of language problems can lead to a misestimation of the true impact of language problems on the probability of temporary employment. For these reasons, I re-estimate the language effects by employing an instrumental variable technique initially proposed by Bleakley & Chin (2004, 2010) and later employed by others (Budria & Martinez de Ibarreta, 2020; Chiswick & Wang, 2019; Yao & van Ours, 2015). This method instruments language problems with an interaction between the age at arrival in the Netherlands and a dummy variable indicating whether a migrant did not speak Dutch during childhood. The crucial assumption for it to work is that, except for language development, age at arrival has the same effects for migrants who did not speak Dutch during childhood and those who did. The results of this robustness check confirm the direction of the estimates of the impact of language problems on the probability of being temporarily employed, even suggesting they are underestimated in the OLS model.

My analysis does not provide an exact measurement for the racial discrimination that individuals from different ethnic backgrounds may suffer in their integration into the Dutch labor market (Andriessen, 2012; Zorlu, 2013). However, when I control for demographic characteristics, profession, sector of employment, education, language problems, and active social contacts, a part of the residual effect of migration background on the probability of being temporarily employed can be interpreted as the effect of racial discrimination.

The results of this research could orient towards a better EPL that takes into account ethnic backgrounds and age differences, with beneficial effects both for public finances and migrants' job security. Furthermore, by understanding which mechanisms affect migrants' job outcomes the most, it would be possible to formulate the correct policies to foster their labor market integration.

The rest of this study is structured as follows. In section 2, I provide a review of the literature on the labor market integration of first-generation migrants and the factors that might affect it. In section 2.1, I discuss the labor market legislation in the Netherlands and its recent developments on temporary employment. Section 3 includes the empirical part of my analysis. In section 4, I discuss the implications and limitations of the results. Section 5 concludes.

2. Literature review

The literature on the labor market integration of first-generation migrants has identified three main factors that may explain it. These are education, language proficiency, and social contacts. Education

is often regarded as one of the main tools through which immigrants can enrich their human capital and achieve professional success in the host country. However, the available empirical evidence on the labor market beneficial effects of migrants' education corroborates this idea only partially. It is often the case that second-generation migrants benefit from the host country's education much more than their parents from the home country's one (Gonzalez, 2003; Piton & Rycx, 2020; Zorlu & Hartog, 2009). Possible explanations for it are the little compatibility between different educational systems and difficulties in translating one own knowledge into a foreign language (Zorlu, 2013). Migrating at a younger age allows the individual to complete secondary education in the host country and greatly improves job prospects (Åslund et al., 2009; Chiswick & Miller, 1995; Chiswick & Wang, 2019).

Contrary to education, the benefits from high host country language proficiency are often found to be significantly positive. Dustmann (1994) is among the first to find a positive correlation between language proficiency (Germany) and earnings. Chiswick & Miller (1995) are the first to use an IV estimation technique to account for the potential biases in measuring language problems and find that the language premium on male first-generation migrants' earnings is more than 20%. In later studies, age at arrival in host countries is a commonly used instrument for language skills. Bleakley & Chin (2004, 2010) instrument language skills with the interaction of a dummy for arriving in the US as a child and a dummy variable for being born in a non-English speaking country. Their approach is based on the assumption that non-language effects of age at arrival are the same irrespective of country of origin. They find that English proficiency increases the earnings of immigrants who migrated when they were children by 33%.

Regarding the importance of social contacts, their relevance within migration studies has grown since the publication of Bourdieu's (1998) theory of social capital. Putnam's (2000) conceptualization of social capital applied it to collective bodies such as migrant communities. In particular, two distinctive types of social capital have been defined for migrants: bonding and bridging. Social capital comes from bonding when the individual strengthens his/her ties with his/her migrant community (intra-ethnic contacts), and from bridging when the social ties are made with the local community (inter-ethnic contacts) (Patulny & Svendsen, 2007). Inter-ethnic contacts are often found to improve migrants' employability and earnings while intra-ethnic contacts might have negative implications such as little integration in the host country's society, excessive trust in the migrant community, and restrictions imposed by leaders of the migrant community on others (Chiswick & Wang, 2019; Lancee, 2010; Portes, 2000, 2014; Sanders & Nee, 1996).

Since the 1970's, when the number of migrants in the Netherlands started to considerably grow, an increasing body of academic work has been devoted to analyzing their integration into the Dutch labor market. Recent studies have found non-western migrants as the population group that faces the most labor market difficulties. Their participation rate is more than five percent lower than the ones for western migrants and natives, whose rates are comparable (above 80%) (Hartog & Salverda, 2018). They are also the population group that, on average, takes more time to transit from unemployment to

employment (Bijwaard & Veenman, 2007; Zorlu, 2013) and is less likely to be employed (Chiswick & Wang, 2019; Zorlu & Hartog, 2008). Finally, they are the ones whose earnings benefit less from naturalization (Bevelander & Veenman, 2006) and higher education in foreign countries (Hartog & Zorlu, 2009; van Ours & Veenman, 2006).

2.1 Labor market legislation

Statistics Netherlands (CBS) (2019) reports that the Netherlands has been the country with the highest increase in the number of flexworkers in the period 2008-2017 (+4.7%). Currently, the Netherlands has the third most flexible labor market in the EU (30% of all the workers), following Poland (33.3%) and Spain (33.1%) (CBS, 2019). This growth has been driven by a constant increase in temporary jobs relative to permanent ones (CBS, 2018). Temporary workers make up 70% of the flexworkers in the Netherlands and 21% of all workers (CBS, 2018). Temporary jobs are most common among the youth. More than 60% of the employees between 20-30 years old work on temporary employment, while 68% of the employees between 45-75 years old work on permanent employment.

The recent growth in temporary jobs in the Netherlands is due to several reasons. First, non-standard forms of employment are on the rise in most developed countries as a result of the job polarization fostered by globalization and technological change (OECD, 2019). Being the Netherlands one of the world's most advanced labor markets, it does not come as a surprise that it is the leading European country for growth in flexworkers in the period 2008-2017.

Second, the Netherlands is a country with a high level of labor market dualism: the extent to which employment is divided between protected permanent contracts and fragile temporary contracts (Hartog & Salverda, 2018; OECD, 2019; ter Weel, 2015). In the Netherlands, the employer can terminate an open-ended employment contract only by showing fair grounds for dismissal, and the employee cannot be moved to another position within the company. After the dismissal, if the employment period was of two years or more, the employer is obliged to make a costly severance payment to the employee (Bolhaar et al., 2018).

Although it is still weaker than in most other OECD countries, the stringency of Dutch EPL for temporary employment increased from 2013 to 2018 (OECD, 2019). This rise was led by the 2015 introduction of the Work and Security Regulation (Wet Werk en Zekerheid). The new law reduced the maximum period for successive fixed-term employment contracts with the same employer from three to two years. As a result of this, the regulation has increased the average contract's duration but has not provided a real incentive for switching from temporary to permanent work (Hartog & Salverda, 2018). The coalition government formed in 2017 promised to revert this law but has failed yet to do so.

When strict EPL for permanent contracts is combined with liberal ruling for temporary contracts, as in the Dutch case, firms react by substituting temporary for permanent workers (Boeri et al., 2020; Bolhaar et al., 2018; OECD, 2019).

Lastly, an important role is played by sectoral collective labor agreements (CLAs). They are fundamental in setting salary scales, unemployment benefits, training duties, and occupational pension rights. However, because self-employed and temporary agency workers are most of the times not included in the CLA of their sector, employers can bypass unemployment benefits, pay scales, and pension contributions by hiring employees on flexible work arrangements (Bolhaar et al., 2018).

3. Empirical analysis

3.1 Data and sample composition

My dataset is derived from the Longitudinal Internet Studies for the Social Sciences (LISS) administered by CentERdata (Tilburg University, The Netherlands)[3]. The population of reference of the LISS is the Dutch-speaking population permanently residing in the Netherlands, and it provides information on a variety of topics including demographic characteristics, labor market position, and the financial situation of households. Most importantly for this study, it contains information also on migration background, type of employment, education, language skills, and social contacts. Survey modules on a set of background variables are run every month, while modules on more specific topics, like work and education, are run yearly. The dataset employed is composed of the waves covering the ten years between 2008 and 2017.

Since I am interested in the working-age population, I restrict my sample to individuals who are 15 to 64 years old. Because my focus is on the first-generation, I exclude second-generation migrants (1,768) from my sample. Given that they are usually better integrated than their parents, their inclusion in the pool of first-generation migrants or the one of Dutch natives would be likely to lead to an underestimation of the impact of having a migration background on the probability of temporary employment for the first-generation (van Elk et al., 2019).

After deleting the observations of those who do not report information on their ethnic background (1,370) and their current or last type of employment (6,886), I obtain a dataset consisting of 28,325 observations from 19,545 unique individuals, from 5,309 unique households. 69.0% of the individuals appear only once in the sample, 25.4% appear twice, and 5.6% appear more than twice. Migrants make up 6.5% of the observations in the sample (6.9% of the individuals). This is lower than the percentage provided by the CBS (12.5%) for multiple reasons. First, the sample lacks all the migrants who are not

[3] The sample frame is the nationwide address frame of Statistics Netherlands. The sampling and survey units are independent, private households, thereby excluding institutions and other forms of collective households. When a household receives the request for participation in the survey, all the household members older than 15 are invited to take part. Households in which no adult is capable of understanding Dutch are not included (LISS, 2009).

active in the labor market. This is relevant since Eurostat (2018) reports that 40.3% of the non-EU citizens in the Netherlands are not active in the labor market, compared to 17.7% of Dutch citizens. Second, the migrants who do not have a sufficient command of Dutch to fill out the survey are also not included.

3.1.1 Temporary employment variable

The measure for whether an individual has a temporary form of employment is derived from the question: Are (/In your last job) (/were) you an employee in permanent or temporary employment? Eight possible answers are provided: employee in permanent employment, employee in temporary employment, on-call employee, temp-staffer, self-employed/freelancer, independent professional, director of a limited liability or private limited company, and majority shareholder director. From this variable I create a dummy for whether someone is employed in a temporary form of employment (categories two, three, four) or not (categories one, five, six, seven, eight). This is the dependent variable. The specification includes all the people with temporary contracts, on-call employees, and temp-staffers, without any discrimination for the number of hours worked. Those flexworkers with a permanent contract but with a flexible number of hours are not categorized as temporarily employed, because the study is focused on the type of employment, not on the number of hours. The same applies to self-employed and independent professionals.

3.1.2 Migration background variable

To study ethnic backgrounds, I use a variable asking respondents to classify their ethnic backgrounds, based on CBS definitions. The answers are five possible categories: native Dutch background (born in the Netherlands by two parents born in the Netherlands), first-generation migrant with a western background (born outside the Netherlands by both the parents, or just the mother, from a western country), first-generation migrant with a non-western background (born outside the Netherlands by both the parents, or just the mother, from a non-western country), second-generation migrant with a western background (born in the Netherlands by both the parents, or just the mother, from a western country), and second-generation migrant with a non-western background (born in the Netherlands by both the parents, or just the mother, from a non-western country)[4].

From this variable, I first create a dummy for whether someone has a first-generation migration background (categories one and two) or not (category zero). Second, to study ethnic backgrounds separately, I create a categorical variable which takes value zero if the individual is native Dutch, one

[4] The CBS defines Europe, North America, Oceania, Japan, and Indonesia, the latter being a former Dutch colony, as western; Africa, Asia, and Latin America are defined as non-western.

if she/he is a first-generation western migrant, and two if she/he is a first-generation non-western migrant.

3.1.3 Control variables

As control variables, I employ the set of variables included by Yao & van Ours (2015), who also employ the LISS to study the labor market position of migrants in the Netherlands. These are age, gender, civil status, number of children at home, and whether someone is living in an urbanized area or not.

In addition, I control for the profession and sector of employment by using two categorical variables (the full specification can be found in Table 1). I include them in the analysis because professions and sectors of employment can correlate with both type of employment and migration background. Without controlling for them, my analysis would estimate the impact of having a migration background on the probability of being employed in a sector or profession which makes high use of temporary employment, rather than on the pure probability of being temporarily employed. In other words, their omission would cause an omitted variable bias.

3.1.4 Integration variables

I use three variables to capture the factors that may influence the probability of being temporarily employed: level of education, whether someone has language problems or not, and the number of social clubs at which an individual is an active member. The latter is a proxy for active social contacts. Education is expressed in CBS categories: primary education, lower secondary education (VMBO), intermediate secondary education (HAVO/VWO/MBO), and higher education (HBO/WO). Language problems are measured by a dummy variable that takes value one if the respondent reports to have problems in reading or speaking Dutch, and zero if not. The variable for active social contacts takes values zero to three for whether an individual is an active member of zero to three social clubs (sports clubs, culture/hobby clubs, and religious groups).

3.2 Descriptive statistics

Table 1 provides an overview of the summary statistics for the variables included in the analysis, split by ethnic groups: native Dutch population, first-generation migrants with a western background, and first-generation migrants with a non-western background.

The three ethnic groups are heterogeneous when it comes to types of employment. Dutch natives show the highest share of individuals permanently employed (76.3%), while western migrants and non-western migrants are three (73.0%) and nine points below (67.7%) respectively. Western migrants are the population group most involved in self-employment (self-employed and independent professionals) (10.5%) compared to Dutch natives (7.8%), and non-western migrants (4.8%). The latter is the ethnic group with the largest share of temporarily employed individuals (temporary contracts, on-call

employees, and temporary staffers) (26.4%), compared to western-migrants (15.9%) and Dutch natives (14.9%).

These statistics can be related to the ones for professions and sectors of employment, as different sectors and professions rely on different types of employment. In fact, Dutch natives and western migrants, whose numbers for permanent and temporary employment are rather similar, show also similar professional profiles, with the latter slightly more employed in high- or medium-skilled jobs (52.7% and 53.4%) (high or intermediate academic, supervisory, and independent professions). Non-western migrants have instead a greater incidence in low-skilled professions (34.1%) (unskilled, manual, and agricultural jobs), which largely employ temporary contracts, on-call workers, and temporary staffers. Dutch natives are relatively more employed in sectors related to national services (38.2%) like healthcare, welfare, and education, all of which provide a high number of permanent jobs. Western migrants are relatively more present in the industrial production sector (17.3%) (like engineering) and in business services (8.6%), which might explain the relatively high number of self-employed individuals among them. Non-western migrants are relatively more employed in catering (6.5%), which is a sector that makes high use of temporary work arrangements, like on-call contracts.

Dutch natives and western migrants show comparable demographic characteristics, while non-western migrants present different ones. The first two groups have similar gender ratios (53.1% and 52.5% female), a similar share of singles among them (19% and 19.1%), and a similar share of individuals living in urban areas (82.9% and 87.8%). Non-western migrants have instead the highest share for males (53%), singles (22.8%), and individuals living in urban areas (97%). They also have the highest average number of children at home (1.2).

Regarding the integration variables, non-western migrants are once again the most different population group from the other two. They are the ones with the lowest share of individuals with higher education (31.9%) and the highest one for individuals who report to have language problems in reading or speaking Dutch (45.8%). Western migrants show instead the largest share of individuals with higher education (46.1%) and a slightly lower number of people who report having language problems (41.1%). Regarding active social contacts, the three ethnic groups show similar statistics. All three have a share of individuals who affirm to be active members of a sports club, cultural/hobby association, or religious group that is slightly above twenty percent, with non-western migrants showing the top statistic (24.3%). This might be explained by the high degree of religiosity among non-western migrants. In fact, around 95% of the Dutch residents with a Moroccan or Turkish migration background consider themselves Muslims. In comparison: only 50% of Dutch natives call themselves religious (CBS, 2009).

3.3 Methodology

To estimate the influence of having a migration background on the likelihood of being temporarily employed, I use Equation 1 below:

$$\mathrm{TE}_{it} = \beta_0 + \beta_1 \mathrm{MB}_i + \beta_2 X_{it} + \beta_3 \mathrm{P}_{it} + \beta_4 \mathrm{Se}_{it} + \beta_5 \mathrm{E}_{it} + \beta_6 \mathrm{LP}_{it} + \beta_7 \mathrm{SC}_{it} + \delta_t + \varepsilon_{it} \quad (1)$$

TE_{it} is the dependent variable which takes value one if individual i has a temporary contract, on-call contract, or temporary staffer contract at time t, and zero if the individual has a permanent contract or is self-employed; MB_i is a dummy variable which takes value one if individual i has a migration background and zero otherwise. X_{it} is a vector containing a set of variables measuring background demographic characteristics (age, age squared, gender, civil status, number of children at home, and whether someone lives in an urbanized area or not); P_{it} is the variable for profession and Se_{it} is the one for sector of employment; E_{it}, LP_{it}, and SC_{it} are the three integration variables for the factors that may influence the type of employment enjoyed by individual i at time t: level of education, language problems, and number of active memberships in social clubs respectively. δ_t are the calendar year effects I capture with the inclusion of year dummies and ε_{it} is the error term.

I employ the OLS estimator and cluster the standard errors at the household level to avoid correlation of the error term between observations of different individuals in the same household, as well as between different observations of the same individual over time. I do not use a fixed effects estimator since the migration background does not change over time. Further, to estimate the impact of the three integration variables on migrants' probability of being temporarily employed, I interact each of them with migration background, keeping the others as controls. For the sake of simplifying the interaction analysis, I treat each integration variable as a dummy (having or not higher education, having or not language problems, and having or not active social contacts). Finally, when I use an IV estimation technique to check the robustness of the OLS estimates, I instrument the dummy for language problems with an interaction between a variable for the migrant's age at arrival in the Netherlands and a dummy indicating whether he/she did not speak Dutch during childhood.

3.4 Results

Table 2 reports the estimation results for Equation 1. As the first three columns show, having a migration background always increases the chances of being temporarily employed, whether I include background variables and integration variables as controls or not. When including all control variables, an individual with a migration background is estimated to be 8.0 percentage points more likely to be temporarily employed than a native Dutch person. This estimate is statistically significant at the 1% level. Column 4 shows that this result is entirely driven by non-western migrants, who are 11.1 percentage points more likely to be temporarily employed than natives. Western migrants are 'only' 3.5

percentage points more likely to be temporarily employed than natives, but this estimate is insignificant at all confidence levels[5].

The estimates for the background variables have the expected signs and effect sizes: being one year older decreases the chances of being temporarily employed by 4.7 percentage points; age squared shows that the effect is increasing with age (+0.05 percentage points). Females are 4.2 percentage points more likely to be temporarily employed than males, while married individuals are 5.8 percentage points less likely to be temporarily employed than singles. Having children at home increases the chances of being temporarily employed by 0.6 percentage points per child, significant at the 10% confidence level.

Unsurprisingly, individuals in low-skilled professions (like semi- or unskilled manual work and agrarian professions) are around 10 percentage points more likely to be temporarily employed than those in high-skilled professions.

The three integration variables, here included as controls and not interacted with the migration background variable, do not yield estimates that are significantly different from zero.

The estimation results for the impact of the three integration variables on migrants' probability of being temporarily employed are presented in Panels *a* and *b* of Table 3, Table 4, and Table 5. Language problems appears to be the only integration variable significantly affecting a migrants' chances of being temporarily employed. Migrants with language problems are estimated to be 9.9 percentage points more likely of being temporarily employed than migrants without language problems, and 14.2 percentage points more likely to be temporarily employed than natives. As shown in Panel b, these numbers are largely driven by non-western migrants. Being a non-western migrant with language problems increases the chances of temporary employment by 13.5 percentage points with respect to those without language, and by 19.0 percentage points with respect to natives. All of these are significant at the 1% level.

Higher education and active social contacts appear to be not significant in explaining migrants' chances of being temporarily employed. Migrants with higher education are not less likely to be temporarily employed than those without, and the same is true for migrants with and without active social contacts, independently of ethnic background.

3.5 Robustness check

The results in section 3.4 point to language problems as the main mechanism affecting the chances of temporary employment for migrants. As Yao & van Ours (2015) explain, the estimation of the effects of language proficiency faces three potential biases. These are omitted variables and reverse causality

[5] As two additional forms of check, the results have been re-estimated, first, with a Random Effects model and, second, by running separates regressions for males and females. The estimates obtained in these checks do not present significant differences from the ones presented above.

on the one hand, which may cause an upward bias, and measurement error on the other hand, which may cause a downward bias.

Regarding omitted variable bias, several unobserved characteristics are potentially correlated both with the type of employment and language problems. For example, migrants with more free time or higher motivation can have more possibilities and desire to learn the Dutch language and also be more active in their job-seeking effort. Regarding reverse causality, it is reasonable to assume that migrants with permanent employment have a stronger motivation for learning Dutch. For instance, migrants temporarily employed in agriculture might have much less of an incentive to learn Dutch than migrants permanently employed in the Dutch public administration. Additionally, measurement error may be an issue since the measure of language problems I employ is self-reported. If individuals tend to exaggerate their language problems, this will lead to an underestimation of the language proficiency effect. In the case of this study, 11% of the Dutch natives in the sample report to have difficulties in reading or speaking Dutch. This is probably due to an exaggerated perception of one own's struggles, rather than an objective linguistic barrier as the one that foreigners may face.

To correct for these potential biases, I employ an IV strategy similar to the one proposed by Bleakley & Chin (2004, 2010) and subsequently used in other studies on the labor market position of migrants in the Netherlands (Yao & van Ours, 2015; Chiswick & Wang 2019). This method consists of instrumenting language problems with an interaction between two other variables: age at arrival in the Netherlands and a dummy indicating whether a migrant did not speak Dutch during childhood[6].

The first variable is a well-established determinant of migrants' host country language skills (Bleakley & Chin, 2004, 2010; Miranda & Zhu, 2013). Children who are early exposed to the host country language are likely to have good language skills in adulthood. Immigrants arriving at a later age face more obstacles in obtaining good host country language proficiency (Sweetman & van Ours, 2014). However, age at arrival may have non-language effects that also condition the labor market position of migrants. Therefore, the variable for age at arrival is interacted with a dummy indicating whether a migrant did not speak Dutch during childhood. Given this interaction, the identifying assumption is that non-language age-of-arrival effects are the same for migrants who spoke Dutch during childhood and those who did not (Yao & van Ours, 2015).

To correctly estimate the actual impact of language problems on migrants' probability of temporary employment, I restrict my sample only to individuals with a first-generation migration background who report their age at arrival in the Netherlands and exclude Dutch natives from it. For these reasons, the number of observations drops to 1331.

[6] Given the colonial past of the Netherlands and the fact that many individuals have migrated to the country when they were still children, the share of first-generation migrants who grew up speaking Dutch is considerable. In the sample used in this study, they constitute 45% of first-generation migrants.

The results of the IV estimation are reported in Table 6. Column 1 shows the estimate without instrumenting language problems. In that case, language problems increase the probability of being temporarily employed by 11.2 percentage points. The effect size is rather similar to the 9.9 percentage points obtained in panel a of Table 4, and similarly, it is significant at the 1% level. This shows that the reduction in sample size does not affect the accuracy of the estimation. Column 2 presents the estimated obtained with IV. The coefficient of the effect size grows from 11.2 percentage points to 18.1 percentage points. This estimate is significant at the 10% level. The increase in effect size suggests that the downward bias caused by measurement error is bigger than the upward bias caused by omitted variables and reverse causality.

For this instrument to be relevant, the assumption is that for first-generation migrants who grew up not speaking Dutch, arriving in the Netherlands at a later age increases language problems. This assumption can be checked in the first stage of the 2SLS estimation, reported in Column 3. The first stage estimate shows that for first-generation migrants who grew up not speaking Dutch, arriving one year later in the Netherlands increases the chances of having language problems by 1.5 percentage points. The estimate is significant at the 1% level.

For this instrument to be exogenous, the assumption is that non-language age-of-arrival effects are the same for migrants who spoke Dutch during childhood and those who did not. To test it, I follow Yao and van Ours (2015) and include age at arrival as an additional instrument. Although this implies the additional assumption that age at arrival does not affect the labor market position of migrants through other channels than language, it allows conducting a Hansen's J test of overidentifying restrictions. A statistically significant test statistic indicates that the instrument may not be valid. The result of this test and the updated IV estimates are presented in Column 4. The test score is 6.3 and it is significant at the 5% level. This casts some doubts on the validity of the instrument and its applications in the literature, as a certain degree of endogeneity cannot be excluded. However, the results of this exogeneity check show that the estimate for the effect of language problems is robust to the inclusion of age at arrival as an additional instrument and the effect size even grows to 21.8 percentage points.

4. Discussion

The finding that non-western migrants are the population group most likely to be temporarily employed is in line with previous evidence on their low employability and earnings in the Dutch labor market (Bijwaard & Veenman, 2007; Chiswick & Wang, 2019; Yao & van Ours, 2015). This result can be framed in the wider context of recent studies on countries with a similar migrant population. In Belgium, where the statistics for first-generation non-western migrants are comparable to the ones of the Netherlands but the labor market is less flexible, the population group is found by Piton & Rycx (2020) to face the same difficulties as in this study. Non-western migrants in Belgium are particularly penalized in terms of employability and earnings when they have language problems and higher education does

not seem to improve their condition. This suggests that the integration of first-generation non-western migrants is an issue for multiple European countries and not for just the ones with the most flexible labor markets.

Two plausible explanations for the results of the empirical part of this study come from factors I cannot exactly quantify in the estimation presented above: racial discrimination and preferences.

Discrimination towards individuals with a non-western background (or just with non-western appearance) is a well-documented phenomenon in the Dutch labor market (see Andriessen, 2012; Zorlu, 2003). Despite the aim of this study is not to precisely estimate it, when I control for demographic characteristics, profession, sector of employment, education, language problems, and social contacts, a part of the residual effect of migration background on the probability of being temporarily employed can be interpreted as the effect of racial discrimination.

Two additional factors suggest that discrimination plays a role in the labor market outcomes of non-western migrants. First, the Dutch population has the highest level of English proficiency among European countries that do not have English as a native language (Eurostat, 2018). This would limit the circumstances under which Dutch proficiency is essential for succeeding in the workplace. Second, the summary statistics show that western and non-western migrants do not report particularly different levels of language problems. Assuming that language problems have a major influence on temporary employment, when controlling for the other factors, western migrants should suffer a disadvantaged labor market position rather similar to the one of non-western migrants. However, the results do not show that, and this disparity might be interpreted as discrimination towards non-western migrants. Nonetheless, it should also be considered that having language problems may mean different things for these two groups.

Temporary forms of employment are generally intended to be a trampoline towards permanent employment, especially for the youth. It is often the case that young people prefer temporary jobs because they can be more easily combined with schooling and allow for more flexibility (CBS, 2018). Therefore, it may be argued that the results of this study are driven by a strong preference of young first-generation non-western migrants for temporary employment. Furthermore, migrants could have a preference for temporary employment because of fewer job obligations and less bureaucratic procedures in case of necessity to relocate again.

Despite there is no specific question in the LISS asking for a preference between a permanent and a temporary job, from the available data it is possible to derive some interesting insights about temporary employment by age, ethnic background, and career satisfaction. Figure 1 shows the percentage of individuals in temporary employment for the different ethnic groups by age. The majority of twenty-five-year-olds from all three ethnic groups are employed in temporary jobs, even though the share for individuals with a migration background is 20 percentage points higher (almost 80%). As age increases, the share of temporary jobs for western migrants drops and converges with the one of Dutch

natives. Interestingly, this does not happen for non-western migrants: individuals aged from 45 to 65 remain always ten percent more likely to be temporarily employed than Dutch natives[7].

As pictured in Figure 2, the career patterns of non-western migrants are also associated with the lowest average levels of job satisfaction. These values are taken from a question that asks the career satisfaction level on a scale from one to ten. Only 61.2% of people with a non-western migration background give a seven or more to their career, while 78.5% of Dutch natives do so. This lower average career satisfaction suggests that individuals with a higher probability of having temporary and low-skilled professions may feel more dissatisfied with their careers. This is supported by Figure 3, which shows that individuals with temporary jobs are considerably less satisfied with their career than permanent employees and self-employed.

These statistics about job satisfaction would not represent an issue if non-western migrants were mostly young people who just entered the labor market, but as Figure 1 shows, non-western migrants are the population group with the highest share of temporary professionals also in later age groups. For older individuals, temporary contracts can become a trap leading to possible risks of social exclusion (Bolhaar et al., 2018; Buiskool et al., 2016). Unfortunately, the available data offer limited scope to study the persistence of temporary employment over time. The LISS includes a question asking the number of temporary jobs a respondent has had up to the present only from 2016. When the data will be available for more years, it would be interesting to investigate whether individuals with migration background and language problems tend to have labor market trajectories characterized by a succession of temporary contracts. This kind of research would allow drawing conclusions on the persistence of temporary employment, preferences for temporary or permanent employment, and the trampoline-or-trap nature of temporary jobs.

4.1 Policy implications

Several policy implications can be derived from the results of this study. The over-exposition of non-western migrants to temporary employment may translate into job insecurity, high job transitionality, and eventually social exclusion, which can put upward pressure on welfare expenditures. Non-western migrants are also likely to spend, on average, more time than western migrants and Dutch natives in transitioning from one temporary job to another (Bijwaard & Veenman, 2007; Buiskool et al., 2016). Therefore, they will rely on unemployment benefits and other types of welfare contributions more frequently and for a longer time than western migrants and Dutch natives.

A policy that would be beneficial for both public finances and the job security of migrants would be a higher level of uniformity between the EPL for permanent jobs and the EPL for temporary ones.

[7] Given that the sample used in this study covers just ten years and most of the observations appear for only two consecutive years, it is not possible to distinguish between cohort effects and age effects. To do so, I would need to observe the same individuals over a longer period of time.

In fact, when strict protection of permanent employees is combined with liberal regulation for temporary ones, employers react by substituting the second for the first (Boeri et al., 2020; OECD, 2019). A more uniform EPL across permanent and temporary jobs would limit this outcome and would lead to more labor market security for migrants and more savings in public spending.

Furthermore, having identified Dutch language problems as crucial in increasing migrants' chances of being temporarily employed, it is relevant to formulate policy solutions that minimize them. Establishing training programs to improve migrants' language skills would foster their integration also in sectors that rely on a stronger mastery of the Dutch language as public administration, healthcare, and education. Furthermore, Zorlu & Hartog (2008) and Zorlu (2013) find that foreign degrees are a major reason for the missing returns to higher education obtained outside the Netherlands/EU. Better coordination between the Dutch and European educational systems and those of the migrants' home countries would allow for better matches between migrants' skills and their actual professions.

5. Conclusion

This study contributes to the literature on first-generation migrants and the one on flexible labor markets. By using the LISS panel data for the Dutch population from 2008 to 2017, I research whether individuals with a first-generation migration background are more likely to be temporarily employed than Dutch natives. The hypothesis is that due to poor education and/or education outside the Netherlands, language problems, and weak social contacts, first-generation migrants are more likely to be temporarily employed than natives.

The findings show that having a migration background increases the probability of being temporarily employed by eight percentage points, with an effect even stronger for individuals with a non-western migration background.

In addition, I assess the effects of three integration mechanisms on migrants' chances of being temporarily employed: education, language problems, and active social contacts. Among these three, only language problems appear to significantly increase migrants' probability of temporary employment. Non-western migrants with language problems are 19.0 percentage points more likely to be temporarily employed than Dutch natives. This result is proved robust by the employment of an IV estimation technique to tackle potential estimation biases. In line with the previous literature, having higher education and active social contacts do not significantly change a migrants' probability of being temporarily employed.

The particularly disadvantaged labor market position of non-western migrants compared to western migrants and Dutch natives is in line with previous academic findings on their employability and earnings. In addition to language problems, this could be explained also by racial discrimination. To improve their condition and reduce their reliance on the Dutch welfare state, I argue, based on my results, for more uniformity between the EPL of permanent workers and the one of temporary ones.

Furthermore, policies oriented towards increasing the language skills of non-western migrants would enhance their employability and diversify their professional paths.

A promising avenue for future research would be to explore whether migrants have a preference for temporary employment by investigating the persistence of their temporary employment over time.

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Figures and tables

Figure 1: Share of temporary employment across ethnic groups.

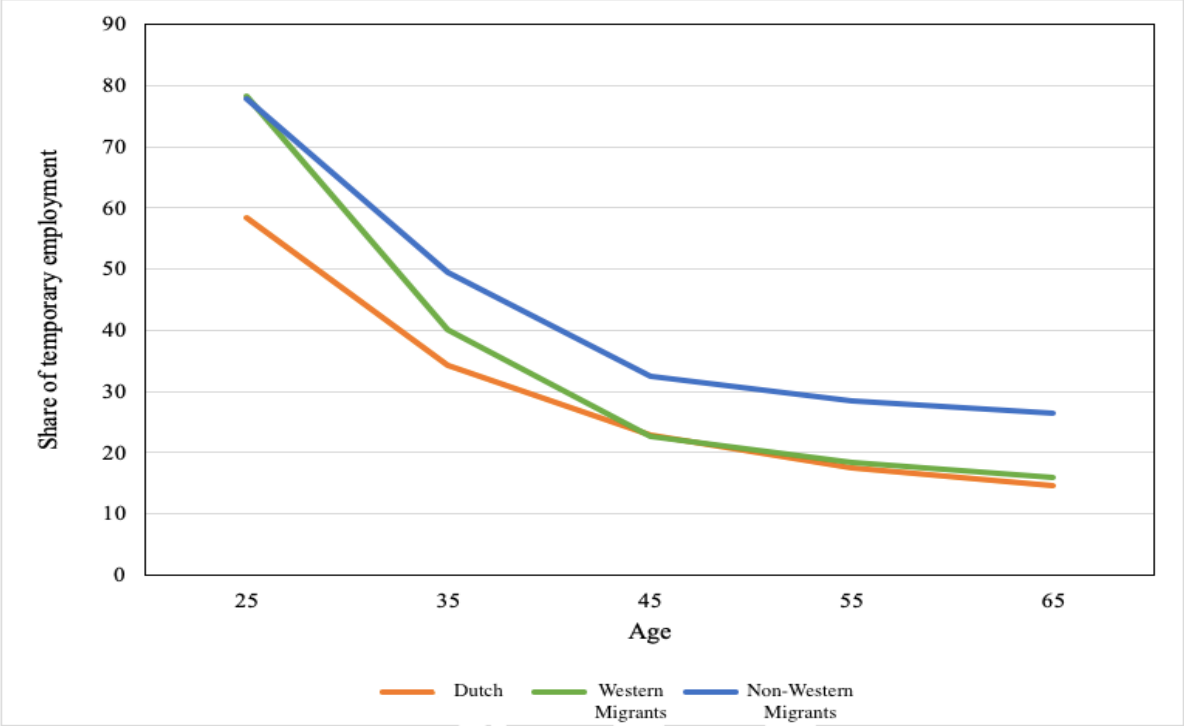

Figure 2: Career satisfaction level across ethnic groups.

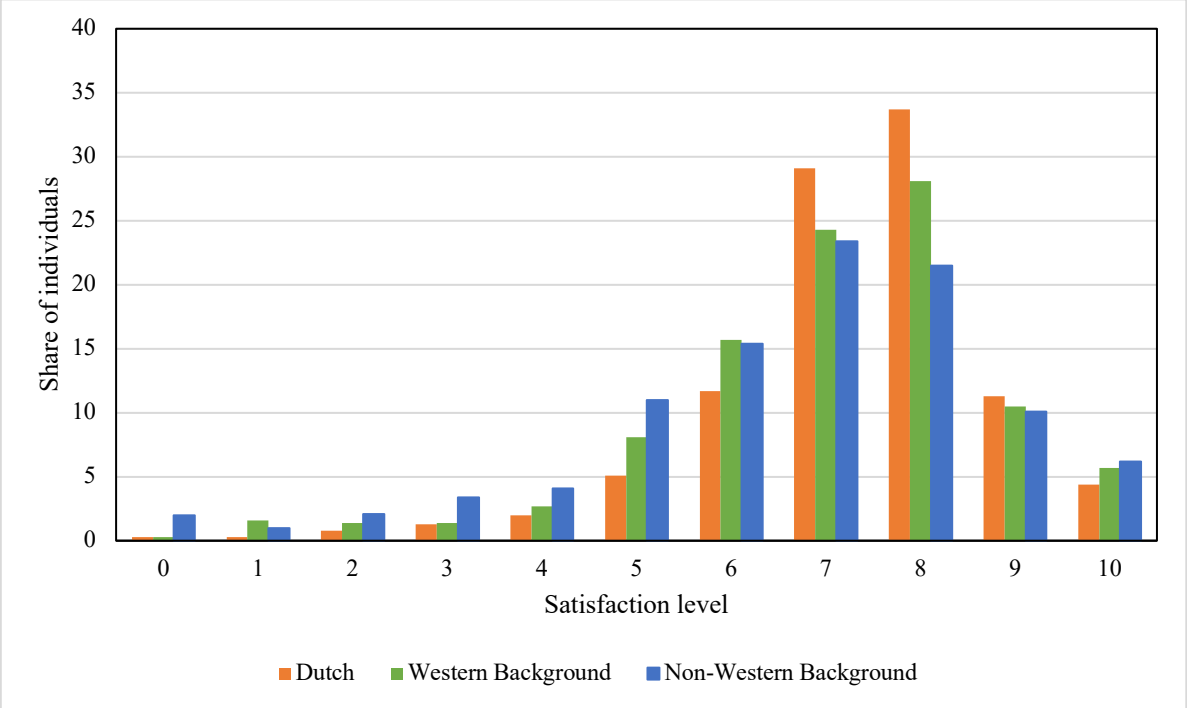

Figure 3: Share of people per satisfaction level across types of employment.

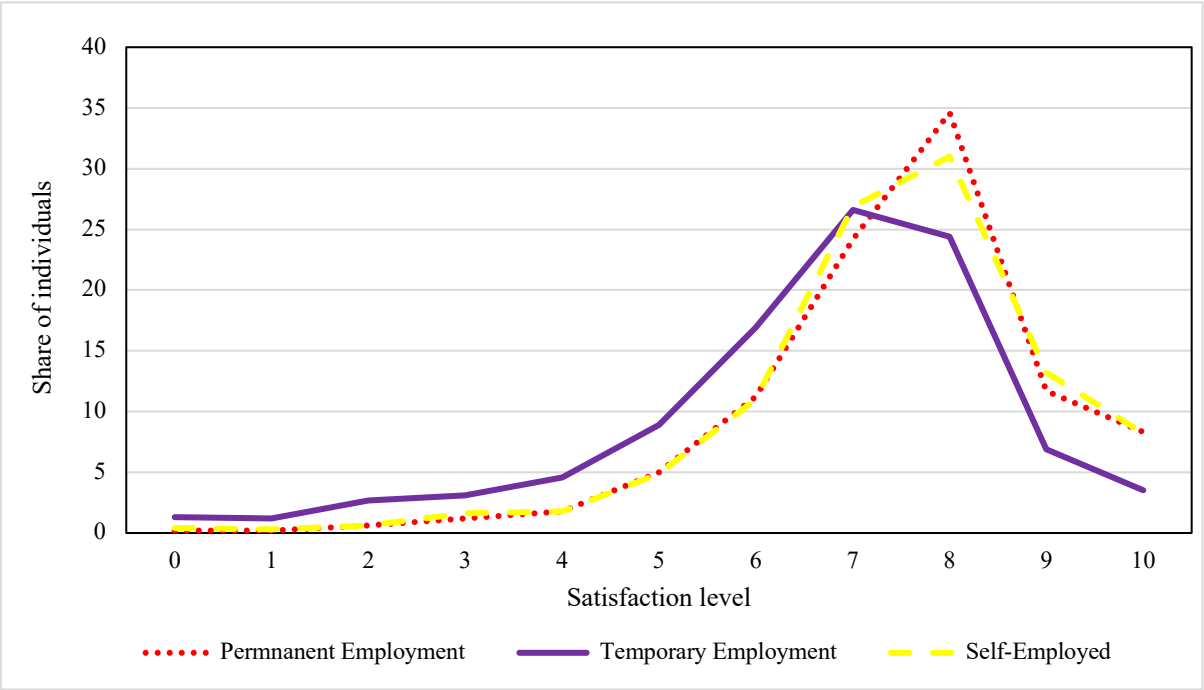

Table 1: Summary statistics.

	Dutch	Western Migrants	Non-Western Migrants
Demographic variables			
Age	43.9	44.6	43.1
Female (%)	53.1	52.5	47.7
Civil status: % single	19	19.1	22.8
Civil status: % unmarried partner, not living together	7.7	6.4	8.9
Civil status: % unmarried partner, living together	16.5	12.9	9.2
Civil status: % married	56.8	61.7	59.2
N. of children at home	1.0	0.8	1.2
Urban domicile (%)[8]	82.9	87.8	97.8
Integration variables (%)			
Level of education[9]: primary education	5.3	7.7	10.4
Level of education: lower secondary education	20.5	10.9	19.3
Level of education: intermediate secondary education	38.2	35.2	38.4
Level of education: higher education	36.0	46.1	31.9
Language problems	11.5	41.1	45.8
Active membership in social clubs[10]	22.7	23.0	24.3
Types of employment (%)			
Permanent contract	76.1	73.0	67.7
Temporary contract	9.7	11.3	16.8
On-call employee	3.0	1.6	3.5
Temp-staffer	2.0	3.0	6.1
Self-employed/freelancer	6.9	9.4	4.7
Independent professional	0.9	1.1	0.1
Director of a limited liability or private limited company	0.4	0.3	0.1
Majority shareholder director	1.0	0.3	1.1

[8] In an urbanized area population density is above 1500 people per square kilometer.

[9] The categories for level of education are taken from the CBS: primary education, lower secondary education (VMBO), intermediate secondary education (HAVO/VWO/MBO), and higher education (HBO/WO).

[10] Active membership in social clubs defines individuals that in the last month have taken part in the activities of a religious group, sports club, and/or hobby club.

	Dutch	Western Migrants	Non-Western Migrants
Profession (%)[11]			
Higher academic or independent profession	7.5	9.7	7.0
Higher supervisory profession	7.6	9.3	6.8
Intermediate academic or independent profession	24.6	24.2	18.7
Intermediate supervisory or business profession	13.0	11.2	6.0
Other mental work	24.5	18.4	21.1
Skilled and supervisory manual work	6.9	9.4	6.2
Semi-skilled manual work	6.7	7.5	12.0
Unskilled and trained manual work	7.7	6.2	18.4
Agrarian profession	1.5	1.3	3.7
Sector of employment (%)			
Agriculture, forestry, fishery, hunting	2.1	0.4	1.7
Mining	0.1	0.1	0.01
Industrial production	9.1	17.3	10.2
Utilities production, distribution and/or trade	0.8	0.7	3.7
Construction	4.2	3.5	2.8
Retail trade	8.4	8.6	6.3
Catering	3.7	3.5	6.5
Transport, storage, communication	4.3	4.3	3.2
Financial	4.3	3.6	6.4
Business services (including real estate, rental)	6.2	8.6	4.2
Government services, P.A., and social insurances	8.8	10.0	8.2
Education	8.9	8.4	7.7
Healthcare and welfare	20.5	13.8	14.4
Environmental services, culture, recreation, and other services	2.4	1.5	1.5
Other	16.1	16.0	22.8
Individuals	18199	535	811
N. of households	4977	226	326
N	26476	745	1104

[11] The categories for professions and sectors are taken from the LISS.

Table 2: Effects of migration background on the probability of temporary employment.

VARIABLE	Temporary Employment			
	(1) No demographic variables and integration variables	(2) With only demographic variables	(3) With demographic variables and integration variables	(4) With all variables and ethnic backgrounds
Origin: western				0.0352
				(0.0222)
Origin: non-western				0.111***
				(0.0229)
Migration background	0.0734***	0.0797***	0.0800***	
	(0.0181)	(0.0166)	(0.0165)	
Age		-0.0442***	-0.0444***	-0.0447***
		(0.00209)	(0.00212)	(0.00211)
Age^2		0.0004***	0.0004***	0.0004***
		(2.35e-05)	(2.40e-05)	(2.39e-05)
Female		0.0322***	0.0326***	0.0333***
		(0.00764)	(0.00767)	(0.00763)
Civil status: partnered, not living together		0.0122	0.0116	0.0114
		(0.0141)	(0.0141)	(0.0141)
Civil status: partnered, living together		-0.0236**	-0.0235**	-0.0232*
		(0.0118)	(0.0118)	(0.0118)
Civil status: married		-0.0508***	-0.0511***	-0.0507***
		(0.0101)	(0.0101)	(0.0101)
N. children at home		0.00518	0.00510	0.00483
		(0.00337)	(0.00339)	(0.00339)
Urban domicile		0.0106	0.0109	0.00993
		(0.00862)	(0.00861)	(0.00860)
Mining		0.0327	0.0334	-0.0347***
		(0.0580)	(0.0580)	(0.0128)
Industrial production		0.0365	0.0381	-0.0136
		(0.0255)	(0.0255)	(0.0130)
Profession: higher supervisory profession		-0.0341***	-0.0348***	-0.0347***
		(0.0127)	(0.0128)	(0.0128)
Profession: intermediate academic or independent profession		-0.0125	-0.0137	-0.0136
		(0.0128)	(0.0129)	(0.0130)
Profession: intermediate supervisory or business profession		-0.0164	-0.0179	-0.0175
		(0.0130)	(0.0136)	(0.0136)

Profession: other mental work	0.0269**	0.0256*	0.0253*
	(0.0129)	(0.0137)	(0.0137)
Profession: skilled and supervisory manual work	-0.00549	-0.00626	-0.00569
	(0.0156)	(0.0168)	(0.0168)
Profession: semi-skilled manual work	0.0903***	0.0922***	0.0918***
	(0.0196)	(0.0207)	(0.0206)
Profession: unskilled and trained manual work	0.110***	0.112***	0.110***
	(0.0195)	(0.0202)	(0.0201)
Profession: agrarian profession	0.0867**	0.0884**	0.0862**
	(0.0368)	(0.0375)	(0.0375)
Sector: utilities production, distribution and/or trade	0.0428	0.0437	0.0396
	(0.0339)	(0.0338)	(0.0342)
Sector: construction	0.0157	0.0183	0.0183
	(0.0275)	(0.0276)	(0.0277)
Sector: retail trade	0.0157	0.0177	0.0179
	(0.0259)	(0.0260)	(0.0261)
Sector: catering	0.127***	0.130***	0.129***
	(0.0311)	(0.0311)	(0.0313)
Sector: transport, storage, communication	0.0434	0.0447	0.0450
	(0.0279)	(0.0279)	(0.0279)
Sector: financial	0.0354	0.0364	0.0353
	(0.0270)	(0.0270)	(0.0272)
Sector: business services	0.0250	0.0256	0.0259
	(0.0259)	(0.0259)	(0.0260)
Sector: government services, PA, social insurances	0.0262	0.0275	0.0272
	(0.0252)	(0.0253)	(0.0253)
Sector: education	0.0588**	0.0609**	0.0600**
	(0.0264)	(0.0264)	(0.0265)
Sector: healthcare and welfare	0.0352	0.0361	0.0354
	(0.0255)	(0.0255)	(0.0255)
Sector: environmental services, culture, and other	0.0518*	0.0524*	0.0519*
	(0.0298)	(0.0298)	(0.0298)
Sector: other	0.0448*	0.0468*	0.0462*
	(0.0246)	(0.0247)	(0.0247)
Level of education: lower secondary		0.00591	0.00568
		(0.0158)	(0.0158)
Level of education: intermediate secondary		0.0182	0.0183
		(0.0154)	(0.0155)
Level of education: higher		0.0115	0.0121

			(0.0164)	(0.0165)
Language problems			-0.00123	-0.00148
			(0.00880)	(0.00880)
N. active memberships in social clubs: 1			-0.00170	-0.00194
			(0.00567)	(0.00566)
N. active memberships in social clubs: 2			0.0168	0.0172
			(0.0111)	(0.0111)
N. active memberships in social clubs: 3			-0.0181	-0.0179
			(0.0249)	(0.0249)
2009		0.00278	0.00262	0.00252
		(0.00549)	(0.00549)	(0.00549)
2010		0.00552	0.00528	0.00498
		(0.00632)	(0.00632)	(0.00633)
2011		-0.00426	-0.00473	-0.00474
		(0.00690)	(0.00691)	(0.00691)
2012		0.00667	0.00593	0.00591
		(0.00717)	(0.00720)	(0.00720)
2013		0.00623	0.00544	0.00535
		(0.00765)	(0.00770)	(0.00770)
2014		0.00712	0.00628	0.00610
		(0.00769)	(0.00774)	(0.00774)
2015		0.0156*	0.0143*	0.0144*
		(0.00803)	(0.00811)	(0.00811)
2016		0.0176**	0.0163*	0.0163*
		(0.00837)	(0.00845)	(0.00845)
2017		0.0174**	0.0163*	0.0163*
		(0.00866)	(0.00875)	(0.00874)
Constant	0.147***	1.114***	1.104***	1.109***
	(0.00386)	(0.0521)	(0.0531)	(0.0530)
Observations	28,325	28,325	28,325	28,325
R-squared	0.003	0.199	0.200	0.200

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.10

Table 3: Higher education.

Panel a: No ethnic background.

VARIABLES	(1) Temporary Employment	(2) Temporary Employment (average marginal effect when higher education=1)
Migration background	0.0839***	0.0748***
	(0.0217)	(0.0256)
Higher education	-0.00231	
	(0.00823)	
Migration background × Higher education	-0.00913	
	(0.0336)	
Constant	1.114***	
	(0.0524)	
Observations	28,325	28,325
R-squared	0.200	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Panel b: By ethnic background.

VARIABLES	(1) Temporary Employment	(2) Temporary Employment (average marginal effect when higher education=1)
Origin: western	0.0301	0.0429
	(0.0278)	(0.0343)
Origin: non-western	0.114***	0.106***
	(0.0296)	(0.0364)
Higher education	-0.00243	
	(0.00823)	
Western × Higher education	0.0128	
	(0.0432)	
Non-western × Higher education	-0.00775	
	(0.0475)	
Constant	1.119***	
	(0.0523)	
Observations	28,325	28,325
R-squared	0.200	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Language problems.

Panel a: No ethnic background.

VARIABLES	(1) Temporary Employment	(2) Temporary Employment (average marginal effects when language problems=1)
Migration background	0.0417**	0.142***
	(0.0187)	(0.0281)
Language problems	-0.0158*	
	(0.00873)	
Migration background × Language problems	0.0998***	
	(0.0324)	
Constant	1.113***	
	(0.0532)	
Observations	28,325	28,325
R-squared	0.201	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Panel b: By ethnic background.

VARIABLES	(1) Temporary Employment	(2) Temporary Employment (average marginal effects when language problems=1)
Origin: western	0.0235	0.0631*
	(0.0280)	(0.0349)
Origin: non-western	0.0554**	0.190***
	(0.0242)	(0.0392)
Language problems	-0.0155*	
	(0.00873)	
Western × Language problems	0.0396	
	(0.0441)	
Non-western × Language problems	0.135***	
	(0.0436)	
Constant	1.118***	
	(0.0532)	
Observations	28,325	28,325
R-squared	0.202	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5: Active social contacts.

Panel a: No ethnic background.

VARIABLES	(1) Temporary Employment	(2) Temporary Employment (average marginal effects when active social contacts=1)
Migration background	0.0827***	0.0716***
	(0.0188)	(0.0231)
Active social contacts	0.00180	
	(0.00541)	
Migration background × Active social contacts	-0.0111	
	(0.0262)	
Constant	1.105***	
	(0.0532)	
Observations	28,325	28,325
R-squared	0.200	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Panel b: By ethnic background.

VARIABLES	(1) Temporary Employment	(2) Temporary Employment (average marginal effects when active social contacts=1)
Origin: western	0.0394	0.0221
	(0.0246)	(0.0290)
Origin: non-western	0.113***	0.104***
	(0.0261)	(0.0329)
Active social contacts	0.00177	
	(0.00541)	
Western × Active social contacts	-0.0173	
	(0.0305)	
Non-western × Active social contacts	-0.00943	
	(0.0372)	
Constant	1.110***	
	(0.0531)	
Observations	28,325	28,325
R-squared	0.200	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Robustness check: IV estimation technique.

VARIABLES	(1) Temporary Employment (no IV)	(2) Temporary Employment (IV[12])	(3) Language Problems (relevance check)	(4) Temporary Employment (exogeneity check)
Language problems	0.113***	0.181*		0.218**
	(0.0360)	(0.0946)		(0.0865)
Instrument			0.0151***	
			(0.00171)	
Hansen's J statistic				6.3**
Observations	1,331	1,331	1,331	1,331
R-squared	0.243	0.238	0.344	0.235

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

[12] Language problems = age at arrival in the Netherlands × speaking non-Dutch during childhood.

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