

## A Online Appendix

### A.1 Tables

Table A1: Determinants of Actual Refugee Allocation

Dependent Variable: Refugees per 100,000 Residents	(1)	(2)	(3)	(4)
Extreme-Right Vote Share <sub>2013</sub> (%)	-105.959* (58.607)		-68.765 (58.371)	-69.044 (56.478)
Hate Crimes per 100,000 Residents <sub>2013</sub>		-68.940 (117.290)	-9.013 (106.084)	-9.127 (104.955)
Unemployment per 1,000 Residents <sub>2015</sub>			6.547** (3.257)	6.528** (3.042)
Mean Income per Capita <sub>2015</sub> in 1,000 EUR			-17.413 (15.539)	-17.375 (14.484)
GDP per Capita <sub>2015</sub> in 1,000 EUR			10.737 (8.247)	10.742 (8.458)
City over 100,000 Residents			285.024** (125.634)	285.729** (113.009)
Vacant Housing <sub>2015</sub> (%)				0.305 (17.565)
Constant	1520.977*** (164.404)	1443.376*** (163.350)	1211.471*** (281.774)	1210.129*** (300.751)
State Fixed Effects	Yes	Yes	Yes	Yes
Adj. $R^2$	0.09	0.08	0.27	0.27
$N$	390	390	390	390

Note: Columns one to three show the OLS estimates of the determinants of the actual refugee allocation to districts in 2015. Regional variables are based in 2013 or 2015 and explained in detail in Section 3. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A2: District Characteristics and Refugee Assignment

Dependent Variable: Assigned Refugees per 100,000 Residents	(1)	(2)
Share of Natives in 2013	13.036 (8.172)	3.521 (12.373)
Hate Crime occurred in the 90s	-89.430 (58.200)	-86.647 (56.947)
Mean NSDAP Vote Share	2.063 (2.032)	1.378 (2.169)
Vacant Housing in 2015 (%)		26.790* (14.424)
Constant	-11.901 (837.402)	828.459 (1212.426)
State Fixed Effects	Yes	Yes
Adj. $R^2$	0.10	0.11
$N$	394	394

Note: Columns one to three show the OLS estimates of refugee assignments to districts in 2014 and 2015 on district characteristics in 2013. Regional variables are explained in detail in Section 3. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A3: First-Stage Regression Results for Table 3

	No Interaction	Median Split		4 <sup>th</sup> Quartile Split		East Germany	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assigned Refugees	0.77985*** (0.22220)	0.95967*** (0.29126)	0.34733 (0.21256)	0.89222*** (0.25759)	0.35898* (0.18549)	0.79178*** (0.22287)	-0.01561 (0.01096)
Assigned Refugees × D [Inflow > 50 <sup>th</sup> percentile]		-0.14978* (0.07898)	0.57263*** (0.04853)				
× D [Inflow > 75 <sup>th</sup> percentile]				-0.09981 (0.06581)	0.55417*** (0.03236)		
× East						-0.14352 (0.09323)	0.58171*** (0.04902)
2015 Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Partial $R^2$	0.49	0.50	0.82	0.50	0.85	0.50	0.38
$N$	780	780	780	780	780	780	780

Note: The table shows the first-stage regression results of Table 3. Columns (1), (2) to (3), (4) to (5), and (6) to (7) refer to the models in column (1), (2), (3), and (4) of Table 3, respectively. Dependent variables in column (1), (2), (4), and (6) are the year-to-year change in refugee stocks per 100,000 residents, and in column (3), (5), and (7) the year-to-year change in refugee stocks per 100,000 residents interacted with either a dummy variable  $D$ , which either take on the value of 1 if the district is above the median or within the fourth quartile of refugee assignments and 0 otherwise, or with the dummy variable  $East$ , which takes the value of 1 if the district belongs to East Germany and 0 otherwise. Control variables are the same as in Table 3. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A4: First-Stage Regression Results for Table 4

	Share of Natives		Hate Crime 1990s		NSDAP Vote Share	
	(1)	(2)	(3)	(4)	(5)	(6)
Assigned Refugees	4.05402*** (1.17565)	3.05183*** (1.05005)	0.80993*** (0.21965)	-0.09667* (0.05848)	0.84844*** (0.27377)	0.03711 (0.05497)
Assigned Refugees × Share of Natives 2013	-3.59909*** (1.12787)	-2.58428** (1.00875)				
× Hate Crime 90s			-0.12299 (0.07478)	0.63641*** (0.02996)		
× Mean NSDAP Vote Share					-0.30590 (0.31975)	0.57899*** (0.06792)
2015 Year Dummy	Yes	Yes	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Partial $R^2$	0.54	0.53	0.50	0.49	0.50	0.50
$N$	780	780	780	780	762	762

Note: The table shows the first-stage regression results of Table 4. Columns (1) to (2), (3) to (4), and (5) to (6) refer to the model in column (1), (2), and (3) of Table 4, respectively. Dependent variable in odd columns is the year-to-year change in refugee stocks per 100,000 residents, and in even columns the year-to-year change in refugee stocks per 100,000 residents interacted with the respective measure of latent local anti-foreigner hostility, i.e. either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP. Control variables are the same as in Table 3. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A5: Measures of Regional Xenophobia on Hate Crime without Control Variables

Dependent Variable: $\Delta$ Hate Crimes per 100,00 Residents	(1)	(2)	(3)	(4)
<b>Panel A: ITT</b>				
Assigned Refugees	-0.00357*** (0.00129)	0.00010 (0.00012)	-0.00024 (0.00020)	-0.00331*** (0.00124)
Assigned Refugees × East	0.00163*** (0.00038)	0.00177*** (0.00037)	0.00183*** (0.00038)	0.00154*** (0.00038)
× Share of Natives 2013	0.00410*** (0.00143)			0.00339** (0.00141)
× Hate Crime 90s		0.00026** (0.00011)		0.00028*** (0.00011)
× Mean NSDAP Vote Share			0.00183** (0.00076)	0.00151** (0.00076)
AME [Refugees]	0.00055*** (0.00013)	0.00061*** (0.00014)	0.00054*** (0.00014)	0.00067*** (0.00013)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	No	No	No	No
Adj. $R^2$	0.42	0.42	0.41	0.42
$N$	804	804	788	788
<b>Panel B: IV</b>				
$\Delta$ Refugees	-0.00835*** (0.00245)	0.00029 (0.00029)	-0.00046 (0.00038)	-0.00830*** (0.00247)
$\Delta$ Refugees × East	0.00254*** (0.00071)	0.00299*** (0.00074)	0.00305*** (0.00073)	0.00236*** (0.00071)
× Share of Natives 2013	0.00961*** (0.00280)			0.00895*** (0.00286)
× Hate Crime 90s		0.00035* (0.00019)		0.00035* (0.00019)
× Mean NSDAP Vote Share			0.00370*** (0.00126)	0.00259** (0.00124)
AME [Refugees]	0.00107*** (0.00029)	0.00108*** (0.00034)	0.00099*** (0.00033)	0.00129*** (0.00030)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	No	No	No	No
Sanderson–Windmeijer $F$ -stats	815.56 246.08 696.59	29.85 229.95	576.46 135.05	618.94 337.74 508.95 451.13
		363.87	774.28	714.60
Adj. $R^2$	0.27	0.25	0.26	0.25
$N$	780	780	762	762

Note: The table shows the first-difference regression results of hate crime against refugees per 100,000 residents on either the assigned number of refugees per 100,000 residents (Panel A) or the first-difference of refugees per 100,000 residents (Panel B). Refugee measures are interacted with the dummy variable *East*, which takes the value of 1 if the district belongs to East Germany and 0 otherwise with either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP between 1928 and 1933. Column (4) presents the results of a model that includes all interaction. Panel A refers to the ITT, while Panel B estimates the IV approach. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A6: Measures of Regional Xenophobia on Hate Crime (Two-way Fixed Effects Approach)

Dependent Variable: Δ Hate Crimes per 100,00 Residents	(1)	(2)	(3)	(4)
<b>Panel A: ITT</b>				
Assigned Refugees	-0.00470** (0.00215)	0.00018 (0.00012)	-0.00007 (0.00027)	-0.00434** (0.00211)
Assigned Refugees × East	0.00112*** (0.00037)	0.00121*** (0.00035)	0.00136*** (0.00037)	0.00098*** (0.00038)
× Share of Natives 2013	0.00552** (0.00240)			0.00468* (0.00239)
× Hate Crime 90s		0.00045*** (0.00016)		0.00047*** (0.00016)
× Mean NSDAP Vote Share			0.00179 (0.00111)	0.00151 (0.00108)
AME [Refugees]	0.00064*** (0.00015)	0.00069*** (0.00015)	0.00061*** (0.00018)	0.00083*** (0.00016)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	No	No	No	No
Adj. $R^2$	0.49	0.49	0.48	0.49
$N$	804	804	788	788
<b>Panel B: IV</b>				
Δ Refugees	-0.00892*** (0.00316)	0.00034 (0.00029)	-0.00014 (0.00045)	-0.00926*** (0.00337)
Δ Refugees × East	0.00119** (0.00047)	0.00136*** (0.00047)	0.00167*** (0.00047)	0.00095* (0.00049)
× Share of Natives 2013	0.01041*** (0.00359)			0.01039*** (0.00392)
× Hate Crime 90s		0.00069*** (0.00025)		0.00064** (0.00025)
× Mean NSDAP Vote Share			0.00280** (0.00142)	0.00161 (0.00146)
AME [Refugees]	0.00098*** (0.00030)	0.00103*** (0.00033)	0.00083** (0.00035)	0.00135*** (0.00033)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	No	No	No	No
Sanderson–Windmeijer $F$ -stats	193.09	11.26	213.51	190.77
	264.09	152.62	116.72	255.99
	181.23			168.00
		77.14		86.04
			307.34	262.37
$N$	780	780	762	762

Note: The table shows the two-way fixed effect regression results of hate crime against refugees per 100,000 residents on either the assigned number of refugees per 100,000 residents (Panel A) or the number of refugees per 100,000 residents (Panel B). Refugee measures are interacted with the dummy variable *East*, which takes the value of 1 if the district belongs to East Germany and 0 otherwise with either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP between 1928 and 1933. Column (4) presents the results of a model that includes all interaction. Panel A refers to the ITT, while Panel B estimates the IV approach. Control variables are the same as in Table 3. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A7: Poisson Pseudo-Maximum Likelihood Estimates of Regional Xenophobia on Hate Crime

Dependent Variable: Number of Hate Crimes	(1)	(2)	(3)	(4)	(5)
Assigned Refugees	0.00074* (0.00042)	-0.00586** (0.00238)	0.00082 (0.00056)	-0.00039 (0.00044)	-0.00325 (0.00257)
Assigned Refugees × East	-0.00091*** (0.00028)	-0.00123*** (0.00035)	-0.00089*** (0.00028)	-0.00112*** (0.00037)	-0.00124*** (0.00042)
× Share of Natives 2013		0.00755*** (0.00282)			0.00335 (0.00295)
× Hate Crime 90s			-0.00009 (0.00041)		0.00010 (0.00041)
× Mean NSDAP Vote Share				0.00756*** (0.00268)	0.00656** (0.00275)
2015 Year Dummy	Yes	Yes	Yes	Yes	Yes
District Fixed Effects	Yes	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes	Yes
Pseudo $R^2$	0.67	0.67	0.67	0.67	0.67
$N$	804	804	804	788	788

Note: The table shows poisson pseudo-maximum likelihood regression results using `ppmlhdfc` from [Correia et al. \(2020\)](#). The number of hate crimes against refugees is used as dependent variable. The main independent variable assigned refugees per 100,000 residents is either interacted with the dummy variable *East*, which takes on the value of 1 if the district belongs to the former territory of the German Democratic Republic and 0 otherwise, and with either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP between 1928 and 1933. Column (5) presents the results of a model that includes all interaction. Control variables are the same as in Table 3. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A8: Measures of Regional Xenophobia on Violent Hate Crime

Dependent Variable: Δ Hate Crimes per 100,00 Residents	(1)	(2)	(3)	(4)	(5)
<b>Panel A: ITT</b>					
Assigned Refugees	0.00004 (0.00003)	-0.00072** (0.00031)	0.00004 (0.00003)	0.00001 (0.00006)	-0.00066** (0.00031)
Assigned Refugees × East	0.00023** (0.00010)	0.00018* (0.00010)	0.00022** (0.00010)	0.00023** (0.00010)	0.00019* (0.00010)
× Share of Natives 2013		0.00084** (0.00035)			0.00076** (0.00036)
× Hate Crime 90s			0.00001 (0.00003)		0.00001 (0.00003)
× Mean NSDAP Vote Share				0.00009 (0.00019)	0.00002 (0.00019)
AME [Refugees]	0.00008*** (0.00003)	0.00009*** (0.00003)	0.00009*** (0.00003)	0.00008*** (0.00003)	0.00010*** (0.00003)
Year Dummy	Yes	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes	Yes
Adj. $R^2$	0.18	0.18	0.18	0.18	0.18
$N$	804	804	804	788	788
<b>Panel B: IV</b>					
Δ Refugees	0.00006 (0.00005)	-0.00135** (0.00055)	0.00006 (0.00005)	0.00002 (0.00010)	-0.00126** (0.00055)
Δ Refugees × East	0.00040** (0.00018)	0.00030 (0.00018)	0.00039** (0.00018)	0.00041** (0.00018)	0.00030* (0.00018)
× Share of Natives 2013		0.00157** (0.00062)			0.00146** (0.00065)
× Hate Crime 90s			0.00003 (0.00005)		0.00002 (0.00005)
× Mean NSDAP Vote Share				0.00017 (0.00043)	0.00002 (0.00044)
AME [Refugees]	0.00013** (0.00006)	0.00017*** (0.00005)	0.00015** (0.00006)	0.00014** (0.00006)	0.00017*** (0.00006)
Year Dummy	Yes	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes	Yes
Sanderson–Windmeijer $F$ -stats	15.04 168.57	563.21 349.31 499.69	27.76 211.93 382.62	540.81 181.92 800.42	453.81 354.06 387.60 487.28 761.46
Adj. $R^2$	0.14	0.15	0.14	0.14	0.14
$N$	780	780	780	762	762

Note: The table shows the first-difference regression results of violent hate crime against refugees per 100,000 residents on either the assigned number of refugees per 100,000 residents (Panel A) or the first-difference of refugees per 100,000 residents (Panel B). Refugees measures are interacted with the dummy variable *East*, which takes the value of 1 if the district belongs to East Germany and 0 otherwise, and with either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP between 1928 and 1933. Column (5) presents the results of a model that includes all interaction. Panel A refers to the ITT, while Panel B estimates the IV approach. Control variables are the same as in Table 3. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A9: Measures of Regional Xenophobia on Hate Crime Controlling for Crime Clearance Rates

Dependent Variable: $\Delta$ Hate Crimes per 100,00 Residents	(1)	(2)	(3)	(4)
<b>Panel A: ITT</b>				
Assigned Refugees	-0.00254* (0.00134)	0.00014 (0.00011)	-0.00008 (0.00020)	-0.00244* (0.00132)
Assigned Refugees × East	0.00147*** (0.00037)	0.00154*** (0.00036)	0.00164*** (0.00036)	0.00138*** (0.00037)
× Share of Natives 2013	0.00303** (0.00148)			0.00258* (0.00149)
× Hate Crime 90s		0.00028** (0.00011)		0.00029** (0.00011)
× Mean NSDAP Vote Share			0.00132* (0.00076)	0.00117 (0.00075)
AME [Refugees]	0.00056*** (0.00011)	0.00061*** (0.00012)	0.00055*** (0.00012)	0.00067*** (0.00012)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Adj. $R^2$	0.44	0.44	0.43	0.44
$N$	804	804	778	778
<b>Panel B: IV</b>				
$\Delta$ Refugees	-0.00593*** (0.00221)	0.00033 (0.00024)	-0.00021 (0.00036)	-0.00605*** (0.00228)
$\Delta$ Refugees × East	0.00239*** (0.00068)	0.00265*** (0.00068)	0.00280*** (0.00067)	0.00218*** (0.00070)
× Share of Natives 2013	0.00701*** (0.00252)			0.00663** (0.00266)
× Hate Crime 90s		0.00040** (0.00019)		0.00040** (0.00019)
× Mean NSDAP Vote Share			0.00271** (0.00122)	0.00214* (0.00123)
AME [Refugees]	0.00014*** (0.00005)	0.00011* (0.00006)	0.00008 (0.00006)	0.00017*** (0.00006)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Sanderson–Windmeijer $F$ -stats	618.88 333.56 549.93	26.23 200.34	519.83 181.07	503.60 335.18 427.58 516.86
		413.92	781.41	749.12
Adj. $R^2$	0.31	0.30	0.30	0.29
$N$	780	780	762	762

Note: The table shows the first-difference regression results of hate crime against refugees per 100,000 residents on either the assigned number of refugees per 100,000 residents (Panel A) or the first-difference of refugees per 100,000 residents (Panel B). Refugee measures are interacted with the dummy variable *East*, which takes the value of 1 if the district belongs to East Germany and 0 otherwise with either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP between 1928 and 1933. Column (4) presents the results of a model that includes all interaction. Panel A refers to the ITT, while Panel B estimates the IV approach. Control variables are the same as in Table 3 and additionally include clear-up rates for violent and total crime. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .



Table A10: Measures of Regional Xenophobia on Hate Crime Controlling for Spatial Spillovers by Car Driving Time

Dependent Variable: Δ Hate Crimes per 100,00 Residents	(1)	(2)	(3)	(4)
<b>Panel A: ITT</b>				
Assigned Refugees	-0.00267** (0.00136)	0.00011 (0.00011)	-0.00013 (0.00020)	-0.00252* (0.00132)
Assigned Refugees × East	0.00148*** (0.00037)	0.00155*** (0.00036)	0.00165*** (0.00036)	0.00139*** (0.00037)
× Share of Natives 2013	0.00314** (0.00151)			0.00261* (0.00150)
× Hate Crime 90s		0.00029** (0.00012)		0.00030*** (0.00012)
× Mean NSDAP Vote Share			0.00140* (0.00075)	0.00124* (0.00075)
AME [Refugees]	0.00053*** (0.00013)	0.00059*** (0.00014)	0.00052*** (0.00014)	0.00066*** (0.00013)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Adj. $R^2$	0.43	0.44	0.43	0.43
$N$	804	804	778	778
<b>Panel B: IV</b>				
Δ Refugees	-0.00599** (0.00238)	0.00027 (0.00025)	-0.00031 (0.00036)	-0.00612** (0.00245)
Δ Refugees × East	0.00249*** (0.00070)	0.00274*** (0.00070)	0.00291*** (0.00070)	0.00227*** (0.00071)
× Share of Natives 2013	0.00701*** (0.00272)			0.00659** (0.00286)
× Hate Crime 90s		0.00045** (0.00020)		0.00045** (0.00020)
× Mean NSDAP Vote Share			0.00295** (0.00122)	0.00239* (0.00122)
AME [Refugees]	0.00099*** (0.00028)	0.00107*** (0.00031)	0.00094*** (0.00030)	0.00127*** (0.00030)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Sanderson–Windmeijer $F$ -stats	573.73	27.44	535.73	457.85
	339.26	200.09	162.57	362.65
	505.73			390.24
		349.01		459.65
			789.81	755.09
Adj. $R^2$	0.30	0.29	0.30	0.28
$N$	780	780	762	762

Note: The table shows the first-difference regression results of hate crime against refugees per 100,000 residents on either the assigned number of refugees per 100,000 residents (Panel A) or the first-difference of refugees per 100,000 residents (Panel B). Refugees measures are interacted with the dummy variable *East*, which takes the value of 1 if the district belongs to East Germany and 0 otherwise with either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP between 1928 and 1933. Column (4) presents the results of a model that includes all interaction. Panel A refers to the ITT, while Panel B estimates the IV approach. Control variables are the same as in Table 3 and additionally includes the spatial lag of the dependent variable weighted by the car driving time between district centroids. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A11: Measures of Regional Xenophobia on Hate Crime Controlling for Spatial Spillovers by Jump Distance

Dependent Variable: Δ Hate Crimes per 100,00 Residents	(1)	(2)	(3)	(4)
<b>Panel A: ITT</b>				
Assigned Refugees	-0.00267* (0.00136)	0.00012 (0.00011)	-0.00013 (0.00020)	-0.00253* (0.00133)
Assigned Refugees × East	0.00149*** (0.00037)	0.00156*** (0.00036)	0.00167*** (0.00037)	0.00140*** (0.00037)
× Share of Natives 2013	0.00314** (0.00152)			0.00263* (0.00151)
× Hate Crime 90s		0.00030** (0.00012)		0.00031*** (0.00012)
× Mean NSDAP Vote Share			0.00143* (0.00077)	0.00128* (0.00076)
AME [Refugees]	0.00054*** (0.00013)	0.00060*** (0.00014)	0.00053*** (0.00014)	0.00067*** (0.00013)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Adj. $R^2$	0.43	0.44	0.43	0.43
$N$	804	804	778	778
<b>Panel B: IV</b>				
Δ Refugees	-0.00604** (0.00240)	0.00028 (0.00025)	-0.00033 (0.00036)	-0.00624** (0.00248)
Δ Refugees × East	0.00252*** (0.00070)	0.00278*** (0.00070)	0.00296*** (0.00071)	0.00231*** (0.00072)
× Share of Natives 2013	0.00708*** (0.00275)			0.00670** (0.00288)
× Hate Crime 90s		0.00047** (0.00020)		0.00046** (0.00020)
× Mean NSDAP Vote Share			0.00311** (0.00123)	0.00256** (0.00123)
AME [Refugees]	0.00101*** (0.00028)	0.00109*** (0.00031)	0.00096*** (0.00030)	0.00131*** (0.00031)
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Sanderson–Windmeijer $F$ -stats	565.72 339.37 498.61	26.57 203.62 347.15	535.99 164.08 776.08	447.92 358.49 382.72 455.78
Adj. $R^2$	0.30	0.29	0.29	0.28
$N$	780	780	762	762

Note: The table shows the first-difference regression results of hate crime against refugees per 100,000 residents on either the assigned number of refugees per 100,000 residents (Panel A) or the first-difference of refugees per 100,000 residents (Panel B). Refugees measures are interacted with the dummy variable *East*, which takes the value of 1 if the district belongs to East Germany and 0 otherwise with either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP between 1928 and 1933. Column (4) presents the results of a model that includes all interaction. Panel A refers to the ITT, while Panel B estimates the IV approach. Control variables are the same as in Table 3 and additionally includes the spatial lag of the dependent variable weighted by the jump distance between district centroids. Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Table A12: Measures of Regional Xenophobia, East Germany, and Hate Crime: HAC Standard Errors

Dependent Variable: Δ Hate Crimes per 100,00 Residents	(1)	(2)	(3)	(4)
<b>Panel A: ITT</b>				
Assigned Refugees	-0.00267 (0.00136)* [0.00118]**	0.00012 (0.00010) [0.00008]	-0.00013 (0.00020) [0.00014]	-0.00252 (0.00132)* [0.00112]**
Assigned Refugees × East	0.00150 (0.00037)*** [0.00036]***	0.00156 (0.00035)*** [0.00036]***	0.00166 (0.00036)*** [0.00035]***	0.00139 (0.00037)*** [0.00036]***
× Share of Natives 2013	0.00315 (0.00151)** [0.00134]**			0.00262 (0.00150)* [0.00130]**
× Hate Crime 90s		0.00030 (0.00011)*** [0.00010]***		0.00031 (0.00011)*** [0.00011]***
× Mean NSDAP Vote Share			0.00142 (0.00075)* [0.00054]***	0.00125 (0.00074)* [0.00058]**
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
<i>N</i>	804	804	788	788
<b>Panel B: IV</b>				
Δ Refugees	-0.00600 (0.00237)** [0.00250]**	0.00027 (0.00025) [0.00018]	-0.00031 (0.00036) [0.00028]	-0.00607 (0.00240)** [0.00238]**
Δ Refugees × East	0.00250 (0.00069)*** [0.00076]***	0.00274 (0.00068)*** [0.00082]***	0.00290 (0.00068)*** [0.00078]***	0.00227 (0.00070)*** [0.00080]***
× Share of Natives 2013	0.00703 (0.00271)*** [0.00289]**			0.00654 (0.00280)** [0.00276]**
× Hate Crime 90s		0.00045 (0.00020)** [0.00021]**		0.00044 (0.00019)** [0.00022]**
× Mean NSDAP Vote Share			0.00293 (0.00120)** [0.00109]***	0.00237 (0.00121)* [0.00106]**
Year Dummy	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
<i>N</i>	780	780	762	762

Note: The table shows the first-difference regression results of hate crime against refugees per 100,000 residents on either the assigned number of refugees per 100,000 residents (Panel A) or the first-difference of refugees per 100,000 residents (Panel B) using `acreg` from [Colella et al. \(2019\)](#). Refugee measures are interacted with the dummy variable *East*, which takes the value of 1 if the district belongs to East Germany and 0 otherwise with either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP between 1928 and 1933. Column (4) presents the results of a model that includes all interaction. Panel A refers to the ITT, while Panel B estimates the IV approach. Control variables are the same as in Table 3. Standard errors that are clustered at the district level are displayed in parentheses. Heteroskedastic and autocorrelation corrected (HAC) standard errors are displayed in brackets. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

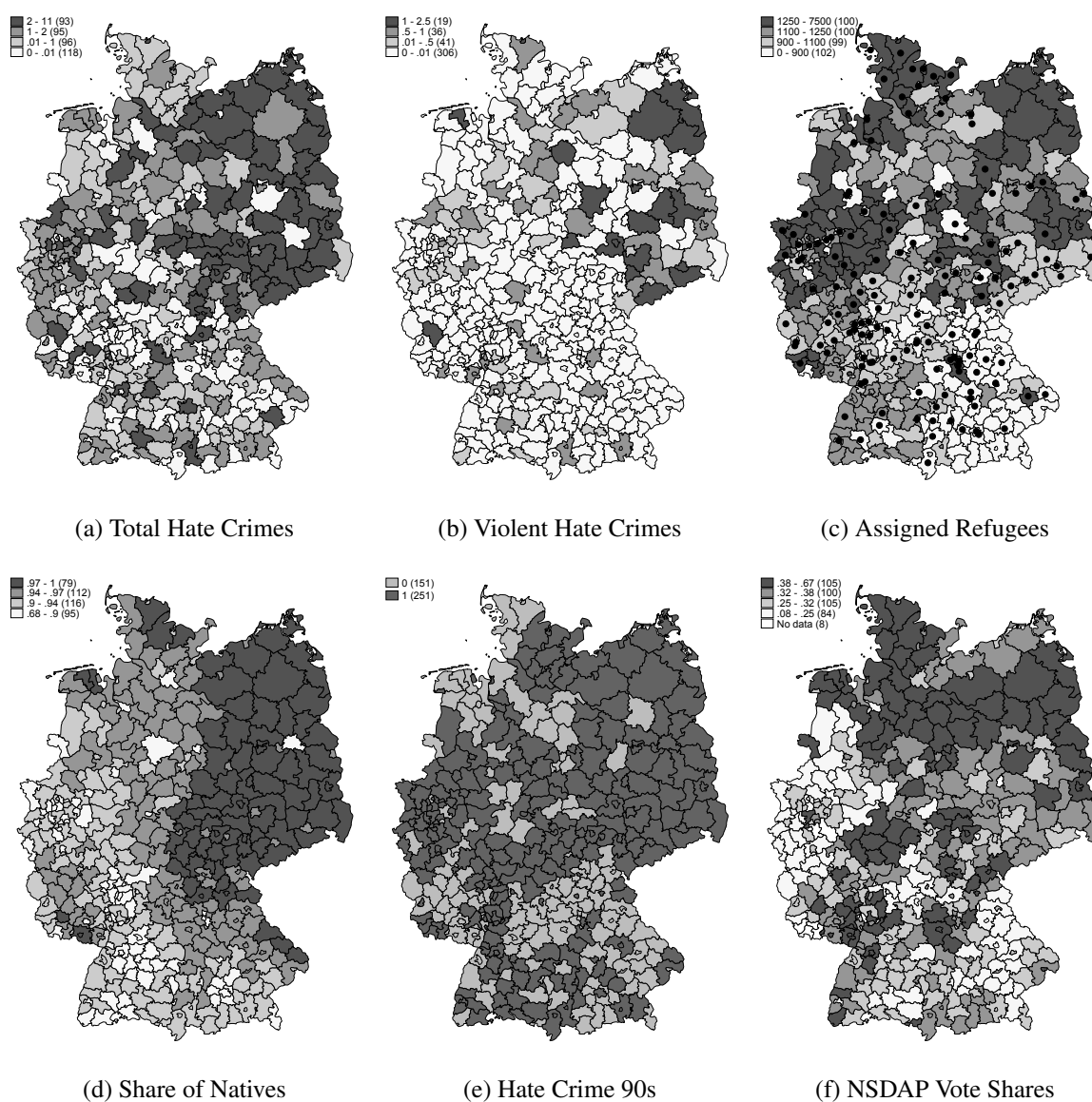
Table A13: Measures of Regional Xenophobia, East Germany, and Hate Crime: Beyond 2015

	(1)	(2)	(3)	(4)
<b>Panel A: Dependent Variable: <math>\Delta_{2013-2016}</math> Hate Crimes per 100,00 Residents</b>				
$\sum_{t=2014}^{2015}$ Assigned Refugees <sub>t</sub>	-0.00371** (0.00166)	0.00024 (0.00021)	0.00044 (0.00035)	-0.00387** (0.00169)
$\sum_{t=2014}^{2015}$ Assigned Refugees <sub>t</sub> × East	0.00105 (0.00074)	0.00129* (0.00077)	0.00139* (0.00076)	0.00105 (0.00075)
× Share of Natives 2013	0.00437** (0.00179)			0.00485*** (0.00186)
× Hate Crime 90s		0.00009 (0.00015)		0.00007 (0.00014)
× Mean NSDAP Vote Share			-0.00084 (0.00097)	-0.00126 (0.00095)
AME [Refugees]	0.00055*** (0.00018)	0.00054*** (0.00020)	0.00051** (0.00023)	0.00059*** (0.00018)
Year Dummy	No	No	No	No
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Adj. R <sup>2</sup>	0.46	0.45	0.45	0.46
N	401	401	387	387
<b>Panel B: Dependent Variable: <math>\Delta_{2013-2017}</math> Hate Crimes per 100,00 Residents</b>				
$\sum_{t=2014}^{2015}$ Assigned Refugees <sub>t</sub>	-0.00063 (0.00095)	0.00010 (0.00009)	0.00008 (0.00014)	-0.00057 (0.00096)
$\sum_{t=2014}^{2015}$ Assigned Refugees <sub>t</sub> × East	0.00010 (0.00030)	0.00016 (0.00030)	0.00012 (0.00030)	0.00008 (0.00030)
× Share of Natives 2013	0.00080 (0.00103)			0.00074 (0.00103)
× Hate Crime 90s		-0.00002 (0.00006)		-0.00003 (0.00006)
× Mean NSDAP Vote Share			0.00002 (0.00043)	-0.00005 (0.00043)
AME [Refugees]	0.00013 (0.00008)	0.00012 (0.00009)	0.00011 (0.00009)	0.00011 (0.00008)
Year Dummy	No	No	No	No
State Fixed Effects	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Adj. R <sup>2</sup>	0.12	0.12	0.11	0.10
N	401	401	387	387

Note: The table shows the regression results of differenced hate crimes against refugees per 100,000 residents either from 2013 to 2016 (Panel A) or from 2013 to 2017 (Panel B) on the cumulated number of assigned refugees per 100,000 residents in 2014 and 2015. Refugee measures are interacted with the dummy variable *East*, which takes the value of 1 if the district belongs to East Germany and 0 otherwise with either the share of Germans living in the district in 2013, a dummy variable *Hate Crime 90s*, which takes on the value of 1 if hate crimes against foreigners occurred in the district between 1991 and 1993, and 0 otherwise, or the average share of votes cast for the NSDAP between 1928 and 1933. Column (4) presents the results of a model that includes all interaction. Control variables are the same as in Table 3. Number of observations are reduced to the cross-section and reflect a district merger performed in 2016 (Göttingen). Standard errors are clustered at the district level and displayed in parentheses. Statistical significance is indicated by asterisks according to: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

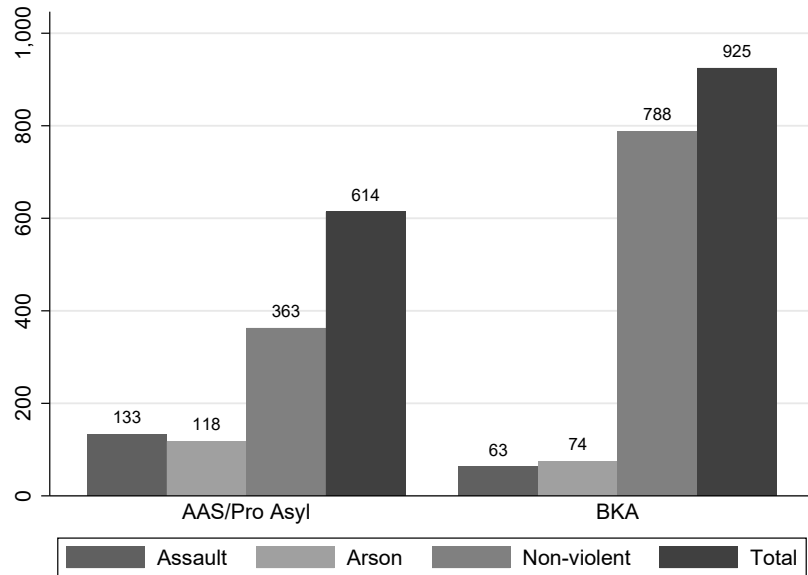
## A.2 Figures

Figure A1: Hate Crimes, Refugees, Foreigners, and NSDAP Vote Shares



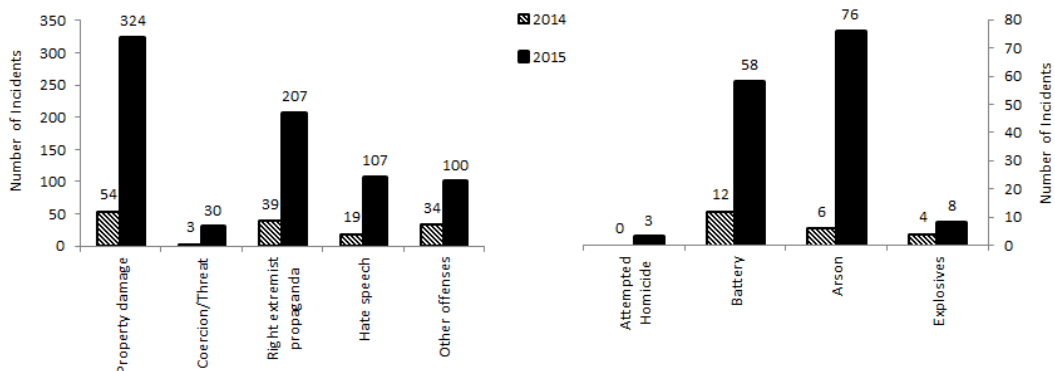
Note: The figure presents the district-level distribution of key regional statistics. Panel (a) displays the total number of hate crimes against refugees per 100,000 residents in 2014 and 2015. Panel (b) displays the total number of violent hate crimes against refugees per 100,000 residents in 2014 and 2015. Panel (c) displays the total number of assigned refugees per 100,000 residents in 2014 and 2015. Black dots mark districts with state-run reception centers (EAE). Panel (d) displays the share of German-born residents in 2013. Panel (e) displays whether a district experienced at least one hate crime against foreigners between 1991 and 1993. Panel (f) displays the average share of votes cast for the NSDAP between 1928 and 1933.

Figure A2: Comparison of Hate Crime Statistics



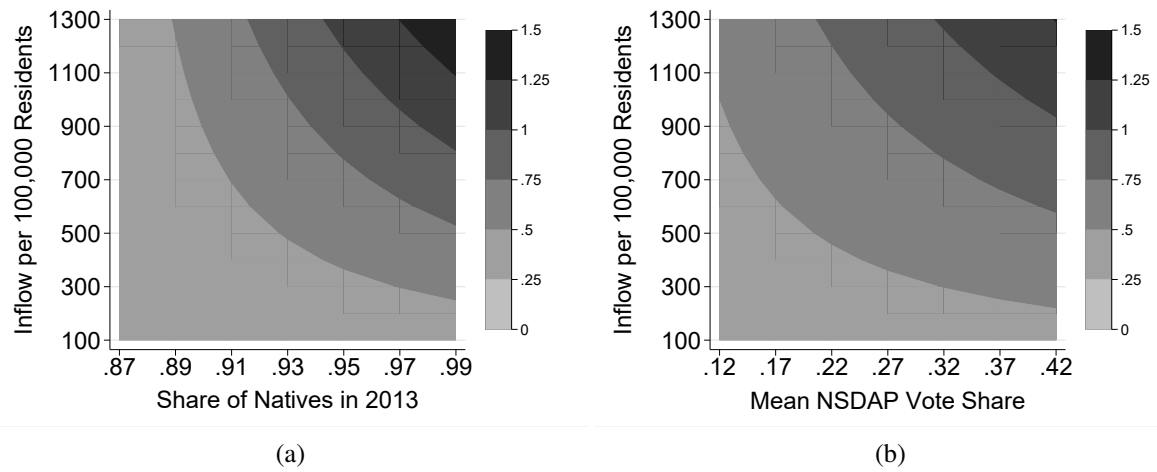
Note: This figure shows a comparison of hate crime cases against refugees in 2015 from two data sources. The left panel shows hate crime incidents from the Amadeu Antonio Foundations (AAS) and Pro Asyl used by [Jäckle and König \(2017\)](#). The right panel depicts hate crime incidents from the Federal Criminal Police Office (BKA, see Section 3). Own depiction.

Figure A3: Type of Hate Crime against Refugees in 2014 and 2015



Note: Left panel shows non-violent hate crimes against refugees whereas the right panel depicts violent hate crimes against refugees. Data comes from the Federal Criminal Police Office (see Section 3). Own depiction.

Figure A4: Predicted Hate Crime Incidents against Refugees per 100,000 Residents



Note: The figure displays the number of predicted hate crimes against refugees for combinations of the size of refugee inflows per 100,000 residents and with either the share of German-born residents in 2013 or the share of votes cast for the NSDAP between 1928 and 1933.