

On intra-urban differences in the destinations of emigrants from the Municipality of Malaga (Spain): An approximation based on the municipal register of inhabitants

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Abstract

Emigrants who left the Municipality of Malaga in the 2017–2021 period went to multiple destinations, mostly municipalities located in the province of Malaga itself, more specifically in its metropolitan area. Average housing prices in these metropolitan municipalities are highly variable, and, in this context, it is reasonable to assume that there will be a relationship between the income levels of emigrants and their destination. Based on a special processing of the Municipal Register of Inhabitants of the Municipality of Malaga, we show how a relationship can effectively be found between the average household income (AHI) of the census tract of origin of the emigrants and the average price of housing in the destination municipality, both for the whole group of emigrants and for selected age groups – children and young adults. A relationship that points to an overrepresentation of municipalities with high housing prices in the sections with the highest income, and vice versa.

Keywords: residential migration, municipal register of inhabitants, average household income, Municipality of Malaga

Received November 2023, accepted January 2024.

Introduction

Residential migration processes, defined as changes in residence within the same metropolitan area that do not involve a modification of individuals' living spaces (BAYONA-I-CARRASCO, J. and PUJADAS-I-RÚBIES, I. 2014), have been the subject of numerous studies applied to the Spanish context. Most of these studies (SUSINO, J. and DUQUE-CALVACHE, R. 2013; DE OLIVEIRA NEVES, G. *et al.* 2019; BAYONA-I-CARRASCO, J. and PUJADAS-I-RÚBIES, I. 2020; TORRADO, J.M. *et al.* 2021) analyse municipalities as the unit of analysis, using the statistics of residential variations and/or population censuses as primary sources. The impact of the crisis on these movements has also been examined by POZO RIVERA, E.

and RODRÍGUEZ MOYA, J.M. (2018) for the case of Madrid, as well as intra-metropolitan migrations among specific population groups, such as the foreign population in Madrid and Barcelona (BAYONA-I-CARRASCO, J. *et al.* 2013; THIERS-QUINTANA, J. and GIL ALONSO, F. 2020).

Previous research treats the municipalities of origin of emigrants as a homogeneous entity, failing to identify areas (sets of census tracts or other sub-municipal spatial units) within them, delimited by the municipality mostly chosen by emigrants leaving those areas. In this sense, it is generally agreed that emigration from major Spanish urban centres is largely driven by dissatisfaction with current housing or the need to acquire housing, issues that, in many cases, can only be ad-

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dressed by moving to peripheral municipalities. Indeed, referring to the early 21st century situation, NEL-LO, O. (2004) stated that the significant differences in housing prices between the cores of metropolitan areas (including Malaga) and their peripheries were fundamental to explaining centre-periphery migration, along with accessibility, which ultimately also influences housing prices.

On the other hand, income largely determines the type and location of housing that can be accessed. In the Spanish context, within a free-market framework with limited policies addressing socio-residential disparities, access to housing is highly unequal among different social groups. As indicated by ANDÚJAR LLOSA, A. *et al.* (2015), the characteristics of the housing that the population can afford and its suitability for household needs are closely related to available resources and the household's position in the social structure. The existing residential stock in the municipalities forming Spanish metropolitan areas is diverse in terms of characteristics and quality, leading to segmented offerings. Therefore, we can argue that the purchasing or rental capacity of the migrant determines their destination municipality based on the average housing price in that municipality. DUQUE-CALVACHE, R. *et al.* (2017) further suggest that when there is a greater range of available housing in the metropolitan periphery, mobility diversifies. This diversity can be understood through different average housing prices, which are not homogeneous among metropolitan municipalities. Given that income is also not uniformly distributed within central municipalities, it is reasonable to assume a relationship between household income level and destination municipality. This reality should have spatial representation at the census tract level.

In Spain, the available body of knowledge regarding the relationship between income and the destination of emigrants from large urban centers is very limited. Contributions in this direction include those of BAYONA-I-CARRASCO, J. and PUJADAS-I-RÚBIES, I. (2010), who use microdata from the Municipal

Register of Inhabitants of Barcelona, and SALOM-CARRASCO, J. (2018), who uses microdata on residential variations obtained from the Valencia City Council. The originality of our research lies in intending to relate the average household income (AHI) by census tract that left the Municipality of Malaga and the destination municipality of that emigration, grouped according to the average price per m² of housing for purchase.

Specifically, our objective is to relate the AHI levels of census tracts from which emigrants left the Municipality of Malaga in the period 2017–2021 to the major destination municipalities, grouped according to the price per m² of existing housing.

Located in the south of Spain, in the Autonomous Community of Andalusia, the Municipality of Malaga is the one with the largest population in the province of the same name (578,061 inhabitants in 2021), and is among the 10 with the largest population in Spain (*Figure 1*). It is, furthermore, the nucleus of one of the most dynamic metropolitan areas in the country, and presents certain particularities: it coincides with the presence of a municipality greater than 500,000 inhabitants – Malaga, object of our study –, which acts as a metropolitan nucleus, together to a set of cities that should be considered average, developed under the shelter of tourist activity and that today make up a continuum built in the western coastal portion of the province: the Costa del Sol. This issue is important, since, although in they are currently part of the Malaga metropolitan area (FERIA TORIBIO, J.M. 2015), part of their dynamism is due to tourism, not metropolitan overflow.

As indicated by GIL ALONSO, F. and BAYONA-I-CARRASCO, J. (2012), Malaga was in the group of urban areas that were systematically experiencing, since the end of the last century, greater population increases in their peripheries than in their centres, increasing the rate of population increase in the latter in the first decade of this century. As a consequence of this, the turn of the century would find this space in the phase of absolute de-concentration – following the well-



Fig. 1. Location of the study area. Source: Authors' own elaboration on Google Maps images.

known model of HALL, P. (1984) –, according to NEL-LO, O. (2004), which meant the overflow of the metropolitan fact beyond from the Municipality of Malaga to those closest to it, towards the Guadalhorce Valley (municipalities of Alhaurín de la Torre or Cártama, in which this process of residential de-concentration has been especially relevant). The large increases in the population of these metropolitan municipalities occurred in short intervals of time, hand in hand with a continuous increase in the urbanized area dedicated to residential use, which has progressively spread to municipalities further away from the metropolitan core.

As we have just indicated, the overflow of the residential function has taken place in the valley of the Guadalhorce river, municipalities of Alhaurín de la Torre, Cártama, Alhaurín el Grande and Coín at first (de-

cade of the 1980s), continuing later on Álora, Pizarra, Almogía and Casabermeja, progressively further north and away from the Municipality of Malaga. And it will be from the end of the 1990s, with the improvement of communications, when the eastern municipalities of Rincón de la Victoria, and, to a lesser extent, Vélez Malaga, join this dynamic. Currently (2021), the population of these municipalities is disparate, ranging between 82,971 inhabitants in Vélez Malaga and 3,738 in Casabermeja. The number of those registered in the western municipalities is also uneven, among which Marbella is the largest (149,031 residents) and Torremolinos, with 67,878, the one with the smallest population. Let us remember that these western municipalities owe their dynamism to tourist activity – hence their comparatively high population volumes – but, like those

located in the Guadalhorce Valley, they are a place of reception for emigrants from the Municipality of Malaga and are functionally linked to it.

Sources and methodology

In the Spanish context, the main sources commonly used to obtain information about migratory movements are two: the statistics of residential variations and population censuses. The former contains information on migratory movements at the municipal level, available for an extensive period. The latter allows obtaining the same information from a set of questions, grouped into two categories in the latest population census (2021) under the headings: “places of origin” and “years of arrival and places of origin”, but the information about the municipality of destination is rather scarce (the concrete destination is not available) and not useful in our context.

A third source that can be used for migratory studies is the municipal register of inhabitants; it is a counting source, so there are no sample problems, and the first hand accessible information allows us to know, at the level of census tract, the relationship between place of birth and residence. The utility of all these sources is considerable, and a detailed description of their advantages and disadvantages applied to migratory studies can be found in PALOMARES-LINARES, I. *et al.* (2017). However, these sources cannot reveal the specific census tract of origin and the destination municipality of emigrants (statistical confidentiality affects the aforementioned sources) unless special processing is requested from those administrations or bodies that have that information.

In our case, we have had special processing of the municipal registers of inhabitants from 2017 to 2021 requested from the city of Malaga; from this, we have obtained residential departures and arrivals at the scale of urban census tract, and the municipalities – and, where applicable, countries – to which departures were directed. With this informa-

tion, combined with population volumes obtained from the continuous register statistics, it is possible to know the migratory balances and migration rates of each tract, identifying differences between census tracts regarding the destination municipalities of their emigrants. An issue of some importance is related to the confinement that the Spanish population suffered between March and June 2020, which, as has been revealed in other areas of the province of Malaga (LARRUBIA-VARGAS, R. *et al.* 2023), influenced residential mobility patterns. However, in our case the influence is subsumed in the study period itself, five years from 2017. In this sense, it is possible to assume that the migrations that were interrupted by confinement took place in the years immediately following, so in any case, are included in the time frame of our research.

To complement all this, we have also used the AHI at the urban census tract level, from the Household Income Atlas (INE, 2022a), for the year 2020, the latest available at the time of writing these paragraphs.

As we will see later, another variable that we have used in our research is the price of housing in the destination municipalities of the emigrants. We have two options: rental price and purchase price. For the first option, we have information derived from the rental price index, prepared by the Ministry of Housing and Urban Agenda (Ministerio de Vivienda y Agenda Urbana, 2024). However, the fact that it does not offer information on some of the municipalities under study has led us to reject it. On the other hand, it is convenient to indicate that the option of purchasing a habitual residence is more profitable in the long term than renting (DOMÍNGUEZ MARTÍNEZ, J.M. and LÓPEZ DEL PASO, R. 2006), while, for young people, renting does not represent a great advantage over property (ECHAVES GARCÍA, A. 2017). So, the second option, the sale price of the home in the destination municipalities, seems appropriate. We have obtained the information from the housing price report prepared by the website “Idealista”, and accessible, at a municipal level, on its website, and their

methodology for obtaining prices can be consulted at <https://bitly.ws/3aLlO>. In any case, we must indicate that the values are average prices, that is, the source does not differentiate between prices according to the type of housing, location, or state of conservation: characteristics that are highly variable not only between the different municipalities, but also inside these. However, despite all this, we believe that its use has more advantages than disadvantages.

Finally, we will note that the statistical treatment to which we have subjected the information has been straightforward but consistent and, in our understanding, sufficient for the purpose of our research. We have calculated emigration and immigration rates, used the Pearson correlation coefficient, and the location quotient (LQ), the latter with the aim of identifying the “specialization” of Malaga census tracts according to the destination municipality of their emigrants.

Results

Emigration and immigration rates and migratory balances

In the 2017–2021 five-year period, a total of 94,311 residential arrivals and 74,929 departures were recorded in the Municipality of Malaga, resulting in a positive migratory balance of 19,382. In this general context, the values corresponding to different census tracts were highly disparate. Referring to the migratory balance, in the negative spectrum, they oscillated between -64 and -1 for the entire period, while in the positive spectrum, they ranged from 1 to 401. However, as depicted in *Figure 2*, most census tracts experienced positive balances. The spatial distribution of those that did not forms a discontinuous border starting from the eastern end of the municipality and, after affecting a set of non-contiguous tracts not bordering the coastline – roughly around Miraflores del Palo – undergoes significant development north of the city centre and on both banks of

the Guadalmedina river (*Figure 3* highlights the landmarks mentioned in the text). The border continues through those outlined in the neighbourhoods at the western end of the Bailén Miraflores district, and from here, it extends mostly through sparsely populated areas in the west of the capital, except for a set of small census tracts in the western area of the built fabric around the Puerta Blanca neighbourhood.

There was also a significant variability in the figures corresponding to emigration and immigration rates; therefore, and to facilitate readability, we have grouped the census tracts into two categories: those with values lower than those of the municipality, and those with higher values. The spatial distributions of both are presented in figures 4 and 5, respectively. The basic characteristics of those corresponding to areas with higher emigration rates, than the municipality (*Figure 4*) are relatively straightforward: they are distributed almost continuously along the east and west coastlines, with a greater penetration towards the interior in the former.

Additionally, there is a compact cluster of neighbourhoods encompassing the central and northern pericentral areas, including neighbourhoods such as La Victoria, El Ejido, and Capuchinos, all east of the Guadalmedina river. On the opposite bank, this cluster continues, composed of neighbourhoods articulated by three major communication axes: from north to south, Martínez Maldonado/Carlos de Haya Avenue, Andalucía Avenue, and Heroes de Sostoa Street. As we move westward, its spatial continuity progressively dissolves, with the approximate western limit being the current Juan XXIII Avenue. It is, therefore, a cluster of neighbourhoods that encompasses the bulk of the expansion of the Malaga urban fabric to the west, which took place mainly during the 1950s and 1960s, in which both private and public initiatives played a fundamental role; this built fabric is supplemented by a series of self-sufficient neighbourhoods in the interior areas of this conglomerate. On the other hand, the spatial

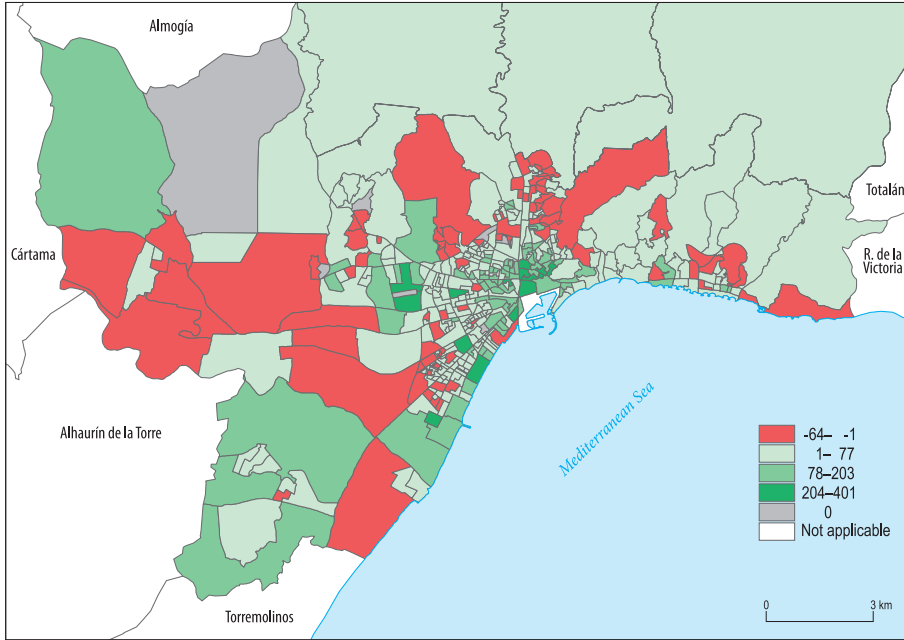


Fig. 2. Migration balances of census tracts for the Municipality of Malaga, 2017–2021. Source: Authors’ own elaboration on the municipal population registers, 2017–2021.

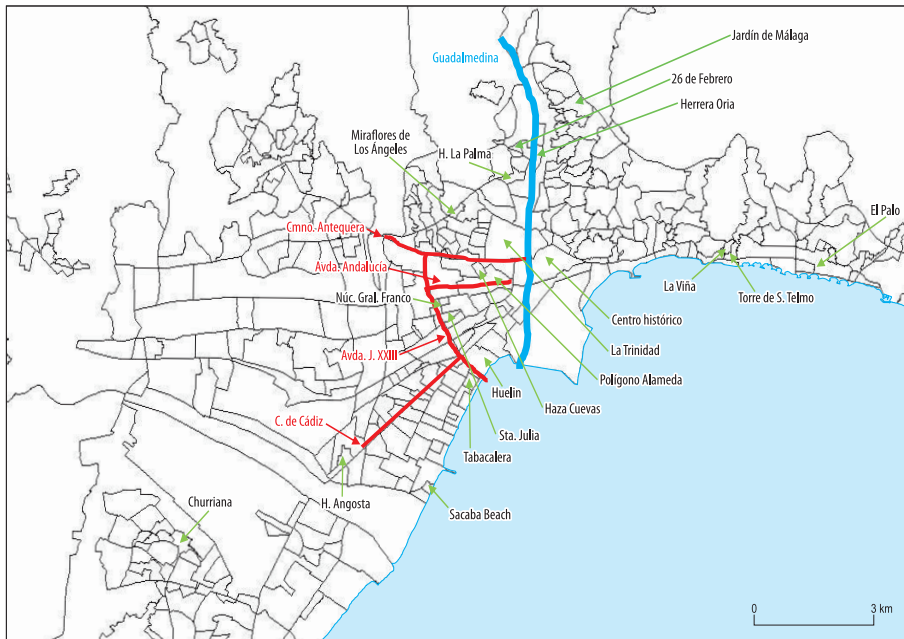


Fig. 3. Location of landmarks mentioned in the text. Source: Authors’ own elaboration.

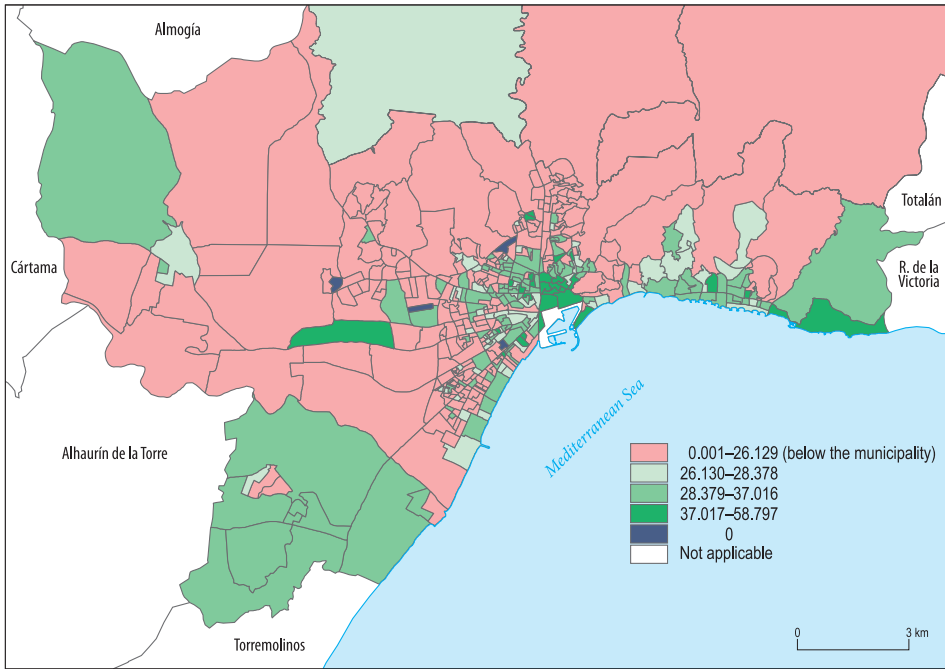


Fig. 4. Emigration rates in the Municipality of Malaga for the period 2017–2021 (emigrants per one million person). *Source:* Authors' own elaboration on the municipal population registers, 2017–2021.

distribution of neighbourhoods with immigration rates higher than those of the municipal aggregate (184 in total) is very similar to the former, with only detailed differences, such as greater fragmentation on the eastern coastal strip or greater continuity in the western strip, reflecting the new real estate developments located there (Figure 5).

The spatial distributions of both rates being similar would indicate the most dynamic areas of the municipality concerning migratory movements. Census tracts where comparatively high values of departures are combined with similarly high values of arrivals; a comparison with the migration balance map (see Figure 1) shows that the result is positive balances, albeit meagerly positive. The sections with the highest balances are located along the Antonio Banderas Promenade – the site of significant real estate developments in recent years – or the neighbourhoods adjacent to the centre in its northern portion, which experienced an increase in the

number of dwellings within the context of the so-called Special Plan for Protection and Interior Reform of the Centre. However, even in these cases, the maximum value of the migration balance is 401 people over 5 years.

Destinations of emigrants

Having established this general framework, it is time to investigate the destinations of emigrants from Malaga in the period 2017–2021. Table 1 displays them, grouped into broad categories. It can be observed that over half of the departures had the province of Malaga as their destination, specifically 53.12 percent. The rest of Spain absorbed 26.95 percent of the movements (primarily directed to Madrid, with 5,504 movements), followed at a distance by those directed to the rest of Andalusia (12.76%), and foreign destinations, constituting the remaining 7.17 percent.

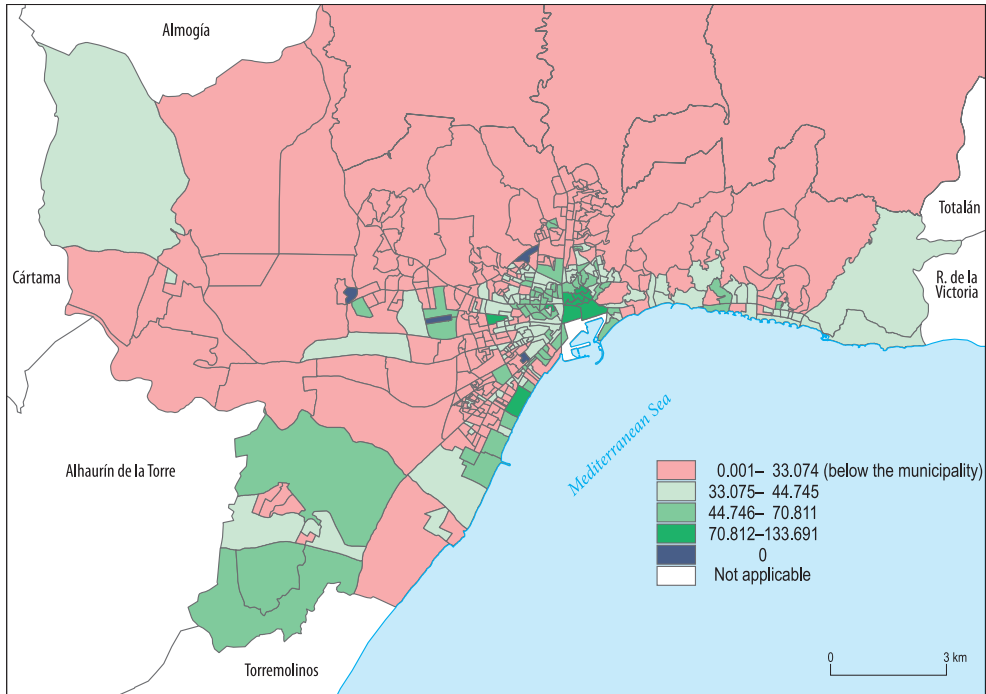


Fig. 5. Immigration rates in the Municipality of Malaga for the period 2017–2021 (immigrants per one million person). *Source:* Authors' own elaboration on the municipal population registers, 2017–2021.

Table 1. Volume and destination of emigrants*

Indicator	Malaga	Rest of Andalusia	Rest of Spain	Foreign	Total
Numbers	39,799	9,564	20,197	5,369	74,929
Proportion, %	53.12	12.76	26.95	7.17	100.00

*Absolute values and percentages for period 2017–2021. *Source:* Municipal population registers, 2017–2021.

Once we have established that the province of Malaga was the primary destination, in order to identify the specific municipalities to which emigrants predominantly headed, we first calculated the percentage of the total each municipality has accommodated. While nearly all municipalities in Malaga have been a destination for some emigrants from the capital, significant differences in numbers exist. For instance, 7,425 individuals, constituting 18.65 percent of the total, migrated to Rincón de la Victoria, contrasting with mini-

mal figures such as 2 for Genalguacil, or 4 for Benalauría. Therefore, we have focused solely on those municipalities to which at least 1 percent of the total emigrants recorded between 2017 and 2021 have headed towards the province, and their list is provided in Table 2.

As evident in Table 2, 16 out of the 101 municipalities comprising the province were the destination for more than four out of five emigrants from the city of Malaga (specifically 85.74%), indicating a concentration in this flow. Given the size of the destination

Table 2. Number of emigrants from the Municipality of Malaga by destination municipality, and percentage of the total emigrants for the period 2017–2021

Municipality	Numbers	%	Municipality	Numbers	%
Alhaurín de la Torre	3,946	9.91	Fuengirola	1,488	3.74
Alhaurín el Grande	901	2.26	Marbella	1,389	3.49
Almogía	458	1.15	Mijas	1,778	4.47
Álora	453	1.14	Pizarra	623	1.57
Benalmádena	3,315	8.33	Rincón de la Victoria	7,425	18.66
Cártama	3,497	8.79	Vélez Malaga	2,747	6.90
Casabermeja	479	1.20	Torremolinos	4,322	10.86
Coín	672	1.69	<i>Total</i>	<i>34,124</i>	<i>85.74</i>
Estepona	631	1.59			

Source: Municipal population registers, 2017–2021.

municipalities, and their affiliation with the Malaga metropolitan area, these migratory movements cannot be considered as urban-rural migration in the sense described by RIVERA ESCRIBANO, M.J. (2007) for movements detected from Pamplona (Autonomous Community of Navarre) to small settlements. Instead, they are part of a population relocation process within an extensive urban area. This concentration is indicative of residential migration, as the list of municipalities is included in those that, according to FERIA TORIBIO, J.M. (2015), are part of the Malaga-Marbella Metropolitan Area. Studies on daily mobility based on mobile phone data (INE, 2022b) highlight the significant flows directed from these municipalities to specific mobility areas in the capital and its surroundings, where a substantial number of job opportunities are concentrated. Therefore, this is indeed a residential mobility that, while changing the individual's actual residence, does not necessarily imply a change in their workplace or even consumption patterns.

Nevertheless, it is also apparent that the attractiveness is not uniform across all municipalities. Rincón de la Victoria attracted nearly 1 in 5 emigrants, while, at the other extreme, Álora only attracted 1.14 percent, which still amounts to 453 movements.

On another note, housing prices in these municipalities are far from homogeneous. On average, prices in, for example, Marbella are higher than those in Almogía. In this regard, there is no doubt that a critical variable

regarding access to housing is the household income. Income facilitates both initial access to housing – whether through purchase or rental – and the maintenance of it – in rental or mortgage situations. Additionally, income enables a change of residence if the current housing does not meet the household's needs or expectations, or if they have had to leave it due to a forced situation – such as non-renewal of the lease or an inability to meet mortgage payments, etc.

Therefore, it is appropriate to correlate the AHI of the census tract from which the urban emigrants originated (*Figure 6*) with the price (in EUR per m²) of housing for sale in the destination municipality, considering only the 16 municipalities listed in *Table 2*. This price per m² was obtained from the website “Idealista” (2023), representing averages of housing costs per m² for sale. While corresponding rental prices for all relevant municipalities are not available, at least for the period 2001–2011, 85 percent of the population moving towards the Malaga–Marbella Metropolitan Area chose homeownership, whether fully paid or with a mortgage (DUQUE-CALVACHE, R. 2015). These departures were also driven by individuals from the lower-middle social class who sold their homes in the capital and, with the capital gains obtained, acquired property on the outskirts (MONTOSA MUÑOZ, J.C. 2012). The values are presented in *Table 3*, with the corresponding data for the Municipality of Malaga included for comparison.

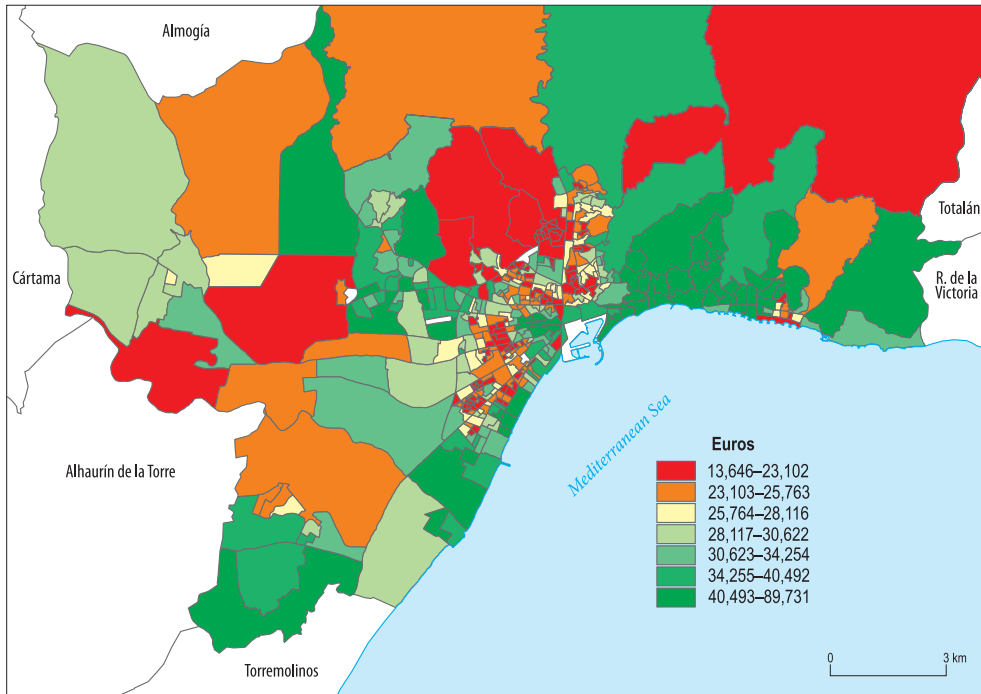


Fig. 6. Average household income in the Municipality of Malaga, 2020. Source: Authors' own elaboration on database of INE, 2022.

Table 3. Average price per m² of housing for sale, 2023

Municipality	Price, EUR per m ²	Municipality	Price, EUR per m ²
Alhaurín de la Torre	1,905	Fuengirola	2,892
Alhaurín el Grande	1,449	Marbella	4,121
Almogía	1,022	Mijas	2,440
Álora	1,044	Pizarra	1,076
Benalmádena	2,673	Rincón de la Victoria	2,179
Cártama	1,661	Vélez Málaga	2,291
Casabermeja	1,330	Torremolinos	2,499
Coín	1,533		
Estepona	2,944	Malaga capital	2,365

Source: Idealista, 2023.

Based on these values, we have categorized the municipalities into four groups according to price range: from 1,000 to 1,500 EUR per m² (Almogía, Álora, Casabermeja, and Pizarra), from 1,500 to 2,000 EUR per m² (Alhaurín de la Torre, Alhaurín el Grande, Cártama, and Coín), from 2,000 to 2,500 EUR per m² (Mijas, Rincón de la Victoria, and Vélez

Malaga/Torre del Mar), and over 2,500 EUR per m² (Benalmádena, Estepona, Fuengirola, Marbella, and Torremolinos).

The number of residential departures in each census tract varies widely, ranging from 56 to 417, and in most of them, the population has moved to municipalities in all four price groups. Therefore, in correlating the

census tracts with the destination of their emigrants, rather than working with absolute numbers, we have opted for the use of a simple statistical tool, the LQ. Through its values, we can identify which census tracts exhibit an over-representation of emigrants for each group of destination municipalities – values that are comparable across tracts, irrespective of the volume of emigrants from each section. With this information, we conducted a correlation analysis between the LQ values and the AHI of each census tract, using the correlation coefficient. The results are presented in *Table 4*.

*Table 4. Values of the correlation coefficients between the AHI and LQ, by groups of municipalities according to the price of housing**

Price, EUR per m ²	Correlation coefficient
1,000–1,500	-0.337
1,500–2,000	-0.290
2,000–2,500	0.423
over 2,500	-0.155

*AHI = Average household income, LC = Location quotient. *Source:* Authors' own elaboration.

As evident in the table, there is a statistically significant correlation between the AHI and the LQ values in three of the housing price ranges, with the exception being municipalities with values exceeding 2,500 EUR per m². The contrast sign is also as anticipated: negative in the first two ranges and positive in the third. Consequently, there is a negative correlation between income and high LQ values in municipalities with lower housing prices, becoming more significant with lower prices. Conversely, the correlation is positive when considering the group of municipalities with housing prices ranging from 2,000 to 2,500 EUR per m², and notably, this correlation is the strongest. In other words, higher income is associated with a lower emigration rate to municipalities with low housing prices, and vice versa.

For the cartographic representation of LQ values and to simplify interpretation, we opted to group values into two main categories. Values below 1 represent sections where the number of departures is lower than expected

compared to the municipal total, labelled as “under-representation” in the legend. Values above 1 correspond to sections that have produced emigrants to the studied municipality group in a higher proportion than expected, identified as “over-representation” in the legend. Additionally, a third category, with a value of 0, groups sections from which no registered individuals moved to the corresponding municipality group, labelled as “no emigrants” in the legend.

In *Figure 7*, we present the spatial distribution of values corresponding to departures to municipalities with lower housing prices for sale (1,000 to 1,500 EUR per m²; destinations including Almogía, Álora, Casabermeja, and Pizarra). In *Figure 8*, the destination municipalities have housing prices between 1,500 and 2,000 EUR per m² (Alhaurín de la Torre, Alhaurín el Grande, Cártama, and Coín). *Figure 9* depicts values of housing prices between 2,000 and 2,500 EUR per m² for sale in the destination municipality (Mijas, Rincón de la Victoria, and Vélez Malaga/Torre del Mar). We note that we will not delve into the last group of destination municipalities, as there is no correlation between the AHI per census tract and this group of destination municipalities.

The interpretations of the distributions are clear. Census tracts with over-representation in departures to municipalities in the first group are predominantly located to the west of the continuous urban fabric, forming a fringe with notable spatial contiguity extending through various neighbourhoods where households with low to very low average incomes reside. The correlation with income values provided by the INE (2022), presented in *Figure 6*, is noteworthy, not only in the western fringe we referred to but also in the grouping around Ciudad Jardín. Furthermore, neighbourhoods with under-representation are situated in the eastern portion of the municipality, over the higher income range of the capital. In this regard, it is interesting to note the existence of two clusters of sections in this eastern area that not only exhibit under-representation but,

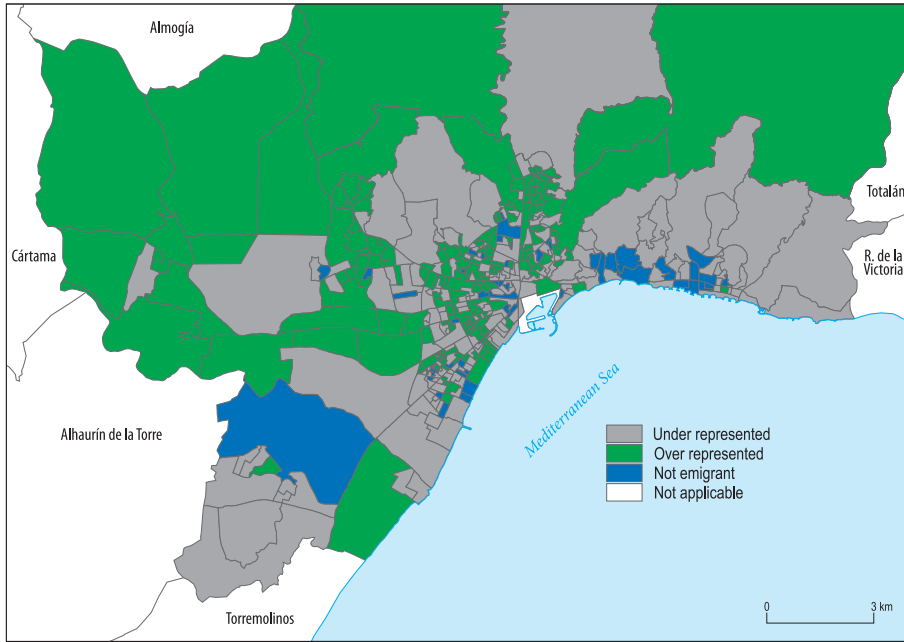


Fig. 7. Location quotients (LQ) of emigrants directed towards municipalities with housing prices between 1,000 and 1,500 EUR per m² in the Municipality of Malaga. Source: Authors' own elaboration.

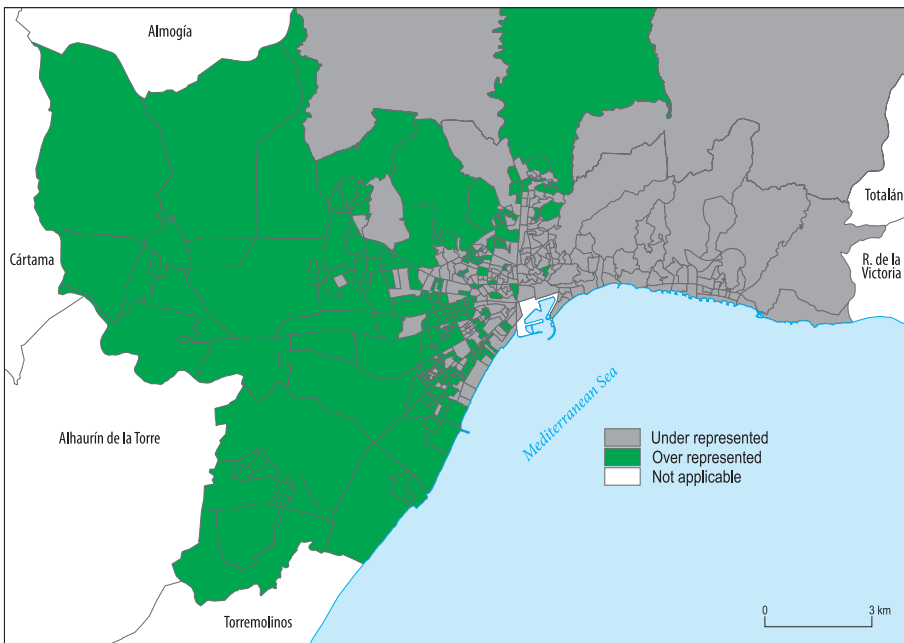


Fig. 8. Location quotients (LQ) of emigrants directed towards municipalities with housing prices between 1,500 and 2,000 EUR per m² in the Municipality of Malaga. Source: Authors' own elaboration.

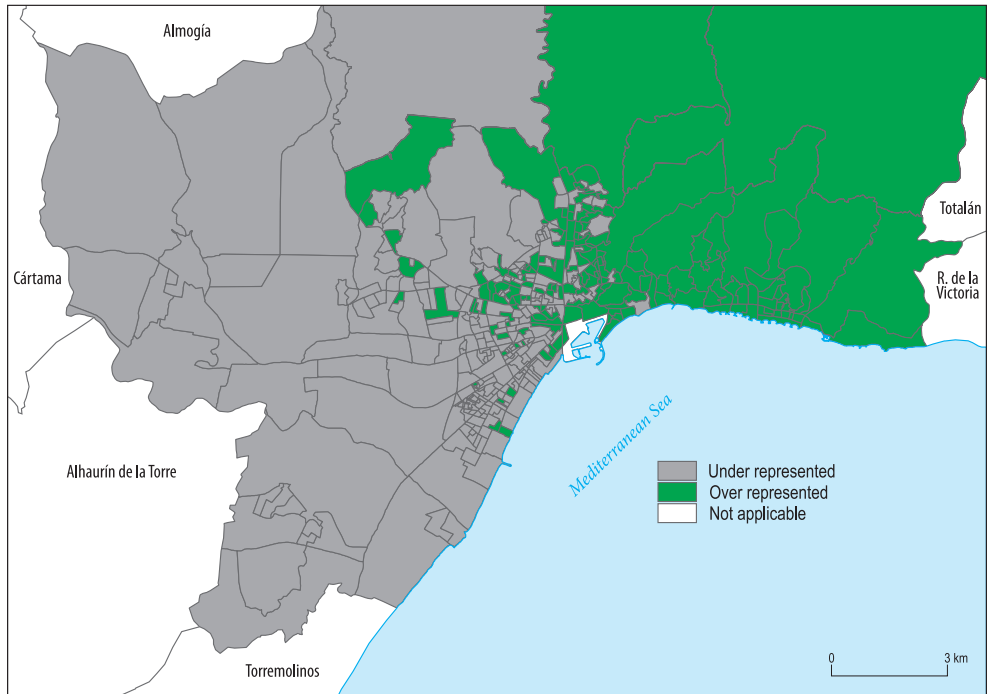


Fig. 9. Location quotients (LQ) of emigrants directed towards municipalities with housing prices between 2,000 and 2,500 EUR per m² in the Municipality of Malaga. Source: Authors' own elaboration.

during our study period, did not send any emigrants to municipalities with lower housing prices. These clusters largely correspond to sections with high AHIs.

Regarding the analysis of the distributions of emigrants heading towards the two subsequent groups of municipalities, it is highly convenient to conduct this analysis simultaneously. Indeed, it can be observed that both distributions are specular: sections with over-representation in emigration to municipalities with housing prices between 1,500 and 2,000 EUR per m² (see Figure 8) exhibit under-representation in emigration to the group with prices from 2,000 to 2,500 EUR per m² (see Figure 9), and vice versa. In other words, all urban sections have experienced population outflows, primarily directed towards the province of Malaga. However, those sections with the highest AHI have directed these flows towards municipalities

with higher housing prices, whereas those with lower incomes have directed them towards places where housing prices are somewhat more affordable.

Conclusions

The destinations of emigrants leaving a municipality are diverse, given variations in motivations, preferences for location, characteristics of the intended housing, and available income for acquisition. However, most sources provide aggregated flows at the municipal level, and those offering some intra-municipal information are either affected by statistical secrecy – pertaining not only to the volume of departures but also to specific destinations – or by rounding resulting from sampling methods. Nevertheless, the existence of a wide variety of destinations reflects

the internal heterogeneity of the originating municipality. In our case, we identified this heterogeneity based on the AHI, which is not evenly distributed within the municipal urban fabric. In the context of residential migrations, where obtaining housing is the primary objective, income can be presumed as one of the key factors underlying the choice of the destination municipality. By utilizing population registry information at the urban census tract level, we have demonstrated a relationship between income level and destination municipality – specifically, housing prices – for emigrants.

Consequently, we are faced with what MITCHELL, C.J.A. (2004) terms displaced urbanization, migration primarily motivated by the search for improved housing conditions at the destination; in this type of migration, the specific destination is not crucial for migrants, as they head to any area where they can meet their housing demands. Furthermore, as ANER, L.G. (2016) indicated for Copenhagen, income and housing influence migration patterns, with available income correlating with the destination, establishing a direct relationship.

This relationship is inverse for municipalities with more affordable housing prices – up to 2,000 EUR per m² – and direct for those with prices up to 2,500 EUR per m². These findings align with the segmentation of the Dutch rural space based on housing prices by BIJKER, R.A. et al. (2013), who found that in less popular rural areas, the average income of residents is lower than in the other two types. Migrants heading to more popular rural areas had higher incomes and were more highly educated. Moreover, as BRANDEN, M. (2013) suggests, income determines whether a person who wants to move has the means to do so. In our case, it determines the destination of migration, i.e., the AHI determines whether a person who wants to move to a municipality with high housing values can do so. Of course, the distance between municipalities of origin and destination is a variable that influence on the destination (FARKAS, R. and KLOBUCNIK,

M. 2021; KOLCSÁR, R.A. et al. 2022). But in a context, as ours, in which, in general terms, the farther is the dwelling, the cheaper is, the relation between available income and price of the new house includes, implicitly, the distance.

Nevertheless, we must not lose sight of the fact that the housing offer in destination municipalities is not homogeneous; different price ranges can be found in all of them. However, the fact that we first obtained statistical correlations between income and housing price per m², and second, that the trend indeed indicates that sections with higher average household income send emigrants “in excess” to municipalities with higher prices, and vice versa, highlights the significance of this variable.

One might question whether this type of movement will ultimately result in maintaining levels of residential segregation based on income, albeit on a larger scale. In other words, the reality present in the Municipality of Malaga would extend to the entire metropolitan area. In this regard, TORRADO, J.M. et al. (2021) have raised this possibility at a metropolitan scale in five major Spanish metropolitan areas. According to the authors, wealth is being centralized, and poverty is being suburbanized, increasing the tendency toward the emergence of a dual city. In our case, the polarization would not be so much spatial – since the movements we have analysed are centrifugal in all cases – as it would be related to the quality of housing. Examining destinations at a finer scale than the municipal level, specifically at the census tract level for arrival municipalities, could allow us to delve deeper into this issue.

To conclude, we will indicate that there remain issues that, based on the research we present, can be addressed: the presence of an immigrant population, basically of a labour nature, is a fact in the Municipality of Malaga, and we can consider not only the participation they have in the emigration flows, but also whether their destination patterns are similar, or not, to the general situation that we have just described. Another as-

point of interest is to investigate the migratory flows of households in relation to the destination municipalities, since we can assume that the physical characteristics of the home vary according to its composition. Elements of great interest that can be addressed taking our results as context.

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