Religiosity, Ideology and Voting

1. Introduction

The main purpose of this note is to describe the results of a two-stage least squares analysis of the two following relationships: the effect of religiosity on ideology and the effect of ideology on voting behaviour.

The outline of this note is as follows:

In Section two we give a summary of the technique of instrumental variables and the two-stage least squares estimator that we will use for the analyses. In particular, we aim to give an intuitive explanation as to why this method is preferred to ordinary least squares in our case. In Section 3 and Section 4 the results of our analyses will be presented. Section 5 summarizes.

2. Instrumental Variables

Consider the problem of estimating the parameters of a linear model that relates a dependent variable y to a set of regressor variables x_1 to x_k and a disturbance term ε:

$$y_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \ldots + \beta_k x_{ki} + \varepsilon_i$$

Under standard conditions, the parameters β_0 to β_k can be efficiently estimated by the method of Ordinary Least Squares. In our case, the standard conditions are not all satisfied.

In particular, the condition that all regressors x are all uncorrelated with the disturbance ε is not satisfied. To see this, consider the regression model with y=Ideology, x_1=Religiosity and some other regressors that serve as control variables. In that regression model, the disturbance term ε is supposed to capture everything related to the dependent variable that is unobserved, i.e. that is not captured by any of the regressors in the model. In this particular case, ε could include unobserved characteristics related to ideology that are not included in the model by means of Religiosity and other regressors. It could be that subjects with a high score on Ideology tend to have a high score on an unobserved variable like "the propensity to self-guidance by means of moral standards." If we label the latter variable w (and keeping in mind that w is unobserved, hence part of the error ε), we can argue that the covariance between w and the regressor Religiosity is non-zero ($\text{cov}(w, x_1) \neq 0$). As w is part of the disturbance ε, this implies that the covariance between ε and the regressor is non-zero ($\text{cov}(\varepsilon, x_1) \neq 0$), a violation of one of the standard assumption

for OLS to be a valid procedure. Under these circumstances OLS estimates are biased and inconsistent and another estimation procedure is needed.

The estimation procedure that was devised to solve the problem of endogenous regressors (i.e. regressors that are correlated with the disturbance) is the method of Instrumental Variables (IV). In short, it exploits the availability of another variable (a so-called Instrumental Variable or IV) to obtain a consistent estimate of the parameters. This Instrumental Variable (that we label z) is a variable that has to satisfy two conditions:

1. It is uncorrelated with the disturbance ($\text{cov}(z, \varepsilon) = 0$)
2. It is correlated with the endogenous regressor ($\text{cov}(z, x_1) = 0$)

Using the observations that we have on the variables y, x_1 and z in the formula of the IV-estimator, we obtain the so-called IV-estimates of the parameters. If there are several endogenous regressors, we will need to find a suitable IV for each endogenous regressor.

Instrumental Variables are not always easily available for the problem at hand. However, there are cases where even more than one IV available is available for one of more of the endogenous regressors. In that case, a generalization of IV called Two-Stage-Least-Squares (2SLS) can be used. It can be shown that it is statistically efficient to include all instrumental variables available in the estimation process. Using 2SLS instead of IV in that case would in principle reduce the variance of our estimates and hence increase precision.

3. Impact of Religiosity on Ideology

For these IV and 2SLS regressions we used the subgroup mature==0.

In the first case, we instrument the variable religious, which is suspected to be endogenous, with the variable attendance. The IV-estimation results are:

```
IV (2SLS) regression with robust standard errors       Number of obs =    4936
                                                       F(  7,  4928) =   59.64
                                                       Prob > F      =  0.0000
                                                       R-squared     =       .
                                                       Root MSE      =  2.3519

------------------------------------------------------------------------------
             |               Robust
  leftright |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   religious |  -3.021852   .2263548   -13.35   0.000    -3.465608   -2.578095
         age |    .032618   .0079638     4.10   0.000     .0170054    .0482306
       class |   .0124774   .0475356     0.26   0.793    -.0807136    .1056683
educagefin~d |   .0418156   .0171498     2.44   0.015     .0081943    .0754369
    proudnat |  -.1723573   .0552461    -3.12   0.002    -.2806643   -.0640503
```

```
   incomcat |   .0954493   .0194161     4.92   0.000     .0573852    .1335135
     cohort |    .205295   .0774229     2.65   0.008     .0535116    .3570784
      _cons |   6.254152    .764548     8.18   0.000     4.755297    7.753007
```

If we instrument the endogenous variable with two instrumental variables, attendance and God, the "SLS procedure gives:

```
IV (2SLS) regression with robust standard errors       Number of obs =    4936
                                                       F(  7,  4928) =   71.82
                                                       Prob > F      =  0.0000
                                                       R-squared     =  0.0362
                                                       Root MSE      =  1.9993

------------------------------------------------------------------------------
             |               Robust
   leftright |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   religious |  -1.715986   .1388874   -12.36   0.000    -1.988267   -1.443705
         age |   .0289814   .0067404     4.30   0.000     .0157671    .0421956
       class |   .0269817   .0403266     0.67   0.503    -.0520764    .1060399
educagefin~d |    .037336   .0146206     2.55   0.011     .0086731    .0659989
    proudnat |  -.2851793   .0449801    -6.34   0.000    -.3733604   -.1969981
    incomcat |   .0937474   .0161219     5.81   0.000     .0621413    .1253535
      cohort |   .1052469   .0649024     1.62   0.105    -.0219907    .2324845
       _cons |   5.382771    .642483     8.38   0.000     4.123218    6.642324
------------------------------------------------------------------------------
```

If we use three instruments for religious, attendance God and afterlife,, we obtain:

```
IV (2SLS) regression with robust standard errors       Number of obs =    4936
                                                       F(  7,  4928) =   72.26
                                                       Prob > F      =  0.0000
                                                       R-squared     =  0.0383
                                                       Root MSE      =  1.9971

------------------------------------------------------------------------------
             |               Robust
   leftright |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   religious |  -1.703859   .1371025   -12.43   0.000    -1.972641   -1.435077
         age |   .0289476   .0067313     4.30   0.000     .0157512    .042144
       class |   .0271164   .0402748     0.67   0.501    -.0518402    .106073
educagefin~d |   .0372944   .0146053     2.55   0.011     .0086615    .0659274
    proudnat |  -.2862269   .0448406    -6.38   0.000    -.3741345   -.1983194
    incomcat |   .0937316   .0160988     5.82   0.000     .0621708    .1252923
      cohort |   .1043178   .0647879     1.61   0.107    -.0226952    .2313309
       _cons |   5.374679   .6418469     8.37   0.000     4.116373    6.632985
------------------------------------------------------------------------------
```

If we use God, afterlife and soul:

```
IV (2SLS) regression with robust standard errors      Number of obs =    4420
                                                      F(  7,  4412) =   67.51
                                                      Prob > F      =  0.0000
                                                      R-squared     =  0.0458
                                                      Root MSE      =  1.9983

------------------------------------------------------------------------------
             |               Robust
  leftright |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
  religious |  -1.713414   .1320648   -12.97   0.000    -1.972327   -1.454501
        age |   .0263031   .0071368     3.69   0.000     .0123113    .0402948
      class |    .013447   .0420216     0.32   0.749    -.0689364    .0958304
educagefin~d |   .0324054   .0155476     2.08   0.037     .0019243    .0628865
   proudnat |  -.2586669   .0474302    -5.45   0.000    -.3516539   -.1656798
   incomcat |   .0937867   .0168733     5.56   0.000     .0607066    .1268669
     cohort |   .0710014   .0687341     1.03   0.302    -.0637519    .2057548
      _cons |   5.760153   .6760716     8.52   0.000     4.434714    7.085593
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```

From the results it seems that an estimate of around –1.7 for religiousity seems ratehr robust to the choice of instrumental variables used. These regressions seem therefore to give mklost credible results.

3. Impact of Ideology on Voting

The dependent variable is vote, a categorical variable. Hence, least squares procedures are not possible in this case. We model the categorical dependent variable by means of a multinomial logit model which we estimate by maximum likelihood. Group1, the largest group, is the reference group. In a sense, the estimation results for each group represents differences with the reference group. The estimation results are as follows[1]:

```
Multinomial logistic regression                 Number of obs   =       6401
                                                LR chi2(168)    =    1789.18
                                                Prob > chi2     =     0.0000
Log likelihood = -12732.208                     Pseudo R2       =     0.0656

------------------------------------------------------------------------------
        vote |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
2            |
  leftright |  -.1318709   .0186098    -7.09   0.000    -.1683454   -.0953963
  religious |   .1296063    .060819     2.13   0.033     .0104033    .2488094
        age |  -.0145048   .0086405    -1.68   0.093    -.0314399    .0024302
      class |   .1854329   .0323343     5.73   0.000     .1220588     .248807
educagefin~d |    .000517   .0161094     0.03   0.974    -.0310569    .0320909
```

[1] no weights were used in this analysis.

```
    proudnat |   .1770176   .0522921     3.39   0.001     .0745269    .2795083
    incomcat |   .0351985   .0151409     2.32   0.020     .0055228    .0648741
      cohort |  -.1262979   .0828459    -1.52   0.127    -.2886729     .036077
       _cons |   .4007068   .8401333     0.48   0.633    -1.245924    2.047338
-------------+----------------------------------------------------------------
3            |
   leftright |  -.1348326   .0191558    -7.04   0.000    -.1723773    -.097288
   religious |   .1488916   .0614894     2.42   0.015     .0283746    .2694087
         age |   .0265548   .0093019     2.85   0.004     .0083235    .0447862
       class |  -.0023892   .0319176    -0.07   0.940    -.0649465    .0601681
educagefin~d |   .0059456   .0163826     0.36   0.717    -.0261637    .0380548
    proudnat |   .2462495   .0527009     4.67   0.000     .1429576    .3495414
    incomcat |  -.0287594   .0149277    -1.93   0.054     -.058017    .0004983
      cohort |   .3050967    .089783     3.40   0.001     .1291252    .4810681
       _cons |  -2.859344   .8992334    -3.18   0.001    -4.621809   -1.096879
-------------+----------------------------------------------------------------
4            |
   leftright |    -.11163   .0263775    -4.23   0.000     -.163329    -.059931
   religious |   .1193468    .083111     1.44   0.151    -.0435478    .2822414
         age |  -.0405436   .0120421    -3.37   0.001    -.0641458   -.0169415
       class |   .1248103   .0446189     2.80   0.005     .0373589    .2122617
educagefin~d |   .0836354   .0226677     3.69   0.000     .0392076    .1280632
    proudnat |   .2778399   .0701182     3.96   0.000     .1404108    .4152691
    incomcat |  -.0744833   .0206558    -3.61   0.000     -.114968   -.0339987
      cohort |  -.3144816   .1149971    -2.73   0.006    -.5398718   -.0890913
       _cons |   .4139417   1.177964     0.35   0.725    -1.894826    2.722709
-------------+----------------------------------------------------------------
5            |
   leftright |  -.2881627   .0298532    -9.65   0.000    -.3466738   -.2296516
   religious |  -.1835064   .0847817    -2.16   0.030    -.3496755   -.0173372
         age |   .0046998   .0139427     0.34   0.736    -.0226275    .0320271
       class |  -.1026957   .0476219    -2.16   0.031    -.1960329   -.0093585
educagefin~d |   .1229613   .0251836     4.88   0.000     .0736024    .1723201
    proudnat |   .5604327   .0703718     7.96   0.000     .4225065    .6983589
    incomcat |  -.0551619   .0212098    -2.60   0.009    -.0967323   -.0135915
      cohort |   .2307753   .1340291     1.72   0.085    -.031917    .4934676
       _cons |  -3.805921   1.355521    -2.81   0.005    -6.462693   -1.149149
-------------+----------------------------------------------------------------
6            |
   leftright |  -.2850947   .0392582    -7.26   0.000    -.3620393   -.2081501
   religious |   .3361811   .1117279     3.01   0.003     .1171985    .5551637
         age |   .0568631   .0202028     2.81   0.005     .0172663    .0964599
       class |  -.3248631   .0665532    -4.88   0.000    -.455305   -.1944211
educagefin~d |   .1266385   .0337903     3.75   0.000     .0604108    .1928662
    proudnat |   .2394706   .0969023     2.47   0.013     .0495455    .4293957
    incomcat |   -.041472   .0272148    -1.52   0.128    -.094812    .0118681
      cohort |   .6041173   .1965961     3.07   0.002     .218796    .9894387
       _cons |  -8.414113   1.946165    -4.32   0.000    -12.22853   -4.599701
-------------+----------------------------------------------------------------
7            |
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  leftright |  -.0519718   .0408145    -1.27   0.203    -.1319668    .0280231
  religious |  -.0771808   .1279069    -0.60   0.546    -.3278738    .1735122
        age |   .0832249   .0224642     3.70   0.000     .0391958     .127254
      class |  -.2606079   .0673261    -3.87   0.000    -.3925646   -.1286512
educagefin~d |   .0765841   .0349301     2.19   0.028     .0081224    .1450458
   proudnat |   .3680886    .105456     3.49   0.000     .1613986    .5747786
   incomcat |  -.1265487    .029141    -4.34   0.000     -.183664   -.0694334
     cohort |    .896096   .2197537     4.08   0.000     .4653867    1.326805
      _cons |  -10.5855   2.157815    -4.91   0.000    -14.81474    -6.35626
-------------+----------------------------------------------------------------
8            |
  leftright |  -.1855035   .0443977    -4.18   0.000    -.2725214   -.0984857
  religious |   .0272412    .129639     0.21   0.834    -.2268465     .281329
        age |   .0404968   .0247793     1.63   0.102    -.0080697    .0890634
      class |  -.6560149   .0829612    -7.91   0.000    -.8186159    -.493414
educagefin~d |   .0048125   .0370061     0.13   0.897    -.0677181    .0773431
   proudnat |   .4024458   .1110747     3.62   0.000     .1847433    .6201483
   incomcat |  -.0905346   .0305638    -2.96   0.003    -.1504386   -.0306307
     cohort |   .5841128   .2404249     2.43   0.015     .1128886    1.055337
      _cons |   -5.42992   2.348565    -2.31   0.021    -10.03302   -.8268168
-------------+----------------------------------------------------------------
9            |
  leftright |   .1045994   .0502411     2.08   0.037     .0061287     .20307
  religious |  -.2011247   .1731433    -1.16   0.245    -.5404793    .1382299
        age |  -.1070727    .023001    -4.66   0.000    -.1521539   -.0619916
      class |  -.2586494    .089438    -2.89   0.004    -.4339447   -.0833541
educagefin~d |   .1538873   .0433934     3.55   0.000     .0688377    .2389369
   proudnat |   .2686922   .1345985     2.00   0.046     .0048839    .5325005
   incomcat |  -.1768384   .0385373    -4.59   0.000      -.25237   -.1013067
     cohort |  -1.138754   .2210171    -5.15   0.000     -1.57194   -.7055686
      _cons |   4.457013   2.284708     1.95   0.051    -.0209329    8.934959
-------------+----------------------------------------------------------------
10           |
  leftright |  -.1251316   .0590939    -2.12   0.034    -.2409536   -.0093097
  religious |   .4447078   .1680405     2.65   0.008     .1153545    .7740611
        age |   .1216555   .0315192     3.86   0.000      .059879     .183432
      class |   .3986305   .0964678     4.13   0.000     .2095571     .587704
educagefin~d |   .2323895   .0530819     4.38   0.000     .1283508    .3364282
   proudnat |   .6824697   .1335647     5.11   0.000     .4206878    .9442516
   incomcat |  -.0313448   .0429165    -0.73   0.465    -.1154597     .05277
     cohort |   1.328571   .3073827     4.32   0.000     .7261122     1.93103
      _cons |  -20.55022   3.059984    -6.72   0.000    -26.54768   -14.55276
-------------+----------------------------------------------------------------
11           |
  leftright |  -.0232154   .0502658    -0.46   0.644    -.1217345    .0753037
  religious |  -.0646272   .1507175    -0.43   0.668     -.360028    .2307737
        age |   .0661589   .0262257     2.52   0.012     .0147576    .1175602
      class |   .0903147   .0820026     1.10   0.271    -.0704074    .2510367
educagefin~d |    .186819   .0464345     4.02   0.000      .095809    .2778291
   proudnat |   .6999928    .118375     5.91   0.000      .467982    .9320037
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   incomcat |  -.0534179   .0364597    -1.47   0.143    -.1248775    .0180418
     cohort |   .8192609   .2543264     3.22   0.001     .3207904    1.317731
      _cons |  -13.75579   2.554829    -5.38   0.000    -18.76317   -8.748422
-------------+----------------------------------------------------------------
12           |
  leftright |   -.189233   .1738829    -1.09   0.276    -.5300373    .1515713
  religious |  -.2571219   .5113079    -0.50   0.615    -1.259267    .7450232
        age |   .0081434   .0884135     0.09   0.927    -.1651438    .1814307
      class |  -.4352159   .2810108    -1.55   0.121     -.985987    .1155552
educagefin~d |   .0227729   .1388126     0.16   0.870    -.2492949    .2948407
   proudnat |   .5919975   .4108227     1.44   0.150    -.2132002    1.397195
   incomcat |  -.2485904   .1280859    -1.94   0.052    -.4996342    .0024535
     cohort |   .1413419   .8623297     0.16   0.870    -1.548793    1.831477
      _cons |  -4.525661   8.483253    -0.53   0.594    -21.15253    12.10121
-------------+----------------------------------------------------------------
13           |
  leftright |   .0779872    .125913     0.62   0.536    -.1687977    .3247722
  religious |  -1.083255   .4120275    -2.63   0.009    -1.890814   -.2756964
        age |  -.0241429   .0751113    -0.32   0.748    -.1713582    .1230725
      class |  -1.286931   .3282478    -3.92   0.000    -1.930285    -.643577
educagefin~d |   -.235356   .1001519    -2.35   0.019    -.4316502   -.0390619
   proudnat |   .3181683   .3429606     0.93   0.354     -.354022    .9903587
   incomcat |  -.1436229   .0897647    -1.60   0.110    -.3195586    .0323127
     cohort |   .0902992   .7279804     0.12   0.901    -1.336516    1.517115
      _cons |   2.341327    7.00229     0.33   0.738    -11.38291    16.06556
-------------+----------------------------------------------------------------
14           |
  leftright |   .3766127   .0665034     5.66   0.000     .2462684    .5069569
  religious |  -.8321443   .2087798    -3.99   0.000    -1.241345   -.4229435
        age |   .0471012   .0413941     1.14   0.255    -.0340296    .1282321
      class |  -29.86076   438389.1    -0.00   1.000    -859256.7     859197
educagefin~d |  -.0482037   .0485146    -0.99   0.320    -.1432906    .0468832
   proudnat |    .390076   .1634782     2.39   0.017     .0696646    .7104874
   incomcat |  -.0722524   .0421983    -1.71   0.087    -.1549595    .0104546
     cohort |      .4699   .4088413     1.15   0.250    -.3314143    1.271214
      _cons |  -6.829581   3.867592    -1.77   0.077    -14.40992    .7507598
-------------+----------------------------------------------------------------
15           |
  leftright |  -.1807132    .232143    -0.78   0.436    -.6357051    .2742787
  religious |  -.5221482   .7182012    -0.73   0.467    -1.929797    .8855003
        age |  -.0169739   .1309382    -0.13   0.897    -.2736081    .2396603
      class |  -.9519476   .4640922    -2.05   0.040    -1.861552   -.0423437
educagefin~d |  -.1709415    .183105    -0.93   0.351    -.5298206    .1879376
   proudnat |  -.0244458   .6662369    -0.04   0.971    -1.330246    1.281355
   incomcat |  -.1231165   .1660374    -0.74   0.458    -.4485438    .2023109
     cohort |   .0890025    1.26299     0.07   0.944    -2.386412    2.564417
      _cons |   .8709688   12.20362     0.07   0.943    -23.04769    24.78963
-------------+----------------------------------------------------------------
16           |
  leftright |   .2272005   .0736548     3.08   0.002     .0828397    .3715613
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  religious |  -.1447776   .2345208    -0.62   0.537    -.6044299    .3148748
        age |   .0494261   .0436072     1.13   0.257    -.0360425    .1348947
      class |  -1.140199   .1749556    -6.52   0.000    -1.483105   -.7972921
educagefin~d |  -.2179952   .0576666    -3.78   0.000    -.3310197   -.1049708
   proudnat |   .0690591   .2075824     0.33   0.739     -.337795    .4759131
   incomcat |  -.0036718   .0510192    -0.07   0.943    -.1036676    .0963239
     cohort |    .740084   .4255025     1.74   0.082    -.0938856    1.574054
      _cons |  -5.447827   4.094981    -1.33   0.183    -13.47384    2.578189
-------------+----------------------------------------------------------------
17           |
  leftright |  -.2100087   .1279798    -1.64   0.101    -.4608445     .040827
  religious |  -.3077131    .383636    -0.80   0.422    -1.059626    .4441996
        age |   .1196363   .0707768     1.69   0.091    -.0190837    .2583563
      class |    -.1491   .1960484    -0.76   0.447    -.5333479    .2351479
educagefin~d |  -.1277999   .1040211    -1.23   0.219    -.3316775    .0760777
   proudnat |   .6124622   .2998234     2.04   0.041     .0248191    1.200105
   incomcat |  -.0042702   .0949297    -0.04   0.964    -.1903289    .1817885
     cohort |   1.346961   .6936633     1.94   0.052    -.0125946    2.706516
      _cons |  -13.11958   6.728182    -1.95   0.051    -26.30657    .0674181
-------------+----------------------------------------------------------------
18           |
  leftright |  -.3024986   .2231204    -1.36   0.175    -.7398065    .1348092
  religious |    .056785   .6115224     0.09   0.926    -1.141777    1.255347
        age |   .0029965   .1020543     0.03   0.977    -.1970261    .2030192
      class |   .1927416   .3494139     0.55   0.581     -.492097    .8775802
educagefin~d |   .1162312   .1852864     0.63   0.530    -.2469235     .479386
   proudnat |   .1864916   .5300981     0.35   0.725    -.8524815    1.225465
   incomcat |  -.0044108   .1603709    -0.03   0.978     -.318732    .3099103
     cohort |   .3706137   .9667746     0.38   0.701     -1.52423    2.265457
      _cons |  -8.929895   9.862815    -0.91   0.365    -28.26066    10.40087
-------------+----------------------------------------------------------------
21           |
  leftright |  -.3265764    .173515    -1.88   0.060    -.6666596    .0135068
  religious |   .1619079   .4276509     0.38   0.705    -.6762725    1.000088
        age |  -.0825664   .0813477    -1.01   0.310    -.2420049    .0768721
      class |  -.0638302   .2481267    -0.26   0.797    -.5501495    .4224892
educagefin~d |  -.1436681   .1353017    -1.06   0.288    -.4088545    .1215183
   proudnat |   .5636431   .3620487     1.56   0.120    -.1459594    1.273246
   incomcat |  -.0981605   .1180103    -0.83   0.406    -.3294564    .1331354
     cohort |   .2306539    .723411     0.32   0.750    -1.187205    1.648513
      _cons |   .0181156   7.367192     0.00   0.998    -14.42132    14.45755
-------------+----------------------------------------------------------------
23           |
  leftright |  -.1227273   .2219455    -0.55   0.580    -.5577326    .3122779
  religious |   .3543264   .6091256     0.58   0.561    -.8395378    1.548191
        age |   .1113414   .1268813     0.88   0.380    -.1373414    .3600242
      class |   .5613579    .366627     1.53   0.126    -.1572178    1.279934
educagefin~d |   .0383543    .179773     0.21   0.831    -.3139943    .3907029
   proudnat |   .4784418   .5071781     0.94   0.346     -.515609    1.472493
   incomcat |  -.3082763   .1824038    -1.69   0.091    -.6657811    .0492286
```

```
      cohort |    1.70111   1.219508     1.39   0.163     -.689081    4.091302
       _cons |  -19.94847   11.93553    -1.67   0.095    -43.34168    3.444741
-------------+----------------------------------------------------------------
others       |
  leftright |  -.2961265   .0436293    -6.79   0.000    -.3816384   -.2106146
  religious |  -.0021363   .1272161    -0.02   0.987    -.2514752    .2472026
        age |  -.0470045   .0184887    -2.54   0.011    -.0832416   -.0107673
      class |   .3429948   .0763728     4.49   0.000     .1933068    .4926828
educagefin~d |   .0273561   .0359961     0.76   0.447     -.043195    .0979073
   proudnat |   .2057231   .1086615     1.89   0.058    -.0072495    .4186957
   incomcat |   .0332193   .0346671     0.96   0.338    -.0347269    .1011655
     cohort |  -.2985425   .1750004    -1.71   0.088     -.641537    .0444519
      _cons |   .6549767   1.805758     0.36   0.717    -2.884244    4.194198
-------------+----------------------------------------------------------------
would not ~e |
  leftright |  -.2894675   .0993262    -2.91   0.004    -.4841433   -.0947918
  religious |  -.0737126   .2539279    -0.29   0.772     -.571402    .4239769
        age |   .0769975   .0494533     1.56   0.119    -.0199292    .1739243
      class |   .3395098   .1559409     2.18   0.029     .0338711    .6451484
educagefin~d |  -.1019182   .0780813    -1.31   0.192    -.2549547    .0511184
   proudnat |    .810629   .2055461     3.94   0.000     .4077661    1.213492
   incomcat |  -.1429488    .072874    -1.96   0.050    -.2857792   -.0001185
     cohort |   1.339339   .4761629     2.81   0.005     .4060767    2.272601
      _cons |  -11.97226   4.686305    -2.55   0.011    -21.15725   -2.787272
------------------------------------------------------------------------------
(Outcome vote==1 is the comparison group)
```

For some groups religious is significant, for others not. The interpretation will depend on the semantic meaning of the groupings.

5. Summary

First, we introduced the method of Instrumental Variables and two-stage-least squares and their relevance to the problem at hand. We then reported the analyses on the two estimation problems stated in the first section.