Appendix

Unequal and Unsupportive: Exposure to Poor People Weakens Support for Redistribution among the Rich

Contents

A Data, sample, and data access

A.1 Survey data and sample

The primary data, the panel data, consists of panel survey data collected among individuals aged 15 and above residing in Denmark. The survey data is combined with governmental administrative data about the respondents and the people who live in their immediate vicinity (see next section for details about the registry data). The survey data is used to measure the dependent variable, attitudes towards redistribution, and defines the sample used in the analyses. The first wave of the panel survey data was collected as part of the European Social Survey (ESS) in Denmark. Next, two follow-up surveys were conducted when 1,745 respondents from round 1 (2002-2003), round 2 (2004-2005), and round 4 (2008-2009) were re-interviewed in 2011-2012 (wave two) and 669 in 2017 (wave three). To minimize bias from attrition (which is naturally increasing with length between waves) and the risk of confounding of our relationship of primary interest—exposure to poor individuals and support for redistribution—from other developments over time (also likely to increase with length between waves), we use only the last round of ESS (2008/9) as our first wave in the primary specifications (see flowchart in Figure A1). However, in robustness analyses, we also include the two earlier rounds (see Section D.3).

We excluded from the sample person-year observations of persons who, at the time of interview, had moved to their current address within 6 months prior to the interview (approx. 4.11 %; information about relocation is obtained from the population registry; see next section). Exclusion of recent movers is done to increase validity of the contextual measures. More specifically, the "dose" of exposure to poor individuals for people who recently relocated to a new neighborhood is likely a mix of exposure in their previous neighborhoods and that in their contemporary one.[1] We also exclude those person-wave observations who have fewer than 15 neighbors and/or two families living within 100 meters from their residence (approx. 16 %). In sparsely populated areas the contextual measure could be very sensitive to the exact size of the context and the threshold for being categorized as poor as e.g., inclusion/exclusion of a single poor neighbor would imply dramatic changes to the share of poor individuals. Some of this sensitivity is

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[1]In Figure A19, we report the results of analyses comparing our primary panel estimates based on the restricted sample to estimates based on the same specification using the unrestricted sample. In general, the estimates from the unrestricted sample are slightly weaker, but neither substantially nor significantly different from those based on the restricted sample.

Figure A1: Flowchart of data collection and sample restrictions, panel data
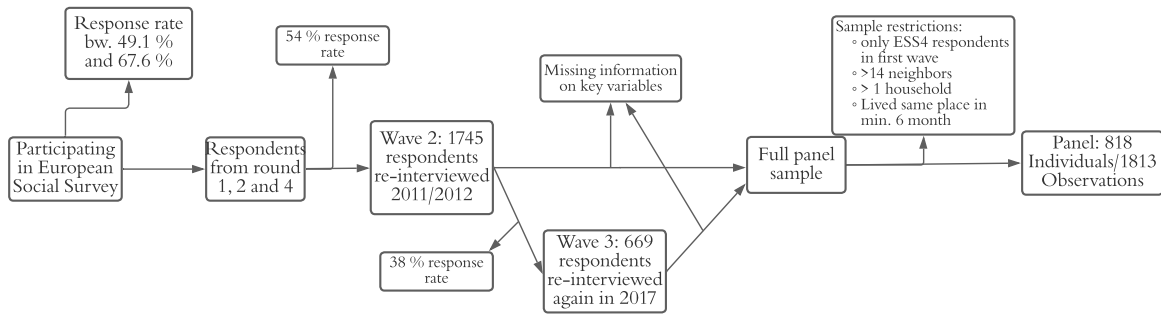
removed by the fixed effects approach because of its reliance of temporal variation, but minor changes in composition (e.g., a neighbor just being categorized a poor at one time point) may still lead to dramatic changes. Parts of such changes can be conceived as random measurement error which is likely to downward bias our estimate. To counter this noise, we set the population threshold to at least 15 neighbors (and two families) in a given context.[2] These restrictions and removal of observations with missing data leave us with a primary sample of 1813 person-wave observations—or 818 individuals observed, on average, 2.22 times.

The cross-sectional data, which we use for comparison with the panel data, consists of survey data on respondents from the first seven rounds of the ESS and the same registry data as for the panel data. After applying the same inclusion criteria as mentioned above, the cross-sectional sample consists of 8268 observations.

A.2 Registry data on economic conditions and covariates

We combined the survey data with (anonymized) economic, socio-demographic, and other information (see Table A1) about the respondents and their neighbors from official governmental registries provided by Statistics Denmark. This allows us to compute reliable measures of the socio-economic composition of the respondents' residential areas (their social context) as well as a comprehensive set of precisely measured covariates about the respondents themselves and their social context. The registry data also allow us to flexibly specify the size of the respondents' social context. We use contexts defined as circles around each respondents with the following radii (in meters): 100, 150, 200, 250, 500, 1000, 1500, 2000, and 2500.

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[2]We examine the sensitivity of our results due to this sample restriction in Figure A18.

The contextual data are computed from various registries maintained by Statistics Denmark, including registries on income (*The Income and the Family Income Registries*; see Baadsgaard and Quitzau 2011) and general information on citizenship, sex, age, residential address etc. (*The Population Registry*; see Pedersen 2011).

A.2.1 Coverage of the registry data

The registries contain information about everyone residing in Denmark who has a Danish social security number. This excludes asylum seekers and illegal immigrants. It may also exclude some Nordic citizens (who can reside legally in Denmark without further registration) and some EU citizens (who can reside in Denmark without further registration for up to 3 months; 6 if seeking a job).

The number of asylum seekers varies over time, but asylum seekers reside in designated facilities, typically in sparsely populated areas. This implies that only a few respondents, if any, live near asylum seekers, and consequently that measurement error stemming from the omission of asylum seekers should be negligible. The number of illegal immigrants is of course uncertain, but estimates from 2008 (2013) lie between 9000 (20000) and 28000 (65000) (Tranæs and Jensen 2014); 65000 corresponds roughly to a little more than 1% of the registered population. Assuming that many illegal immigrants live in larger cities, we cannot rule out that some respondents are exposed to some (supposedly relatively poor) illegal immigrant neighbors that are not included in our data. However, if this primarily occurs in densely populated areas, the size of such measurement error would be minor due to the high number of other neighbors (who presumably also are relatively poor).

Regarding Nordic/EU-citizens without a social security number: We have not been able to find estimates of the size this population but given the benefits of having a social security number (e.g., access to free health care), the expectation would be that most residents who can obtain a social security number would have one. This means that most Nordic/EU citizens with a primary residence in Denmark would have a social security number and hence be included in our data.

A.3 Data accessibility

Our analyses are mainly based on administrative registry data with sensitive information about individuals. Although anonymized, the data are not publicly available. The combined survey and registry data are stored at Statistics Denmark and can only be accessed

by researchers affiliated with a permanent Danish research institution using Statistics Denmark remote server system (for further information about the Danish administrative registries, including access, see http://www.dst.dk/en/TilSalg/Forskningsservice.aspx and Pedersen 2011). Accordingly, we cannot make replication data for our analyses available. However, the file used to produce the analyses as well as a file containing the actual output from the statistical software regarding the main analyses can be found here https://doi.org/10.7910/DVN/GCCULO.

A.4   Ethics

A part of the research material consists of survey data, which has been collected in direct engagement with the participants. Participation in the surveys was based on voluntary consent and did not involve any payment. The pool of participants was based on a random sample and was, therefore, diverse. We consider the risk of harming any of the survey participants—including participants from groups that could be considered as vulnerable—as very low given the nature of the questions in the surveys (we do not find the questions to be sensitive) and because participants could opt out of the entire survey/skip specific questions without any personal consequences. For these reasons, and because ethical review of studies based on standard surveys are rare and typically not required in Denmark, the surveys have not been reviewed by an ethical review board.

B Measurement

B.1 Exposure to poor individuals

Our primary measure of exposure to poor individuals is the share of poor people in a given context. An individual (a neighbor) is classified as poor if their income is below the 20th percentile in the national income distribution in a given year. Figure A2 illustrates this classification, and also provides examples of how different compositions of neighborhoods affects the measure (EXP) for a given respondent i. Income is measured as household equivalent disposable income for (nearly) all individuals in the context (see below); persons with a negative income are excluded from the calculation, because negative incomes often reflect capital loss, and, hence, are not credible estimates of disposable income.

Figure A2: Classification of poor neighbors in the primary measure
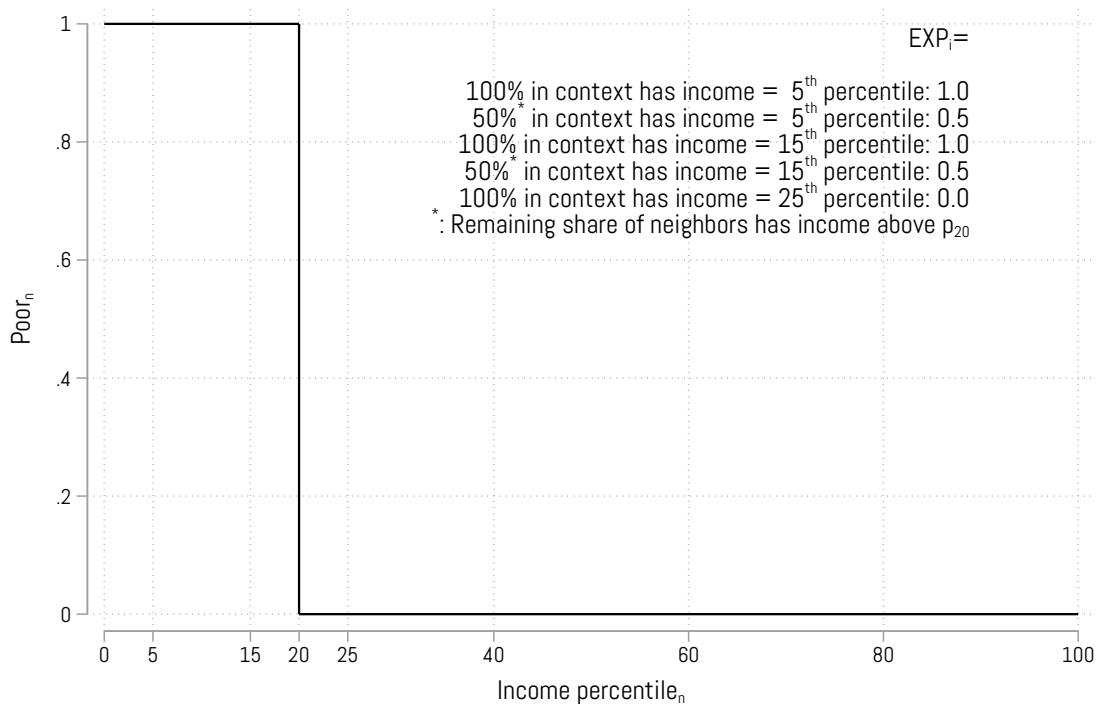
We use two alternative measures of exposure to poor individuals in robustness analyses: A measure where the definition of poor individuals is gradual rather than sharp (implying that very poor individuals signify more exposure than relatively less poor individuals), and a measure where poor is defined sharply as earning less than half of the median national income.

The gradual contextual measure of exposure to poor individuals is based on the average

level of poverty among individuals in the context (again, neighbors with negative incomes are excluded in the calculation). Poverty is based on a transformation of the national income distribution using the following formula:

$$\frac{exp(-0.30*x+6)}{(1+exp(-0.30*x+6))} \text{ for x } \epsilon \text{ [0; 50); 0 for } X \text{ } \epsilon \text{ [50;100]}$$

where X indicates the income percentile of the individual in the national income distribution. Using this formula, the degree of poverty approaches 1 for incomes in the very bottom of the national income distribution and 0 for incomes near the 40th percentile of the national income distribution. It is 0.5 for incomes at the 20th percentile of the national income distribution, and exactly zero for individuals with an income at or above the median of the national income distribution. Figure A3 shows the relationship between income percentile and poverty using the gradual measure, and provides examples of values on the measure of exposure to poor individuals depending on the composition of the respondent's neighborhood. The correlation between changes in this measure of exposure and changes in the primary measure is 0.98 in the 100 meter context.

Figure A3: Calculation of poverty in the gradual measure of exposure to poor individuals
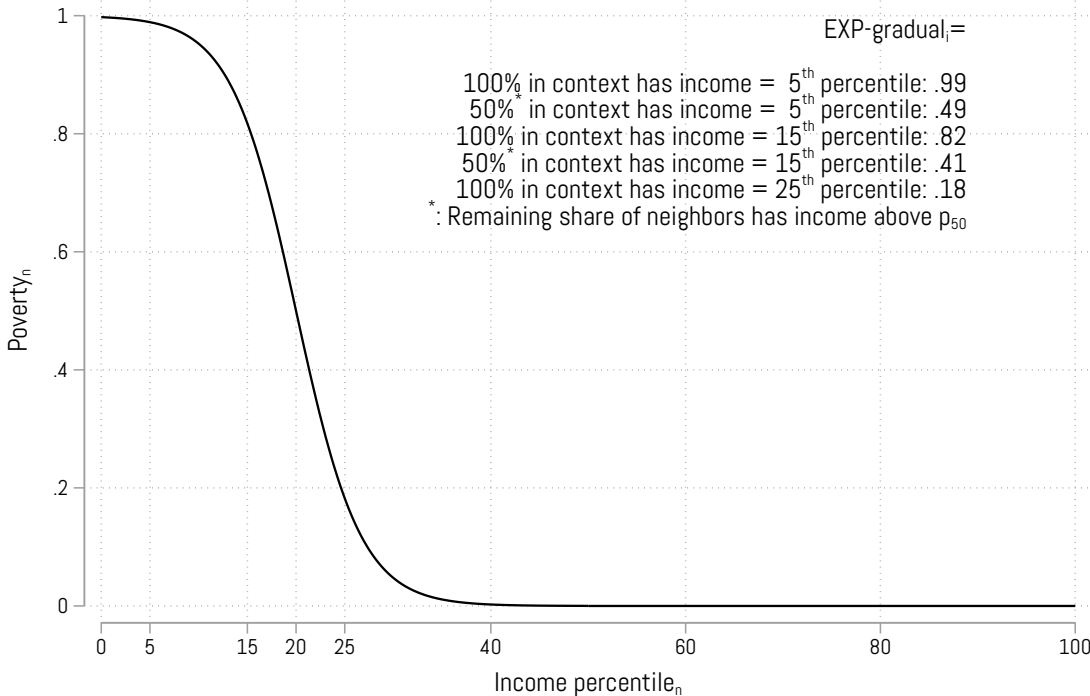
The second alternative measure is similar to the primary measure, except that poor is defined (sharply) as individuals with an income less than half of the national median

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income in a given year (instead of less than the 20th percentile). In 2008, 2011, and 2017 those who had an income less than half of the national median income had an income below the 8th, 9th, and 10th percentile in the national income distribution, respectively. The correlation between changes in this measure of exposure and changes in the primary measure (in the 100 meter context) is 0.72.

B.2   Additional predictors and covariates

In some analyses we include additional measures of contextual income distribution: *Exposure to rich individuals*, *Gini* and *Income Diversity*.

Exposure to rich individuals is measured as the share of people in a given context whose income is above the 80th percentile of the national income distribution. Hence, this measure mirrors the measures of exposure to poor individuals. The Pearson correlation between changes in exposure to rich individuals measured in the 100 meter context and changes in exposure to poor individuals is -0.40.

The Gini coefficient is a standard measure used to gauge the income distribution in a population; in our case, the income distribution in a given neighborhood. The coefficient is based on the Lorenz curve and it ranges from 0 to 1, with 0 representing perfect equality (10 percent of the population having 10 percent of the overall income, 20 percent having 20 percent of the overall income etc.) and 1 representing perfect inequality. We adjust the Gini coefficient with a factor of $\frac{N}{N-1}$, as the original Gini formula has a downward-bias in small populations (Deltas 2003). The correlation between the gini-coefficient measured in the 100 meter context and the exposure to poor individuals is 0.36.

Inspired by Minkoff and Lyons (2019), *income diversity* is measured as a reversed Herfindahl-Hirschman Index (HHI): $H = 1 - \sum_{i=1}^{N}$. Here s_i denotes the share of people in the context who belong to the income group i, and N denotes the total number of income groups in the context. Consistent with the measures of exposure to poor and rich individuals, we focus on the five groups: Income $\leq$ p(20); Income $>$ p(20) and Income $\leq$ p(40); Income $>$ p(40) and Income $\leq$ p(60); Income $>$ p(60) and Income $\leq$ p(80); Income $>$ p(80). The measure ranges from 0 to 1, with 0 indicating no income diversity—the context consists of a single income group—and 1 representing perfect income diversity—an equal proportion of all five income groups.

Table A1 provides details about coding of all other covariates.

Table A1: Variable description

Variable	Description	Source
Contextual Characteristics		
Population Size	Number of people living in the context.	Registry
Age variation	Standard deviation of age among all residents living in the context.	Registry
Median income	Median income in the context in the year the survey was initiated measured using household equivalised disposable income (adjusted for inflation with 2015 as base).	Registry
Share of unemployed	The share of people living in the context who are unemployed. A person is considered unemployed if they fall into one of the following categories in the registries: "unemployed for more than half of the year", "receiving cash benefits" or "persons with little or no connection to the labour market who also do not receive any larger benefits".	Registry
Ethnic diversity	Ethnic diversity is measured by subtracting the Hirschman-Herfindahl Index from unity: $H = 1 - \sum_{i=1}^{N}$. Here s_i denotes the share of people in the context who belong to the ethnic group i and N denotes the total number of ethnic groups in the context.	Registry
Residents' mobility	The proportion of people over the age of five living in the context who moved to the context within the last five years from December 31 in the year the survey was initiated.	Registry
Share single-parent households	Share of single parent households as a proportion of the total number of households in the context. A single parent household is defined as a household with minimum one child under the age of 25 and only one adult.	Registry
Municipality FE	The municipality in which the respondent lives	Registry
Individual Characteristics		
Income (ln.)	Yearly household equivalised disposable income in Danish Kroner in the year the survey was initiated (adjusted for inflation with 2015 as base). Statistics Denmark's equivalence scale is used.	Registry
Income quintile	Based on respondent's income and the income of all Danish residents with a valid measure of household equivalised disposable income. Poor: Income $\leq$ p(20); lower-middle: Income > p(20) or $\leq$ p(40); Middle: Income > p(40) or $\leq$ p(60); Upper-middle: Income > p(60) or $\leq$ p(80); Rich > p(80).	Registry
Years lived at address	Number of years lived at current address.	Registry
Unemployment status	1 = Employed, 2 = Unemployed, 3= Retired, 4= Early Retirement, 5= Student	Registry
Years of education	Years of full-time education required to obtain the respondent's highest level of education	Registry
Danish citizenship	0= Non-Danish Citizenship, 1= Danish Citizenship	Registry
Marital status	1= Widow, not remarried, 2= Divorced, 3= Married, 4= Never Married	Registry
Cohabitation	0= Living alone, 1= Living with others	Register
Sex[†]	0= Female, 1= Male	Registry
Age[†]	Age in years on the day of the interview	Registry
Origin[†]	1= Danish Origin, 2= Western Immigrant, 3=Non-western Immigrant, 4= Western Descendant, 5= Non-western Descendant	Registry

† only used in cross-sectional models.

B.3 Descriptive statistics

Descriptive statistics for the main independent variable in the full sample—exposure to poor individuals (across different context sizes)—and the dependent variable—attitudes towards redistibution—are reported in Table A2. Table A3 reports the corresponding descriptive statistics in the subsample of rich respondents. Figure A4 displays the distribution of attitudes toward redistribution (levels across all observations and changes from one wave to the next) and Figure A6 displays the distribution of the main independent variable measuring exposure to poor individuals for four context sizes and in levels across all observations as well as changes from one wave to the next. Figure A5 and Figure A7 display these distributions when restricting the sample to rich respondents.

Table A2: Descriptive Statistics, Main Variables

	Mean	SD$_{between}$	SD$_{within}$
Exposure to poor individuals - 100 meters	0.16	0.13	0.06
Exposure to poor individuals - 150 meters	0.16	0.12	0.05
Exposure to poor individuals - 200 meters	0.17	0.12	0.05
Exposure to poor individuals - 250 meters	0.17	0.11	0.04
Exposure to poor individuals - 500 meters	0.18	0.10	0.04
Exposure to poor individuals - 1000 meters	0.19	0.09	0.03
Exposure to poor individuals - 1500 meters	0.19	0.09	0.03
Exposure to poor individuals - 2000 meters	0.20	0.08	0.03
Exposure to poor individuals - 2500 meters	0.20	0.08	0.02
Attitudes towards Redistribution	0.53	0.26	0.15

Note: SD$_{between}$: Between-individual standard deviation. SD$_{within}$: Within-individual standard deviation. Individuals = 818, person-wave observations = 1813

Table A3: Descriptive Statistics, Main Variables, Sample of Rich Respondents

	Mean	SD$_{between}$	SD$_{within}$
Exposure to poor individuals - 100 meters	0.11	0.10	0.05
Exposure to poor individuals - 150 meters	0.12	0.10	0.05
Exposure to poor individuals - 200 meters	0.13	0.10	0.04
Exposure to poor individuals - 250 meters	0.13	0.10	0.04
Exposure to poor individuals - 500 meters	0.15	0.09	0.04
Exposure to poor individuals - 1000 meters	0.17	0.08	0.03
Exposure to poor individuals - 1500 meters	0.18	0.08	0.03
Exposure to poor individuals - 2000 meters	0.18	0.08	0.02
Exposure to poor individuals - 2500 meters	0.19	0.08	0.02
Attitudes towards Redistribution	0.49	0.28	0.14

Note: SD$_{between}$: Between-individual standard deviation. SD$_{within}$: Within-individual standard deviation. Individuals = 259, person-wave observations = 594

Figure A4: Distribution of Attitudes toward Redistribution

Note: Left-Panel: N = 1813 person-wave observations, Right-Panel: N = 995 person-wave-on-waves
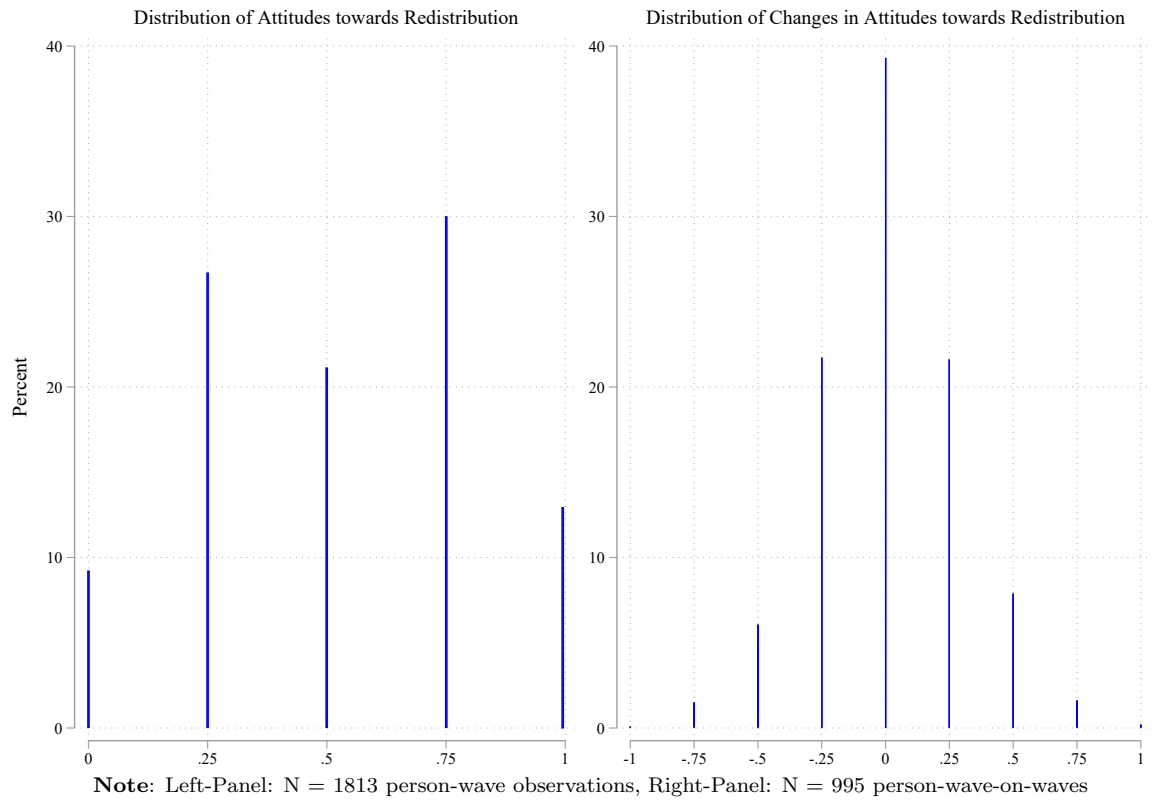
Figure A5: Distribution of Attitudes toward Redistribution, Sample of Rich Respondents

Note: Left-Panel: N = 594 person-wave observations, Right-Panel: N = 335 person-wave-on-waves
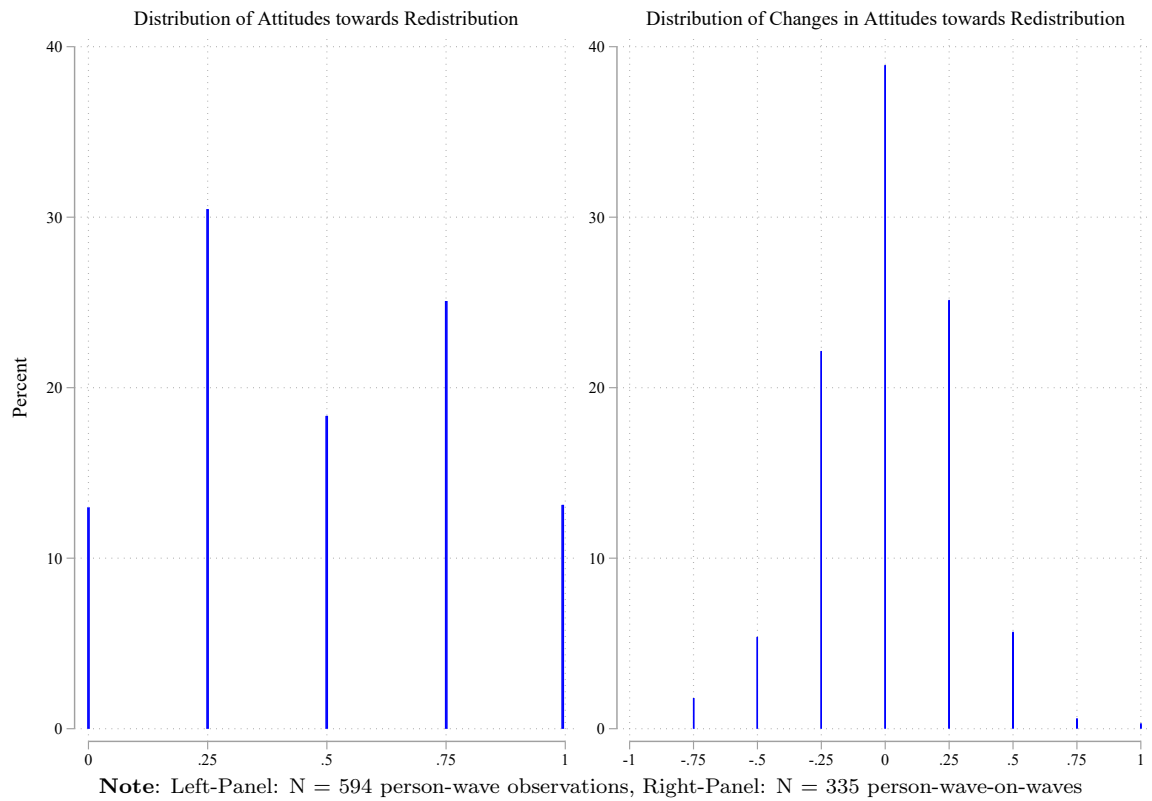
Figure A6: Distribution of Exposure to Poor Individuals in (a) Levels, (b) Changes
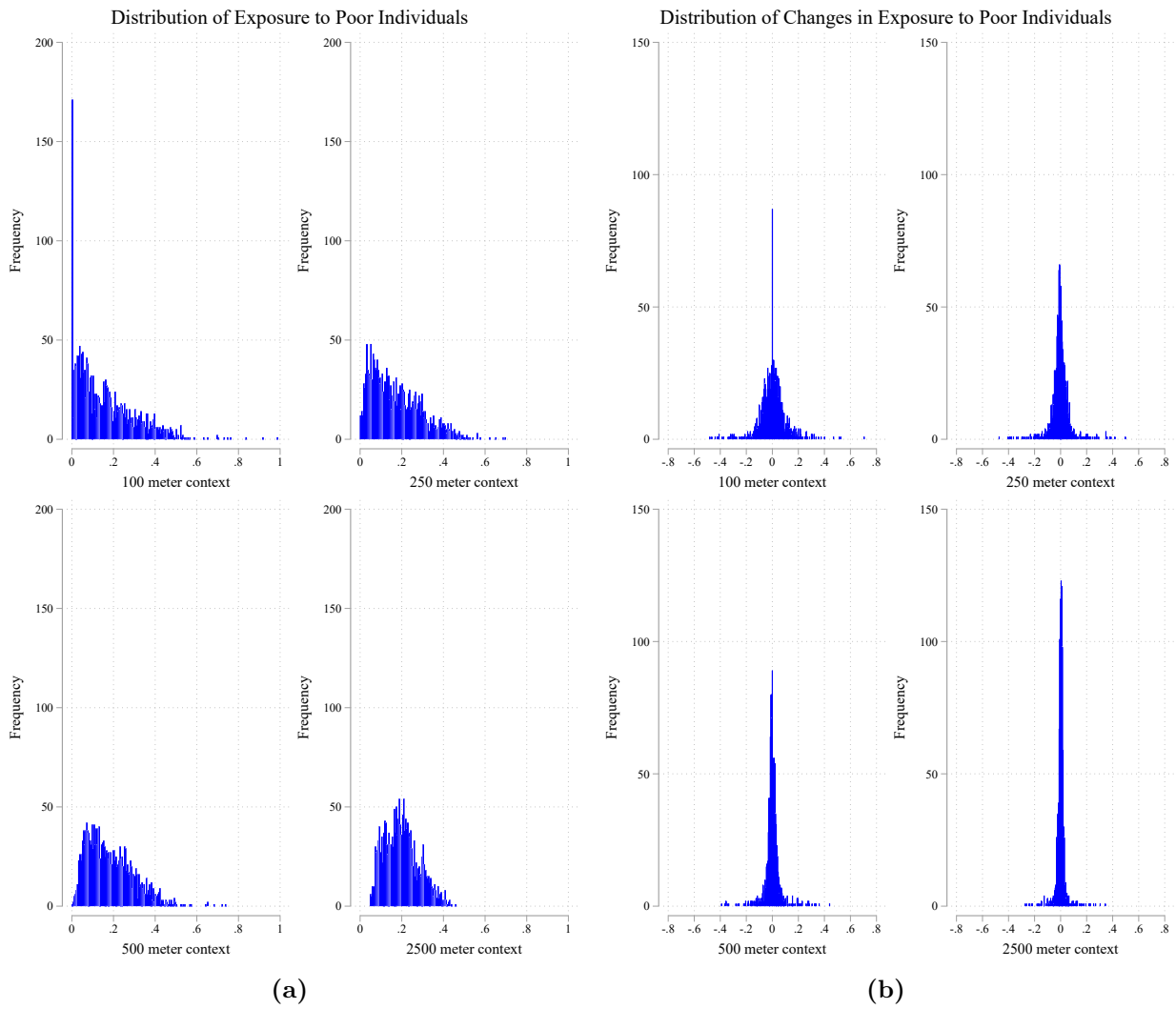
(a)

(b)

Note: Left-Panel: N = 1813 person-wave observations, Right-Panel: N = 995 person-wave-on-waves

Figure A7: Distribution of Exposure to Poor Individuals in (a) Levels, (b) Changes, Sample of Rich Respondents

(a)   (b)
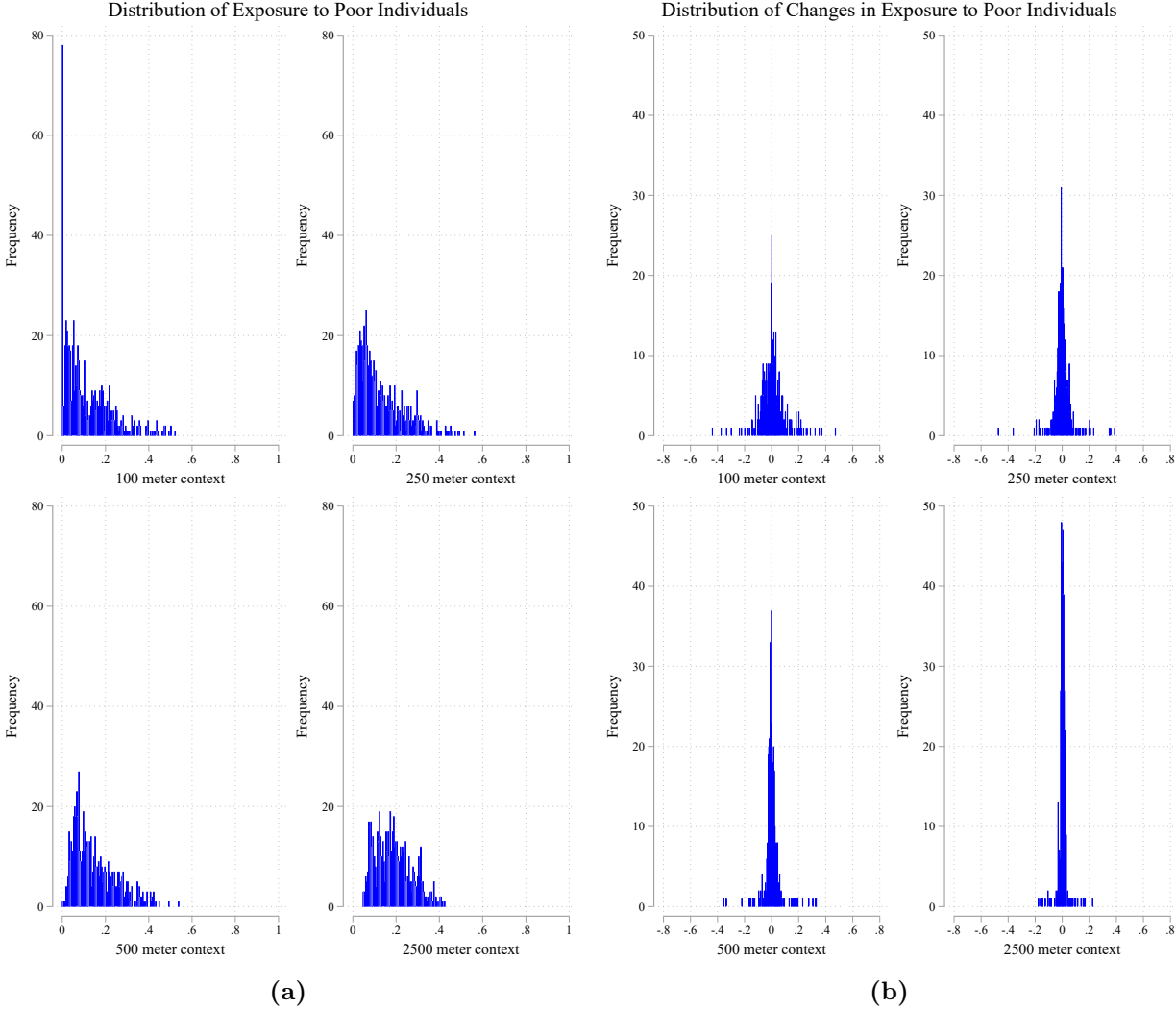
Note: Left-Panel: N = 594 person-wave observations, Right-Panel: N = 335 person-wave-on-waves

Descriptive statistics for the control variables in the full sample are reported in Table A4, while Table A5 reports descriptive statistics in the subsample of rich respondents.

Table A4: Descriptive Statistics of Control Variables

	Mean	SD$_{between}$	SD$_{within}$
Contextual Characteristics			
Population Size	150	187	65
Exposure to poor individuals (gradual)	0.15	0.12	0.05
Exposure to poor individuals (half of median)	0.05	0.06	0.04
Exposure to rich individuals	0.23	0.18	0.07
Gini (adj.)	0.21	0.06	0.03
Income diversity	0.70	0.09	0.04
Age variation	22.18	2.46	1.24
Median income	241156	61464	23799
Share of unemployed	0.06	0.04	0.03
Ethnic diversity	0.14	0.13	0.06
Residents' mobility	0.36	0.17	0.09
Share single-parent households	0.05	0.04	0.03
Individual Characteristics			
Income Quintile			
Poor	0.09	0.29	0.29
Lower-Middle	0.13	0.33	0.33
Middle	0.20	0.40	0.40
Upper-Middle	0.25	0.43	0.43
Rich	0.33	0.47	0.47
Income (ln.)	12.49	0.39	0.19
Years lived at address	16.94	15.69	3.44
Unemployment Status			
Working	0.65	0.43	3.44
Unemployed	0.03	0.14	0.12
Retired	0.24	0.39	0.17
Early Retirement	0.03	0.16	0.07
Student	0.05	0.18	0.11
Years of Education	14.38	2.83	0.53
Danish citizenship	0.99	0.09	0.02
Marital status			
Widowed	0.06	0.22	0.06
Divorced	0.09	0.29	0.07
Married	0.64	0.46	0.14
Unmarried	0.21	0.40	0.11
Cohabitating	0.84	0.34	0.14

Notes: SD$_{between}$: Between-individual standard deviation. SD$_{within}$: Within-individual standard deviation. Contextual characteristics are measured in the 100-meter context. The income quintile is measured as individuals' income quintile in either first or second wave (hence, the missing within variation), depending on whether they participated in all three waves (income quintile in wave one) or only participated in wave two and three (income quintile in second wave).

Table A5: Descriptive Statistics of Control Variables, Sample of Rich Respondents

	Mean	SD$_\text{between}$	SD$_\text{within}$
Contextual Characteristics			
Population Size	124	134	61
Exposure to poor individuals (gradual)	0.11	0.09	0.05
Exposure to poor individuals (half of median)	0.05	0.05	0.03
Exposure to rich individuals	0.35	0.20	0.08
Gini (adj.)	0.22	0.07	0.04
Income diversity	0.67	0.13	0.05
Age variation	22.39	2.18	1.10
Median income	277776	74623	30576
Share of Unemployed	0.05	0.04	0.03
Ethnic diversity	0.13	0.11	0.05
Residents' Mobility	0.32	0.15	0.10
Share single-parent Households	0.04	0.04	0.03
Individual Characteristics			
Income (ln.)	12.87	0.30	0.21
Years lived at address	19.95	15.19	3.59
Unemployment Status			
Working	0.75	0.37	0.23
Unemployed	0.02	0.12	0.10
Retired	0.20	0.33	0.22
Early Retirement	0.02	0.11	0.06
Student	0.02	0.12	0.06
Years of Education	15.44	2.51	0.38
Danish citizenship	0.99	0.09	0.00
Marital status			
Widowed	0.05	0.20	0.06
Divorced	0.05	0.22	0.06
Married	0.80	0.39	0.12
Unmarried	0.10	0.29	0.08
Cohabitating	0.91	0.25	0.12

See notes to Table A4.

Table A4 shows that 33 % of the panel sample has an income above the 80$^\text{th}$ percentile in the national income distribution, so rich individuals are clearly overrepresented in the sample (by 13 percentage points). A small part of this overrepresentation comes from non-response bias in the first wave of the survey (22 % were rich in Round 4 of the ESS), another part comes from panel attrition (of those who participated in at least two waves, 27.9 % were rich in the first wave they participated in). The remaining part comes from the sample restrictions discussed in Section A.1. The over-representation, although substantial, need not be a problem in itself given that the rich respondents are our primary

interest. However, the over-representation raises a question about generalizability of our results as the sample of rich individuals might not be representative of the entire population of rich individuals in Denmark. In Section D.3 below, we show that the sample restrictions probably do not affect the results substantively, but unfortunately, we cannot assess the consequences of the initial non-response bias and the panel attrition.

B.4 Sources of variation in changes in exposure to poor individuals

B.4.1 Contextual- and individual level correlates

To describe the correlates of changes in exposure to poor individuals over time, we calculated the correlation between various contextual and individual characteristics in wave 1 and changes in exposure to poor individuals from wave one to wave two. Figure A8 plots these correlations in the full sample, while Figure A9 plots these correlations in the subsample of rich respondents. It is evident that none of the observed covariates are particularly highly correlated with changes in exposure to poor individuals. Nevertheless, increasing shares of poor people are more likely to occur in neighborhoods with high initial unemployment levels and a larger initial variation in age. Furthermore, in Figure A9, we see that changes in the share of poor people are less likely to occur in more populated areas and in areas with higher residential turnover.

Figure A8: Correlation between Individual and Contextual Characteristics and Changes in Exposure to Poor Individuals - 100-meter context
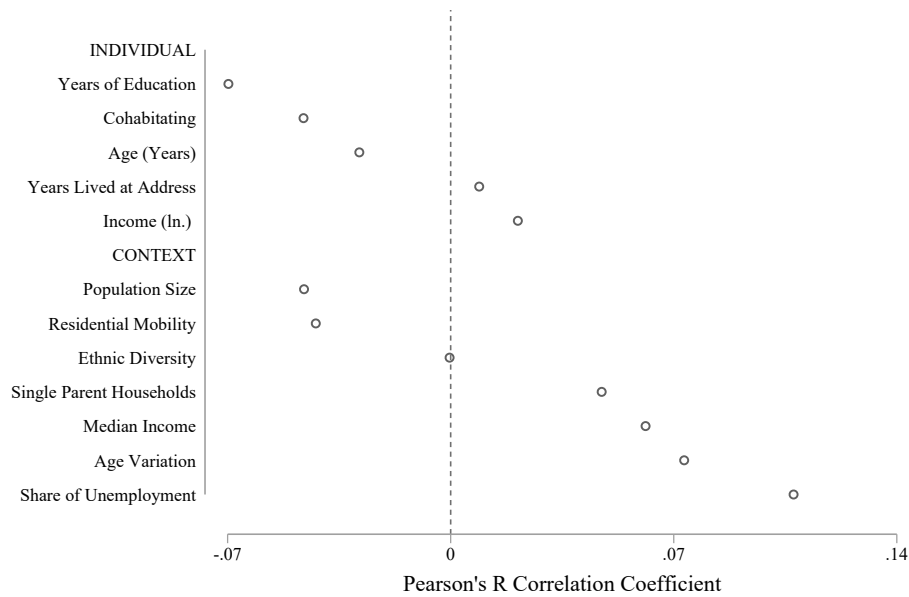
Figure A9: Correlation between Individual and Contextual Characteristics and Changes in Exposure to Poor Individuals among the Rich Respondents - 100-meter context
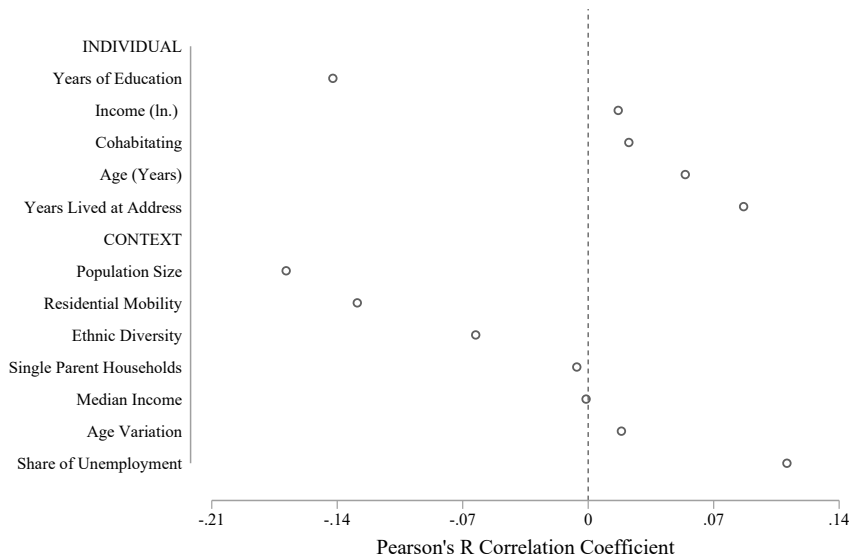
B.4.2 Geographical distribution of changes

In Figure A10, we show how the changes in exposure to poor people are distributed geographically to explore if positive or negative changes are concentrated in specific regions of Denmark. Specifically, we computed the average change in the share of poor individuals

in the 100-meter context between each wave for the respondents living in each of the Danish municipalities (mean size: 438 km^2). Darker blue shades indicate a higher decrease in the local share of poor individuals, whereas darker red shades indicate a higher increase in the share of poor individuals. The largest average increase in the local share of poor individuals is found among respondents living in the Municipality of Elsinore on the North-East coast of the island of Zealand (+11.7 percentage points). The largest average decrease in the local share of poor is -7.4 percentage points (found in the municipality of North Funen). Generally, and reassuringly, neither positive nor negative changes seem to be concentrated in certain geographic regions.
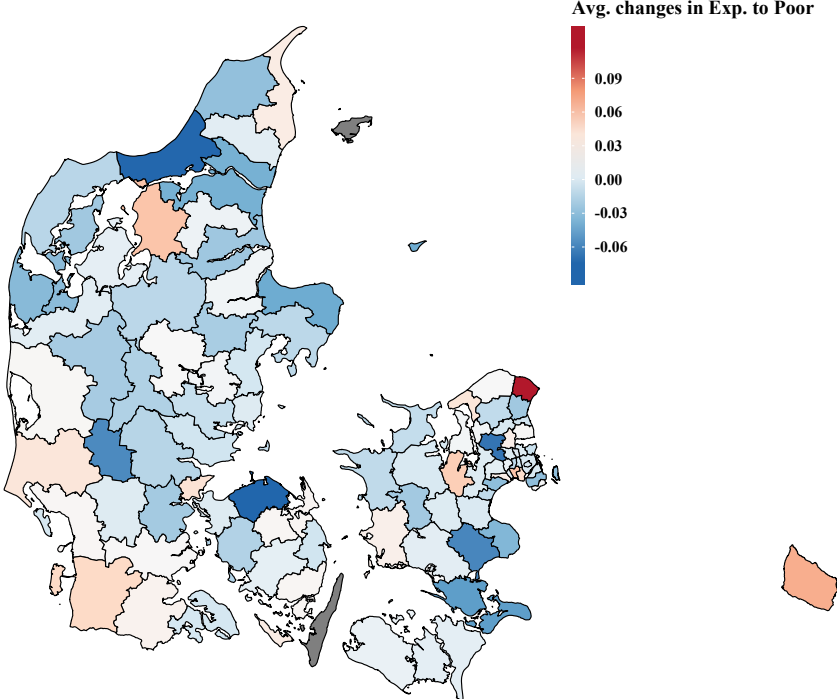
Figure A10: Mapping Average Changes in Exposure to Poor Individuals in Danish Municipalities

Note: Grey indicates that there is no person-wave in our panel in that specific municipality.

B.4.3   Changes in neighbors' income

As a final attempt to understand the sources of variation in exposure to poor individuals, we look at the most direct explanation; changes in neighbors' income. From an individual's perspective, temporal changes in exposure to poor neighbors can be caused by changes in the composition of their neighborhood and changes in income of their existing neighbors. The former category can furthermore be divided into changes caused

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by new neighbors moving into the neighborhood, former neighbors moving out (incl. deceased neighbors), and relocation of the individual themselves. All sources of variation may be relevant in relation to attitudes towards redistribution, but, as noted in Section A.1, we disregard variation induced by relocation immediately prior to being surveyed (by excluding respondents who relocated within six months prior to the interview).

Our data allow us to shed some light on the sources of variation. Table A6 shows the average share of neighbors in wave 2 and 3 who also was a neighbor in the previous wave (wave 1 or 2) across person-wave observations (with the number of person-wave observations in parentheses). The average (rich) respondents were more exposed to persistent neighbors than to neighbors who were only present in one wave (around 60 % compared to 40 %), as shown in the first row. This is, of course, more pronounced if the sample is restricted to observations who did not move from one wave to the next because respondents who move typically change almost all of their neighbors upon relocation. 70 % of the neighbors at the time of the interview of average (rich) respondents who did not move between waves were also neighbors at the time of the previous interview. In sum, a substantial part of the neighbors that respondents were exposed to were long-term neighbors. Note also that a part of the "new" neighbors likely will have been neighbors for a while if they, e.g., moved into the neighborhood shortly after wave 1 or moved out shortly before wave 2. This means that the two categories will be partly overlapping in many instances.

Table A6: Average share of neighbors in the 100-meter context who did not move between waves over person-wave observations across samples

Observations	All	Rich
All	0.59 (995)	0.62 (335)
Excluding movers	0.70 (839)	0.70 (295)

Note: Number of person-wave observations in parentheses.

Despite substantial residential stability, it might be that the temporal within-individual variation in exposure to poor neighbors is mainly driven by neighbors moving in or out of the neighborhood (and, of course, by moving oneself). Table A7 allows for exploring this possibility. Here we correlate the measure of wave-on-wave changes in exposure to poor individuals used in the analysis (based on *all* neighbors) with measures of wave-on-wave changes in exposure to poor individuals based on *persistent* (i.e. non-moving) neighbors and *interim* neighbors (i.e. neighbors who live in the neighborhood only in one wave),

Table A7: Correlations between measures of wave-on-wave changes in exposure to poor individuals based different sets of neighbors across samples, 100-meter context

All observations (995)			Rich observations (335)		
Neighbors	All	Persistent	*Neighbors*	All	Persistent
Persistent	0.37	1	Persistent	0.40	1
Interim	0.68	0.15	Interim	0.65	0.15

All non-moving respondents (839)			Rich non-moving respondents (295)		
Neighbors	All	Persistent	*Neighbors*	All	Persistent
Persistent	0.53	1	Persistent	0.47	1
Interim	0.62	0.14	Interim	0.64	0.13

Notes: Cell entries are Pearson's r correlations. Number of person-wave observations in parentheses. *Persistent*: Neighbors who were neighbors in at least two subsequent waves. *Interim*: Neighbors who were neighbors in one wave only.

respectively. The table shows that our measure of changes in exposure to poor individuals based on all neighbors ("All") is strongly and positively correlated with both of the partial measures (first column in all four sub-tables), but mostly so with the measure based on interim neighbors only. The difference in correlations drops when excluding moving respondents (lower sub-tables); probably because the average change in exposure to poor individuals is the highest for respondents who change neighborhood. The low correlation between the two partial measures (lower-right quadrant in all sub-tables) shows that very few respondents experience changes in exposure to poor individuals due to co-occurring neighbor-replacement and within-neighbor changes. This strongly suggests that the two types of changes independently affect the overall change in exposure to poor individuals.

Overall, the analyses suggest that both within-neighbor changes in income and temporal replacement of neighbors contribute to the within-respondents variation in exposure to poor individuals. Replacement is slightly higher correlated with changes in exposure, but the average (non-moving) respondent is exposed to more persistent neighbors. On balance, we expect that individuals take cues about poverty and poor people from both types of changes.

C Results

C.1 Full results

Table A8: Full Results, Panel Models, 100 Meter Context

	Model 0a		Model 0b		Model 0c		Model 1		Model 2		Model 3		Model 4	
Exposure to Poor Ind.	0.09	(0.07)	0.34*	(0.14)	0.01	(0.11)	0.32+	(0.19)	0.18	(0.24)	0.32+	(0.18)	0.45*	(0.22)
Poor × Exposure to Poor Ind.			ref. [0.34]*				ref. [0.32]+		ref. [0.18]		ref. [0.32]+		ref. [0.45]*	
Lower-Middle × Exposure to Poor Ind.			-0.37[-0.02]	(0.28)			-0.23[0.09]	(0.38)	-0.08[0.10]	(0.45)	-0.18[0.14]	(0.39)	-0.30[0.14]	(0.41)
Middle × Exposure to Poor Ind.			-0.29[0.05]	(0.20)			-0.30[0.02]	(0.24)	-0.13[0.05]	(0.29)	-0.34[-0.02]	(0.24)	-0.42[0.03]	(0.26)
Upper-Middle × Exposure to Poor Ind.			-0.04[0.31]	(0.26)			-0.13[0.19]	(0.29)	-0.03[0.14]	(0.36)	-0.07[0.25]	(0.30)	-0.29[0.16]	(0.32)
Rich × Exposure to Poor Ind.			-0.55**[-0.20]+	(0.18)			-0.72***[-0.40]**	(0.21)	-0.51+[-0.34]*	(0.27)	-0.73**[-0.42]*	(0.22)	-0.87***[-0.42]**	(0.25)
Years lived at address					-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Years of Education					-0.01	(0.01)	-0.01	(0.01)	-0.01	(0.01)	-0.01	(0.01)	-0.01	(0.01)
Income (ln.)					-0.03	(0.03)	-0.03	(0.03)	-0.04	(0.03)	-0.03	(0.03)	-0.03	(0.03)
Danish citizenship					0.21***	(0.06)	0.21***	(0.06)	0.21***	(0.06)	0.21***	(0.06)	0.22***	(0.06)
Unemployment Status														
Working					ref.		ref.		ref.		ref.		ref.	
Unemployed					-0.06	(0.04)	-0.05	(0.04)	-0.05	(0.04)	-0.05	(0.04)	-0.05	(0.04)
Retired					-0.03	(0.03)	-0.02	(0.03)	-0.02	(0.03)	-0.02	(0.03)	-0.02	(0.03)
Early retirement					-0.02	(0.08)	-0.02	(0.08)	-0.02	(0.08)	-0.02	(0.08)	-0.00	(0.08)
Student					-0.03	(0.05)	-0.04	(0.05)	-0.03	(0.05)	-0.03	(0.05)	-0.03	(0.05)
Marital Status														
Widowed					ref.		ref.		ref.		ref.		ref.	
Divorced					0.05	(0.11)	0.05	(0.10)	0.04	(0.10)	0.05	(0.11)	0.05	(0.11)
Married					0.09	(0.10)	0.08	(0.10)	0.07	(0.09)	0.08	(0.09)	0.09	(0.09)
Unmarried					0.05	(0.11)	0.04	(0.11)	0.03	(0.10)	0.04	(0.11)	0.04	(0.11)
Cohabitation														
Living alone					ref.		ref.		ref.		ref.		ref.	
Living with others					0.00	(0.04)	0.00	(0.04)	0.00	(0.04)	0.00	(0.04)	-0.00	(0.04)
Age variation					-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.01)
Share of unemployed					0.19	(0.22)	0.22	(0.22)	0.22	(0.22)	0.24	(0.22)	0.23	(0.22)
Median income					-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Ethnic diversity					-0.03	(0.12)	-0.05	(0.12)	-0.06	(0.12)	-0.05	(0.12)	-0.05	(0.12)
Share single-parent households					0.02	(0.14)	0.06	(0.14)	0.04	(0.15)	0.04	(0.15)	0.06	(0.14)
Residents' mobility					-0.04	(0.06)	-0.04	(0.06)	-0.05	(0.06)	-0.05	(0.06)	-0.05	(0.06)
Population size					0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)
Exposure to Rich Ind.									-0.51	(0.41)				
Poor × Exposure to Rich Ind.									ref.					
Lower-Middle × Exposure to Rich Ind.									0.37	(0.52)				
Middle × Exposure to Rich Ind.									0.51	(0.44)				
Upper-Middle × Exposure to Rich Ind.									0.30	(0.44)				
Rich × Exposure to Rich Ind.									0.53	(0.42)				
Gini (adj.)											0.07	(0.49)		
Poor × Gini (adj.)											ref.			
Lower-Middle × Gini (adj.)											-0.63	(0.66)		
Middle × Gini (adj.)											0.24	(0.65)		
Upper-Middle × Gini (adj.)											-0.42	(0.63)		
Rich × Gini (adj.)											-0.02	(0.57)		
Income diversity													0.26	(0.28)
Lower-Middle × Income diversity													0.15	(0.55)
Middle × Income diversity													-0.74*	(0.37)
Upper-Middle × Income diversity													-0.11	(0.36)
Rich × Income diversity													-0.16	(0.34)
Constant	0.52***	(0.01)	0.52***	(0.01)	0.94*	(0.44)	0.91*	(0.44)	0.96*	(0.44)	0.93*	(0.45)	0.77+	(0.44)
Individual FE	✓		✓		✓		✓		✓		✓		✓	
Wave FE	✓		✓		✓		✓		✓		✓		✓	
Municipality FE	–		–		✓		✓		✓		✓		✓	
Individual Controls	–		–		✓		✓		✓		✓		✓	
Contextual Controls	–		–		✓		✓		✓		✓		✓	
Waves	Three		Three		Three		Three		Three		Three		Three	
R-sqr(within)	0.035		0.043		0.118		0.127		0.130		0.130		0.131	
Person-wave Observations	1813		1813		1813		1813		1813		1813		1813	
Individuals	818		818		818		818		818		818		818	

Note: Standard errors clustered on individuals in parentheses. +p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Two-sided t-tests. Square brackets indicate marginal effects.

Table A9: Full Results, Cross-Sectional Models, 100 Meter Context

	Model 0		Model 1		Model 2		Model 3	
Exposure to poor individuals	0.07	(0.05)	0.07	(0.06)	0.05	(0.07)	0.10$^+$	(0.06)
Poor	ref.		ref.		ref.		ref.	
Lower-Middle	-0.02	(0.02)	0.00	(0.02)	-0.04	(0.04)	-0.07	(0.04)
Middle	-0.04*	(0.02)	0.01	(0.02)	-0.01	(0.03)	0.01	(0.04)
Upper-Middle	-0.05*	(0.02)	0.01	(0.02)	0.02	(0.03)	0.00	(0.04)
Rich	-0.10***	(0.02)	-0.02	(0.03)	-0.04	(0.04)	-0.03	(0.04)
Poor × Exposure to poor individuals	ref. [0.07]		ref. [0.07]		ref. [0.05]		ref. [0.07]$^+$	
Lower-Middle × Exposure to poor individuals	0.13$^+$ [0.20]***	(0.07)	0.07 [0.15]*	(0.07)	0.16$^+$ [0.21]**	(0.08)	0.04 [0.13]*	(0.07)
Middle × Exposure to poor individuals	0.12$^+$ [0.19]***	(0.07)	0.06 [0.13]*	(0.07)	0.09 [0.14]*	(0.08)	0.08 [0.18]**	(0.07)
Upper-Middle × Exposure to poor individuals	0.04 [0.12]*	(0.07)	-0.01 [0.06]	(0.07)	-0.03 [0.03]	(0.08)	0.01 [0.11]	(0.07)
Rich × Exposure to poor individuals	0.08 [0.16]**	(0.07)	-0.01 [0.06]	(0.08)	0.02 [0.07]	(0.09)	0.02 [0.12]	(0.08)
Male			-0.06***	(0.01)	-0.06***	(0.01)	-0.06***	(0.01)
Age			0.00***	(0.00)	0.00***	(0.00)	0.00***	(0.00)
Years lived at address			0.00	(0.00)	0.00	(0.00)	0.00	(0.00)
Income (ln.)			-0.03*	(0.01)	-0.04*	(0.02)	-0.03*	(0.02)
Years of Education			-0.00*	(0.00)	-0.00*	(0.00)	-0.00*	(0.00)
Danish citizenship			0.03	(0.03)	0.03	(0.03)	0.03	(0.03)
Danish origin			ref.		ref.		ref.	
Western imm.			0.03	(0.03)	0.03	(0.03)	0.03	(0.03)
Non-West imm.			0.05*	(0.02)	0.05*	(0.02)	0.05*	(0.02)
West descendant			0.13	(0.08)	0.13	(0.08)	0.13	(0.08)
Non-West decen.			0.03	(0.04)	0.03	(0.04)	0.03	(0.04)
Unemployment Status								
Working			ref.		ref.		ref.	
Unemployed			0.03*	(0.01)	0.03*	(0.01)	0.03*	(0.01)
Retired			-0.01	(0.01)	-0.01	(0.01)	-0.01	(0.01)
Early retirement			0.07***	(0.02)	0.07***	(0.02)	0.07***	(0.02)
Student			0.01	(0.01)	0.02	(0.01)	0.02	(0.01)
Marital Status								
Widowed			ref.		ref.		ref.	
Divorced			0.03*	(0.02)	0.03$^+$	(0.02)	0.03$^+$	(0.02)
Married			0.04*	(0.02)	0.03*	(0.02)	0.04*	(0.02)
Unmarried			0.05**	(0.02)	0.05**	(0.02)	0.05**	(0.02)
Cohabitation								
Living alone			ref.		ref.		ref.	
Living with others			0.01	(0.01)	0.01	(0.01)	0.01	(0.01)
Age variation			-0.00*	(0.00)	-0.00*	(0.00)	-0.00*	(0.00)
Share unemployed			0.03	(0.08)	0.03	(0.08)	0.05	(0.08)
Median income			-0.00$^+$	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Ethnic diversity			-0.05	(0.03)	-0.05$^+$	(0.03)	-0.06$^+$	(0.03)
Share single-parent households			0.31***	(0.07)	0.30***	(0.07)	0.30***	(0.07)
Residents' mobility			-0.06**	(0.02)	-0.06**	(0.02)	-0.06*	(0.02)
Population size			-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Exposure to rich individuals					-0.15	(0.10)		
Poor × Exposure to rich individuals					ref.			
Lower-Middle × Exposure to rich individuals					0.22$^+$	(0.12)		
Middle × Exposure to rich individuals					0.10	(0.11)		
Upper-Middle × Exposure to rich individuals					0.02	(0.10)		
Rich × Exposure to rich individuals					0.10	(0.10)		
Gini (adj.)							-0.19	(0.15)
Poor × Gini (adj.)							ref.	
Lower-Middle × Gini (adj.)							0.39$^+$	(0.21)
Middle × Gini (adj.)							-0.06	(0.20)
Upper-Middle × Gini (adj.)							0.01	(0.18)
Rich × Gini (adj.)							0.01	(0.18)
Constant	0.53***	(0.02)	0.91***	(0.18)	0.95***	(0.19)	0.91***	(0.19)
Number of ESS-rounds	7		7		7		7	
Survey Round FE	−		✓		✓		✓	
Municipality FE	−		✓		✓		✓	
Individual controls	−		✓		✓		✓	
Contextual controls	−		✓		✓		✓	
Adjusted R^2	0.025		0.058		0.058		0.059	
N	8268		8268		8268		8268	

Note: Standard errors clustered on individuals in parentheses. $+p<0.1$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$. Two-sided t-tests. Square brackets indicate marginal effects

Table A10: Conditional and Unconditional Effects of GINI and Income Diversity, Panel Models, 100 Meter Context

	Model 1		Model 2		Model 3		Model 4	
Gini (adj.)	-0.17	(0.17)	0.20	(0.52)				
Poor × Gini (adj.)			ref. [0.20]					
Lower-Middle × Gini (adj.)			-0.73 [-0.53]	(0.68)				
Middle × Gini (adj.)			0.10 [0.30]	(0.66)				
Upper-Middle × Gini (adj.)			-0.45 [-0.25]	(0.64)				
Rich × Gini (adj.)			-0.43 [-0.23]	(0.58)				
Income diversity					-0.06	(0.13)	-0.20	(0.26)
Poor × Income diversity							ref. [0.20]	
Lower-Middle × Income diversity							0.57 [0.37]	(0.53)
Middle × Income diversity							-0.29 [-0.49]+	(0.35)
Upper-Middle × Income diversity							0.41 [0.22]	(0.34)
Rich × Income diversity							0.15 [-0.05]	(0.33)
Years lived at address	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Years of Education	-0.01	(0.01)	-0.01	(0.01)	-0.01	(0.01)	-0.01	(0.01)
Income (ln.)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)
Danish citizenship	0.21***	(0.06)	0.21***	(0.06)	0.21***	(0.06)	0.22***	(0.06)
Unemployment Status								
Working	ref.		ref.		ref.		ref.	
Unemployed	-0.06	(0.04)	-0.06	(0.04)	-0.06	(0.04)	-0.06	(0.04)
Retired	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)	-0.03	(0.03)
Early retirement	-0.02	(0.08)	-0.02	(0.08)	-0.02	(0.08)	-0.00	(0.08)
Student	-0.03	(0.05)	-0.03	(0.05)	-0.03	(0.05)	-0.04	(0.05)
Marital Status								
Widowed	ref.		ref.		ref.		ref.	
Divorced	0.06	(0.11)	0.06	(0.11)	0.06	(0.11)	0.06	(0.11)
Married	0.09	(0.10)	0.10	(0.10)	0.09	(0.10)	0.09	(0.10)
Unmarried	0.05	(0.11)	0.05	(0.11)	0.05	(0.11)	0.05	(0.11)
Cohabitation								
Living alone	ref.		ref.		ref.		ref.	
Living with others	0.00	(0.04)	0.00	(0.04)	0.00	(0.04)	-0.00	(0.04)
Age variation	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.01)
Share of Unemployed	0.22	(0.22)	0.21	(0.22)	0.20	(0.22)	0.22	(0.22)
Median income	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Ethnic diversity	-0.03	(0.12)	-0.03	(0.12)	-0.03	(0.12)	-0.03	(0.12)
Share single-parent Households	0.01	(0.15)	0.00	(0.15)	0.02	(0.14)	0.03	(0.14)
Residents' Mobility	-0.04	(0.06)	-0.04	(0.06)	-0.04	(0.06)	-0.05	(0.06)
Population Size	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)
Constant	0.97*	(0.43)	0.93*	(0.45)	0.98*	(0.43)	0.86*	(0.43)
Individual FE	✓		✓		✓		✓	
Wave FE	✓		✓		✓		✓	
Municipality FE	✓		✓		✓		✓	
Individual Controls	✓		✓		✓		✓	
Contextual Controls	✓		✓		✓		✓	
Waves	Three		Three		Three		Three	
R-sqr(within)	0.119		0.121		0.119		0.122	
Person-wave Observations	1813		1813		1813		1813	
Individuals	818		818		818		818	

Note: Standard errors clustered on individuals in parentheses. +p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Two-sided t-tests. Square brackets indicate marginal effects
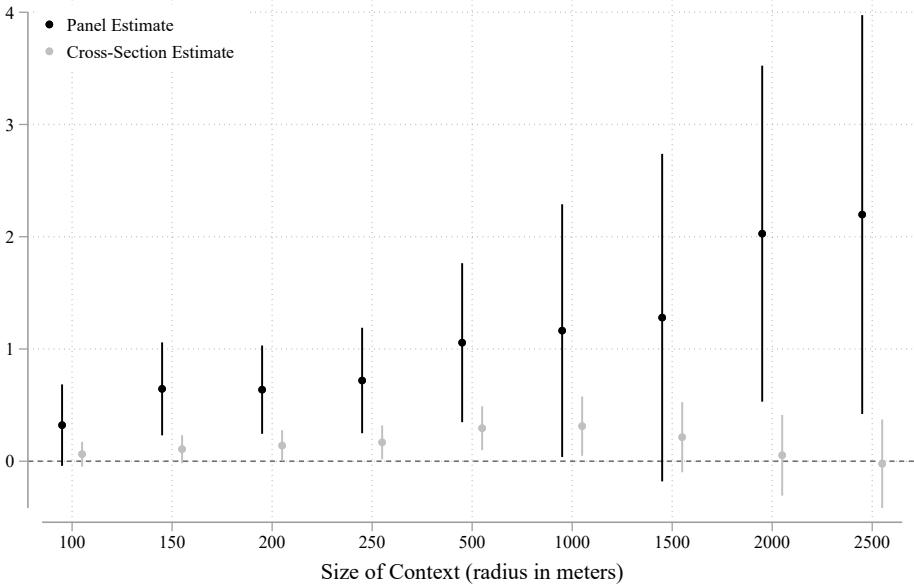
C.2 Marginal Effects of Exposure to Poor Individuals for the Poor

Figure A11: Marginal Effects of Exposure to Poor Individuals for the Poor across Context Sizes

Note: Panel estimates are based on similar specifications as that used in Model 2 in Table A8 and cross-section estimates are based on similar specifications as that used in Model 1, Table A9. Error bars represent 95% C.I.

D Robustness Checks

In this section, we probe the main findings in a series of robustness checks. We report the results in tables with context sizes varying from 100 to 2500 meters. As our main quantity of interest is the marginal effect of exposure to poor individuals for the rich, we also show the marginal effects of the main independent variable for this income group in marginal effect plots.

D.1 Matching Two-Way Fixed Effects Estimator

In this section, we apply a matching two-way fixed effects estimator where those who, on average, experience positive changes in exposure to poor individuals are matched with those who, on average, experience negative changes in exposure to poor individuals. Doing so, we allow changes in redistribution attitudes across positive and negative exposed individuals to vary with (observed) pre-treatment characteristics (Abadie 2005; Sant'Anna and Zhao 2020, see also Imai, Kim, and Wang 2021). Applying matching raises the probability that those who receive different changes in exposure to poor individuals are as similar in their pre-treatment characteristics, which might lead them to change their redistribution attitudes differently over time. We use inverse-probability weighting based on propensity scores because this is the prevalent approach in the cited difference-in-difference literature (Sant'Anna and Zhao 2020). We calculate propensity scores based on pre-treatment individual-level characteristics (gender, age, income (ln.), years of education, income group, and, most importantly, previous support for redistribution) as well as pre-treatment contextual characteristics (share of unemployed, median income, population size, and ethnic diversity.)

Next, we evaluate the balance in pre-treatment characteristics between respondents with positive or negative changes in exposure to poor people before and after matching. Table A11, for instance, shows that people experiencing positive changes tend to live in less populated areas than those who experience negative changes. However, after matching, we see in Table A12 that the differences in pre-treatment characteristics between the two groups are basically non-existent.

In Table A13 and Figure A12, we present the results based on the matching two-way fixed effects estimator. This estimation strategy reproduces the main findings of our baseline specification, that is a negative and significant relationship between exposure to

poor individuals and attitudes toward redistribution among the well-off.

Table A11: Balance Table before Inverse-Probability Weigting

	Mean (Negative Exposure)	Mean (Positive Exposure)
Attitudes toward Redistribution	0.53	0.52
Male	0.49	0.49
Age	49.17	50.75
Income (ln.)	12.44	12.44
Years of Education	14.40	14.08
Share of Unemployed	0.05	0.05
Median income	228588	233898
Population Size	166	134
Ethnic diversity	0.13	0.12
Income Quintile		
Rich	0.30	0.33
Upper-Middle	0.27	0.22
Middle	0.19	0.22
Lower-Middle	0.13	0.13

Note: Person-wave observations = 383 (Negative Exposure) and 408 (Positive Exposure). Negative (positive) exposure indicates that the average changes in exposure to poor individuals across waves are negative (positive).

Table A12: Balance Table after Inverse-Probability Weigting

|	Mean (Negative Exposure)	Mean (Positive Exposure)
Attitudes toward Redistribution	0.52	0.52
Male	0.49	0.49
Age	50.07	50.00
Income (ln.)	12.44	12.44
Years of Education	14.21	14.21
Share of Unemployed	0.05	0.05
Median income	231961	231501
Population Size	149	151
Ethnic diversity	0.13	0.13
Income Quintile		
Rich	0.31	0.31
Upper-Middle	0.24	0.24
Middle	0.21	0.21
Lower-Middle	0.14	0.14

Note: Person-wave observations = 383 (Negative Exposure) and 408 (Positive Exposure). Negative (positive) exposure indicates that the average changes in exposure to poor individuals across waves are negative (positive).

Table A13: Reestimation using Matching TWFE, 100 meter context

	TWFE		Matched TWFE	
Exposure to poor individuals	0.32$^+$	(0.19)	0.31	(0.19)
Poor × Exposure to poor individuals	ref. [0.32]$^+$		ref. [0.31]	
Lower-Middle × Exposure to poor individuals	-0.23 [0.09]	(0.38)	-0.21 [0.10]	(0.39)
Middle × Exposure to poor individuals	-0.30 [0.02]	(0.24)	-0.35 [-0.04]	(0.25)
Upper-Middle × Exposure to poor individuals	-0.13 [0.19]	(0.29)	-0.19 [0.12]	(0.30)
Rich × Exposure to poor individuals	-0.72*** [0.40]***	(0.21)	-0.71*** [0.40]***	(0.21)
Years lived at address	-0.00	(0.00)	-0.00	(0.00)
Years of Education	-0.01	(0.01)	-0.01	(0.01)
Income (ln.)	-0.03	(0.03)	-0.03	(0.03)
Danish citizenship	0.21***	(0.06)	0.21***	(0.06)
Unemployment Status				
Working	ref.		ref.	
Unemployed	-0.05	(0.04)	-0.05	(0.04)
Retired	-0.02	(0.03)	-0.03	(0.03)
Early retirement	-0.02	(0.08)	0.01	(0.07)
Student	-0.04	(0.05)	-0.04	(0.05)
Marital Status				
Widowed	ref.		ref.	
Divorced	0.05	(0.10)	0.04	(0.11)
Married	0.08	(0.09)	0.07	(0.10)
Unmarried	0.04	(0.11)	0.02	(0.11)
Cohabitation				
Living alone	ref.		ref.	
Living with others	0.00	(0.04)	0.02	(0.04)
Age variation	-0.00	(0.00)	-0.00	(0.00)
Share of unemployed	0.22	(0.22)	0.23	(0.22)
Median income	-0.00	(0.00)	-0.00	(0.00)
Ethnic diversity	-0.05	(0.12)	-0.06	(0.12)
Share single-parent HH	0.06	(0.14)	0.07	(0.15)
Residents' mobility	-0.04	(0.06)	-0.05	(0.06)
Population size	0.00	(0.00)	0.00	(0.00)
Constant	0.91*	(0.44)	0.90*	(0.45)
Individual FE	✓		✓	
Wave FE	✓		✓	
Municipality FE	✓		✓	
Individual Controls	✓		✓	
Contextual Controls	✓		✓	
Waves	Three		Three	
R-sqr(within)	0.127		0.125	
Person-wave Observations	1813		1813	
Individuals	818		818	

Note: Standard errors clustered on individuals in parentheses. +p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Two-sided t-tests.

Figure A12: Marginal Effects across Context Size of Exposure to Poor Individuals for the Rich using Matching TWFE
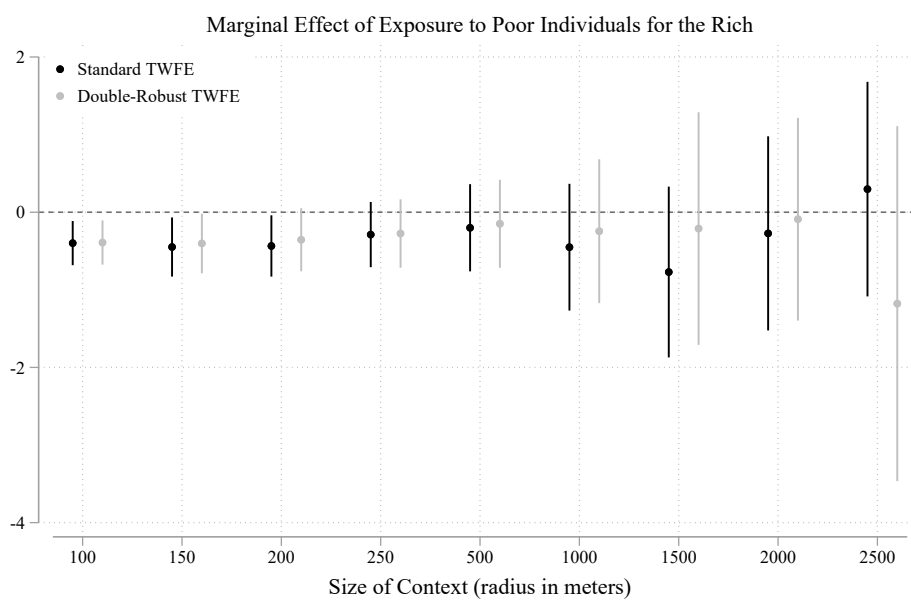
Marginal Effect of Exposure to Poor Individuals for the Rich

Note: The estimates in the figure are based on models using the same specifications as used in Table A13. Error bars represent 95% C.I.

In addition, recent research on DiD-designs indicates that the standard two-way fixed effects estimator in panel models with more than one time period provides a weighted average of treatment effects in which some weights may be negative (see e.g. Chaisemartin and D'Haultfœuille 2022; Imai and Kim 2021). These negative weights could potentially bias the ATT by yielding estimates that are either too small or even wrong-signed, especially if the ATT varies over time. To account for this potential negative weighting bias, we estimated the effect in each time period separately. As shown in Figure A13, we find a negative effect in both periods, with effect estimates being close to the main estimate. However, the effect is quite imprecisely estimated in the first time period.
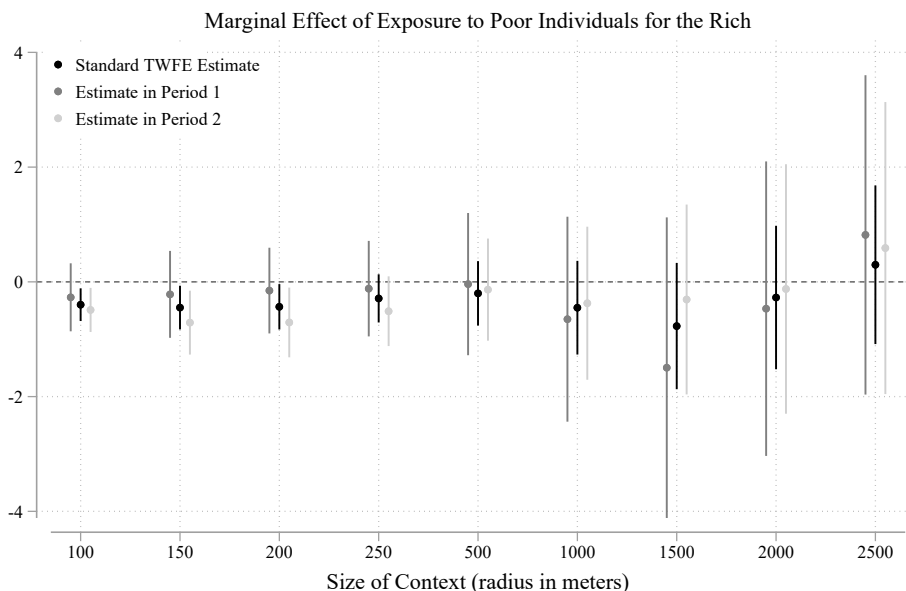
Figure A13: Marginal Effects across Context Size of Exposure to Poor Individuals for the Rich in each time period

Note: The estimates in the figure are based on models using the same specifications as used in Table A8. Error bars represent 95% C.I.

D.2   Alternative Measures of Exposure to Poor Individuals

We reestimated the relationship between exposure to poor individuals and attitudes towards redistribution using alternative measures of exposure to poor individuals (see Section B.1) to examine whether the main results depend on our choice of measurement. The results for the gradual measure of exposure are reported in Table A14 and Figure A14. As shown in Figure A14, the marginal effect of exposure to poor individuals among the rich using the gradual measure is consistently negative and also significant in the smallest contexts. Looking at Table A15 and Figure A15, which report the estimates when being

poor is defined as having an income less than half of the national median, the results are less clear-cut. This is especially the case in contexts ranging from 200 to 500 meters, where the estimates indicate a null-effect. However, more importantly, we still find a negative and significant relationship between exposure to poor individuals and attitudes toward redistribution for the rich in the smallest context and thus where the impact of exposure to poor individuals is likely to be estimated most precisely. Taking together, these robustness checks indicate that our results are quite robust to our operationalization of exposure to poor individuals.

Table A14: Reestimation using the Gradual Measure of Exposure to Poor Individuals

|	100 meter	150 meter	250 meter	500 meter	2500 meter
Exposure to poor individuals (gradual)	0.36[+]	0.72**	0.89***	1.36***	2.66**
	(0.19)	(0.23)	(0.26)	(0.41)	(0.93)
Poor × Exposure to poor individuals	ref. [0.36][+]	ref. [0.72]**	ref. [0.89]***	ref. [1.36]***	ref. [2.66]**
Lower-Middle × Exposure to poor individuals (gradual)	-0.59[-0.24]	-0.57[0.15]	-0.13[0.76]	-0.73[0.63]	-1.58[1.08]
	(0.36)	(0.44)	(0.55)	(0.63)	(1.06)
Middle × Exposure to poor individuals (gradual)	-0.27[0.09]	-0.92**[-0.20]	-1.21***[-0.32]	-1.56***[-0.20]	-2.50**[0.17]
	(0.26)	(0.32)	(0.35)	(0.45)	(0.83)
Upper-Middle × Exposure to poor individuals (gradual)	-0.23[0.13]	-0.93**[-0.21]	-1.21***[-0.32]	-1.95***[-0.59]	-2.41*[0.25]
	(0.30)	(0.34)	(0.37)	(0.53)	(0.98)
Rich × Exposure to poor individuals (gradual)	-0.77***[-0.41]**	-1.16***[-0.45]*	-1.11***[-0.23]	-1.57***[-0.21]	-2.30**[0.36]
	(0.22)	(0.26)	(0.26)	(0.38)	(0.89)
Years lived at address	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of Education	-0.01	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income (ln.)	-0.03	-0.03	-0.03	-0.03	-0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Danish citizenship	0.22***	0.23***	0.22***	0.21***	0.25***
	(0.06)	(0.05)	(0.05)	(0.04)	(0.05)
Unemployment Status					
Working	ref.	ref.	ref.	ref.	ref.
Unemployed	-0.05	-0.05	-0.06	-0.06[+]	-0.06[+]
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Retired	-0.02	-0.02	-0.03	-0.02	-0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Early retirement	-0.02	-0.02	-0.02	-0.02	-0.02
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Student	-0.04	-0.05	-0.05	-0.05	-0.02
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Marital Status					
Widowed	ref.	ref.	ref.	ref.	ref.
Divorced	0.05	0.07	0.08	0.08	0.07
	(0.10)	(0.11)	(0.11)	(0.11)	(0.11)
Married	0.08	0.10	0.11	0.11	0.10
	(0.09)	(0.09)	(0.10)	(0.10)	(0.09)
Unmarried	0.04	0.06	0.06	0.07	0.05
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Cohabitation					
Living alone	ref.	ref.	ref.	ref.	ref.
Living with others	-0.00	0.00	0.00	-0.01	-0.00
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Age variation	-0.00	0.00	-0.00	0.01	-0.02
	(0.00)	(0.01)	(0.01)	(0.01)	(0.02)
Share of unemployed	0.24	0.27	-0.13	0.04	0.10
	(0.22)	(0.28)	(0.37)	(0.58)	(1.12)
Median income	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Ethnic diversity	-0.04	0.02	-0.02	-0.02	-0.65
	(0.12)	(0.14)	(0.17)	(0.22)	(0.42)
Residents' mobility	-0.04	-0.07	-0.05	-0.03	-0.10
	(0.06)	(0.07)	(0.10)	(0.15)	(0.33)
Population size	0.00	0.00	0.00	0.00[+]	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Share single-parent HH	0.07	0.34	0.52	0.56	1.79
	(0.14)	(0.22)	(0.33)	(0.50)	(1.56)
Constant	0.88*	0.80[+]	0.92*	0.60	1.30[+]
	(0.44)	(0.45)	(0.46)	(0.50)	(0.68)
Individual FE	✓	✓	✓	✓	✓
Wave FE	✓	✓	✓	✓	✓
Municipality FE	✓	✓	✓	✓	✓
R-sqr(within)	0.127	0.131	0.131	0.130	0.127
Person-wave Observations	1813	1813	1813	1813	1813
Individuals	818	818	818	818	818

Note: Standard errors clustered on individuals in parentheses. +p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Two-sided t-tests. Square brackets indicate marginal effects.

Table A15: Reestimation using the Half of Median Measure of Exposure to Poor Individuals

	100 meter	150 meter	250 meter	500 meter	2500 meter
Exposure to poor individuals (half of median)	0.30	0.79**	1.46***	2.47**	4.00**
	(0.24)	(0.31)	(0.42)	(0.81)	(1.39)
Poor × Exposure to poor individuals	ref. [0.30]	ref. [0.79]**	ref. [1.46]***	ref. [2.47]**	ref. [4.00]**
Lower-Middle × Exposure to poor individuals (half of median)	-0.98$^+$[-0.67]	-0.58[0.21]	-0.66[0.81]	-1.85$^+$[0.62]	-2.41[1.59]
	(0.57)	(0.56)	(0.74)	(1.03)	(1.69)
Middle × Exposure to poor individuals (half of median)	-0.01[0.29]	-0.62[0.16]	-0.57[0.89]*	-1.57$^+$[0.90]$^+$	-2.57*[1.43]
	(0.37)	(0.45)	(0.53)	(0.85)	(1.28)
Upper-Middle × Exposure to poor individuals (half of median)	-0.68[-0.37]	-0.73[0.06]	-0.93[0.53]	-2.11*[0.36]	-1.67[2.33]*
	(0.46)	(0.55)	(0.58)	(0.90)	(1.42)
Rich × Exposure to poor individuals (half of median)	-0.81**[-0.51]*	-0.95**[-0.16]	-1.23**[0.23]	-2.29**[0.17]	-3.30*[0.70]
	(0.30)	(0.36)	(0.42)	(0.75)	(1.30)
Years lived at address	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of Education	-0.01	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income (ln.)	-0.04	-0.04	-0.04	-0.04	-0.05$^+$
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Danish citizenship	0.26***	0.23***	0.23***	0.22***	0.24***
	(0.07)	(0.06)	(0.06)	(0.05)	(0.05)
Unemployment Status					
Working	ref.	ref.	ref.	ref.	ref.
Unemployed	-0.06	-0.05	-0.04	-0.05	-0.05
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Retired	-0.02	-0.03	-0.02	-0.02	-0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Early retirement	-0.02	-0.02	-0.02	-0.02	-0.03
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Student	-0.04	-0.04	-0.04	-0.04	-0.02
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Marital Status					
Widowed	ref.	ref.	ref.	ref.	ref.
Divorced	0.05	0.06	0.06	0.06	0.08
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Married	0.09	0.09	0.09	0.09	0.10
	(0.09)	(0.10)	(0.10)	(0.10)	(0.10)
Unmarried	0.05	0.05	0.04	0.04	0.06
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Cohabitation					
Living alone	ref.	ref.	ref.	ref.	ref.
Living with others	-0.00	-0.00	-0.00	-0.01	-0.01
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Age variation	-0.00	0.00	0.00	0.01	-0.00
	(0.00)	(0.01)	(0.01)	(0.01)	(0.02)
Share of unemployed	0.27	0.17	-0.32	-0.22	-0.26
	(0.22)	(0.29)	(0.37)	(0.57)	(1.13)
Median income	-0.00	-0.00	0.00	0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Ethnic diversity	-0.01	0.02	-0.07	-0.05	-0.63
	(0.12)	(0.14)	(0.17)	(0.22)	(0.40)
Residents' mobility	-0.04	-0.08	-0.07	-0.05	-0.11
	(0.06)	(0.07)	(0.10)	(0.14)	(0.30)
Population size	0.00	0.00	0.00	0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Share single-parent HH	0.01	0.33	0.56$^+$	0.68	2.10
	(0.15)	(0.22)	(0.33)	(0.51)	(1.56)
Constant	0.86*	0.76$^+$	0.70	0.49	1.10
	(0.44)	(0.45)	(0.46)	(0.50)	(0.68)
Individual FE	✓	✓	✓	✓	✓
Wave FE	✓	✓	✓	✓	✓
Municipality FE	✓	✓	✓	✓	✓
R-sqr(within)	0.126	0.125	0.128	0.127	0.130
Person-wave Observations	1813	1813	1813	1813	1813
Individuals	818	818	818	818	818

Note: Standard errors clustered on individuals in parentheses. +p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Two-sided t-tests. Square brackets indicate marginal effects.

Figure A14: Marginal Effects across Context Size of Exposure to Poor Individuals for the Rich using the Gradual Exposure Measure
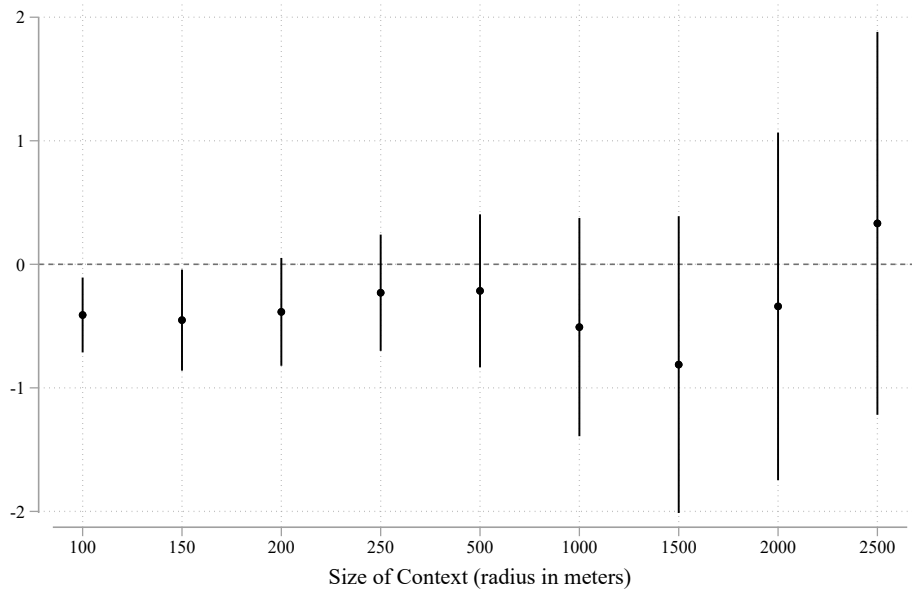
Note: The estimates in the figure are based on models using the same specifications as used in Table A14. Error bars represent 95% C.I.

Figure A15: Marginal Effects across Context Size of Exposure to Poor Individuals for the Rich using the Half of Median Measure
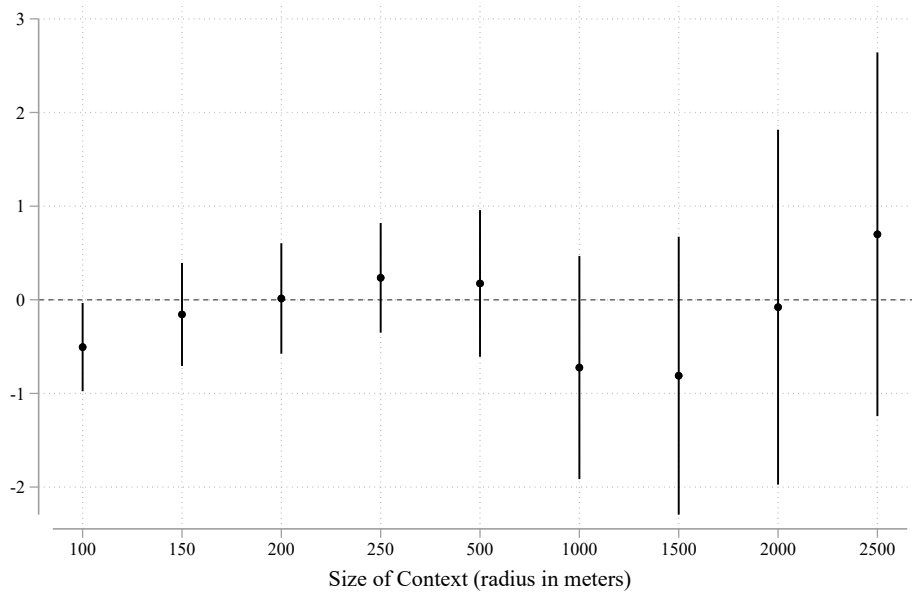
Note: The estimates in the figure are based on models using the same specifications as used in Table A15. Error bars represent 95% C.I.

D.3   Alternative Sample Restrictions

In this section, we explore the robustness of our results using various restriction criteria for our sample. First, we employed the full panel sample which adds 470 respondents from round 1 (2002/3) and round 2 (2004/5) of the European Social Survey. These respondents were initially excluded because the long interval between wave one and wave two raised the risk of attrition and could confound our primary relationship due to other unobserved time-varying confounders (see Section A). The results based on the full panel are shown in Table A16 and Figure A16. Reassuringly, the coefficients are very similar to the original coefficients. They are, however, less precisely estimated despite the increased sample size, which may plausibly be attributed to the longer average time span between waves for the included observations.

Table A16: Reestimation including Respondents from ESS Round 1 and 2

	100 meter	150 meter	250 meter	500 meter	2500 meter
Exposure to poor individuals	0.38**	0.49**	0.45*	0.78**	1.71***
	(0.14)	(0.18)	(0.19)	(0.25)	(0.50)
Poor × Exposure to poor individuals	ref. [0.38]**	ref. [0.49]**	ref. [0.45]*	ref. [0.78]**	ref. [1.71]***
Lower-Middle × Exposure to poor individuals	-0.40[-0.2]	-0.59[-0.10]	-0.62[-0.17]	-0.84+[-0.06]	-1.57*[0.14]
	(0.32)	(0.39)	(0.39)	(0.43)	(0.77)
Middle × Exposure to poor individuals	-0.28[0.11]	-0.49*[-0.01]	-0.47+[-0.02]	-0.29[0.49]+	-1.17**[0.55]
	(0.19)	(0.24)	(0.26)	(0.26)	(0.43)
Upper-Middle × Exposure to poor individuals	-0.09[0.29]+	-0.26[0.22]	-0.29[0.16]	-0.65*[0.13]	-1.39**[0.32]
	(0.21)	(0.23)	(0.24)	(0.29)	(0.44)
Rich × Exposure to poor individuals	-0.59***[-0.21]	-0.80***[-0.32]*	-0.66**[-0.21]	-0.74**[0.05]	-1.82***[-0.11]
	(0.17)	(0.20)	(0.20)	(0.24)	(0.47)
Years lived at address	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of Education	-0.01	-0.01	-0.01	-0.01+	-0.01+
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income (ln.)	-0.02	-0.02	-0.02	-0.02	-0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Danish citizenship	0.51**	0.53**	0.54**	0.53**	0.53**
	(0.19)	(0.17)	(0.17)	(0.18)	(0.18)
Unemployment Status					
Working	ref.	ref.	ref.	ref.	ref.
Unemployed	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Retired	-0.01	-0.01	-0.01	-0.01	-0.01
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Early retirement	0.03	0.03	0.03	0.02	0.03
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Student	-0.04	-0.05	-0.04	-0.04	-0.04
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Marital Status					
Widowed	ref.	ref.	ref.	ref.	ref.
Divorced	0.02	0.03	0.03	0.04	0.04
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Married	0.03	0.05	0.06	0.05	0.06
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Unmarried	0.05	0.07	0.07	0.08	0.08
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Cohabitation					
Living alone	ref.	ref.	ref.	ref.	ref.
Living with others	0.00	-0.00	-0.00	0.00	0.00
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Age variation	0.00	0.01+	0.01	0.01	-0.01
	(0.00)	(0.00)	(0.00)	(0.01)	(0.02)
Share of unemployed	0.25	0.19	0.02	-0.26	-0.88
	(0.17)	(0.24)	(0.30)	(0.40)	(0.62)
Median income	0.00	-0.00	0.00	0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Ethnic diversity	0.00	-0.04	-0.04	-0.03	0.15
	(0.09)	(0.10)	(0.12)	(0.15)	(0.26)
Residents' mobility	-0.03	-0.02	0.08	0.08	0.20
	(0.05)	(0.06)	(0.08)	(0.11)	(0.27)
Population size	0.00+	0.00+	0.00	0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Share single-parent HH	0.14	0.30	0.49+	0.41	1.99+
	(0.14)	(0.19)	(0.26)	(0.41)	(1.11)
Constant	0.08	0.00	0.00	-0.02	0.36
	(0.37)	(0.37)	(0.37)	(0.41)	(0.56)
Individual FE	✓	✓	✓	✓	✓
Wave FE	✓	✓	✓	✓	✓
Municipality FE	✓	✓	✓	✓	✓
R-sqr(within)	0.195	0.195	0.193	0.193	0.200
Person-wave Observations	2915	2915	2915	2915	2915
Individuals	1288	1288	1288	1288	1288

Note: Standard errors clustered on individuals in parentheses. +p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Two-sided t-tests. Square brackets indicate marginal effects.

Secondly, we excluded individuals who moved between waves. One objection to the interpretation of the negative marginal relationship as a negative causal effect for the rich could be that the negative coefficient is reflecting selection rather than a negative causal effect of exposure to poor individuals. Although it seems less plausible a priori, our results could be biased in a negative direction if, for instance, affluent individuals who

Figure A16: Marginal Effects across Context Size of Exposure to Poor Individuals for the Rich when including Respondents from ESS Round 1 and 2
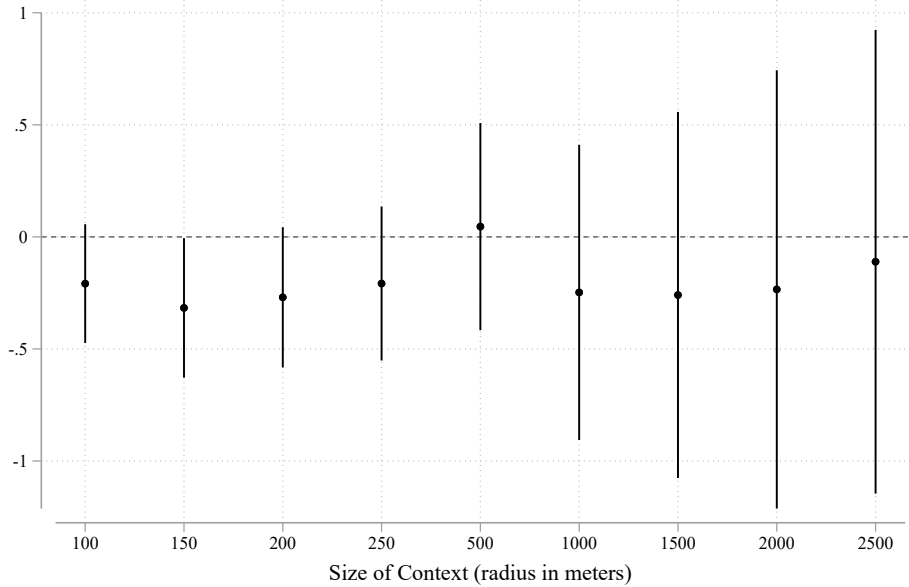
Note: The figure is based on models using the same specifications as used in Table A16. Error bars represent 95% C.I.

prefer less redistribution for some reason are more inclined to move into an area with a higher share of poor people. One approach to address this is to restrict the sample to those individuals who did not move between waves (although it might lead to collider bias (see Pearl and Mackenzie 2018)). This restriction excludes 15% of the original sample. As Table A17 and the light-grey estimates in Figure A17 indicate, the results remain robust to this restriction as exposure to poor individuals is still significant and negative related to attitudes toward redistribution for the rich. In other words, these results do not suggest that the estimated negative relationship is reflecting selection. The analyses reported in Section D.4 below similarly indicate that selection hardly can explain the estimated negative coefficient.

We also tried excluding neighbors between 18 and 30 years in our calculation of the contextual exposure measure to avoid conflating poverty with age composition.[3] We do this as exposure to poor young people may not be conceived as exposure to poverty in the same way as exposure to poor older people, because poor young people may be seen as less problematic or more "natural" given that many people in this group are still students with a limited income. The results obtained using this alternative measure are shown in Table A18 and the dark-grey estimates in Figure A17. The results remain largely

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[3]Note, however, that we also control for age variation in the primary analysis to alleviate this concern.

unchanged.

Table A17: Effect of Exposure to Poor Individuals excluding Movers

|	100 meter	150 meter	250 meter	500 meter	2500 meter
	(1)	(2)	(3)	(4)	(5)
Exposure to poor individuals	0.14	0.71	1.38$^+$	1.20	0.53
	(0.40)	(0.57)	(0.81)	(1.05)	(1.76)
Poor × Exposure to poor individuals	ref. [0.14]	ref. [0.71]	ref. [1.38]$^+$	ref. [1.20]	ref. [0.53]
Lower-Middle × Exposure to poor individuals	0.38[0.52]	0.10[0.81]	0.24[1.62]$^+$	-0.47[0.73]	0.46[0.99]
	(0.67)	(0.85)	(1.15)	(1.32)	(2.09)
Middle × Exposure to poor individuals	-0.20[-0.06]	-1.16$^+$[-0.46]	-2.45**[-1.07]*	-1.93$^+$[-0.72]	-1.38[-0.86]
	(0.45)	(0.64)	(0.91)	(1.13)	(1.86)
Upper-Middle × Exposure to poor individuals	0.37[0.51]	-0.38[0.33]	-1.59$^+$[-0.21]	-2.33$^+$[-1.13]	0.36[0.89]
	(0.51)	(0.68)	(0.93)	(1.25)	(2.01)
Rich × Exposure to poor individuals	-0.61[-0.47]**	-1.40*[-0.69]*	-1.73$^+$[-0.35]	-1.46[-0.26]	-0.47[0.05]
	(0.43)	(0.63)	(0.89)	(1.12)	(1.97)
Years lived at address	0.00	0.01	0.01	0.01	0.00
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Years of Education	-0.00	-0.00	-0.00	-0.01	-0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income (ln.)	-0.02	-0.01	-0.01	-0.01	-0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Danish citizenship	0.00	0.00	0.00	0.00	0.00
	(.)	(.)	(.)	(.)	(.)
Unemployment Status					
Working	ref.	ref.	ref.	ref.	ref.
Unemployed	-0.05	-0.05	-0.05	-0.06	-0.06
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Retired	-0.01	-0.02	-0.01	-0.01	-0.00
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Early retirement	-0.03	-0.04	-0.03	-0.02	-0.03
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Student	-0.04	-0.03	-0.02	-0.02	-0.03
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Marital Status					
Widowed	ref.	ref.	ref.	ref.	ref.
Divorced	0.12	0.14	0.12	0.14	0.11
	(0.13)	(0.13)	(0.14)	(0.13)	(0.13)
Married	0.13	0.15	0.13	0.14	0.12
	(0.10)	(0.11)	(0.11)	(0.10)	(0.11)
Unmarried	0.11	0.13	0.10	0.11	0.11
	(0.12)	(0.12)	(0.13)	(0.12)	(0.12)
Cohabitation					
Living alone	ref.	ref.	ref.	ref.	ref.
Living with others	-0.05	-0.04	-0.02	-0.04	-0.04
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Age variation	0.00	0.01	0.02	0.02	-0.02
	(0.01)	(0.01)	(0.01)	(0.02)	(0.03)
Share of unemployed	0.04	0.07	-0.39	-0.39	-1.28
	(0.24)	(0.32)	(0.45)	(0.69)	(1.16)
Median income	-0.00	-0.00	-0.00	-0.00	-0.00*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Ethnic diversity	0.03	0.06	-0.03	-0.33	-0.65
	(0.15)	(0.18)	(0.25)	(0.35)	(0.57)
Residents' mobility	-0.06	-0.02	0.10	0.24	0.03
	(0.07)	(0.08)	(0.11)	(0.19)	(0.37)
Population size	-0.00	0.00	0.00	0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Share single-parent HH	-0.06	0.21	0.53	0.66	1.31
	(0.19)	(0.28)	(0.42)	(0.66)	(1.78)
Constant	0.79	0.40	0.29	0.19	1.88
	(1.27)	(1.29)	(1.28)	(1.38)	(1.47)
Individual FE	✓	✓	✓	✓	✓
Wave FE	✓	✓	✓	✓	✓
R-sqr(within)	0.046	0.050	0.053	0.046	0.044
Person-wave Observations	1531	1531	1531	1531	1531
Individuals	701	701	701	701	701

Note: Standard errors clustered on individuals in parentheses. +p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Two-sided t-tests. Square brackets indicate marginal effects.

Table A18: Effect of Exposure to Poor Individuals excluding Young Neighbors

	100 meter	150 meter	250 meter	500 meter	2500 meter
Exposure to poor individuals	0.39	0.53	0.54	1.38*	2.63[+]
	(0.28)	(0.37)	(0.45)	(0.65)	(1.53)
Poor × Exposure to poor individuals	ref. [0.39]	ref. [0.53]	ref. [0.54]	ref. [1.38]*	ref. [2.63][+]
Lower-Middle × Exposure to poor individuals	-0.31[0.09]	-0.25[0.28]	0.10[0.64]	-0.65[0.75]	-1.05[1.58]
	(0.45)	(0.57)	(0.76)	(0.93)	(1.92)
Middle × Exposure to poor individuals	-0.39[0.00]	-0.90*[-0.37]	-1.49**[-0.95]*	-2.16**[-0.78]	-2.41[0.22]
	(0.33)	(0.44)	(0.56)	(0.76)	(1.72)
Upper-Middle × Exposure to poor individuals	-0.19[0.20]	-0.65[-0.12]	-1.15*[-0.61]	-2.09**[-0.71]	-3.32[+][-0.70]
	(0.43)	(0.49)	(0.56)	(0.77)	(1.74)
Rich × Exposure to poor individuals	-0.88**[-0.48]*	-1.25**[-0.72]**	-0.92[+][-0.38]	-1.48*[-0.10]	-1.86[0.77]
	(0.34)	(0.45)	(0.54)	(0.67)	(1.70)
Years lived at address	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of education	-0.01	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income (ln.)	-0.03	-0.03	-0.04	-0.04	-0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Danish citizenship	0.21***	0.20***	0.20**	0.21***	0.24***
	(0.06)	(0.06)	(0.06)	(0.04)	(0.05)
Unemployment Status					
Working	ref.	ref.	ref.	ref.	ref.
Unemployed	-0.05	-0.05	-0.06	-0.06[+]	-0.07[+]
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Retired	-0.02	-0.02	-0.03	-0.03	-0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Early retirement	-0.02	-0.02	-0.02	-0.02	-0.02
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Student	-0.03	-0.02	-0.03	-0.04	-0.03
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Marital Status					
Widowed	ref.	ref.	ref.	ref.	ref.
Divorced	0.05	0.06	0.07	0.08	0.06
	(0.11)	(0.11)	(0.11)	(0.11)	(0.10)
Married	0.09	0.10	0.10	0.12	0.10
	(0.09)	(0.09)	(0.09)	(0.10)	(0.09)
Unmarried	0.05	0.06	0.06	0.08	0.07
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Cohabitation					
Living alone	ref.	ref.	ref.	ref.	ref.
Living with others	0.00	0.01	0.01	-0.00	0.00
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Age variation	-0.00	-0.00	-0.00	0.00	-0.03
	(0.00)	(0.01)	(0.01)	(0.01)	(0.02)
Share of unemployed	0.18	0.25	0.01	0.07	0.12
	(0.22)	(0.28)	(0.37)	(0.58)	(1.12)
Median income	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Ethnic diversity	-0.05	-0.02	-0.03	-0.06	-0.69
	(0.12)	(0.14)	(0.18)	(0.24)	(0.42)
Residents' mobility	-0.04	-0.06	-0.03	0.00	-0.00
	(0.06)	(0.07)	(0.10)	(0.14)	(0.29)
Population size	0.00	0.00	0.00	0.00[+]	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Share single-parent HH	0.03	0.25	0.49	0.44	1.68
	(0.15)	(0.23)	(0.34)	(0.50)	(1.55)
Constant	0.94*	0.91*	0.96*	0.64	1.58*
	(0.43)	(0.44)	(0.45)	(0.50)	(0.67)
Individual FE	✓	✓	✓	✓	✓
Wave FE	✓	✓	✓	✓	✓
Municipality FE	✓	✓	✓	✓	✓
R-sqr(within)	0.125	0.128	0.128	0.126	0.125
Person-wave Observations	1813	1813	1813	1813	1813
Individuals	818	818	818	818	818

Note: Standard errors clustered on individuals in parentheses. +p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Two-sided t-tests. Square brackets indicate marginal effects.

Figure A17: Marginal Effects of Exposure to Poor Individuals for the Rich using different Exclusion Criteria
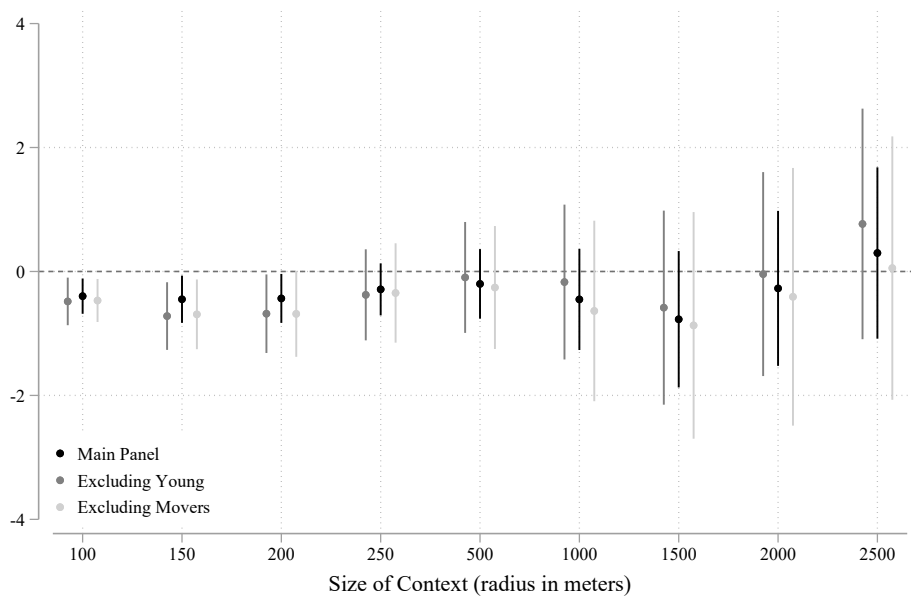
Note: The figure is based on the same specifications as used in Table A18 (dark-grey) and Table A17 (light-grey). Context sizes range from 100 meter to 2500 meters. Error bars represent 95% C.I.

Fourth, we examine the sensitivity of our results to the various sample restriction criteria (length of residence and the number of neighbors). Figure A18 reports the sensitivity of our results using alternative restrictions on the number of neighbors living within 100 meters from the respondents' residence.[4] Compared to the estimate using our baseline specification, we see that the estimate with no restriction on the number of people living within a given radius is slightly attenuated but still significantly negative. Additionally, the figure shows that our results are basically similar when using different neighbor restriction criteria (≥ 5, ≥ 10, ≥ 20, or ≥ 25 neighbors). Moreover, Figure A19 compares our primary panel estimates to the estimates based on a similar model without excluding respondents, who moved to their current residence less than six months before the interview. In general, the estimates from the full sample are slightly weaker, but the main takeaway is that the estimates from the two models are neither substantially nor significantly different from each other. In sum, these robustness checks show that our results are not driven by our sample restriction criteria.
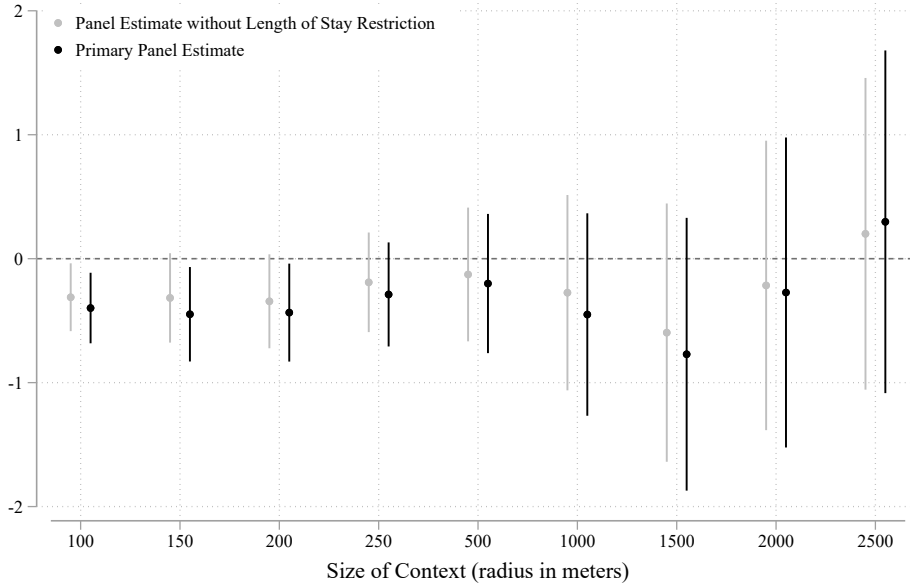
Figure A18: Marginal Effects of Exposure to Poor Individuals for the Rich across Context Sizes and Sample Restrictions
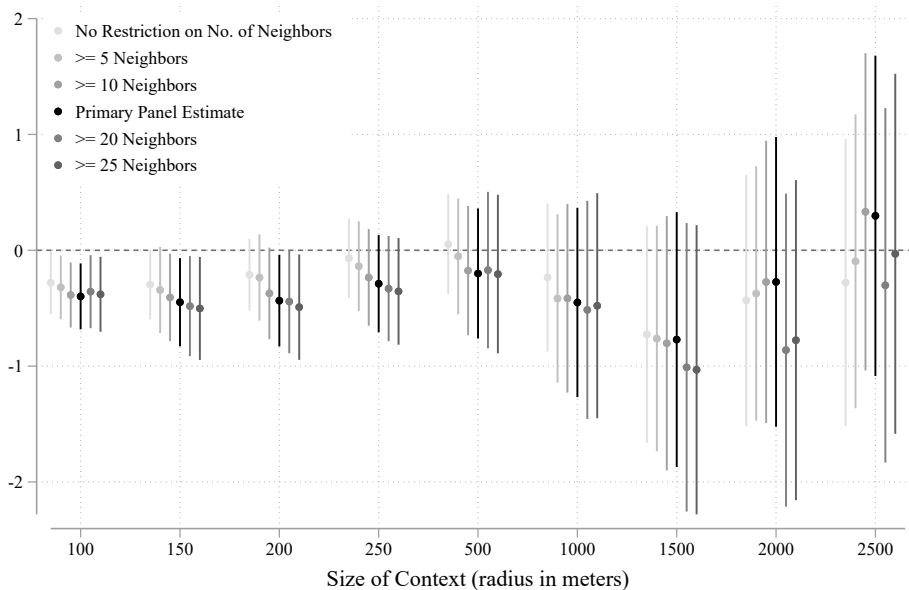
Note: Same co-variates as Model 2 in Table A8. Context sizes range from 100 meter to 2500 meters. Error bars represent 95% C.I.

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[4]Note that we still restrict the sample to neighborhoods with at least two families to ensure that our respondents are not only exposed to members of their own family.

Figure A19: Marginal Effects of Exposure to Poor Individuals for the Rich across Context Sizes and Sample Restrictions
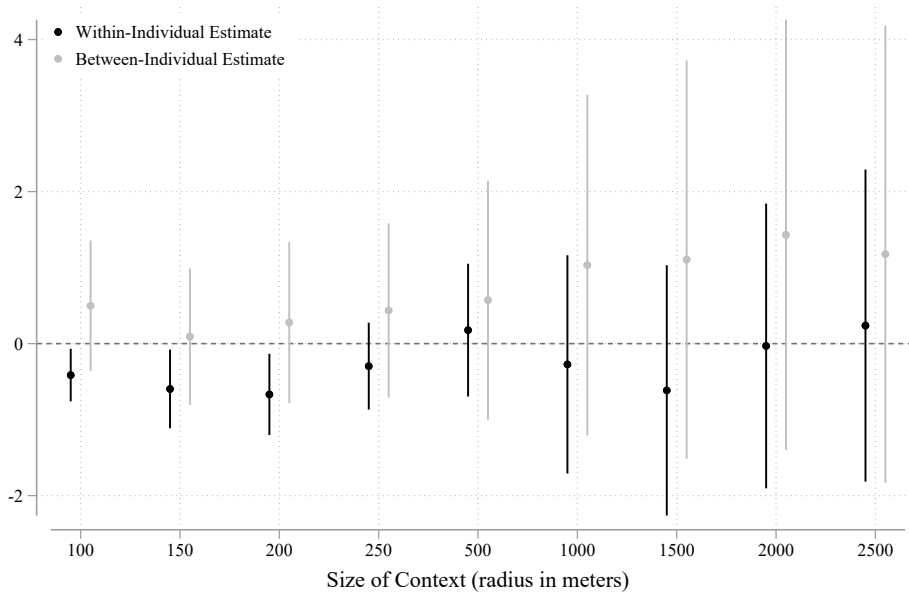

Note: Same co-variates as Model 2 in Table A8. Context sizes range from 100 meter to 2500 meters. Error bars represent 95% C.I.

Finally, we estimated the relationship between exposure to poor individuals and attitudes towards redistribution when restricting the sample to only include affluent respondents (as an alternative to estimating heterogeneous effects across income quintiles). Here, we show both the within- and between-individual estimates to stress that the divergence between the cross-sectional and panel results in the main text is not just an artifact of two different samples applied. The estimates of exposure to poor individuals in varying context sizes are shown in Figure A20, with dark lines indicating panel results and light-grey lines indicating cross-sectional results. The within-individual estimates are nearly identical to the ones reported in Figure 1 in the main text and Model 2 in Table A8. Likewise, the figure shows that the divergence between the cross-sectional and the panel estimates holds when doing the comparative between-individual analysis only on those who contribute to the within estimates in the panel models.[5]

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[5]It is worth noting that the estimates of the between-individual effects are very similar to those shown in Figure 1 in the main text. However, the relationship between exposure to poor individuals and redistribution attitudes is much less precisely estimated because of the reduced number of rich respondents in this sample.

Figure A20: Marginal Effects of Exposure to Poor Individuals for
Sub-Sample of Rich Respondents

Note: Person-wave observations=594, Individuals=259. Same co-variates as
Model 2 in Table A8. In between-individual models, we also add sex, age, and
origin. Error bars represent 95% C.I.

D.4 Probing the Parallel Trends Assumption

We also probed the crucial parallel trends assumption by estimating whether past changes in support for redistribution predict subsequent changes in exposure to poor individuals. More specifically, we examine whether changes in attitudes toward redistribution between wave one and two are related to changes in exposure to poor individuals between wave two and three. We restricted the sample to only include affluent respondents as they are our main focus. Figure A21 shows that past changes in redistribution attitudes are positive but insignificantly (although, admittedly, close to significantly) related to later changes in exposure to poor individuals. In other words, this analysis indicates that trends in attitudes toward redistribution were parallel between those who become more or less exposed to poor individuals later on, which corroborates the parallel trends assumption. However, if anything, the analysis suggests that our estimated coefficients may be conservative because those who become more positive toward redistribution are more likely to be exposed to poor individuals in the future. Furthermore, these results also point toward the self-selection mechanisms that we propose as a likely explanation for the positive findings from studies using a cross-sectional approach, as it indicates that the decision to live near or far from the less well-off is correlated with attitudes toward redistribution.

Figure A21: Relationship between Changes in Redistribution
Attitudes from 1st to 2nd Wave and Changes in Exposure to Poor
Individuals from 2nd to 3rd Wave
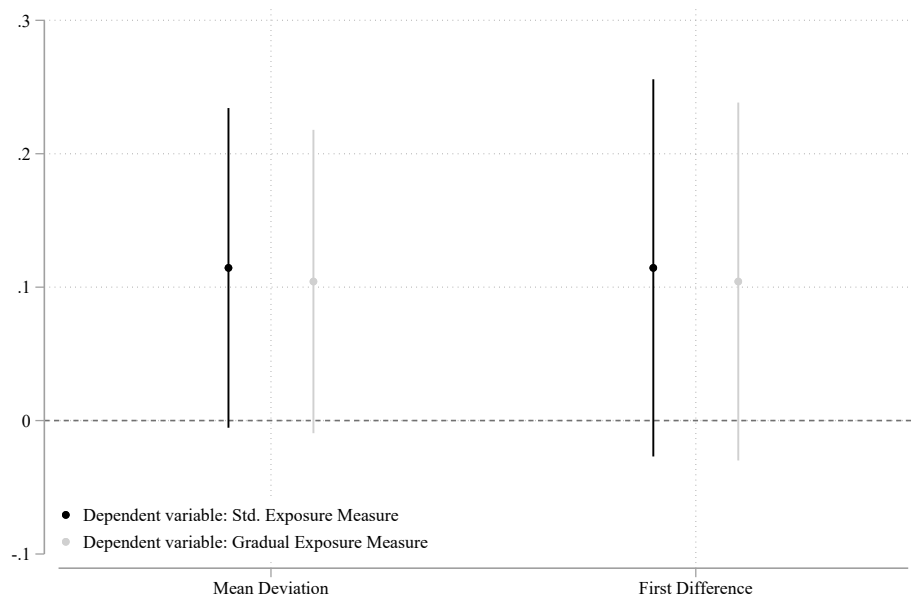
Note: Person-wave observations=152. Same covariates as in the main models.
Context size is 100 meter. Error bars represent 95% C.I.

D.5 Conditionality and Scope of our Results

In this section, we explore the conditionalities and scope of our results.

First, we examine if the estimates are primarily driven by experiencing increasing or decreasing exposure to poor individuals (see e.g. Allison 2019). While our data are not optimal for this purpose due to the limited sample size, the results reported in Figure A22 suggest that our results are driven by positive changes in the share of poor individuals.

Figure A22: Marginal Effects of Positive and Negative Changes in
Exposure to Poor Individuals for the Rich
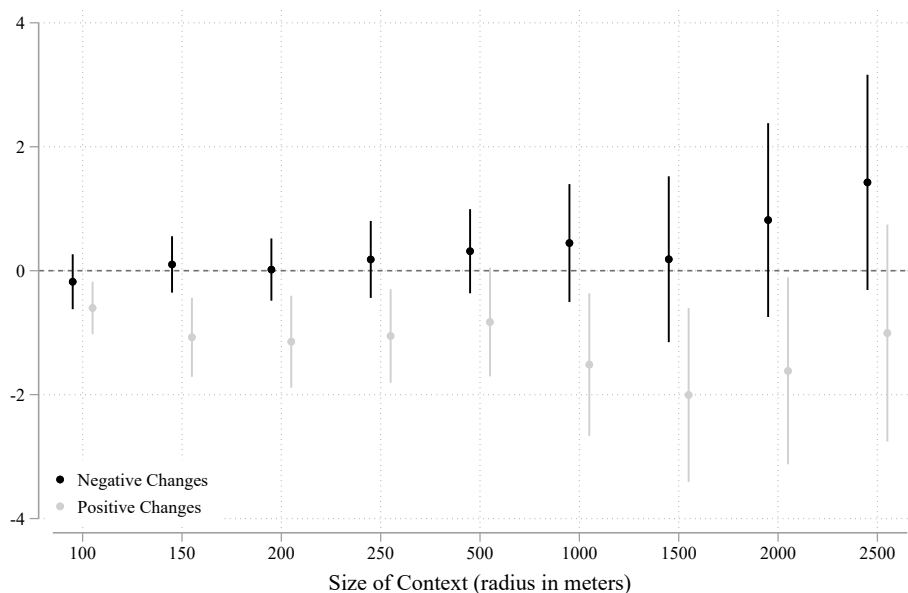
Note: Same co-variates as Model 2 in Table A8. Context sizes range from 100
meter to 2500 meters. Error bars represent 95% C.I.

Second, we examine whether left- and right-wing individuals respond differently to residential exposure to poor individuals. This could – in line with politically motivated reasoning - be the case if individuals process neighborhood cues in an ideologically biased manner. We measure political ideology using the following question: "In politics, people sometimes talk of 'left' and 'right.' Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?" More explicitly, we examine whether ideology (measured in the first wave of the panel survey) conditioned the effect of subsequent exposure to poor individuals among the rich. We do this analysis in the full sample (that is, in a three-way interaction model) as well as in a subgroup analysis among rich respondents.[6] As seen in Model 1 and Model 3 in Table A19, we find a non-significant interaction effect. The upper panel in Figure A23 illustrates that both left- and right-wing rich respondents react negatively to exposure to poor individuals, though to a slightly lesser degree among the most right-leaning individuals.[7]

Third, we tried introducing political ideology as our outcome variable to examine if the effect of exposure to poor individuals extends from a specific aspect of distributional

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[6]There are slightly fewer respondents in these analyses compared to the primary analysis due to non-response on political ideology.

[7]To reiterate, it is important to note that the interaction effect is non-significant so we cannot reject the null hypothesis, which is that left- and right-leaning individuals respond similarly when exposed to poor individuals.
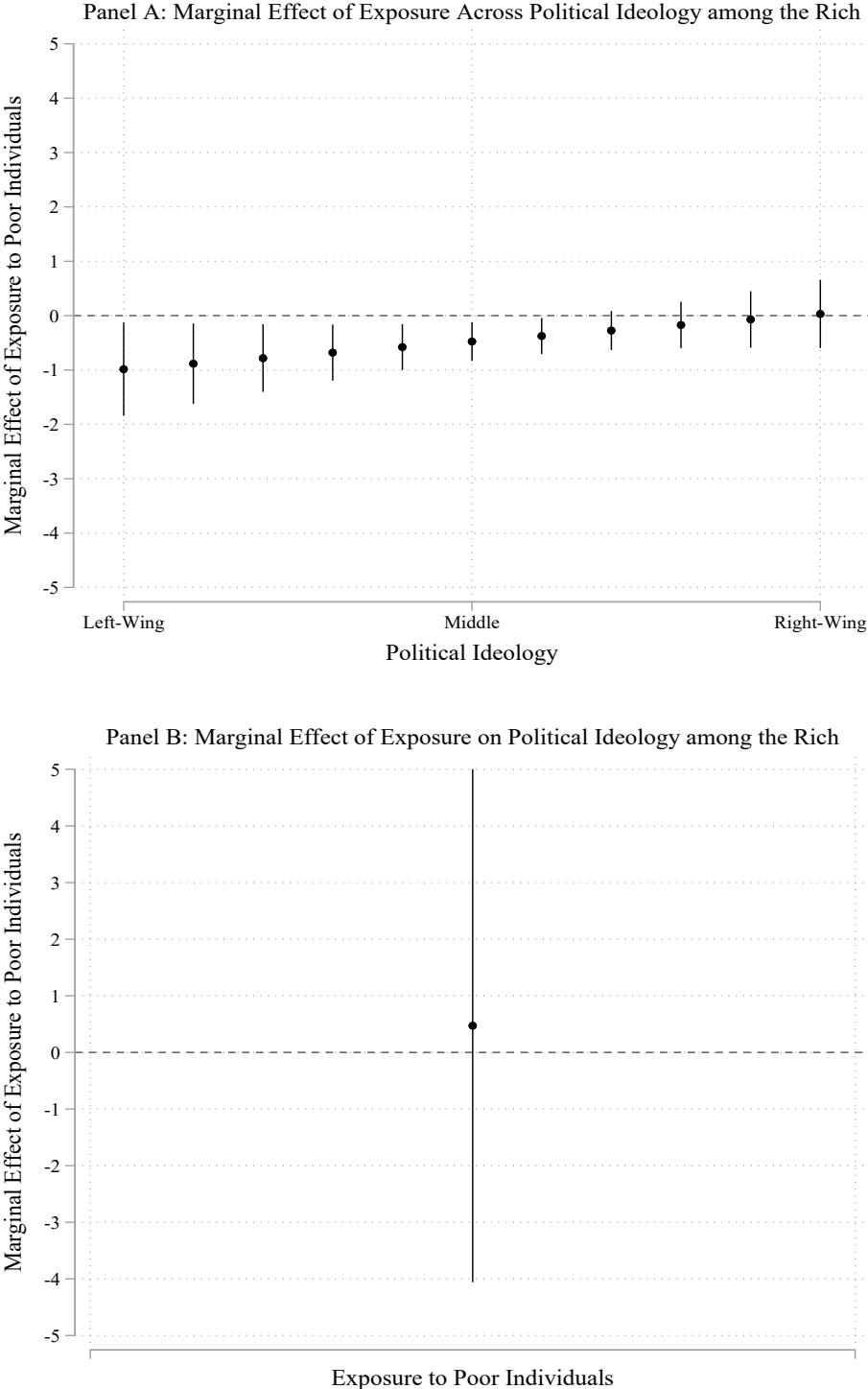
politics to more general political orientations. With the caveat that political ideology only appears in wave 1 and wave 2, we find an insignificant effect of exposure to poor individuals among the rich on political ideology (see Model 2 and Model 4 in Table A19 and lower panel in Figure A23).

Table A19: Exposure to Poor Individuals Interacted with Political Ideology in Wave 1 and Political Ideology as Outcome

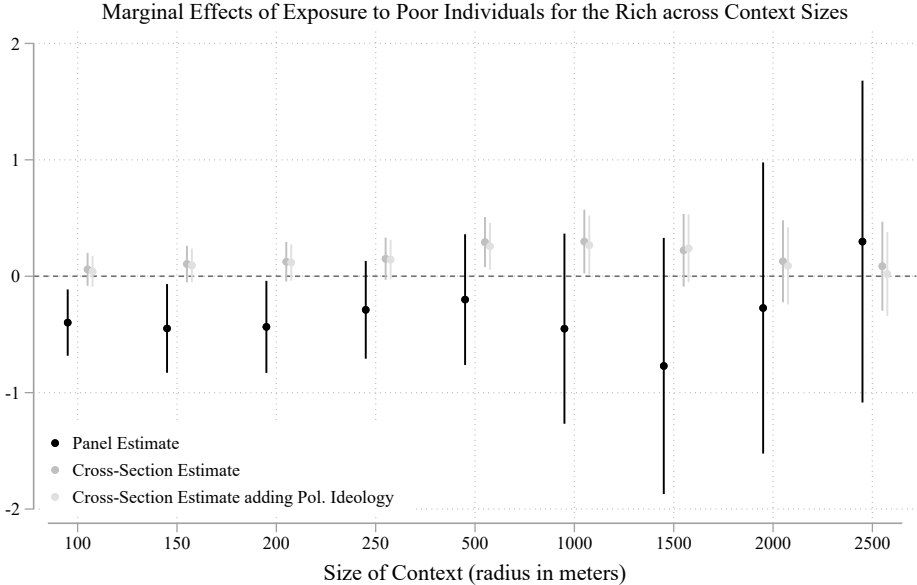|	Full Sample				Only Rich Sample			
	(1)		(2)		(3)		(4)	
	Interaction Model		Political Ideology as Outcome		Interaction Model		Political Ideology as Outcome	
Exposure to poor individuals	1.09*	(0.49)	0.46	(1.54)	-0.99*	(0.44)	0.47	(2.31)
Poor × Exposure to poor individuals	ref.		ref. [0.46]					
Lower-Middle × Exposure to poor individuals	-1.31	(1.04)	3.06 [3.52]	(3.21)				
Middle × Exposure to poor individuals	-0.95	(0.61)	1.55 [2.01]	(2.03)				
Upper-Middle × Exposure to poor individuals	-0.13	(0.91)	-1.65 [-1.19]	(2.60)				
Rich × Exposure to poor individuals	-2.02**	(0.64)	-0.79 [-0.34]	(2.27)				
Exposure to poor individuals × Pol. Ideology (Wave 1)	-0.15	(0.11)			0.10	(0.07)		
Poor × Exposure to poor individuals × Pol. Ideology	ref.							
Lower-Middle × Exposure to poor individuals × Pol. Ideology (Wave 1)	0.20	(0.22)						
Middle × Exposure to poor individuals × Pol. Ideology (Wave 1)	0.15	(0.12)						
Upper-Middle × Exposure to poor individuals × Pol. Ideology (Wave 1)	-0.03	(0.19)						
Rich × Exposure to poor individuals × Pol. Ideology (Wave 1)	0.24+	(0.13)						
Years lived at address	-0.00	(0.00)	-0.02	(0.03)	0.00	(0.00)	0.02	(0.04)
Years of Education	-0.01	(0.01)	-0.01	(0.07)	-0.02	(0.02)	-0.26*	(0.12)
Income (ln.)	-0.04	(0.03)	-0.28	(0.25)	-0.06	(0.05)	0.03	(0.40)
Danish citizenship	0.17+	(0.09)	-5.23***	(0.50)	0.00	(.)	0.00	(.)
Unemployment Status								
Working	ref.		ref.		ref.		ref.	
Unemployed	-0.07+	(0.04)	-0.64**	(0.24)	-0.04	(0.12)	-0.95***	(0.25)
Retired	-0.03	(0.03)	-0.24	(0.36)	-0.09*	(0.04)	-0.03	(0.53)
Early retirement	-0.04	(0.08)	-0.83**	(0.31)	-0.07	(0.23)	-0.88***	(0.22)
Student	-0.02	(0.06)	0.03	(0.43)	-0.01	(0.14)	-2.78**	(0.84)
Marital Status								
Widowed	ref.		ref.		ref.		ref.	
Divorced	0.06	(0.11)	1.91*	(0.84)	-0.00	(0.13)	-0.16	(1.76)
Married	0.09	(0.10)	2.06**	(0.70)	0.33*	(0.14)	0.73+	(0.43)
Unmarried	0.05	(0.11)	2.16**	(0.78)	0.30*	(0.14)	0.00	(.)
Cohabitation								
Living alone	ref.		ref.		ref.		ref.	
Living with others	-0.01	(0.04)	-1.10+	(0.58)	-0.21**	(0.07)	0.79	(0.54)
Age variation	0.00	(0.01)	0.05	(0.05)	0.00	(0.01)	-0.09	(0.14)
Share of Unemployed	0.32	(0.23)	-0.50	(2.21)	-0.05	(0.33)	-3.79	(3.27)
Median income	-0.00	(0.00)	0.00	(0.00)	-0.00	(0.00)	-0.00	(0.00)
Ethnic diversity	0.00	(0.12)	0.39	(1.01)	0.19	(0.20)	-4.61*	(1.93)
Share single-parent Households	0.11	(0.15)	-1.51	(1.66)	0.29	(0.21)	2.01	(3.63)
Residents' Mobility	-0.05	(0.06)	-0.08	(0.52)	0.01	(0.08)	0.10	(0.69)
Population Size	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)	0.00	(0.00)
Constant	0.85+	(0.48)	11.20**	(3.67)	1.52+	(0.78)	9.69	(6.68)
Individual FE	✓		✓		✓		✓	
Wave FE	✓		✓		✓		✓	
Municipality FE	✓		✓		✓		✓	
Individual Controls	✓		✓		✓		✓	
Contextual Controls	✓		✓		✓		✓	
Waves	Three		Two		Three		Two	
R-sqr(within)	0.131		0.131		0.216		0.157	
Person-wave observations	1712		1399		565		424	
Individuals	768		812		245		259	

Note: Standard errors clustered on individuals in parentheses. +p<0.1, * p<0.05, ** p<0.01, *** p<0.001. Two-sided t-tests.

Figure A23: Exposure to Poor Individuals Interacted with Political Ideology in Wave 1 (Panel A) and Political Ideology as Outcome (Panel B)

Panel A: Marginal Effect of Exposure Across Political Ideology among the Rich

Panel B: Marginal Effect of Exposure on Political Ideology among the Rich

Note: Panel A is based on Model 3 in Table A19 and Panel B is based on Model 4 in Table A19. Context size is 100 meters. Error bars represent 95% C.I.

Figure A24: Exposure to Poor Individuals and Attitudes towards Redistribution

Marginal Effects of Exposure to Poor Individuals for the Rich across Context Sizes

- Panel Estimate
- Cross-Section Estimate
- Cross-Section Estimate adding Pol. Ideology

Size of Context (radius in meters)

Note: The panel estimates are based on specifications similar to Model 1 in Table A8, but with varying contextual sizes. The cross-sectional estimates are based on the specifications reported in Model 1 in Table A9 but include political ideology as a control variable in the light-grey estimates. Error bars represent 95% C.I.

Fourth we examined whether changes in exposure to poor individuals are related to changes in attitudes toward immigrants. We measured attitudes towards immigrants using the following questions: "Would you say that Denmark's cultural life is generally undermined or enriched by people coming to live here from other countries?" and "Do you think people who come to live in Denmark receive more than they contribute or contribute more than they receive?". Answers for the questions were recorded on a ten-point scale, with higher values indicating pro-immigrant attitudes.[8] As shown in Figure A25, and discussed under robustness analyses in the main paper, these placebo tests demonstrate that exposure to poor individuals do not explain changes in attitudes towards immigrants.

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[8]The second question was only asked in wave one and wave two.

Figure A25: Exposure to Poor Individuals on Placebo Outcomes

Panel A: Cultural Life is Enrich by Immigrants

Panel B: Does Immigrants Contribute more than they Receive
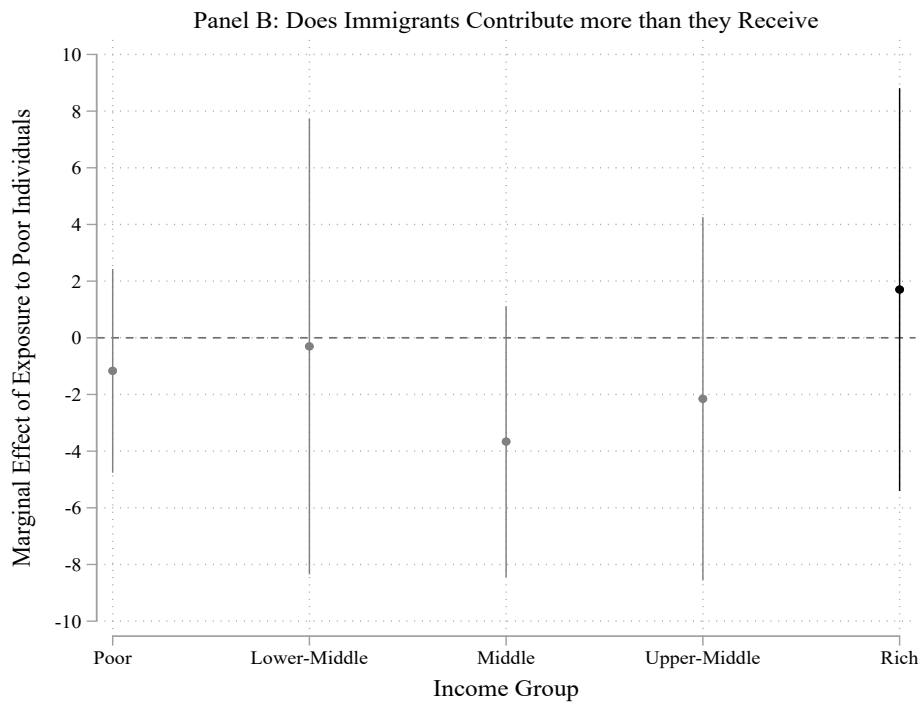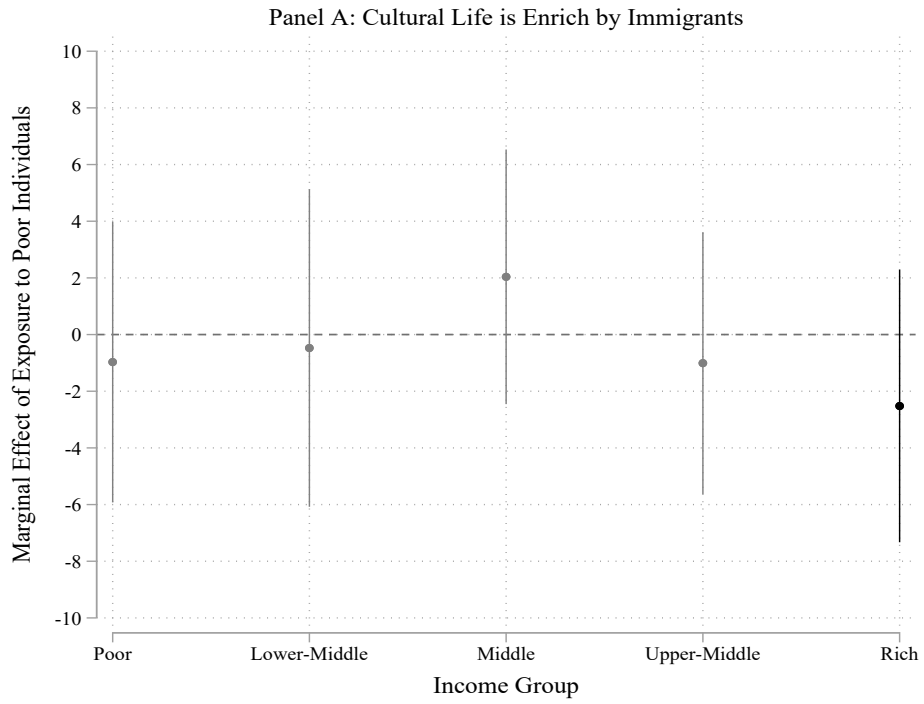
Note: Person-wave observations=1776 in Panel A and Person-wave observations=1385 in Panel B. Same co-variates as in main models. Context size is 100 meter. Error bars represent 95% C.I.

E Relationship between Exposure to Rich Individuals and Attitudes toward Redistribution

Table A20: Effect of Exposure to Rich Individuals and Attitudes toward Redistribution

	100 meter	150 meter	250 meter	500 meter	2500 meter
Exposure to rich individuals	-0.71*	-1.09*	-1.40**	-1.71*	-1.56
	(0.32)	(0.48)	(0.53)	(0.70)	(1.13)
Poor × Exposure to rich individuals	ref. [-0.71]*	ref. [-1.09]*	ref. [-1.40]**	ref. [-1.71]*	ref. [-1.56]
Lower-Middle × Exposure to rich individuals	0.54 [-0.17]	1.12$^+$ [0.03]	1.46* [0.06]	2.03* [0.33]	1.39 [-0.16]
	(0.43)	(0.66)	(0.69)	(0.96)	(1.54)
Middle × Exposure to rich individuals	0.68$^+$ [-0.03]	1.03* [-0.06]	1.26* [-0.14]	1.37$^+$ [-0.34]	1.32 [-0.24]
	(0.36)	(0.52)	(0.58)	(0.73)	(1.18)
Upper-Middle × Exposure to rich individuals	0.45 [-0.26]	0.84$^+$ [-0.25]	1.20* [-0.20]	1.60* [-0.11]	1.35 [-0.21]
	(0.34)	(0.49)	(0.54)	(0.72)	(1.25)
Rich × Exposure to rich individuals	0.82* [0.11]	1.02* [-0.07]	1.27* [-0.13]	1.80** [0.10]	1.55 [-0.00]
	(0.32)	(0.49)	(0.52)	(0.66)	(1.15)
Years lived at address	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Years of Education	-0.01	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income (ln.)	-0.04	-0.04	-0.04	-0.04	-0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Danish citizenship	0.22***	0.22***	0.24***	0.23***	0.23***
	(0.06)	(0.05)	(0.05)	(0.04)	(0.04)
Unemployment Status					
Working	ref.	ref.	ref.	ref.	ref.
Unemployed	-0.06	-0.06$^+$	-0.06	-0.06	-0.06
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Retired	-0.03	-0.03	-0.03	-0.02	-0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Early retirement	-0.02	-0.02	-0.02	-0.02	-0.02
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Student	-0.03	-0.02	-0.02	-0.03	-0.04
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Marital Status					
Widowed	ref.	ref.	ref.	ref.	ref.
Divorced	0.04	0.03	0.06	0.05	0.07
	(0.10)	(0.11)	(0.11)	(0.11)	(0.11)
Married	0.07	0.07	0.09	0.09	0.10
	(0.09)	(0.09)	(0.10)	(0.10)	(0.09)
Unmarried	0.03	0.03	0.05	0.05	0.06
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Cohabitation					
Living alone	ref.	ref.	ref.	ref.	ref.
Living with others	0.00	0.01	0.01	0.01	0.00
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Age variation	-0.00	-0.00	-0.00	0.00	-0.01
	(0.00)	(0.01)	(0.01)	(0.01)	(0.02)
Share of unemployed	0.20	0.20	-0.15	0.03	0.29
	(0.22)	(0.27)	(0.36)	(0.56)	(1.06)
Median income	-0.00	0.00	0.00	0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Ethnic diversity	-0.05	-0.00	-0.02	-0.05	-0.58
	(0.11)	(0.13)	(0.17)	(0.22)	(0.39)
Residents' mobility	-0.05	-0.09	-0.05	-0.01	0.02
	(0.06)	(0.07)	(0.10)	(0.14)	(0.29)
Population size	0.00	0.00	0.00	0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Share single-parent households	0.01	0.24	0.42	0.40	1.47
	(0.15)	(0.23)	(0.33)	(0.51)	(1.54)
Constant	1.03*	0.93*	0.98*	0.66	1.43*
	(0.43)	(0.43)	(0.45)	(0.49)	(0.68)
Individual FE	✓	✓	✓	✓	✓
Wave FE	✓	✓	✓	✓	✓
Municipality FE	✓	✓	✓	✓	✓
R-sqr(within)	0.126	0.125	0.125	0.125	0.122
Person-wave Observations	1813	1813	1813	1813	1813
Individuals	818	818	818	818	818

Note: Standard errors clustered on individuals in parentheses. $+p<0.1$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$. Two-sided t-tests.

Figure A26: Marginal Effect of Exposure to Rich Individuals for the Poor and the Rich

Marginal Effect of Exposure to Rich Individuals for the Poor
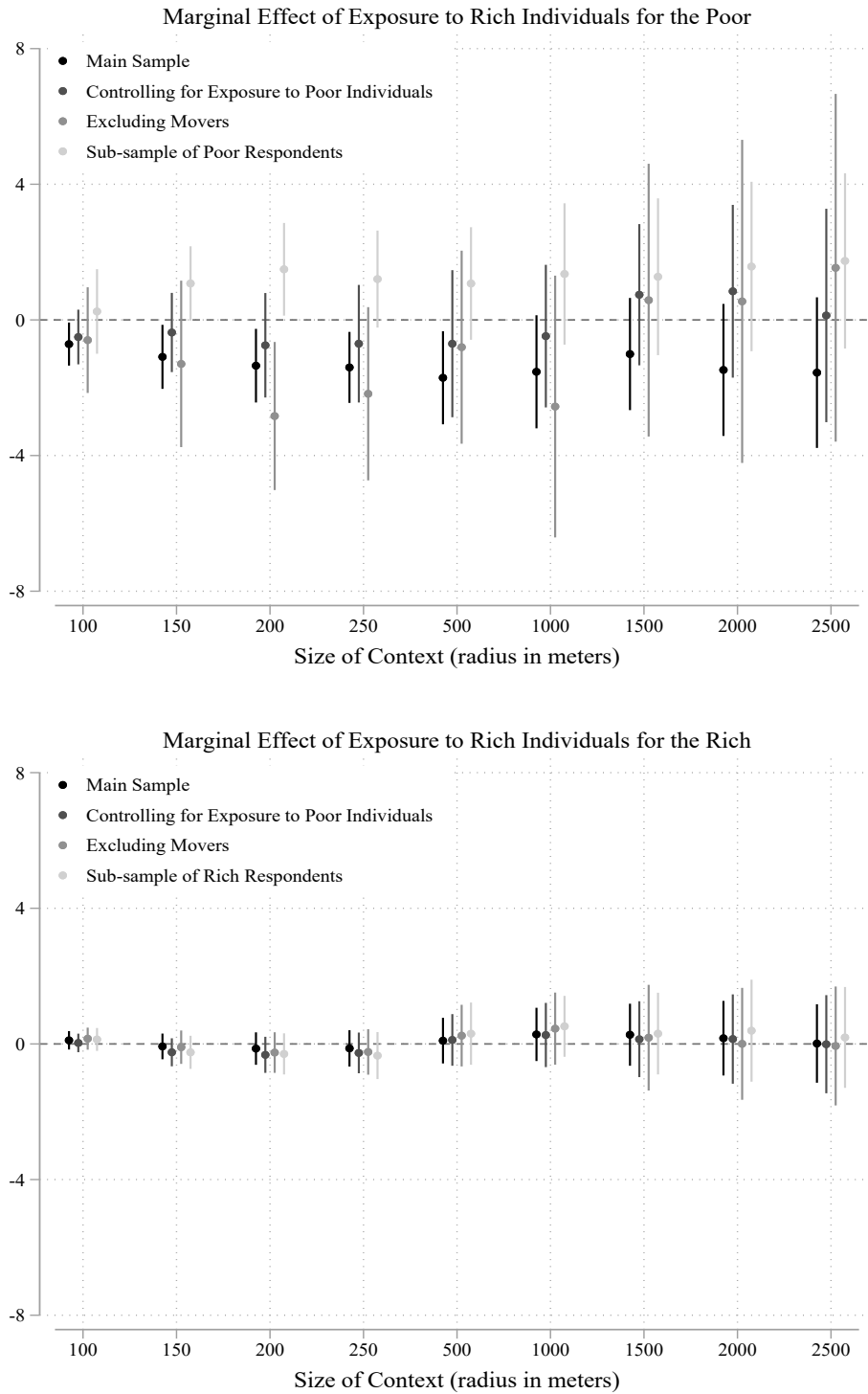
Note: Main and sub-sample estimates are based on the same specifications as used in Table A26. Error bars represent 95% C.I.

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