Migrazensus - Codebook

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The data

Around 6.3 million German voters in the 2017 federal election had a so-called migration background - that is, they or at least one parent was born abroad. Their overall share, about 10 percent of the electorate, will continue to rise in the coming years due to demographic trends and increasing naturalization rates among the 8 million foreign citizens in Germany. However, due to their supposedly small size and lack of voice, policymakers too often overlook their concerns. In cooperation with Citizens for Europe, we — Arndt Leininger (CorrelAid e.V. and Chemnitz University of Technology) and Julius Lagodny (Cornell University) – have therefore for the first time estimated how influential the voices of people with a migration background could be in the upcoming and subsequent federal elections.

To do so, we used Germany's micro census to estimate the number of eligible voters with an immigrant background for each of the 299 federal electoral districts. For each constituency (N = 299), the dataset (working title *Migrazensus*) contains:

- Information on the number of eligible voters with a migration background
- The number of residents with a migration background overall
- The results of the 2017 Bundestag election
- Socioeconomic and demographic structural data

The dataset, especially in combination with shapefiles provided by the Federal Returning Officer, thus offers a wide range of possibilities for data visualizations with a visual "wow" as well as a political "aha" factor.

Variables

Identifiers

- `wknr_2021`: Official ID number for electoral district
- `wkname_2021`: Name of electoral district
- `land`: Name of federal state
- `landid`: Official numeric ID for federal state

Estimates obtained from micro census

- `bevoelkerung`: Estimated population size for a district
- `wahlberechtigte`: Estimated number of eligible voters
- `wbmighintergrund_absolut`: Number of eligible citizen with migrant background
- `wbmighintergrund_anteil`: Share of eligible citizens with migrant background among all eligible voters
- `mighintergrund_absolut`: Number of residents with migrant background
- `mighintergrund_anteil`: Share of residents with migrant background among all residents (population)

2017 results within 2021 boundaries

(Source: https://www.bundeswahlleiter.de/bundestagswahlen/2021/wahlkreiseinteilung/umgerechnete-ergebnisse.html)

- `wahlberechtigte_2017`: Number of eligible voters
- `waehler`: Number of voters
- `gueltige_1`: Number of valid votes (Erststimme, i.e., vote for a district candidate)
- `gueltige_2`: Number of valid votes (Zweitstimme, i.e., vote for a district candidate)
- `cdu_1`: Number of votes for CDU (Erststimme)
- `cdu_2`: Number of votes for CDU (Zweitstimme)
- `spd_1`: Number of votes for SPD (Erststimme)
- `spd_2`: Number of votes for SPD (Zweitstimme)
- `linke_1`: Number of votes for Die Linke (Erststimme)
- `linke_2`: Number of votes for Die Linke (Zweitstimme)
- `gruene_1`: Number of votes for Bündnis 90/Die Grünen(Erststimme)
- `gruene_2`: Number of votes for Bündnis 90/Die Grünen(Zweitstimme)
- `csu_1`: Number of votes for CSU (Erststimme)
- `csu_2`: Number of votes for CSU (Zweitstimme)
- `fdp_1`: Number of votes for FDP (Erststimme)
- `fdp_2`: Number of votes for FDP (Zweitstimme)
- `afd_1`: Number of votes for AfD (Erststimme)
- `afd_2`: Number of votes for AfD (Zweitstimme)

Note: Turnout can be calculated as `waehler / wahlberechtigte_2017` *and vote shares as, for instance,* `cdu_1 / gueltige_1` *oder* `spd_2 / gueltige_2`*.*

Socioeconomic and demographic data

(Source: https://www.bundeswahlleiter.de/bundestagswahlen/2021/strukturdaten.html)

- `gemeinden`: Municipalities on 31.12.2019 (number)
- `flaeche`: Area on 31.12.2019 (km²)
- `bevoelkerung_strktr`: Population on 31.12.2019 - Total (in 1000)
- `bevoelkerung_deutsche`: Population on 31.12.2019 - Germans (in 1000)
- `bevoelkerung_auslaender`: Population on 31.12.2019 - Foreigners (%)
- `bevdichte`: Population density on 31.12.2019 (inhabitants per km²)
- `geburtensaldo`: Increase (+) or decrease (-) in population in 2019 - birth balance (per 1000 inhabitants)
- `wanderungssaldo`: Increase (+) or decrease (-) in population in 2019 - net migration (per 1000 inhabitants)
- `unter18`: Age from ... to ... years as of 12/31/2019 - under 18 (%)
- `v18b24`: Age from ... to ... years on 12/31/2019 - 18-24 (%)
- `v25b34`: Age from ... to ... years on 12/31/2019 - 25-34 (%)
- `v35b59`: Age from ... to ... years as of 12/31/2019 - 35-59 (%)
- `v60b74`: Age from ... to ... years on 12/31/2019 - 60-74 (%)
- `ue75`: Age from ... to ... years as of Dec. 31, 2019 - 75 and over (%)
- `boden_siedlung_verkehr`: Land area by type of actual use as of 12/31/2019 - settlement and transport (%).
- `boden_vegetation_wasser`: Land area by type of actual use as of 12/31/2019 - vegetation and water bodies (%).
- `wohnungen_neu`: Completed apartments 2019 (per 1000 inhabitants)
- `wohnungen_bestand`: Housing stock on 31.12.2019 - total (per 1000 inhabitants)
- `wohnflaeche_wohnung`: Living space on 31.12.2019 (per apartment)
- `wohnflaeche_einwohner`: Living space on 31.12.2019 (per inhabitant)
- `pkw`: Car population on 01.01.2020 - total cars (per 1000 inhabitants)
- `pkw_elektro_hybrid`: Cars on 01.01.2020 - cars with electric or hybrid drive (%)
- `unternehmen`: Business register 2018 - Total enterprises (per 1000 inhabitants)
- `handwerksunternehmen`: Business register 2018 - craft enterprises (per 1000 inhabitants)
- `absolventen_beruflich`: Business register 2018 - craft enterprises (per 1000 inhabitants)
- `absolventen_allg`: School leavers from general education schools in 2019 - total without external students (per 1,000 inhabitants)

- `absolventen_ohauptschule`: School leavers from general education schools in 2019 - without lower secondary school leaving certificate (%)
- `absolventen_hauptschule`: School leavers from general education schools in 2019 - with lower secondary school leaving certificate (%)
- `absolventeren_mittlerer`: School leavers from general education schools in 2019 - with intermediate school leaving certificate (%)
- `absolventen_hochschulreife`: School leavers from general secondary schools in 2019 - with general and advanced technical college entrance qualifications (%)
- `kindertagesbetreuung_u3`: Child day care on 01.03.2020 - Children under 3 years of age in care (care rate)
- `kindertagesbetreuung_ue3`: Child day care on 01.03.2020 - Children in care 3 to under 6 years (care rate)
- `hheinkommen`: Disposable income of private households 2018 (EUR per inhabitant)
- `bipkopf`: Gross Domestic Product 2018 (EUR per inhabitant)
- `beschaeftigte`: Employees subject to social security contributions on 30.06.2020 - total (per 1000 inhabitants)
- `beschaeftigte_land`: Employees subject to social security contributions as of 06/30/2020 - Agriculture, forestry, fishing (%)
- `beschaeftigte_produktion`: Employees subject to social security contributions as of 06/30/2020 - Manufacturing (%)
- `beschaeftigte_handel`: Employees subject to social security contributions as of 06/30/2020 - trade, hotels and restaurants, transport (%)
- `beschaeftigte_dienstleistungen`: Employees subject to social security contributions as of 06/30/2020 - Public and private service providers (%)
- `beschaeftigte_sonstige`: Employees subject to social security contributions as of 06/30/2020 - Other service providers and "not specified" (%)
- `alg2`: Recipients of benefits under SGB II October 2020 - total (per 1000 inhabitants)
- `alg2_hilfsb`: Recipients of benefits under SGB II October 2020 - persons not capable of working in need of assistance (%)
- `alg2_auslaender`: Recipients of benefits under SGB II October 2020 - Foreigners (%)
- `alq`: Unemployment rate February 2021 - total
- `alq_maenner`: Unemployment rate February 2021 - men
- `alq_frauen`: Unemployment rate February 2021 - women
- `alq_15_24`: Unemployment rate February 2021 - 15 to 24 years old
- `alq_55_64`: Unemployment rate February 2021 - 55 to 64 years old

Excerpt of the data

```
## Rows: 299
## Columns: 76
## $ wknr_2021                   <chr> "001", "002", "003", "004", "005", "006~
## $ wkname_2021                 <chr> "Flensburg - Schleswig", "Nordfriesland~
## $ land                        <chr> "Schleswig-Holstein", "Schleswig-Holste~
## $ landid                      <dbl> 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 2, 2, ~
## $ bevoelkerung                <dbl> 285551.2, 257325.5, 210136.1, 241908.2,~
## $ wahlberechtigte             <dbl> 230717.7, 213652.9, 172607.0, 201948.1,~
## $ wbmighintergrund_anteil     <dbl> 0.06901038, 0.05503848, 0.05704767, 0.0~
## $ wbmighintergrund_absolut    <dbl> 15921.920, 11759.132, 9846.825, 11548.5~
## $ mighintergrund_anteil       <dbl> 0.15900435, 0.13863604, 0.11008602, 0.1~
## $ mighintergrund_absolut      <dbl> 45403.87, 35674.59, 23133.04, 27013.76,~
## $ wahlberechtigte_2017        <dbl> 228471, 186568, 176636, 200831, 204650,~
## $ waehler                     <dbl> 171914, 139194, 132017, 157354, 153273,~
## $ gueltige_1                  <dbl> 170318, 137897, 130883, 156102, 151679,~
```

```
## $ gueltige_2                     <dbl> 170465, 138071, 130878, 156267, 152069,~
## $ cdu_1                          <dbl> 68120, 62256, 54812, 66625, 46560, 5310~
## $ cdu_2                          <dbl> 58320, 52928, 47366, 56585, 40736, 4377~
## $ spd_1                          <dbl> 47711, 34685, 34219, 45070, 46991, 3772~
## $ spd_2                          <dbl> 40388, 31120, 29756, 35766, 36208, 3101~
## $ linke_1                        <dbl> 12144, 7102, 7176, 8074, 11114, 7009, 1~
## $ linke_2                        <dbl> 14002, 8589, 8732, 9962, 15546, 8503, 1~
## $ gruene_1                       <dbl> 17911, 13026, 8791, 13978, 21743, 11736~
## $ gruene_2                       <dbl> 22304, 15144, 12960, 19337, 26143, 1635~
## $ csu_1                          <dbl> 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, ~
## $ csu_2                          <dbl> 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, ~
## $ fdp_1                          <dbl> 11147, 11105, 14440, 10077, 11363, 9379~
## $ fdp_2                          <dbl> 18955, 18050, 17298, 19071, 17804, 1648~
## $ afd_1                          <dbl> 10583, 8117, 10006, 10656, 9283, 10223,~
## $ afd_2                          <dbl> 11653, 9030, 11180, 11578, 10504, 11161~
## $ gemeinden                      <dbl> 126, 197, 178, 163, 3, 92, 49, 95, 49, ~
## $ flaeche                        <dbl> 2124.3, 2777.9, 2000.0, 2165.4, 143.0, ~
## $ bevoelkerung_strktr            <dbl> 291.300, 235.000, 221.000, 252.100, 268~
## $ bevoelkerung_deutsche          <dbl> 266.9, 218.3, 206.6, 238.2, 238.1, 203.~
## $ bevoelkerung_auslaender        <dbl> 8.4, 7.1, 6.5, 5.5, 11.4, 8.7, 11.1, 8.~
## $ bevdichte                      <dbl> 137.1, 84.6, 110.5, 116.4, 1879.2, 171.~
## $ geburtensaldo                  <dbl> -2.7, -5.2, -5.3, -3.8, -0.8, -4.0, -2.~
## $ wanderungssaldo                <dbl> 9.5, 8.3, 4.6, 8.6, -1.8, 5.1, 8.1, 5.7~
## $ unter18                        <dbl> 16.6, 15.6, 16.3, 16.9, 14.9, 16.1, 17.~
## $ v18b24                         <dbl> 8.4, 7.7, 7.2, 7.0, 10.6, 7.2, 7.1, 6.8~
## $ v25b34                         <dbl> 12.0, 11.0, 10.5, 9.9, 17.2, 10.6, 10.8~
## $ v35b59                         <dbl> 33.6, 34.0, 35.7, 35.9, 32.1, 34.6, 36.~
## $ v60b74                         <dbl> 17.6, 18.9, 18.2, 18.3, 14.6, 18.2, 16.~
## $ ue75                           <dbl> 11.9, 12.8, 12.2, 12.0, 10.5, 13.3, 12.~
## $ boden_siedlung_verkehr         <dbl> 12.4, 11.0, 11.5, 11.4, 50.8, 12.1, 22.~
## $ boden_vegetation_wasser        <dbl> 87.6, 89.0, 88.5, 88.6, 49.2, 87.9, 77.~
## $ wohnungen_neu                  <dbl> 6.4, 8.3, 3.8, 4.3, 3.1, 2.6, 5.0, 5.3,~
## $ wohnungen_bestand              <dbl> 523.1, 588.9, 505.4, 500.1, 546.7, 505.~
## $ wohnflaeche_wohnung            <dbl> 94.3, 94.6, 97.5, 99.0, 72.0, 90.7, 91.~
## $ wohnflaeche_einwohner          <dbl> 49.3, 55.7, 49.2, 49.5, 39.4, 45.8, 44.~
## $ pkw                            <dbl> 592.1, 620.2, 617.8, 634.0, 465.3, 588.~
## $ pkw_elektro_hybrid             <dbl> 1.0, 1.2, 0.9, 1.1, 1.5, 1.1, 1.4, 1.3,~
## $ unternehmen                    <dbl> 41.0, 56.1, 40.0, 37.9, 35.3, 37.6, 42.~
## $ handwerksunternehmen           <dbl> 6.9, 9.0, 6.9, 6.7, 4.3, 6.4, 6.9, 7.0,~
## $ absolventen_beruflich          <dbl> 4.8, 3.9, 2.9, 2.4, 6.0, 4.8, 2.2, 2.6,~
## $ absolventen_allg               <dbl> 10.2, 10.8, 10.6, 9.5, 9.0, 10.4, 10.6,~
## $ absolventen_ohauptschule       <dbl> 9.1, 9.6, 9.6, 9.5, 9.1, 9.8, 7.6, 8.4,~
## $ absolventen_hauptschule        <dbl> 17.7, 19.6, 17.8, 19.0, 15.8, 17.8, 15.~
## $ absolventeren_mittlerer        <dbl> 39.0, 44.0, 40.2, 35.7, 32.5, 35.4, 38.~
## $ absolventen_hochschulreife     <dbl> 34.2, 26.8, 32.4, 35.8, 42.5, 37.0, 38.~
## $ kindertagesbetreuung_u3        <dbl> 38.8, 31.7, 31.8, 36.9, 35.7, 34.1, 32.~
## $ kindertagesbetreuung_ue3       <dbl> 93.3, 93.2, 89.9, 92.1, 90.2, 87.2, 87.~
## $ hheinkommen                    <dbl> 21358, 24354, 22292, 23410, 19718, 2208~
## $ bipkopf                        <dbl> 31178, 34160, 31977, 29036, 46128, 2905~
## $ beschaeftigte                  <dbl> 345.0, 355.5, 313.4, 291.6, 490.7, 329.~
## $ beschaeftigte_land             <dbl> 1.7, 2.8, 3.0, 2.6, 0.2, 1.6, 2.2, 1.1,~
## $ beschaeftigte_produktion       <dbl> 19.3, 20.5, 27.7, 23.7, 16.4, 22.1, 29.~
## $ beschaeftigte_handel           <dbl> 27.0, 32.1, 22.3, 22.9, 19.7, 28.7, 29.~
## $ beschaeftigte_dienstleistungen <dbl> 15.4, 11.8, 15.1, 17.0, 24.8, 17.5, 14.~
```

```
## $ beschaeftigte_sonstige         <dbl> 36.7, 32.7, 32.0, 33.9, 38.9, 30.1, 25.~
## $ alg2                           <dbl> 76.8, 59.1, 70.6, 52.8, 125.2, 75.8, 67~
## $ alg2_hilfsb                    <dbl> 26.1, 26.1, 26.3, 29.6, 26.8, 27.7, 29.~
## $ alg2_auslaender                <dbl> 28.2, 23.8, 29.3, 33.2, 35.1, 30.1, 44.~
## $ alq                            <dbl> 7.0, 6.5, 6.4, 4.8, 8.4, 6.7, 5.9, 5.0,~
## $ alq_maenner                    <dbl> 7.7, 6.9, 6.8, 5.2, 9.2, 7.3, 6.3, 5.2,~
## $ alq_frauen                     <dbl> 6.2, 5.9, 6.1, 4.3, 7.4, 6.1, 5.4, 4.8,~
## $ alq_15_24                      <dbl> 5.9, 5.4, 7.0, 4.7, 5.1, 6.7, 5.3, 4.6,~
## $ alq_55_64                      <dbl> 7.6, 7.2, 6.4, 5.2, 8.4, 7.0, 6.1, 5.5,~
```