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Sandra V. Rozo
USC Marshall School of Business and IZA

Maria J. Urbina
USC Marshall School of Business

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IZA – Institute of Labor Economics

Schaumburg-Lippe-Straße 5–9
53113 Bonn, Germany

Phone: +49-228-3894-0
Email: publications@iza.org

www.iza.org

ABSTRACT

Who Does Not like Migrants? Individual Demographics and Attitudes Towards Migration

We exploit the quasi-random settlement of refugees in Sweden between 1985 and 1994 to examine the characteristics of individuals showing a disproportionate negative response to migration flows and whether these responses differ when the arrival of refugees occurred concurrently with economic shocks. We document that, on average, migration shocks translate to lower support for immigration. These responses are disproportionately driven by the changes in attitudes of young males, with less wealth, and who work in blue-collar occupations. Also, we find more support for immigration where employment increased and tax collection was lower concurrent with the arrival of refugees.

JEL Classification: D72, F2, O15, R23
Keywords: migration, attitudes, demography

Corresponding author:
Sandra V. Rozo
USC Marshall School of Business
701 Exposition Boulevard
Los Angeles, CA 90089
USA
E-mail: sandra.rozo@marshall.usc.edu

I Introduction

Ample literature has documented that individuals' support for immigrants decreases in response to positive migration flows. Recently, Dustmann et al. (2019) and Tabellini (2020), for example, present evidence that individuals living in areas with positive migration flows shift their political attitudes in favor of anti-immigration parties. Such reactions have been actively exploited in the political arena in recent years to create polarization and demonize migrants all across the globe. Characterizing the individuals that change their views about immigration when facing a positive migration shock has remained challenging because there are scarce longitudinal data on attitudes towards migration that can be combined with exogenous sources of variation on migration flows to identify causal effects. The characterization of these individuals could help inform how to effectively focus programs that aim to reduce prejudice and increase empathy in societies.

We combine municipal data on a unique historic program that allocated refugees quasi-randomly with individual longitudinal data on attitudes towards immigration. These paired datasets allow us to examine whether changes in attitudes towards immigration are heterogeneous based on individuals' characteristics and whether such changes vary according to the concurrent economic trends experienced by individuals.

The context of the study is the Refugee Placement Program implemented in Sweden between 1985 and 1994. This program settled refugees quasi-randomly in municipalities across Sweden. We use the variation induced by the program to study the impact of positive migration shocks on individuals' support for immigration, and we characterize these effects according to age, gender, education, type of occupation, and wealth.

Our analysis proceeds in two steps. First, we combine municipal data on refugee placement with panel data on people's attitudes towards immigration collected by the Swedish National Election Program. This step permits us to estimate the causal effects of higher migration flows on individuals' attitudes towards immigration. We document large and negative effects of migration inflows on people's support for immigration. We also illustrate that a simple regression of attitudes towards immigration and migration shocks is biased towards zero, as migrants tend to move to municipalities that are more friendly towards migrants, or possibly, because individuals who dislike migrants move out of the municipalities that receive migrants. Our estimates suggest that when the share of migrants in a population increases by 1 percentage point, support for immigration drops by 0.25 points on a Likert scale that ranges from 1 to 5, with 5 representing complete support for immigration. Considering the mean support for immigration in our data was 2.44, a reduction of 0.25 represents a 8.20% reduction in the mean support for immigration. These estimates are remarkably strong and robust to the inclusion of a large group of controls including a rich set of individual and municipal characteristics.

In a second step, we explore the heterogeneity of the changes in attitudes towards immigration according to in-

dividuals' characteristics and by the main economic trends experienced within each municipality at the time of the refugees' arrival. We mostly focus on changes in employment and tax collection.

People who are young and those who are male, work in blue-collar occupations, or have low levels of wealth show the largest reduction in support for immigration when migration flows increase. Age seems to be a relevant driver of attitudes towards immigration across the life cycle, as the reduction in the support for immigration in response to positive migration flows occurs systematically with age.

Individuals who have political opinions that could be categorized as more altruistic towards foreign countries, the public sector, or other citizens also tend to show lower reduction in their support for immigration when migration flows increase. This finding is in line with the negative effects of the Refugee Placement Program on altruistic behaviors as documented by Dahlberg et al. (2012).

The economic trends experienced by individuals are also important in determining their response to immigration. Changes in employment and tax collection are relevant in explaining changes towards support for immigration. Individuals located in municipalities that received migration shocks while also experiencing positive employment shocks show lower reductions in their support for immigration. In contrast, individuals that experienced a migration shock while experiencing an increment in their tax base show larger reductions in their support for immigration. Employment changes are more relevant in explaining changes in support for immigration than changes in the tax base.

We contribute to the literature by exploiting a quasi-experimental historic episode to document the causal effects of migration shocks on attitudes towards immigration. Previous studies by Edin et al. (2003), Åslund and Rooth (2007), Dahlberg and Edmark (2008), and Dahlberg et al. (2012) also exploit this historical episode to explore the labor market outcomes from living in enclaves and the impact of racial diversity on altruism. We also contribute to the literature that studies the determinants of individuals' attitudes and preferences regarding redistribution (see Facchini and Mayda, 2009; Luttmer and Singhal, 2011; Alesina and Giuliano, 2011; Altindag and Kaushal, 2017 for examples). These studies have shown that context, culture, history, and individual characteristics are relevant determinants of preferences towards redistribution. We advance this research agenda by identifying the causal impacts of migration flows on support for immigration by combining data on a unique historic episode with individual panel data. The rich data enable a comprehensive analysis of the heterogeneous effects of migration flows by individual characteristics and concurrent economic trends.

II The Refugee Placement Program

The Refugee Placement Program was implemented between 1985 and 1994. According to reports from the Swedish Immigration Board, the program was rigorously implemented up until 1991, and thereafter, compliance was weaker due to the arrival of a large wave of migrants from Yugoslavia (The Immigration Board, 1997). The main objective of the program was to distribute refugees evenly across Sweden as a reaction to immigrants being concentrated only in larger cities. The vast majority of the country's municipalities participated in the program, and only five of the 288 municipalities in Sweden refused to receive refugees throughout the duration of the program's implementation (Dahlberg and Edmark, 2008).

Under the program, refugees were placed in a refugee center upon arrival to Sweden. They remained at the center until their asylum was granted. Once their asylum petition was approved, a process that took approximately 3 to 12 months, a public official selected where the refugees would settle. The official would not have any contact with the migrants, but likely considered housing vacancies and labor market conditions when selecting the specific municipality. After the location was chosen, the refugees moved to that municipality, where they were enrolled in language and other introductory classes. The refugees were not expected or required to join the labor market in the first 18 months after being placed in a municipality to allow them time to adjust. In reality, however, one fifth of refugees under the program had some earnings the first year after placement (Åslund and Rooth, 2007).

Once refugees reached their new residence, the Swedish central government compensated municipalities for each refugee being hosted with annual payments lasting up to 4 years after the migrant's arrival. After 1991, this system was replaced by a unique lump-sum transfer (Dahlberg et al., 2012). Each municipality had a contract coordinated by the Sweden Immigration Board (a central government agency) to receive compensation for the refugees hosted. The refugees were free to leave after their arrival, and the municipalities only received compensation for the migrants that lived in their territories each year. Edin et al. (2003) document that 4 years after placement, approximately 60% of the refugees still lived in the places where they were placed originally. Most of the remaining refugees moved to the three biggest cities, Stockholm, Malm*ö*, and V*ä*stra G*ö*taland.

Through the program execution, the number of refugees that arrived in Sweden increased dramatically, from an annual average of 15,000 in the 3 years prior to 1985 to 27,490 between 1985 and 1994 (see Figure I). Refugee arrival reached a peak in 1994 when more than 62,000 individuals were placed under the program.

III Empirical Framework

III.1 Data

We combine longitudinal individual data on attitudes towards immigration with municipal data to carry out our estimates.

1. *The Swedish National Election Studies Program*: The Swedish National Election Studies Program (SNESP) was established in 1954 as a collaborative platform for scholars interested in studies of opinion formation and voting behavior. The SNESP collects surveys each election year in the form of rotating panels in which half of the sample is interviewed in two periods and the other half corresponds to new interviewees. We use the six surveys collected by the SNESP between 1985 and 1994, when the Refugee Placement Program was in place; these surveys include information on approximately 3,700 individuals. As such we are able to construct three panel samples for the years 1985-1988, 1988-1991, and 1991-1994. The surveys include information on political opinions and individual socio-demographics. We include only the individuals that live in the same municipality within each panel period in our sample. As such, our estimates are a lower bound of the true effects of immigration if individuals who dislike migrants disproportionately move out when migrants arrive.

2. *Migration and Refugee Placement data*: Municipal data on the refugee counts placed under the refugee placement program come from the Swedish Migration Agency. Figure II illustrates the municipal distribution of refugees during the Refugee Placement Program (1985 to 1994). The figure confirms that refugee placement had a large geographical variation. Moreover, Figure I presents the annual evolution of refugee inflows and illustrates the annual evolution of the annual share of foreigners in Sweden. Both figures confirm that a time variation exists in migration inflows between 1985 and 1994.

3. *Municipal Data:* We use a large set of municipal controls to test the robustness of our main estimates. These controls include per capita social welfare expenditures, unemployment rates, housing vacancy rates, population figures, and majority support for the main political ideologies including socialists, the Green Party, and the new democrats. These variables come from the replication files made publicly available by Dahlberg et al. (2012).

Descriptive statistics for all the variables employed in our analysis are presented in Table A.1.

III.2 Identification Strategy

We exploit the quasi-random allocation of refugees across Sweden municipalities between 1985 and 1994 to estimate the causal effect of larger migration flows on individuals' support regarding migrants. For this purpose, we estimate the following two-stage least squares specification:

$$\Delta S_{imt} = \alpha + \alpha_1 \Delta \text{Migrant Share}_{mt} + X_{imt}\Gamma + W_{mt} + \delta_t \epsilon_{imt} \tag{1}$$

$$\Delta \text{Migrant Share}_{mt} = \beta + \beta_1 \text{Refugee Inflows}_{mt} + X_{imt}\Lambda + W_{mt}\Theta + \delta_t + _{imt} \tag{2}$$

where *i* stands for the individual, *m* represents the municipality, and *t* stands for each panel under consideration (i.e., 1985-1988, 1988-1991, or 1991-1994). Because we are using three different panels, most of our variables correspond to the difference observed between the two periods within each panel.

As such, $\Delta\ S_{imt}$ stands for the change in support for immigration within each panel. Support for immigration is signalled by the answer to the question "What is your support for the following proposal: Increase economic support to immigrants so they can maintain their own culture." There are five alternative answers that span from 1 (very good proposal) to 5 (very bad proposal). We recoded the answers on a scale from 1 to 5, where 1 implies little support for immigration to facilitate interpretation. Figure A.1 presents the distribution of $\Delta\ S_{imt}$ for the whole period of study, as well as for each of the three individual panels that we use in our analysis. In general, we observe that the change in support for immigration has relevant variation, although the majority of individuals show consistent preferences. As such, the variable shows a bell-shaped distribution centered around zero.

Δ Migrant Share is constructed as the change in the share of non-OECD and Turkish citizens in the population of each municipality following settlement. The change in foreign nationals is scaled by the average population between the two panel periods. We focus on these migrants because they account for the vast majority of the variation in the total foreign proportion of the population in Sweden during our period of analysis, as is illustrated in Figure I.

Refugee Inflows corresponds to the cumulative number of refugees resettled in each municipality between the two years within each panel. It is escalated by the average population within the two periods of each panel. Figure A.2 presents the change in the share of foreigners and the cumulative share of refugees. As illustrated in the figure, a strong positive and significant correlation exists between both variables across the whole study period. The correlation between both variables is positive and significant in all the panels we study, but it is stronger for the period 1991-1994 and weaker for the period 1988 and 1991.

X_{imt} is a vector of individual covariates observed at baseline within each panel including gender, age, number of children, student status, level of education, and wealth. W_{mt} includes municipal covariates such as the panel period averages for unemployment rate and vacant housing, which according to Åslund and Rooth (2007), Edin et al. (2003), and Dahlberg et al. (2012) were used by the program officers in some instances to select municipalities where refugees would settle. Additionally, to account for other possible endogeneity concerns we include controls for per capita welfare expenditures, the change in unemployment rate, the change in tax base, the change in population, indicator variables for small- and large-sized municipalities, and indicator variables for having a socialist majority in the municipal council, and having Green Party and New Democracy seats in the municipal council.

We will test for the sensitivity of our results to each group of covariates included in our main estimates. All shares are expressed in percentage points. Standard errors are clustered by municipality to account for serial correlation.

IV Results

Our first step is to estimate equations (1) and (2). We present the results in Table I. The table includes seven columns and four panels. Each coefficient illustrates the results of a separate regression. Panel A presents a simple linear regression of the change in support for immigration in the change of migrant stock. Panel B is a reduced form regression of the change in support for immigration in the cumulative refugee inflows. Panels C and D present the first- and second-stage estimates of equations (1) and (2).

Columns (1) through (7) test for the sensitivity of our estimates for the inclusion of a large set of covariates including individual controls observed at baseline such as age, gender, number of children, student status, level of education, and wealth; per capita welfare expenditures, which could change with the arrival of refugees; panel period average unemployment and vacant housing rates, which according to some accounts were sometimes used for placing refugees in certain municipalities; panel period change in unemployment rate, tax base, and population, as these variables might be affected by the migration shock and through them induce changes in support for immigration; indicator variables for small- (less than 50,000 individuals) and large-sized (more than 200,000 individuals) municipalities; and indicator variables for having a socialist majority in the municipal council and having a seat for the Green Party and the New Democracy party to account for the effects of political orientation.

Our results remarkably and consistently show a negative effect of higher migration inflows in support for immigration. The results for the simple regression presented in Panel A are negative but not statistically different from zero; however, those results are likely biased towards zero. Migrants are likely to "vote with their feet" and move to municipalities that are more friendly towards migrants, and where, presumably other migrants are already settled. As

such, the individuals living in those municipalities may be more supportive of migrants. Moreover, the individuals who dislike migrants will probably also move out of the municipalities that receive more migrants.

As expected when we correct for the endogeneity concerns by using the cumulative refugee inflows assigned to each municipality through the Refugee Placement Program, we observe that the support for immigration drops dramatically and becomes significant for all columns in Panels B and C. We also observe that the variation on the cumulative refugee inflows induced by refugee placement program is a strong instrument across all specifications.

Our preferred results are those presented in column (7) and Panels C and D since they include all the controls and correct the estimates for endogeneity. The point estimates suggest that when the share of migrants in the total population increases by 1 percentage point, support for immigration drops by 0.25. Considering the mean support for immigration was 2.44 (see Table A.1), a reduction of 0.25 corresponds to a 8.20% reduction in the mean support for immigration. The estimates are remarkably strong and consistent to the inclusion of any controls.

IV.1 Heterogeneous Effects

We now proceed to examine the characteristics of individuals who show a disproportionate reduction in their support for immigration when a positive migration shock to their municipalities occurs. We examine the heterogeneous effects of the Refugee Placement Program by dividing our sample according to age, gender, education, occupation (white- or blue-collar), and wealth. Each variable corresponds to the values reported in the first period in which we observe each individual in each panel. The sample was divided into two groups according to the median values for wealth.

The results are presented in Figure III. Each coefficient corresponds to a separate regression of each specific group of individuals in our sample. The figure reports the coefficient α_1 as described in equation (1) and (2) and includes all the controls presented in column (7) of Table I. We summarize the estimates in the figure for visualization, but the specific point estimates are presented in Appendix A. The figure reports the 95% confidence interval for each coefficient.

Figure III suggests that individuals who are young and those who are male, work on blue-collar occupations, or have lower wealth tend to show larger reductions in their support for immigration when faced with positive migration shocks.

We divided the sample into smaller groups according to age to examine the evolution of the changes in support for immigration across the life cycle, as shown in Figure III. Although we lose precision, our estimates illustrate that the support for immigration becomes greater as individuals age. In other words, younger individuals show larger drops in their support for immigration when faced with a migration shock relative to older individuals.

Finally, we examine the heterogeneous effects of migration inflows in support for immigration by dividing the sample according to political opinions in Figure B.1. For this purpose, we used three questions asking individuals whether they agree or disagree with (i) reducing the public sector, (ii) abolishing wage earners' funds, and (iii) reducing foreign aid. The point estimates show that individuals who tend to show less altruism as measured by any of these variables also show larger reductions in their support for immigration when migration inflows increase.

IV.2 Are the effects stronger in municipalities that are doing better?

Across the literature it has been difficult to differentiate how much of the resentment towards migrants is driven by the economic trends present at the time of their arrival. We use the variation induced by the Refugee Placement Program to test whether municipalities that experienced higher employment and tax collection also show disproportionate changes in residents' support for immigration. Table II presents the results of equations 1 and 2, which include interactions of the change in migrant stock and the change in employment and tax base concurrent with the arrival of refugees. Each interaction was instrumented by the corresponding interaction of change in employment and tax base with cumulative refugee arrival.

Our results confirm that economic conditions are key drivers of the response that individuals have towards migration. In column (1) we observe that in municipalities where employment increased, individuals show lower reductions in their support for immigration. In contrast, in the areas where the tax base increased, individuals showed a larger drop in their support for immigration. Between the two variables, employment seems to be the more important driver of support for immigration.

V Conclusions

In this paper we combine the variation induced by a unique and historic program that placed refugees quasi-randomly across Sweden municipalities with individual longitudinal data to examine the impacts of migration inflows on the support for immigration. We document that increments in migration inflows, on average, reduce support for immigration. These effects are concentrated in people who are young or males, those with low wealth, and those who work in blue-collar occupations. The reductions observed in support for immigration are also lower in municipalities that experience higher changes in employment rates when refugees arrive.

Our results underline the importance of individual and context characteristics in understanding the attitudes towards migration. Our findings can guide future work that aims to reduce prejudice and increase empathy towards migrants, by focusing on the individuals who show disproportionate changes in their attitudes.

References

Alesina, A. and P. Giuliano (2011). Preferences for redistribution. In *Handbook of social economics*, Volume 1, pp. 93–131. Elsevier.

Altindag, O. and N. Kaushal (2017). Do refugees impact voting behavior in the host country? evidence from Syrian refugee inflows in Turkey. *IZA Discussion Paper Series. N. 10849*.

Åslund, O. and D.-O. Rooth (2007). Do when and where matter? initial labour market conditions and immigrant earnings. *The Economic Journal 117*(518), 422–448.

Dahlberg, M. and K. Edmark (2008). Is there a "race-to-the-bottom" in the setting of welfare benefit levels? evidence from a policy intervention. *Journal of Public Economics 92*(5-6), 1193–1209.

Dahlberg, M., K. Edmark, and H. Lundqvist (2012). Ethnic diversity and preferences for redistribution. *Journal of Political Economy 120*(1), 41–76.

Dustmann, C., K. Vasiljeva, and A. Piil Damm (2019). Refugee migration and electoral outcomes. *The Review of Economic Studies 86*(5), 2035–2091.

Edin, P.-A., P. Fredriksson, and O. Åslund (2003). Ethnic enclaves and the economic success of immigrants—evidence from a natural experiment. *The quarterly journal of economics 118*(1), 329–357.

Facchini, G. and A. M. Mayda (2009). Does the welfare state affect individual attitudes toward immigrants? evidence across countries. *The review of economics and statistics 91*(2), 295–314.

Luttmer, E. F. and M. Singhal (2011). Culture, context, and the taste for redistribution. *American Economic Journal: Economic Policy 3*(1), 157–79.

Tabellini, M. (2020). Gifts of the immigrants, woes of the natives: Lessons from the age of mass migration. *The Review of Economic Studies 87*(1), 454–486.

The Immigration Board (1997). Individuall mångfald: Invandrarverkets utvärdering och analys av det samordnade flyktingmottagandet 1991–96.

Table (I) Effects of Migration on Attitudes Towards Immigration

Dependent variable diff (s-s-1)	**Support for Immigration**						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A. OLS							
Δ Migrant Share	-0.073	-0.062	-0.058	-0.060	-0.071	-0.059	-0.054
	(0.057)	(0.053)	(0.055)	(0.055)	(0.055)	(0.053)	(0.055)
Adj. R-squared	0.007	0.033	0.033	0.033	0.035	0.038	0.041
Panel B. Reduced Form							
Refugee Inflow	-0.127**	-0.119**	-0.122**	-0.138**	-0.136**	-0.138**	-0.140**
	(0.059)	(0.060)	(0.061)	(0.062)	(0.062)	(0.061)	(0.063)
Adj. R-squared	0.009	0.035	0.035	0.035	0.036	0.040	0.043
Panel C. 2SLS							
Δ Migrant Share	-0.227**	-0.211*	-0.232*	-0.254**	-0.249**	-0.248**	-0.252**
	(0.115)	(0.113)	(0.121)	(0.121)	(0.119)	(0.116)	(0.120)
Adj. R-squared	0.004	0.030	0.029	0.028	0.030	0.033	0.036
Panel D. First Stage	**Δ Migrant Share**						
Refugee Inflow	0.559***	0.565***	0.527***	0.542***	0.547***	0.558***	0.557***
	(0.063)	(0.062)	(0.066)	(0.066)	(0.064)	(0.065)	(0.066)
Cragg-Donald F-Statistic	666.95	664.81	526.8	518.84	540.08	624.17	605.71
Observations (All Panels)	1,632	1,627	1,627	1,627	1,627	1,627	1,627
Controls (all panels)							
Dummy for panel 1988/91, and 1991/94	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individual controls	No	Yes	Yes	Yes	Yes	Yes	Yes
Per capital welfare expenditures	No	No	Yes	Yes	Yes	Yes	Yes
Unemployment rate (panel period average)	No	No	No	Yes	Yes	Yes	Yes
Vacant housing rate (panel period average)	No	No	No	Yes	Yes	Yes	Yes
Δ Unemployment rate (panel period change)	No	No	No	No	Yes	Yes	Yes
Δ Tax base	No	No	No	No	Yes	Yes	Yes
Δ Population	No	No	No	No	Yes	Yes	Yes
Dummy for small-sized (<50K) and large-sized municipalities(>200k)	No	No	No	No	No	Yes	Yes
Dummy for socialist majority in mun. council	No	No	No	No	No	No	Yes
Dummy if green party has seats in mun. council	No	No	No	No	No	No	Yes
Dummy if new democrats has seats in mun. council	No	No	No	No	No	No	Yes

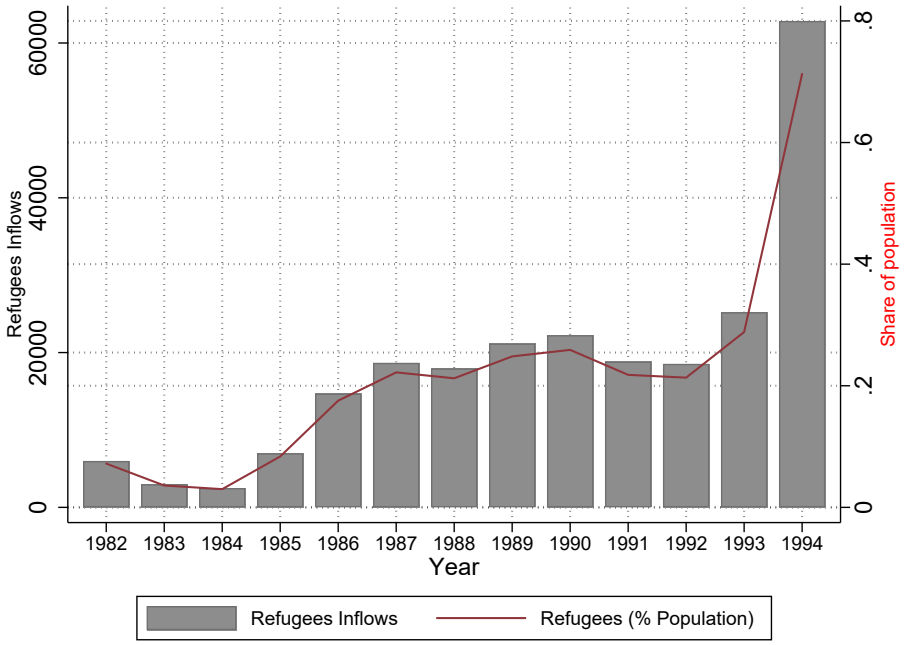
Notes: Individual controls include gender, age, number of children, student status, level of education, and wealth. Clustered standard errors at the municipality level are reported in parentheses. *** p<0.01, **p< 0.05, *p< 0.1.

Table (II) Heterogeneous Effects by Economic Trends

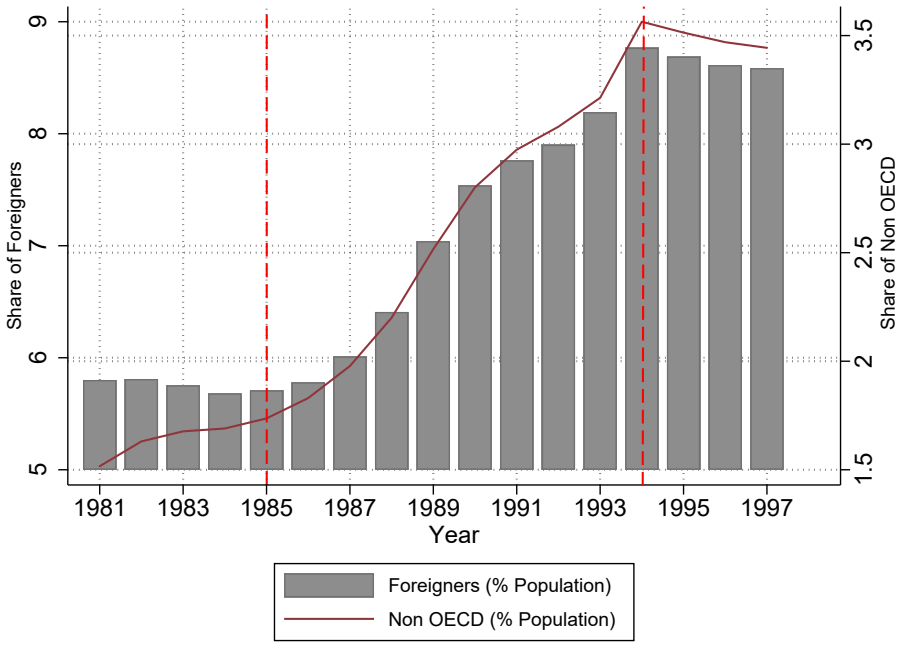
Dependent Variable	Δ Support for Immigration	
	(1)	(2)
Δ in Mun. Employment ×Δ Migrant Share	0.129**	
	(0.057)	
Δ in Mun. Employment	-0.086	
	(0.056)	
Δ Migrant Share	-0.832**	
	(0.326)	
Δ in Mun. Tax Base ×Δ Migrant Stock		-0.005**
		(0.003)
Δ in Mun. Tax Base		0.001
		(0.002)
Δ Migrant Share		-0.267**
		(0.120)
Cragg-Donald F-stat	150.69	209.37
R-squared	0.032	0.038
Observations	1,627	1,627

Notes: Include same controls of Table III. Clustered standard errors at the municipality level are reported in parentheses. *** p<0.01, **p< 0.05, *p< 0.1.

Figure (I) Migrant Inflows During the Refugee Placement Program



Panel A: Refugee Inflows



Panel B: Annual Share of Foreigners and Non OECD nationals

Figure (II) Municipal Distribution of Refugees During the Refugee Placement Program

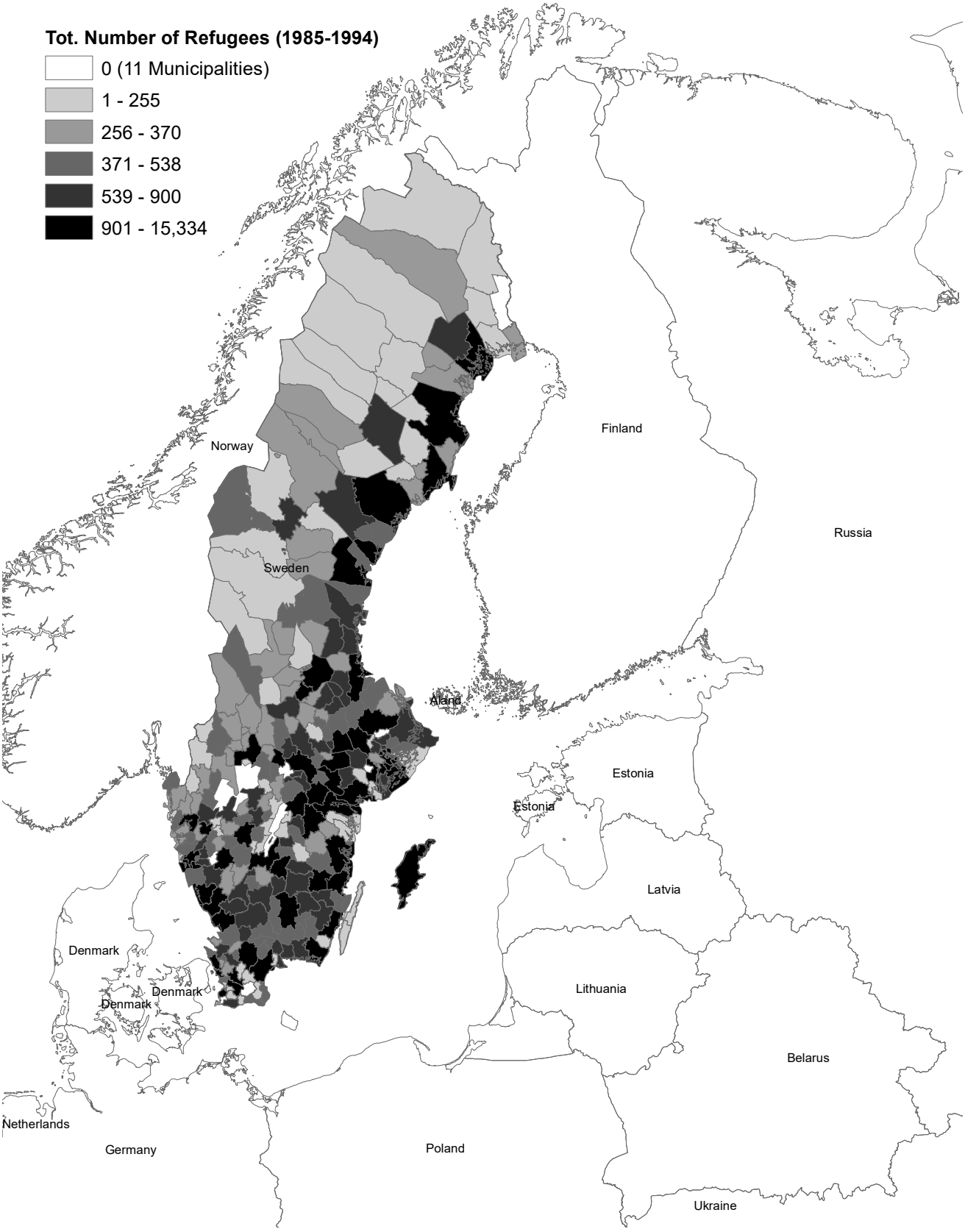
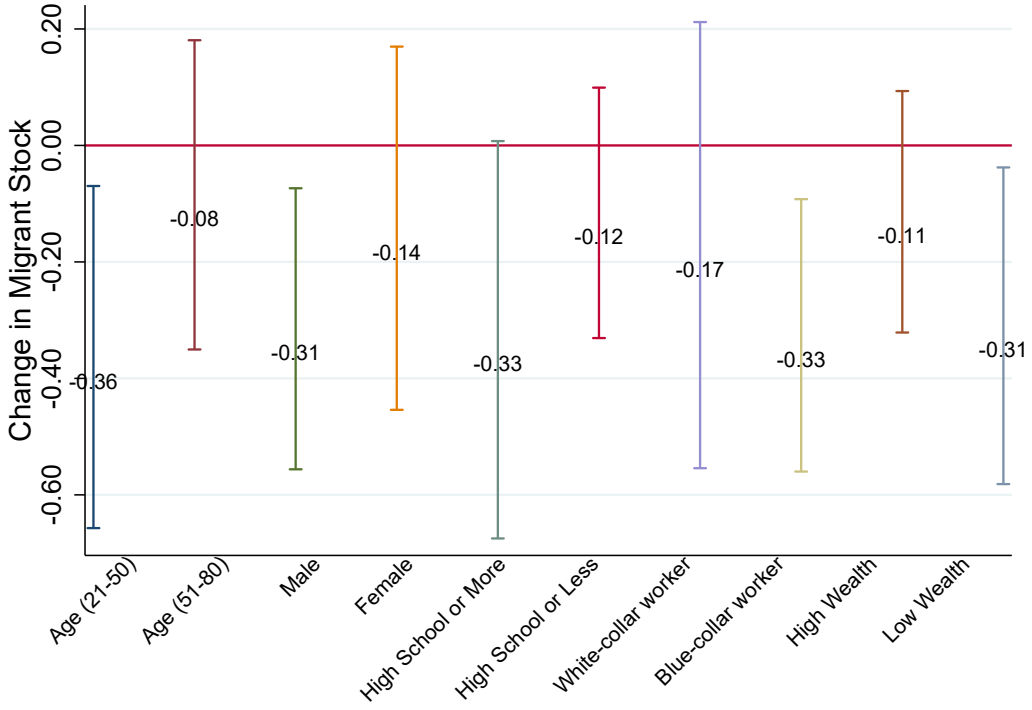
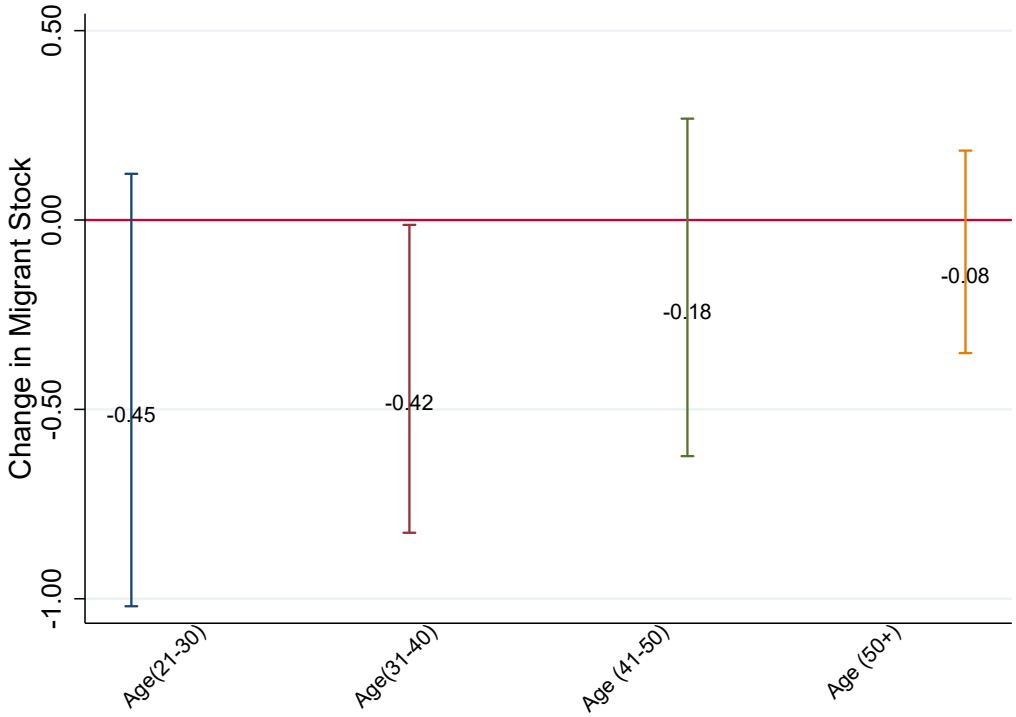


Figure (III) Individual Heterogeneous Effects



Panel A: Heterogeneous Effects by Basic Demographics



Panel B: Heterogeneous Effects by Age

Appendix A: Descriptive Statistics

Table (A.1) Descriptive Statistics

	Observations	Average	SD	Min	Max
Panel A: Main Outcome, independent variable, and instrumental variable					
Support for immigration [Complete approval (=5)]	3,463	2.44	1.08	1	5
Δ Support for immigration	1,632	-0.20	1.16	-4	4
Share of non-OECD + Turkish citizens in municipality (Migrant Share)	3,662	2.8	2.04	0.14	12.94
Δ Share of non-OECD + Turkish citizens (Δ Migrant Share)	1,632	0.62	0.46	-1.47	5.71
Refugee Inflow, cumulative between each panel (% of panel period-averaged pop)	1,632	0.87	0.5	0	7.77
Panel B: Municipal Controls					
Real welfare spending, 100 SEK per capita (100=1994)	3,662	8.39	5.29	0	29.26
Vacant housing share, average over panel period	3,662	1.89	2.67	0	18.97
Unemployment, average over panel period	3,662	3.61	2.73	0.36	11.7
Tax base, 100 SEK per capita (100=1994)	3,662	966.15	129.71	717.55	1738.67
Population	3,662	111.69	175.36	2.94	698.29
Small municipality, ==1 if population <50,000	3,662	0.52	0.5	0	1
Large municipality, ==1 if population >= 200,000	3,662	0.13	0.34	0	1
==1 if Socialist majority in municipal council	3,662	0.4	0.49	0	1
==1 if Green Party holds municipal council seat(s)	3,662	0.79	0.41	0	1
==1 if the New Democrats hold municipal council seat(s)	3,662	0.44	0.5	0	1
Panel C: Individual Covariates					
Male (=1)	3,662	0.58	0.49	0	1
Age (21-30)	3,662	0.16	0.37	0	1
Age (31-40)	3,662	0.24	0.43	0	1
Age (41-50)	3,662	0.23	0.42	0	1
Age (51-60)	3,662	0.17	0.37	0	1
Age (61-70)	3,662	0.13	0.34	0	1
Age (71-80)	3,662	0.06	0.25	0	1
Education (Primary school)	3,656	0.21	0.41	0	1
Education (Comprehensive and vocational school)	3,656	0.2	0.4	0	1
Education (Secondary and upper secondary school)	3,656	0.37	0.48	0	1
Education (University)	3,656	0.22	0.41	0	1
Wealth (No wealth)	3,662	0.4	0.49	0	1
Wealth (< 40,000)	3,662	0.15	0.35	0	1
Wealth (40,000-100,000)	3,662	0.15	0.36	0	1
Wealth (100,000-200,000)	3,662	0.15	0.36	0	1
Wealth (> 200,000)	3,662	0.15	0.36	0	1
Non-Altruist	3,662	0.59	0.49	0	1
Altruist	3,662	0.41	0.49	0	1
White-Collar Worker	3,164	0.51	0.50	0	1
Blue-Collar Worker	3,164	0.49	0.50	0	1

Notes: All variables in shares are given in percentage points. Tax base and welfare spending are given in SEK 100 (Swedish kronor) per capita deflated to 1994 year values (SEK 6.50 US$1), and population is given in 1,000s.

Figure (A.1) Distribution of the Change in Support for Immigration

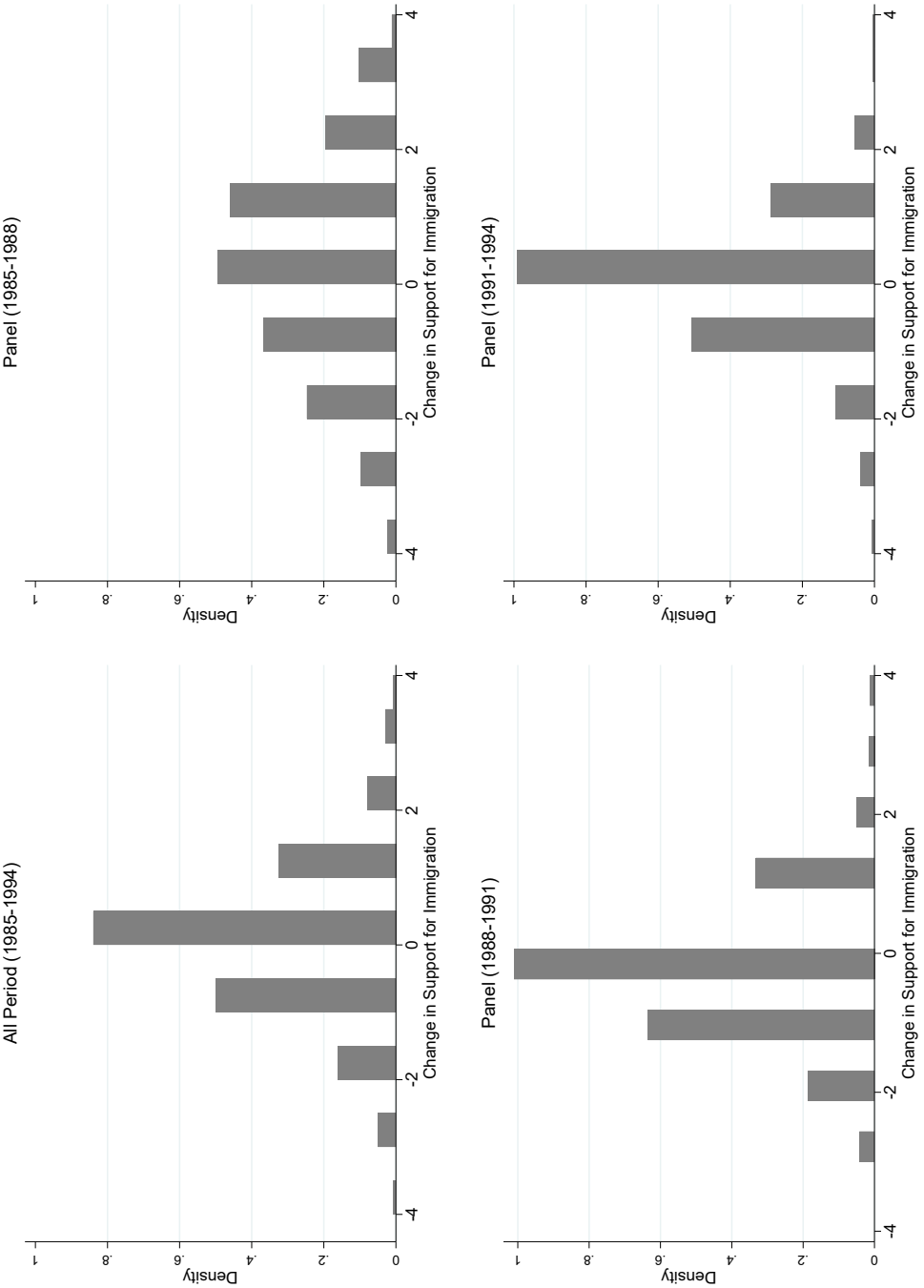
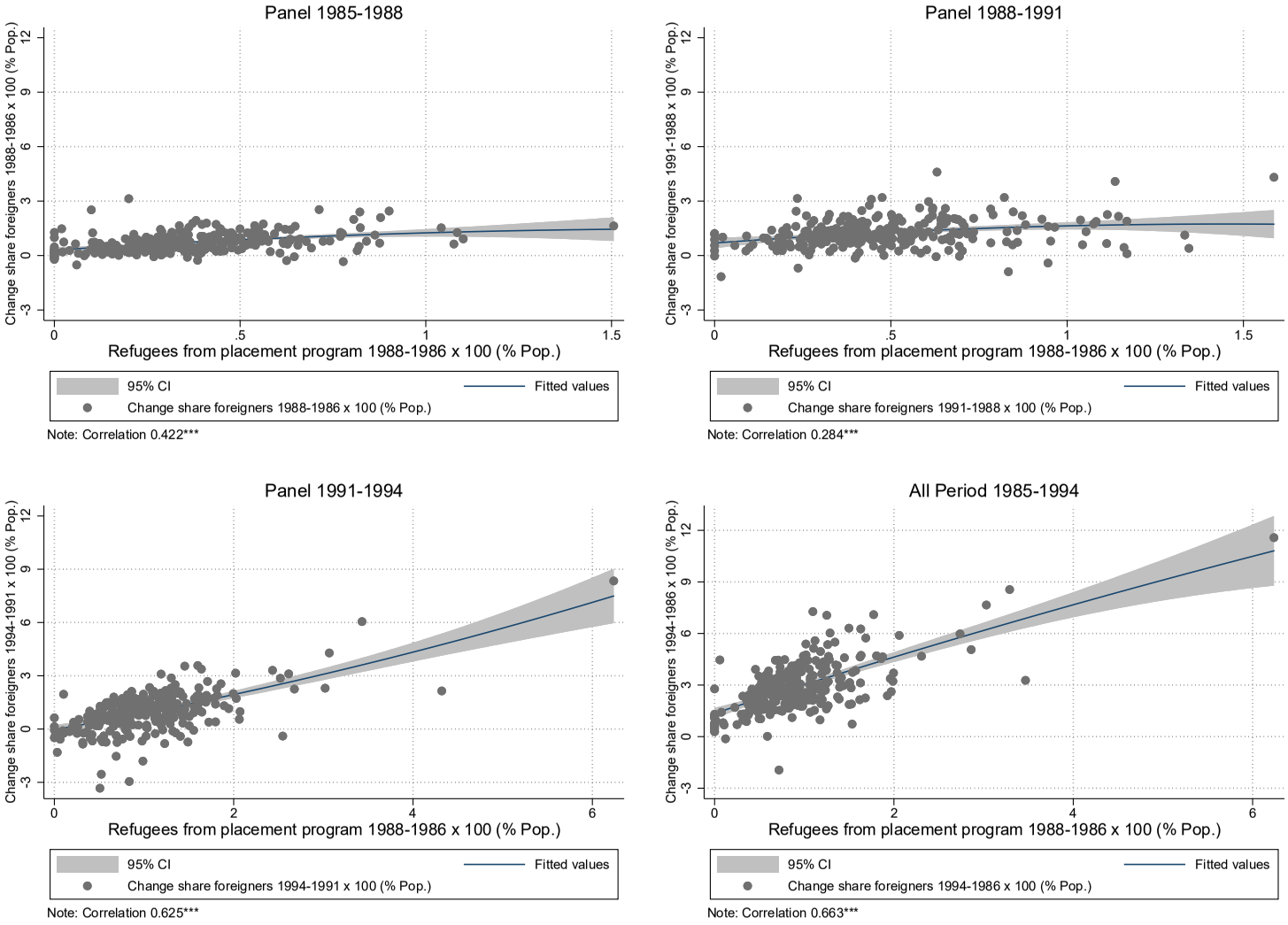


Figure (A.2) Change in Share of Refugees and Cumulative Number of Refugees by Municipality



Notes: Each dot represents a municipality.

Appendix B: Heterogeneous Effects

Table (B.1) Heterogeneous Effects Support for Immigration

Dependent variable diff (s-s-1)	**Support for immigration**											
	High Wealth	Low Wealth	Age (21-50)	Age (51-80)	Male	Female	Blue-collar worker	White-collar worker	Altruist	Non Altruist	Personal finance has improved	Personal finance hasn't improved
Panel A. OLS												
ΔMigrant Stock	-0.112	-0.030	-0.044	-0.073	-0.043	-0.090	-0.028	-0.141	0.038	-0.122*	-0.089	-0.037
	(0.084)	(0.078)	(0.074)	(0.101)	(0.069)	(0.087)	(0.079)	(0.088)	(0.087)	(0.067)	(0.128)	(0.066)
Adj. R-squared	0.098	0.045	0.052	0.068	0.046	0.078	0.074	0.066	0.094	0.046	0.080	0.066
Panel B. Reduced Form												
Refugee Inflow	-0.074	-0.155*	-0.197**	-0.050	-0.182**	-0.073	-0.200**	-0.076	0.062	-0.266***	-0.203	-0.123*
	(0.086)	(0.081)	(0.090)	(0.099)	(0.077)	(0.098)	(0.081)	(0.106)	(0.129)	(0.081)	(0.167)	(0.067)
Adj. R-squared	0.097	0.047	0.056	0.067	0.050	0.078	0.080	0.064	0.094	0.052	0.082	0.068
Panel C. 2SLS												
ΔMigrant Stock	-0.114	-0.310*	-0.363**	-0.085	-0.315**	-0.142	-0.326**	-0.171	0.129	-0.438***	-0.498	-0.207*
	(0.126)	(0.165)	(0.179)	(0.161)	(0.147)	(0.190)	(0.142)	(0.233)	(0.259)	(0.157)	(0.394)	(0.115)
Adj. R-squared	0.098	0.035	0.040	0.068	0.036	0.078	0.062	0.066	0.093	0.033	0.065	0.062
Panel D. First Stage	ΔMigrant Stock											
Refugee Inflow	0.646***	0.499***	0.541***	0.588***	0.579***	0.513***	0.613***	0.444***	0.479***	0.607***	0.407***	0.594***
	(0.070)	(0.070)	(0.073)	(0.089)	(0.082)	(0.091)	(0.077)	(0.097)	(0.081)	(0.068)	(0.082)	(0.069)
Cragg Donald F-stat	361.51	281.54	311.79	293.12	411.39	185.27	396.65	119	150.58	472.3	69.13	540.89
Observations (All Panels)	478	1,149	1,038	589	947	680	690	708	662	965	497	1,122

Notes: All regressions include individual controls including gender, age, number of children, student status, level of education, and wealth; and municipal controls including i) average municipal unemployment rate, ii) rate of vacant housing, iii) change in unemployment rate, iv) per capital social welfare expenditures, vii) per capital tax base, viii) population size, ix) small-sized ($< 50K$) and large-sized municipalities ($> 200k$), x) socialist majority in municipal council dummy, xi) Green Party and New Democrats holds municipal council seats dummy, and xii) panel dummy for panels 1988/91, and 1991/94. Clustered standard errors at the municipality level are reported in parentheses. *** p<0.01, **p< 0.05, *p< 0.1.

Table (B.2) Heterogeneous Effects Support for Immigration by Age

Dependent variable diff (s-s-1)	**Support for immigration**			
	(21-30)	(31-40)	(41-50)	(50+)
Panel A. OLS				
ΔMigrant Stock	0.174	-0.115	-0.072	-0.074
	(0.116)	(0.144)	(0.110)	(0.101)
Adj. R-squared	0.183	0.118	0.077	0.067
Panel B. Reduced Form				
Refugee Inflow	-0.267	-0.264*	-0.080	-0.049
	(0.191)	(0.144)	(0.127)	(0.100)
Adj. R-squared	0.185	0.122	0.077	0.067
Panel C. 2SLS				
ΔMigrant Stock	-0.449	-0.419*	-0.178	-0.084
	(0.347)	(0.247)	(0.271)	(0.162)
Adj. R-squared	0.135	0.110	0.076	0.067
Panel D. First Stage	ΔMigrant Stock			
Refugee Inflow	0.595***	0.630***	0.448***	0.588***
	(0.114)	(0.108)	(0.079)	(0.090)
Cragg Donald F-stat	77.15	181.58	71.75	294.13
Observations (All Panels)	279	381	378	589

Notes: All regressions include individual controls including gender, age, number of children, student status, level of education, and wealth; and municipal controls including i) average municipal unemployment rate, ii) rate of vacant housing, iii) change in unemployment rate, iv) per capital social welfare expenditures, vii) per capital tax base, viii) population size, ix) small-sized ($< 50K$) and large-sized municipalities ($> 200k$), x) socialist majority in municipal council dummy, xi) Green Party and New Democrats holds municipal council seats dummy, and xii) panel dummy for panels 1988/91, and 1991/94. Clustered standard errors at the municipality level are reported in parentheses. *** p<0.01, **p< 0.05, *p< 0.1.

Table (B.3) Heterogeneous Effects Support for Immigration by Political Opinions

Dependent variable diff (s-s-1)	**Support for immigration**					
	Reduce Public Sector		**Abolish the wage's earners funds**		**Reduce foreign aid**	
	Good/Indifferent	Bad	Good/Indifferent	Bad	Good/Indifferent	Bad
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. OLS						
ΔMigrant Stock	-0.200***	0.083	-0.088	0.045	-0.036	-0.124
	(0.067)	(0.082)	(0.085)	(0.088)	(0.061)	(0.105)
Adj. R-squared	0.046	0.072	0.055	0.068	0.044	0.224
Panel B. Reduced Form						
Refugee Inflow	-0.172**	-0.116	-0.163*	-0.068	-0.182**	-0.051
	(0.086)	(0.091)	(0.093)	(0.088)	(0.072)	(0.124)
Adj. R-squared	0.045	0.072	0.057	0.068	0.048	0.223
Panel C. 2SLS						
ΔMigrant Stock	-0.318*	-0.199	-0.260*	-0.138	-0.313**	-0.105
	(0.163)	(0.157)	(0.147)	(0.180)	(0.140)	(0.243)
Adj. R-squared	0.044	0.062	0.050	0.064	0.034	0.224
Panel D. First Stage			ΔMigrant Stock			
Refugee Inflow	0.542***	0.581***	0.628***	0.491***	0.582***	0.482***
	(0.086)	(0.081)	(0.076)	(0.080)	(0.070)	(0.138)
Cragg Donald F-stat	339.96	263.1	366.63	197.11	527.2	80.24
Observations (All Panels)	845	782	707	823	1,325	302

Notes: We use the questions opinion good/bad into a 0 to 5 scale of reduce public sector, abolish wage's earners funds and reduce foreign aid. Where 0 is a very bad proposal and 5 very good proposal. The category Bad corresponds to people who answer 0 to 2, and Good/Indifferent people who answer 3 to 5 respectively. Same controls as Table (IV). Clustered standard errors at the municipality level are reported in parentheses. *** p<0.01, **p< 0.05, *p< 0.1.

Figure (B.1) Heterogeneous Effects by Political Opinions