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# A comment on Alesina, Miano and Stancheva (2023)* 

Sabina Albrecht, Jason Collins, Romain Gauriot \& Fannie Wu

June 5, 2023


#### Abstract

Alesina et al. (2023) examine how people perceive the number and characteristics of migrants and how those perceptions affect their support for redistribution. They find that respondents from the United States, United Kingdom, Sweden, Italy, Germany and France markedly overestimate the share of immigrants in each country, with the average respondent in all countries except Sweden overestimating by more than a factor of two. We reproduce these results using the original code and data and test the robustness by (i) including participants excluded for time to complete the survey, (ii) extending the analysis of misperceptions to all survey respondents, and (iii) using alternative authoritative estimates of the proportion of immigrants. We find that these checks marginally change the estimates of the size of the misperception but do not change the conclusions to be drawn from the analysis. Alesina et al. (2023) also test the effect on support for redistribution of showing videos on immigrant characteristics. We computationally reproduced the treatment effects on support for redistribution.


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## 1 Introduction

Alesina et al. (2023) (henceforth AMS) used a combined survey and experimental approach to examine how people in the United States, United Kingdom, Sweden, Italy, Germany and France perceive the number and characteristics of migrants, and how those perceptions affect their support for redistribution. The authors obtained a sample of 22,006 non-immigrants aged between 18 to 69 years old across the six countries. The survey included an "immigration block" and "redistribution block" of questions. The immigration block sought respondents' perceptions about the number and characteristics of immigrants and non-immigrants in their countries. The redistribution block sought respondents' attitudes to redistribution, such as taxation of different parts of the income distribution and charitable contributions.

The authors found that respondents from all surveyed countries markedly overestimate the share of immigrants in each country, with the average respondent in each country except Sweden overestimating by more than a factor of two. They also found that respondents "primed" by the immigration block before completing the redistribution block support less redistribution, including lower charitable contributions.

In this paper, we investigate whether their analytical results are computationally reproducible and test their robustness with three checks: (i) retaining respondents excluded by AMS for the time taken to complete the survey, (ii) including participants from treatments groups in the analysis and (iii) using alternative authoritative estimates of the true proportion of immigrants.

We obtained the data and code for the paper from the Replication package provided by the authors at Zenodo (Alesina et al., 2022). The replication package included the cleaned data from the main survey wave, national and local statistics on immigrants and non-immigrants, and scripts for producing figures and tables. The package was designed to enable the reproduction of the tables and figures in the main text of the paper. Code was not provided to reproduce outputs contained in the Appendix. We successfully reproduced the data underlying Figure 2 and Tables 4,5 and 6 using AMS's code. The outputs were identical.

In the original analysis, in Section 3 AMS excluded participants who were in the fastest and slowest $2 \%$ of respondents to complete the survey from each country. We reran the analysis using the original code except for removing flagged respondents. We found that retaining these respondents marginally increased the size of the misperception.

In their original analysis, AMS also constrained their analysis in section 3 to the 5,562
respondents in the control group. In our re-analysis, we included all 20,006 survey respondents. The results were robust to using the full sample, with the size of the misperception for the full sample generally within a percentage point of that for the control group reported in section 3 of the paper.

Finally, AMS relied on specific data sources to provide the "actual" statistics against which the level of misperception could be calculated. We considered some alternative data sources and found that the level of misperception remained at a similar magnitude regardless of the data source.

## 2 Reproducibility

We ran the original code and reproduce the data underlying Figure 2 and Tables 4, 5 and 6 . We find that the point estimates are identical. The original text contains a typographical error relating to the sample size. Section 2.1 describes the sample as comprising 4,500 from the US, 4,001 from the UK, 4,001 from Germany, 4,000 from France, 4,000 from Italy and 2,004 from Sweden, for a total of 22,506 respondents. The data file in the replication package contains only 22,006 respondents, with 4,000 respondents from the US.

## 3 Replication

In this section, we reproduce Figure 2 and show that its conclusion is robust to alternative specification.

### 3.1 Figure 2 Left Panel

Table 1 reproduces the left panel of Figure 2 (p12). The figure in the paper reports the actual share of immigrant (blue dot) and the perceived share of immigrant (red dot). They do not report a statistical test or standard error as the effect is large and is evident without a statistical test. In Table 1 we report the misperception of the share of immigrants, which is the difference between the perceived and the actual share of immigrants. This is what is reported in the right panel of Figure 2. We also report the standard error of this estimate and the p-value from a t-test testing whether this misperception is equal to 0 .

The first column reproduces the results reported in the paper. We reproduce the exact same estimate. The p-value is always very close to 0 .

|  |  | $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US | Estimate | 26.082 | 26.617 | 24.821 | 20.782 | 22.582 |
|  | Std Error | $(0.728)$ | $(0.727)$ | $(0.375)$ | $(0.728)$ | $(0.728)$ |
|  | p value | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ |
|  | N | 960 | 1,000 | 3,837 | 960 | 960 |
| UK | Estimate | 17.987 | 18.171 | 16.186 | 17.987 | 17.487 |
|  | Std Error | $(0.637)$ | $(0.631)$ | $(0.343)$ | $(0.637)$ | $(0.637)$ |
|  | p value | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ |
|  | N | 973 | 1,012 | 3,842 | 973 | 973 |
| DE | Estimate | 15.459 | 15.819 | 14.062 | 15.459 | 16.059 |
|  | Std Error | $(0.678)$ | $(0.665)$ | $(0.348)$ | $(0.678)$ | $(0.678)$ |
|  | p value | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ |
|  | N | 973 | 1,013 | 3,840 | 973 | 973 |
| FR | Estimate | 16.609 | 16.961 | 18.230 | 16.609 | 16.509 |
|  | Std Error | $(0.614)$ | $(0.610)$ | $(0.348)$ | $(0.614)$ | $(0.614)$ |
|  | p value | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ |
|  | N | 980 | 1,020 | 3,839 | 980 | 980 |
| IT | Estimate | 16.406 | 16.936 | 16.605 | 16.406 | 16.506 |
|  | Std Error | $(0.654)$ | $(0.655)$ | $(0.342)$ | $(0.654)$ | $(0.654)$ |
|  | p value | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ |
|  | N | 971 | 1,011 | 3,836 | 971 | 971 |
| SE | Estimate | 9.402 | 10.045 | 9.217 | 9.402 | 9.902 |
|  | Std Error | $(0.814)$ | $(0.830)$ | $(0.432)$ | $(0.814)$ | $(0.814)$ |
|  | p value | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ | $(0.000)$ |
|  | N | 481 | 501 | 1,921 | 481 | 481 |

Table 1: Misperception of the share of immigrants reported in Figure 2 left panel as in the paper (first column), including the respondents in the top $2 \%$ and bottom $2 \%$ of survey time (second column), including respondents from both the control and treatment groups (third column), using alternative definitions for the actual share of immigrants in the country (fourth and fifth columns).

In the second column, we include the respondents in the top $2 \%$ and bottom $2 \%$ of survey time. Those were excluded in the original results as those respondents have been flagged as not paying enough attention to the survey.

In the third column, we include respondents from both the control and treatment groups. In the original results, Figure 2 includes respondents from the control group only (which makes sense given the design of the survey/experiment).

In the fourth and fifth columns, we use alternative definitions for the actual share of immigrants in the country (see Section 3.3). The other specification choices are the same as in the original paper (i.e., excluding respondents flagged for not paying attention and only including the control group). The results are similar to the results reported in the paper. The effect for the US drops a bit, but it stays above $20 \%$.

To sum up, we are able to reproduce the exact results from Figure 2 and by exclud-
ing/including different observations in the estimation or using alternative definitions of the actual share of immigrants in each country, we get very similar results.

### 3.2 Figure 2 Right Panel

Table 2 does the same thing for the right panel of Figure 2.
Similarly, to the left panel, we are able to reproduce the exact same results as in Figure 2 (first column). By changing the specification we get similar results (columns 2 to 5 ).

|  |  | (1) | (2) | (3) | (4) | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No College | Estimate | 19.228 | 19.581 | 18.327 | 18.454 | 18.804 |
|  | Std Error | (0.370) | (0.367) | (0.194) | (0.366) | (0.366) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 3,184 | 3, 306 | 12,581 | 3,184 | 3,184 |
| College | Estimate | 15.337 | 15.859 | 15.487 | 14.121 | 14.561 |
|  | Std Error | (0.447) | (0.447) | (0.239) | (0.438) | (0.440) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 2,152 | 2,249 | 8,531 | 2,152 | 2,152 |
| Low Income | Estimate | 17.818 | 18.146 | 17.289 | 16.907 | 17.283 |
|  | Std Error | (0.310) | (0.308) | (0.164) | (0.306) | (0.307) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 4,466 | 4, 642 | 17,739 | 4,466 | 4,466 |
| High Income | Estimate | 16.902 | 17.762 | 16.623 | 15.729 | 16.172 |
|  | Std Error | (0.736) | (0.741) | (0.392) | (0.722) | (0.725) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 872 | 915 | 3, 376 | 872 | 872 |
| No Imm. Parent | Estimate | 17.050 | 17.460 | 16.764 | 16.094 | $16.482$ |
|  | Std Error | (0.297) | (0.295) | (0.157) | (0.293) | (0.293) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 4,832 | 5,028 | 19, 165 | 4, 832 | 4, 832 |
| Imm. Parent | Estimate | 23.458 | 23.898 | 21.241 | 22.535 | 22.913 |
|  | Std Error | (0.993) | (0.987) | (0.524) | (0.985) | (0.985) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 505 | 528 | 1,941 | 505 | 505 |
| Age 46-69 | Estimate | 15.316 | 15.378 | 15.440 | 14.391 | 14.776 |
|  | Std Error | (0.413) | (0.409) | (0.219) | (0.408) | (0.409) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 2,516 | 2,574 | 10,044 | 2,516 | 2,516 |
| Age 18-45 | Estimate | 19.765 | 20.417 | 18.763 | 18.787 | 19.175 |
|  | Std Error | (0.393) | (0.391) | (0.208) | (0.386) | (0.387) |
|  | p value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 2, 822 | 2,983 | 11,071 | 2,822 | 2, 822 |
| Female | Estimate | 19.729 | 19.937 | 18.954 | 18.756 | 19.150 |
|  | Std Error | (0.386) | (0.382) | (0.206) | (0.382) | (0.383) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 2,725 | 2,822 | 10,808 | 2,725 | 2,725 |
| Male | Estimate | 15.519 | 16.170 | 15.324 | 14.586 | 14.966 |
|  | Std Error | (0.420) | (0.420) | (0.220) | (0.412) | (0.414) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 2,613 | 2,735 | 10,307 | 2,613 | 2,613 |
| Right-Wing | Estimate | 18.451 | 18.861 | 18.104 | 17.198 | 17.679 |
|  | Std Error | (0.444) | (0.441) | $(0.238)$ | (0.437) | (0.438) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 2,145 | 2,238 | 8,413 | 2,145 | 2,145 |
| Left-Wing | Estimate | 18.013 | 18.384 | 17.294 | 17.043 | 17.437 |
|  | Std Error | (0.434) | (0.431) | (0.227) | (0.428) | (0.429) |
|  | $p$ value | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
|  | N | 2, 449 | 2,548 | 9,770 | 2,449 | 2,449 |

Table 2: Misperception of the share of immigrants reported in Figure 2 right panel as in the paper (first column), including the respondents in the top $2 \%$ and bottom $2 \%$ of survey time (second column), including respondents from both the control and treatment groups (third

### 3.3 Actual Statistics about Immigrants and non immigrants

AMS relied on national-level immigration statistics from PEW Research Center (2017) for the US and on national-level immigration statistics from the United Nations Department of Economic and Social Affairs, Population Division (2017) (United Nations and Affairs, 2017) for European countries to compare the elicited perceptions with actual data. Source files were provided in Excel as part of the replication package.

As part of our replication, we first checked all computations performed in the provided national-level Excel source files. This included for the US the distinction between documented and undocumented immigrants. We found no errors in these computations. We also performed selected checks of the local-level immigration statistics for European countries. We note, however, that for the US no Excel source file was provided that calculated immigration statistics at the local level. Thus we were not able to verify the computations underlying these data.

While we found that the underlying calculations of immigration statistics were correct based on the data provided, we wanted to check whether the conclusions drawn from Figure 2 hold up for different data sources. The rationale for this test was that we noticed that the US data reported is for 2015, while the European data is for 2017, with perceptions elicited in 2018.

We performed two robustness checks related to the source of the data, reported in Columns 4 and 5 of Table 1 and 2. In Column 4, we use the share of foreign-born for the year 2017 from the United Nations Department of Economic and Social Affairs, Population Division (2017) for all countries, including the US. This means that the misperception estimates in Column 4 are identical to the original paper for the European countries, but different for the US. In Column 5, we use the share of foreign-born for 2015 from the OECD International Migration Outlook 2017 (2017), Statistical Annex, for all countries (OECD, 2017). The strength of this exercise is that all actual comparison data come from the same source and are for the same year. It also does not distinguish between documented and undocumented immigrants, which, despite the explicit emphasis in the survey questions on documented immigrants, might be more similar to what survey respondents have in mind when they think about "immigrants".

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