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Do local attitudes change with the exposure and the status of the migrants?

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Abstract. Attitudes and perceptions regarding refugees and migrants play a vital role in the integration potential of newcomers and reflect policies and policy changes. This paper investigates how the exposure of urban communities to the presence of refugees and migrants in their local neighbourhoods affects their evaluation of the potential for migrant integration in the host country. Furthermore, it investigates the existence of a bias in the awareness of the presence of refugees and whether these evaluations change according to the status of the migrant. Using a unique dataset on the individual perceptions of residents of the Greek capital Athens, the analysis shows a positive effect of perceived presence and contends that perceptions of the size of refugee and migrant populations are more consequential for the formation of attitudes than the actual size. Moreover, residents tend to be more favourably disposed towards those recognised as refugees than they are towards permanent migrants.

JEL classification: F22, J60

Key words: migrants, refugees, exposure, integration, public opinions, perception bias

1 Introduction

In OECD countries, more than 5 million additional people migrate permanently (+ 7% in 2016 with respect to 2015; OECD 2018), and on average, more than 10% of residents are born abroad (Germany 15.7%; UK 13.4%, Greece 11.6%, Italy 10.4%). The 2030 Agenda for Sustainable Development of the United Nations recognises the importance of migration for sustainable development considering the "number of countries with migration policies to facilitate orderly, safe, regular, and responsible migration and mobility of people". Migration policies are set at a national level; however, it is the local context that matters when considering active measures for migrant integration as well as impacts on social policy, local labour markets, public services, and amenities.

The relationship between the presence of migrants and local economic performance is not straightforward; heterogeneity in cultural traits and level of education, the conditions under which net benefits prevail over costs, is still a research issue. Indeed, the level of integration strictly depends on the quantity/quality of migrants and natives as well as the perceived and actual cultural distance between them (Easterly, Levine 1997, Ottaviano, Peri 2006, Spies, Schmidt-Catran 2016, Bove, Elia 2017, Gradstein, Justman 2019).

The upsurge in anti-immigration sentiments has inflamed the policy debate throughout Europe (Bansak et al. 2016, Percoco, Fratesi 2018). Such public beliefs range broadly from generalised hostility towards immigration and a widespread fear over its perceived effects to scepticism around the possibility of integrating migrant populations in local communities while social cohesion is safeguarded. Understanding public attitudes towards migration and the underlying factors that drive them are central. Public attitudes determine policy changes (e.g., policy decisions on free-movement restrictions). They also influence collective visions and perceptions of who is considered a member of the in-group and who is not, affecting the potential for interaction as well as the prospects of conflict among different groups and, in turn, integration (Curtice 2017). Several factors shape public attitudes towards refugees and migrants, and the number of migrants is a crucial determinant (Bansak et al. 2016). However, studies have found that the perceived number of migrants overestimates the real numbers (Alesina et al. 2018, 2019, Steele, Perkins 2019). The misperception – when the size and the composition of migrants are seen differently than the actual numbers – might generate bias in public opinions. The intensity and direction of the relationship between misperception and attitudes towards migrants are not straightforward, and recent research offers mixed results. On the one hand, it supports the association between misperception and anti-immigrant attitudes (Pottie-Sherman, Wilkes 2017, Gorodzeisky, Semyonov 2019). On the other hand, it finds 1) a weak relationship between the objective and subjective evaluation of natives about the number of migrants and 2) a weak linkage between these subjective evaluations and attitudes towards integration (Spies, Schmidt-Catran 2016). Therefore, exposure to refugees and migrants in everyday life might positively or negatively affect perceptions. According to the intergroup theory proposed by Allport (1954), closer contact between natives and non-natives might reduce the prejudice towards minority groups and reduce extremism (Steinmayr 2020).

Interestingly, some studies have found that people tend to be more favourably disposed towards those recognised as refugees rather than other migrants (Mayda 2006, O'Rourke, Sinnott 2006, Hatton 2016). The word migration often implies a voluntary process, such as people who cross a border searching for better economic opportunities. This is not the case for refugees who cannot return to their homes in safe conditions and are consequently entitled to specific protection measures (UNHCR 2025).

Overall, previous research highlights the attitudes towards refugees and migrants and their subsequent integration, which is dependent on the socio-demographic and cultural characteristics of migrants, residents, the distance between them, and the contact between them.

This study starts with the premise that local attitudes and perceptions play a vital role in the integration potential of newcomers. Other fundamental structural factors are national integration policies that safeguard equal rights and access to services for migrant populations and local integration practices that aim to maximise opportunities for interaction. Specifically, this work concentrates on how the exposure of urban communities to the presence of refugees and migrant groups in their local neighbourhoods affects their evaluation of the potential for integration in the host country.

The first hypothesis (H1) is that the exposure to refugees (i.e., the possibility of interaction) reduces the negative attitudes and perceptions of the resident population towards them. Consequently, it might affect residents' beliefs about integration later on. The second hypothesis (H2) is that bias in the awareness of the presence of refugees may reinforce the residents' perception of the potential for integration. The third hypothesis (H3) is that the perceptions of integration may differ due to the status of refugees and migrants; while refugees are displaced due to conflict or persecution, migrants are free people who moved away from their country to seek better economic and educational opportunities.

In the present paper, the issue of integration focuses on the perspective of the resident population. The work uses a unique dataset on the individual perceptions of residents of the Greek capital Athens obtained less than two years after the outbreak of the refugee crisis in the summer of 2015. Between 2016 and 2017, the City of Athens Observatory for Refugees and Migrants (AORI) undertook a research programme consisting of a refugee

census and public opinion surveys to understand attitudes towards migrants and refugees. A challenge related to the situation is the increasing discontent among Greek nationals and existing migrant communities. As in the rest of Europe (Bansak et al. 2016), the mobilisation of funds and resources to manage the refugee crisis has fanned social tension (details on refugees' integration policies in Greece are provided in Skleparis 2018). The humanitarian response to the refugees' crisis affects the quality and breadth of social and welfare services for nationals. This work studies how the perceived presence of refugees affects residents' evaluation of integration potential and explores whether misperception occurs between the perceived presence and the actual number of refugees. Finally, it investigates whether the potential for integration changes according to the status of migrants compared to that of refugees.

The present paper contributes to the literature on the formation of public opinion of out-group populations in various ways. First, it provides evidence that exposure to refugees and migrants in local neighbourhoods positively affects individual attitudes related to immigration. This paper finds evidence that perceived presence has a more substantial effect on such attitudes than the actual presence of out-group populations and reports more positive attitudes towards newly arrived refugee populations than towards longer-term migrants living in the city. Such findings are extremely timely, as policies on immigration and refugees are often motivated by prevailing public attitudes. The outcomes of the present work can inform policy-relevant research that examines the complex bidirectional relationship between societal perceptions related to migration and current anti-immigration narratives.

The paper is structured as follows. Section 2 reviews the existing literature on public attitudes towards migration. Section 3 presents a case study of Athens, a city that found itself at the forefront of an unprecedented refugee crisis at the European level. Section 4 explains the unique dataset used in study (4.1) and presents the empirical model and the methodology (4.2). Section 5 illustrates the main results, with a specific analysis on the effect of perceived versus actual presence (5.1) and on the effect of economic migrants (5.2), providing various robustness checks (5.3). The last section presents conclusions, discusses limitations, and compiles the policy implications of this work.

2 Perceptions on migration

Research on public opinion regarding immigration has grown in recent decades due mainly to the rapid increase in the phenomenon. Hainmueller, Hopkins (2014) classified the literature on immigration opinions into two main strands: political economy and sociopsychological. The former analyses the impact of immigration on individuals according to labour market competition (Hainmueller, Hopkins 2015, Valentino et al. 2019, Chletsos, Roupakias 2019), welfare (Facchini, Mayda 2009, Schmidt-Catran, Spies 2019), and fiscal burden (Campbell et al. 2006, Dustmann, Preston 2007). The economic strand highlights several factors that can affect negative and positive perceptions of migrants held by native-born individuals related to both their macro-contexts (e.g., mixed schools, the employment rate of the region), and their social characteristics (e.g., the personal knowledge of migrants, the level of difficulty in paying bills, and the inaccurate perception of the actual numbers of migrants; Citrin et al. 1997, Eurobarometer 2018, OECD 2018). The so-called sociopsychological strand is rather heterogeneous and ranges from attitudes towards differences in race, religion, etc., to perceived threats to national identity, prejudice, and stereotypes and recognises the role of mass media on attitudes concerning immigration (Hainmueller, Hopkins 2014).

The attitudes and opinions of local communities regarding refugees and migrants depend on socio-cultural openness and play a key role in local integration policies. A strand of recent research focuses on the effects of residents' misperception on the opinion and attitude towards refugees and migrants (Pottie-Sherman, Wilkes 2017, Alesina et al. 2018, Steele, Perkins 2019, Gorodzeisky, Semyonov 2019). Overall, the findings confirm misperception and the linkage between misperception, anti-immigrant attitudes, and related policies (redistribution and welfare policies, and general social policies). In this context, Alesina et al. (2018, 2019) find that the perceived number of migrants is always

twice as high as reality for a set of countries (Germany, France, Italy, Sweden, the United Kingdom, and the United States). Steele, Perkins (2019), focusing on New York neighbourhoods, confirm overestimation, even at a lower intensity.

Exposure to migrants and refugees can positively or negatively affect the opinions of the resident population. Applied research finds negative opinions in cities and regions with low-and medium-income individuals, low-skilled natives working in the sector more exposed to migrants, non-college-educated individuals, women, right-wing voters, smaller, and less urban municipalities, municipalities with high unemployment, high immigrant shares, or past immigration settlements (Young et al. 2018, Palermo et al. 2022). Positive perceptions are found in cities and regions with younger individuals, high skills and college-educated individuals, left-wing voters, and more urban municipalities (Hainmueller, Hiscox 2007, Constant, Zimmermann 2009, Dahlberg et al. 2011, Alesina et al. 2018, Dustmann et al. 2019, OECD 2018).

Several studies show distinctions in public attitudes based on refugees' and migrants' characteristics. Evidence from the UK, for instance, suggests that people tend to default to negativity when asked about immigration, but are much less prone to do so when asked about specific groups of migrants (Ford 2011). In particular, people tend to be more favourably disposed towards those recognised as refugees than they are towards other migrants (Mayda 2006, O'Rourke, Sinnott 2006, Hatton 2016).

The present study investigates the integration potential of migrants and refugees from the perspective of the resident population. This work contributes to this line of research by analysing the presence of misperceptions and disentangling the different roles migrants and refugees might play in residents' opinions of integration potential. The case of Athens is the first study of Greece on this specific topic.

3 The city of Athens

Following the outbreak of the refugee crisis in the summer of 2015, Athens, the capital of Greece, found itself at the forefront of an unprecedented emergency at the European level. On top of Greece's domestic economic crisis, the influx of large numbers of refugees – mainly from Syria, Afghanistan, and Iraq – found the country unprepared to deal with complex challenges, which ranged from the provision of short-term accommodation solutions for asylum seekers to longer-term support for the efficient integration of recognised refugees and migrants into Greek society. United Nations High Commissioner for Refugees (UNHCR) data for Greece indicate that, as of October 2018, 58% (over 12,000) of refugees living in UNHCR's 'ESTIA' accommodation programme were living in Athens and the region of Attica (Papatzani 2020). An additional 6,323 people resided in six open reception facilities (open campsites), with one, the site of Eleonas, located very close to the city centre (UNHCR 2018).

Significant immigration flows are not a new phenomenon in Greece. Indeed, starting in the early 1990s and especially following the collapse of the communist regime, Greece received major waves of migrants from the Balkans, Central, and Eastern Europe, and the former Soviet Union. During the last decade, particularly since the beginning of the economic crisis in 2008, Greece has become a transit point and destination for migrants and asylum seekers arriving from Southeast Asia, Africa, and the Middle East.

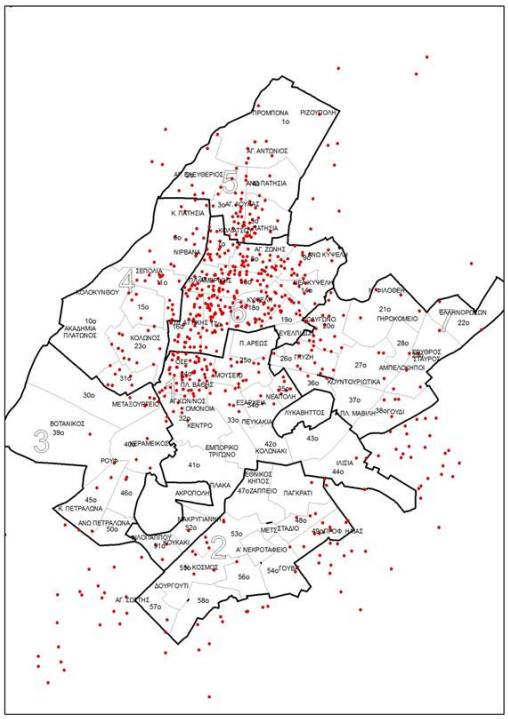
The largest nationality among migrants in Athens in 2016 was Albanians (38,469), followed in much smaller numbers by nationals from the Philippines, Bangladesh, and Ukraine (Table 1). There is no reliable information on the number of irregular migrants living in Athens. In terms of age, the majority of migrants in Athens are between 25 and 50 years old. In comparison, there is a significant age cohort among the younger generations between 0 and 14 years old – children born in Greece – that remain foreign nationals – or those who came to the country at a very early age.

The number of refugees and asylum seekers in Athens during 2016–2017 was estimated at 15,000 people (a share of over 40% of Greece's total number of refugees). It is worth noticing that, according to the 2011 census, migrants represent 17.7% of the total population in the Central Sector of the Prefecture of Attica (ELSTAT 2011).

According to preliminary observations, the district of Western Athens seems partic-

Table 1: Number of residence permits issued to third-country nationals in the Municipality of Athens, March 2016

Nationality	# of Permits	Nationality	# of Permits	Nationality	# of Permits
Albania	38,469	Moldova	2,120	Sri Lanka	499
Philippines	6,083	Syria	2,025	Ghana	475
Bangladesh	4,383	China	1,662	Armenia	452
Ukraine	4,026	Nigeria	1,194	Morocco	324
Egypt	3,549	Russia	1,186	Iran	312
Georgia	3,203	India	792	Other	3,258
Pakistan	3,068	Ethiopia	726	Total	77,806



Source: Public Issue, 2016.

Figure 1: Spatial distribution of refugee apartments in Athens

ularly concerned about migration with more than ten asylum seekers and refugees for every 1,000 people, compared to the average of more than four for every 1,000 people in the rest of Athens. On 30 April 2017, there were 98,107 recorded and pending asylum applications in Greece. Since then, asylum procedures have accelerated, but still challenge the public system, and a sizeable backlog remains (Proietti, Veneri 2021).

In Athens, as well as in other Greek cities, accommodation for asylum seekers and refugees is scarce. In the centre of Athens, once-abandoned urban spaces – mainly derelict retail spaces in the centre of the city – have been transformed into community centres offering services from language courses to legal representation and psychological support. By 2018, the Office of the United Nations High Commissioner for Refugees (UNHCR) had a housing programme for refugees – the ESTIA programme – and many refugees have found informal jobs and are renting apartments across the city, especially in multicultural neighbourhoods. Figure 1 shows the distribution of UNHCR accommodation apartments in the districts of Athens. The most significant concentration is in District 6 due to real estate availability under the UNHCR scheme. District 3 (Eleonas) hosts a temporary accommodation site.

Table 2: Distribution of interviews within Athens' city districts

District	Share	District	Share	District	Share
District 1	11%	District 4	13%	District 7	19%
District 2	16%	District 5	15%		
District 3	7%	District 6	20%		

Table 3: Sample description

Integration potential	
Cannot be integrated	40%
It depends	34%
Can be integrated	22%
Gender	
Male	53%
Female	47%
Age	
18–24	2%
25–34	4%
35–44	9%
45–54	18%
55–64	25%
>65	42%
Native	97%
Civil status	
Married with children under 18	14%
Married with children over 18	49%

Employment	
Employers/self-employed	9%
Public sector salaried employees	6%
Private sector salaried employees	13%
Unemployed	11%
Pensioners	49%
Housewives	9%
Students	1%
Other/no answer	2%
Financial situation	
Facing great difficulties	41%
Facing difficulties	34%
Making ends meet	22%
Living comfortably	3%
Political self-placement	
Left	17%
Centre	39%
Right	12%
Apolitical	32%

4 Methodological approach and empirical model

4.1 The data

Between 2016 and 2017, the AORI undertook a research programme consisting of a refugee census and public opinion surveys. Specifically, a public opinion survey aimed to understand the attitudes towards refugees and migrants of permanent residents of the city of Athens. The central questions concern the perceived presence, attitude towards coexistence, and integration of refugees. In 2016, a total of 3,024 residents aged 18 and over were interviewed in three waves of telephone surveys (1,007 in October, 1,012 in November, and 1,005 in December) by 22 interviewers and two supervisors. The sample was stratified according to the resident's neighbourhood. The standard error of the final sample is between +/- 3.2%, and the confidence interval was 95% (Table 2).

The question under analysis asks respondents to indicate their opinion about the integration potential of refugees: "Generally speaking, the refugees that remain in Greece, do you think that they can or they cannot be integrated into the Greek Society?" The dependent variable is a discrete variable that considers the respondent's perception of the possibility of refugees' integration. The response options are on a three-point Likert scale: 1 = cannot be integrated, 2 = it depends, and 3 = can be integrated. The majority of residents (40%) believe that refugees cannot be integrated, 22% believe that they can be integrated, and the remaining residents do not have a clear position. The majority of respondents are native, male, aged over 45, married with children over 18, pensioners, facing financial difficulties, and politically place themselves in the centre or left wings (Table 3).

4.2 The empirical model

As the dependent variable has more than two categories, and the values of each category have an expressive sequential order corresponding to the level of integration, the empirical analysis uses an ordered logit model. This model, also called the *proportional regressions*

model, implies that the observed ordinal variable Y is a function of a continuous latent variable, Y^*, which is not measured. Y^* has various threshold points, and the value of Y depends on whether a particular threshold is crossed (Menard 2002). Specifically, Y^* is equal to:

$$Y^* = \sum_{k=1}^{K} \beta_k X_{ki} + \varepsilon_i = Z_i + \varepsilon_i \tag{1}$$

where $Z_i = E(Y^*)$, and ε_i is the random disturbance term. Using the estimated value of Z and assuming a logistic distribution for the disturbance term, the ordered logit model estimates the probability that the unobserved variable Y^* falls within the various threshold limits. Furthermore, this specification assumes that the coefficients that express the relationship between the lowest threshold and all higher thresholds of the dependent variable are the same as those that describe the relationship between the next lowest category and all higher categories, and so on. In other words, because it is assumed that the relationship between all pairs of groups is the same, a single set of coefficients is estimated, and the parallel regression assumption holds. The empirical model applied in the present paper is as follows:

$$\begin{aligned} &\textit{Perception of refugees' integration}_i = f(\textit{Refugees' perceived presence}_i, \\ &\textit{Refugees' actual presence}_i, \textit{Immigrants' perceived presence}_i, \textit{Other controls}_i) \end{aligned} \tag{2}$$

Controls included individual socio-economic and demographic characteristics, such as gender, age, education, civil status, presence of children, employment, income adequacy (financial situation), and political self-placement. Furthermore, the controls included two variables that check for the perception that refugees might cause problems and that residents cannot distinguish between migrants and refugees. Variable descriptions are presented in Table A.1 in the Appendix.

The final model (Base Model) included the variables selected using a stepwise procedure. In this specification, the approximate likelihood-ratio test of proportionality of odds across response categories does not provide evidence that parallel regression assumption has been violated (chi2(16) = 15.04 and Prob > chi2 = 0.5219). This result is also confirmed by the Brant Test of Parallel Regression Assumption (chi2(16) = 22.40 and Prob > chi2 = 0.131). Therefore, the results can be interpreted by looking at the sign and significance of the coefficients.

5 Results

The present paper investigates three main hypotheses. First, that the exposure to refugees reduces the resident population's negative attitudes towards and perceptions of them (H1). Second, that a bias in the awareness of the presence of refugees may reinforce the perception of the potential for integration (H2). Third, that the perception of integration may differ due to the status of refugees and migrants (H3). Table 4 shows that *refugees' perceived presence* and *refugees' actual presence* are positive and significant (Model 1 and Model 2). This finding corroborates H1; hence, exposure (perceived and actual) to refugees reduces the resident population's negative attitudes towards them. The comparison between the coefficients of the variables *refugees' perceived presence* and *refugees' actual presence* confirms H2, as the effect of perception is stronger than the actual presence. This could be interpreted as a sign of misperception, confirming that perceptions are often stronger than actual facts (Alesina et al. 2018, Steele, Perkins 2019). Furthermore, when the *perception that foreigners cause problems* increases, opinions of integration potential decrease accordingly. Perception of the presence of migrants (*migrants' perceived presence)* negatively affects individual evaluations of the potential for integration. In line with H3, this result suggests that the status of refugees and migrants might affect integration perceptions. This might also suggest that refugees are perceived differently than migrants. According to previous research, residents tend to be more

Table 4: Residents' perception of refugees' integration potential

Dependent: Perception of refugees' integration	Model 1 With perceived refugee presence	Model 2 With actual refugee presence
Refugees' perceived presence	0.103**	
	(0.0517)	
Refugees' actual presence		0.000434**
		(0.000212)
Perception that foreigners cause problems	-0.564***	-0.539***
	(0.0617)	(0.0557)
Migrants' perceived presence	-0.00335	-0.00314*
	(0.00208)	(0.00190)
Unable to distinguish between migrants/refugees	-0.221	-0.156
	(0.166)	(0.139)
Gender	-0.0491	-0.0750
	(0.0915)	(0.0862)
Age	-0.724***	-0.672***
	(0.208)	(0.198)
Age^2	0.0766***	0.0689***
	(0.0264)	(0.0251)
Education	0.208***	0.176**
	(0.0759)	(0.0708)
Married with children over 18	-0.0700	-0.0212
	(0.105)	(0.0979)
Married with children under 18	-0.142	-0.135
	(0.146)	(0.140)
Unemployed	0.0385	-0.0277
	(0.153)	(0.144)
Inactive	-0.133	-0.204
	(0.138)	(0.131)
Income adequacy	0.0940*	0.117**
	(0.0537)	(0.0506)
Born in Greece	-0.477*	-0.406
	(0.277)	(0.261)
Political self-placement (left)	1.034***	1.049***
	(0.123)	(0.117)
Political self-placement (centre)	0.172*	0.193**
	(0.101)	(0.095)
N	2164	2433
Pseudo R^2	0.071	0.071
AIC	3863.5	4356.8
BIC	3965.7	4461.1

Standard errors are in parentheses; * p <0.10, ** p <0.05, *** p <0.01.

favourably disposed towards individuals recognised as refugees than they are towards migrants (Mayda 2006, O'Rourke, Sinnott 2006, Hatton 2016).

Among the socio-economic and demographic controls, residents' age negatively affects perceptions of integration. The effect is not linear, indicating that younger residents have positive opinions (Age^2). Age, education level, and financial difficulties affect public opinion (Card et al. 2005, Mayda 2006, O'Rourke, Sinnott 2006, Hainmueller, Hiscox 2007, 2010, Alesina et al. 2018, 2019, Hatton 2020). Residents *born in Greece* are found to be more sceptical about refugees' integration potential than non-natives (see Model 1). Finally, confirming previous findings, political self-placement affects integration perceptions. Specifically, residents who vote for left-wing and centre political parties have a favourable opinion about integration (Dustmann et al. 2019, Alesina et al. 2018, 2019). Tables A.4 and A.5 in the Appendix present the marginal effects for both models across each threshold of the dependent variable (i.e., *Cannot be integrated, Depends and Can be integrated*).

5.1 The effects of perceived versus actual presence

Existing literature suggests that perceptions often play a bigger role than facts in how views are formed. Specifically, Alesina et al. (2018) found that the perceived number of

Table 5: The effect of refugees' perceived presence versus actual presence: marginal effects expressed in percentages

Dependent: Perception of refugees' integration	Cannot be integrated pr(y = 1)	Depends	Can be integrated pr(y = 3)
Refugees' perceived presence	-2.230%**	0.313%**	1.920%**
	(0.0111)	(0.00158)	(0.00959)
Refugees' actual presence	-0.009%**	0.001%**	0.008%**
	(0.0000457)	(0.00000668)	(0.0000391)

Notes: Standard errors are in parentheses; $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table 6: The effect of refugees' perceived presence: marginal effects expressed in percentage by categories

Dependent: Perception of refugees' integration Refugees' perceived presence	Cannot be integrated pr(y = 1)	Depends	Can be integrated pr(y = 3)
None	58.70%	13.30%	28.00%
A few	56.50%	13.60%	29.90%
Some	54.30%	13.90%	31.80%
Many	52.00%	14.10%	33.80%

migrants is always two times higher than reality. A more in-depth analysis on this issue in the case of Athens compares the marginal effects of the *refugees' perceived presence* and *refugees' actual presence* variables (Table 5). When transforming the coefficients into percentages, the present analysis confirms the impact of perception over actual presence, as in Steele, Perkins (2019) and, specifically, a perception of double the number present in reality, as in Alesina et al. (2018).

Investigating in more detail how perceived presence affects the perception of integration potential, Figures 2 and 3 show refugees' role in the neighbourhood. Figure 2 (Table 6) compares *refugees' perceived presence* with the *perception of refugees' integration*; the dashed line shows that the predicted probability of the perception of integration (the y-axis) goes from 28% – when the residents are not at all exposed to refugees in their neighbourhood – to 34% – the maximum exposure. The line continuously moves in the same direction: the probability of no integration decreases as exposure increases (the predicted probability goes from 59% to 52%).

The same results were confirmed when analysing the effect of the actual presence on predicted probabilities (Figure 3, Table 7). Overall, the findings indicate that the higher the opportunities to interact with refugees, the higher the residents' positive opinion on refugees' integration.

Table 7: The effect of refugees' actual presence: marginal effects expressed in percentage by categories

Dependent: Perception of refugees' integration Refugees' actual presence	Cannot be integrated pr(y = 1)	Depends	Can be integrated pr(y = 3)
2%	58.60%	13.80%	27.70%
8%	57.80%	13.90%	28.30%
9%	57.80%	13.90%	28.40%
11%	57.50%	13.90%	28.60%
13%	57.20%	14.00%	28.80%
50%	53.00%	14.50%	32.50%

Notes: Refugees' actual presence is the percentage of total refugees hosted in each city district.

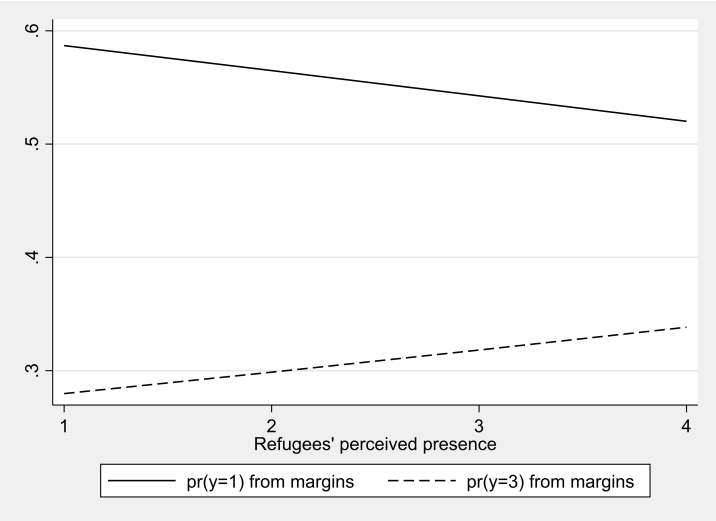


Figure 2: The effect of refugees' perceived presence

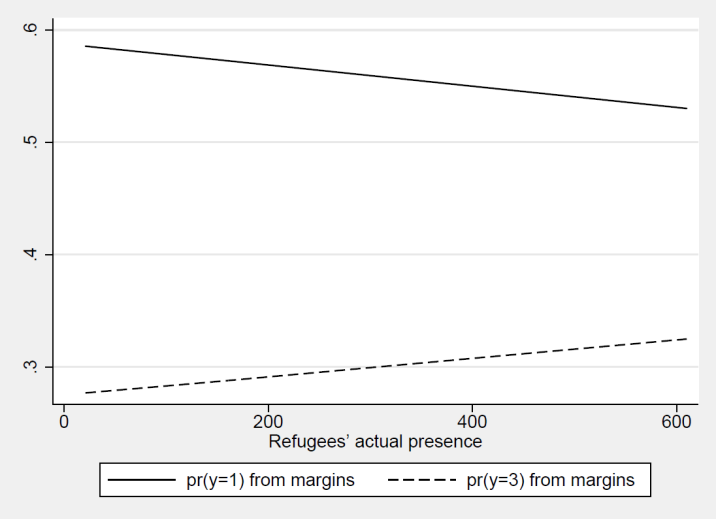


Figure 3: The effect of refugees' actual presence

5.2 The effect of migrants' perceived presence

Another result regards the role of the perceived presence of migrants on residents' opinions. The migrants' impact is not positive (Figure 4, Table 8). Indeed, the predicted probability of integration decreases as the perceived presence of migrants increases – the dashed line in Figure 4 shows that the probability goes from 32% to 26% – while the probability of no integration increases as the migrants' perceived presence increases – the solid line in Figure 4 shows that the probability goes from 54% to 61%.

This result might also indicate that migrants are not fully integrated into Athens. Therefore, their perceived presence in each district might negatively affect residents opinions on the prospective integration of refugees. Furthermore, residents would likely perceive refugees as more educated than migrants and, therefore, more likely to be integrated into the local context. Indeed, previous literature has found that cultural adaptability relates to the level of education (Algan et al. 2012). Unfortunately, no information about refugees' education levels is available. Moreover, this result could also be capturing one of the first effects of the ad hoc integration policy implemented in Athens after the first refugee crisis in 2015 (Skleparis 2018).

Table 8: The effect of migrants' perceived presence: marginal effects expressed in percentage by categories

Dependent: Perception of refugees' integration Migrants' perceived presence	Cannot be integrated pr(y = 1)	Depends	Can be integrated pr(y = 3)
1 %	54.30%	14.10%	31.60%
5 %	54.60%	14.00%	31.30%
8 %	54.80%	14.00%	31.10%
15 %	55.40%	14.00%	30.70%
30 %	56.50%	13.80%	29.70%
50 %	57.90%	13.60%	28.50%
80 %	60.10%	13.20%	26.70%
90 %	60.80%	13.10%	26.10%
98 %	61.40%	13.00%	25.60%

Notes: Migrants' perceived presence is the proportion of foreigners living in the city district as a subjective estimation.

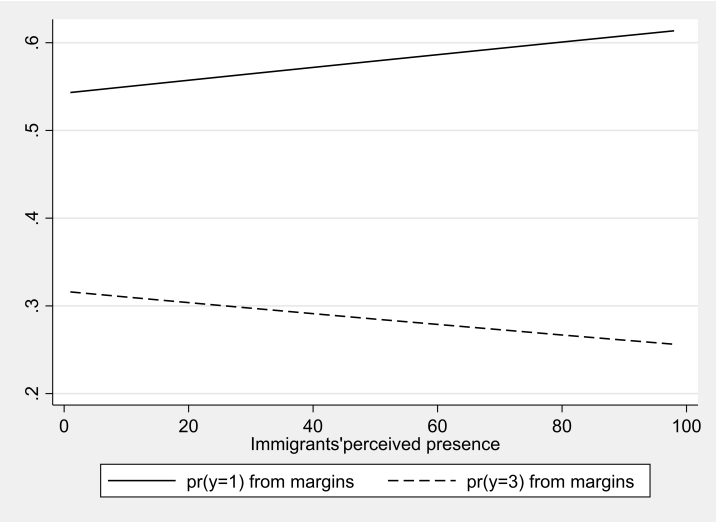


Figure 4: The effect of migrants' perceived presence

Table 9: Robustness check. Including the new migrants' perceived presence and new perception that foreigners cause problems

Dependent: Perception of refugees' integration	Model 1 With perceived refugee presence	Model 2 With actual refugee presence
Refugees' perceived presence	0.0940*	
	(0.0498)	
Refugees' actual presence		0.000384*
		(0.000199)
Perception that foreigners cause problems 1		
Perception that foreigners cause problems 2	-0.554***	-0.537***
	(0.105)	(0.0975)
Perception that foreigners cause problems 3	-1.271***	-1.182***
	(0.157)	(0.141)
Perception that foreigners cause problems 4	-1.632***	-1.550***
	(0.249)	(0.224)
New Migrants' perceived presence	-0.109	-0.110
	(0.138)	(0.121)
Unable to distinguish between	-0.193	-0.130
migrants/refugees	(0.162)	(0.133)
Gender	-0.0282	-0.0434
	(0.0897)	(0.0836)

continued on next page ...

Table 9: Robustness check. Including the new migrants' perceived presence and new perception that foreigners cause problems – continued

Dependent: Perception of refugees' integration	Model 1 With perceived refugee presence	Model 2 With actual refugee presence
Age	-0.725***	-0.652***
	(0.214)	(0.202)
Age^2	0.0771***	0.0667***
	(0.0272)	(0.0256)
Education	0.212***	0.175***
	(0.0725)	(0.0675)
Married with children over 18	-0.0865	-0.0459
	(0.101)	(0.0934)
Married with children under 18	-0.140	-0.123
	(0.147)	(0.140)
Unemployed	0.0781	-0.00330
	(0.151)	(0.141)
Inactive	-0.101	-0.168
	(0.144)	(0.133)
Income adequacy	0.0802	0.102**
	(0.0529)	(0.0493)
Born in Greece	-0.363	-0.382
	(0.268)	(0.247)
Political self-placement (left)	1.066***	1.069***
	(0.120)	(0.113)
Political self-placement (centre)	0.194*	0.200**
	(0.0998)	(0.0928)
Cut1	-1.075**	-1.163**
	(0.510)	(0.474)
Cut2	-0.396	-0.457
	(0.509)	(0.473)
N	2236	2537
Pseudo R^2	0.070	0.068
AIC	4004.3	4566.1
BIC	4118.5	4682.9

Notes: Robust standard errors are in parentheses; *p < 0.10, **p < 0.05, ***p < 0.01.

5.3 Robustness check

Some variables related to the perception of refugees and migrants are weakly correlated. The correlation table in the appendix (Table A.2) shows that the most correlated variables are: *refugees' perceived presence* and *migrants' perceived presence*; *migrants' perceived presence* and *perception that foreigners cause problems*. Therefore, to check whether the results hold, migrants*' perceived presence* and *perception that foreigners cause problems* were transformed into dummy variables. In particular, the continuous variable *migrants' perceived presence* has been transformed into a dummy variable that takes the value 1 if the share of foreigners over the total residents in the district is higher than 75%, and 0 otherwise. Other dummy variables with different thresholds have been tried (> 25; > 55; > 70) and the least correlated one resulted in the > 75 threshold. The correlation of n*ew migrants' perceived presence* and *refugees' perceived presence* reduces to 0.19 (originally it was 0.39, compare Table A.2 and Table A.3 in the Appendix). Furthermore, the *perception that foreigners cause problems* has been split into 4 dummies that take the following values depending on the response options: 1 = none, 2 = a few, 3 = some, 4 = many, and 0 otherwise. This transformation reduces the correlation between the *perception that foreigners cause problems* and n*ew migrants' perceived presence* (compare Tables A.2 and A.3 in the Appendix). As a further check, we also estimated two additional models, transforming all categorical variables of Model 1 and Model 2 into dummy variables. As shown in Table A.6, the results align with previous findings. Table 9 shows that the results also remained stable using the two transformed variables. A set of regressions controls for the fixed effects of ethnic nationalities and residents' neighbourhood location. Table 10 shows that refugees' perceived presence and refugees' actual presence remain consistently stable.

Table 10: Robustness check by nationality of refugees and migrants

Dependent: Perception of refugees' integration	Model 1 With perceived refugee presence	Model 2 With actual refugee presence
Albanians		
Refugees' perceived presence	0.111**	
	(0.0526)	
Refugees' actual presence		0.000446**
		(0.000212)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3864.8	4358.3
BIC	3972.7	4468.4
Pakistanis		
Refugees' perceived presence	0.109**	
	(0.0520)	
Refugees' actual presence		0.000418**
		(0.000212)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3864.1	4357.1
BIC	3972.0	4467.2
Africans		
Refugees' perceived presence	0.101*	
	(0.0518)	
Refugees' actual presence		0.000361*
		(0.000218)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3862.8	4356.9
BIC	3970.8	4467.0
Filipinos		
Refugees' perceived presence	0.0938*	
	(0.0524)	
Refugees' actual presence		0.000406*
		(0.000214)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3864.3	4357.9
BIC	3972.2	4468.1
Syrians		
Refugees' perceived presence	0.0968*	
	(0.0538)	
Refugees' actual presence		0.000429**
		(0.000212)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.071	0.071
AIC	3865.3	4358.3
BIC	3973.2	4468.4

Notes: Standard errors are in parentheses; *p < 0.10, **p < 0.05, ***p < 0.01.

As explained in Section 3, the city of Athens is divided into seven districts. Results stay stable for all districts; the only exception are districts six and seven, where actual presence does not affect the residents' opinion of integration potential in the neighbourhood (Table 11).

Table 11: Robustness check by neighbourhood (districts)

Dependent: Perception of refugees' integration	Model 1 With perceived refugee presence	Model 2 With actual refugee presence
District 1		
Refugees' perceived presence	0.104**	
	(0.0519)	
Refugees' actual presence		0.000446**
		(0.000212)
District 1	-0.0204	0.0678
	(0.149)	(0.141)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3864.8	4358.3
BIC	3972.7	4468.4
District 2		
Refugees' perceived presence	0.104**	
	(0.0519)	
Refugees' actual presence		0.000443**
		(0.000217)
District 2	0.0165	0.0235
	(0.120)	(0.116)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3864.1	4357.1
BIC	3972.0	4467.2
District 3		
Refugees' perceived presence	0.103**	
	(0.0517)	
Refugees' actual presence		0.000472**
		(0.000218)
District 3	0.0279	0.118
	(0.172)	(0.165)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3862.8	4356.9
BIC	3970.8	4467.0
District 4		
Refugees' perceived presence	0.102**	
	(0.0518)	
Refugees' actual presence		0.000520**
		(0.000219)
District 4	0.222	0.212
	(0.138)	(0.131)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3864.3	4357.9
BIC	3972.2	4468.1
District 5		
Refugees' perceived presence	0.104**	
	(0.0517)	
Refugees' actual presence		0.000419**
		(0.000214)
District 5	-0.150	-0.0636
	(0.127)	(0.121)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.071	0.071
AIC	3865.3	4358.3
BIC	3973.2	4468.4
District 6		
Refugees' perceived presence	0.0943*	

continued on next page ...

Table 11: Robustness check by neighbourhood (districts) – continued

Dependent: Perception of refugees' integration	Model 1 With perceived refugee presence	Model 2 With actual refugee presence
	(0.0521)	
Refugees' actual presence		-0.000262
		(0.00137)
District 6	0.172	0.358
	(0.115)	(0.695)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3862.8	4356.9
BIC	3970.8	4467.0
District 7		
Refugees' perceived presence	0.0909*	
	(0.0522)	
Refugees' actual presence		0.000335
		(0.000218)
District 7	-0.206*	-0.214*
	(0.113)	(0.110)
Other controls	YES	YES
N	2164	2433
Pseudo R^2	0.072	0.071
AIC	3864.3	4357.9
BIC	3972.2	4468.1

As a final check, we address the potential joint endogeneity of the perception variables by estimating a reduced-form equation with only exogenous variables as regressors. Specifically, we use a binary logit model, where the dependent variable is *Can be integrated* (coded as 1 for "Can be integrated" and 0 otherwise). The independent variables include only strictly exogenous individual characteristics, omitting perception/opinion variables and focusing on *refugees' actual presence* as the main variable of interest. As shown in Table 12, the presence of refugees increases the likelihood that residents report that refugees can be integrated.

6 Conclusions and policy implications

This study is based on the premise that – in practice – integration takes place at the local level, as cities are focal locations for the refugee and migrant reception and integration processes. Additionally, although migration policies are the responsibility of national governments, the concentration of migrants in cities and metropolitan areas more broadly has a significant impact on local demands for labour, housing, and goods and services, creating challenges that fall to local authorities to manage (Boulant et al. 2016, Diaz Ramirez et al. 2018). The present paper analyses how urban communities' exposure to refugee and migrant groups in their local neighbourhoods affects their evaluation of the refugees' potential for integration into the host communities. Specifically, it explores how the exposure to refugees affects residents' evaluation of integration potential, whether misperception occurs between the perceived presence and the actual number, and to what extent the potential for integration changes according to migrant versus refugee status. Overall, the results corroborate the few existing studies on the positive effect of exposure (Steele, Perkins 2019) and contend that perceptions of the size of refugee and migrant populations are more consequential to the formation of attitudes related to refugees and migrants than is the actual size (Alesina et al. 2018, Gorodzeisky, Semyonov 2019). Moreover, in accordance with previous research, residents tend to be more favourably disposed towards refugees than they are towards permanent migrants (Mayda 2006, O'Rourke, Sinnott 2006, Hatton 2016).

Immigration policy-making is often motivated by prevailing public attitudes. Simultaneously, public opinion can be shaped by the ways in which political actors frame the issues and challenges at hand. Understanding public attitudes in host communities is an increasingly important task. One of the most crucial policy implications relates to

Table 12: Binary Logit Model: Reduced-Form Analysis

	Can be integrated
Refugees' actual presence	0.000146**
	(0.0000680)
Gender	0.0697
	(0.0481)
Age	-0.212***
	(0.0363)
Education	0.253***
	(0.0436)
Married with children over18	0.0103
	(0.0897)
Married with children under 18	-0.234*
	(0.134)
cons	-0.580***
	(0.164)
N	2856
pseudo R^2	0.018
AIC	3346.6
BIC	3382.3

the powers of perception and public opinion, which are as important as planning for an inclusive city. However, ensuring that public spaces are designed and utilised for meaningful encounters is critical. Proximity in neighbourhoods is insufficient to bring about positive inter-group attitudes without targeted work to bring different people together (Ahmed 2000). Social projects that allow locals and migrants to come together enable sustained and meaningful interactions, which more effectively generate positive intergroup attitudes (Matejskova, Leitner 2011) towards cultural diversity and spill over onto economic outcomes.

Several limitations of this study need to be acknowledged. These are mainly related to the nuances of the term 'integration', as interviewees can interpret it in various ways. More attention to public opinions and perceptions is needed from local and national policy advocates in Greece. Additional empirical research is required to understand the social dynamics that shape the subjective dimensions of the social integration of migrants and refugees.

As this work mainly relies on survey-based data, it does not capture the nuanced experiences of residents, which would have provided a deeper understanding of how perceptions are formed. Additionally, it is important to note that the sample overrepresents individuals aged 45 and above, which may introduce potential bias. However, this may reflect the demographic profile of the population residing in the neighbourhoods, as the sample is stratified by district. Furthermore, future research should also consider the cultural aspects and its barriers in order to better understand the mechanisms underlying integration issues. Future research should be complemented by a qualitative approach to allow for a more accurate interpretation of the socio-cultural determinants of perceptions and the narratives that shape them for both local and migrant residents.

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A Appendix:

Table A.1: Description of the variables

Variable name	Variable description	Source
Perception of refugees' integration	Discrete var. that takes into account the respondents' perception on the possibility of refugees' integration. The response options are: 1 = cannot be integrated, 2 = depends, and 3 = can be integrated.	AORI survey data
Refugees' perceived presence	Discrete var. that takes into account the perception of refugees' presence in the respondent's residential area. The response options are: 1 = none, 2 = a few, 3 = some, and 4 = many.	AORI survey data
Refugees' actual presence	Continuous var. that takes into account the number of refugees hosted in each city district.	Public Issue, 2016
Perception that foreigners cause problems	Discrete var. that takes into account the residents' perceptions about problems caused by foreigners in the residential area. The response options are: 1 = none, 2 = a few, 3 = some, and 4 = many.	AORI survey data
Migrants' perceived presence	Continuous var. that takes into account the proportion of foreigners living in the city district as a subjective estimation.	AORI survey data
Unable to distinguish between migrants/refugees	Dichotomous var. that takes a value of 1 if the respondent is unable to distinguish migrants from refuges; 0 otherwise	AORI survey data
Gender	Dichotomous var. that takes a value of 1 if male; 0 otherwise	AORI survey data
Age	Discrete var. that accounts for the respondent's age range. The response options are: 1 = 18–24, 2 = 25–34, 3 = 35–44, 4 = 45–54, 5 = 55–64, and 6 = >65.	AORI survey data
Age^2	The square of the respondent's age.	AORI survey data
Education	Discrete var. that takes into account the respondent's level of education. The response options are: 1 = primary, 2 = secondary, and 3 = tertiary.	AORI survey data
Married with children over 18	Dichotomous var. that takes a value of 1 if the respondent is married and has children over 18; 0 otherwise.	AORI survey data
Married with children under 18	Dichotomous var. that takes a value of 1 if the respondent is married and has children under 18; 0 otherwise.	AORI survey data
Unemployed	Dichotomous var. that takes a value of 1 if the respondent is unemployed at the time of the interview; 0 otherwise.	AORI survey data
Inactive	Dichotomous var. that takes a value of 1 if the respondent is inactive (i.e. pensioners, housewives, and students) at the time of the interview; 0 otherwise.	AORI survey data
Income adequacy	Discrete var. that takes into account the respondent's self-assessment of their personal financial situation. The response options are: 1 = facing great difficulties, 2 = facing difficulties, 3 = making ends meet, and 4 = living comfortably.	AORI survey data
Born in Greece	Dichotomous var. that takes a value of 1 if the respondent is a Greek native; 0 otherwise.	AORI survey data
Political self-placement (left)	Dichotomous var. that takes a value of 1 if the respondent declares that they belong to left-leaning political parties; 0 otherwise.	AORI survey data
Political self-placement (centre)	Dichotomous var. that takes a value of 1 if the respondent declares that they belong to centre political parties; 0 otherwise.	AORI survey data
District	Dichotomous var. that takes a value of 1 if the respondent lives in the corresponding number of the city district; 0 otherwise	AORI survey data
Albanians	Dichotomous var. that takes a value of 1 if the respondent declares that most of the foreigners living in their city district are from Albania; 0 otherwise.	AORI survey data
Pakistanis	Dichotomous var. that takes a value of 1 if the respondent declares that most of the foreigners living in their city district are from Pakistan; 0 otherwise.	AORI survey data

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Table A.1: Description of the variables – continued

Variable name	Variable description	Source
Africans	Dichotomous var. that takes a value of 1 if the respondent declares that most of the foreigners living in their city district are from Africa; 0 otherwise.	AORI survey data
Filipinos	Dichotomous var. that takes a value of 1 if the respondent declares that most of the foreigners living in their city district are from the Philippines; 0 otherwise.	AORI survey data
Syrians	Dichotomous var. that takes a value of 1 if the respondent declares that most of the foreigners living in their city district are from Syria; 0 otherwise.	AORI survey data

Table A.2: Correlation matrix of the variables of interest

	Perception of refugees' integration	Refugees' perceived presence	Refugees' actual presence	Migrants' perceived presence	Perception that foreigners cause problems
Perception of refugees' integration	1				
Refugees' perceived presence	-0.0640*	1			
Refugees' actual presence	0.0094	0.2058*	1		
Migrants' perceived presence	-0.1371*	0.3891*	0.2313*	1	
Perception that foreigners cause problems	-0.2467*	0.3994*	0.1470*	0.4149*	1

Note. $^*p < 0.05$.

Table A.3: Correlation matrix of the variables of interest transformed

	Perception of refugees' integration	Refugees' perceived presence	Refugees' actual presence	New migrants' perceived presence	Perception that foreigners cause problems 1	Perception that foreigners cause problems 2	Perception that foreigners cause problems 3	Perception that foreigners cause problems 4
Perception of refugees' integration	1							
Refugees' perceived presence	-0.0640*	1						
Refugees' actual presence	0.0094	0.2058*	1					
New migrants' perceived presence	-0.0768*	0.1969*	0.0767*	1				
Perception that foreigners cause problems 1	0.2145*	-0.3213*	-0.1218*	-0.1089*	1			
Perception that foreigners cause problems 2	-0.0463*	0.0418	0.0349	-0.0476*	-0.6452*	1		

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Table A.3: Correlation matrix of the variables of interest transformed – continued

	Perception of refugees' integration	Refugees' perceived presence	Refugees' actual presence	New migrants' perceived presence	Perception that foreigners cause problems 1	Perception that foreigners cause problems 2	Perception that foreigners cause problems 3	Perception that foreigners cause problems 4
Perception that foreigners cause problems 3	-0.1553*	0.2294*	0.0454*	0.0841*	-0.4207*	-0.2418*	1	
Perception that foreigners cause problems 4	-0.1367*	0.2640*	0.1211*	0.1901*	-0.2779*	-0.1598*	-0.1042*	1

Note: $^*p < 0.05$.

Table A.4: Residents' perception of refugees' integration potential, Model 1 marginal effects

Dependent: Perception of refugees' integration	Cannot be integrated pr(y = 1)	Depends	Can be integrated pr(y = 1)
Refugees' perceived presence	-0.0223**	0.00313**	0.0192**
	(0.0111)	(0.00158)	(0.00959)
Perception that foreigners cause problems	0.122***	-0.0171***	-0.105***
	(0.0125)	(0.00205)	(0.0111)
Migrants' perceived presence	0.000724	-0.000102	-0.000623
	(0.000448)	(0.0000633)	(0.000385)
Unable to distinguish between migrants/refugees	0.0477	-0.00669	-0.0410
	(0.0358)	(0.00505)	(0.0308)
Gender	0.0106	-0.00149	-0.00912
	(0.0198)	(0.00278)	(0.0170)
Age	0.156***	-0.0219***	-0.135***
	(0.0445)	(0.00653)	(0.0383)
Age2	-0.0166***	0.00232***	0.0142***
	(0.00567)	(0.000820)	(0.00488)
Education	-0.0450***	0.00632***	0.0387***
	(0.0163)	(0.00233)	(0.0141)
Married with children over18	0.0151	-0.00212	-0.0130
	(0.0226)	(0.00318)	(0.0194)
Married with children under 18	0.0307	-0.00430	-0.0264
	(0.0316)	(0.00445)	(0.0272)
Unemployed	-0.00832	0.00117	0.00715
	(0.0330)	(0.00463)	(0.0284)
Inactive	0.0286	-0.00402	-0.0246
	(0.0298)	(0.00420)	(0.0257)
Income adequacy	-0.0203*	0.00285*	0.0175*
	(0.0116)	(0.00164)	(0.00995)
Born in Greece	0.103*	-0.0145*	-0.0886*
	(0.0598)	(0.00847)	(0.0515)
Political self-placement (left)	-0.224***	0.0314***	0.192***
	(0.0253)	(0.00452)	(0.0218)
Political self-placement (centre)	-0.0371*	0.00520*	0.0319*
	(0.022)	(0.003)	(0.019)
Perception that foreigners cause problems	0.122***	-0.0171***	-0.105***
	(0.0125)	(0.00205)	(0.0111)
N	2164	2164	2164
pseudo R^2			
AIC	.	.	.

continued on next page ...

Table A.4: Residents' perception of refugees' integration potential, Model 1 marginal effects – continued

Dependent: Perception of refugees' integration	Cannot be integrated pr(y = 1)	Depends	Can be integrated pr(y = 1)
BIC	.	.	.

Standard errors in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.5: Residents' perception of refugees' integration potential, Model 2 marginal effects

Dependent: Perception of refugees' integration	Cannot be integrated pr(y = 1)	Depends	Can be integrated pr(y = 1)
Refugees' actual presence	-0.0000939**	0.0000136**	0.0000803**
	(0.0000457)	(0.00000668)	(0.0000391)
Perception that foreigners cause problems	0.117***	-0.0169***	-0.0996***
	(0.0113)	(0.00190)	(0.0100)
Migrants' perceived presence	0.000679*	-0.0000985*	-0.000581*
	(0.000409)	(0.0000597)	(0.000350)
Unable to distinguish between migrants/refugees	0.0338	-0.00490	-0.0289
	(0.0301)	(0.00438)	(0.0258)
Gender	0.0162	-0.00235	-0.0139
	(0.0186)	(0.00271)	(0.0159)
Age	0.145***	-0.0211***	-0.124***
	(0.0426)	(0.00641)	(0.0364)
Age^2	-0.0149***	0.00216***	0.0127***
	(0.00540)	(0.000804)	(0.00462)
Education	-0.0381**	0.00553**	0.0326**
	(0.0152)	(0.00224)	(0.0131)
Married with children over18	0.00458	-0.000665	-0.00392
	(0.0212)	(0.00307)	(0.0181)
Married with children under 18	0.0291	-0.00422	-0.0249
	(0.0303)	(0.00441)	(0.0259)
Unemployed	0.00599	-0.000868	-0.00512
	(0.0311)	(0.00451)	(0.0266)
Inactive	0.0441	-0.00639	-0.0377
	(0.0282)	(0.00412)	(0.0241)
Income adequacy	-0.0252**	0.00366**	0.0216**
	(0.0109)	(0.00160)	(0.00933)
Born in Greece	0.0879	-0.0127	-0.0751
	(0.0564)	(0.00824)	(0.0482)
Political self-placement (left)	-0.227***	0.0329***	0.194***
	(0.0239)	(0.00439)	(0.0205)
Political self-placement (centre)	-0.0416**	0.00604**	0.0356**
	(0.0205)	(0.00299)	(0.0176)
N	2433	2433	2433
pseudo R^2			
AIC	.	.	.
BIC	.	.	.

Standard errors in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.6: Residents' perception of refugees' integration potential with dummy variables

Dependent: Perception of refugees' integration	Model 1 With perceived refugee presence	Model 2 With actual refugee presence
Refugees' perceived presence (ref. category: none)		
A few	0.272**	
	(0.108)	
Some	0.366***	
	(0.135)	
Many	0.0402	
	(0.195)	
Refugees' actual presence (ref. category: 50%)		
2%		-0.157
		(0.183)
8%		-0.225
		(0.144)
8%		-0.0551
		(0.151)
9%		-0.405***
		(0.138)
11%		-0.284*
		(0.149)
13%		-0.173
		(0.166)
Perception that foreigners cause problems (ref. category: none)		
A few	-0.571***	-0.536***
	(0.107)	(0.100)
Some	-1.273***	-1.206***
	(0.163)	(0.148)
Many	-1.555***	-1.559***
	(0.257)	(0.237)
Migrants' perceived presence	-0.00240	-0.00341*
	(0.00210)	(0.00193)
Unable to distinguish between migrants/refugees	-0.208	-0.158
	(0.167)	(0.140)
Gender	-0.0545	-0.0684
	(0.0921)	(0.0867)
Age (ref. category: 18-24)		
25-34	0.102	0.252
	(0.327)	(0.313)
35-44	-0.297	-0.226
	(0.278)	(0.265)
45-54	-0.555***	-0.530***
	(0.211)	(0.202)
55-64	-0.275*	-0.196
	(0.142)	(0.134)
Age^2	-0.0160*	-0.0160*
	(0.00854)	(0.00816)
Education		
Primary	-0.680	-0.565
	(0.948)	(0.908)
Secondary	-0.221	-0.208
	(0.934)	(0.896)
Tertiary	-0.0957	-0.0816
	(0.935)	(0.897)
Married with children over18	-0.0826	-0.0234
	(0.106)	(0.0991)
Married with children under 18	-0.135	-0.105
	(0.153)	(0.146)
Unemployed	0.0276	-0.0453
	(0.154)	(0.145)
Inactive	-0.138	-0.202
	(0.141)	(0.133)
Income adequacy (ref. category: making ends meet)		
Facing great difficulties	-0.211*	-0.281
	(0.121)	(0.251)
Facing difficulties	-0.0493	-0.134
	(0.119)	(0.250)

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Table A.6: Residents' perception of refugees' integration potential with dummy variables – continued

Dependent: Perception of refugees' integration	Model 1 With perceived refugee presence	Model 2 With actual refugee presence
Living comfortably	-0.0561	
	(0.267)	
Born in Greece	-0.493*	-0.459*
	(0.280)	(0.263)
Political self-placement (left)	1.038***	1.042***
	(0.125)	(0.118)
Political self-placement (centre)	0.175*	0.205**
N	2164	2433
pseudo R^2	0.075	0.074
AIC	3870.3	4368.4
BIC	4035.0	4553.9

Standard errors in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01