# **Data Analysis**

### Multivariate regression for the Speaker Corpus, EU.conducted in May 2022

```
## Loading required package: zoo
##
## Attaching package: 'zoo'
## The following objects are masked from 'package:base':
##
##
       as.Date, as.Date.numeric
##
## Please cite as:
   Hlavac, Marek (2018). stargazer: Well-Formatted Regression and Summary Statisti
cs Tables.
   R package version 5.2.2. https://CRAN.R-project.org/package=stargazer
## — Attaching packages —
                                                           --- tidyverse 1.3.0 -
## ✓ ggplot2 3.3.3
                                 0.3.4
                      √ purrr
## / tibble 3.0.6
                       ✓ dplyr
                                 1.0.4
## ✓ tidyr 1.1.2
                      ✓ stringr 1.4.0
## ✓ readr
            1.4.0
                       ✓ forcats 0.5.1
## - Conflicts -
                                                          - tidyverse_conflicts() -
## x dplyr::between() masks plm::between()
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()
                     masks plm::lag(), stats::lag()
## x dplyr::lead() masks plm::lead()
```

```
##
     Х
                    speaker gender member state EP
## 1 0 Magdalena Adamowicz
                                           Poland
          Marina Kaljurand
  2 1
                                  1
                                         Estonia
## 3 2
          Annalisa Tardino
                                  1
                                            Italy
                                                   1
## 4 3
             Laura Ferrara
                                  1
                                            Italy
                                                   1
##
  5 4
               Paulo Rangel
                                  0
                                        Portugal
##
  6 5
               Ismail Ertug
                                  0
                                         Germany
##
                                                                         party group
##
   1
                                                             European People's Party
   2 Progressive Alliance of Socialists and Democrats in the European Parliament
##
                                                       Identity and Democracy Group
##
                                                                Non-attached Members
## 5
                                                             European People's Party
##
   6 Progressive Alliance of Socialists and Democrats in the European Parliament
     Dominant Topic prev ai edu AI education prev global market Global market
##
  1
          Democracy
                      0.05868839
                                      5.868839
                                                        0.06620718
                                                                          6.620718
##
          Democracy
                      0.09129630
                                      9.129630
                                                        0.10314815
                                                                         10.314815
## 3
           Residual
                      0.07185990
                                      7.185990
                                                        0.06300322
                                                                          6.300322
## 4
          Democracy
                      0.06814548
                                      6.814548
                                                        0.05215827
                                                                          5.215827
## 5
           Residual
                      0.07921811
                                      7.921811
                                                        0.08991770
                                                                          8.991770
##
  6
                      0.08805556
                                      8.805556
                                                        0.10583333
                                                                         10.583333
          Democracy
##
     prev digital sov Digital sovereignty prev eu tech
##
  1
           0.07289056
                                   7.289056
                                               0.06787803
## 2
           0.15870370
                                  15.870370
                                               0.10166667
##
           0.05253623
                                   5.253623
                                               0.05817230
## 4
           0.12969624
                                  12.969624
                                               0.06894484
## 5
           0.05699588
                                   5.699588
                                               0.05617284
##
                                               0.09250000
           0.06361111
                                   6.361111
##
     European technology capacity prev democracy Democracy prev human rights
## 1
                          6.787803
                                          0.2842523
                                                     28.42523
                                                                       0.06620718
##
  2
                         10.166667
                                          0.2727778
                                                     27.27778
                                                                       0.09129630
##
                          5.817230
                                          0.1797504
                                                     17.97504
                                                                       0.08071659
##
                          6.894484
                                          0.3263389
                                                     32.63389
                                                                       0.09052758
## 5
                          5,617284
                                          0.1393004
                                                     13,93004
                                                                       0.06934156
##
                                                     24.36111
                                                                       0.10250000
  6
                          9.250000
                                          0.2436111
##
     Human rights prev residual Residuals
## 1
         6.620718
                       0.3838764
                                   38.38764
## 2
         9.129630
                       0.1811111
                                   18.11111
##
         8.071659
                       0.4939614
                                   49.39614
         9.052758
                       0.2641886
                                   26.41886
## 4
## 5
         6.934156
                       0.5090535
                                   50.90535
## 6
        10.250000
                       0.3038889
                                   30.38889
```

### 1 Check states

How many states does this dataset contain?

```
## [1] "number of states:"
```

```
## [1] 27

## [1] "number of parties:"

## [1] 18
```

## 2 Regression

### 2.1 OLS

Run a full model with all state individual effects and a fixed effects model for all topics and party groups

```
## Oneway (individual) effect Within Model
##
## Call:
## plm(formula = European_technology_capacity ~ gender + (member_state) +
       factor(party group), data = eu req, model = "within", index = "party group",
##
       type = "bp")
##
##
## Unbalanced Panel: n = 18, T = 1-40, N = 173
##
## Residuals:
##
       Min.
                       Median 3rd Qu.
             1st Qu.
                                           Max.
## -13.2088
           -3.9624 -1.0892
                                1.6477
                                         29.0686
##
## Coefficients:
##
                           Estimate Std. Error t-value Pr(>|t|)
## gender
                            1.03715
                                        1.39146
                                                 0.7454
                                                         0.45741
                           -2.24695
                                        5.93480 -0.3786
## member stateBelgium
                                                         0.70560
## member stateBulgaria
                            3.82192
                                       6.07423 0.6292
                                                        0.53033
## member_stateCroatia
                            8.06941
                                       5.94681 1.3569 0.17717
                                       6.71551 -0.0961
## member stateCyprus
                           -0.64547
                                                         0.92358
## member stateCzechia
                            1.08781
                                       6.04282 0.1800 0.85742
## member stateDenmark
                           -3.20352
                                       6.22319 - 0.5148
                                                        0.60759
## member stateEstonia
                           -1.58636
                                       9.55080 -0.1661
                                                         0.86834
## member stateFinland
                           13.59892
                                       7.51729 1.8090
                                                        0.07278
## member stateFrance
                           -0.69548
                                       5.33594 - 0.1303
                                                         0.89650
                           -0.44543
## member stateGermany
                                       5.03251 -0.0885
                                                         0.92961
## member stateGreece
                            2.32621
                                       6.05753 0.3840
                                                         0.70160
## member stateHungary
                            8.20031
                                       6.34836 1.2917
                                                         0.19876
## member stateIreland
                            9.65923
                                       6.60607 1.4622
                                                       0.14613
## member stateItaly
                            1.64570
                                        5.12521 0.3211
                                                         0.74865
## member stateLatvia
                           -3.51955
                                       9.68999 -0.3632
                                                         0.71704
## member stateLuxembourg
                           -5.30736
                                       7.44544 - 0.7128
                                                         0.47724
                            5.50416
## member_stateMalta
                                       7.63392 0.7210 0.47221
                                       5.52929 -0.5215
## member stateNetherlands -2.88333
                                                         0.60294
## member statePoland
                                       5.55573 0.9050
                                                        0.36716
                            5.02786
## member statePortugal
                            4.13057
                                       6.28967 0.6567
                                                         0.51253
## member stateRomania
                                        5.43297 0.7047
                            3.82866
                                                         0.48226
## member stateSlovakia
                            2.16207
                                        5.63153
                                                0.3839
                                                         0.70167
## member stateSlovenia
                                       6.62068 -0.7622
                           -5.04596
                                                         0.44736
## member stateSpain
                            1.98170
                                        5.21123 0.3803
                                                         0.70437
## member_stateSweden
                                       6.24764 0.4777
                            2.98421
                                                         0.63370
## ---
## Signif. codes:
                   0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Total Sum of Squares:
                            10063
## Residual Sum of Squares: 8258.4
## R-Squared:
                   0.17937
## Adj. R-Squared: -0.094172
## F-statistic: 1.08448 on 26 and 129 DF, p-value: 0.36862
```

```
## Oneway (individual) effect Within Model
##
## Call:
## plm(formula = Digital_sovereignty ~ gender + (member_state) +
##
       factor(party_group), data = eu_reg, model = "within", index = "party_group")
##
## Unbalanced Panel: n = 18, T = 1-40, N = 173
##
## Residuals:
##
        Min.
               1st Ou.
                          Median
                                   3rd Ou.
                                                Max.
## -13.71232
             -3.26703
                       -0.37012
                                   2.00507
                                            25.37888
##
## Coefficients:
##
                              Estimate Std. Error t-value Pr(>|t|)
## gender
                            0.81981079
                                        1.12838341 0.7265
                                                             0.4688
## member stateBelgium
                            1.60940794
                                        4.81273370 0.3344
                                                             0.7386
## member stateBulgaria
                            2.67792635
                                        4.92579879 0.5437
                                                             0.5876
                                        4.82246903 -0.2808
## member stateCroatia
                           -1.35404848
                                                             0.7793
## member stateCyprus
                           -0.75314636
                                       5.44583042 -0.1383
                                                             0.8902
## member_stateCzechia
                            4.35450126
                                       4.90032506 0.8886
                                                             0.3759
## member_stateDenmark
                           -0.00037266
                                        5.04659147 -0.0001
                                                             0.9999
## member stateEstonia
                            5.98972136
                                        7.74507062 0.7734
                                                             0.4407
## member stateFinland
                            7.56508475
                                        6.09602656 1.2410
                                                             0.2169
## member stateFrance
                            1.13384091
                                        4.32709598
                                                    0.2620
                                                             0.7937
## member stateGermany
                                        4.08102875
                            2.98426172
                                                    0.7313
                                                             0.4660
## member stateGreece
                            2.06111567
                                        4.91225647
                                                    0.4196
                                                             0.6755
## member stateHungary
                            4.82638340
                                        5.14810189
                                                    0.9375
                                                             0.3502
                                        5.35708827 2.1757
## member stateIreland
                           11.65521788
                                                             0.0314 *
## member stateItaly
                            5.34536687
                                        4.15620278
                                                    1.2861
                                                             0.2007
## member_stateLatvia
                            4.39624258
                                       7.85793832 0.5595
                                                             0.5768
## member stateLuxembourg -3.97002610
                                        6.03775915 - 0.6575
                                                             0.5120
## member stateMalta
                            2.81420634
                                        6.19060126 0.4546
                                                             0.6502
## member stateNetherlands 1.50261669
                                        4.48388531
                                                    0.3351
                                                             0.7381
## member statePoland
                            4.14520738
                                        4.50533074 0.9201
                                                             0.3593
## member statePortugal
                            0.01260901
                                        5.10050438
                                                    0.0025
                                                             0.9980
## member stateRomania
                            3.81571826
                                        4.40578054 0.8661
                                                             0.3881
## member stateSlovakia
                           -0.31577847
                                        4.56679476 -0.0691
                                                             0.9450
## member stateSlovenia
                           -1.53122578
                                        5.36893152 -0.2852
                                                             0.7759
## member stateSpain
                            3.41614589
                                        4.22595869
                                                    0.8084
                                                             0.4204
## member stateSweden
                            0.50226103
                                        5.06642215
                                                    0.0991
                                                             0.9212
## ---
                   0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Signif. codes:
##
## Total Sum of Squares:
                            6415
## Residual Sum of Squares: 5430.8
## R-Squared:
                   0.15342
## Adj. R-Squared: -0.12877
## F-statistic: 0.899162 on 26 and 129 DF, p-value: 0.60891
```

```
## Oneway (individual) effect Within Model
##
## Call:
## plm(formula = Democracy ~ gender + (member_state) + factor(party_group),
##
       data = eu reg, model = "within", index = "party group")
##
## Unbalanced Panel: n = 18, T = 1-40, N = 173
##
## Residuals:
##
       Min. 1st Ou.
                      Median 3rd Ou.
                                           Max.
## -14.9208 -5.2811 -1.3546
                                3.3225
                                        24.6758
##
## Coefficients:
##
                           Estimate Std. Error t-value Pr(>|t|)
## gender
                           -1.08291
                                       1.51800 -0.7134
                                                        0.47690
## member stateBelgium
                            2.24597
                                       6.47449 0.3469
                                                        0.72923
                                       6.62660 0.2232 0.82377
## member stateBulgaria
                           1.47873
## member stateCroatia
                           -2.78139
                                       6.48759 - 0.4287
                                                        0.66884
## member_stateCyprus
                           -2.76065
                                       7.32619 -0.3768 0.70693
## member stateCzechia
                                       6.59233 -0.5641 0.57369
                           -3.71853
## member stateDenmark
                                       6.78910 1.0633 0.28964
                            7.21874
## member stateEstonia
                           16.15898
                                      10.41932 1.5509 0.12338
## member stateFinland
                            1.08901
                                       8.20088 0.1328
                                                        0.89456
## member stateFrance
                                       5.82117 -0.0449
                           -0.26109
                                                       0.96430
## member stateGermany
                            0.21378
                                       5.49014 0.0389
                                                        0.96900
## member stateGreece
                           -1.05147
                                       6.60838 -0.1591 0.87383
## member stateHungary
                           -1.00451
                                       6.92566 -0.1450 0.88490
                                       7.20680 -1.0534
## member stateIreland
                           -7.59195
                                                       0.29411
## member_stateItaly
                                       5.59127 -0.4389 0.66144
                           -2.45423
## member stateLatvia
                                      10.57116 1.4612
                           15.44690
                                                        0.14638
## member stateLuxembourg
                          11.84659
                                       8.12250 1.4585 0.14714
## member stateMalta
                           -2.67588
                                       8.32811 -0.3213 0.74850
## member_stateNetherlands -0.95386
                                       6.03210 -0.1581 0.87460
                           -3.13177
                                       6.06095 -0.5167
## member statePoland
                                                        0.60624
## member statePortugal
                           -3.90332
                                       6.86162 -0.5689 0.57044
                                       5.92702 -0.0578 0.95402
## member stateRomania
                           -0.34239
## member stateSlovakia
                                       6.14363 0.0246
                            0.15106
                                                        0.98042
## member stateSlovenia
                           18.40134
                                       7.22274 2.5477
                                                        0.01202 *
## member stateSpain
                                       5.68511 -0.1479
                                                        0.88266
                           -0.84079
## member stateSweden
                           1.10459
                                       6.81577 0.1621
                                                        0.87151
## ---
## Signif. codes:
                   0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Total Sum of Squares:
                            12409
## Residual Sum of Squares: 9828.6
## R-Squared:
                   0.20795
## Adj. R-Squared: -0.056068
## F-statistic: 1.30262 on 26 and 129 DF, p-value: 0.16886
```

```
## Oneway (individual) effect Within Model
##
## Call:
## plm(formula = AI_education ~ gender + (member_state) + factor(party_group),
##
       data = eu reg, model = "within", index = "party group")
##
## Unbalanced Panel: n = 18, T = 1-40, N = 173
##
## Residuals:
##
       Min.
               1st Ou.
                          Median
                                   3rd Ou.
                                                Max.
## -14.55438 -4.33869 -0.87304
                                   1.72356
                                           26.69753
##
## Coefficients:
##
                            Estimate Std. Error t-value Pr(>|t|)
## gender
                            3.862142
                                       1.418061 2.7235 0.007354 **
## member stateBelgium
                           -0.190375
                                       6.048253 -0.0315 0.974939
                                       6.190344 -0.3371 0.736605
## member stateBulgaria
                           -2.086637
## member stateCroatia
                           -1.448733
                                       6.060488 -0.2390 0.811450
## member_stateCyprus
                            7.731673
                                       6.843878 1.1297 0.260690
## member stateCzechia
                                       6.158331 0.5063 0.613524
                            3.117844
## member stateDenmark
                                       6.342147 1.0684 0.287316
                            6.776217
## member stateEstonia
                           -4.020786
                                       9.733377 -0.4131 0.680225
## member stateFinland
                           -8.558139
                                       7.660992 -1.1171 0.266025
## member stateFrance
                                       5.437943 1.0508 0.295337
                            5.713928
## member stateGermany
                            2.324996
                                       5.128706 0.4533 0.651073
## member stateGreece
                            2.160493
                                       6.173325 0.3500 0.726930
## member stateHungary
                                       6.469717 0.4111 0.681681
                            2.659706
## member stateIreland
                                       6.732354 -0.3874 0.699113
                           -2.607982
## member stateItaly
                                       5.223179 0.3566 0.721943
                            1.862801
## member stateLatvia
                                       9.875220 -0.4572 0.648324
                           -4.514576
## member stateLuxembourg
                          -2.262676
                                       7.587766 -0.2982 0.766030
## member stateMalta
                           -0.004917
                                       7.779846 -0.0006 0.999497
## member_stateNetherlands -1.084173
                                       5.634983 -0.1924 0.847731
## member statePoland
                                       5.661934 -0.4214 0.674145
                           -2.386093
## member statePortugal
                                       6.409900 1.3468 0.180399
                            8.633001
                            0.226541 5.536828 0.0409 0.967427
## member stateRomania
## member stateSlovakia
                            1.310337
                                       5.739177 0.2283 0.819763
## member stateSlovenia
                           -0.890272
                                       6.747238 -0.1319 0.895232
## member stateSpain
                                       5.310842 1.5715 0.118521
                            8.345884
                           -0.079673 6.367068 -0.0125 0.990035
## member stateSweden
## ---
## Signif. codes:
                   0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Total Sum of Squares:
                            10890
## Residual Sum of Squares: 8577.1
## R-Squared:
                   0.21242
## Adj. R-Squared: -0.050112
## F-statistic: 1.33815 on 26 and 129 DF, p-value: 0.14635
```

```
## Oneway (individual) effect Within Model
##
## Call:
## plm(formula = Human_rights ~ gender + (member_state) + factor(party_group),
##
       data = eu reg, model = "within", index = "party group")
##
## Unbalanced Panel: n = 18, T = 1-40, N = 173
##
## Residuals:
##
        Min.
               1st Ou.
                          Median
                                    3rd Ou.
                                                 Max.
## -12.22034 -3.67923 -0.97739
                                    1.29969
                                             31.79949
##
## Coefficients:
##
                           Estimate Std. Error t-value Pr(>|t|)
## gender
                           -1.41440
                                        1.30802 -1.0813
                                                           0.2816
## member stateBelgium
                            2.19717
                                        5.57893 0.3938
                                                           0.6944
                                        5.70999 1.5925
## member stateBulgaria
                            9.09313
                                                           0.1137
## member stateCroatia
                            3.04292
                                        5.59021 0.5443
                                                           0.5872
## member_stateCyprus
                            5.17307
                                        6.31281 0.8195
                                                          0.4140
## member stateCzechia
                                        5.68046 1.0821
                            6.14688
                                                           0.2812
## member stateDenmark
                            0.62144
                                        5.85002 0.1062
                                                           0.9156
## member stateEstonia
                           -2.64137
                                        8.97810 - 0.2942
                                                           0.7691
## member stateFinland
                           -2.91841
                                        7.06652 - 0.4130
                                                           0.6803
## member stateFrance
                            3.82909
                                        5.01598 0.7634
                                                           0.4466
## member stateGermany
                            0.73936
                                        4.73073
                                                0.1563
                                                           0.8761
## member stateGreece
                            4.93566
                                        5.69429 0.8668
                                                           0.3877
## member stateHungary
                                        5.96769 -0.4380
                                                           0.6621
                           -2.61377
## member stateIreland
                           -2.67037
                                        6.20994 - 0.4300
                                                           0.6679
## member_stateItaly
                                        4.81788 -0.2376
                                                           0.8125
                           -1.14492
## member stateLatvia
                             2.16951
                                        9.10893 0.2382
                                                           0.8121
## member stateLuxembourg -1.20177
                                        6.99898 - 0.1717
                                                           0.8639
## member stateMalta
                            0.17943
                                        7.17615
                                                0.0250
                                                           0.9801
## member_stateNetherlands 2.30494
                                        5.19773 0.4435
                                                           0.6582
                                        5.22259 -0.1719
## member statePoland
                           -0.89773
                                                           0.8638
                           -3.70359
## member statePortugal
                                        5.91251 -0.6264
                                                           0.5322
                                        5.10719 -0.5543
## member stateRomania
                           -2.83109
                                                          0.5803
## member stateSlovakia
                                        5.29383 0.4730
                            2.50383
                                                           0.6370
## member stateSlovenia
                           -3.14723
                                        6.22367 - 0.5057
                                                           0.6139
## member stateSpain
                            0.24130
                                        4.89874
                                                0.0493
                                                           0.9608
                                        5.87300 -0.0484
## member stateSweden
                           -0.28410
                                                           0.9615
##
## Total Sum of Squares:
                            8656.2
## Residual Sum of Squares: 7297.7
## R-Squared:
                   0.15694
## Adj. R-Squared: -0.12408
## F-statistic: 0.923621 on 26 and 129 DF, p-value: 0.5755
```

```
## Oneway (individual) effect Within Model
##
## Call:
## plm(formula = Global_market ~ gender + (member_state) + factor(party_group),
##
       data = eu reg, model = "within", index = "party group")
##
## Unbalanced Panel: n = 18, T = 1-40, N = 173
##
## Residuals:
##
      Min. 1st Ou. Median 3rd Ou.
                                       Max.
## -9.8123 -4.4240 -1.1323 1.5430 22.7529
##
## Coefficients:
##
                            Estimate Std. Error t-value Pr(>|t|)
## gender
                             -1.37415
                                         1.32093 -1.0403
                                                          0.30015
## member stateBelgium
                            -1.97573
                                         5.63397 -0.3507
                                                          0.72640
                                         5.76633 -1.2350
## member stateBulgaria
                            -7.12141
                                                          0.21908
## member stateCroatia
                            -4.13374
                                         5.64536 -0.7322
                                                          0.46535
## member_stateCyprus
                            -7.78834
                                         6.37509 -1.2217
                                                          0.22406
## member stateCzechia
                                         5.73650 -0.7596
                            -4.35761
                                                          0.44886
## member stateDenmark
                                         5.90773 -1.5780
                            -9.32236
                                                          0.11702
## member stateEstonia
                            -7.73232
                                         9.06667 -0.8528
                                                          0.39533
## member stateFinland
                            -4.47396
                                         7.13624 -0.6269
                                                          0.53181
## member stateFrance
                                         5.06546 -1.5270
                            -7.73488
                                                          0.12921
## member stateGermany
                            -2.70973
                                         4.77741 - 0.5672
                                                          0.57157
## member stateGreece
                            -7.02535
                                         5.75047 -1.2217
                                                          0.22405
## member stateHungary
                            -7.83382
                                         6.02656 - 1.2999
                                                          0.19596
                                         6.27121 -0.3529
## member stateIreland
                            -2.21292
                                                          0.72476
## member stateItaly
                                         4.86541 -0.9836
                            -4.78575
                                                          0.32714
## member stateLatvia
                                         9.19880 -0.5761
                             -5.29899
                                                          0.56558
## member stateLuxembourg
                             2.05209
                                         7.06803 0.2903
                                                          0.77203
## member stateMalta
                           -11.33511
                                         7.24695 - 1.5641
                                                          0.12024
## member_stateNetherlands -3.07966
                                         5.24900 -0.5867
                                                          0.55842
                                         5.27411 -0.8888
                                                          0.37575
## member statePoland
                            -4.68781
## member statePortugal
                            -5.48253
                                         5.97084 -0.9182
                                                          0.36022
                                         5.15757 -0.6989
## member stateRomania
                            -3.60443
                                                          0.48590
## member stateSlovakia
                                         5.34606 -1.4633
                            -7.82276
                                                          0.14582
## member stateSlovenia
                           -11.27384
                                         6.28507 -1.7937
                                                          0.07520 .
## member stateSpain
                            -8.79249
                                         4.94707 -1.7773
                                                          0.07787 .
                                         5.93094 0.0201
## member stateSweden
                             0.11908
                                                          0.98401
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Total Sum of Squares:
                             8648
## Residual Sum of Squares: 7442.4
## R-Squared:
                   0.13942
## Adj. R-Squared: -0.14745
## F-statistic: 0.803776 on 26 and 129 DF, p-value: 0.73585
```

## [1] "/Users/charlottekaiser/Documents/uni/Hertie/master\_thesis/10\_code/10\_analys
is"

## [1] "/Users/charlottekaiser/Documents/uni/Hertie/master\_thesis/20\_results/10\_ana
lysis/LDA\_speaking-points"

### Save table output

```
##
## <caption><strong>Multivariate OLS Regressions f
or various topics</strong></caption>
## style="border-bottom" type="border-bottom" type="border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-border-bor
le="text-align:left">Digital sovereigntyDemocracy<t
d>AI educationHuman rightsGlobal market
## (1)(2)(3)<(4)
(5)(6)
## sty
le="text-align:left">Gender (1 = female/0 = male1.03720.8198
-1.08293.8621<sup>***</sup>-1.4144-1.3742
## (1.3915)(1.1284)(1.51
80)(1.4181)(1.3080)(1.3209)
## member stateBelgium-2.24701.60
942.2460-0.19042.1972-1.9757
## (5.9348)(4.8127)(6.47
45)(6.0483)(5.5789)(5.6340)
## member stateBulgaria3.82192.67
791.4787-2.08660.0931-7.1214
## (6.0742)(4.9258)(6.62
66)(6.1903)(5.7100)(5.7663)
## member stateCroatia8.0694-1.35
40-2.7814-1.44873.0429-4.1337
## (5.9468)(4.8225)(6.48
76)(6.0605)(5.5902)(5.6454)
## member stateCyprus-0.6455-0.75
31-2.76077.73175.1731-7.7883
## (6.7155)(5.4458)(7.32
62)(6.8439)(6.3128)(6.3751)
## member stateCzechia1.08784.354
5-3.7185-4.3576
## (6.0428)(4.9003)(6.59
23)(6.1583)(5.6805)(5.7365)
## member stateDenmark-3.2035-0.0
0047.21876.77620.6214-9.3224
## (6.2232)(5.0466)(6.78
91)(6.3421)(5.8500)(5.9077)
## member_stateEstonia-1.58645.98
9716.1590-4.0208-2.6414-7.7323
## (9.5508)(7.7451)(10.4
```

```
193)(9.7334)(8.9781)(9.0667)
## member stateFinland13.5989<sup>*</sup><
/td>7.56511.0890-8.5581-2.9184-4.4740<
/tr>
## (7.5173)(6.0960)(8.20
09)(7.6610)(7.1362)
## member_stateFrance-0.69551.133
8-0.26115.71393.8291-7.7349
## (5.3359)(4.3271)(5.82)
12)(5.4379)(5.0160)(5.0655)
## member stateGermany-0.44542.98
430.21382.32500.7394-2.7097
## (5.0325)(4.0810)(5.49
01)(5.1287)(4.7307)(4.7774)
## member stateGreece2.32622.0611
-1.05152.16054.9357-7.0254
## (6.0575)(4.9123)(6.60
84)(6.1733)(5.6943)(5.7505)
## member stateHungary8.20034.826
4-1.00452.6597-2.6138-7.8338
## (6.3484)(5.1481)(6.92
57)(6.4697)(5.9677)(6.0266)
## member stateIreland9.659211.65
52<sup>**</sup>-7.5920-2.6080-2.6704-2.2129</td
## (6.6061)(5.3571)(7.20
68)(6.7324)(6.2099)(6.2712)
## member stateItaly1.64575.3454
/td>-2.45421.8628-1.1449-4.7857
## (5.1252)(4.1562)(5.59
13)(5.2232)(4.8179)(4.8654)
## member_stateLatvia-3.51954.396
215.4469-4.51462.1695-5.2990
## (9.6900)(7.8579)(10.5
712)(9.8752)(9.1089)(9.1988)
## member stateLuxembourg-5.3074
3.970011.8466-2.2627-1.20182.0521
## (7.4454)(6.0378)(8.12
25)(7.5878)(6.9990)(7.0680)
## member stateMalta5.50422.8142
/td>-2.6759-0.00490.1794-11.3351
## (7.6339)(6.1906)(8.32)
81)(7.7798)(7.1762)(7.2470)
## member stateNetherlands-2.8833+td><
1.5026  -0.9539  -1.0842  -2.3049  -3.0797   -3.0797  -3.0797  -3.0797   -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797  -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.0797 > -3.079
## (5.5293)(4.4839)(6.03
21)(5.6350)(5.1977)(5.2490)
## member statePoland5.02794.1452
-3.1318-2.3861-0.8977-4.6878
## (5.5557)(4.5053)(6.06
09)(5.6619)(5.2226)(5.2741)
```

```
## member statePortugal4.13060.01
26-3.90338.6330-3.7036-5.4825
## (6.2897)(5.1005)(6.86
16)(6.4099)(5.9125)(5.9708)
## member stateRomania3.82873.815
7-0.34240.2265-2.8311-3.6044
## (5.4330)(4.4058)(5.92
70)(5.5368)(5.1576)
## member stateSlovakia2.1621-0.3
1580.15111.31032.5038-7.8228
## (5.6315)(4.5668)(6.14
36)(5.7392)(5.2938)(5.3461)
## member_stateSlovenia-5.0460-1.
531218.4013<sup>**</sup>0.8903-3.1472-11.2738
sup>*</sup>
## (6.6207)(5.3689)(7.22
27)(6.7472)(6.2237)(6.2851)
## member stateSpain1.98173.4161
/td>-0.84088.34590.2413-8.7925<sup>*</sup>
## (5.2112)(4.2260)(5.68
51)(5.3108)(4.8987)(4.9471)
## member stateSweden2.98420.5023
1.1046-0.0797-0.28410.1191
## (6.2476)(5.0664)(6.81
58)(6.3671)(5.8730)(5.9309)
## N173173173173
3173
## R<sup>2</sup>0.17940.1534
0.20790.21240.15690.1394
## Adjusted R<sup>2</sup>-0.0942--
0.1288-0.0561-0.0501-0.1241-0.1474
## col
span="7" style="text-align:left">Standard errors given in parentheses.
## ***p<0.01; **p<0.05; *p<0.1.</td>
r>
## Prevalence measured in %
##
```