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A longitudinal analysis of arrival infrastructures: The geographic pathways of EU labour migrants in the Netherlands

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Abstract

Although traditional migration research focuses predominantly on large cities as ports of entry for migrants, increasingly more migrants start in smaller cities and rural areas. These mobility patterns give access to specific arrival infrastructures with differentiated and often unequal opportunities. Current research has addressed the multiplicity and political nature of arrival infrastructures, but what happens after arrival remains a black box. By building on micro register data, this study employs a longitudinal approach to trace the trajectories of EU labour migrants in the Netherlands across time and space. Our findings indicate that among those who choose to remain in the Netherlands, internal migration is largely characterized by geographical immobility. When people did move to a different type of residential location, it was often to more urbanized places. As mostly migrants with a higher income made these moves, this strengthened the dualization of more precarious migrants in rural areas and more well-off migrants in larger cities.

KEYWORDS
arrival infrastructures, labour migrants, new immigration destinations, rural areas

1 | INTRODUCTION

Contemporary migrant arrival patterns have shifted. In Europe, the enlargement of the European Union has facilitated migration to labour markets in affluent economies, such as the United Kingdom (McCollum & Trevena, 2021; McGhee et al., 2013; Trevena et al., 2013), Norway (Rye & Slettebak, 2020), Germany (Fiałkowska & Piechowska, 2016) and the Netherlands (Engbersen et al., 2010). Agricultural, transport and packaging industries in the European Union rely heavily on low-wage and flexibly contracted migrant workers from predominantly Central and Eastern European countries (Rye & OReilly, 2021). As many migrant workers find or are allocated housing close to their worksite, this also influences the geography of arrival localities. At the same time, gentrification and housing financialization processes make it increasingly hard for low-income people, including migrants, to find housing in prime urban areas (Goodwin-Hawkins & Jones, 2022; Hochstenbach & Musterd, 2018; Kadi et al., 2020; Loomans & Kaika, 2021). As such, not only classic arrival neighbourhoods in large metropolitan areas but also suburban and rural places now function frequently as entry points for newcomers (King et al., 2021; McAreavey & Argent, 2018; Rye & Slettebak, 2020).

These new arrival destinations do not necessarily have the appropriate resources and facilities in place to accommodate newcomers (McAreavey, 2012). Starting in a small town could mean that you are far away from opportunities, such as better paying jobs, (language) schools, housing, medical care and the presence of a (migrant) community (Ulceluse et al., 2021; Van Liempt &

Miellet, 2021). Housing for migrant workers is sometimes even placed outside the town centre to keep migrants out of sight of the nonmigrant local population. This isolates migrants even more from daily facilities, threatening their well-being and possibilities to interact with the local community (Ulceluse et al., 2021). As labour migrants are expected to stay only temporarily, municipalities furthermore are often reluctant to establish appropriate facilities (McAreavey, 2012; Ulceluse et al., 2021). Migrants themselves also often see their first place of residence as a temporary foothold for finding something better once they have settled (McCollum & Trevena, 2021). Therefore, one's arrival place generally does not really depend on a conscious and explicit choice but is heavily influenced by employment opportunities, social networks or (international) recruitment agencies (Trevena et al., 2013).

However, what actually happens after arrival remains underexplored. There are few longitudinal studies that follow migrants, and we thus lack understanding of the extent to which new arrival places are really only temporary footholds. The aim of this contribution is to examine to what extent the arrival of migrant workers takes place in new arrival destinations (e.g., rural and smaller cities); to what extent migrants stay in these types of places or move towards larger cities; and how this differs between different types of migrant workers.

Theoretically, we employ an arrival infrastructure lens to study the residential trajectories of EU labour migrants. Arrival infrastructures are 'those parts of the urban fabric within which newcomers become entangled on arrival and where their future local or trans local social mobilities are produced as much as negotiated' (Meeus et al., 2019, p. 1). This perspective emphasizes that migrant mobilities are mediated by socio-material constellations that include not just physical structures such as roads and airports, but also EU laws, websites and apps, social networks and recruitment agencies (Lin et al., 2017; Ye & Yeoh, 2022). The arrival infrastructure literature is mostly conceptual or tends to focus on ethnographic case studies (Hanhörster & Wessendorf, 2020; Meeus et al., 2019, 2020; Schrooten & Meeus, 2020). So far, it has not been picked up in quantitative approaches to migrant arrival. This is unfortunate as an infrastructure perspective is helpful in acknowledging the diverse trajectories of migrants as well as the broad range of actors and channels that shape arrival. Moreover, register data is an excellent source to systematically investigate in what geographical and temporal patterns arrival infrastructures result.

We use Dutch fine-grained longitudinal register data and employ sequencing techniques to describe the first locations and subsequent spatial trajectories (for over 6 years) of all registered EU migrant workers who have arrived in the Netherlands between 2011 and 2014. By distinguishing between rural areas, suburban areas/smaller cities and larger cities, we are able to compare 'new' and traditional arrival destinations that represent different types of arrival infrastructures. We then use regression techniques to investigate the distinctives trajectories in time and space.

In the remainder of this study, we first discuss the conceptual history of arrival places. In Section 3, we explain how we translate an arrival infrastructure lens into a quantitative methodology. In Section 4, we then discuss the arrival places of migrant workers in the Netherlands, followed by a discussion of the different subsequent residential trajectories. We conclude with a discussion on how arrival and subsequent trajectories reflect a spatial dualization of migrant workers, as it are mainly more precarious migrants who start and stay in rural destinations, while more well-off migrants have access to the arrival infrastructures of larger cities.

2 | THEORETICAL FRAMEWORK

Ideas on the capacities of arrival places stem back to the studies of the Chicago School of Social Ecology. The highly influential model of concentric city development outlined how the city consists of concentric zones, including an 'urban transition zone' that is home to recent immigrant groups and ethnic stores and facilities. In these neighbourhoods, newcomers could find informal job opportunities, a thick migrant network with specific knowledge and facilities, public institutions and affordable housing. These—symbolic—resources were seen as essential stepping stones for upward social mobility and 'integration' (Burgess, 1925/1967). Over time, social mobility would also result in an 'improved' residential location, as 'assimilated'[1] migrants moved to suburban areas with better schools and other facilities (Burgess, 1925/1967; Massey & Denton, 1985). The ideas of the Chicago School have been particularly valuable in (amongst others) emphasizing the spatial context of social processes. This has inspired many scholars to theorize about the 'resourcefulness' of cities for arriving migrants (Cohen et al., 2022; Hanhörster & Wessendorf, 2020; Kurtenbach, 2017; Massey & Denton, 1985; Schillebeeckx, 2019; Wessendorf, 2018).

Recently, Meeus et al. (2019) coined the concept of 'arrival infrastructure'. Inspired by the infrastructural perspective in urban (Graham & Marvin, 2002) and mobility (Lin et al., 2017) scholarship, arrival infrastructures refer to socio-material constellations that shape the arrival of migrants. These can include a broad range of actors, institutions, places and practices from various layers of society. Their understanding of arrival extends and challenges the Chicago School (and studies in their vein) in a number of ways. First, although the Chicago School described social processes as natural and uniform, an infrastructural lens points towards how spatial trajectories are highly political and unequal. Infrastructures of power constituted by both human and nonhuman actors, including intermediaries, regulatory forces and materialities, produce the (lack of) opportunities and subsequent trajectories (Collins, 2012; Lin et al., 2017; Meeus et al., 2019). Second, Meeus et al. warn for 'telescopic urbanism' and point to the importance of processes and places outside the neighbourhood. National immigration policies, but also international ethnic ties and resources, can, for example, influence the arrival process (Zelinsky & Lee, 1998). Third, they shift

[1]This line of thinking has received various critiques including on the framing of assimilation as progress. See Feldmeyer, 2018, for a useful critical discussion of the Chicago School and assimilation models.

the focus from pre-established migrant neighbourhoods in large metropoles to the variety of places that accommodate newcomers. This is especially relevant as contemporary urban and mobility patterns differ greatly from the early 20th-century US context on which the Chicago School based their understandings of arrival places. Gentrification, deindustrialization and suburbanization processes mean that affordable housing and jobs are no longer predominantly located in the metropolitan areas (Alba et al., 1999; McAreavey, 2012; Ulceluse et al., 2021; Zelinsky & Lee, 1998). Therefore, migrants increasingly arrive in 'new immigration destinations' such as suburban and rural places (King et al., 2021; McAreavey & Argent, 2018; Rye & Slettebak, 2020) with different levels of housing market accessibility.

2.1 | Arriving in new destinations

Although job opportunities in a specific sector might initially draw immigrants to rural areas and smaller cities, these places often lack routes to other—better paying and more secure—employment positions (McAreavey, 2012). At the same time, municipalities are often hesitant in realizing additional services and amenities, such as housing, language schools or an appropriate regulatory framework (Baalbergen et al., 2023; McAreavey, 2012; Ulceluse et al., 2021). As a consequence, commercial intermediaries tend to have an important function within these arrival infrastructures, sometimes at the cost of social safety and well-being (Szytniewski & Van der Haar, 2022; Ulceluse et al., 2021). The experiences of migrants in suburban arrival places are less researched, but a few studies indicate similar types of infrastructures: low functional diversity, less established immigrant networks (El-Kayed et al., 2020) and no appropriate institutional social services (Boost & Oosterlynck, 2019), although their closer location to larger cities might make it easier to access these resources elsewhere.

An important assumed function of arrival infrastructures is their ability to shape future 'local or trans local social mobilities' (El-Kayed et al., 2020; Meeus et al., 2019). However, although the arrival infrastructure literature emphasizes their transformative power, the actual spatial and social mobility of migrants is rarely tracked (Kreichauf et al., 2020). Yet, this is important considering that new arrival destinations seem to lack some of the supportive resources of large cities and have different infrastructures with more room for commercial channels rather than state-organized infrastructures and established (migrant) social networks.

In this study, we focus in particular on the spatial trajectories of EU migrant workers to contribute to understandings of the longer-term workings of arrival infrastructures and new immigration destinations. We distinguish between rural, suburban areas/smaller cities and larger cities to account for the different types of arrival infrastructures. We then use sequence analysis to move beyond the moment of arrival. Sequence analysis captures the temporal aspect of social processes as a series of events (the sequence), which is treated as a unit of analysis rather than measuring phenomena at one point in time (Raab & Struffolino, 2022).

Recently, sequence analysis has gained popularity within migration studies (Chihaya et al., 2022; Kleinepier et al., 2015; Manting et al., 2021; Vogiazides & Chihaya, 2020), but only a few studies have used register data and sequence analysis tools to understand the geographical trajectories of migrants after arrival. This research, predominantly focused on refugees, indicates that the majority of migrants stay in the type of region of their first arrival place and that transitions happen mostly from rural to more urbanized regions (De Hoon et al., 2021; Vogiazides & Mondani, 2021). Refugees are, however, a specific case as they are often assigned their first residence location. These outcomes are thus not necessarily applicable to EU migrants, who can—in theory—choose where to settle but are heavily influenced by intermediaries and social networks. In this study, we apply this methodology to the EU migrant workers in the Netherlands.

3 | METHODOLOGY

3.1 | A quantitative approach to arrival infrastructures

This study uses a quantitative approach to investigate arrival infrastructures. To date, the arrival infrastructure literature is almost entirely qualitative or conceptual, using quantitative methodologies thus necessitates work in operationalization. In this section we will first explain how we define arrival infrastructures and how we can quantify these. Thereafter, we will focus more in-depth on the data and analysis techniques.

Arrival infrastructures are the place-specific socio-material constellations that mediate the migration arrival process. Using arrival infrastructure as a theoretical lens means acknowledging (1) **the diversity of arrival places**. In our analysis, we adhere this by differentiating between three different type of arrival places (rural areas, suburban and small cities, and larger cities). In this way, we distinguish between the traditional arrival places in densely populated places and arrival in 'new' immigration destinations, such as rural and suburban areas; (2) **the transformative potential of a place**. This means that place has the potential to fundamentally shape and influence the future trajectory of migrants, for better or for worse. We consider this by looking beyond the place of arrival and following migrant mobility over time; and (3) **the political and unequal nature** of migrant arrival and subsequent trajectories, relating to differentiated state policies, employment and housing opportunities. We investigate these inequalities through regression analysis, by questioning how trajectories differ along personal characteristics (sex, country of origin, life stage and economic status). We also include characteristics of the arrival infrastructure. In the literature many elements—for example, state employees, non-governmental organizations, shops, religious places, migrant services and restaurants—are brought forward. It is not possible to include all aspects that constitute the arrival infrastructure of a migrant in a quantitative way. In this study, we incorporate social housing, migrant networks,

employment opportunities and urban services. These dimensions are often found to be of importance in qualitative literature (Hanhörster & Wessendorf, 2020; Kurtenbach, 2017; Schillebeeckx, 2019).

It is important to note that there are also some elements of an infrastructural approach that we deviate from. The data we use is limited to the boundaries of the nation state, and essentializing categorizations such as 'migrant workers' or 'urban' are necessary for a meaningful exploration of this type of data. This contrasts with an infrastructural perspective that, for example, emphasizes how arrival infrastructures transcend territorial boundaries (Meeus et al., 2019). We bear these limitations in mind and aim for an interpretation of the quantitative data that is attentive to these considerations. This is, for example, done by not forefronting country of origin and not comparing newcomers to the standards of the nonmigrant population but rather by investigating and describing other axes of inequalities. Despite this, we argue that our quantitative approach does allow for a systematic and large scale analysis of arrival places and subsequent geographical pathways that considers numerous aspects of the infrastructure and migrant characteristics.

3.2 | The migrant population

This study focuses on EU labour migrants in the Netherlands. Between 2006 and 2021, the number of working migrants in the Netherlands has quadrupled to almost 1.2 million. Two-thirds of this group come from EU countries (Heyma & Vervliet, 2022). EU migrant workers are a diverse group and can be found in many employment sectors, varying from finance and business to agriculture. Here, employment agencies have an important role by 'channelling migrant workers from recruitment to work to accommodation' (Szytniewski & Van der Haar, 2022).

Migrants who (intend to) stay longer than 4 months in the Netherlands are required to register at their municipality of residence. Therefore, their first address and all following formal addresses of all legal and longer-term migrants are included in the Personal Records Database. This, in turn, can be traced in the databases of Statistics Netherlands (CBS), which is linked to other register data on demographic and socioeconomic characteristics. This full population register database is used to build the data set for this study.

For this analysis, we include all EU migrants who find employment within 2 years upon entry[2] except students. In this way, we are able to also include migrants who needed longer to find work or who came as a couple. We follow migrants spatially over a period of 6 years. This timeframe makes it possible to include multiple cohorts (2011–2014[3]) and take the most recent available data into account (2020). Migrants are most mobile in their first years of settlement (Trevena et al., 2013) so we assume that 6 years captures a significant part of their residential trajectories. Sequence techniques are then used to construct individual spatial trajectories for 122,476 migrant workers.

It should be noted that this analysis does not include *all* residential transitions, nor all migrants. People do not always live where they are registered. The most precarious migrants, such as migrants experiencing homelessness, are most likely not registered at all. Their trajectories will thus not appear in the analysis. This, in general, is a downside of working with register data. A major advantage is that it includes the full registered population and therefore does not have the same issues of the sample bias that many survey studies for example bring.

3.3 | Rural, suburban and urban locations

The elements that make up the spatial sequence in this study are based on the annual measurement of the level of urbanity of the neighbourhood of residence. Although this does not account for moves within the same type of residential environment, this is adequate for this analysis, as we are not interested in residential mobility per se but specifically focus on residential moves to other type of arrival infrastructures.

The following categories of places are distinguished: rural (<1000 addresses per km^2), suburban areas and smaller cities (1000–2500 addresses per km^2), larger cities (>2500 addresses per km^2) and emigrated (no address[4]). These categories are based on the degrees of urbanization of Statistics Netherlands at the neighbourhood level. Figure 1 presents a map of the geography of these places in the Netherlands. In the Netherlands, the degree of urbanity has implications for many relevant factors of arrival infrastructures. In comparison with larger cities, rural areas are characterized by a limited supply of social housing, fewer migrants and migrant services on average and fewer schools, shops and health care centres (De Hoon et al., 2021. By car, these places are mostly well connected, but many rural areas lack reliable and frequent public transport options (Bastiaanssen & Breedijk, 2022). Jobs are more diverse, more available and better paid in highly urban areas, although these areas are also highly unequal in terms of income (Buitelaar et al., 2016). Suburban areas and smaller cities lie in between these two categories, although it is easier for residents of these to reach the infrastructures of larger cities because of physical closeness. Of course, there are also differences within these categories. Rural areas in a central region are, for example, more orientated towards large cities. In the regression analysis, we will take these differences into account by adding environmental variables to the model (see end of this section).

[2]This deviates from the official classification of Statistics Netherlands, which includes only migrants who find work within 120 days and excludes migrating partners who find work after their partner.

[3]Migrants who have multiple arrival dates within this time frame (due to remigration patterns) are counted as new cases due to data limitations.

[4]Technically, people without an address can still be in the Netherlands, but there is no easy way to verify this based on the register data.

FIGURE 1 Map of the Netherlands distinguishing between larger cities, suburban areas/smaller cities and rural areas.

3.4 | Empirical strategy: Sequence analysis and multinomial regression modelling

A spatial trajectory was constructed for each migrant individually using sequence analysis. Sequence analysis is a set of analytical tools that represent strings of observations in a sequence of states. In this project the possible states are rural, suburban areas/smaller cities, larger cities and emigrated. For each person in the data set, a sequence is thus created that capture these states for over 6 years. With sequence analysis the unit of analysis is the whole trajectory. This is particularly suited for a longitudinal analysis of arrival places, as it not only captures the place of arrival, but also takes into account where migrants reside after a few years. Rather than a cross-sectional design that looks at one point in time or event history analysis that includes one transition, this will show us multiple transitions and their timing.

Sequence analysis is a descriptive method and therefore often used together with cluster and regression analysis. Cluster analysis groups individual sequences[5] together based on similarity producing clusters of trajectories. In our study, these clusters represent typical trajectories, such as staying in rurality or emigration from rurality. Together these methodologies thus form a good approach to create a typology of arrival trajectories including potentially more complex pathways with multiple transitions. We explored different clustering techniques (Pam, Ward and Pam + Ward), as well as different substitution costs (theoretical cost, data-driven cost and constant cost). These 'cost' quantify the difference between two sequences and enable us to cluster sequences that are similar. The selected Ward cluster solution of 11 clusters with indel and substitution cost at 2 differentiated best between the arrival places and therefore yielded the theoretically most interesting results. Cluster solutions with more than 11 clusters did not result in theoretically more interesting results and did not

[5]To enhance computing time, the sequences were aggregated and weighted using the WeightedCluster package in R (Studer, 2013).

increase the cluster quality indicators[6] substantially. For the sequence and cluster analysis, we used the TraMineR and the WeightedCluster packages in R (Gabadinho et al., 2011; Studer, 2013).

After having identified the clusters of spatial trajectories, multinomial regression models were used to analyse the probability of belonging to one of the clusters. The analysis was split into three models (differentiated by arrival location) to enhance the interpretation of the models. As an infrastructural approach acknowledges that arrival is an unequal process, we, in this study, explored different experiences based on personal socioeconomic characteristics as well as some relevant characteristics of the arrival neighbourhood. We included *sex*, *country of origin*,[7] *age*, *partner status* and *having a child* to account for life stage and demographic background. *Income* and *employment sector* were used to represent the economic status of a migrant. We also included several environmental variables at the level of the neighbourhood or municipality of the migrant. These include *share of migrants*, which is based on the share of Western migrants in the neighbourhood. This is a category from the Netherlands Statistics that includes Europe, the United States, Japan and Oceania. Although this category is not a direct representation of a potential ethnic community, it can serve as a rudimentary proxy. *Share of social housing* is included to measure the availability of affordable housing in the municipality, and *macro region* distinguishes between central, intermediary and periphery regions of the Netherlands. Central refers to the Randstad, a highly urbanized region with interconnected large cities. In terms of economy, this zone is dominated by the financial sector in Amsterdam and the port of Rotterdam. Intermediary includes more varied subregions with various larger cities, such as Eindhoven, Arnhem and Tilburg, but also rural areas where the agriculture and packaging industry are present. Periphery includes few urban cores (Groningen and Maastricht are most noteworthy here) and large rural areas in which agricultural activities/agribusiness dominates. Distances between rural locations and urban centres are significantly shorter in the Randstad compared to the periphery. Last, we included the dichotomous variable *geographic isolation*, which differentiates between rural arrival places that are more than 3 km away from a big supermarket and neighbourhoods that are not. As facilities are often clustered, being far away from a supermarket often means that you are also far away from other services. These environmental variables represent a selection of resources that constitute arrival infrastructures and signify differences within similar categories of urbanity. All variables were measured in t1 (a maximum of 1 year after immigration) as including time-varying variables is not possible with this type of sequence analysis.

[6]This solution had an Average Silhouette Width of 0.49, a Point Bi-serial Correlation of 0.66 and a Hubert's C index of 0.7. This indicates a reasonable cluster quality. See Raab and Struffolino (2022) for a discussion of the meaning of cluster quality indicators and sequence techniques.

[7]To enhance the interpretation of the data and avoid categories with too little numbers, we merged all countries with less than 1250 cases (Malta, Ireland, Luxembourg, Cyprus, Austria, Former Yugoslavia, Denmark, Sweden and Finland).

4 | RESULTS

4.1 | Arriving in the Netherlands

The first analysis of places of arrival shows that the arrival of EU migrant workers in the Netherlands is clearly not just a metropolitan phenomenon. Table 1 presents the arrival destinations of EU migrants and reveals that more than half of the population starts in 'new' arrival destinations (26% in rural areas and 29% in suburban areas and smaller cities) compared with larger cities (45%). Both the shares of rural and high-urban destinations have grown between 2011 and 2014, while the share of EU migrants who first arrived in suburban areas and smaller cities has shrunk accordingly.

Comparing their demographic and socioeconomic profiles, we can see salient differences between EU migrants who first reside in rural locations, suburban areas/smaller cities and larger cities. EU migrants who first move to *rural locations* are more often male, they are relatively older and they more often immigrate as a single person. Polish migrants are strongly overrepresented in this group (67%) even in the context of their overall overrepresentation in the population (42%). Belgians are as well, but this is probably due to cross-border property purchase. Lower-income households are overrepresented amongst rural EU migrants and they more often work for employment agencies, most likely in agricultural jobs,[8] or for the agricultural industry directly.

EU migrants who first arrive in *large cities* indeed have a different profile, with a larger share amongst them being younger and childless, arriving with a migrant partner, originating more often from Southern and Western Europe, working in the service sector, most often in financial services or wholesale and retail, and, accordingly, belonging to higher-income groups.

For most of these characteristics, EU migrants moving to *suburban areas and smaller cities* lie somewhere in between the other two groups, with the exception that they more often arrive with children, move in with Dutch partners upon arrival and more often work in manufacturing and industry as well as in transport and logistics.

4.2 | Beyond arrival: Spatial dualization consolidated

To see to what extent EU migrant workers stay in the same type of residential environment, leave the Netherlands or move to a different type of environment, we first looked at their residential locations after 6 years (Figure 2). We can see that emigration rates are very similar for all three arrival locations: between 42% and 46% of all migrants who moved to the Netherlands between 2011 and 2014 had left the country 6 years later. In other words, despite the fact that these locations represent different strata from the EU working

[8]The specific sectors in which migrants working through recruitment agencies are placed is unknown.

TABLE 1 Places of arrival by demographic and economic characteristics of migrants in t1, in %.

In %	Rural areas	Suburban	Larger cities	Overall	In %	Rural areas	Suburban	Larger cities	Overall
Sex					Country of origin				
Female	41.4	43	44	43.0	Poland	67.1	50.8	27	44.4
Male	58.6	57	56	57.0	Belgium	5.6	2.3	2.2	3.1
Age (years)					Bulgaria	0.8	2.3	5.6	3.4
18–24	26.4	25.6	23.4	24.8	Former CS	2.4	2.8	2.5	2.6
25–34	43.3	46.8	51.6	48.0	Former SU	3	3.2	3.3	3.2
35–44	19	17.9	17.2	17.9	France	0.9	2.6	6.1	3.7
>45	11.3	9.6	7.9	9.3	Germany	3.6	6.3	7.4	6.1
Migrating with child	15.6	17.6	12.8	15.0	Greece	0.9	2.8	4.3	3.0
Partner status					Hungary	4.3	4.8	4.9	4.7
No partner	64.6	57.9	58.5	59.9	Italy	1.1	3.9	8.6	5.3
Dutch partner	5.8	7.4	5.7	6.2	Other	1.2	2.8	5	3.2
Migrant partner	29.6	34.7	35.8	33.9	Portugal	2.5	3	3.8	3.3
Income					Romania	3.1	3.2	3.4	4.8
1st quartile	25.7	22.2	22.4	23.2	Spain	1.3	4.2	7.3	6.0
2nd quartile	29	24.5	18.9	23.1	UK	2.2	4.9	8.8	3.4
3rd quartile	22	24.5	23.1	23.2	Cohort				
4th quartile	15.1	22.1	28.7	23.3	2011	25.7	31.2	43.1	23.2
Unknown/negative	8.2	6.6	7	7.2	2012	25.6	29.5	44.9	22.8
Employment sector					2013	25.7	29.3	44.9	24.4
Employment agencies	42.6	34.5	21.6	30.8	2014	26.4	27.5	46.1	29.6
Unknown	24.1	18.7	17.6	19.6	Total (*N*)	31,707	35,852	54,917	122,476
Agriculture	5.8	2	1.2	2.6					
Manufacturing and industry	5.1	7.4	5	5.7					
Construction	2.9	3.6	4.1	3.6					
Wholesale and retail	6.1	8.5	10	8.6					
Transport and logistics	2.1	2.5	1.9	2.2					
Hospitality	2.1	4.7	6	4.6					
Creative	0.6	1.2	4	2.3					
Financial and business services	2.3	6.5	14.9	9.2					
Public services	1.8	4.2	6.9	4.8					
Other services	4.5	6.4	6.8	6.1					

migrant population, and often lack adequate arrival structures, leaving the country after a couple of years is the most likely outcome in all of them, signifying more fluid states with regard to their cross-border migration patterns.

Meanwhile, migrants who stay in the Netherlands mostly stay in the same type of location they arrived in initially. In arrival locations of high urbanity, more than 40% of EU working migrants still lived there 6 years later. In suburban areas and smaller cities, the share of stayers amounts to 36%, while about 32% of all migrants stay in rural locations.

The sequence and cluster analysis provides a more detailed picture of EU migrant workers' spatial trajectories in the Netherlands including transitions, timing and order. Figure 3 first confirms the previous analysis in the predominance of emigration clusters overall (i.e., clusters 3, 4, 8 and 11 combined). Around 42% of all EU working migrants can be put in either of the four categories: 'quick emigration

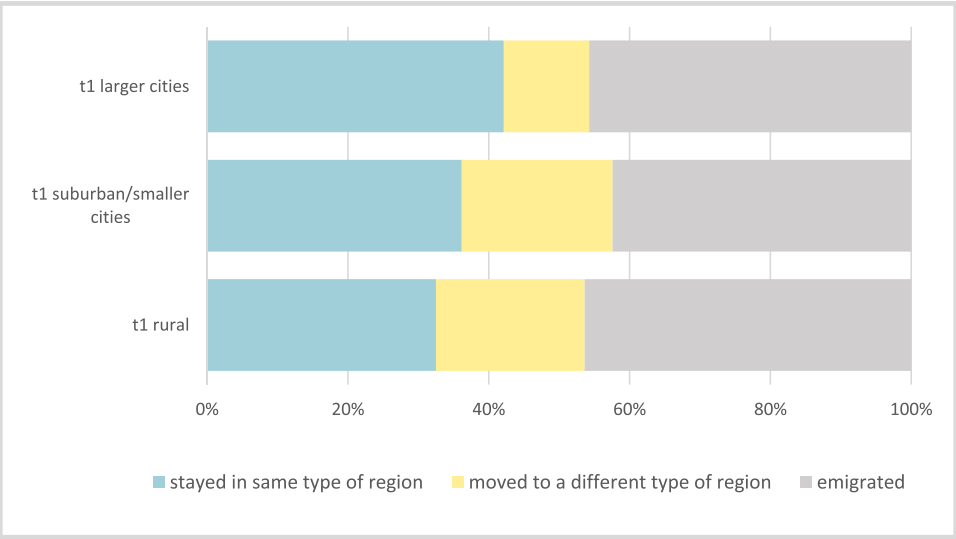

FIGURE 2 Residential status after 6 years by arrival location.

from suburban areas/smaller cities', 'late emigration from suburban areas/smaller cities', 'emigration from rural' or 'emigration from larger cities'. Emigration happens mostly within the first 4 years.

Second, we can again see that staying within the initial type of residential location is more common than moving up or down the urbanity ladder. This holds true for all three arrival locations: Although 23% of all EU working migrants fall under the 'staying in larger cities' cluster, 4% follow a spatial trajectory in which they move towards suburban areas or smaller cities within 6 years. Moving from larger cities to rural locations appears to be particularly uncommon and thus does not form a cluster on its own. Of all EU working migrants, 12% follow the 'staying in rural locations' pathway, while only 1% falls under the 'from rural to larger cities' cluster. Similarly, 'staying in suburban areas/smaller cities' accounts for 12% of the migrant population, whereas the 'suburban areas/smaller cities to larger cities' cluster accounts for 2% of all cases. Again, moving towards rural places is relatively uncommon and does not warrant its own cluster. Moving up in level of urbanity (i.e. from rural to suburban areas/smaller cities or larger cities) is thus more common than moving down (i.e., from larger cities to suburban areas/smaller cities or rural areas). Transitions to other types of residential locations appear to take place mostly between the second and the fourth year after arriving in the Netherlands (Figure 4).

4.3 | Determinants of different trajectories

In the previous analysis, we have shown that those who first arrive in rural, suburban areas/smaller cities and larger cities have different economic and sociodemographic profiles. Accordingly, we used these different arrival locations as starting points for our further analysis, meaning that we split the sample by arrival location and tracked migrant's trajectories for each of those. We ran three separate multinomial regression models: The first for migrants who arrive in rural locations and then follow one of the four spatial trajectories 'staying in rural', 'rural to emigration', 'rural to suburban areas/smaller cities' and 'rural to larger cities'. The latter two were combined in the regression analysis, because they showed similar types of trajectories (upwards urbanization) and results, but they produced more robust outcomes due to higher sample size. The second model consists of those who arrive in suburban areas or smaller cities and follow the 'staying in suburban areas/smaller cities', 'moving to larger cities' or 'from suburban areas/smaller cities to emigration' trajectories, for which the quick migration and late migration clusters were combined for similar reasons as described above. The third model focuses on spatial trajectories among high-urban migrants, comparing migrants who stay in those places, move towards suburban areas/smaller cities or emigrate to another country. Staying in the same level of urbanity is used as the reference category in all three models and results are presented as predicted probabilities for more intuitive interpretation—the full regression result tables can be found in the Appendix.

4.3.1 | Rural areas

As compared with those who remain in rural locations, our analysis reveals that migrants who move up in urbanity are younger, more often have a Dutch or foreign partner when moving to the Netherlands, have a relatively high income and less frequently work in the agricultural sector (or, the other way round, working in agricultural jobs is a strong predictor for staying in rural locations). Germans are more likely to move towards locations of a higher urbanity level, whereas Belgian migrants are the least likely to do so (which is probably due to the fact they are most likely to reside in rural locations near the Belgian border).[9]

[9]Probabilities are limited to migrant groups that are overrepresented (e.g., the four largest groups of country of origin or employment category. See Appendix for all other probabilities).

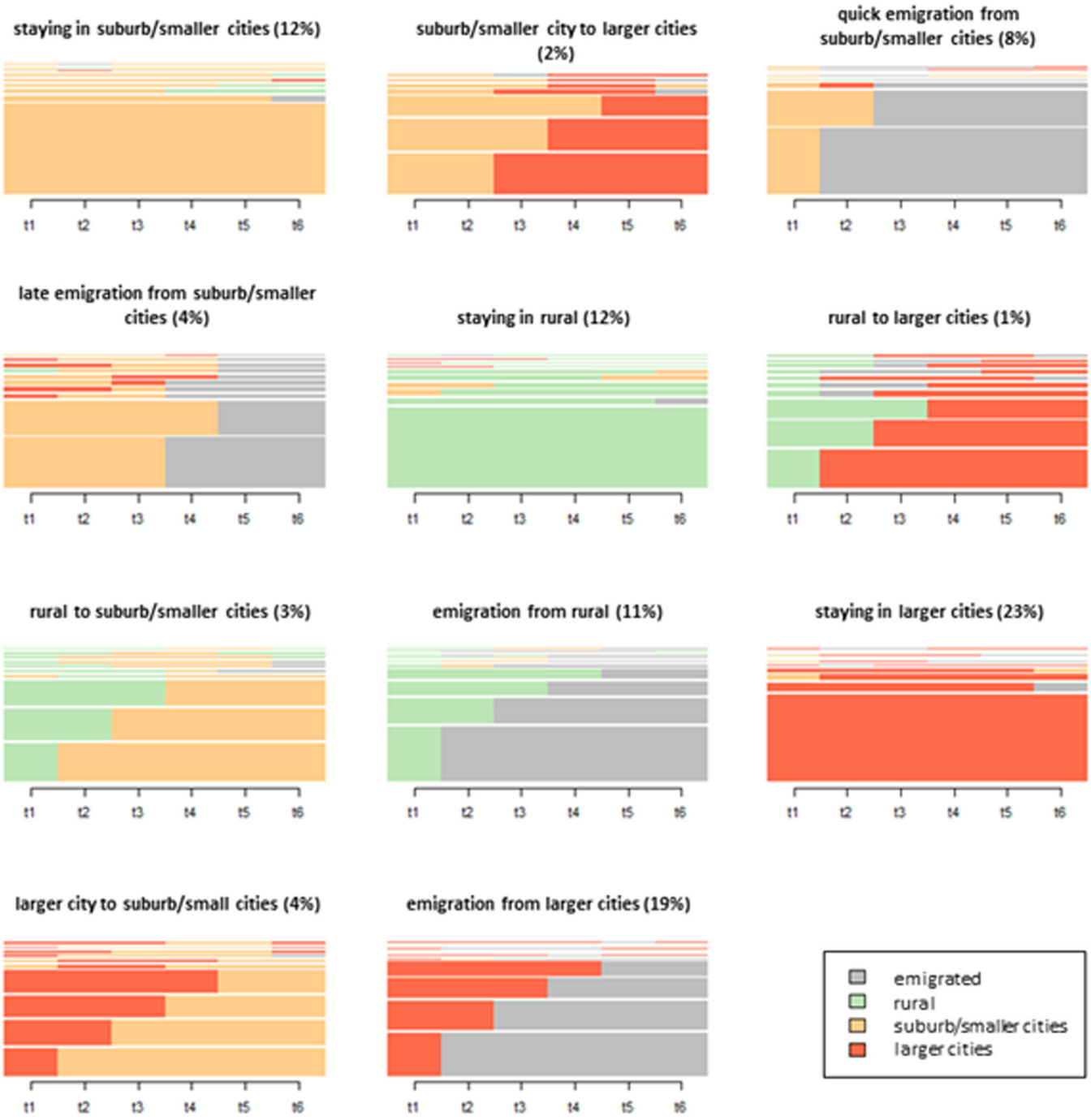

FIGURE 3 Sequence analysis clusters.

Looking at arrival infrastructure factors in our model (see Figure 5), we can see that migrants in the central Randstad region of the Netherlands are much more likely to move towards larger cities. Furthermore, we can see that the presence of a large social housing sector and, to a smaller extent, the presence of a larger migrant community in the arrival locality and its geographic isolation (more than 3 km away from the nearest supermarket) decrease the likelihood of moving towards larger cities or emigration.

In some regard, migrants who emigrate from rural locations are more similar to those who move towards non-rural environments; however, there are some different characteristics as well. Low-income migrants are more likely to leave the country and they more often enter the Netherlands as single-person households. Furthermore, compared with Polish people, migrants from Western and Southern Europe are more likely to emigrate than to stay in rural locations or move towards higher urbanity.

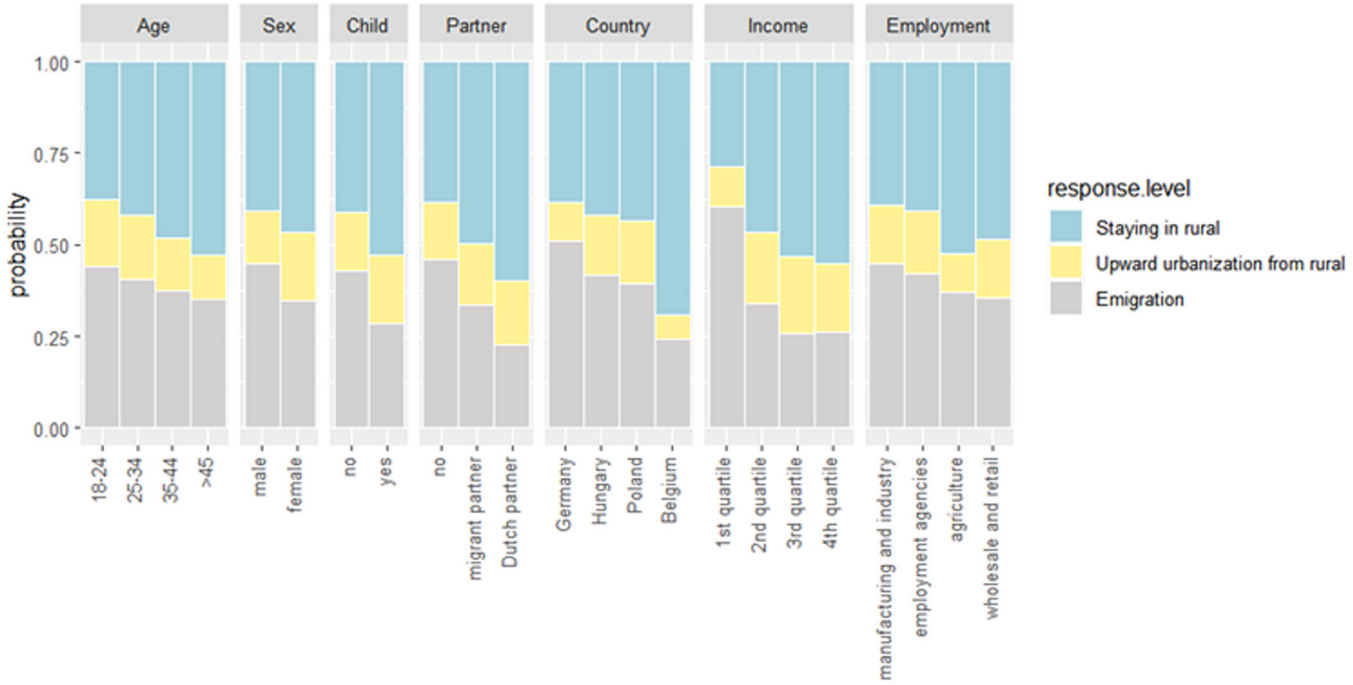

FIGURE 4 Predicted probabilities individual variables for migrants starting in rural arrival places (to increase legibility, only the four categories that are most present in rural areas are shown for country of origin and employment sector; full results can be found in the Appendix. The model is controlled for cohort.).

FIGURE 5 Predicted probabilities arrival infrastructure characteristics for migrants starting in rural arrival places.

4.3.2 | Suburban locations and smaller cities

The second set of (Figures 6 and 7) shows the regression results for suburban areas and smaller cities. Here, we can see that, again, age seems to be a strong predictor for staying in a similar type of residential location. Migrants without children and higher-income migrants have a higher chance of staying as well. Meanwhile, having a job in a sector that is typically located in higher urban areas, such as the financial sector, more often coincides with a move towards larger cities. Arrival infrastructure

FIGURE 6 Predicted probabilities individual variables for migrants starting in suburban and smaller arrival places (to increase legibility, only the four categories that are most present in suburban areas and smaller cities are shown for country of origin and employment sector; full results can be found in the Appendix. The model is controlled for cohort.).

factors are similar to the rural migrant population, but differences are less pronounced.

4.3.3 | Larger cities

Finally, we look at the trajectories of EU working migrants who first enter the Netherlands in its most urbanized areas (Figures 8 and 9). Here we can see that having a Dutch partner when moving to the Netherlands is a strong predictor of both staying in larger cities and moving to suburban locations or smaller cities during the first 6 years after arrival. Western European migrants (as compared to Polish ones) have a stronger likelihood of staying in larger cities as well as a higher probability of emigration. Moreover, higher-income households are more likely to move to suburban places, whereas lower-income households are more likely to emigrate from larger cities.

Taking into account spatial factors, our analysis further reveals that EU working migrants have a higher probability of staying in larger cities within the central Randstad region. Moving from larger cities to suburban areas or smaller cities appears to be more likely in the periphery of the Netherlands and the intermediary zone particularly. Interestingly, a higher share of social housing in the municipality in which migrants first reside increases the likelihood of both a trajectory towards suburban places and emigration. Reason for this could be that migrants do not fulfil the income requirements or have not acquired enough waiting time to access social housing.

4.3.4 | Comparing trajectories from different arrival infrastructures

Overall, the three regression models show that for all arrival localities especially income, relationship status and country of origin, seem to predict well whether a migrant stays in the arrival destination, moves to a different type of place or emigrates all together.

Regarding arrival infrastructure characteristics, we first included the geographic location (central, intermediary or periphery zone) as an indicator for employment opportunities and the national position of arrival places. This showed that migrants arriving in the central regions of the Netherlands have the highest probability of moving towards more urbanized areas. This is possibly due to the fact that this region is generally more urbanized, meaning that commuting distances remain shorter for those who work in rural locations but seek to live in larger cities. This also makes it easier for migrants to access resources outside their rural or suburban arrival local. It could also mean that these migrants move because of better job opportunities in larger cities in central areas.

Second, a higher degree of social housing, taken as a proxy for affordable and accessible housing, in the most urbanized arrival places increased the chances of moving to suburban areas or smaller cities, while in rural arrival places this increased the chance of staying put. This might be because social housing in rural areas has shorter waiting lists and is therefore generally more quickly accessible to migrants. In urban areas, a high degree of social housing might thus actually refer to an arrival infrastructure with a *lack* of accessible affordable housing, thereby functioning differently than originally

FIGURE 7 Predicted probabilities arrival infrastructure characteristics for migrants starting in suburban and smaller arrival places.

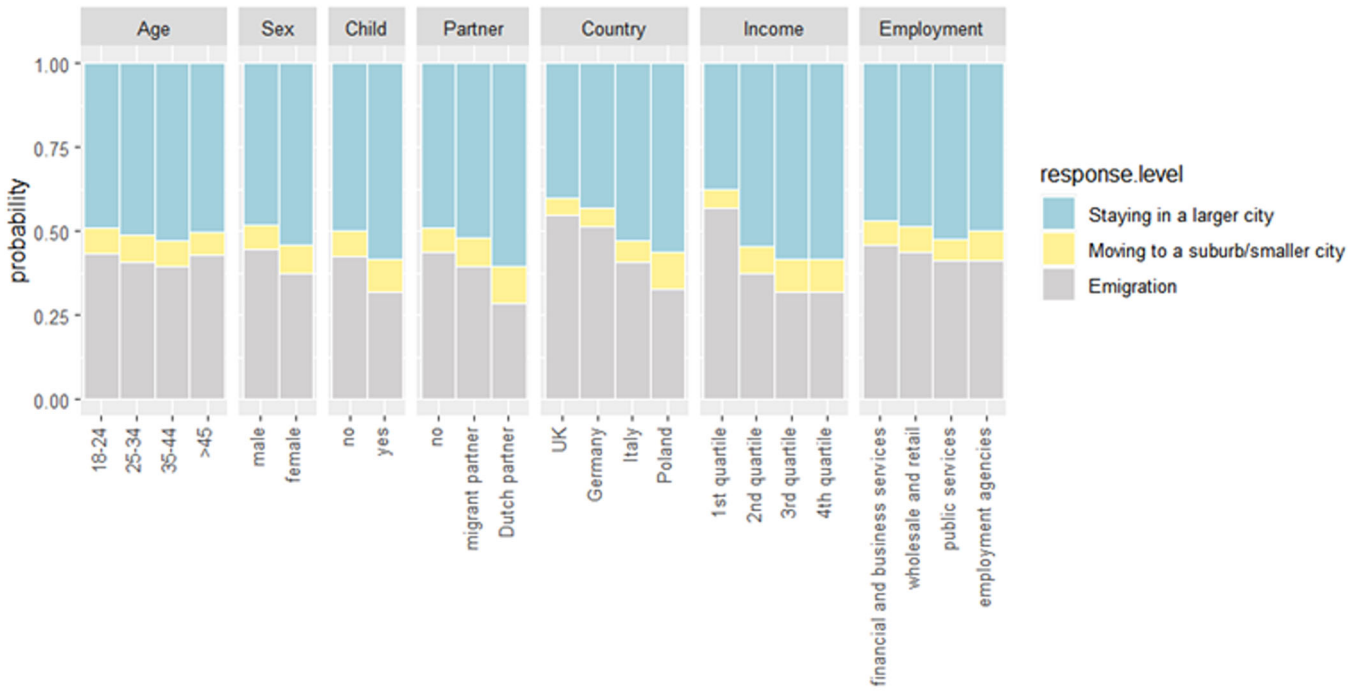

FIGURE 8 Predicted probabilities individual variables for migrants starting in larger cities (to increase legibility, only the four categories that are most present in larger cities are shown for country of origin and employment sector; full results can be found in the Appendix. The model is controlled for cohort.).

assumed. This also suggests that facets of arrival infrastructures play out differently in different contexts.

The share of migrants was included as a proxy for social resources that might help newcomers settle in a new society, as found in research on arrival neighbourhoods (Schillebeeckx et al., 2019). We expected that more migrants in a neighbourhood would increase the chance of either staying in that type of place or moving to a more urbanized place. However, this was not the case.

FIGURE 9 Predicted probabilities arrival infrastructure characteristics for migrants starting in larger cities.

Instead, a higher share of migrants increased the probability of emigration in all residential settings. It could be that the share of migrants is in fact not a good proxy for social resources and/or that it confounds with other neighbourhood characteristics such as a lower socioeconomic status and a lower quality amenities. It could also be that the importance of migrant communities in arrival infrastructure for longer-term spatial mobility is actually limited.

We also looked at the role of geographic isolation, meaning arrival infrastructures that are far away from services such as shops and restaurants. These only exist in rural places and were thus only included in the first model. This showed that it did not matter much for future trajectories if a migrant started in an isolated place. This is surprising as we expected that a lack of appropriate services would result in quick emigration, whereas proximity to such services would result in either staying put or moving to a different type of place, especially as qualitative literature indicates that migrants do not enjoy living in isolated areas (Ulceluse et al., 2021).

5 | DISCUSSION AND CONCLUSION

This study investigates the arrival places and subsequent geographic trajectories of EU labour migrants in the Netherlands. Although much attention has been given to qualitative case studies and the conceptualization of arrival infrastructure processes (Hanhörster & Wessendorf, 2020; Meeus et al., 2019, 2020; Schillebeeckx et al., 2019) and 'new immigration destinations' beyond metropolitan areas (McAreavey & Argent, 2018; Rye & OReilly, 2021; Ulceluse et al., 2021), few studies have attempted to systematically investigate this in a large-scale quantitative study. By doing so, our study has yielded four important findings.

First, rural places, suburban areas and smaller cities frequently function as starting points for labour migrants. This confirms the claim in arrival infrastructure literature that we need to broaden the scope beyond classic arrival cities (Meeus et al., 2020). The results highlight that it is a specific group that starts in these new immigration destinations: predominantly lower-income migrants who work through employment agencies and come from newer EU countries such as Poland are overrepresented outside of highly urbanized places. In contrast, higher-income migrants from traditional EU countries, who work in sectors such as finance, start in the most urbanized areas. This is likely related to the nature of EU labour migration, with sectors such as agriculture and logistics relying heavily on low-income migrant workers in rural places, also visible in other Western European countries (Rye & OReilly, 2021).

Second, by focusing on trajectories we showed that there is a considerable group that leaves the Netherlands within the first 6 years after arrival. This is more or less equal for all types of arrival places. This indicates that there seems to be little influence of arrival places on the decision to stay or to leave the country. Regarding economic status, it are predominantly the lowest income groups that emigrate. The prevalence of emigration is in line with temporary and 'liquid' patterns that dominate current EU migration (Engbersen et al., 2010).

Third, for those who stay longer in the Netherlands –over half of the migrant workers—internal migration is largely dominated by geographical *immobility*. The majority of the people who stayed in the Netherlands remained in the same type of place. For most migrants, their type of arrival place is thus not just a temporary foothold. This is

even the case in the most isolated places. This is important as these places represent distinct arrival infrastructures. The share of social housing and the diversity of jobs, housing and migrant networks are, for example, generally lower in rural and suburban areas.

Finally, when people did move to a different type of residential location, it was often to more urbanized places. As mostly migrants with a higher income made these moves, this strengthened the dualization of more precarious migrants in rural areas and more well-off migrants in larger cities. This empirically substantiates that not everyone benefits equally from local arrival infrastructures. A hypothesis is that higher-income migrants are less dependent on local arrival infrastructures and can use their own resources to 'take-off'.

The arrival infrastructure perspective, building on the work of the Chicago School of Social Ecology, suggest that arrival places have the potential to influence future trajectories. The findings of this study indicate that new arrival destinations are rarely stepping stones for *spatial mobility*. Further research is needed to investigate the impact of these spatial trajectories on *social mobility*. In particular the income and employment developments of lower-income migrants staying in rural areas would be useful to explore. In addition, more work can be done in investigating the longer-term experiences of migrants arriving in these areas. Although current studies suggest that migrants dislike the conditions in rural and isolated arrival places, we do not know if this is also the case for migrants that stay there for a longer period of time.

Studying labour migrant arrival through an infrastructural lens means acknowledging that these findings are not natural, but produced by a wider labour migration regime that funnels particular migrants into particular places. Industries in rural areas for example rely heavily on low-waged migrant labour to compete in global agri-food chains (Rye & OReilly, 2021). The findings of this study thus have significant implications for local policy makers, especially for those in rural areas who often think migrant workers are only temporarily in their municipality and are therefore reluctant to realize appropriate amenities. This dynamic results in more leeway for profit-driven actors (McAreavey, 2012; Ulceluse et al., 2021). The lack of diverse opportunities and amenities and hostility of the local community in new arrival infrastructures can endanger the well-being and social inclusion of in particular lower-income migrants (Rye & OReilly, 2021; Ulceluse et al., 2022; Van Liempt & Miellet, 2021). As such, a mix of people and place based policies could be helpful to improve conditions for migrant workers in rural areas.

The infrastructural approach invited us to explore both spatial and social differences in the arrival patterns of labour migrants. As we show, there are substantial inequalities that are a reflection of social-hierarchies and the place of migrant workers in EU society. While research usually conceptualizes migrant dualization on the scale of the city (Sassen, 2004), our study shows that the bifurcation of the migrant labour market (Yeoh, 2006) also plays out at a wider scale; low-income, precarious migrants are not (only) found in the margins of the city but also the margins of the country.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from Statistics Netherlands. Restrictions apply to the availability of these data, which were used under license for this study. Data are available from the author(s) with the permission of Statistics Netherlands.

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APPENDIX: Full regression results from multinomial models: Predicted probabilities and confidence intervals

Model 1. Rural locations.

	Staying in rural			Moving from rural			Emigration from rural		
	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound
Age (years)									
18–24	0.375	0.363	0.387	0.184	0.175	0.193	0.441	0.429	0.453
25–34	0.420	0.411	0.429	0.173	0.167	0.180	0.406	0.397	0.416
35–44	0.481	0.467	0.495	0.143	0.134	0.153	0.376	0.362	0.390
>45	0.527	0.509	0.545	0.121	0.111	0.133	0.351	0.335	0.369
Child									
No	0.413	0.406	0.419	0.159	0.154	0.164	0.429	0.422	0.436
Yes	0.528	0.512	0.543	0.186	0.175	0.198	0.286	0.271	0.301
Partnership status									
No partner	0.383	0.375	0.391	0.158	0.153	0.164	0.459	0.450	0.467
Dutch partner	0.599	0.572	0.624	0.176	0.157	0.196	0.226	0.203	0.250
Migrant partner	0.497	0.486	0.509	0.167	0.159	0.175	0.336	0.325	0.347
Sex									
Female	0.465	0.456	0.475	0.188	0.181	0.196	0.346	0.337	0.356
Male	0.406	0.398	0.414	0.147	0.142	0.153	0.447	0.439	0.455
Country of origin									
Poland	0.436	0.428	0.444	0.170	0.164	0.176	0.395	0.387	0.402
Belgium	0.689	0.660	0.717	0.068	0.055	0.084	0.242	0.216	0.271
Bulgaria	0.420	0.360	0.483	0.314	0.258	0.377	0.266	0.215	0.324
Former CS	0.354	0.320	0.390	0.117	0.097	0.140	0.529	0.491	0.567
Former SU	0.362	0.329	0.396	0.200	0.175	0.227	0.438	0.404	0.473
France	0.254	0.206	0.309	0.168	0.129	0.215	0.579	0.514	0.641
Germany	0.383	0.353	0.415	0.106	0.089	0.125	0.511	0.477	0.545
Greece	0.363	0.308	0.421	0.231	0.185	0.285	0.406	0.346	0.469
Hungary	0.418	0.390	0.446	0.166	0.147	0.188	0.416	0.388	0.445
Italy	0.295	0.248	0.346	0.277	0.231	0.328	0.428	0.371	0.487
Other	0.241	0.202	0.285	0.115	0.089	0.147	0.644	0.592	0.693
Portugal	0.390	0.355	0.426	0.191	0.164	0.221	0.419	0.381	0.457
Romania	0.443	0.409	0.478	0.213	0.185	0.243	0.344	0.312	0.378
Spain	0.318	0.273	0.367	0.267	0.225	0.313	0.415	0.361	0.471
UK	0.314	0.280	0.350	0.148	0.124	0.176	0.538	0.496	0.579
Employment sector									
Employment agencies	0.408	0.398	0.417	0.172	0.165	0.179	0.421	0.411	0.431
Unknown	0.449	0.434	0.463	0.157	0.147	0.167	0.395	0.381	0.409
Agriculture	0.523	0.499	0.548	0.107	0.094	0.122	0.369	0.345	0.394
Manufacturing/industry	0.392	0.368	0.417	0.160	0.143	0.178	0.447	0.421	0.474
Construction	0.497	0.464	0.530	0.171	0.149	0.197	0.331	0.301	0.364
Wholesale/retail	0.486	0.462	0.509	0.160	0.145	0.176	0.354	0.331	0.378
Transport/logistics	0.407	0.369	0.447	0.174	0.148	0.204	0.418	0.378	0.459
Hospitality	0.451	0.410	0.492	0.176	0.149	0.208	0.373	0.333	0.414
Creative	0.487	0.411	0.564	0.217	0.164	0.282	0.295	0.227	0.374
Financial/business services	0.370	0.333	0.408	0.157	0.133	0.184	0.473	0.432	0.515
Public services	0.334	0.294	0.377	0.269	0.231	0.311	0.397	0.349	0.447
Other services	0.447	0.420	0.474	0.162	0.145	0.182	0.391	0.364	0.418
Income class									
1st quartile	0.288	0.278	0.299	0.107	0.100	0.114	0.605	0.593	0.617

	Staying in rural			Moving from rural			Emigration from rural		
	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound
2nd quartile	0.466	0.455	0.477	0.196	0.187	0.204	0.339	0.328	0.349
3rd quartile	0.533	0.520	0.545	0.210	0.200	0.220	0.257	0.247	0.268
4th quartile	0.552	0.536	0.568	0.186	0.174	0.199	0.262	0.248	0.277
Unknown/negative	0.164	0.148	0.182	0.053	0.045	0.064	0.783	0.763	0.801
Year of arrival									
2011	0.424	0.412	0.436	0.170	0.161	0.179	0.406	0.393	0.419
2012	0.442	0.429	0.454	0.170	0.161	0.179	0.388	0.376	0.401
2013	0.438	0.426	0.450	0.167	0.158	0.176	0.395	0.383	0.408
2014	0.425	0.414	0.436	0.152	0.145	0.160	0.422	0.411	0.434
Macro region									
Central	0.340	0.329	0.351	0.221	0.212	0.231	0.439	0.427	0.451
Intermediary	0.449	0.438	0.460	0.169	0.161	0.177	0.382	0.371	0.393
Periphery	0.484	0.475	0.494	0.127	0.121	0.134	0.388	0.379	0.398
Share of migrants									
<26%	0.431	0.018	0.422	0.178	0.023	0.172	0.391	0.018	0.382
26%–32%	0.459	0.031	0.444	0.168	0.039	0.157	0.373	0.033	0.358
32%–40%	0.460	0.032	0.444	0.145	0.042	0.135	0.395	0.033	0.380
>40%	0.381	0.034	0.366	0.136	0.045	0.126	0.482	0.033	0.466
Share of social housing									
<9%	0.402	0.015	0.395	0.161	0.020	0.156	0.437	0.015	0.430
9%–12%	0.472	0.029	0.458	0.172	0.036	0.163	0.355	0.031	0.342
12%–18%	0.574	0.049	0.551	0.169	0.059	0.154	0.256	0.057	0.236
>18%	0.762	0.103	0.724	0.094	0.131	0.075	0.143	0.126	0.116
Proximity of amenities									
Isolated	0.431	0.413	0.448	0.143	0.132	0.155	0.426	0.409	0.444
Not isolated	0.432	0.425	0.439	0.167	0.162	0.172	0.401	0.394	0.408

Model 2. Suburban locations and smaller cities.

	Staying in suburban/smaller cities			Moving from suburban/smaller cities			Emigration from suburban/smaller cities		
	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound
Age (years)									
18–24	0.394	0.382	0.407	0.106	0.099	0.113	0.500	0.487	0.513
25–34	0.447	0.438	0.457	0.093	0.088	0.098	0.459	0.450	0.468
35–44	0.500	0.486	0.515	0.079	0.072	0.087	0.421	0.406	0.435
>45	0.532	0.512	0.551	0.067	0.058	0.076	0.402	0.383	0.421
Child									
No	0.427	0.420	0.434	0.091	0.087	0.095	0.482	0.475	0.489
Yes	0.565	0.550	0.580	0.086	0.079	0.095	0.349	0.334	0.364
Partnership status									
No partner	0.387	0.379	0.395	0.091	0.087	0.096	0.522	0.514	0.530
Dutch partner	0.644	0.622	0.666	0.092	0.080	0.105	0.263	0.243	0.285
Migrant partner	0.517	0.507	0.528	0.086	0.080	0.092	0.397	0.386	0.407
Sex									
Female	0.505	0.496	0.515	0.097	0.092	0.103	0.397	0.388	0.407
Male	0.411	0.403	0.419	0.085	0.081	0.090	0.503	0.495	0.512

(Continues)

	Staying in suburban/smaller cities			Moving from suburban/smaller cities			Emigration from suburban/smaller cities		
	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound
Country of origin									
Poland	0.525	0.516	0.535	0.082	0.077	0.087	0.393	0.384	0.402
Belgium	0.451	0.410	0.492	0.052	0.038	0.071	0.497	0.455	0.540
Bulgaria	0.576	0.536	0.615	0.171	0.143	0.202	0.253	0.223	0.286
Former CS	0.364	0.331	0.399	0.076	0.060	0.095	0.560	0.524	0.595
Former SU	0.452	0.419	0.486	0.117	0.098	0.138	0.431	0.398	0.465
France	0.254	0.223	0.288	0.089	0.071	0.110	0.657	0.620	0.692
Germany	0.402	0.378	0.426	0.065	0.054	0.077	0.534	0.508	0.559
Greece	0.394	0.358	0.432	0.162	0.137	0.190	0.444	0.407	0.481
Hungary	0.422	0.396	0.449	0.115	0.099	0.132	0.463	0.436	0.490
Italy	0.341	0.311	0.372	0.119	0.101	0.140	0.540	0.507	0.572
Other	0.265	0.236	0.296	0.069	0.055	0.087	0.666	0.632	0.698
Portugal	0.373	0.340	0.407	0.128	0.107	0.152	0.499	0.464	0.534
Romania	0.489	0.455	0.522	0.133	0.113	0.156	0.379	0.347	0.412
Spain	0.295	0.269	0.324	0.117	0.100	0.136	0.588	0.557	0.617
UK	0.267	0.244	0.291	0.069	0.057	0.082	0.664	0.639	0.689
Employment sector									
Employment agencies	0.438	0.427	0.449	0.095	0.089	0.102	0.467	0.456	0.478
Unknown	0.469	0.453	0.484	0.093	0.085	0.102	0.439	0.423	0.454
Agriculture	0.513	0.470	0.556	0.058	0.041	0.081	0.429	0.386	0.473
Manufacturing/ industry	0.438	0.416	0.461	0.065	0.055	0.076	0.497	0.474	0.520
Construction	0.470	0.438	0.502	0.114	0.096	0.136	0.416	0.385	0.448
Wholesale/retail	0.504	0.483	0.525	0.080	0.070	0.091	0.416	0.396	0.437
Transport/logistics	0.474	0.437	0.511	0.096	0.077	0.119	0.431	0.393	0.469
Hospitality	0.463	0.433	0.494	0.091	0.077	0.107	0.446	0.417	0.476
Creative	0.453	0.397	0.511	0.129	0.099	0.166	0.418	0.363	0.475
Financial/business services	0.383	0.359	0.407	0.105	0.092	0.120	0.512	0.487	0.537
Public services	0.406	0.375	0.437	0.113	0.096	0.133	0.481	0.450	0.512
Other services	0.465	0.440	0.489	0.080	0.069	0.092	0.456	0.432	0.480
Income class									
1st quartile	0.284	0.273	0.295	0.073	0.067	0.080	0.643	0.631	0.655
2nd quartile	0.484	0.472	0.496	0.103	0.096	0.111	0.413	0.401	0.425
3rd quartile	0.559	0.547	0.571	0.098	0.091	0.105	0.343	0.332	0.355
4th quartile	0.580	0.566	0.593	0.096	0.088	0.104	0.325	0.312	0.338
Unknown/negative	0.164	0.147	0.183	0.037	0.029	0.045	0.799	0.779	0.818
Year of arrival									
2011	0.458	0.445	0.470	0.090	0.083	0.097	0.453	0.440	0.465
2012	0.456	0.443	0.469	0.100	0.093	0.108	0.444	0.431	0.456
2013	0.459	0.447	0.471	0.085	0.078	0.091	0.457	0.444	0.469
2014	0.436	0.424	0.447	0.090	0.084	0.096	0.474	0.463	0.486
Macro region									
Central	0.405	0.395	0.414	0.111	0.105	0.117	0.484	0.475	0.494
Intermediary	0.489	0.477	0.500	0.085	0.079	0.091	0.427	0.416	0.438
Periphery	0.496	0.482	0.509	0.064	0.058	0.071	0.440	0.426	0.454
Share of migrants									
<26%	0.470	0.459	0.480	0.084	0.078	0.089	0.447	0.436	0.457
26%–32%	0.469	0.458	0.480	0.091	0.085	0.097	0.440	0.429	0.451
32%–40%	0.428	0.415	0.441	0.103	0.096	0.111	0.469	0.456	0.482
>40%	0.389	0.369	0.409	0.088	0.078	0.099	0.523	0.503	0.544

	Staying in suburban/smaller cities			Moving from suburban/smaller cities			Emigration from suburban/smaller cities		
	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound
Share of social housing									
<9%	0.458	0.445	0.470	0.078	0.072	0.084	0.465	0.453	0.477
9%–12%	0.473	0.462	0.483	0.085	0.080	0.091	0.442	0.432	0.452
12%–18%	0.442	0.430	0.454	0.111	0.104	0.119	0.447	0.435	0.459
>18%	0.384	0.365	0.404	0.101	0.091	0.112	0.514	0.495	0.534

Model 3. Urban locations.

	Staying in larger city			Moving from larger city to suburban/rural			Emigration from larger city		
	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound
Age									
18–24	0.492	0.482	0.501	0.077	0.072	0.081	0.432	0.422	0.441
25–34	0.512	0.506	0.518	0.082	0.078	0.085	0.407	0.400	0.413
35–44	0.527	0.516	0.537	0.077	0.072	0.082	0.397	0.386	0.407
>45	0.503	0.488	0.519	0.065	0.059	0.073	0.431	0.415	0.447
Child									
No	0.497	0.492	0.502	0.076	0.073	0.078	0.427	0.422	0.432
Yes	0.585	0.573	0.598	0.096	0.089	0.103	0.319	0.307	0.332
Partnership status									
No partner	0.491	0.485	0.497	0.072	0.069	0.075	0.437	0.431	0.443
Dutch partner	0.603	0.585	0.621	0.112	0.102	0.124	0.285	0.268	0.302
Migrant partner	0.521	0.514	0.529	0.084	0.080	0.088	0.395	0.387	0.402
Sex									
Female	0.540	0.533	0.546	0.086	0.083	0.090	0.374	0.367	0.381
Male	0.484	0.478	0.489	0.072	0.069	0.075	0.444	0.438	0.450
Country of origin									
Poland	0.563	0.554	0.572	0.110	0.105	0.116	0.327	0.318	0.335
Belgium	0.458	0.429	0.488	0.072	0.059	0.087	0.470	0.439	0.500
Bulgaria	0.684	0.667	0.701	0.093	0.082	0.105	0.223	0.209	0.238
Former CS	0.452	0.424	0.479	0.084	0.070	0.099	0.465	0.437	0.493
Former SU	0.512	0.488	0.536	0.093	0.080	0.107	0.395	0.372	0.419
France	0.415	0.398	0.433	0.038	0.032	0.045	0.547	0.529	0.565
Germany	0.430	0.414	0.446	0.058	0.051	0.065	0.512	0.496	0.529
Greece	0.553	0.533	0.573	0.074	0.065	0.085	0.373	0.353	0.393
Hungary	0.495	0.475	0.514	0.092	0.082	0.104	0.413	0.394	0.432
Italy	0.528	0.513	0.543	0.065	0.058	0.072	0.407	0.393	0.422
Other	0.379	0.360	0.398	0.053	0.046	0.062	0.568	0.548	0.587
Portugal	0.511	0.489	0.532	0.098	0.087	0.111	0.391	0.370	0.413
Romania	0.554	0.531	0.577	0.117	0.104	0.133	0.328	0.307	0.350
Spain	0.444	0.429	0.460	0.058	0.052	0.066	0.497	0.481	0.513
UK	0.400	0.386	0.415	0.052	0.046	0.059	0.548	0.533	0.563
Employment sector									
Employment agencies	0.500	0.490	0.511	0.085	0.080	0.091	0.414	0.404	0.425
Unknown	0.547	0.535	0.558	0.081	0.076	0.088	0.372	0.360	0.383
Agriculture	0.513	0.472	0.554	0.044	0.032	0.060	0.442	0.401	0.485
Manufacturing/ industry	0.461	0.442	0.481	0.083	0.074	0.094	0.456	0.436	0.476
Construction	0.560	0.538	0.583	0.070	0.060	0.081	0.370	0.348	0.393

(Continues)

	Staying in larger city			Moving from larger city to suburban/rural			Emigration from larger city		
	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound	Predicted probability	CI lower bound	CI upper bound
Wholesale/retail	0.484	0.471	0.498	0.076	0.070	0.084	0.439	0.425	0.453
Transport/logistics	0.475	0.444	0.506	0.102	0.087	0.120	0.423	0.392	0.454
Hospitality	0.515	0.497	0.533	0.096	0.086	0.107	0.389	0.372	0.407
Creative	0.530	0.508	0.552	0.056	0.046	0.068	0.414	0.392	0.436
Financial/business services	0.469	0.457	0.481	0.072	0.066	0.078	0.459	0.447	0.472
Public services	0.525	0.508	0.542	0.065	0.057	0.073	0.411	0.394	0.427
Other services	0.534	0.517	0.550	0.084	0.076	0.094	0.382	0.365	0.398
Income class									
1st quartile	0.378	0.369	0.387	0.054	0.051	0.058	0.568	0.558	0.577
2nd quartile	0.543	0.533	0.553	0.084	0.079	0.090	0.372	0.362	0.382
3rd quartile	0.583	0.575	0.592	0.096	0.091	0.101	0.321	0.312	0.329
4th quartile	0.584	0.575	0.593	0.095	0.089	0.100	0.321	0.313	0.330
Unknown/negative	0.230	0.216	0.245	0.028	0.023	0.033	0.742	0.726	0.757
Year of arrival									
2011	0.509	0.500	0.518	0.075	0.070	0.079	0.416	0.407	0.426
2012	0.509	0.500	0.518	0.079	0.075	0.084	0.412	0.402	0.421
2013	0.517	0.508	0.526	0.077	0.073	0.082	0.406	0.397	0.415
2014	0.502	0.494	0.510	0.081	0.077	0.086	0.416	0.408	0.424
Macro region									
Central	0.522	0.517	0.527	0.069	0.067	0.072	0.409	0.404	0.414
Intermediary	0.457	0.443	0.470	0.145	0.136	0.154	0.399	0.385	0.413
Periphery	0.429	0.412	0.446	0.111	0.101	0.122	0.460	0.442	0.478
Share of migrants									
<26%	0.531	0.517	0.546	0.101	0.093	0.109	0.368	0.354	0.383
26%–32%	0.512	0.503	0.522	0.094	0.089	0.099	0.394	0.384	0.403
32%–40%	0.502	0.494	0.509	0.087	0.083	0.091	0.412	0.404	0.419
>40%	0.505	0.497	0.513	0.058	0.055	0.062	0.437	0.429	0.444
Share of social housing									
<9%	0.635	0.604	0.665	0.073	0.061	0.088	0.292	0.263	0.322
9%–2%	0.524	0.514	0.533	0.088	0.082	0.093	0.389	0.379	0.399
12%–18%	0.510	0.502	0.518	0.078	0.074	0.082	0.412	0.404	0.420
>18%	0.495	0.488	0.502	0.075	0.071	0.078	0.430	0.423	0.437