

Appendix A

Summary of Synthetic Variables Estimation

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2. capital M for "Model..." followed by model number
else always lower case 'm' ("model")
→ either always lower case "m" or "M"

2. is the process described on page 25
written understandable?

1 Austria

I think this means the parties were selected, not the variables.
 In that case omit "full set of". Else there is confusion whether the variables or the parties were selected.
 If this refers to the variables, simply include an "and" before selected. That should make it clearer.

Synthetic variables have been estimated for the full set of Austrian parties available in the original 2019 EES Austrian voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 1.1).

Table 1.1: Austrian Relevant parties

Dep. Var.	Party	Party name (eng)
stack_101	101	Austrian People's Party
stack_102	102	Austrian Social Democratic Party
stack_104	104	NEOS - The New Austria and Liberal Forum
stack_106	106	The Greens
stack_103	103	Austrian Freedom Party
stack_105	105	Alliance for the Future of Austria

Full OLS models converge and coefficients do not show any particular issues (see Table 1.7). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.044 for party 103 (Austrian Freedom Party) and a maximum of 0.059 for party 104 (NEOS - The New Austria and Liberal Forum). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in all 6 cases out of 6 null models perform better than full ones (see Table 1.2).

Table 1.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_101	101	681.001	720.163	-39.162
stack_102	102	623.760	665.472	-41.712
stack_104	104	421.135	462.888	-41.753
stack_106	106	668.724	698.015	-29.292
stack_103	103	782.940	810.946	-28.007
stack_105	105	49.015	78.412	-29.397

On the contrary, one out of six logistic regression models (see Table 1.8) show inflated standard errors for some of the coefficients of interest:

- Model 12: D8_rec, D1_rec;

Model 12 presents more problematic profile, since it affects the models constant terms with its inflated standard errors.

Model 12 inflated standard errors are due to separation issues. In short, no respondent from rural areas or small cities and members of trade unions did vote for party 505 (see Tables 1.5, 1.6).

As a consequence, a constrained version of model 6 without said variables was estimated and contrasted with the original, full model. Likelihood-ratio test results show that H_0 (namely, that the constrained model

does not fit better than the full model) can be rejected at $p < 0.001$ (see Table 1.3). Consequently, synthetic variables for respondents' vote choice for party 105 have been predicted relying on the unconstrained model.

Table 1.3: Likelihood-ratio Test between Model 6a (Unconstrained) and Model 6b (Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
856	93.76483			
854	78.91633	2	14.84849	0.0005966

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.028 for party 105 (Alliance for the Future of Austria) and a maximum of 0.084 for party 101 (Austrian People's Party). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models shows that in 5 cases out of 6 null models perform better than full ones.

Table 1.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_101	101	793.489	868.142	-74.653
stack_102	102	809.298	845.471	-36.173
stack_104	104	479.669	483.460	-3.791
stack_106	106	621.086	625.784	-4.698
stack_103	103	794.417	806.568	-12.151
stack_105*	105	102.916	102.106	0.810

* AIC value refers to Model 6b (constrained).

Table 1.5: Cross tabulation between vote choice for party 105 and respondents' area of residency

stack_105/D8_rec	0	1	Total
0	370	595	965
1	0	10	10
NA	13	12	25
Total	383	617	1000

Table 1.6: Cross tabulation between vote choice for party 105 and respondents' marital status

stack_105/D1_rec	0	1	Total
0	636	329	965
1	10	0	10
NA	19	6	25
Total	665	335	1000

Table 1.7: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	101	102	104	106	103	105
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
D3_rec2	-0.013 (0.024)	0.005 (0.023)	-0.027 (0.021)	0.036 (0.024)	-0.073** (0.026)	-0.025 (0.017)
D8_rec1	0.001 (0.025)	0.067** (0.025)	0.036 (0.022)	0.036 (0.025)	-0.041 (0.027)	0.010 (0.018)
D5_rec1	0.026 (0.025)	-0.069** (0.024)	-0.024 (0.022)	-0.042 (0.025)	-0.003 (0.027)	-0.038* (0.018)
EDU_rec2	0.006 (0.033)	0.001 (0.032)	0.030 (0.029)	0.031 (0.033)	-0.015 (0.035)	0.015 (0.023)
EDU_rec3	-0.057 (0.035)	0.090** (0.034)	0.087** (0.031)	0.144*** (0.035)	-0.138*** (0.037)	0.083*** (0.025)
D1_rec1	-0.027 (0.026)	0.144*** (0.025)	-0.017 (0.022)	0.027 (0.026)	-0.019 (0.027)	0.024 (0.018)
D7_rec1	0.031 (0.029)	0.006 (0.028)	0.031 (0.025)	0.017 (0.029)	-0.011 (0.030)	-0.009 (0.020)
D7_rec2	0.059 (0.037)	-0.045 (0.036)	0.098** (0.032)	0.055 (0.037)	-0.063 (0.039)	-0.027 (0.026)
D6_une1	-0.011 (0.064)	-0.047 (0.062)	-0.035 (0.055)	-0.042 (0.063)	0.124 (0.067)	0.061 (0.045)
D4_age	0.0004 (0.001)	-0.001 (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.0001 (0.001)	-0.002*** (0.001)
D10_rec	0.043*** (0.006)	-0.009 (0.006)	0.019*** (0.005)	-0.001 (0.006)	-0.009 (0.006)	0.002 (0.004)
Constant	0.366*** (0.051)	0.395*** (0.050)	0.429*** (0.044)	0.413*** (0.051)	0.478*** (0.054)	0.312*** (0.036)
N	877	879	873	878	875	869
R-squared	0.067	0.070	0.070	0.057	0.056	0.057
Adj. R-squared	0.056	0.058	0.059	0.045	0.044	0.045

***p < .001; **p < .01; *p < .05

Table 1.8: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	101 Model 7	102 Model 8	104 Model 9	106 Model 10	103 Model 11	105 Model 12
D3_rec2	0.313 (0.184)	0.059 (0.182)	-0.579* (0.263)	0.390 (0.219)	-0.619** (0.188)	0.248 (0.694)
D8_rec1	-0.042 (0.191)	0.171 (0.195)	-0.324 (0.266)	0.190 (0.231)	-0.136 (0.192)	18.227 (2397.322)
D5_rec1	0.186 (0.196)	-0.346 (0.190)	0.044 (0.271)	0.070 (0.228)	0.418* (0.201)	-0.070 (0.694)
EDU_rec2	0.066 (0.253)	0.374 (0.281)	0.302 (0.383)	0.154 (0.341)	-0.073 (0.237)	0.016 (0.905)
EDU_rec3	-0.359 (0.276)	0.649* (0.290)	0.643 (0.386)	0.806* (0.332)	-0.579* (0.273)	-0.005 (0.945)
D1_rec1	-0.130 (0.194)	1.050*** (0.187)	-0.130 (0.275)	-0.299 (0.241)	-0.007 (0.196)	-18.090 (2510.829)
D7_rec1	0.197 (0.230)	0.419 (0.225)	0.204 (0.326)	0.257 (0.279)	-0.169 (0.209)	-1.052 (0.759)
D7_rec2	0.782** (0.276)	0.192 (0.287)	0.492 (0.381)	0.534 (0.325)	-0.441 (0.294)	-1.073 (1.139)
D6_une1	-1.746 (1.037)	0.105 (0.489)	0.646 (0.579)	-0.264 (0.636)	-0.064 (0.478)	0.078 (1.121)
D4_age	0.019*** (0.006)	0.017** (0.006)	-0.029*** (0.008)	-0.016* (0.007)	0.009 (0.006)	-0.030 (0.022)
D10_rec	0.309*** (0.042)	-0.133** (0.048)	-0.016 (0.065)	-0.030 (0.055)	-0.089 (0.048)	-0.054 (0.196)
Constant	-3.380*** (0.422)	-3.110*** (0.428)	-1.246* (0.538)	-2.129*** (0.479)	-1.357*** (0.394)	-19.919 (2397.322)
N	866	866	866	866	866	866
Log Likelihood	-384.745	-392.649	-227.834	-298.543	-385.208	-39.458
AIC	793.489	809.298	479.669	621.086	794.417	102.916

***p < .001; **p < .01; *p < .05

2 Czech Republic

Synthetic variables have been estimated for the full set of Czech parties available in the original 2019 EES Czech Republic voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 2.1).

Table 2.1: Czech Republic relevant parties

Dep. Var.	Party	Party name (eng)
stack_601	601	Christian and Democratic Union / Czechoslovak People's Party
stack_603	603	Czech Social Democratic Party
stack_604	604	Civic Democratic Party
stack_605	605	Communist Party of Bohemia and Moravia
stack_606	606	ANO 2011
stack_607	607	Czech Pirate Party
stack_608	608	Freedom and Direct Democracy Tomio Okamura
stack_602	602	Tradition, Responsibility, Prosperity 09 (TOP 09)

Full OLS models converge and coefficients do not show any particular issues (see Table 2.8). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.022 for party 608 (Freedom and Direct Democracy Tomio Okamura) and a maximum of 0.197 for party 601 (Christian and Democratic Union / Czechoslovak People's Party). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that the full models perform better in all cases (see Table 2.2).

Table 2.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_601	601	58.949	237.851	-178.903
stack_603	603	160.644	169.927	-9.283
stack_604	604	393.140	459.680	-66.540
stack_605	605	393.498	411.747	-18.249
stack_606	606	744.963	803.107	-58.144
stack_607	607	525.748	633.168	-107.419
stack_608	608	460.064	468.756	-8.692
stack_602	602	141.419	241.723	-100.304

On the contrary, five out of eight logistic regression models (see Table 2.9) show inflated standard errors for some of the coefficients of interest. In particular:

- Model 9: D6_une
- Model 10a: EDU_rec (both categories), D7_rec (second category), D6_une
- Model 11: D6_une
- Model 15: D6_une
- Model 16: D6_une

However, for Models 9, 11, 15 and 16 the constant terms and other regressors are not affected by the inflated standard errors. Model 10a appears more problematic.

The inflated standard errors in Model 10a are due to separation issues. In short, no respondents who are unemployed or of high subjective social status ~~voted~~ for party 603. Only one respondent with low education voted for party 603. (See tables 2.5, 2.6, 2.7)

As a consequence, a constrained version of model 10 (namely, Model 10b) without said variables was estimated and contrasted with the original (Model 10a), full model. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) cannot be rejected (see Table 2.3). Consequently, synthetic variables for respondents' vote choice for party 603 have been predicted relying on the constrained model (Model 10b).

Table 2.3: Likelihood-ratio Test between Model 10a (Unconstrained) and Model 10b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	849	163.9202			
Unconstrained	844	154.0839	5	9.83628	0.0800093

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.067 for party 603 (Czech Social Democratic Party) and a maximum of 0.142 for party 601 (Christian and Democratic Union / Czechoslovak People's Party). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models shows that in four cases out of eight null models perform better than full ones. According to AIC values the related null model appears to have a better fit than Model 10b (see Table 2.4).

Table 2.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_601	601	217.3010	255.3350	-38.034000
stack_602	602	268.9980	275.1270	-6.129000
stack_603	603	178.0840	168.9080	9.176000
stack_603*	603	177.9202	168.9081	9.012099
stack_604	604	473.8460	462.0590	11.787000
stack_605	605	331.1420	331.1770	-0.035000
stack_606	606	723.3500	774.4330	-51.083000
stack_607	607	529.1280	528.9600	0.168000
stack_608	608	395.5950	394.0820	1.513000

* AIC value refers to Model 10b (constrained).

Table 2.5: Cross tabulation between vote choice for party 603 and respondents' education

stack_603/EDU_rec	1	2	3	NA	Total
0	71	542	343	7	963
1	1	14	4	0	19
NA	3	7	7	1	18
Total	75	563	354	8	1000

Table 2.6: Cross tabulation between vote choice for party 603 and respondents' subjective social class

stack_603/D7_rec	0	1	2	NA	Total
0	366	467	118	12	963
1	8	11	0	0	19
NA	8	9	0	1	18
Total	382	487	118	13	1000

Table 2.7: Cross tabulation between vote choice for party 603 and respondents' employment status

stack_603/D6_une	0	1	Total
0	945	18	963
1	19	0	19
NA	17	1	18
Total	981	19	1000

Table 2.8: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	601	603	604	605	606	607	608	602
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
D3_rec2	0.004 (0.017)	-0.022 (0.018)	0.017 (0.021)	-0.002 (0.021)	-0.025 (0.026)	0.026 (0.023)	-0.024 (0.022)	0.040* (0.018)
D8_rec1	0.027 (0.019)	0.008 (0.021)	0.0004 (0.024)	-0.010 (0.024)	0.012 (0.029)	0.003 (0.026)	0.009 (0.025)	-0.014 (0.021)
D5_rec1	-0.017 (0.018)	-0.030 (0.019)	-0.021 (0.022)	-0.053* (0.022)	0.036 (0.026)	-0.050* (0.023)	0.003 (0.022)	-0.041* (0.019)
EDU_rec2	-0.010 (0.035)	-0.021 (0.038)	0.001 (0.043)	-0.015 (0.043)	-0.023 (0.053)	0.013 (0.046)	0.058 (0.045)	-0.009 (0.038)
EDU_rec3	0.023 (0.036)	-0.031 (0.038)	0.020 (0.044)	-0.043 (0.044)	-0.076 (0.054)	0.037 (0.047)	-0.0002 (0.046)	0.021 (0.038)
D1_rec1	0.040 (0.024)	0.122*** (0.025)	0.047 (0.029)	0.077** (0.029)	0.078* (0.035)	-0.024 (0.031)	0.083** (0.030)	0.005 (0.025)
D7_rec1	0.026 (0.019)	0.013 (0.020)	0.038 (0.023)	-0.017 (0.023)	0.031 (0.028)	-0.012 (0.025)	-0.056* (0.024)	0.038 (0.020)
D7_rec2	-0.017 (0.029)	0.040 (0.030)	0.095** (0.035)	-0.018 (0.035)	0.033 (0.043)	0.056 (0.038)	-0.052 (0.036)	0.042 (0.030)
D6_une1	-0.011 (0.070)	0.009 (0.074)	-0.100 (0.085)	0.143 (0.085)	-0.077 (0.104)	0.043 (0.092)	0.096 (0.088)	-0.073 (0.077)
D4_age	-0.003*** (0.001)	-0.0001 (0.001)	-0.005*** (0.001)	0.003*** (0.001)	0.006*** (0.001)	-0.008*** (0.001)	0.001 (0.001)	-0.005*** (0.001)
D10_rec	0.067*** (0.005)	0.002 (0.005)	0.018** (0.006)	-0.014* (0.006)	-0.014 (0.008)	-0.0004 (0.007)	-0.009 (0.006)	0.022*** (0.005)
Constant	0.290*** (0.044)	0.300*** (0.046)	0.476*** (0.053)	0.184*** (0.053)	0.134* (0.065)	0.724*** (0.057)	0.237*** (0.055)	0.457*** (0.046)
N	863	864	864	864	865	863	864	841
R-squared	0.208	0.036	0.097	0.046	0.088	0.139	0.035	0.135
Adj. R-squared	0.197	0.023	0.086	0.033	0.077	0.128	0.022	0.124

***p < .001; **p < .01; *p < .05

Table 2.9: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	601	603	603	604	605	606	607	608	602
	Model 9	Model 10a	Model 10b	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16
D3_rec2	0.098 (0.419)	0.122 (0.502)	0.163 (0.495)	-0.035 (0.265)	-0.362 (0.339)	-0.406* (0.199)	-0.030 (0.244)	-0.084 (0.295)	0.012 (0.376)
D8_rec1	0.232 (0.485)	0.544 (0.652)	0.444 (0.645)	-0.055 (0.299)	0.011 (0.383)	-0.001 (0.227)	0.108 (0.283)	0.512 (0.383)	-1.165** (0.379)
D5_rec1	-0.051 (0.438)	-0.282 (0.514)	-0.219 (0.505)	-0.229 (0.269)	-0.340 (0.332)	0.553** (0.213)	0.035 (0.253)	0.848* (0.354)	-0.341 (0.382)
EDU_rec2	-1.196 (0.693)	17.188 (2205.393)		0.017 (0.539)	-0.502 (0.656)	-0.026 (0.484)	0.302 (0.532)	0.949 (1.041)	-0.561 (0.685)
EDU_rec3	-0.844 (0.694)	16.536 (2205.393)		0.054 (0.549)	-0.441 (0.688)	-0.314 (0.500)	0.702 (0.530)	1.141 (1.046)	0.252 (0.664)
D1_rec1	0.029 (0.534)	0.819 (0.556)	0.845 (0.551)	0.178 (0.344)	0.678 (0.404)	0.525* (0.253)	-0.171 (0.347)	0.247 (0.376)	-0.113 (0.526)
D7_rec1	0.731 (0.477)	-0.133 (0.508)		0.218 (0.307)	-0.338 (0.350)	0.551* (0.217)	-0.520 (0.271)	-0.591 (0.329)	1.010 (0.520)
D7_rec2	-1.356 (1.133)	-16.786 (1630.831)		0.806* (0.393)	-0.693 (0.660)	0.616 (0.334)	-0.039 (0.360)	0.225 (0.423)	1.199 (0.626)
D6_une1	-13.334 (1086.259)	-16.376 (4695.013)		-14.127 (681.190)	0.958 (1.105)	-0.304 (1.097)	0.288 (0.803)	-13.878 (673.219)	-14.376 (1087.655)
D4_age	0.004 (0.013)	-0.014 (0.016)	-0.001 (0.015)	-0.004 (0.008)	0.038*** (0.011)	0.048*** (0.007)	-0.025** (0.008)	0.011 (0.010)	-0.025 (0.013)
D10_rec	0.547*** (0.077)	0.026 (0.146)	0.006 (0.143)	0.089 (0.068)	-0.156 (0.128)	-0.012 (0.058)	-0.162 (0.095)	-0.065 (0.097)	0.035 (0.100)
Constant	-4.133*** (0.951)	-20.396 (2205.393)	-4.349*** (1.016)	-2.459*** (0.657)	-4.010*** (0.937)	-4.559*** (0.631)	-1.298* (0.630)	-5.009*** (1.186)	-1.823* (0.863)
N	856	856	856	856	856	856	856	856	856
Log Likelihood	-96.650	-77.042	-81.960	-224.923	-153.571	-349.675	-252.564	-185.797	-122.499
AIC	217.301	178.084	177.920	473.846	331.142	723.350	529.128	395.595	268.998

***p < .001; **p < .01; *p < .05

3 Croatia

Synthetic variables have been estimated for the full set of Croatian parties available in the original 2019 EES Croatian voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 3.1).

Table 3.1: Croatian relevant parties

Dep. Var.	Party	Party name (eng)
stack_412	412	Social Democratic Party of Croatia
stack_404	404	Croatian Democratic Union
stack_414	414	Human Shield
stack_405	405	Coalition of HSS (1191810) + GRA?ANSKO-LIBERALNI SAVEZ - GLAS +IDS (1191953)
stack_406	406	Bridge of Independent Lists
stack_413	413	Party of Anti-corruption, Development and Transparency
stack_401	401	Milan Bandic 365 – The Party of Labour and Solidarity

Full OLS models converge and coefficients do not show any particular issues (see Table 3.13). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.03 for party 413 (Party of Anti-corruption, Development and Transparency) and a maximum of 0.121 for party 404 (Croatian Democratic Union). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in all 7 cases out of 7 null models perform better than full ones (see Table 3.2).

Table 3.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_412	412	666.207	739.344	-73.137
stack_404	404	308.726	415.168	-106.441
stack_414	414	293.610	342.782	-49.172
stack_405	405	239.613	292.137	-52.524
stack_406	406	140.927	166.996	-26.068
stack_413	413	25.812	39.969	-14.157
stack_401	401	-228.960	-153.443	-75.516

On the contrary, two out of seven logistic regression models (see Table 3.14) show inflated standard errors for some of the coefficients of interest. In particular:

- Model 8a: D8_rec, D5_rec, EDU_rec, D7_rec (only for category 2), D6_une;
- Model 13a: EDU_rec, D6_une;

Those Models 14a and 13a present more problematic profiles, since they affect their models' constant terms through their inflated standard errors.

The of Model 8a and 13a inflated standard errors are due to separation issues. In short, no respondents with low education and unemployment did not vote for party 413 (see Tables 3.6, 3.7). As well as, no respondents

*Who are
voted*

from rural areas or small cities, single, low educated, with high subjective socioeconomic status (SES) and unemployed did vote for party 401 (see Tables 3.8, 3.9, 3.10, 3.11, 3.12).

As a consequence, a constrained version of Model 8 and 13 (namely, Model 14b, 13b) without said variables were estimated and contrasted with the original (Model 14a, 13a), full model. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) can be rejected at $p < 0.1$ for party 401 (see Table 3.3). For party 413 H_0 cannot be rejected (see Table 3.4). Consequently, synthetic variables for respondents' vote choice for party 401 and 413 have been predicted relying on the constrained models (Model 14b, 13b).

Table 3.3: Likelihood-ratio Test between Model 14a (Unconstrained) and Model 8b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	883	65.61194			
Unconstrained	876	52.20412	7	13.40781	0.0627739

Table 3.4: Likelihood-ratio Test between Model 13a (Unconstrained) and Model 13b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	879	145.6508			
Unconstrained	876	142.0655	3	3.585322	0.3098636

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.091 for party 413 (Party of Anti-corruption, Development and Transparency) and a maximum of 0.098 for party 412 (Social Democratic Party of Croatia). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 3 cases out of 7 null models perform better than full ones. According to AIC values the related null models appear to have a better fit than Models 13b and 14b (see Table 3.5).

Table 3.5: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_401	401	76.20400	73.92600	2.278000
stack_401*	401	75.61194	73.92592	1.686021
stack_404	404	405.72900	425.29500	-19.566000
stack_405	405	293.35600	303.31300	-9.957000
stack_406	406	192.82500	185.68300	7.143000
stack_412	412	599.92400	667.24200	-67.318000
stack_413	413	166.06600	154.17300	11.893000
stack_413*	413	163.65082	154.17283	9.477993
stack_414	414	481.79400	472.07800	9.716000

* AIC value refers to Model 13b and 14b (constrained).

Table 3.6: Cross tabulation between vote choice for party 413 and respondents' education

stack_413/EDU_rec	1	2	3	NA	Total
0	41	434	440	44	959
1	0	5	10	1	16
NA	4	19	9	1	33
Total	45	458	459	46	1008

Table 3.7: Cross tabulation between vote choice for party 413 and respondents' employment status

stack_413/D6_une	0	1	Total
0	875	84	959
1	16	0	16
NA	29	4	33
Total	920	88	1008

Table 3.8: Cross tabulation between vote choice for party 401 and respondents' education

stack_401/EDU_rec	1	2	3	NA	Total
0	41	435	448	44	968
1	0	4	2	1	7
NA	4	19	9	1	33
Total	45	458	459	46	1008

Table 3.9: Cross tabulation between vote choice for party 401 and respondents' employment status

stack_401/D6_une	0	1	Total
0	884	84	968
1	7	0	7
NA	29	4	33
Total	920	88	1008

Table 3.10: Cross tabulation between vote choice for party 401 and respondents' subjective SES membership

stack_401/D7_rec	0	1	2	NA	Total
0	383	429	133	23	968
1	2	4	1	0	7
NA	13	16	3	1	33
Total	398	449	137	24	1008

Table 3.11: Cross tabulation between vote choice for party 401 and respondents' marital status

stack_401/D5_rec	0	1	Total
0	330	638	968
1	0	7	7
NA	9	24	33
Total	339	669	1008

Table 3.12: Cross tabulation between vote choice for party 401 and respondents' area of residency

stack_401/D8_rec	0	1	Total
0	179	789	968
1	0	7	7
NA	8	25	33
Total	187	821	1008

Table 3.13: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	412 Model 1	404 Model 2	414 Model 3	405 Model 4	406 Model 5	413 Model 6	401 Model 7
D3_rec2	-0.021 (0.023)	-0.001 (0.019)	0.005 (0.019)	0.005 (0.019)	0.003 (0.017)	-0.028 (0.017)	0.014 (0.014)
D8_rec1	-0.039 (0.030)	0.009 (0.024)	-0.037 (0.024)	0.027 (0.024)	-0.004 (0.022)	0.034 (0.022)	0.010 (0.018)
D5_rec1	-0.093*** (0.025)	0.006 (0.021)	-0.045* (0.021)	-0.068*** (0.021)	-0.022 (0.019)	-0.023 (0.019)	-0.026 (0.015)
EDU_rec2	-0.094 (0.062)	-0.098 (0.051)	-0.132** (0.050)	-0.157** (0.052)	-0.134** (0.046)	-0.167*** (0.048)	-0.045 (0.038)
EDU_rec3	-0.067 (0.063)	-0.061 (0.052)	-0.175*** (0.051)	-0.110* (0.053)	-0.139** (0.047)	-0.168*** (0.049)	-0.074 (0.038)
D1_rec1	0.049 (0.027)	0.068** (0.022)	-0.008 (0.022)	0.007 (0.022)	0.015 (0.020)	0.033 (0.020)	-0.004 (0.016)
D7_rec1	0.104*** (0.025)	0.047* (0.021)	0.014 (0.020)	0.082*** (0.020)	0.039* (0.019)	0.051** (0.019)	0.038* (0.015)
D7_rec2	0.099** (0.037)	0.114*** (0.030)	0.015 (0.030)	0.082** (0.030)	0.037 (0.028)	0.032 (0.027)	0.026 (0.023)
D6_une1	0.027 (0.042)	-0.014 (0.035)	0.024 (0.034)	0.006 (0.034)	0.040 (0.031)	-0.005 (0.031)	-0.031 (0.026)
D4_age	0.005*** (0.001)	0.0004 (0.001)	-0.003*** (0.001)	0.001 (0.001)	-0.001 (0.001)	0.0001 (0.001)	-0.003*** (0.001)
D10_rec	-0.028*** (0.005)	0.042*** (0.004)	-0.002 (0.004)	-0.022*** (0.004)	0.015*** (0.004)	-0.008* (0.004)	0.020*** (0.003)
Constant	0.311*** (0.071)	0.090 (0.058)	0.576*** (0.057)	0.332*** (0.059)	0.348*** (0.053)	0.313*** (0.055)	0.232*** (0.043)
N	911	912	911	868	911	829	910
R-squared	0.099	0.131	0.075	0.082	0.051	0.043	0.102
Adj. R-squared	0.088	0.121	0.064	0.070	0.040	0.030	0.091

***p < .001; **p < .01; *p < .05

Table 3.14: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	412	404	414	405	406	413	413	401	401
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
D3_rec2	-0.130 (0.220)	-0.512 (0.290)	-0.455 (0.263)	0.819* (0.375)	-0.090 (0.477)	-0.422 (0.541)	-0.457 (0.539)	0.693 (0.893)	0.568 (0.875)
D8_rec1	0.321 (0.325)	-0.230 (0.347)	-0.194 (0.317)	0.763 (0.622)	0.470 (0.660)	-0.294 (0.666)	-0.227 (0.660)	19.001 (5165.518)	
D5_rec1	-0.377 (0.236)	0.533 (0.346)	0.166 (0.287)	0.104 (0.390)	-0.107 (0.517)	0.101 (0.603)	0.152 (0.604)	18.684 (3933.489)	
EDU_rec2	-0.185 (0.826)	0.053 (0.708)	-0.352 (0.563)	-0.460 (1.139)	-1.277 (0.781)	14.849 (1762.135)		18.316 (9790.615)	
EDU_rec3	-0.052 (0.822)	0.440 (0.710)	-0.260 (0.577)	-0.260 (1.132)	-1.345 (0.816)	15.381 (1762.135)		17.453 (9790.615)	
D1_rec1	0.565* (0.238)	0.524 (0.296)	-0.120 (0.304)	0.450 (0.389)	0.668 (0.487)	0.056 (0.600)	0.109 (0.600)	-0.969 (1.119)	-0.699 (1.108)
D7_rec1	0.665** (0.251)	0.252 (0.339)	-0.189 (0.284)	0.929* (0.454)	-0.147 (0.522)	-0.108 (0.625)	0.006 (0.613)	0.681 (0.928)	
D7_rec2	0.713* (0.350)	1.193** (0.401)	-0.040 (0.397)	1.279* (0.551)	0.108 (0.721)	0.789 (0.704)	0.976 (0.685)	-17.837 (5997.631)	
D6_une1	-0.937 (0.613)	-0.258 (0.628)	0.344 (0.432)	-0.247 (0.762)	-0.269 (1.057)	-15.331 (1237.064)		-19.072 (7689.871)	
D4_age	0.054*** (0.009)	-0.002 (0.011)	-0.025* (0.011)	0.029* (0.013)	0.006 (0.018)	0.022 (0.020)	0.030 (0.020)	-0.026 (0.034)	-0.002 (0.029)
D10_rec	-0.200*** (0.056)	0.276*** (0.064)	-0.016 (0.060)	-0.300** (0.102)	0.293** (0.107)	-0.087 (0.132)	-0.098 (0.130)	0.471* (0.206)	0.442* (0.201)
Constant	-4.517*** (0.932)	-4.139*** (0.861)	-0.789 (0.676)	-5.675*** (1.361)	-4.236*** (1.134)	-19.726 (1762.135)	-5.187*** (1.272)	-60.797 (11747.810)	-6.634*** (1.664)
N	888	888	888	888	888	888	888	888	888
Log Likelihood	-287.962	-190.865	-228.897	-134.678	-84.413	-71.033	-72.825	-26.102	-32.806
AIC	599.924	405.729	481.794	293.356	192.825	166.066	163.651	76.204	75.612

*** p < .001; ** p < .01; * p < .05

4 Cyprus

see above

Synthetic variables have been estimated for the full set of Cypriot parties available in the original 2019 EES Cypriot voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 4.1).

Table 4.1: Cypriot Relevant parties

Dep. Var.	Party	Party name (eng)
stack_501	501	Progressive Party of the Working People
stack_502	502	Democratic Rally
stack_503	503	Democratic Party
stack_504	504	United Democratic Union of Centre
stack_505	505	Ecological and Environmental Movement (Cyprus Green Party)
stack_507	507	National Popular Front

Full OLS models converge and coefficients do not show any particular issues (see Table 4.11). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of -0.008 for party 504 (United Democratic Union of Centre) and a maximum of 0.078 for party 502 (Democratic Rally). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 4 cases out of 6 null models perform better than full ones (see Table 4.2).

Table 4.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_501	501	345.686	366.312	-20.626
stack_502	502	401.571	425.484	-23.913
stack_503	503	263.578	256.427	7.151
stack_504	504	146.427	132.226	14.200
stack_505	505	114.242	107.109	7.133
stack_507	507	204.881	199.676	5.205

On the contrary, three out of six logistic regression models (see Table 4.12) show inflated standard errors for some of the coefficients of interest. In particular:

- Model 9: D7_rec (only for category 2);
- Model 11a: D8_rec, D5_rec, EDU_rec, D7_rec (only for category 2), D6_une;
- Model 12: D6_une.

Nevertheless, Models 9 and 12 constant terms and other regression coefficients are not affected by said inflated standard errors, whereas Model 5a presents a more problematic profile.

Model 5a inflated standard errors are due to separation issues. In short, no respondent from rural areas or small cities, single, low educated, with high subjective socioeconomic status (SES), members of trade unions, and unemployed voted for party 505 (see Tables 4.5, 4.6, 4.7, 4.8, 4.9, 4.10).

As a consequence, a constrained version of Model 11 (namely, Model 11b) without said variables was estimated and contrasted with the original (Model 11a), full model. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) cannot be rejected (see Table 4.3). Consequently, synthetic variables for respondents' vote choice for party 505 have been predicted relying on the constrained model (Model 11b).

Table 4.3: Likelihood-ratio Test between Model 5a (Unconstrained) and Model 5b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	391	52.33088			
Unconstrained	383	39.43782	8	12.89306	0.1155825

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.183 for party 505 (Ecological and Environmental Movement (Cyprus Green Party)) and a maximum of 0.062 for party 501 (Progressive Party of the Working People). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 3 cases out of 6 null models perform better than full ones. According to AIC values the related null model appears to have a better fit than Model 11b (see Table 4.4).

Table 4.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_501	501	270.27400	290.27300	-19.99900
stack_502	502	358.98900	383.05300	-24.06400
stack_503	503	233.62500	229.00000	4.62600
stack_504	504	151.74400	135.94400	15.79900
stack_505	505	63.43800	55.63100	7.80700
stack_505*	505	60.33088	55.63092	4.69996
stack_507	507	115.69400	116.33000	-0.63600

* AIC value refers to Model 11b (constrained).

5 Denmark

Synthetic variables have been estimated for seven of ten of Danish parties available in the original 2019 EES Danish voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 5.1).

Table 4.5: Cross tabulation between vote choice for party 505 and respondents' area of residency

stack_505/D8_rec	0	1	Total
0	84	354	438
1	0	5	5
NA	10	48	58
Total	94	407	501

Table 4.6: Cross tabulation between vote choice for party 505 and respondents' marital status

stack_505/D5_rec	0	1	Total
0	104	334	438
1	0	5	5
NA	14	44	58
Total	118	383	501

Table 4.7: Cross tabulation between vote choice for party 505 and respondents' education

stack_505/EDU_rec	1	2	3	NA	Total
0	92	175	154	17	438
1	0	2	3	0	5
NA	5	20	33	0	58
Total	97	197	190	17	501

Table 4.8: Cross tabulation between vote choice for party 505 and respondents' subjective SES

stack_505/D7_rec	0	1	2	NA	Total
0	161	246	25	6	438
1	2	3	0	0	5
NA	24	30	2	2	58
Total	187	279	27	8	501

Table 4.9: Cross tabulation between vote choice for party 505 and respondents' trade union membership

stack_505/D1_rec	0	1	NA	Total
0	339	84	15	438
1	5	0	0	5
NA	47	8	3	58
Total	391	92	18	501

Table 4.10: Cross tabulation between vote choice for party 505 and respondents' employment status

stack_505/D6_une	0	1	NA	Total
0	398	39	1	438
1	5	0	0	5
NA	55	3	0	58
Total	458	42	1	501

Table 4.11: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	501	502	503	504	505	507
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
D3_rec2	0.097** (0.036)	-0.054 (0.038)	0.046 (0.032)	0.010 (0.028)	0.053 (0.027)	-0.086** (0.030)
D8_rec1	0.021 (0.046)	-0.040 (0.049)	0.011 (0.041)	0.013 (0.036)	0.007 (0.035)	0.018 (0.039)
D5_rec1	0.036 (0.043)	-0.027 (0.046)	0.038 (0.039)	0.023 (0.034)	0.026 (0.033)	-0.014 (0.036)
EDU_rec2	-0.105* (0.050)	0.110* (0.053)	0.069 (0.045)	0.036 (0.040)	0.015 (0.038)	0.026 (0.042)
EDU_rec3	-0.086 (0.055)	0.153** (0.059)	0.086 (0.050)	0.054 (0.044)	0.061 (0.042)	0.001 (0.046)
D1_rec1	0.020 (0.044)	0.124** (0.047)	0.027 (0.040)	-0.019 (0.035)	-0.008 (0.034)	0.059 (0.037)
D7_rec1	-0.136*** (0.037)	0.100* (0.040)	0.005 (0.034)	-0.003 (0.030)	0.019 (0.029)	-0.006 (0.032)
D7_rec2	0.008 (0.082)	0.196* (0.088)	0.052 (0.075)	0.097 (0.065)	0.061 (0.063)	-0.076 (0.070)
D6_une1	0.139* (0.062)	0.002 (0.066)	0.049 (0.056)	0.026 (0.049)	0.015 (0.049)	-0.029 (0.054)
D4_age	0.0002 (0.001)	0.002* (0.001)	0.002* (0.001)	-0.0003 (0.001)	-0.001 (0.001)	-0.002 (0.001)
D10_rec	-0.028* (0.012)	0.041*** (0.012)	-0.001 (0.011)	0.011 (0.009)	0.004 (0.009)	0.008 (0.010)
Constant	0.437*** (0.086)	-0.002 (0.092)	0.066 (0.078)	0.115 (0.069)	0.119 (0.066)	0.265*** (0.073)
N	430	430	431	427	427	428
R-squared	0.094	0.101	0.034	0.018	0.034	0.038
Adj. R-squared	0.071	0.078	0.009	-0.008	0.009	0.013

***p < .001; **p < .01; *p < .05

Table 4.12: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	501	502	503	504	505	505	507
	Model 1	Model 8	Model 9	Model 10	Model 11a	Model 11b	Model 12
D3_rec2	0.879* (0.373)	0.005 (0.289)	-0.027 (0.396)	-0.592 (0.535)	0.765 (1.003)	0.463 (0.946)	-0.721 (0.667)
D8_rec1	-0.439 (0.405)	-0.588 (0.342)	-0.452 (0.458)	-0.119 (0.696)	17.416 (4596.570)		0.656 (0.866)
D5_rec1	0.638 (0.449)	-0.050 (0.366)	0.177 (0.498)	-0.231 (0.653)	18.145 (4107.323)		0.561 (0.848)
EDU_rec2	-0.586 (0.432)	0.081 (0.408)	0.411 (0.542)	-0.710 (0.732)	18.749 (4358.061)		0.565 (0.836)
EDU_rec3	-0.508 (0.538)	0.560 (0.475)	0.841 (0.657)	-0.146 (0.749)	19.403 (4358.061)		-2.014 (1.283)
D1_rec1	0.088 (0.413)	0.368 (0.322)	0.500 (0.422)	0.398 (0.614)	-18.666 (4623.097)		1.438* (0.629)
D7_rec1	-1.129** (0.375)	0.862* (0.339)	-0.585 (0.405)	1.068 (0.691)	-0.675 (0.992)		0.941 (0.732)
D7_rec2	-0.623 (0.813)	0.844 (0.674)	-15.467 (827.025)	1.761 (0.991)	-19.172 (8981.149)		0.844 (1.320)
D6_une1	0.670 (0.512)	-0.163 (0.577)	0.593 (0.610)	-0.009 (1.079)	-17.835 (6690.058)		-16.117 (1677.752)
D4_age	0.031** (0.012)	0.035*** (0.010)	0.035* (0.014)	0.004 (0.017)	0.047 (0.039)	0.019 (0.027)	-0.023 (0.020)
D10_rec	-0.172 (0.111)	0.255** (0.097)	0.046 (0.127)	0.022 (0.165)	-0.328 (0.303)	-0.281 (0.281)	-0.221 (0.215)
Constant	-2.741** (0.938)	-4.676*** (0.798)	-4.410*** (1.123)	-3.491** (1.263)	-58.895 (7549.255)	-4.492** (1.591)	-3.129* (1.358)
N	395	395	395	395	395	395	395
Log Likelihood	-123.137	-167.494	-104.813	-63.872	-19.719	-26.165	-45.847
AIC	270.274	358.989	233.625	151.744	63.438	60.331	115.694

***p < .001; **p < .01; *p < .05

Table 5.1: Danish ~~relevant~~ parties

Dep.	Var.	Party	Party name (eng)
stack_701	701	Social Democratic Party	
stack_702	702	Liberals	
stack_703	703	Danish People's Party	
stack_704	704	Radical Party	
stack_705	705	Socialist People's Party	
stack_706	706	Red-Green Unity List	
stack_707	707	Conservative People's Party	

Full OLS models converge and coefficients do not show any particular issues (see Table 5.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.006 for party 703 (Danish People's Party) and a maximum of 0.084 for party 707 (Conservative People's Party). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 1 case out of 7 null models perform better than full ones (see Table 5.2).

Table 5.2: Akaike Information Criterion values for OLS full and null models

Dep.	Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_701	701		602.803	650.130	-47.327
stack_702	702		664.540	698.147	-33.607
stack_703	703		707.938	702.351	5.587
stack_704	704		320.451	385.068	-64.616
stack_705	705		606.771	637.521	-30.750
stack_706	706		652.782	694.182	-41.400
stack_707	707		366.698	431.607	-64.908

Furthermore, there were no unusual standard errors for any coefficients in the logistic regression models. (see Table 5.5)

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.044 for party 704 (Radical Party) and a maximum of 0.016 for party 703 (Danish People's Party). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 3 cases out of 7 null models perform better than full ones (see Table 5.3).

Table 5.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_701	701	759.240	771.073	-11.833
stack_702	702	746.506	757.681	-11.175
stack_703	703	591.607	602.927	-11.320
stack_704	704	394.156	379.564	14.592
stack_705	705	524.297	523.116	1.181
stack_706	706	408.469	412.696	-4.227
stack_707	707	316.194	314.621	1.573

Table 5.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	701	702	703	704	705	706	707
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	0.083*** (0.023)	-0.051* (0.024)	-0.068** (0.024)	0.034 (0.020)	0.088*** (0.023)	0.044 (0.024)	-0.086*** (0.020)
D8_rec1	0.068* (0.028)	0.002 (0.029)	0.036 (0.030)	0.001 (0.024)	0.064* (0.028)	0.052 (0.029)	0.020 (0.025)
D5_rec1	-0.007 (0.024)	0.037 (0.025)	0.026 (0.026)	-0.025 (0.021)	-0.021 (0.025)	-0.038 (0.026)	-0.004 (0.022)
EDU_rec2	-0.061 (0.051)	0.113* (0.053)	0.037 (0.055)	-0.034 (0.044)	-0.070 (0.053)	-0.056 (0.054)	0.071 (0.046)
EDU_rec3	-0.023 (0.048)	0.038 (0.049)	-0.005 (0.051)	0.004 (0.041)	-0.004 (0.049)	0.004 (0.050)	0.048 (0.042)
D1_rec1	0.139*** (0.026)	-0.056* (0.027)	-0.003 (0.028)	0.005 (0.022)	0.068* (0.026)	0.041 (0.027)	-0.007 (0.023)
D7_rec1	-0.001 (0.026)	0.100*** (0.027)	-0.047 (0.028)	0.045* (0.022)	-0.019 (0.027)	-0.021 (0.027)	0.063** (0.023)
D7_rec2	-0.116** (0.036)	0.172*** (0.037)	-0.053 (0.038)	0.048 (0.031)	-0.074* (0.036)	-0.112** (0.037)	0.192*** (0.032)
D6_une1	0.053 (0.048)	-0.056 (0.049)	-0.003 (0.051)	-0.022 (0.041)	-0.043 (0.048)	-0.033 (0.050)	-0.089* (0.042)
D4_age	0.0001 (0.001)	-0.002* (0.001)	0.001 (0.001)	-0.005*** (0.001)	-0.002** (0.001)	-0.004*** (0.001)	-0.001 (0.001)
D10_rec	0.011 (0.007)	0.023** (0.007)	0.006 (0.007)	0.012* (0.006)	0.007 (0.007)	0.005 (0.007)	0.027*** (0.006)
Constant	0.358*** (0.062)	0.389*** (0.064)	0.311*** (0.066)	0.512*** (0.053)	0.385*** (0.063)	0.494*** (0.065)	0.275*** (0.055)
N	879	878	877	873	863	861	863
R-squared	0.076	0.061	0.019	0.094	0.059	0.071	0.096
Adj. R-squared	0.064	0.049	0.006	0.083	0.047	0.059	0.084

***p < .001; **p < .01; *p < .05

6 Estonia

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Synthetic variables have been estimated for seven of twelve Estonian parties available in the original 2019 EES Estonian voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the

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Table 5.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	701	702	703	704	705	706	707
	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
D3_rec2	0.515** (0.192)	-0.193 (0.193)	-0.731** (0.231)	-0.077 (0.296)	0.870*** (0.261)	0.187 (0.284)	-0.358 (0.347)
D8_rec1	0.117 (0.233)	0.010 (0.231)	0.420 (0.296)	-0.132 (0.361)	-0.416 (0.276)	-0.015 (0.348)	-0.478 (0.374)
D5_rec1	0.076 (0.201)	0.409 (0.212)	-0.311 (0.234)	-0.336 (0.310)	-0.073 (0.259)	-0.037 (0.296)	0.197 (0.374)
EDU_rec2	-0.600 (0.417)	-0.456 (0.453)	0.782 (0.652)	0.759 (0.815)	0.058 (0.628)	-0.279 (0.635)	0.423 (0.830)
EDU_rec3	-0.378 (0.372)	-0.331 (0.409)	0.420 (0.630)	0.924 (0.777)	0.550 (0.575)	0.012 (0.585)	-0.252 (0.795)
D1_rec1	0.726** (0.232)	-0.201 (0.216)	-0.242 (0.241)	0.532 (0.365)	-0.219 (0.272)	0.237 (0.320)	0.011 (0.392)
D7_rec1	0.128 (0.212)	0.504* (0.244)	0.127 (0.257)	0.014 (0.335)	0.101 (0.290)	-0.010 (0.299)	0.530 (0.468)
D7_rec2	-0.556 (0.329)	1.002*** (0.290)	-0.184 (0.372)	0.083 (0.458)	0.558 (0.352)	-2.402* (1.035)	1.372** (0.510)
D6_une1	0.170 (0.363)	0.190 (0.407)	-0.182 (0.496)	-0.597 (0.744)	-0.247 (0.545)	-0.887 (0.741)	-0.474 (1.039)
D4_age	0.003 (0.006)	0.012 (0.006)	0.024** (0.008)	-0.012 (0.010)	-0.006 (0.008)	0.004 (0.010)	0.011 (0.011)
D10_rec	0.140** (0.052)	0.072 (0.053)	-0.010 (0.067)	-0.016 (0.085)	-0.001 (0.070)	-0.327** (0.114)	0.174 (0.089)
Constant	-2.591*** (0.513)	-2.585*** (0.537)	-3.560*** (0.757)	-3.101*** (0.925)	-2.631*** (0.700)	-2.471** (0.758)	-4.042*** (0.999)
N	874	874	874	874	874	874	874
Log Likelihood	-367.620	-361.253	-283.804	-185.078	-250.148	-192.234	-146.097
AIC	759.240	746.506	591.607	394.156	524.297	408.469	316.194

***p < .001; **p < .01; *p < .05

criteria see Sect. XXX; for the relevant parties see Table 6.1).

Table 6.1: Estonian relevant parties

Dep. Var.	Party	Party name (eng)
stack_901	901	Estonian Reform Party
stack_902	902	Estonian Center Party
stack_903	903	Conservative People's Party of Estonia
stack_904	904	Union for the Republic – Res Publica
stack_905	905	Social Democratic Party
stack_906	906	Estonia 200
stack_907	907	Estonian Greens

Full OLS models converge and coefficients do not show any particular issues (see Table 6.13). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.028 for party 906 (Estonia 200) and a maximum of 0.063 for party 905 (Social Democratic Party). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 0 cases out of 7 null models perform better than full ones (see Table 6.2).

Table 6.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_901	901	645.297	681.225	-35.928
stack_902	902	468.318	482.379	-14.061
stack_903	903	523.081	555.418	-32.337
stack_904	904	316.225	331.505	-15.280
stack_905	905	364.945	406.867	-41.922
stack_906	906	321.048	332.960	-11.912
stack_907	907	171.422	186.800	-15.378

On the contrary, three out of seven logistic regression models (see Table 6.14) show inflated standard errors for some of the coefficients of interest. In particular:

- Model 9: D6_une;
- Model 13a: EDU_rec;
- Model 14a: D5_rec, EDU_rec, D1_rec, D6_une.

Nevertheless, Model 9's constant terms and other regression coefficients are not affected by said inflated standard errors, whereas Model 13a and 14a present a more problematic profile.

Model 13a's and 14a's inflated standard errors are due to separation issues. In short, no respondents from respondents with low education ~~voted~~ for party 906 (see Table 6.8) and no respondents with low education, with high subjective social status, ~~who are~~ members of trade unions, and unemployed and only very few respondents married or in partnership as well as married or in a partnership (2 and 9) ~~voted~~ for party 907 (see Tables 6.9, 6.10, 6.11, 6.12). *; regressor D5_rec*

As a consequence, a constrained version of Model 13 (namely, Model 13b) without said variable was estimated and contrasted with the original (Model 13a), full model. Likelihood-ratio test results show that H_0 (namely,

that the constrained model fits better than the full model) cannot be rejected (see Table 6.3). Consequently, synthetic variables for respondents' vote choice for party 906 have been predicted relying on the constrained model (Model 13b).

Table 6.3: Likelihood-ratio Test between Model 13a (Unconstrained) and Model 13b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	800	202.6392			
Unconstrained	798	197.9122	2	4.726983	0.0940911

In 6.9 there is no 0 disrupting our ~~Logit~~ regression. As a consequence, a constrained version of ~~H~~ Model 14 (namely, Model 14b_1) without said variables and without D5_rec was estimated and contrasted with the original (Model 14a), ~~full model~~. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) cannot be rejected (see Table 6.4).

Furthermore, another constrained version of ~~H~~ Model 14 (namely, Model 14b_2) without said variables, but with D5_rec, was estimated and contrasted with the original (Model 14a), ~~full model~~. ~~Model 14b_2 is therefore less constrained than 14b_1 (by D5_rec)~~. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) cannot be rejected (see Table 6.5).

Then we compared the fit of 14b_1 and 14b_2. Likelihood-ratio test results show that H_0 (namely, that the 'fuller' constrained model with D5_rec fits better than the constrained model without D5_rec) cannot be rejected (see Table 6.5). Consequently, synthetic variables for respondents' vote choice for party 907 have been predicted relying on the less constrained model with D5_rec (Model 14b_2).

Table 6.4: Likelihood-ratio Test between Model 14a (Unconstrained) and Model 14b1 (Constrained and without D5rec)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	803	84.40316			
Unconstrained	798	73.88477	5	10.51839	0.0618107

Table 6.5: Likelihood-ratio Test between Model 14a (Unconstrained) and Model 14b2 (Constrained and with D5rec)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	802	78.30208			
Unconstrained	798	73.88477	4	4.417304	0.352466

Table 6.6: Likelihood-ratio Test between Model 14b1 (Constrained and without D5rec, here: Constrained) and Model 14b2 (Constrained and with D5rec, here: Unconstrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	803	84.40316			
Unconstrained	802	78.30208	1	6.101085	0.0135099

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.09 for party 907 (Estonian Greens) and a maximum of 0.035 for party 903 (Conservative

People's Party of Estonia). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 3 cases out of 7 null models perform better than full ones. According to AIC values the related null models appear to have a better fit than Models 13b and 14b_2 (see Table 6.7).

Table 6.7: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_901	901	692.70300	705.58000	-12.877000
stack_902	902	508.65000	506.31300	2.337000
stack_903	903	507.99000	528.63400	-20.644000
stack_904	904	415.24200	419.58900	-4.347000
stack_905	905	650.16600	649.26800	0.898000
stack_906	906	221.91200	211.17100	10.741000
stack_906*	906	222.63922	211.17148	11.467732
stack_907	907	97.88500	91.80200	6.083000
stack_907*	907	98.40316	91.80221	6.600954

* AIC value refers to Model 13b for 906* (constrained) and 14b_2 for 907* (constrained and with D5_rec).

Table 6.8: Cross tabulation between vote choice for party 906 and respondents' education

stack_906/EDU_rec	1	2	3	NA	Total
0	46	456	425	29	956
1	0	9	18	0	27
NA	0	8	8	1	17
Total	46	473	451	30	1000

Table 6.9: Cross tabulation between vote choice for party 907 and respondents' marital status

stack_907/D5_rec	0	1	Total
0	328	644	972
1	2	9	11
NA	7	10	17
Total	337	663	1000

Table 6.10: Cross tabulation between vote choice for party 907 and respondents' education

stack_907/EDU_rec	1	2	3	NA	Total
0	46	463	436	27	972
1	0	2	7	2	11
NA	0	8	8	1	17
Total	46	473	451	30	1000

Table 6.11: Cross tabulation between vote choice for party 907 and respondents' trade union membership

stack_907/D1_rec	0	1	Total
0	880	92	972
1	11	0	11
NA	16	1	17
Total	907	93	1000

Table 6.12: Cross tabulation between vote choice for party 907 and respondents' employment status

stack_907/D6_une	0	1	Total
0	945	27	972
1	11	0	11
NA	16	1	17
Total	972	28	1000

Table 6.13: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	901	902	903	904	905	906	907
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	0.042 (0.025)	-0.012 (0.023)	-0.127*** (0.024)	-0.040 (0.021)	0.125*** (0.021)	0.035 (0.021)	0.074*** (0.019)
D8_rec1	0.012 (0.028)	0.050 (0.025)	-0.080** (0.026)	-0.111*** (0.023)	0.037 (0.024)	0.027 (0.024)	0.025 (0.021)
D5_rec1	0.009 (0.027)	-0.022 (0.024)	-0.015 (0.025)	-0.035 (0.022)	0.009 (0.023)	0.026 (0.023)	-0.002 (0.020)
EDU_rec2	-0.085 (0.061)	0.072 (0.055)	0.010 (0.058)	0.024 (0.051)	-0.017 (0.052)	-0.044 (0.051)	-0.031 (0.046)
EDU_rec3	-0.033 (0.061)	0.038 (0.055)	-0.013 (0.058)	0.048 (0.051)	0.005 (0.052)	-0.008 (0.051)	-0.007 (0.046)
D1_rec1	-0.065 (0.042)	0.058 (0.038)	-0.008 (0.039)	-0.060 (0.034)	0.029 (0.036)	-0.040 (0.035)	-0.046 (0.032)
D7_rec1	0.098*** (0.027)	-0.040 (0.024)	-0.047 (0.025)	0.002 (0.022)	0.013 (0.023)	0.022 (0.023)	0.009 (0.020)
D7_rec2	0.174*** (0.042)	-0.079* (0.038)	-0.084* (0.039)	-0.042 (0.035)	0.061 (0.035)	0.099** (0.035)	0.032 (0.031)
D6_une1	-0.105 (0.075)	-0.029 (0.067)	0.031 (0.069)	-0.063 (0.061)	-0.045 (0.063)	0.023 (0.063)	0.071 (0.056)
D4_age	-0.002* (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	-0.003*** (0.001)	-0.001* (0.001)	-0.002*** (0.001)
D10_rec	-0.026** (0.008)	0.026*** (0.007)	0.013 (0.008)	-0.001 (0.007)	-0.009 (0.007)	-0.017* (0.007)	-0.001 (0.006)
Constant	0.519*** (0.072)	0.269*** (0.064)	0.360*** (0.067)	0.455*** (0.059)	0.421*** (0.061)	0.367*** (0.060)	0.372*** (0.054)
N	814	817	810	807	814	794	810
R-squared	0.069	0.043	0.065	0.045	0.076	0.042	0.045
Adj. R-squared	0.056	0.030	0.052	0.032	0.063	0.028	0.032

***p < .001; **p < .01; *p < .05

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 Table 6.14: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	901	902	903	904	905	906	906	907	907
	Model 14ax	Model 9	Model 10	Model 11	Model 12	Model 13a	Model 13b	Model 14a	Model 14b2
D3_rec2	0.184 (0.204)	-0.163 (0.251)	-1.365*** (0.268)	-0.655* (0.285)	0.573** (0.221)	-0.433 (0.434)	-0.464 (0.432)	0.509 (0.752)	0.433 (0.746)
D8_rec1	0.069 (0.227)	0.451 (0.307)	-0.570* (0.258)	-0.596* (0.288)	-0.199 (0.229)	0.125 (0.522)	0.202 (0.518)	-0.633 (0.762)	-0.518 (0.750)
D5_rec1	0.143 (0.220)	0.010 (0.269)	-0.271 (0.263)	-0.263 (0.294)	-0.113 (0.223)	-0.060 (0.468)	0.041 (0.466)	18.042 (2716.366)	17.243 (1720.678)
EDU_rec2	-0.280 (0.483)	0.672 (0.758)	0.284 (0.645)	0.362 (0.768)	-0.279 (0.488)	14.771 (1012.475)		16.591 (6503.809)	
EDU_rec3	-0.003 (0.478)	0.466 (0.761)	0.204 (0.647)	0.355 (0.774)	0.045 (0.482)	15.435 (1012.475)		17.656 (6503.809)	
D1_rec1	-0.453 (0.377)	0.383 (0.369)	-0.032 (0.427)	-0.649 (0.612)	0.171 (0.331)	-0.905 (1.036)	-0.818 (1.033)	-18.090 (4764.365)	
D7_rec1	0.550* (0.223)	0.089 (0.266)	-0.055 (0.266)	-0.296 (0.291)	0.142 (0.229)	0.558 (0.481)	0.668 (0.473)	0.621 (0.892)	0.699 (0.874)
D7_rec2	0.728* (0.308)	0.243 (0.390)	0.244 (0.379)	-1.583* (0.750)	0.492 (0.321)	-0.201 (0.830)	-0.021 (0.816)	0.883 (1.047)	1.200 (1.017)
D6_une1	-1.156 (1.034)	-15.146 (794.955)	0.291 (0.667)	-0.586 (1.052)	0.087 (0.639)	0.252 (1.073)	0.282 (1.063)	-17.502 (8763.359)	
D4_age	0.018** (0.006)	0.019* (0.008)	0.012 (0.008)	0.020* (0.009)	0.006 (0.006)	-0.012 (0.014)	-0.010 (0.013)	-0.013 (0.024)	-0.012 (0.023)
D10_rec	-0.228** (0.080)	0.117 (0.072)	0.150* (0.069)	0.020 (0.088)	-0.171* (0.081)	-0.097 (0.162)	-0.104 (0.164)	-0.585 (0.518)	-0.601 (0.524)
Constant	-2.850*** (0.590)	-4.260*** (0.916)	-2.061** (0.732)	-2.751** (0.884)	-2.198*** (0.577)	-18.036 (1012.475)	-3.238*** (0.908)	-38.761 (7048.274)	-21.035 (1720.678)
N	810	810	810	810	810	810	810	810	810
Log Likelihood	-334.351	-242.325	-241.995	-195.621	-313.083	-98.956	-101.320	-36.942	-39.151
AIC	692.703	508.650	507.990	415.242	650.166	221.912	222.639	97.885	94.302

***p < .001; **p < .01; *p < .05

7 Finland

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Synthetic variables have been estimated for the full set of Finnish parties available in the original 2019 EES
 ! ~~Finland~~ voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria
 see Sect. XXX; for the relevant parties see Table 7.1).

Table 7.1: ~~Finland~~ *Finnish* relevant parties

Dep. Var.	Party	Party name (eng)
stack_1001	1001	Finnish Social Democrats
stack_1002	1002	True Finns
stack_1003	1003	National Coalition
stack_1004	1004	Finnish Centre
stack_1005	1005	Green Union
stack_1006	1006	Left Wing Alliance
stack_1007	1007	Swedish People's Party

! Full OLS models converge and coefficients do not show any particular issues (see Table 7.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.037 for party 1001 (Finnish Social Democrats) and a maximum of 0.136 for party 1003 (National Coalition). Moreover, ! the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that the full models perform better in all cases (see Table 7.2).

Table 7.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1001	1001	503.719	524.434	-20.715
stack_1002	1002	760.678	793.350	-32.673
stack_1003	1003	454.559	567.635	-113.076
stack_1004	1004	212.187	257.058	-44.871
stack_1005	1005	579.984	634.977	-54.993
stack_1006	1006	542.244	575.824	-33.580
stack_1007	1007	187.642	217.272	-29.630

Similarly, only one out of the seven logistic regression models (see Table 7.5) shows inflated standard errors for one of the coefficients of interest. In particular:

- Model 11: D6_une

However, the constant term and the other regressors of Model 11 seem not to be affected by the inflated standard errors. Thus, no further adjustments are made and Model 11 is kept as is.

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.078 for party 1007 (Swedish People's Party) and a maximum of 0.077 for party 1003 (National Coalition). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in two cases out of seven null models perform better than full ones (see Table 7.3).

Table 7.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1001	1001	490.506	497.038	-6.532
stack_1002	1002	645.695	659.969	-14.274
stack_1003	1003	478.136	520.112	-41.976
stack_1004	1004	254.450	260.410	-5.960
stack_1005	1005	540.407	546.870	-6.463
stack_1006	1006	364.792	363.652	1.140
stack_1007	1007	195.420	183.272	12.148

Table 7.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	1001	1002	1003	1004	1005	1006	1007
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	0.046* (0.022)	-0.143*** (0.026)	-0.042 (0.022)	-0.011 (0.019)	0.157*** (0.023)	0.062** (0.023)	-0.002 (0.019)
D8_rec1	0.109*** (0.029)	-0.069* (0.033)	0.045 (0.028)	-0.015 (0.024)	0.070* (0.030)	0.058* (0.030)	0.013 (0.024)
D5_rec1	-0.047* (0.023)	0.032 (0.027)	0.006 (0.022)	-0.018 (0.019)	-0.055* (0.024)	-0.028 (0.023)	-0.050** (0.019)
EDU_rec2	-0.026 (0.045)	0.110* (0.051)	-0.002 (0.043)	0.018 (0.037)	-0.037 (0.047)	-0.027 (0.045)	0.028 (0.037)
EDU_rec3	0.009 (0.042)	0.021 (0.049)	-0.016 (0.041)	0.006 (0.035)	0.013 (0.044)	0.006 (0.043)	0.031 (0.035)
D1_rec1	0.074** (0.023)	-0.016 (0.027)	-0.038 (0.023)	-0.005 (0.020)	0.038 (0.024)	0.064** (0.024)	0.025 (0.019)
D7_rec1	0.005 (0.026)	0.023 (0.030)	0.158*** (0.025)	0.083*** (0.022)	0.031 (0.027)	-0.057* (0.026)	0.067** (0.021)
D7_rec2	-0.100** (0.035)	0.006 (0.040)	0.299*** (0.034)	0.055 (0.029)	-0.021 (0.036)	-0.194*** (0.035)	0.102*** (0.029)
D6_une1	-0.032 (0.037)	0.025 (0.042)	-0.028 (0.036)	-0.001 (0.031)	-0.013 (0.038)	-0.001 (0.037)	-0.001 (0.030)
D4_age	0.001 (0.001)	-0.002** (0.001)	-0.001 (0.001)	-0.002** (0.001)	-0.003*** (0.001)	-0.001 (0.001)	-0.001 (0.001)
D10_rec	0.011 (0.008)	0.003 (0.009)	0.029*** (0.007)	0.041*** (0.006)	0.003 (0.008)	0.004 (0.008)	0.028*** (0.006)
Constant	0.283*** (0.060)	0.593*** (0.069)	0.322*** (0.058)	0.332*** (0.050)	0.417*** (0.062)	0.370*** (0.061)	0.174*** (0.049)
N	843	851	847	845	845	846	844
R-squared	0.049	0.062	0.147	0.076	0.087	0.064	0.059
Adj. R-squared	0.037	0.050	0.136	0.064	0.075	0.051	0.047

***p < .001; **p < .01; *p < .05

Table 7.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	1001	1002	1003	1004	1005	1006	1007
	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
D3_rec2	0.018 (0.252)	-0.712** (0.219)	-0.148 (0.255)	-0.020 (0.384)	0.871*** (0.245)	-0.048 (0.307)	-0.716 (0.506)
D8_rec1	0.418 (0.349)	-0.830*** (0.242)	1.049* (0.428)	-0.571 (0.424)	0.239 (0.317)	0.268 (0.428)	-0.522 (0.547)
D5_rec1	0.025 (0.258)	0.019 (0.216)	0.016 (0.259)	0.269 (0.401)	-0.583* (0.245)	-0.401 (0.312)	0.098 (0.489)
EDU_rec2	0.359 (0.656)	0.982 (0.525)	0.442 (0.668)	-0.171 (0.860)	-0.544 (0.411)	0.379 (0.793)	0.091 (1.200)
EDU_rec3	0.653 (0.622)	0.880 (0.508)	0.605 (0.629)	0.040 (0.787)	-0.502 (0.379)	0.867 (0.751)	0.842 (1.096)
D1_rec1	0.648* (0.274)	0.135 (0.219)	-0.003 (0.259)	-0.377 (0.394)	0.168 (0.247)	0.523 (0.333)	-0.057 (0.487)
D7_rec1	-0.139 (0.285)	-0.380 (0.252)	0.900** (0.315)	1.066* (0.448)	0.638* (0.264)	-0.466 (0.342)	0.636 (0.565)
D7_rec2	-0.468 (0.410)	0.579* (0.292)	1.536*** (0.342)	0.275 (0.650)	0.016 (0.392)	-1.582* (0.748)	0.837 (0.651)
D6_une1	-0.239 (0.494)	-0.795* (0.402)	0.454 (0.413)	-15.891 (1056.071)	0.360 (0.365)	-1.181 (0.747)	0.101 (0.798)
D4_age	0.033*** (0.009)	-0.008 (0.007)	0.021** (0.008)	0.015 (0.012)	0.0004 (0.007)	0.005 (0.010)	-0.010 (0.015)
D10_rec	0.067 (0.081)	-0.078 (0.073)	0.243*** (0.072)	0.254* (0.104)	0.064 (0.079)	-0.196 (0.135)	0.163 (0.131)
Constant	-5.247*** (0.873)	-1.350* (0.612)	-5.756*** (0.854)	-4.301*** (1.067)	-2.602*** (0.601)	-3.526*** (0.995)	-3.864** (1.339)
N	834	834	834	834	834	834	834
Log Likelihood	-233.253	-310.847	-227.068	-115.225	-258.204	-170.396	-85.710
AIC	490.506	645.695	478.136	254.450	540.407	364.792	195.420

***p < .001; **p < .01; *p < .05

8 France

see top

*party numbers in table 8.1
imply that for 7 out of at least 14
parties available*

Synthetic variables have been estimated for the full set of French parties available in the original 2019 EES French voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 8.1).

Table 8.1: French relevant parties

Dep. Var.	Party	Party name (eng)
stack_1113	1113	The Republicans
stack_1105	1105	Socialist Party
stack_1111	1111	National Rally
stack_1114	1114	Europe Ecology - The Greens
stack_1101	1101	Unbowed France
stack_1110	1110	Generation.s, the movement
stack_1102	1102	The Republic Onwards!

Full OLS models converge and coefficients do not show any particular issues (see Table 8.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.037 for party 1111 (National Rally) and a maximum of 0.121 for party 1110 (Generation.s, the movement). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models shows that in 7 cases out of 7 null models perform better than full ones (see Table 8.2).

Table 8.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1113	1113	405.205	484.329	-79.124
stack_1105	1105	389.453	413.135	-23.682
stack_1111	1111	793.837	817.144	-23.307
stack_1114	1114	503.042	556.941	-53.900
stack_1101	1101	372.091	453.519	-81.428
stack_1110	1110	116.767	210.757	-93.990
stack_1102	1102	658.650	705.587	-46.937

Also the full Logit models converge and coefficients do not show any particular issues (see Table 8.5) In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.081 for party 1110 (Generation.s, the movement) and a maximum of 0.105 for party 1113 (The Republicans). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models shows that in 2 cases out of 6 null models perform better than full ones.

Table 8.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1113	1113	404.790	454.071	-49.281
stack_1105	1105	332.900	317.328	15.572
stack_1111	1111	772.124	771.426	0.698
stack_1114	1114	548.128	547.508	0.619
stack_1101	1101	387.932	383.077	4.855
stack_1110	1110	215.727	201.572	14.155
stack_1102	1102	710.496	774.865	-64.369

Table 8.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	1113	1105	1111	1114	1101	1110	1102
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	0.010 (0.020)	0.016 (0.020)	-0.017 (0.025)	0.051* (0.022)	0.011 (0.020)	0.020 (0.018)	-0.024 (0.024)
D8_rec1	0.011 (0.022)	0.033 (0.022)	-0.021 (0.027)	0.011 (0.023)	-0.008 (0.022)	0.011 (0.020)	0.074** (0.025)
D5_rec1	0.002 (0.022)	-0.007 (0.022)	0.025 (0.028)	-0.031 (0.024)	0.001 (0.022)	-0.011 (0.021)	-0.022 (0.026)
EDU_rec2	-0.009 (0.039)	0.035 (0.039)	0.131** (0.049)	-0.015 (0.042)	0.013 (0.039)	0.022 (0.036)	-0.045 (0.046)
EDU_rec3	-0.036 (0.038)	0.052 (0.038)	0.036 (0.047)	0.025 (0.040)	0.010 (0.038)	0.028 (0.035)	-0.026 (0.045)
D1_rec1	0.057 (0.030)	0.121*** (0.029)	0.118** (0.036)	0.109*** (0.031)	0.151*** (0.029)	0.175*** (0.027)	0.046 (0.034)
D7_rec1	0.090*** (0.023)	0.045* (0.023)	-0.056 (0.029)	0.066** (0.024)	-0.010 (0.023)	0.052* (0.021)	0.119*** (0.027)
D7_rec2	0.190*** (0.030)	-0.005 (0.030)	-0.025 (0.037)	0.026 (0.032)	-0.089** (0.030)	-0.009 (0.027)	0.197*** (0.035)
D6_une1	-0.009 (0.045)	0.026 (0.044)	-0.0004 (0.055)	-0.017 (0.048)	0.072 (0.045)	0.031 (0.042)	-0.085 (0.052)
D4_age	-0.001 (0.001)	-0.002** (0.001)	-0.002* (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.003*** (0.001)	-0.0004 (0.001)
D10_rec	0.034*** (0.006)	-0.007 (0.006)	0.012 (0.007)	-0.016** (0.006)	-0.003 (0.006)	-0.0003 (0.005)	0.007 (0.006)
Constant	0.249*** (0.050)	0.307*** (0.050)	0.359*** (0.062)	0.557*** (0.053)	0.438*** (0.050)	0.303*** (0.046)	0.279*** (0.058)
N	902	901	900	902	888	810	898
R-squared	0.106	0.049	0.049	0.081	0.110	0.133	0.074
Adj. R-squared	0.095	0.038	0.037	0.069	0.099	0.121	0.062

***p < .001; **p < .01; *p < .05

9 Germany

see top

Synthetic variables have been estimated for all of German parties available in the original 2019 EES German voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see

move below
Table!

8.5

Table 8.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	1113 Model 8	1105 Model 9	1111 Model 10	1114 Model 11	1101 Model 12	1110 Model 13	1102 Model 14
D3_rec2	0.374 (0.287)	0.190 (0.344)	-0.153 (0.192)	0.194 (0.242)	0.195 (0.306)	-0.097 (0.457)	-0.454* (0.201)
D8_rec1	-0.402 (0.291)	0.017 (0.365)	-0.217 (0.199)	-0.434 (0.244)	-0.614* (0.302)	0.385 (0.526)	0.381 (0.224)
D5_rec1	0.718 (0.379)	-0.231 (0.364)	-0.058 (0.211)	-0.078 (0.264)	0.033 (0.333)	-0.547 (0.474)	-0.277 (0.223)
EDU_rec2	-0.070 (0.611)	1.199 (1.051)	0.485 (0.408)	-0.167 (0.452)	-0.455 (0.545)	0.966 (1.084)	0.169 (0.479)
EDU_rec3	-0.276 (0.597)	1.228 (1.042)	0.209 (0.407)	0.101 (0.435)	-0.088 (0.521)	0.682 (1.087)	0.699 (0.459)
D1_rec1	-0.377 (0.489)	-0.605 (0.631)	0.222 (0.278)	0.508 (0.308)	0.342 (0.409)	1.010 (0.542)	-0.198 (0.317)
D7_rec1	0.941* (0.425)	-0.357 (0.384)	-0.525* (0.210)	0.718* (0.281)	-0.232 (0.312)	0.015 (0.494)	0.596* (0.258)
D7_rec2	1.898*** (0.452)	-0.017 (0.480)	-0.584* (0.291)	0.066 (0.402)	-1.502* (0.638)	-0.171 (0.720)	1.311*** (0.291)
D6_une1	0.381 (0.660)	-0.267 (0.759)	-0.384 (0.456)	0.414 (0.473)	-1.187 (1.033)	-0.366 (1.059)	-1.950 (1.025)
D4_age	0.037*** (0.010)	0.005 (0.011)	0.015* (0.006)	-0.010 (0.008)	0.004 (0.009)	-0.001 (0.014)	0.028*** (0.006)
D10_rec	0.212*** (0.064)	-0.032 (0.101)	0.019 (0.053)	-0.115 (0.073)	-0.078 (0.095)	-0.172 (0.153)	-0.040 (0.056)
Constant	-6.211*** (0.932)	-4.236*** (1.183)	-2.213*** (0.523)	-2.025*** (0.564)	-2.215** (0.719)	-4.349*** (1.305)	-3.965*** (0.602)
N	905	905	905	905	905	905	905
Log Likelihood	-190.395	-154.450	-374.062	-262.064	-181.966	-95.863	-343.248
AIC	404.790	332.900	772.124	548.128	387.932	215.727	710.496

***p < .001; **p < .01; *p < .05

Sect. XXX; for the relevant parties see Table 9.1).

Table 9.1: German relevant parties

Dep. Var.	Party	Party name (eng)
stack_801	801	Christian Democratic Union / Christian Social Union
stack_802	802	Sozialdemokratische Partei Deutschlands (SPD)
stack_805	805	Free Democratic Party
stack_803	803	Alliance 90 / The Greens
stack_804	804	The Left
stack_807	807	Alternative for Germany
stack_806	806	Pirates

Full OLS models converge and coefficients do not show any particular issues (see Table 9.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.023 for party 807 (Alternative for Germany) and a maximum of 0.131 for party 806 (Pirates). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 0 cases out of 7 null models perform better than full ones (see Table 9.2).

Table 9.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_801	801	629.185	723.798	-94.612
stack_802	802	479.527	515.917	-36.390
stack_805	805	395.771	446.781	-51.009
stack_803	803	730.198	749.883	-19.685
stack_804	804	562.801	597.527	-34.726
stack_807	807	624.656	634.098	-9.442
stack_806	806	69.436	178.350	-108.914

On the contrary, one out of seven logistic regression models (see Table 9.5) show inflated standard errors for one of the coefficients of interest. In particular:

- Model 10: D6_une

Nevertheless, Models 10's constant term and other regression coefficients are not affected by said inflated standard error. Therefore, we do not adapt the model.

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.127 for party 806 (Pirates) and a maximum of 0.069 for party 801 (Christian Democratic Union / Christian Social Union). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 1 case out of 7 null models perform better than full ones (see Table 9.3).

Table 9.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_801	801	784.360	844.663	-60.303
stack_802	802	591.380	602.235	-10.855
stack_805	805	370.949	373.555	-2.607
stack_803	803	849.094	850.477	-1.383
stack_804	804	375.615	384.835	-9.220
stack_807	807	592.287	593.786	-1.500
stack_806	806	123.057	111.226	11.831

Table 9.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	801	802	805	803	804	807	806
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	-0.038 (0.024)	0.004 (0.022)	0.025 (0.021)	0.039 (0.025)	-0.006 (0.023)	-0.019 (0.024)	-0.016 (0.017)
D8_rec1	-0.039 (0.027)	0.022 (0.025)	-0.032 (0.024)	0.029 (0.029)	0.012 (0.026)	-0.021 (0.027)	0.036 (0.020)
D5_rec1	-0.002 (0.025)	-0.0003 (0.023)	0.019 (0.022)	-0.059* (0.027)	-0.022 (0.024)	0.089*** (0.025)	0.031 (0.018)
EDU_rec2	-0.032 (0.042)	-0.029 (0.038)	0.0001 (0.037)	-0.009 (0.044)	-0.018 (0.040)	-0.063 (0.042)	-0.022 (0.031)
EDU_rec3	0.001 (0.043)	-0.011 (0.039)	0.021 (0.038)	0.028 (0.045)	0.012 (0.041)	-0.052 (0.043)	0.029 (0.031)
D1_rec1	-0.026 (0.030)	0.145*** (0.028)	0.009 (0.027)	0.096** (0.032)	0.143*** (0.029)	0.018 (0.030)	0.096*** (0.022)
D7_rec1	0.090*** (0.026)	0.029 (0.024)	0.044 (0.023)	0.082** (0.028)	-0.074** (0.025)	-0.088*** (0.026)	-0.056** (0.019)
D7_rec2	0.180*** (0.038)	-0.010 (0.035)	0.159*** (0.033)	0.101* (0.040)	-0.162*** (0.036)	-0.071 (0.037)	-0.081** (0.027)
D6_une1	-0.209** (0.066)	-0.109 (0.060)	-0.111 (0.058)	-0.123 (0.071)	0.040 (0.064)	0.018 (0.066)	0.014 (0.049)
D4_age	0.002** (0.001)	0.001* (0.001)	0.0003 (0.001)	-0.001 (0.001)	-0.002* (0.001)	-0.001 (0.001)	-0.005*** (0.001)
D10_rec	0.045*** (0.006)	0.018** (0.006)	0.029*** (0.006)	0.011 (0.007)	-0.007 (0.006)	0.002 (0.006)	0.005 (0.005)
Constant	0.254*** (0.059)	0.249*** (0.054)	0.258*** (0.052)	0.427*** (0.063)	0.451*** (0.057)	0.354*** (0.059)	0.392*** (0.043)
N	866	865	862	867	863	868	854
R-squared	0.126	0.065	0.081	0.047	0.064	0.036	0.142
Adj. R-squared	0.115	0.053	0.069	0.035	0.052	0.023	0.131

*** p < .001; ** p < .01; * p < .05

10 Greece

see top

Synthetic variables have been estimated for the full set of Greek parties available in the original 2019 EES Greek voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria

move below table g.5

Table 9.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	801	802	805	803	804	807	806
	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
D3_rec2	-0.462* (0.188)	-0.152 (0.226)	0.177 (0.308)	0.317 (0.178)	0.353 (0.307)	-0.552* (0.230)	0.521 (0.675)
D8_rec1	-0.345 (0.204)	0.293 (0.275)	0.251 (0.374)	0.397 (0.219)	-0.178 (0.340)	-0.103 (0.255)	1.212 (1.070)
D5_rec1	-0.041 (0.197)	-0.063 (0.240)	0.581 (0.361)	-0.190 (0.185)	0.030 (0.316)	0.384 (0.244)	0.274 (0.705)
EDU_rec2	0.194 (0.338)	0.781 (0.499)	-0.128 (0.576)	0.016 (0.324)	-0.383 (0.490)	-0.102 (0.378)	-0.705 (0.904)
EDU_rec3	0.172 (0.344)	0.778 (0.503)	-0.001 (0.576)	0.276 (0.327)	-0.035 (0.503)	-0.512 (0.401)	-1.013 (0.984)
D1_rec1	-0.498* (0.248)	0.903*** (0.256)	-0.387 (0.419)	0.057 (0.226)	0.850* (0.356)	-0.241 (0.311)	-0.384 (0.892)
D7_rec1	0.450* (0.215)	0.321 (0.257)	0.620 (0.403)	0.289 (0.203)	-0.881** (0.317)	-0.492* (0.241)	-0.790 (0.755)
D7_rec2	0.584* (0.288)	0.084 (0.374)	1.271** (0.462)	0.676* (0.269)	-2.589* (1.033)	-0.566 (0.382)	0.100 (0.902)
D6_une1	-1.543 (1.035)	-0.880 (1.038)	-13.943 (716.816)	-0.347 (0.561)	1.165* (0.551)	-0.078 (0.640)	1.051 (1.166)
D4_age	0.023*** (0.006)	0.027*** (0.007)	0.018 (0.010)	-0.011* (0.005)	0.010 (0.010)	0.010 (0.007)	-0.039 (0.021)
D10_rec	0.287*** (0.044)	0.020 (0.058)	0.109 (0.074)	-0.067 (0.049)	-0.193 (0.101)	-0.126 (0.070)	0.095 (0.151)
Constant	-2.966*** (0.498)	-4.761*** (0.694)	-5.038*** (0.879)	-1.549*** (0.449)	-2.698*** (0.755)	-1.795** (0.568)	-3.307* (1.607)
N	871	871	871	871	871	871	871
Log Likelihood	-380.180	-283.690	-173.474	-412.547	-175.807	-284.143	-49.528
AIC	784.360	591.380	370.949	849.094	375.615	592.287	123.057

***p < .001; **p < .01; *p < .05

see Sect. XXX; for the relevant parties see Table 10.1).

Greek
Table 10.1: ~~Greece~~ Relevant parties

Dep. Var.	Party	Party name (eng)
stack_1201	1201	Coalition of the Radical Left
stack_1202	1202	New Democracy
stack_1203	1203	Golden Dawn
stack_1204	1204	Panhellenic Socialist Movement/ Movement for Change
stack_1205	1205	Communist Party of Greece

| Full OLS models converge and coefficients do not show any particular issues (see Table 10.7). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.016 for party 1204 (Panhellenic Socialist Movement/ Movement for Change) and a maximum of 0.083 for party 1202 (New Democracy). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that the full models perform better in all cases (see Table 10.2).

Table 10.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1201	1201	821.486	839.980	-18.495
stack_1202	1202	763.863	831.163	-67.301
stack_1203	1203	132.265	163.404	-31.139
stack_1204	1204	205.841	208.918	-3.077
stack_1205	1205	235.149	258.529	-23.380

On the contrary, two out of five logistic regression models (see Table 10.8) show inflated standard errors for some of the coefficients of interest. In particular:

- Model 8a: EDU_rec (both categories), D1_rec
- Model 9: D7_rec (second category)

However, for Model 9 the constant term and other regressors are not affected by the inflated standard errors. Model 8a appears more problematic.

The inflated standard errors in Model 8a are potentially due to separation issues. In short, no respondents with low education voted for party 1203 and only two respondents who were union members voted for party 1203. (See Tables 10.5, 10.6)

As a consequence, a constrained version of model 8 (namely, Model 8b) without said variables was estimated and contrasted with the original (Model 8a), full model. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) can be rejected (see Table 10.3). Consequently, synthetic variables for respondents' vote choice for party 1203 have been predicted relying on the unconstrained model (Model 8a).

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.035 for party 1205 (Communist Party of Greece) and a maximum of 0.078 for party

Table 10.3: Likelihood-ratio Test between Model 8a (Unconstrained) and Model 8b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	851	281.9099			
Unconstrained	848	270.2080	3	11.70184	0.0084776

1204 (Panhellenic Socialist Movement/ Movement for Change). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in one case out of five the null model performs better than the full ones. According to AIC values the related null model appears to have a better fit than Model 8b (see Table 10.4).

Table 10.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1201	1201	824.0760	828.3560	-4.279000
stack_1202	1202	931.2300	944.2880	-13.058000
stack_1203	1203	294.2080	294.6670	-0.459000
stack_1203*	1203	299.9099	294.6668	5.243114
stack_1204	1204	309.2970	337.5330	-28.236000
stack_1205	1205	302.8550	294.6670	8.188000

* AIC value refers to Model 8b (constrained).

Table 10.5: Cross tabulation between vote choice for party 1203 and respondents' education level

stack_1203/EDU_rec	1	2	3	NA	Total
0	46	199	626	38	909
1	0	12	27	0	39
NA	2	12	36	7	57
Total	48	223	689	45	1005

Table 10.6: Cross tabulation between vote choice for party 1203 and respondents' trade union membership status

stack_1203/D1_rec	0	1	Total
0	820	89	909
1	37	2	39
NA	55	2	57
Total	912	93	1005

Table 10.7: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	1201	1202	1203	1204	1205
	Model 1	Model 2	Model 3	Model 4	Model 5
D3_rec2	0.089*** (0.026)	-0.039 (0.025)	-0.031 (0.018)	-0.019 (0.019)	0.057** (0.019)
D8_rec1	-0.026 (0.046)	0.083 (0.044)	0.004 (0.031)	-0.010 (0.033)	-0.040 (0.033)
D5_rec1	0.027 (0.029)	0.037 (0.028)	-0.015 (0.020)	0.031 (0.021)	0.013 (0.021)
EDU_rec2	-0.116 (0.068)	-0.092 (0.065)	0.132** (0.046)	-0.066 (0.048)	-0.070 (0.049)
EDU_rec3	-0.099 (0.065)	-0.105 (0.063)	0.075 (0.045)	-0.056 (0.046)	-0.021 (0.047)
D1_rec1	0.030 (0.044)	-0.029 (0.043)	-0.036 (0.030)	0.104** (0.032)	0.049 (0.032)
D7_rec1	-0.053 (0.027)	0.112*** (0.026)	-0.041* (0.019)	0.033 (0.019)	-0.059** (0.020)
D7_rec2	-0.119* (0.052)	0.209*** (0.051)	0.023 (0.036)	-0.017 (0.037)	-0.082* (0.038)
D6_une1	-0.061 (0.039)	0.028 (0.038)	0.004 (0.026)	-0.005 (0.028)	-0.065* (0.028)
D4_age	0.0004 (0.001)	-0.001 (0.001)	-0.002** (0.001)	0.001 (0.001)	-0.0001 (0.001)
D10_rec	-0.028*** (0.007)	0.043*** (0.006)	0.020*** (0.004)	0.004 (0.005)	-0.018*** (0.005)
Constant	0.524*** (0.079)	0.241** (0.076)	0.116* (0.054)	0.179** (0.056)	0.315*** (0.057)
N	898	900	899	886	896
R-squared	0.044	0.094	0.057	0.028	0.049
Adj. R-squared	0.032	0.083	0.046	0.016	0.038

***p < .001; **p < .01; *p < .05

Table 10.8: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	1201	1202	1203	1203	1204	1205
	Model 6	Model 7	Model 8a	Model 8b	Model 9	Model 10
D3_rec2	0.135 (0.185)	0.001 (0.171)	-0.447 (0.372)	-0.381 (0.371)	-0.243 (0.354)	-0.055 (0.369)
D8_rec1	-0.016 (0.331)	0.391 (0.328)	0.135 (0.630)	0.148 (0.627)	-0.717 (0.528)	-0.619 (0.516)
D5_rec1	0.233 (0.210)	0.068 (0.192)	-0.123 (0.407)	-0.082 (0.408)	0.513 (0.442)	0.411 (0.424)
EDU_rec2	-0.506 (0.442)	-0.504 (0.408)	16.498 (1569.420)		0.034 (1.158)	-0.483 (0.893)
EDU_rec3	-0.596 (0.424)	-0.458 (0.389)	16.220 (1569.420)		0.027 (1.124)	-0.411 (0.850)
D1_rec1	0.234 (0.296)	-0.203 (0.286)	-16.579 (1152.673)		1.512*** (0.388)	0.452 (0.560)
D7_rec1	-0.055 (0.190)	0.418* (0.181)	-0.687 (0.369)	-0.731* (0.364)	1.416** (0.440)	-0.516 (0.371)
D7_rec2	-0.644 (0.411)	0.676* (0.314)	-1.327 (1.047)	-1.493 (1.040)	-14.897 (774.130)	-0.480 (0.773)
D6_une1	-0.831* (0.342)	0.183 (0.255)	-0.555 (0.631)	-0.393 (0.630)	0.239 (0.533)	0.611 (0.467)
D4_age	0.014 (0.007)	-0.002 (0.007)	0.004 (0.015)	0.008 (0.014)	0.033* (0.014)	-0.0004 (0.015)
D10_rec	-0.156*** (0.046)	0.203*** (0.044)	0.169 (0.090)	0.158 (0.090)	0.144 (0.089)	-0.236** (0.090)
Constant	-1.169* (0.528)	-1.987*** (0.513)	-19.410 (1569.420)	-3.479*** (0.927)	-5.774*** (1.303)	-1.719 (0.969)
N	860	860	860	860	860	860
Log Likelihood	-400.038	-453.615	-135.104	-140.955	-142.648	-139.428
AIC	824.076	931.230	294.208	299.910	309.297	302.855

***p < .001; **p < .01; *p < .05

11 Hungary

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*party numbers in table 11.1
imply that for 7 out of at least 8
parties available*

Synthetic variables have been estimated for the full set of Hungarian parties available in the original 2019 EES Hungary voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 11.1).

Hungarian
Table 11.1: Hungary relevant parties

Dep.	Var.	Party	Party name (eng)
stack_1301	1301	Democratic Coalition	
stack_1302	1302	FIDESZ-KDNP Alliance	
stack_1303	1303	Jobbik	
stack_1304	1304	Politics Can Be Different	
stack_1306	1306	Hungarian Socialist Party	
stack_1307	1307	Our Homeland Movement	
stack_1308	1308	Momentum Movement	

- Full OLS models converge and coefficients do not show any particular issues (see Table 11.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.022 for party 1308 (Momentum Movement) and a maximum of 0.112 for party 1302 (FIDESZ-KDNP Alliance).
- Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that the full models perform better in all cases (see Table 11.2).

Table 11.2: Akaike Information Criterion values for OLS full and null models

Dep.	Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1301	1301		694.097	736.686	-42.589
stack_1302	1302		816.070	914.037	-97.967
stack_1303	1303		461.680	543.950	-82.270
stack_1304	1304		134.898	146.605	-11.706
stack_1306	1306		295.659	314.278	-18.619
stack_1307	1307		135.446	160.468	-25.022
stack_1308	1308		599.902	608.757	-8.855

On the contrary, three out of seven logistic regression models (see Table 11.5) show inflated standard errors for some of the coefficients of interest. In particular:

- Model 11: D7_rec (second category)
- Model 12: D6_une
- Model 13: D7_rec (second category), D6_une

However, for these models the constant terms and other regressors are not affected by the inflated standard errors. Thus, no additional adjustments are made and Models 11, 12 and 13 are not modified.

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.07 for party 1304 (Politics Can Be Different) and a maximum of 0.082 for party 1302

(FIDESZ-KDNP Alliance). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models shows that in three cases out of seven null models perform better than full ones (see Table 11.3).

Table 11.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1301	1301	710.883	766.824	-55.941
stack_1302	1302	869.063	949.018	-79.955
stack_1303	1303	457.685	455.166	2.519
stack_1304	1304	125.608	119.342	6.266
stack_1306	1306	287.596	293.324	-5.729
stack_1307	1307	221.242	227.216	-5.974
stack_1308	1308	514.296	508.228	6.067

Table 11.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	1301	1302	1303	1304	1306	1307	1308
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	0.012 (0.024)	-0.004 (0.025)	-0.032 (0.021)	0.027 (0.017)	0.012 (0.019)	-0.043* (0.018)	0.004 (0.023)
D8_rec1	0.004 (0.029)	-0.019 (0.031)	-0.091*** (0.025)	-0.014 (0.021)	-0.005 (0.023)	0.019 (0.021)	0.072** (0.028)
D5_rec1	-0.002 (0.025)	0.067* (0.026)	-0.031 (0.022)	-0.027 (0.018)	-0.002 (0.020)	0.011 (0.018)	-0.030 (0.023)
EDU_rec2	-0.005 (0.042)	0.003 (0.045)	0.015 (0.037)	-0.001 (0.031)	-0.020 (0.034)	-0.050 (0.032)	-0.042 (0.040)
EDU_rec3	-0.043 (0.043)	0.014 (0.045)	0.023 (0.037)	0.013 (0.031)	-0.009 (0.034)	-0.015 (0.032)	-0.035 (0.040)
D1_rec1	0.053 (0.036)	-0.013 (0.039)	0.076* (0.032)	0.057* (0.027)	0.081** (0.029)	0.093*** (0.027)	0.033 (0.035)
D7_rec1	-0.019 (0.025)	0.072** (0.026)	-0.060** (0.022)	-0.020 (0.018)	-0.018 (0.020)	-0.028 (0.019)	-0.031 (0.024)
D7_rec2	0.010 (0.056)	0.119* (0.060)	0.0001 (0.049)	-0.050 (0.042)	0.025 (0.045)	-0.034 (0.042)	0.014 (0.054)
D6_une1	-0.061 (0.063)	-0.018 (0.066)	-0.053 (0.054)	-0.019 (0.046)	-0.045 (0.050)	-0.035 (0.046)	-0.125* (0.059)
D4_age	0.005*** (0.001)	-0.0001 (0.001)	-0.005*** (0.001)	-0.002*** (0.001)	0.002*** (0.001)	-0.002*** (0.001)	-0.0001 (0.001)
D10_rec	-0.026*** (0.006)	0.066*** (0.007)	-0.009 (0.006)	-0.009 (0.005)	-0.020*** (0.005)	-0.003 (0.005)	-0.022*** (0.006)
Constant	0.198*** (0.054)	0.176** (0.057)	0.653*** (0.047)	0.371*** (0.039)	0.168*** (0.043)	0.333*** (0.040)	0.399*** (0.051)
N	911	916	918	910	915	880	906
R-squared	0.068	0.123	0.107	0.036	0.043	0.052	0.033
Adj. R-squared	0.057	0.112	0.097	0.025	0.032	0.040	0.022

***p < .001; **p < .01; *p < .05

Table 11.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	1301	1302	1303	1304	1306	1307	1308
	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
D3_rec2	-0.120 (0.199)	-0.190 (0.173)	-0.438 (0.270)	1.182 (0.693)	-0.081 (0.363)	-1.414** (0.511)	-0.063 (0.248)
D8_rec1	0.114 (0.250)	-0.022 (0.211)	-0.804** (0.284)	0.901 (1.072)	0.963 (0.619)	-0.360 (0.500)	0.793* (0.389)
D5_rec1	-0.160 (0.203)	0.338 (0.184)	-0.184 (0.275)	0.487 (0.700)	0.858* (0.427)	0.270 (0.476)	-0.054 (0.255)
EDU_rec2	-0.012 (0.377)	0.051 (0.330)	0.669 (0.530)	-1.492 (1.455)	-0.630 (0.680)	-0.128 (0.892)	0.417 (0.514)
EDU_rec3	-0.242 (0.387)	0.139 (0.329)	0.704 (0.528)	0.668 (1.117)	-0.256 (0.673)	0.820 (0.823)	0.350 (0.514)
D1_rec1	0.469 (0.286)	-0.030 (0.256)	-0.334 (0.450)	0.325 (0.815)	-0.831 (0.747)	0.628 (0.535)	-0.322 (0.419)
D7_rec1	-0.069 (0.209)	0.266 (0.181)	-0.385 (0.292)	0.736 (0.673)	-0.722 (0.410)	-0.041 (0.425)	0.296 (0.262)
D7_rec2	-0.068 (0.489)	0.686 (0.371)	-0.334 (0.634)	-15.078 (1515.898)	0.011 (0.775)	-16.360 (1540.344)	0.935* (0.462)
D6_une1	-0.071 (0.566)	-0.284 (0.561)	-0.178 (0.657)	1.458 (1.160)	-15.488 (1105.684)	-16.512 (1807.276)	0.217 (0.637)
D4_age	0.048*** (0.007)	0.014** (0.005)	-0.017* (0.008)	-0.005 (0.019)	0.030* (0.012)	-0.022 (0.014)	0.001 (0.007)
D10_rec	-0.212*** (0.064)	0.370*** (0.043)	-0.040 (0.077)	0.008 (0.171)	-0.195 (0.125)	-0.248 (0.153)	-0.157 (0.080)
Constant	-3.671*** (0.534)	-2.671*** (0.417)	-1.221* (0.594)	-6.465*** (1.731)	-5.115*** (1.071)	-2.055* (0.931)	-3.338*** (0.658)
N	844	844	844	844	844	844	844
Log Likelihood	-343.442	-422.531	-216.842	-50.804	-131.798	-98.621	-245.148
AIC	710.883	869.063	457.685	125.608	287.596	221.242	514.296

***p < .001; **p < .01; *p < .05

12 Ireland

see top

Synthetic variables have been estimated for the full set of Irish parties available in the original 2019 EES ! Irish voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 12.1).

Table 12.1: Irish relevant parties

Dep. Var.	Party	Party name (eng)
stack_1402	1402	Familiy of the Irish
stack_1403	1403	Labour Party
stack_1401	1401	Soldiers of Destiny
stack_1404	1404	Green Party
stack_1405	1405	Ourselves Alone
stack_1406	1406	Solidarity - People Before Profit/

! Full OLS models converge and coefficients do not show any particular issues (see Table 12.6). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.026 for party 1404 (Green Party) and a maximum of 0.111 for party 1401 (Soldiers of Destiny). Moreover, the ! differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 6 cases out of 6 null models perform better than full ones (see Table 12.2).

Table 12.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1402	1402	484.214	542.391	-58.177
stack_1403	1403	255.063	273.301	-18.238
stack_1401	1401	405.761	494.195	-88.434
stack_1404	1404	452.245	463.429	-11.184
stack_1405	1405	419.106	482.320	-63.214
stack_1406	1406	354.872	374.578	-19.706

On the contrary, one out of six logistic regression models (see Table 12.7) shows inflated standard errors for one of the coefficients of interest:

- Model 8: EDU_rec;

Model 8

It presents a problematic profile since its inflated standard error is affecting the constant term.

Why 8a here and above voted Model 8a's inflated standard errors are due to separation issues. In short, only one low educated respondent did vote for party 1403 (see Tables 12.5)

As a consequence, a constrained version of model 8 (namely, Model 8b) without said variables was estimated and contrasted with the original (Model 8a), full model. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) cannot be rejected (see Table 12.3). Consequently, synthetic variables for respondents' vote choice for party 1403 have been predicted relying on the constrained model (Model 8b).

Table 12.3: Likelihood-ratio Test between Model 8a (Unconstrained) and Model 8b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	818	175.2906			
Unconstrained	816	171.6861	2	3.604472	0.1649297

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.038 for party 1403 (Labour Party) and a maximum of 0.033 for party 1402 (Family of the Irish). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 4 cases out of 6 null models perform better than full ones. According to AIC values the related null model appears to have a better fit than Model 8b (see Table 12.4).

Table 12.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1401	1401	526.3080	532.3840	-6.075000
stack_1402	1402	702.7700	728.4990	-25.729000
stack_1403	1403	195.6860	190.4440	5.242000
stack_1403*	1403	195.2906	190.4442	4.846376
stack_1404	1404	534.4010	536.8130	-2.412000
stack_1405	1405	443.8770	447.6410	-3.764000
stack_1406	1406	235.6500	233.1430	2.508000

* AIC value refers to Model 8b (constrained).

Table 12.5: Cross tabulation between vote choice for party 505 and respondents' education

stack_1403/EDU_rec	1	2	3	NA	Total
0	80	365	421	66	932
1	0	8	12	3	23
NA	3	18	20	4	45
Total	83	391	453	73	1000

Table 12.6: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	1402	1403	1401	1404	1405	1406
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
D3_rec2	0.006 (0.022)	0.031 (0.019)	-0.049* (0.021)	0.055* (0.022)	-0.019 (0.021)	0.021 (0.021)
D8_rec1	0.027 (0.024)	0.050* (0.021)	0.015 (0.023)	0.035 (0.023)	-0.026 (0.023)	0.020 (0.022)
D5_rec1	0.030 (0.025)	0.010 (0.022)	0.007 (0.024)	0.005 (0.025)	0.010 (0.024)	0.018 (0.024)
EDU_rec2	-0.062 (0.042)	-0.054 (0.037)	0.066 (0.041)	-0.032 (0.042)	0.038 (0.041)	-0.031 (0.040)
EDU_rec3	-0.025 (0.041)	-0.003 (0.036)	0.032 (0.040)	0.015 (0.041)	-0.017 (0.040)	-0.054 (0.039)
D1_rec1	-0.015 (0.025)	0.022 (0.022)	-0.034 (0.024)	0.019 (0.025)	0.025 (0.024)	0.055* (0.023)
D7_rec1	0.076** (0.024)	0.063** (0.021)	0.099*** (0.023)	0.081*** (0.023)	-0.020 (0.023)	-0.040 (0.022)
D7_rec2	0.137*** (0.040)	0.078* (0.035)	0.138*** (0.038)	0.051 (0.040)	-0.030 (0.039)	-0.037 (0.038)
D6_une1	-0.098* (0.046)	-0.028 (0.040)	-0.034 (0.044)	-0.083 (0.046)	0.038 (0.045)	0.110* (0.044)
D4_age	-0.0005 (0.001)	-0.001 (0.001)	-0.002** (0.001)	0.001 (0.001)	-0.006*** (0.001)	-0.002** (0.001)
D10_rec	0.029*** (0.005)	0.009* (0.004)	0.038*** (0.004)	-0.002 (0.004)	0.002 (0.004)	-0.007 (0.004)
Constant	0.345*** (0.052)	0.328*** (0.045)	0.329*** (0.050)	0.348*** (0.052)	0.599*** (0.050)	0.475*** (0.050)
N	848	848	846	841	848	826
R-squared	0.090	0.046	0.122	0.039	0.096	0.049
Adj. R-squared	0.078	0.034	0.111	0.026	0.084	0.036

***p < .001; **p < .01; *p < .05

Table 12.7: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	1402	1403	1403	1401	1404	1405	1406
	Model 1	Model 8a	Model 8b	Model 9	Model 10	Model 11	Model 12
D3_rec2	0.036 (0.199)	0.043 (0.469)	0.101 (0.466)	-0.420 (0.247)	-0.129 (0.241)	-0.098 (0.274)	0.301 (0.415)
D8_rec1	-0.109 (0.208)	1.528* (0.759)	1.531* (0.757)	0.215 (0.266)	0.167 (0.262)	-0.567* (0.273)	0.027 (0.446)
D5_rec1	0.067 (0.226)	-0.095 (0.510)	0.010 (0.508)	0.151 (0.281)	-0.037 (0.269)	0.698* (0.343)	0.744 (0.513)
EDU_rec2	-0.532 (0.377)	15.404 (1180.975)		1.186 (0.751)	-0.662 (0.456)	0.267 (0.497)	0.063 (0.803)
EDU_rec3	-0.146 (0.366)	15.798 (1180.975)		1.307 (0.746)	-0.181 (0.429)	-0.541 (0.510)	-0.030 (0.814)
D1_rec1	-0.333 (0.235)	0.518 (0.490)	0.496 (0.489)	0.040 (0.273)	0.390 (0.257)	0.178 (0.294)	0.709 (0.438)
D7_rec1	0.154 (0.216)	0.276 (0.519)	0.396 (0.506)	0.249 (0.264)	0.875** (0.277)	-0.235 (0.284)	-0.648 (0.455)
D7_rec2	0.052 (0.347)	0.300 (0.848)	0.418 (0.828)	0.085 (0.439)	0.849* (0.401)	-1.256 (0.747)	-0.898 (1.052)
D6_une1	-0.569 (0.545)	0.060 (1.078)	-0.042 (1.064)	0.482 (0.476)	-0.277 (0.622)	-0.970 (0.749)	1.791** (0.545)
D4_age	0.026*** (0.006)	0.028 (0.016)	0.026 (0.015)	0.017* (0.008)	0.015* (0.008)	-0.020* (0.010)	0.004 (0.015)
D10_rec	0.140*** (0.039)	-0.182 (0.105)	-0.184 (0.104)	0.131** (0.048)	-0.036 (0.049)	0.010 (0.055)	-0.178 (0.095)
Constant	-2.995*** (0.490)	-21.721 (1180.976)	-6.241*** (1.182)	-4.877*** (0.857)	-3.178*** (0.575)	-1.459* (0.617)	-4.144*** (1.116)
N	828	828	828	828	828	828	828
Log Likelihood	-339.385	-85.843	-87.645	-251.154	-255.201	-209.938	-105.825
AIC	702.770	195.686	195.291	526.308	534.401	443.877	235.650

***p < .001; **p < .01; *p < .05

13 Latvia

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*party numbers in table 13.1
imply that for 7 out of at least 16
parties available*

Synthetic variables have been estimated for the full set of Latvian parties available in the original 2019 EES Latvian voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 13.1).

Table 13.1: Latvian Relevant parties

Dep. Var.	Party	Party name (eng)
stack_1611	1611	For Fatherland and Freedom - National Independence Movement of Latvia
stack_1608	1608	New Conservative Party
stack_1609	1609	Development/For!
stack_1605	1605	Who owns the state?
stack_1610	1610	Social Democratic Party "Harmony"
stack_1604	1604	Green and Farmers' Union
stack_1616	1616	Unity

Full OLS models converge and coefficients do not show any particular issues (see Table 13.15). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.007 for party 1608 (New Conservative Party) and a maximum of 0.047 for party 1610 (Social Democratic Party "Harmony"). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 5 cases out of 7 null models perform better than full ones (see Table 13.2).

Table 13.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1611	1611	417.132	427.783	-10.651
stack_1608	1608	313.235	308.067	5.168
stack_1609	1609	297.863	304.472	-6.610
stack_1605	1605	-52.366	-52.571	0.205
stack_1610	1610	610.475	638.014	-27.539
stack_1604	1604	225.320	225.784	-0.464
stack_1616	1616	432.790	446.309	-13.519

On the contrary, six out of seven logistic regression models (see Tables 13.16, 13.17) show inflated standard errors for some of the coefficients of interest. In particular:

- Model 8,14: EDU_rec, D6_une;
- Model 9: D6_une;
- Model 11: D5_rec;
- Model 12,13: EDU_rec.

Nevertheless, models 9 and 11 constant terms and other regression coefficients are not affected by said inflated standard errors, whereas Models 8,12,13,14 present a more problematic profile.

of Models 9 and 11

Models 8,12,13,14 inflated standard errors are due to separation issues. In short, no respondents with low education and unemployed voted *blanks!* did vote for party 1611 and 1616 (see Tables 13.9, 13.10, 13.11, 13.12). For parties 1610 and 1604, *No* respondents with low education voted for them *blanks!* (see Tables 13.13, 13.14).

As a consequence, a constrained version of Models 8,12,13,14 (namely, Model 8b,12b,13b,14b) without said variables ~~were~~ was estimated and contrasted with the original (Models 8a,12a,13a,14a), full models. Likelihood-ratio test results show

- that for Model 8 H_0 (namely, that the constrained model fits better than the full model) can be rejected at $p<0.05$ (see Table 13.3). However, if just EDU_rec is dropped, H_0 can be rejected at $p<0.1$ and the constant term is also not affected (see Table 13.4). Thus, synthetic variables for respondents' vote choice for party 1611 have been predicted relying on the constrained model dropping only EDU_rec.
- that for Model 12 H_0 can be rejected at $p<0.1$ (see Table 13.5). Consequently, synthetic variables for respondents' vote choice for party 1610 have been predicted relying on the constrained model (Model 12b).
- that for Model 13 H_0 can be rejected at $p<0.05$ (see Table 13.6). Consequently, synthetic variables for respondents' vote choice for party 1604 have been predicted relying on the constrained model (Model 13b).
- that for Model 14 H_0 can be rejected at $p<0.001$ (see Table 13.7). Consequently, synthetic variables for respondents' vote choice for party 1616 have been predicted relying on the unconstrained model (Model 14).

Table 13.3: Likelihood-ratio Test between Model 8a (Unconstrained) and (Fully Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
784	471.5062			
781	461.8983	3	9.607929	0.0222105

Table 13.4: Likelihood-ratio Test between Model 8a (Unconstrained) and Model 8b (Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
783	465.7091			
781	461.8983	2	3.810772	0.1487652

Table 13.5: Likelihood-ratio Test between Model 12a (Unconstrained) and Model 12b (Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
783	474.3959			
781	469.3674	2	5.028464	0.0809251

Table 13.6: Likelihood-ratio Test between Model 13a (Unconstrained) and Model 13b (Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
783	259.6867			
781	252.6965	2	6.990147	0.0303465

Table 13.7: Likelihood-ratio Test between Model 14 (Unconstrained and Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
783	589.2296			
781	573.1892	2	16.04043	0.0003287

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.055 for party 1608 (New Conservative Party) and a maximum of 0.043 for party 1616 (Unity). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models shows that in 3 cases out of 7 null models perform better than full ones. According to AIC values the related null model appears to have a better fit than Model 11b (see Table 13.8).

Table 13.8: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1604	1604	276.6970	270.1370	6.5600000
stack_1611*	1604	279.6867	270.1366	9.5501070
stack_1605	1605	70.3880	72.5630	-2.1760000
stack_1608	1608	296.1930	282.6840	13.5080000
stack_1609	1609	461.8350	456.5220	5.3130000
stack_1610	1610	493.3670	493.8890	-0.5220000
stack_1610	1610	494.3959	493.8894	0.5065162
stack_1611	1611	485.8980	480.1110	5.7880000
stack_1610*	1611	485.7091	480.1108	5.5982749
stack_1616	1616	597.1890	625.7790	-28.5900000
stack_1604*				

* AIC value refers to Model 11b (constrained).

Table 13.9: Cross tabulation between vote choice for party 1611 and respondents' education

stack_1611/EDU_rec	1	2	3	NA	Total
0	26	422	422	17	887
1	1	36	46	3	86
NA	2	13	12	0	27
Total	29	471	480	20	1000

Table 13.10: Cross tabulation between vote choice for party 1611 and respondents' employment status

stack_1611/D6_une	0	1	Total
0	838	49	887
1	85	1	86
NA	26	1	27
Total	949	51	1000

Table 13.11: Cross tabulation between vote choice for party 1616 and respondents' education

stack_1616/EDU_rec	1	2	3	NA	Total
0	26	414	380	18	838
1	1	44	88	2	135
NA	2	13	12	0	27
Total	29	471	480	20	1000

Table 13.12: Cross tabulation between vote choice for party 1616 and respondents' employment status

stack_1616/D6_une	0	1	Total
0	791	47	838
1	132	3	135
NA	26	1	27
Total	949	51	1000

Table 13.13: Cross tabulation between vote choice for party 1610 and respondents' education membership

stack_1610/EDU_rec	1	2	3	NA	Total
0	26	419	424	17	886
1	1	39	44	3	87
NA	2	13	12	0	27
Total	29	471	480	20	1000

Table 13.14: Cross tabulation between vote choice for party 1604 and respondents' education

stack_1604/EDU_rec	1	2	3	NA	Total
0	27	446	442	18	933
1	0	12	26	2	40
NA	2	13	12	0	27
Total	29	471	480	20	1000

Table 13.15: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	1611	1608	1609	1605	1610	1604	1616
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	-0.028 (0.023)	0.010 (0.022)	0.030 (0.022)	0.014 (0.017)	0.049 (0.026)	0.033 (0.020)	0.034 (0.023)
D8_rec1	-0.108*** (0.028)	-0.076** (0.027)	-0.055* (0.026)	-0.051* (0.021)	0.178*** (0.031)	-0.029 (0.025)	-0.057* (0.028)
D5_rec1	-0.043 (0.026)	-0.015 (0.024)	-0.062* (0.024)	-0.012 (0.019)	0.028 (0.029)	0.0001 (0.023)	-0.034 (0.026)
EDU_rec2	0.078 (0.071)	0.002 (0.067)	0.064 (0.066)	0.035 (0.052)	0.004 (0.078)	0.019 (0.061)	0.047 (0.070)
EDU_rec3	0.117 (0.071)	0.030 (0.067)	0.118 (0.066)	0.061 (0.053)	-0.060 (0.079)	0.085 (0.062)	0.127 (0.070)
D1_rec1	0.026 (0.030)	0.003 (0.028)	0.010 (0.028)	-0.008 (0.022)	0.027 (0.034)	0.020 (0.026)	0.028 (0.030)
D7_rec1	0.039 (0.024)	0.021 (0.023)	0.017 (0.022)	0.020 (0.018)	0.013 (0.027)	0.039 (0.021)	0.030 (0.024)
D7_rec2	0.035 (0.045)	-0.011 (0.043)	-0.007 (0.043)	0.022 (0.034)	-0.022 (0.050)	0.039 (0.039)	0.030 (0.045)
D6_une1	-0.083 (0.060)	-0.103 (0.055)	0.043 (0.057)	-0.003 (0.043)	0.044 (0.066)	0.011 (0.051)	-0.072 (0.058)
D4_age	0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.002** (0.001)	-0.001 (0.001)	0.0001 (0.001)	0.001 (0.001)
D10_rec	-0.002 (0.006)	0.003 (0.006)	-0.010 (0.006)	-0.001 (0.005)	0.011 (0.007)	0.0001 (0.006)	0.0002 (0.006)
Constant	0.282** (0.089)	0.376*** (0.084)	0.385*** (0.083)	0.280*** (0.065)	0.137 (0.098)	0.231** (0.076)	0.203* (0.087)
N	784	768	767	770	792	790	789
R-squared	0.041	0.022	0.037	0.028	0.061	0.028	0.044
Adj. R-squared	0.027	0.007	0.023	0.014	0.047	0.014	0.030

***p < .001; **p < .01; *p < .05

Table 13.16: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	1611 Model 8	1611 Model 8a	1608 Model 9	1609 Model 10	1605 Model 11
D3_rec2	-0.408 (0.261)	-0.381 (0.260)	0.047 (0.365)	0.130 (0.272)	-0.568 (1.022)
D8_rec1	-0.149 (0.305)	-0.178 (0.304)	-0.418 (0.408)	-0.765** (0.286)	-2.413* (1.086)
D5_rec1	-0.210 (0.287)	-0.169 (0.286)	-0.223 (0.394)	-0.519 (0.276)	17.928 (2693.556)
EDU_rec2	16.018 (1357.773)		-1.380 (0.821)	-0.355 (0.779)	-2.126 (1.474)
EDU_rec3	16.148 (1357.773)		-0.918 (0.806)	-0.188 (0.783)	-2.422 (1.630)
D1_rec1	0.238 (0.315)	0.261 (0.314)	-0.024 (0.471)	0.281 (0.336)	0.414 (1.216)
D7_rec1	-0.029 (0.270)	-0.004 (0.268)	0.023 (0.380)	0.236 (0.276)	0.056 (1.056)
D7_rec2	0.269 (0.463)	0.305 (0.459)	0.131 (0.678)	-0.350 (0.638)	2.391 (1.465)
D6_une1	-16.006 (1087.001)	-15.178 (674.828)	-15.519 (1096.978)	0.398 (0.579)	3.017* (1.174)
D4_age	0.007 (0.008)	0.008 (0.008)	-0.001 (0.012)	0.006 (0.009)	0.063 (0.043)
D10_rec	0.086 (0.067)	0.083 (0.067)	0.092 (0.093)	-0.114 (0.082)	-0.394 (0.345)
Constant	-18.433 (1357.773)	-2.432*** (0.636)	-1.641 (1.110)	-1.609 (0.973)	-22.674 (2693.557)
N	793	793	793	793	793
Log Likelihood	-230.949	-232.855	-136.096	-218.918	-23.194
AIC	485.898	485.709	296.193	461.835	70.388

***p < .001; **p < .01; *p < .05

Table 13.17: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	1610	1610	1604	1604	1616
	Model 12a	Model 12b	Model 13a	Model 13b	Model 14
D3_rec2	-0.568 (1.022)	0.260 (0.258)	-0.152 (0.374)	-0.098 (0.373)	-0.151 (0.225)
D8_rec1	-2.413* (1.086)	1.132** (0.439)	-0.721 (0.395)	-0.808* (0.393)	-0.279 (0.251)
D5_rec1	17.928 (2693.556)	-0.183 (0.276)	0.308 (0.451)	0.329 (0.447)	-0.153 (0.246)
EDU_rec2	-2.126 (1.474)		13.707 (850.340)		15.052 (807.744)
EDU_rec3	-2.422 (1.630)		14.643 (850.340)		15.784 (807.744)
D1_rec1	0.414 (1.216)	0.218 (0.305)	0.506 (0.435)	0.620 (0.429)	-0.200 (0.301)
D7_rec1	0.056 (1.056)	0.417 (0.274)	0.388 (0.408)	0.495 (0.405)	-0.034 (0.229)
D7_rec2	2.391 (1.465)	0.397 (0.465)	0.349 (0.701)	0.541 (0.692)	0.033 (0.430)
D6_une1	3.017* (1.174)	0.502 (0.563)	0.843 (0.810)	0.450 (0.775)	-15.056 (652.582)
D4_age	0.063 (0.043)	0.004 (0.008)	0.002 (0.012)	0.002 (0.012)	0.031*** (0.007)
D10_rec	-0.394 (0.345)	0.091 (0.066)	-0.077 (0.109)	-0.086 (0.109)	0.005 (0.061)
Constant	-22.674 (2693.557)	-3.982*** (0.710)	-17.407 (850.340)	-3.230*** (0.924)	-18.457 (807.744)
N	793	793	793	793	793
Log Likelihood	-23.194	-237.198	-126.348	-129.843	-286.595
AIC	70.388	494.396	276.697	279.687	597.189

***p < .001; **p < .01; *p < .05

14 Lithuania

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Synthetic variables have been estimated for the full set of Lithuanian parties available in the original 2019 EES Lithuania voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 14.1).

Table 14.1: Lithuania relevant parties

Dep. Var.	Party	Party name (eng)
stack_1701	1701	Homeland Union - Lithuanian Christian Democrats
stack_1703	1703	Lithuanian Social Democratic Party
stack_1706	1706	Liberal Movement
stack_1705	1705	Labour Party
stack_1704	1704	Order and Justice
stack_1707	1707	Election Action of Lithuania's Poles
stack_1702	1702	Lithuanian Peasant and Greens Union

Full OLS models converge and coefficients do not show any particular issues (see Table 14.12). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.004 for party 1703 (Lithuanian Social Democratic Party) and a maximum of 0.057 for party 1701 (Homeland Union - Lithuanian Christian Democrats). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that the full models perform better in six out of seven cases (see Table 14.2).

Table 14.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1701	1701	595.850	636.971	-41.120
stack_1703	1703	474.217	466.964	7.253
stack_1706	1706	263.612	290.702	-27.090
stack_1705	1705	260.747	299.923	-39.177
stack_1704	1704	58.757	92.687	-33.930
stack_1707	1707	-195.660	-158.090	-37.570
stack_1702	1702	502.180	515.036	-12.855

On the contrary, three out of seven logistic regression models (see Table 14.13) show inflated standard errors for some of the coefficients of interest, in particular:

- Model 10a: EDU_rec (both categories)
- Model 13a: EDU_rec (both categories), D7_rec (second category), D6_une
- Model 14a: EDU_rec (both categories)

Models 10a, 13a and 14a are all problematic as the constant terms seem to be affected by the inflated standard errors issue. These inflated standard errors are due to separation issues which are explored below.

For Model 10a, we see that no respondent with low education voted for party 1706 (see Table 14.7). For Model 13a, we ~~have that~~ again, no respondent with low education and no respondent who is unemployed

voted for party 1707 (see Tables 14.8, 14.10). Furthermore, only one respondent with high subjective social class voted for party 1707 (see Table 14.9). Finally, for Model 14a Table 14.11 shows that no respondent with low education voted for party 1702.

As a consequence constrained versions of Models 10, 13 and 14 (namely 10b, 13b and 14b) were estimated. In Models 10b and 14b the EDU_rec variables were removed, while in Model 13b the EDU_rec variables, the D7_rec variables and the D6_une variable were removed. These constrained models were then contrasted with their respective (original) full models (i.e. 10a, 13a, 14a). Likelihood-ratio test results show that H_0 (constrained model fits better than the full model) cannot be rejected for any of the models (see Tables 14.3, 14.4, 14.5). Following these results, synthetic variables for respondents' vote choice for parties 1706, 1707 and 1702 have been predicted relying on the constrained models (Model 10b, 13b, 14b).

Table 14.3: Likelihood-ratio Test between Model 10a (Unconstrained) and Model 10b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	803	269.6011			
Unconstrained	801	263.9373	2	5.663756	0.0589021

Table 14.4: Likelihood-ratio Test between Model 13a (Unconstrained) and Model 13b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	806	80.57055			
Unconstrained	801	72.02173	5	8.548816	0.1284711

Table 14.5: Likelihood-ratio Test between Model 14a (Unconstrained) and Model 14b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	803	472.3105			
Unconstrained	801	469.1299	2	3.18063	0.2038614

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.043 for party 1705 (Labour Party) and a maximum of 0.057 for party 1701 (Homeland Union - Lithuanian Christian Democrats). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in two cases out of seven null models perform better than full ones. According to AIC values the related null models appear to have a worse fit than Models 10b, 13b and 14b (see Table 14.6).

Table 14.6: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1701	1701	716.17000	761.3430	-45.174000
stack_1702	1702	493.13000	506.9030	-13.773000
stack_1702*	1702	492.31053	506.9028	-14.592235
stack_1703	1703	686.87500	682.5230	4.352000
stack_1704	1704	166.46100	167.1380	-0.676000
stack_1705	1705	313.74400	302.9360	10.808000
stack_1706	1706	287.93700	290.6480	-2.711000
stack_1706*	1706	289.60107	290.6479	-1.046876
stack_1707	1707	96.02200	100.9630	-4.941000
stack_1707*	1707	94.57055	100.9631	-6.392566

* AIC value refers to constrained models (i.e. 14b, 10b, 13b)

Table 14.7: Cross tabulation between vote choice for party 1706 and respondents' education

stack_1706/EDU_rec	1	2	3	NA	Total
0	29	265	553	14	861
1	0	6	34	2	42
NA	7	28	59	3	97
Total	36	299	646	19	1000

Table 14.8: Cross tabulation between vote choice for party 1707 and respondents' education

stack_1707/EDU_rec	1	2	3	NA	Total
0	29	265	584	14	892
1	0	6	3	2	11
NA	7	28	59	3	97
Total	36	299	646	19	1000

Table 14.9: Cross tabulation between vote choice for party 1707 and respondents' subjective social class

stack_1707/D7_rec	0	1	2	NA	Total
0	387	353	125	27	892
1	5	5	1	0	11
NA	46	37	10	4	97
Total	438	395	136	31	1000

Table 14.10: Cross tabulation between vote choice for party 1707 and respondents' employment status

stack_1707/D6_une	0	1	Total
0	858	34	892
1	11	0	11
NA	91	6	97
Total	960	40	1000

Table 14.11: Cross tabulation between vote choice for party 1702 and respondents' education

stack_1702/EDU_rec	1	2	3	NA	Total
0	29	245	534	15	823
1	0	26	53	1	80
NA	7	28	59	3	97
Total	36	299	646	19	1000

Table 14.12: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	1701	1703	1706	1705	1704	1707	1702
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	-0.013 (0.024)	0.031 (0.022)	-0.002 (0.020)	0.026 (0.020)	0.018 (0.018)	0.001 (0.015)	0.006 (0.023)
D8_rec1	0.017 (0.033)	-0.011 (0.031)	0.055* (0.027)	-0.018 (0.027)	-0.010 (0.024)	-0.021 (0.021)	-0.084** (0.031)
D5_rec1	0.003 (0.025)	0.020 (0.023)	-0.030 (0.021)	0.015 (0.021)	0.029 (0.019)	0.001 (0.016)	0.032 (0.024)
EDU_rec2	-0.121 (0.067)	-0.114 (0.062)	-0.020 (0.056)	0.023 (0.055)	0.055 (0.049)	0.044 (0.043)	-0.012 (0.063)
EDU_rec3	-0.055 (0.066)	-0.088 (0.062)	0.008 (0.056)	0.005 (0.055)	0.031 (0.049)	-0.003 (0.042)	-0.043 (0.063)
D1_rec1	0.024 (0.037)	0.073* (0.034)	0.080** (0.030)	0.123*** (0.030)	0.103*** (0.027)	0.139*** (0.023)	0.117*** (0.035)
D7_rec1	0.058* (0.025)	-0.032 (0.023)	0.012 (0.021)	-0.029 (0.021)	-0.034 (0.018)	-0.013 (0.016)	-0.038 (0.024)
D7_rec2	0.163*** (0.035)	-0.002 (0.033)	0.053 (0.029)	0.007 (0.029)	0.00002 (0.026)	-0.015 (0.023)	-0.029 (0.034)
D6_une1	0.019 (0.061)	0.063 (0.056)	0.122* (0.050)	0.178*** (0.050)	0.094* (0.045)	0.059 (0.039)	0.134* (0.058)
D4_age	-0.001 (0.001)	-0.0002 (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.002*** (0.001)	-0.001 (0.0005)	0.001 (0.001)
D10_rec	0.031*** (0.006)	0.005 (0.006)	-0.0001 (0.005)	0.002 (0.005)	0.0003 (0.005)	0.007 (0.004)	0.007 (0.006)
Constant	0.405*** (0.074)	0.512*** (0.069)	0.422*** (0.062)	0.328*** (0.061)	0.259*** (0.055)	0.146** (0.047)	0.320*** (0.070)
N	887	888	881	888	884	879	887
R-squared	0.069	0.016	0.054	0.067	0.061	0.066	0.039
Adj. R-squared	0.057	0.004	0.042	0.055	0.049	0.054	0.026

***p < .001; **p < .01; *p < .05

Table 14.13: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

Model	1701 8	1703 9	1706 10a	1706 10b	1705 11	1704 12	1707 13a	1707 13b	1702 14a	1702 14b
D3_rec2	-0.322 (0.204)	0.452* (0.218)	-0.392 (0.382)	-0.452 (0.378)	0.486 (0.371)	0.198 (0.540)	0.337 (0.804)	0.167 (0.768)	0.279 (0.266)	0.275 (0.264)
D8_rec1	0.298 (0.299)	0.211 (0.301)	0.501 (0.622)	0.503 (0.620)	-0.074 (0.463)	-1.367* (0.547)	0.774 (1.183)	0.552 (1.104)	-0.999*** (0.281)	-1.011*** (0.281)
D5_rec1	0.240 (0.220)	0.240 (0.227)	0.108 (0.414)	0.169 (0.413)	-0.164 (0.364)	0.607 (0.616)	0.532 (0.913)	0.543 (0.855)	0.448 (0.292)	0.493 (0.290)
EDU_rec2	-0.785 (0.632)	-0.817 (0.570)	13.953 (730.300)		0.452 (1.113)	0.326 (1.201)	17.669 (4941.218)		14.499 (733.709)	
EDU_rec3	-0.411 (0.618)	-0.663 (0.564)	14.775 (730.300)		0.522 (1.112)	0.029 (1.201)	16.265 (4941.218)		14.209 (733.709)	
D1_rec1	-0.177 (0.314)	0.156 (0.319)	1.243** (0.416)	1.301** (0.412)	0.821 (0.453)	0.191 (0.716)	1.387 (0.800)	1.327 (0.746)	-0.669 (0.540)	-0.687 (0.538)
D7_rec1	0.406 (0.220)	-0.285 (0.228)	0.457 (0.381)	0.538 (0.376)	-0.472 (0.368)	-0.592 (0.617)	-0.051 (0.740)		0.054 (0.272)	-0.013 (0.267)
D7_rec2	0.852** (0.276)	0.274 (0.284)	-0.409 (0.665)	-0.211 (0.659)	-1.331 (0.758)	0.555 (0.675)	-17.218 (2316.843)		-0.221 (0.412)	-0.306 (0.404)
D6_une1	-14.326 (437.598)	-0.613 (0.754)	0.130 (1.067)	-0.029 (1.059)	0.856 (0.669)	0.350 (1.092)	-16.306 (5123.557)		0.524 (0.585)	0.621 (0.582)
D4_age	0.024*** (0.007)	0.013 (0.007)	0.0004 (0.012)	0.009 (0.011)	-0.008 (0.011)	-0.062** (0.020)	-0.018 (0.026)	-0.026 (0.022)	0.027** (0.009)	0.027** (0.008)
D10_rec	0.178*** (0.054)	0.017 (0.056)	-0.186 (0.102)	-0.182 (0.102)	0.012 (0.097)	0.234 (0.150)	0.663** (0.231)	0.649** (0.224)	-0.017 (0.070)	-0.020 (0.070)
Constant	-3.288*** (0.700)	-2.327*** (0.648)	-17.955 (730.300)	-3.941*** (0.939)	-3.167** (1.205)	-1.421 (1.386)	-24.306 (4941.219)	-6.881*** (1.942)	-17.587 (733.709)	-3.261*** (0.618)
N	813	813	813	813	813	813	813	813	813	813
Log Likelihood	-346.085	-331.438	-131.969	-134.801	-144.872	-71.231	-36.011	-40.285	-234.565	-236.155
AIC	716.170	686.875	287.937	289.601	313.744	166.461	96.022	94.571	493.130	492.311

***p < .001; **p < .01; *p < .05

15 Luxembourg

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Synthetic variables have been estimated for seven of ten ~~of~~ Luxembourgian parties available in the original 2019 EES Luxembourg voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 15.1).

Table 15.1: Luxembourgian ~~R~~relevant parties

Dep. Var.	Party	Party name (eng)
stack_1801	1801	Christian Social People's Party
stack_1802	1802	Socialist Workers' Party
stack_1803	1803	Democratic Party
stack_1804	1804	The Greens
stack_1805	1805	The Left
stack_1806	1806	Alternative Democratic Reform Party
stack_1807	1807	Pirate Party of Luxembourg

Full OLS models converge and coefficients do not show any particular issues (see Table 15.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.015 for party 1806 (Alternative Democratic Reform Party) and a maximum of 0.135 for party 1804 (The Greens). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models shows that in 1 case out of 7 null models perform better than full ones (see Table 15.2).

Table 15.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1801	1801	310.058	321.535	-11.478
stack_1802	1802	198.824	208.287	-9.462
stack_1803	1803	252.843	277.718	-24.875
stack_1804	1804	265.151	320.320	-55.169
stack_1805	1805	161.525	168.247	-6.722
stack_1806	1806	55.842	51.752	4.090
stack_1807	1807	29.092	45.389	-16.297

On the contrary, four out of seven logistic regression models (see Table 15.5) show inflated standard errors for one of the coefficients of interest. In particular:

- Model 8, 9, 10 and 12: D6_une.

Nevertheless, Models 8, 9, 10 and 12 constant terms and other regression coefficients are not affected by said inflated standard error. Therefore, we do not adapt the model.

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.078 for party 1805 (The Left) and a maximum of 0.022 for party 1801 (Christian Social People's Party). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models shows that in 6 cases out of 7 null models perform better than full ones (see Table 15.3).

Table 15.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1801	1801	374.918	385.253	-10.335
stack_1802	1802	278.328	270.650	7.678
stack_1803	1803	433.884	426.431	7.453
stack_1804	1804	415.830	408.096	7.735
stack_1805	1805	201.244	188.620	12.624
stack_1806	1806	179.510	171.048	8.461
stack_1807	1807	156.219	152.574	3.645

Table 15.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	1801	1802	1803	1804	1805	1806	1807
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	0.007 (0.032)	-0.008 (0.029)	0.010 (0.030)	0.056 (0.031)	0.006 (0.027)	-0.027 (0.024)	0.005 (0.024)
D8_rec1	-0.002 (0.032)	-0.028 (0.029)	0.021 (0.030)	-0.0004 (0.031)	-0.003 (0.028)	0.012 (0.025)	-0.016 (0.024)
D5_rec1	0.016 (0.036)	-0.029 (0.032)	-0.051 (0.034)	-0.034 (0.034)	-0.014 (0.030)	0.001 (0.027)	-0.058* (0.026)
EDU_rec2	0.109 (0.060)	0.169** (0.053)	0.082 (0.056)	-0.040 (0.057)	-0.052 (0.051)	0.064 (0.046)	-0.087* (0.044)
EDU_rec3	0.106 (0.057)	0.099 (0.051)	0.077 (0.054)	0.034 (0.055)	0.013 (0.049)	0.018 (0.044)	-0.082 (0.042)
D1_rec1	0.004 (0.032)	0.060* (0.029)	-0.045 (0.031)	-0.036 (0.031)	-0.009 (0.028)	-0.007 (0.025)	-0.025 (0.024)
D7_rec1	0.005 (0.045)	0.096* (0.041)	0.171*** (0.043)	0.175*** (0.043)	-0.012 (0.039)	-0.032 (0.035)	0.031 (0.034)
D7_rec2	-0.023 (0.048)	0.154*** (0.043)	0.198*** (0.045)	0.218*** (0.046)	-0.011 (0.041)	-0.030 (0.037)	-0.012 (0.035)
D6_une1	-0.188 (0.114)	-0.012 (0.107)	-0.218* (0.107)	-0.167 (0.108)	0.096 (0.097)	0.215* (0.092)	0.170* (0.084)
D4_age	-0.0002 (0.001)	-0.002** (0.001)	-0.002* (0.001)	-0.005*** (0.001)	-0.003*** (0.001)	-0.001 (0.001)	-0.003*** (0.001)
D10_rec	0.050*** (0.010)	-0.002 (0.009)	-0.002 (0.009)	-0.010 (0.009)	-0.013 (0.008)	0.016* (0.007)	-0.002 (0.007)
Constant	0.281*** (0.080)	0.307*** (0.072)	0.370*** (0.076)	0.528*** (0.077)	0.435*** (0.068)	0.185** (0.062)	0.423*** (0.059)
N	454	449	453	454	453	446	453
R-squared	0.071	0.068	0.098	0.156	0.061	0.039	0.081
Adj. R-squared	0.048	0.044	0.076	0.135	0.038	0.015	0.058

*** p < .001; ** p < .01; * p < .05

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16 Malta
Synthetic variables have been estimated for the full set of Maltese parties (5) available in the original 2019 EES Maltese voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the

Table 15.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	1801	1802	1803	1804	1805	1806	1807
	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
D3_rec2	0.268 (0.281)	-0.019 (0.345)	-0.020 (0.254)	0.162 (0.261)	0.386 (0.435)	-0.586 (0.477)	0.254 (0.520)
D8_rec1	-0.194 (0.279)	0.162 (0.352)	0.082 (0.258)	0.042 (0.266)	0.195 (0.446)	-0.857 (0.474)	-0.644 (0.510)
D5_rec1	-0.239 (0.302)	0.140 (0.381)	0.341 (0.300)	-0.101 (0.290)	-0.361 (0.451)	0.196 (0.530)	-0.749 (0.524)
EDU_rec2	1.396* (0.673)	0.517 (0.602)	0.531 (0.588)	-0.399 (0.492)	-0.402 (0.753)	-0.048 (0.732)	-0.395 (0.698)
EDU_rec3	1.241 (0.670)	-0.407 (0.607)	0.622 (0.563)	-0.098 (0.450)	0.050 (0.687)	-0.547 (0.734)	-0.975 (0.687)
D1_rec1	0.155 (0.281)	0.589 (0.349)	-0.163 (0.258)	-0.085 (0.267)	0.460 (0.447)	0.400 (0.472)	0.363 (0.534)
D7_rec1	-0.679 (0.365)	-0.598 (0.479)	0.888* (0.448)	0.580 (0.418)	-0.889 (0.552)	0.098 (0.565)	-0.176 (0.569)
D7_rec2	-0.715 (0.387)	0.262 (0.462)	0.810 (0.463)	0.559 (0.435)	-0.778 (0.583)	-0.881 (0.723)	-1.481 (0.857)
D6_une1	-14.963 (900.955)	-14.421 (885.351)	-14.970 (885.011)	-0.132 (1.098)	-13.908 (866.852)	1.487 (1.158)	1.233 (1.224)
D4_age	0.020* (0.008)	-0.012 (0.011)	0.003 (0.008)	-0.014 (0.008)	0.0003 (0.013)	0.004 (0.015)	-0.014 (0.016)
D10_rec	0.227** (0.073)	0.052 (0.097)	0.004 (0.075)	-0.175 (0.091)	-0.199 (0.155)	-0.117 (0.159)	-0.116 (0.172)
Constant	-3.584*** (0.854)	-2.113* (0.837)	-3.105*** (0.769)	-1.053 (0.654)	-2.287* (0.997)	-2.236* (1.116)	-0.945 (1.030)
N	443	443	443	443	443	443	443
Log Likelihood	-175.459	-127.164	-204.942	-195.915	-88.622	-77.755	-66.109
AIC	374.918	278.328	433.884	415.830	201.244	179.510	156.219

***p < .001; **p < .01; *p < .05

criteria see Sect. XXX; for the relevant parties see Table 16.1).

Table 16.1: Maltese relevant parties

Dep. Var.	Party	Party name (eng)
stack_1901	1901	Labour Party
stack_1902	1902	Nationalist Party
stack_1903	1903	Democratic Alternative
stack_1904	1904	Democratic Party
stack_1905	1905	Imperium Europa

Full OLS models converge and coefficients do not show any particular issues (see Table 16.19). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.059 for party 1901 (Labour Party) and a maximum of 0.112 for party 1904 (Democratic Party). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 0 cases out of 5 null models perform better than full ones (see Table 16.2).

Table 16.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1901	1901	329.706	341.135	-11.429
stack_1902	1902	242.091	269.234	-27.143
stack_1903	1903	5.845	26.449	-20.603
stack_1904	1904	-81.147	-48.198	-32.949
stack_1905	1905	-60.311	-48.173	-12.138

On the contrary, three out of five logistic regression models (see Table 16.20) show inflated standard errors for some of the coefficients of interest. In particular:

- Model 8a: D8_rec, EDU_rec, D1_rec, D7_rec (only for category 2), D6_une;
- Model 9a: D8_rec, D7_rec (for category 1 and 2), D6_une;
- Model 10a: D8_rec, EDU_rec (only for category 3), D7_rec (only for category 2), D6_une.

Models 8a, 9a and 10a constant terms and other regression coefficients are affected by the above mentioned variables' inflated standard error showing unusual values.

Model 8a's inflated standard errors are due to separation issues. In short, no respondents from rural areas, with low education, with high subjective social status, members of trade unions, and unemployed ~~voted~~ for party 1903 (see Tables 16.7, 16.8, 16.9, 16.10, 16.11, ??).

Model 9a's inflated standard errors are due to separation issues. In short, no respondents from rural areas, with NA in their subjective social status and NA in their employment information ~~voted~~ for party 1904 (see Tables 16.12, 16.13, 16.14).

Model 10a's inflated standard errors are due to separation issues. In short, no respondents from rural areas, with high education or NA in their education information, with high subjective social status, members of trade unions, and unemployed or NA in their employment information ~~voted~~ for party 1905 (see Tables 16.15, 16.16, 16.17, 16.18).

As a consequence, constrained versions of Model 8, 9 and 10 (namely, Model 8b, 9b and 10b) without said variables were estimated and contrasted with the originals (Model 8a, 9a and 10a), full model.

For Model 8 Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) is rejected (see Table 16.3). Consequently, synthetic variables for respondents' vote choice for party 1903 have been predicted relying on the unconstrained model (Model 8a).

For Model 9 Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) can not be rejected (see Table 16.4). Consequently, synthetic variables for respondents' vote choice for party 1904 have been predicted relying on the constrained model (Model 9b).

For Model 10 Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) can not be rejected (see Table 16.5). Consequently, synthetic variables for respondents' vote choice for party 1905 have been predicted relying on the constrained model (Model 10b).

Table 16.3: Likelihood-ratio Test between Model 8a (Unconstrained) and Model 8b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	320	43.05034			
Unconstrained	313	28.50452	7	14.54582	0.0422826

Table 16.4: Likelihood-ratio Test between Model 9a (Unconstrained) and Model 9b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	317	54.51011			
Unconstrained	313	45.21436	4	9.295746	0.0541177

Table 16.5: Likelihood-ratio Test between Model 10a (Unconstrained) and Model 10b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	319	62.52901			
Unconstrained	313	53.36654	6	9.16247	0.164645

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.158 for party 1904 (Democratic Party) and a maximum of 0.042 for party 1901 (Labour Party). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models shows that in 2 cases out of 5 null models perform better than full ones. According to AIC values the related null model appears to have a better fit than Model 9b and 10b (see Table 16.6).

Table 16.6: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1901	1901	430.16300	450.91700	-20.753000
stack_1902	1902	324.72700	338.04900	-13.321000
stack_1903	1903	52.50500	53.66700	-1.162000
stack_1904	1904	69.21400	61.79300	7.421000
stack_1904*	1904	70.51011	61.79333	8.716779
stack_1905	1905	77.36700	69.57900	7.788000
stack_1905*	1905	74.52901	69.57895	4.950063

* AIC value refers to Model 9b for 1904* (constrained) and to Model 10b for 1905* (constrained).

Table 16.7: Cross tabulation between vote choice for party 1903 and respondents' area of residency

stack_1903/D8_rec	0	1	Total
0	4	367	371
1	0	6	6
NA	8	118	126
Total	12	491	503

Table 16.8: Cross tabulation between vote choice for party 1903 and respondents' education

stack_1903/EDU_rec	1	2	3	NA	Total
0	114	173	72	12	371
1	0	2	4	0	6
NA	33	61	31	1	126
Total	147	236	107	13	503

Table 16.9: Cross tabulation between vote choice for party 1903 and respondents' subjective SES

stack_1903/D1_rec	0	1	NA	Total
0	284	79	8	371
1	6	0	0	6
NA	97	24	5	126
Total	387	103	13	503

Table 16.10: Cross tabulation between vote choice for party 1903 and respondents' trade union membership

stack_1903/D7_rec	0	1	2	NA	Total
0	127	192	38	14	371
1	1	5	0	0	6
NA	40	60	13	13	126
Total	168	257	51	27	503

Table 16.11: Cross tabulation between vote choice for party 1903 and respondents' employment status

stack_1903/D6_une	0	1	NA	Total
0	352	17	2	371
1	6	0	0	6
NA	117	9	0	126
Total	475	26	2	503

Table 16.12: Cross tabulation between vote choice for party 1904 and respondents' area of residency

stack_1904/D8_rec	0	1	Total
0	4	366	370
1	0	7	7
NA	8	118	126
Total	12	491	503

Table 16.13: Cross tabulation between vote choice for party 1904 and respondents' subjective SES

stack_1904/D7_rec	0	1	2	NA	Total
0	127	194	35	14	370
1	1	3	3	0	7
NA	40	60	13	13	126
Total	168	257	51	27	503

Table 16.14: Cross tabulation between vote choice for party 1904 and respondents' employment status

stack_1904/D6_une	0	1	NA	Total
0	352	16	2	370
1	6	1	0	7
NA	117	9	0	126
Total	475	26	2	503

Table 16.15: Cross tabulation between vote choice for party 1905 and respondents' area of residency

stack_1905/D8_rec	0	1	Total
0	4	364	368
1	0	9	9
NA	8	118	126
Total	12	491	503

Table 16.16: Cross tabulation between vote choice for party 1905 and respondents' education

stack_1905/EDU_rec	1	2	3	NA	Total
0	111	169	76	12	368
1	3	6	0	0	9
NA	33	61	31	1	126
Total	147	236	107	13	503

Table 16.17: Cross tabulation between vote choice for party 1905 and respondents' subjective SES

stack_1905/D7_rec	0	1	2	NA	Total
0	122	195	38	13	368
1	6	2	0	1	9
NA	40	60	13	13	126
Total	168	257	51	27	503

Table 16.18: Cross tabulation between vote choice for party 1905 and respondents' trade union membership

stack_1905/D6_une	0	1	NA	Total
0	349	17	2	368
1	9	0	0	9
NA	117	9	0	126
Total	475	26	2	503

Table 16.19: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	1901	1902	1903	1904	1905
	Model 1	Model 2	Model 3	Model 4	Model 5
D3_rec2	0.006 (0.040)	0.019 (0.035)	0.052* (0.025)	0.035 (0.023)	0.022 (0.023)
D8_rec1	-0.055 (0.120)	0.123 (0.112)	0.070 (0.081)	0.107 (0.072)	0.080 (0.074)
D5_rec1	0.052 (0.046)	-0.062 (0.041)	-0.034 (0.029)	-0.037 (0.026)	-0.059* (0.027)
EDU_rec2	-0.096* (0.046)	0.006 (0.041)	0.024 (0.030)	0.004 (0.026)	0.039 (0.027)
EDU_rec3	-0.169** (0.058)	0.147** (0.052)	0.125*** (0.038)	0.064 (0.033)	-0.027 (0.034)
D1_rec1	0.087 (0.048)	-0.051 (0.042)	0.012 (0.031)	0.013 (0.027)	0.001 (0.028)
D7_rec1	-0.145*** (0.042)	0.117** (0.038)	0.021 (0.027)	0.039 (0.024)	0.009 (0.025)
D7_rec2	-0.198** (0.074)	0.240*** (0.065)	0.063 (0.047)	0.095* (0.041)	-0.005 (0.043)
D6_une1	-0.048 (0.086)	0.164* (0.080)	-0.054 (0.055)	-0.040 (0.049)	0.015 (0.052)
D4_age	-0.001 (0.001)	-0.001 (0.001)	-0.002** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
D10_rec	0.005 (0.008)	0.017* (0.007)	-0.001 (0.005)	0.004 (0.005)	0.006 (0.005)
Constant	0.831*** (0.141)	0.122 (0.130)	0.155 (0.094)	0.115 (0.084)	0.132 (0.086)
N	367	364	369	369	368
R-squared	0.087	0.126	0.109	0.138	0.089
Adj. R-squared	0.059	0.099	0.082	0.112	0.060

***p < .001; **p < .01; *p < .05

Table 16.20: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	1901 Model 10ax	1902 Model 2	1903 Model 8	1904 Model 9a	1905 Model 9b	Model 10a	Model 10b
D3_rec2	-0.273 (0.241)	0.120 (0.295)	-2.373 (1.456)	-1.472 (1.152)	-1.501 (1.112)	-0.175 (0.825)	-0.243 (0.784)
D8_rec1	-1.150 (1.220)	0.036 (1.207)	16.045 (20644.170)	17.191 (13257.050)		16.553 (13817.140)	
D5_rec1	0.567 (0.293)	-0.150 (0.345)	2.365 (1.765)	-1.080 (0.982)	-1.162 (0.964)	-1.927* (0.956)	-1.720 (0.918)
EDU_rec2	-0.667* (0.283)	0.483 (0.374)	18.858 (3573.824)	0.987 (1.382)	1.012 (1.155)	0.757 (0.885)	
EDU_rec3	-0.944** (0.358)	0.965* (0.437)	20.619 (3573.824)	-0.503 (1.531)	0.254 (1.442)	-17.021 (3155.295)	
D1_rec1	0.586* (0.291)	-0.254 (0.368)	-19.465 (4242.759)	0.631 (0.964)	0.659 (0.921)	-0.199 (1.138)	-0.474 (1.111)
D7_rec1	-0.845*** (0.256)	1.162** (0.365)	1.069 (1.345)	17.398 (2515.151)		-1.467 (0.871)	
D7_rec2	-1.376** (0.448)	1.581** (0.502)	-18.841 (5649.703)	19.153 (2515.151)		-18.140 (4450.592)	
D6_une1	-0.592 (0.579)	1.025 (0.602)	-15.497 (9581.531)	-15.807 (6595.269)		-17.591 (6560.746)	
D4_age	0.007 (0.007)	0.024** (0.009)	-0.165 (0.087)	0.006 (0.028)	0.013 (0.025)	0.004 (0.023)	0.004 (0.021)
D10_rec	-0.007 (0.050)	0.065 (0.063)	-0.380 (0.259)	-0.020 (0.175)	-0.032 (0.169)	-0.031 (0.159)	-0.030 (0.146)
Constant	1.423 (1.320)	-4.154** (1.400)	-33.126 (20951.230)	-38.375 (13493.530)	-4.118** (1.525)	-18.828 (13817.140)	-2.846** (1.016)
N	325	325	325	325	325	325	325
Log Likelihood	-203.082	-150.364	-14.252	-22.607	-27.255	-26.683	-31.265
AIC	430.163	324.727	52.505	69.214	70.510	77.367	74.529

***p < .001; **p < .01; *p < .05

17 Netherlands

see top

Synthetic variables have been estimated for nine of 16 Dutch parties available in the original 2019 EES Dutch voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 17.1).

Table 17.1: Dutch ~~relevant~~ parties

Dep. Var.	Party	Party name (eng)
stack_2001	2001	People's Party for Freedom and Democracy
stack_2002	2002	Party of Freedom
stack_2003	2003	Christian Democratic Appeal
stack_2004	2004	Democrats '66
stack_2005	2005	Green Left
stack_2006	2006	Socialist Party
stack_2007	2007	Labour Party
stack_2008	2008	Christian Union
stack_2012	2012	Forum for Democracy

Full OLS models converge and coefficients do not show any particular issue (see Table 17.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.035 for party 2007 (Labour Party) and a maximum of 0.281 for party 2008 (Christian Union). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 0 cases out of 9 null models perform better than full ones (see Table 17.2).

Table 17.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2001	2001	453.942	531.738	-77.797
stack_2002	2002	548.437	581.994	-33.558
stack_2003	2003	214.898	350.169	-135.270
stack_2004	2004	330.452	390.042	-59.590
stack_2005	2005	474.268	525.482	-51.214
stack_2006	2006	335.676	364.542	-28.866
stack_2007	2007	428.915	448.610	-19.694
stack_2008	2008	46.234	315.802	-269.567
stack_2012	2012	624.523	658.327	-33.805

Full logit models converge and coefficients do not show any particular issue (see Table 17.5).

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.045 for party 2006 (Socialist Party) and a maximum of 0.432 for party 2008 (Christian Union). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 4 cases out of 9 null models perform better than full ones (see Table 17.3).

Table 17.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2001	2001	480.979	489.018	-8.039
stack_2002	2002	357.226	353.172	4.055
stack_2003	2003	316.879	317.798	-0.919
stack_2004	2004	250.224	247.659	2.565
stack_2005	2005	364.959	364.576	0.383
stack_2006	2006	342.596	329.791	12.805
stack_2007	2007	636.547	643.259	-6.712
stack_2008	2008	165.479	293.155	-127.676
stack_2012	2012	618.969	639.394	-20.425

Table 17.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	2001	2002	2003	2004	2005	2006	2007	2008	2012
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
D3_rec2	-0.074*** (0.022)	-0.096*** (0.023)	-0.036 (0.019)	-0.005 (0.020)	0.023 (0.022)	0.007 (0.020)	-0.019 (0.022)	-0.004 (0.017)	-0.103*** (0.024)
D8_rec1	-0.023 (0.024)	-0.041 (0.025)	-0.056** (0.021)	-0.014 (0.022)	0.039 (0.024)	0.050* (0.022)	0.027 (0.024)	-0.024 (0.019)	-0.045 (0.027)
D5_rec1	0.005 (0.023)	0.029 (0.024)	0.022 (0.020)	-0.029 (0.021)	-0.052* (0.023)	-0.025 (0.022)	-0.023 (0.023)	0.006 (0.018)	0.037 (0.026)
EDU_rec2	-0.056 (0.041)	0.024 (0.043)	-0.055 (0.036)	-0.047 (0.038)	-0.105* (0.042)	-0.001 (0.038)	-0.098* (0.040)	-0.059 (0.032)	0.022 (0.046)
EDU_rec3	0.003 (0.040)	-0.0002 (0.042)	-0.007 (0.034)	0.023 (0.037)	-0.030 (0.040)	0.043 (0.037)	-0.041 (0.039)	-0.014 (0.031)	0.058 (0.044)
D1_rec1	0.010 (0.024)	0.069** (0.026)	0.032 (0.021)	0.056* (0.023)	0.057* (0.025)	0.076*** (0.023)	0.103*** (0.024)	0.033 (0.019)	0.034 (0.027)
D7_rec1	0.117*** (0.025)	-0.049 (0.027)	0.055* (0.022)	0.045 (0.023)	0.003 (0.026)	-0.052* (0.024)	0.020 (0.025)	0.0003 (0.020)	-0.050 (0.028)
D7_rec2	0.188*** (0.031)	-0.102** (0.033)	0.095*** (0.027)	0.077** (0.029)	-0.005 (0.032)	-0.127*** (0.029)	0.014 (0.031)	0.014 (0.025)	-0.100** (0.035)
D6_une1	-0.022 (0.049)	0.041 (0.052)	-0.037 (0.043)	-0.038 (0.046)	0.012 (0.050)	0.024 (0.046)	-0.019 (0.049)	-0.056 (0.039)	-0.085 (0.055)
D4_age	-0.003*** (0.001)	-0.002*** (0.001)	-0.003*** (0.001)	-0.004*** (0.001)	-0.003*** (0.001)	-0.001* (0.001)	-0.001 (0.001)	-0.002** (0.001)	-0.003*** (0.001)
D10_rec	0.004 (0.005)	-0.010 (0.006)	0.036*** (0.005)	-0.005 (0.005)	0.005 (0.005)	0.003 (0.005)	-0.004 (0.005)	0.068*** (0.004)	-0.016** (0.006)
Constant	0.461*** (0.054)	0.526*** (0.057)	0.476*** (0.047)	0.524*** (0.051)	0.556*** (0.055)	0.394*** (0.051)	0.466*** (0.054)	0.296*** (0.043)	0.555*** (0.061)
N	852	852	850	851	850	850	851	849	842
R-squared	0.111	0.063	0.169	0.091	0.083	0.058	0.048	0.291	0.064
Adj. R-squared	0.099	0.051	0.158	0.080	0.070	0.046	0.035	0.281	0.052

***p < .001; **p < .01; *p < .05

Table 17.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	2001	2002	2003	2004	2005	2006	2007	2008	2012
	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16	Model 17	Model 18
D3_rec2	-0.132 (0.261)	-0.991** (0.343)	-0.552 (0.350)	-0.185 (0.400)	0.404 (0.316)	0.010 (0.328)	0.022 (0.216)	1.714*** (0.495)	-0.825*** (0.226)
D8_rec1	0.231 (0.291)	-0.238 (0.336)	-0.557 (0.347)	0.309 (0.474)	0.815 (0.421)	0.180 (0.369)	0.088 (0.234)	-0.225 (0.491)	-0.338 (0.228)
D5_rec1	-0.324 (0.269)	-0.026 (0.334)	0.048 (0.368)	-0.315 (0.417)	-0.315 (0.322)	-0.147 (0.340)	0.147 (0.231)	0.320 (0.541)	0.401 (0.240)
EDU_rec2	0.471 (0.590)	-0.525 (0.536)	-1.714** (0.554)	-0.812 (0.875)	-0.972 (0.541)	0.107 (0.657)	-0.167 (0.432)	0.093 (0.787)	0.132 (0.452)
EDU_rec3	0.453 (0.568)	-0.359 (0.509)	-0.957* (0.474)	0.665 (0.698)	-0.132 (0.460)	0.294 (0.642)	0.098 (0.416)	-0.594 (0.790)	0.091 (0.441)
D1_rec1	-0.167 (0.303)	0.380 (0.331)	-0.021 (0.373)	0.426 (0.414)	-0.046 (0.352)	0.355 (0.355)	0.557* (0.229)	0.294 (0.484)	-0.366 (0.257)
D7_rec1	1.196** (0.408)	-0.650 (0.355)	0.517 (0.426)	0.198 (0.518)	0.114 (0.371)	-0.084 (0.352)	0.318 (0.263)	-0.701 (0.538)	0.254 (0.255)
D7_rec2	1.868*** (0.435)	-0.746 (0.451)	0.396 (0.500)	0.624 (0.547)	0.239 (0.435)	-1.053 (0.590)	0.505 (0.311)	-0.178 (0.607)	-0.179 (0.332)
D6_une1	0.046 (0.636)	0.123 (0.642)	0.858 (0.654)	-0.186 (1.059)	0.248 (0.643)	0.252 (0.636)	-0.195 (0.548)	-0.577 (1.730)	-0.663 (0.620)
D4_age	0.008 (0.007)	-0.007 (0.010)	0.010 (0.010)	-0.027* (0.013)	-0.017 (0.009)	0.017 (0.010)	0.025*** (0.007)	0.014 (0.013)	0.003 (0.007)
D10_rec	-0.047 (0.066)	-0.038 (0.077)	0.164* (0.070)	-0.056 (0.099)	-0.049 (0.080)	-0.043 (0.086)	-0.118* (0.059)	0.978*** (0.140)	-0.246*** (0.073)
Constant	-4.141*** (0.760)	-1.277 (0.689)	-2.562*** (0.736)	-2.722** (0.947)	-2.433*** (0.730)	-3.962*** (0.913)	-3.680*** (0.611)	-8.067*** (1.318)	-1.613** (0.575)
N	842	842	842	842	842	842	842	842	842
Log Likelihood	-228.489	-166.613	-146.440	-113.112	-170.479	-159.298	-306.273	-70.739	-297.484
AIC	480.979	357.226	316.879	250.224	364.959	342.596	636.547	165.479	618.969

***p < .001; **p < .01; *p < .05

18 Slovakia

Synthetic variables have been estimated for the full set of Slovakian parties available in the original 2019 EES Slovakia voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 18.1).

Table 18.1: Slovakia relevant parties

Dep. Var.	Party	Party name (eng)
stack_2510	2510	Christian Democratic Movement
stack_2501	2501	People's Party Our Slovakia
stack_2509	2509	We are family
stack_2503	2503	Direction - Social Democracy
stack_2505	2505	Freedom and Solidarity
stack_2506	2506	Ordinary People and Independent Personalities
stack_2508	2508	Electoral alliance Progressive Slovakia and TOGETHER – Civic Democracy
stack_2504	2504	Slovak National Part
stack_2507	2507	Bridge

- Full OLS models converge and coefficients do not show any particular issues (see Table 18.8). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.011 for party 2505 (Freedom and Solidarity) and a maximum of 0.135 for party 2510 (Christian Democratic Movement).
- Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that the full models perform better in eight out of nine cases (see Table 18.2).

Table 18.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2510	2510	130.031	249.895	-119.864
stack_2501	2501	603.854	604.122	-0.268
stack_2509	2509	337.682	363.837	-26.155
stack_2503	2503	616.736	633.097	-16.361
stack_2505	2505	404.040	403.405	0.635
stack_2506	2506	371.846	373.616	-1.770
stack_2508	2508	614.338	627.328	-12.990
stack_2504	2504	218.824	223.280	-4.456
stack_2507	2507	-158.533	-157.311	-1.221

On the contrary, two out of nine logistic regression models (see Table 18.9) show inflated standard errors for some of the coefficients of interest, in particular:

- Model 15: D6_une
- Model 18a: EDU_rec (both categories), D1_rec, D6_une

However, for Model 15 the constant term and other regressors are not affected by the inflated standard errors. Model 18a appears more problematic.

The inflated standard errors in Model 18a are due to separation issues. In short, no respondents with low education voted for party 2507. Furthermore, only one respondent with trade union membership status and only one respondent who is unemployed voted for party 2507. (See tables 18.5, 18.6, 18.7)

As a consequence, a constrained version of model 18 (namely, Model 18b) without said variables was estimated and contrasted with the original (Model 18a), full model. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) cannot be rejected (see Table 18.3). Consequently, synthetic variables for respondents' vote choice for party 2507 have been predicted relying on the constrained model (Model 18b).

Table 18.3: Likelihood-ratio Test between Model 18a (Unconstrained) and Model 18b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	888	98.63942			
Unconstrained	884	92.38181	4	6.257619	0.1807175

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.06 for party 2507 (Bridge) and a maximum of 0.102 for party 2510 (Christian Democratic Movement). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in six cases out of nine null models perform better than full ones. According to AIC values the related null model appears to have a better fit than Model 18b (see Table 18.4).

Table 18.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2501	2501	500.5100	488.3540	12.157000
stack_2503	2503	482.4070	498.2260	-15.819000
stack_2504	2504	247.7680	237.3100	10.458000
stack_2505	2505	415.6830	404.5320	11.151000
stack_2506	2506	287.7080	278.1040	9.603000
stack_2507	2507	116.3820	111.7950	4.587000
stack_2507*	2507	114.6394	111.7951	2.844343
stack_2508	2508	668.2410	673.2700	-5.029000
stack_2509	2509	325.6570	310.2900	15.366000
stack_2510	2510	298.8860	335.0130	-36.127000

* AIC value refers to Model 18b (constrained).

Table 18.5: Cross tabulation between vote choice for party 2507 and respondents' education

stack_2507/EDU_rec	1	2	3	NA	Total
0	78	521	360	8	967
1	0	7	4	0	11
NA	3	11	7	1	22
Total	81	539	371	9	1000

Table 18.6: Cross tabulation between vote choice for party 2507 and respondents' trade union membership status

stack_2507/D1_rec	0	1	Total
0	803	164	967
1	10	1	11
NA	17	5	22
Total	830	170	1000

Table 18.7: Cross tabulation between vote choice for party 2507 and respondents' employment status

stack_2507/D6_une	0	1	Total
0	910	57	967
1	10	1	11
NA	21	1	22
Total	941	59	1000

Table 18.8: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	2510	2501	2509	2503	2505	2506	2508	2504	2507
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
D3_rec2	-0.023 (0.017)	-0.017 (0.023)	0.057** (0.020)	-0.008 (0.023)	-0.010 (0.020)	0.005 (0.020)	0.020 (0.023)	-0.026 (0.018)	-0.012 (0.015)
D8_rec1	-0.002 (0.018)	-0.032 (0.024)	-0.013 (0.020)	-0.010 (0.024)	-0.001 (0.021)	-0.008 (0.021)	0.019 (0.024)	-0.016 (0.019)	-0.031* (0.016)
D5_rec1	-0.001 (0.018)	0.014 (0.024)	0.010 (0.021)	0.038 (0.024)	-0.014 (0.021)	-0.008 (0.021)	0.017 (0.024)	0.008 (0.019)	0.001 (0.016)
EDU_rec2	0.0002 (0.037)	0.033 (0.048)	0.028 (0.041)	-0.092 (0.048)	0.009 (0.043)	-0.024 (0.042)	-0.097* (0.049)	-0.065 (0.038)	-0.042 (0.031)
EDU_rec3	0.006 (0.037)	-0.020 (0.048)	-0.012 (0.042)	-0.098* (0.048)	0.034 (0.043)	-0.011 (0.042)	-0.061 (0.049)	-0.098* (0.039)	-0.023 (0.032)
D1_rec1	0.007 (0.023)	0.043 (0.030)	0.034 (0.026)	0.040 (0.030)	0.006 (0.027)	-0.011 (0.026)	-0.002 (0.031)	0.073** (0.024)	0.045* (0.020)
D7_rec1	0.009 (0.019)	-0.051* (0.025)	-0.004 (0.022)	0.023 (0.025)	0.048* (0.022)	0.014 (0.022)	0.072** (0.026)	0.028 (0.020)	0.015 (0.016)
%	D7_rec2	0.011 (0.029)	-0.079* (0.038)	-0.076* (0.032)	-0.038 (0.038)	0.046 (0.034)	-0.009 (0.033)	0.102** (0.038)	-0.003 (0.030)
	D6_une1	0.051 (0.039)	0.043 (0.050)	0.070 (0.043)	-0.001 (0.050)	-0.047 (0.045)	0.036 (0.044)	-0.090 (0.052)	-0.002 (0.040)
%	D4_age	0.00000 (0.001)	-0.001 (0.001)	-0.003*** (0.001)	0.004*** (0.001)	-0.002** (0.001)	-0.002*** (0.001)	-0.001 (0.001)	0.001* (0.0005)
	D10_rec	0.042*** (0.003)	-0.002 (0.004)	-0.001 (0.004)	0.003 (0.005)	-0.004 (0.004)	0.005 (0.004)	-0.007 (0.005)	0.005 (0.004)
Constant	0.146*** (0.041)	0.381*** (0.054)	0.430*** (0.046)	0.159** (0.054)	0.374*** (0.048)	0.418*** (0.047)	0.434*** (0.055)	0.245*** (0.044)	0.145*** (0.035)
N	904	906	906	907	906	904	891	905	901
R-squared	0.145	0.024	0.052	0.041	0.023	0.026	0.039	0.029	0.025
Adj. R-squared	0.135	0.012	0.040	0.030	0.011	0.014	0.026	0.017	0.013

***p < .001; **p < .01; *p < .05

Table 18.9: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

Model	2510	2501	2509	2503	2505	2506	2508	2504	2507	2507
	10	11	12	13	14	15	16	17	18a	18b
D3_rec2	-0.224 (0.344)	-0.159 (0.256)	0.336 (0.346)	-0.210 (0.259)	0.036 (0.289)	-0.489 (0.374)	0.072 (0.209)	-0.396 (0.413)	0.641 (0.711)	0.709 (0.710)
D8_rec1	-0.216 (0.346)	-0.067 (0.269)	0.074 (0.364)	0.434 (0.292)	-0.003 (0.309)	-0.181 (0.378)	0.465* (0.236)	0.804 (0.511)	-1.574* (0.712)	-1.522* (0.704)
D5_rec1	-0.170 (0.360)	0.184 (0.274)	-0.053 (0.356)	-0.158 (0.270)	-0.455 (0.297)	-0.202 (0.387)	0.212 (0.227)	-0.045 (0.427)	0.011 (0.715)	0.119 (0.714)
EDU_rec2	0.024 (0.720)	-0.243 (0.545)	-0.066 (0.693)	-0.180 (0.661)	-0.185 (0.611)	-0.363 (0.722)	-1.026* (0.405)	-0.624 (0.851)	16.893 (3241.772)	
EDU_rec3	0.342 (0.718)	-0.203 (0.552)	-0.178 (0.710)	-0.569 (0.685)	0.237 (0.606)	-0.194 (0.725)	-0.992* (0.411)	-0.665 (0.876)	16.610 (3241.772)	
D1_rec1	-0.198 (0.474)	-0.417 (0.393)	0.380 (0.418)	0.171 (0.342)	0.351 (0.359)	-0.794 (0.619)	0.255 (0.264)	0.283 (0.517)	-17.229 (2191.432)	
D7_rec1	-0.633 (0.382)	-0.355 (0.274)	-0.393 (0.363)	0.272 (0.282)	0.185 (0.334)	-0.325 (0.420)	0.616* (0.247)	0.116 (0.431)	-0.618 (0.784)	-0.610 (0.782)
D7_rec2	0.086 (0.496)	-0.487 (0.450)	-0.734 (0.658)	0.303 (0.451)	0.441 (0.457)	0.484 (0.527)	0.571 (0.354)	-1.225 (1.075)	1.265 (0.902)	1.041 (0.817)
D6_une1	-0.417 (0.784)	0.920* (0.425)	-0.009 (0.759)	0.148 (0.633)	-0.412 (0.750)	-15.358 (916.391)	-0.952 (0.737)	-0.198 (1.061)	-17.190 (3837.093)	
D4_age	0.005 (0.011)	0.004 (0.009)	-0.002 (0.011)	0.048*** (0.009)	0.007 (0.009)	0.010 (0.012)	0.020** (0.007)	0.027 (0.014)	0.016 (0.021)	0.024 (0.021)
D10_rec	0.492*** (0.079)	-0.045 (0.053)	-0.120 (0.077)	0.065 (0.049)	-0.120 (0.063)	0.090 (0.070)	-0.038 (0.042)	0.076 (0.077)	0.031 (0.131)	0.031 (0.128)
Constant	-4.646*** (0.899)	-2.117*** (0.612)	-2.695*** (0.794)	-5.023*** (0.773)	-2.788*** (0.684)	-3.028*** (0.820)	-2.795*** (0.483)	-4.815*** (1.031)	-21.463 (3241.772)	-5.459*** (1.395)
N	896	896	896	896	896	896	896	896	896	896
Log Likelihood	-137.443	-238.255	-150.828	-229.203	-195.842	-131.854	-322.120	-111.884	-46.191	-49.320
AIC	298.886	500.510	325.657	482.407	415.683	287.708	668.241	247.768	116.382	114.639

***p < .001; **p < .01; *p < .05

19 Poland

Synthetic variables have been estimated for the full set of Polish parties available in the original 2019 EES ~~Polish~~ voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 19.1).

Polish
Table 19.1: ~~Poland~~ Relevant parties

Dep. Var.	Party	Party name (eng)
stack_2104	2104	Law and Justice
stack_2106	2106	Kukiz'15
stack_2102	2102	Spring
stack_2105	2105	Poland Together
stack_2103	2103	European Coalition

- Full OLS models converge and coefficients do not show any particular issues (see Table 19.8). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.028 for party 2103 (European Coalition) and a maximum of 0.132 for party 2104 (Law and Justice). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models shows that the full models perform better in all cases (see Table 19.2).

Table 19.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2104	2104	826.702	943.422	-116.721
stack_2106	2106	437.745	502.658	-64.913
stack_2102	2102	467.864	555.309	-87.445
stack_2105	2105	192.191	222.690	-30.499
stack_2103	2103	112.861	127.620	-14.759

On the contrary, one out of the five logistic regression models (see Table 19.9) shows inflated standard errors for some of the coefficients of interest, ~~in particular~~:

- Model 9a: EDU_rec (both categories), D7_rec (second category), D6_une

Model 9a appears to be problematic as ~~the~~ constant term seems to be affected by the inflated standard errors issue.

The inflated standard errors in Model 9a are due to separation issues. In short, no respondents who are unemployed or of high subjective social status voted for party 2105. Only one respondent with low education voted for party 2105. (See tables 19.5, 19.6, 19.7)

As a consequence, a constrained version of ~~H~~ Model 9 (namely, Model 9b) without said variables was estimated and contrasted with the original (Model 9a), full model. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) cannot be rejected (see Table 19.3). Consequently, synthetic variables for respondents' vote choice for party 2105 have been predicted relying on the constrained model (Model 9b).

Table 19.3: Likelihood-ratio Test between Model 9a (Unconstrained) and Model 9b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	901	165.4308			
Unconstrained	896	155.3708	5	10.06004	0.0735519

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.062 for party 2105 (Poland Together) and a maximum of 0.073 for party 2104 (Law and Justice). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in one case out of five null models perform better than full ones. According to AIC values the related null model appears to have a better fit than Model 9b (see Table 19.4).

Table 19.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2102	2102	544.5020	548.0700	-3.568000
stack_2103	2103	1019.3140	1082.1110	-62.797000
stack_2104	2104	944.8220	1020.9980	-76.176000
stack_2105	2105	179.3710	170.9330	8.438000
stack_2105*	2105	179.4308	170.9328	8.498034
stack_2106	2106	477.1480	480.2080	-3.060000

* AIC value refers to Model 9b (constrained).

Table 19.5: Cross tabulation between vote choice for party 2105 and respondents' education

stack_2105/EDU_rec	1	2	3	NA	Total
0	57	246	636	34	973
1	1	4	13	1	19
NA	1	2	3	2	8
Total	59	252	652	37	1000

Table 19.6: Cross tabulation between vote choice for party 2105 and respondents' subjective social class

stack_2105/D7_rec	0	1	2	NA	Total
0	314	493	147	19	973
1	11	8	0	0	19
NA	4	2	1	1	8
Total	329	503	148	20	1000

Table 19.7: Cross tabulation between vote choice for party 2105 and respondents' employment status

stack_2105/D6_une	0	1	Total
0	931	42	973
1	19	0	19
NA	8	0	8
Total	958	42	1000

Table 19.8: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	2104	2106	2102	2105	2103
	Model 1	Model 2	Model 3	Model 4	Model 5
D3_rec2	-0.053* (0.026)	-0.003 (0.021)	0.097*** (0.021)	0.054** (0.018)	0.025 (0.017)
D8_rec1	0.041 (0.035)	-0.015 (0.028)	-0.009 (0.029)	0.020 (0.025)	0.002 (0.023)
D5_rec1	0.038 (0.030)	0.042 (0.024)	0.065* (0.025)	0.074*** (0.021)	0.029 (0.020)
EDU_rec2	-0.044 (0.065)	0.025 (0.052)	0.054 (0.054)	0.012 (0.047)	0.020 (0.043)
EDU_rec3	-0.012 (0.061)	0.044 (0.049)	0.041 (0.050)	-0.0002 (0.043)	0.010 (0.040)
D1_rec1	0.009 (0.034)	-0.013 (0.028)	0.030 (0.028)	0.013 (0.024)	0.047* (0.023)
D7_rec1	-0.037 (0.029)	-0.006 (0.023)	-0.027 (0.024)	-0.045* (0.020)	0.0001 (0.019)
D7_rec2	0.004 (0.041)	-0.032 (0.033)	-0.045 (0.034)	-0.046 (0.029)	0.015 (0.027)
D6_une1	0.006 (0.075)	0.042 (0.061)	-0.004 (0.063)	0.007 (0.055)	0.023 (0.051)
D4_age	-0.001 (0.001)	-0.005*** (0.001)	-0.001 (0.001)	-0.002** (0.001)	0.001* (0.001)
D10_rec	0.061*** (0.005)	0.017*** (0.004)	-0.041*** (0.004)	-0.017*** (0.004)	-0.018*** (0.004)
Constant	0.221** (0.071)	0.481*** (0.057)	0.424*** (0.058)	0.348*** (0.051)	0.301*** (0.047)
N	905	900	889	884	907
R-squared	0.142	0.092	0.116	0.058	0.040
Adj. R-squared	0.132	0.081	0.105	0.046	0.028

***p < .001; **p < .01; *p < .05

Table 19.9: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	2104	2106	2102	2105	2105	2103
	Model 6	Model 7	Model 8	Model 9a	Model 9b	Model 10
D3_rec2	-0.179 (0.166)	-0.066 (0.261)	0.406 (0.245)	0.255 (0.503)	0.134 (0.497)	-0.241 (0.159)
D8_rec1	0.066 (0.216)	0.270 (0.385)	-0.053 (0.338)	1.099 (1.047)	1.092 (1.040)	0.298 (0.230)
D5_rec1	0.559** (0.209)	-0.299 (0.296)	0.171 (0.278)	0.118 (0.596)	0.169 (0.587)	-0.187 (0.183)
EDU_rec2	0.048 (0.452)	0.584 (0.709)	0.266 (0.685)	16.061 (2360.044)		0.240 (0.453)
EDU_rec3	0.182 (0.424)	1.037 (0.664)	0.211 (0.652)	16.342 (2360.044)		0.329 (0.429)
D1_rec1	0.068 (0.210)	0.349 (0.309)	-0.187 (0.361)	0.663 (0.571)	0.724 (0.559)	-0.085 (0.219)
D7_rec1	-0.091 (0.187)	-0.080 (0.281)	0.038 (0.261)	-0.623 (0.501)		0.438* (0.181)
D7_rec2	0.213 (0.253)	-0.636 (0.482)	-0.460 (0.430)	-17.137 (1490.826)		0.634* (0.249)
D6_une1	0.009 (0.500)	0.564 (0.581)	0.604 (0.579)	-16.560 (3254.945)		-0.982 (0.635)
D4_age	0.003 (0.005)	-0.034*** (0.009)	0.010 (0.008)	-0.004 (0.017)	-0.0002 (0.016)	0.032*** (0.005)
D10_rec	0.315*** (0.039)	0.009 (0.055)	-0.207*** (0.051)	-0.030 (0.106)	-0.045 (0.104)	-0.137*** (0.032)
Constant	-2.990*** (0.507)	-1.938* (0.758)	-2.687*** (0.754)	-20.710 (2360.044)	-5.143*** (1.397)	-2.609*** (0.503)
N	908	908	908	908	908	908
Log Likelihood	-460.411	-226.574	-260.251	-77.685	-82.715	-497.657
AIC	944.822	477.148	544.502	179.371	179.431	1019.314

***p < .001; **p < .01; *p < .05

20 Romania

Synthetic variables have been estimated for the full set of Romania parties available in the original 2019 EES Romanian voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 20.1).

Table 20.1: Romanian relevant parties

Dep. Var.	Party	Party name (eng)
stack_2301	2301	Social Democratic Party
stack_2303	2303	Alliance of Liberals and Democrats
stack_2305	2305	PRO Romania
stack_2306	2306	National Liberal Party
stack_2307	2307	Hungarian Democratic Alliance of Romania
stack_2308	2308	People's Movement Party
stack_2302	2302	2020 USR(1642421) -PLUS Alliance(1642422)

- Full OLS models converge and coefficients do not show any particular issues (see Table 20.8). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.013 for party 2308 (People's Movement Party) and a maximum of 0.087 for party 2301 (Social Democratic Party).
- Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 7 cases out of 7 null models perform better than full ones (see Table 20.2).

Table 20.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2301	2301	553.170	625.062	-71.892
stack_2303	2303	526.588	546.879	-20.292
stack_2305	2305	344.892	365.221	-20.329
stack_2306	2306	707.820	720.286	-12.466
stack_2307	2307	-104.588	-84.132	-20.456
stack_2308	2308	382.965	383.805	-0.841
stack_2302	2302	693.372	721.675	-28.302

- On the contrary, one out of seven logistic regression models (see Table 20.9) shows inflated standard errors for some of the coefficients of interest:

- Model 12: EDU_rec, D6_une;

Model 12

~~✓~~ presents a problematic profile since the inflated standard errors affect the constant term.

Model 12a inflated standard errors are due to separation issues. In short, no respondents with low education and in unemployment ~~voted~~ for party 2307 (see Tables 20.6, 20.7).

As a consequence, a constrained version of ~~M~~odel 12 (namely, Model ~~12~~) without said variables was estimated and contrasted with the original (Model 12a), full model. Likelihood-ratio test results show that H_0 (namely, that the constrained model fits better than the full model) can be rejected at $p < 0.001$ (see Table 12b-1).

20.3). However, if just EDU_rec is dropped H_0 cannot be rejected (see Table 20.4). Consequently, synthetic variables for respondents' vote choice for party 2307 have been predicted relying on the constrained model where just EDU_rec is dropped (Model 12b).

*12b-2, further referred to as Model 12b
12b-1*

Table 20.3: Likelihood-ratio Test between Model 12a (Unconstrained) and Model 12b (Fully Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
886	210.5090			
883	205.3303	3	5.178764	0.1591655

Table 20.4: Likelihood-ratio Test between Model 12a (Unconstrained) and Model 12b (Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
885	209.6429			
883	205.3303	2	4.31258	0.1157538

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.037 for party 2307 (Hungarian Democratic Alliance of Romania) and a maximum of 0.049 for party 2301 (Social Democratic Party). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 3 cases out of 7 null models perform better than full ones. According to AIC values the related null model appears to have a better fit than Model 12b (see Table 20.5).

Table 20.5: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2301	2301	580.2760	611.9490	-31.673000
stack_2302	2302	1031.9880	1071.5910	-39.603000
stack_2303	2303	371.2240	376.2380	-5.014000
stack_2305	2305	368.8700	358.8130	10.057000
stack_2306	2306	910.7300	908.7000	2.030000
stack_2307	2307	229.3300	223.0520	6.279000
stack_2307*	2307	229.6429	223.0515	6.591306
stack_2308	2308	382.0220	370.4750	11.547000

* AIC value refers to Model 12b (constrained).

Table 20.6: Cross tabulation between vote choice for party 505 and respondents' education

stack_2307/EDU_rec	1	2	3	NA	Total
0	51	284	566	43	944
1	0	6	20	2	28
NA	2	5	19	2	28
Total	53	295	605	47	1000

Table 20.7: Cross tabulation between vote choice for party 505 and respondents' employment

stack_2307/D6_une	0	1	Total
0	923	21	944
1	28	0	28
NA	27	1	28
Total	978	22	1000

Table 20.8: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	2301 Model 1	2303 Model 2	2305 Model 3	2306 Model 4	2307 Model 5	2308 Model 6	2302 Model 7
D3_rec2	-0.011 (0.022)	0.016 (0.022)	0.022 (0.020)	-0.0001 (0.024)	-0.018 (0.015)	-0.012 (0.020)	-0.003 (0.025)
D8_rec1	0.077* (0.033)	0.063 (0.033)	0.029 (0.030)	-0.056 (0.036)	-0.040 (0.023)	-0.0003 (0.030)	0.019 (0.037)
D5_rec1	0.033 (0.026)	0.035 (0.026)	0.042 (0.024)	-0.008 (0.028)	0.011 (0.018)	-0.016 (0.024)	0.011 (0.029)
EDU_rec2	-0.018 (0.052)	-0.014 (0.052)	-0.005 (0.048)	-0.083 (0.057)	-0.021 (0.037)	0.006 (0.049)	-0.014 (0.058)
EDU_rec3	-0.053 (0.051)	-0.051 (0.051)	-0.034 (0.047)	-0.074 (0.056)	-0.031 (0.037)	-0.002 (0.048)	0.075 (0.057)
D1_rec1	0.028 (0.028)	0.030 (0.027)	0.053* (0.025)	0.036 (0.030)	0.061** (0.019)	0.068** (0.025)	-0.035 (0.031)
D7_rec1	-0.011 (0.027)	-0.015 (0.027)	0.021 (0.024)	0.039 (0.030)	-0.014 (0.019)	-0.012 (0.025)	0.064* (0.030)
D7_rec2	0.074* (0.033)	0.066* (0.033)	0.030 (0.030)	-0.001 (0.036)	0.015 (0.023)	-0.011 (0.031)	0.029 (0.037)
D6_une1	0.072 (0.083)	-0.092 (0.082)	-0.043 (0.075)	-0.050 (0.091)	0.007 (0.058)	-0.113 (0.076)	-0.257** (0.091)
D4_age	0.004*** (0.001)	0.002* (0.001)	-0.001 (0.001)	-0.003*** (0.001)	-0.001** (0.0005)	-0.001 (0.001)	-0.004*** (0.001)
D10_rec	0.027*** (0.005)	0.018*** (0.005)	0.023*** (0.005)	0.015* (0.006)	0.012** (0.004)	0.016** (0.005)	-0.005 (0.006)
Constant	-0.119 (0.064)	0.080 (0.065)	0.167** (0.059)	0.639*** (0.070)	0.202*** (0.045)	0.269*** (0.060)	0.518*** (0.072)
N	908	904	893	911	899	896	874
R-squared	0.098	0.046	0.046	0.037	0.046	0.025	0.056
Adj. R-squared	0.087	0.034	0.034	0.025	0.034	0.013	0.044

***p < .001; **p < .01; *p < .05

Table 20.9: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	2301 Model 1	2303 Model 2	2305 Model 3	2306 Model 4	2307 Model 5	2307 Model 6	2308 Model 7	2302 Model 8
D3_rec2	-0.233 (0.233)	0.372 (0.313)	0.119 (0.316)	-0.221 (0.172)	-0.834 (0.455)	-0.801 (0.453)	-0.311 (0.315)	0.251 (0.157)
D8_rec1	0.001 (0.358)	1.917 (1.025)	0.142 (0.500)	-0.127 (0.243)	-1.131* (0.511)	-0.930 (0.495)	0.005 (0.464)	0.044 (0.238)
D5_rec1	0.662* (0.315)	0.321 (0.386)	0.989* (0.493)	-0.214 (0.198)	-0.420 (0.479)	-0.306 (0.474)	-0.201 (0.350)	0.139 (0.187)
EDU_rec2	0.112 (0.669)	0.285 (1.079)	0.692 (1.068)	0.211 (0.385)	14.954 (910.935)		0.157 (0.790)	0.307 (0.407)
EDU_rec3	0.124 (0.647)	0.289 (1.055)	0.447 (1.054)	-0.056 (0.382)	15.470 (910.935)		-0.082 (0.779)	0.946* (0.401)
D1_rec1	0.037 (0.281)	0.539 (0.347)	0.226 (0.366)	0.441* (0.201)	0.185 (0.521)	0.197 (0.520)	0.216 (0.374)	-0.659** (0.217)
D7_rec1	-0.189 (0.292)	-0.527 (0.333)	-0.070 (0.394)	-0.144 (0.209)	-0.543 (0.508)	-0.528 (0.506)	-0.362 (0.354)	0.619** (0.204)
D7_rec2	0.613 (0.319)	-1.120* (0.500)	0.196 (0.456)	-0.012 (0.255)	0.289 (0.565)	0.283 (0.561)	-0.137 (0.439)	0.130 (0.255)
D6_une1	1.301 (0.691)	-14.724 (976.128)	0.433 (1.081)	0.058 (0.614)	-14.987 (1590.420)	-13.993 (980.814)	-13.775 (606.067)	-0.226 (0.677)
D4_age	0.037*** (0.008)	0.028** (0.010)	0.015 (0.010)	-0.012* (0.006)	0.010 (0.014)	0.017 (0.013)	0.020* (0.010)	-0.021*** (0.005)
D10_rec	0.140* (0.056)	-0.042 (0.075)	0.092 (0.077)	0.083* (0.041)	-0.095 (0.103)	-0.092 (0.102)	-0.085 (0.075)	-0.087* (0.038)
Constant	-5.074*** (0.847)	-6.318*** (1.563)	-5.538*** (1.272)	-0.763 (0.471)	-17.291 (910.935)	-2.647** (0.908)	-3.139** (0.957)	-0.984* (0.477)
N	895	895	895	895	895	895	895	895
Log Likelihood	-278.138	-173.612	-172.435	-443.365	-102.665	-104.821	-179.011	-503.994
AIC	580.276	371.224	368.870	910.730	229.330	229.643	382.022	1031.988

*** p < .001; ** p < .01; * p < .05

21 Slovenia

Synthetic variables have been estimated for the full set of Slovenian parties available in the original 2019 EES Slovenian voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 21.1).

Table 21.1: Slovenian ~~relevant~~ parties

Dep. Var.	Party	Party name (eng)
stack_2401	2401	Electoral alliance with Slovenian Democratic Party and Slovenian People's Party
stack_2402	2402	List of Marjan Sarec
stack_2403	2403	Social Democratic Party
stack_2404	2404	New Slovene Christian People's Party
stack_2405	2405	The Left
stack_2406	2406	Slovenian National Party
stack_2407	2407	Party of Miro Cerar
stack_2408	2408	Alliance of Alenka Bratusek
stack_2409	2409	Democratic Party of Pensioners of Slovenia

Full OLS models converge and coefficients do not show any particular issues (see Table 21.10). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.008 for party 2408 (Alliance of Alenka Bratusek) and a maximum of 0.097 for party 2401 (Electoral alliance with Slovenian Democratic Party and Slovenian People's Party). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 8 cases out of 9 null models perform better than full ones (see Table 21.2).

Table 21.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2401	2401	489.426	564.516	-75.090
stack_2402	2402	619.562	631.346	-11.784
stack_2403	2403	451.977	463.393	-11.416
stack_2404	2404	153.943	223.585	-69.642
stack_2405	2405	422.328	442.635	-20.307
stack_2406	2406	355.237	359.973	-4.736
stack_2407	2407	-7.702	0.717	-8.418
stack_2408	2408	45.039	41.280	3.759
stack_2409	2409	-84.902	-82.166	-2.736

On the contrary, three out of nine logistic regression models (see Tables 21.11, 21.12) show inflated standard errors for some of the coefficients of interest, in particular:

- Model 14: Edu_rec, D7_rec (category 2 only);
- Model 16: D6_une;
- Model 17: EDU_rec.

Nevertheless, Model 16's constant terms and other regression coefficients are not affected by said inflated standard errors, whereas Models 14a and 17a present a more problematic profile.

Model 14a inflated standard errors are due to separation issues. In short, no respondents with low education and high subjective socioeconomic status (SES) ~~voted~~ for party 2405 (see Tables 21.7, 21.8). In Model 17a, no respondents with low education ~~voted~~ for party 2408 (see Table 21.9).

As a consequence, constrained versions of Models 14 and 17 (namely, Model 14b, 17b) without said variables were estimated and contrasted with the original (Models 14a, 17a), full models. Likelihood-ratio test results show that in case of Model 14 H_0 (namely, that the constrained model fits better than the full model) can be rejected at $p < 0.001$ (see Table 21.3). However, if just EDU_rec is dropped H_0 can be rejected at $p < 0.1$ (See Table 21.4). For Model 17 H_0 cannot be rejected (see Table 21.5). Consequently, synthetic variables for respondents' vote choice for party 2405 and 2408 both have been predicted relying on the constrained model dropping EDU_rec (Model 14b, 17b).

Table 21.3: Likelihood-ratio Test between Model 14a (Unconstrained) and Model 14 (Fully Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	851	293.0119			
Unconstrained	847	276.9192	4	16.09266	0.0028973

-without dropping EDU_rec

Table 21.4: Likelihood-ratio Test between Model 14a (Unconstrained) and Model 14b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	851	293.0119			
Unconstrained	847	276.9192	4	16.09266	0.0028973

Table 21.5: Likelihood-ratio Test between Model 17a (Unconstrained) and Model 17b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	849	134.9594			
Unconstrained	847	132.4739	2	2.485406	0.2886031

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.054 for party 2409 (Democratic Party of Pensioners of Slovenia) and a maximum of 0.143 for party 2401 (Electoral alliance with Slovenian Democratic Party and Slovenian People's Party). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 5 cases out of 9 null models perform better than full ones. According to AIC values the related null models appear to have a better fit than Model 14b and 17b (see Table 21.6).

22 Spain

Synthetic variables have been estimated for seven of 15 Spanish parties available in the original 2019 EES Spanish voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 22.1).

Move below
22.12

Table 21.6: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2408*	2408	154.9594	161.1619	-6.202527
stack_2401	2401	478.8720	560.9320	-82.060000
stack_2402	2402	649.4990	647.8300	1.669000
stack_2403	2403	476.6540	496.7800	-20.126000
stack_2404	2404	213.4090	221.0530	-7.644000
stack_2405	2405	300.9190	307.1020	-6.183000
stack_2405*	2405	302.4181	307.1019	-4.683738
stack_2406	2406	290.5270	281.8270	8.700000
stack_2407	2407	104.2430	101.9590	2.284000
stack_2408	2408	156.4740	161.1620	-4.688000
stack_2409	2409	133.0940	128.3320	4.762000

* AIC value refers to Model 14b and 17b (constrained).

Table 21.7: Cross tabulation between vote choice for party 2405 and respondents' education

stack_2405/EDU_rec	1	2	3	NA	Total
0	76	446	380	40	942
1	0	20	18	0	38
NA	2	14	4	0	20
Total	78	480	402	40	1000

! Full OLS models converge and coefficients do not show any particular issue (see Table 22.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.036 for party 2601 (Spanish Socialist Workers' Party) and a maximum of 0.153 for party 2602 (Popular Party). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 0 cases out of 7 null models perform better than full ones (see Table 22.2).

! On the contrary, one out of seven logistic regression models (see Table 22.5) shows inflated standard errors for one of the coefficients of interest, in particular:

- Model 14: D10_rec.

Nevertheless, Model 7's constant term and other regression coefficients are not affected by said inflated standard error. Therefore, we do not adapt the models.

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.092 for party 2609 (Commitment to Europe) and a maximum of 0.089 for party 2602

Table 21.8: Cross tabulation between vote choice for party 2405 and respondents' subjective SES

stack_2405/D7_rec	0	1	2	NA	Total
0	425	379	110	28	942
1	23	14	0	1	38
NA	10	6	4	0	20
Total	458	399	114	29	1000

Table 21.9: Cross tabulation between vote choice for party 2408 and respondents' education

stack_2408/EDU_rec	1	2	3	NA	Total
0	76	454	393	40	963
1	0	12	5	0	17
NA	2	14	4	0	20
Total	78	480	402	40	1000

Table 21.10: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	2401	2402	2403	2404	2405	2406	2407	2408	2409
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
D3_rec2	-0.034 (0.022)	-0.019 (0.024)	-0.016 (0.022)	-0.037* (0.018)	-0.005 (0.021)	-0.065** (0.021)	0.0003 (0.017)	-0.0003 (0.017)	0.002 (0.016)
D8_rec1	0.001 (0.023)	-0.010 (0.025)	-0.005 (0.023)	0.009 (0.019)	-0.016 (0.022)	-0.033 (0.022)	-0.027 (0.017)	0.002 (0.018)	-0.014 (0.017)
D5_rec1	-0.040 (0.025)	0.022 (0.027)	-0.027 (0.025)	0.008 (0.021)	-0.056* (0.024)	-0.001 (0.023)	-0.025 (0.019)	-0.015 (0.019)	-0.015 (0.018)
EDU_rec2	-0.002 (0.045)	-0.087 (0.049)	0.010 (0.045)	-0.067 (0.037)	0.031 (0.043)	-0.020 (0.041)	-0.024 (0.034)	-0.025 (0.034)	-0.045 (0.032)
EDU_rec3	-0.014 (0.046)	-0.084 (0.050)	0.016 (0.045)	-0.067 (0.038)	0.075 (0.043)	-0.024 (0.042)	0.009 (0.034)	-0.035 (0.035)	-0.046 (0.032)
D1_rec1	-0.043 (0.025)	0.068* (0.027)	0.022 (0.025)	-0.024 (0.021)	0.052* (0.024)	0.021 (0.023)	0.036 (0.019)	0.021 (0.019)	0.042* (0.018)
D7_rec1	0.050* (0.024)	0.001 (0.026)	0.020 (0.024)	0.037 (0.020)	-0.045* (0.023)	0.013 (0.022)	0.012 (0.018)	0.026 (0.018)	0.008 (0.017)
D7_rec2	0.070 (0.037)	0.003 (0.040)	0.121*** (0.037)	0.043 (0.031)	-0.013 (0.036)	0.031 (0.035)	0.064* (0.028)	0.043 (0.029)	0.033 (0.027)
D6_une1	0.050 (0.039)	0.018 (0.042)	-0.021 (0.038)	0.001 (0.032)	0.010 (0.037)	0.027 (0.036)	0.015 (0.029)	-0.048 (0.030)	-0.020 (0.028)
D4_age	-0.001 (0.001)	0.003*** (0.001)	0.002** (0.001)	0.001 (0.001)	-0.0003 (0.001)	-0.001 (0.001)	-0.002** (0.001)	0.002* (0.001)	0.002*** (0.001)
D10_rec	0.050*** (0.005)	-0.018** (0.006)	-0.013* (0.005)	0.040*** (0.005)	-0.027*** (0.005)	0.010* (0.005)	-0.007 (0.004)	-0.007 (0.004)	-0.004 (0.004)
Constant	0.259*** (0.056)	0.366*** (0.061)	0.245*** (0.055)	0.169*** (0.046)	0.358*** (0.053)	0.354*** (0.051)	0.313*** (0.042)	0.168*** (0.043)	0.151*** (0.040)
N	847	846	843	841	848	847	840	848	845
R-squared	0.108	0.039	0.039	0.103	0.049	0.031	0.036	0.021	0.029
Adj. R-squared	0.097	0.026	0.026	0.091	0.036	0.018	0.023	0.008	0.016

***p < .001; **p < .01; *p < .05

Table 21.11: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	2401	2402	2403	2404	2405	2405
	Model 10	Model 11	Model 12	Model 13	Model 14a	Model 14b
D3_rec2	-0.527* (0.255)	0.041 (0.211)	-0.499 (0.261)	-0.344 (0.438)	-0.405 (0.349)	-0.402 (0.348)
D8_rec1	-0.238 (0.257)	0.135 (0.226)	0.050 (0.276)	0.872 (0.508)	0.036 (0.367)	0.049 (0.362)
D5_rec1	0.349 (0.314)	0.429 (0.256)	-0.306 (0.280)	0.184 (0.502)	-0.487 (0.359)	-0.445 (0.358)
EDU_rec2	0.542 (0.539)	-1.146** (0.363)	0.206 (0.639)	-1.341* (0.668)	16.311 (1247.122)	
EDU_rec3	0.100 (0.562)	-1.017** (0.363)	0.162 (0.643)	-1.031 (0.640)	16.405 (1247.122)	
D1_rec1	0.091 (0.277)	0.189 (0.237)	0.547* (0.279)	-1.047 (0.584)	-0.289 (0.436)	-0.265 (0.435)
D7_rec1	0.244 (0.270)	-0.086 (0.232)	0.516 (0.291)	0.600 (0.497)	-0.436 (0.356)	-0.406 (0.355)
D7_rec2	-0.263 (0.489)	0.168 (0.329)	1.113** (0.370)	0.934 (0.633)	-16.639 (1047.949)	-16.766 (1070.018)
D6_une1	0.229 (0.443)	-0.113 (0.381)	0.420 (0.417)	-0.708 (1.051)	-0.090 (0.558)	-0.100 (0.552)
D4_age	0.028** (0.009)	0.022** (0.008)	0.041*** (0.010)	-0.001 (0.015)	-0.004 (0.012)	-0.001 (0.012)
D10_rec	0.472*** (0.056)	-0.050 (0.054)	-0.134 (0.073)	0.381*** (0.092)	-0.266* (0.116)	-0.283* (0.115)
Constant	-5.081*** (0.727)	-2.353*** (0.508)	-4.547*** (0.794)	-4.159*** (0.904)	-18.000 (1247.122)	-1.892** (0.670)
N	859	859	859	859	859	859
Log Likelihood	-227.436	-312.749	-226.327	-94.705	-138.460	-141.209
AIC	478.872	649.499	476.654	213.409	300.919	302.418

***p < .001; **p < .01; *p < .05

Table 21.12: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	2406	2407	2408	2408	2409
	Model 15	Model 16	Model 17a	Model 17b	Model 18
D3_rec2	-0.411 (0.372)	0.519 (0.742)	0.259 (0.539)	0.288 (0.536)	-0.739 (0.646)
D8_rec1	-0.859* (0.377)	-0.902 (0.756)	0.053 (0.573)	0.078 (0.569)	-0.362 (0.619)
D5_rec1	0.110 (0.427)	-1.085 (0.745)	0.777 (0.693)	0.772 (0.693)	-0.556 (0.648)
EDU_rec2	0.357 (0.698)	-2.431 (1.287)	14.972 (1120.123)		-0.281 (1.100)
EDU_rec3	0.152 (0.726)	-0.736 (0.951)	14.410 (1120.123)		-1.470 (1.282)
D1_rec1	0.053 (0.403)	0.111 (0.752)	-0.113 (0.679)	-0.116 (0.675)	0.746 (0.663)
D7_rec1	0.275 (0.393)	-1.277 (1.136)	0.750 (0.589)	0.730 (0.588)	-0.730 (0.711)
D7_rec2	0.290 (0.598)	1.202 (0.760)	0.543 (0.885)	0.450 (0.870)	-0.442 (1.095)
D6_une1	-0.414 (0.753)	-15.699 (1778.515)	0.024 (1.087)	0.112 (1.082)	-0.214 (1.079)
D4_age	-0.021 (0.013)	0.006 (0.026)	0.098*** (0.029)	0.101*** (0.028)	0.074** (0.028)
D10_rec	0.068 (0.083)	-0.009 (0.170)	-0.036 (0.142)	-0.045 (0.139)	-0.102 (0.163)
Constant	-2.284** (0.825)	-2.814* (1.202)	-25.099 (1120.125)	-10.530*** (2.073)	-6.352*** (1.922)
N	859	859	859	859	859
Log Likelihood	-133.263	-40.122	-66.237	-67.480	-54.547
AIC	290.527	104.243	156.474	154.959	133.094

***p < .001; **p < .01; *p < .05

Table 22.1: Spanish ~~relevant~~ parties

Dep. Var.	Party	Party name (eng)
stack_2601	2601	Spanish Socialist Workers' Party
stack_2602	2602	Popular Party
stack_2603	2603	Podemos (We Can)
stack_2604	2604	Citizens - Party of the Citizenry
stack_2605	2605	Voice
stack_2606	2606	Republican Left of Catalonia
stack_2609	2609	Commitment to Europe

Table 22.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2601	2601	703.457	725.668	-22.211
stack_2602	2602	554.471	694.177	-139.706
stack_2603	2603	588.620	689.794	-101.174
stack_2604	2604	552.312	615.298	-62.985
stack_2605	2605	395.533	515.855	-120.322
stack_2606	2606	294.000	327.931	-33.931
stack_2609	2609	225.172	262.243	-37.071

(Popular Party). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models shows that in 3 cases out of 7 null models perform better than full ones (see Table 22.3).

Table 22.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2601	2601	1033.685	1023.898	9.787
stack_2602	2602	658.492	724.588	-66.096
stack_2603	2603	635.765	671.944	-36.179
stack_2604	2604	702.073	691.187	10.886
stack_2605	2605	410.385	414.884	-4.499
stack_2606	2606	244.656	250.879	-6.223
stack_2609	2609	89.358	83.795	5.563

Table 22.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	2601	2602	2603	2604	2605	2606	2609
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	0.050*	-0.021	0.020	0.011	-0.081***	-0.024	-0.005
	(0.024)	(0.022)	(0.023)	(0.022)	(0.020)	(0.019)	(0.019)
D8_rec1	0.043	-0.051	0.030	0.007	-0.074**	0.032	0.027
	(0.033)	(0.031)	(0.031)	(0.030)	(0.028)	(0.027)	(0.026)
D5_rec1	-0.011	-0.009	0.008	0.004	0.009	0.020	0.011
	(0.026)	(0.024)	(0.025)	(0.024)	(0.022)	(0.021)	(0.021)
EDU_rec2	0.062	0.011	-0.046	0.006	-0.017	-0.031	-0.042
	(0.047)	(0.043)	(0.044)	(0.043)	(0.039)	(0.037)	(0.037)
EDU_rec3	0.056	0.046	-0.089*	0.043	0.030	-0.096**	-0.071*
	(0.043)	(0.040)	(0.041)	(0.040)	(0.037)	(0.035)	(0.035)
D1_rec1	0.081**	-0.009	0.133***	0.008	0.043	0.128***	0.150***
	(0.031)	(0.029)	(0.029)	(0.029)	(0.026)	(0.025)	(0.024)
D7_rec1	-0.016	0.087***	-0.035	0.038	0.025	-0.024	-0.022
	(0.026)	(0.024)	(0.025)	(0.024)	(0.022)	(0.021)	(0.021)
D7_rec2	-0.009	0.127***	-0.065	0.123***	0.088**	-0.012	-0.005
	(0.040)	(0.037)	(0.038)	(0.037)	(0.034)	(0.032)	(0.032)
D6_une1	-0.093*	0.039	-0.018	-0.024	0.081*	-0.025	-0.025
	(0.041)	(0.038)	(0.038)	(0.038)	(0.035)	(0.033)	(0.033)
D4_age	-0.003***	0.0001	-0.004***	-0.002**	-0.001	-0.001	-0.001*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
D10_rec	-0.015**	0.058***	-0.030***	0.037***	0.045***	-0.007	-0.004
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)
Constant	0.535***	0.200***	0.624***	0.326***	0.216***	0.268***	0.298***
	(0.063)	(0.058)	(0.060)	(0.058)	(0.053)	(0.051)	(0.051)
N	905	905	901	905	904	893	865
R-squared	0.048	0.164	0.128	0.090	0.146	0.061	0.066
Adj. R-squared	0.036	0.153	0.117	0.078	0.135	0.049	0.054

***p < .001; **p < .01; *p < .05

Table 22.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	2601	2602	2603	2604	2605	2606	2609
	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
D3_rec2	0.232 (0.157)	-0.197 (0.211)	-0.230 (0.214)	0.234 (0.205)	-0.729* (0.302)	-0.274 (0.407)	0.354 (0.805)
D8_rec1	0.072 (0.219)	-0.877*** (0.260)	0.728* (0.346)	0.068 (0.292)	-0.291 (0.391)	0.196 (0.565)	-0.148 (1.121)
D5_rec1	0.049 (0.170)	0.063 (0.238)	-0.031 (0.228)	-0.067 (0.222)	-0.077 (0.330)	0.426 (0.456)	0.356 (0.882)
EDU_rec2	0.270 (0.318)	-0.022 (0.452)	-0.413 (0.377)	0.404 (0.480)	1.303 (1.059)	-0.119 (0.613)	-1.595 (1.488)
EDU_rec3	0.299 (0.297)	0.242 (0.418)	-0.381 (0.344)	0.763 (0.448)	1.640 (1.031)	-1.242* (0.624)	-0.841 (1.161)
D1_rec1	0.337 (0.193)	-0.696* (0.322)	0.569* (0.245)	-0.308 (0.280)	-0.534 (0.411)	0.674 (0.483)	1.173 (0.824)
D7_rec1	-0.062 (0.170)	0.826** (0.262)	-0.583** (0.225)	-0.142 (0.223)	0.011 (0.333)	0.216 (0.445)	-0.541 (0.948)
D7_rec2	-0.130 (0.263)	1.109*** (0.335)	-0.771 (0.396)	-0.113 (0.334)	0.376 (0.429)	0.411 (0.703)	1.161 (0.991)
D6_une1	-0.640* (0.301)	0.150 (0.364)	-0.105 (0.361)	-0.497 (0.394)	0.321 (0.468)	0.371 (0.657)	0.912 (1.188)
D4_age	-0.00002 (0.005)	0.010 (0.007)	-0.009 (0.007)	-0.0001 (0.006)	-0.006 (0.009)	0.034** (0.013)	0.033 (0.025)
D10_rec	-0.043 (0.036)	0.278*** (0.043)	-0.337*** (0.071)	0.059 (0.044)	0.194*** (0.059)	-0.408** (0.158)	-17.141 (2188.572)
Constant	-1.418*** (0.426)	-2.857*** (0.598)	-1.043 (0.536)	-2.581*** (0.609)	-3.738** (1.154)	-4.711*** (1.116)	-5.643** (2.179)
N	891	891	891	891	891	891	891
Log Likelihood	-504.843	-317.246	-305.882	-339.037	-193.192	-110.328	-32.679
AIC	1033.685	658.492	635.765	702.073	410.385	244.656	89.358

***p < .001; **p < .01; *p < .05

23 Sweden

see top

Synthetic variables have been estimated for the full set of Swedish parties available in the original 2019 EES Swedish voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 23.1).

Swedish
Table 23.1: Sweden relevant parties

Dep. Var.	Party	Party name (eng)
stack_2702	2702	Social Democratic Labour Party
stack_2705	2705	Moderate Coalition Party
stack_2707	2707	Green Ecology Party
stack_2704	2704	Liberal People's Party
stack_2703	2703	Centre Party
stack_2708	2708	Sweden Democrats
stack_2706	2706	Christian Democrats
stack_2701	2701	Left Party

Full OLS models converge and coefficients do not show any particular issues (see Table 23.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.018 for party 2702 (Social Democratic Labour Party) and a maximum of 0.1 for party 2707 (Green Ecology Party). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that the full models perform better in all cases (see Table 23.2).

Table 23.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2702	2702	738.604	742.960	-4.356
stack_2705	2705	583.369	623.368	-39.998
stack_2707	2707	400.517	479.613	-79.096
stack_2704	2704	223.279	263.305	-40.026
stack_2703	2703	220.664	266.672	-46.008
stack_2708	2708	836.818	856.252	-19.434
stack_2706	2706	472.844	502.935	-30.091
stack_2701	2701	541.016	577.778	-36.762

On the contrary, one out of ~~the~~ eight logistic regression models (see Table 23.5) shows inflated standard errors for one of the coefficients of interest, ~~in particular~~.

- Model 10: D6_une

However, the constant term and the other regressors of Model 10 are not affected by the inflated standard errors issue. Therefore, no additional adjustments are made and Model 10 is kept as is.

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.037 for party 2704 (Liberal People's Party) and a maximum of 0.036 for party 2705

(Moderate Coalition Party). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in three cases out of eight null models perform better than full ones (see Table 23.3).

Table 23.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2702	2702	806.960	820.036	-13.076
stack_2705	2705	501.752	522.644	-20.892
stack_2707	2707	359.917	359.457	0.460
stack_2704	2704	255.004	247.996	7.008
stack_2703	2703	299.293	299.837	-0.544
stack_2708	2708	736.415	735.017	1.398
stack_2706	2706	369.826	370.795	-0.969
stack_2701	2701	416.961	424.960	-7.999

Table 23.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	2702	2705	2707	2704	2703	2708	2706	2701
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
D3_rec2	0.016 (0.026)	-0.028 (0.024)	0.089*** (0.021)	0.017 (0.019)	0.040* (0.019)	-0.090** (0.027)	-0.021 (0.022)	0.056* (0.023)
D8_rec1	0.043 (0.033)	0.026 (0.030)	0.021 (0.027)	0.041 (0.025)	0.022 (0.024)	-0.047 (0.035)	0.030 (0.028)	-0.003 (0.030)
D5_rec1	-0.016 (0.027)	-0.002 (0.025)	-0.051* (0.022)	-0.026 (0.020)	-0.026 (0.020)	0.035 (0.028)	0.008 (0.023)	-0.053* (0.024)
EDU_rec2	0.023 (0.050)	-0.063 (0.046)	0.031 (0.041)	0.029 (0.037)	-0.006 (0.037)	-0.041 (0.053)	-0.042 (0.043)	0.048 (0.045)
EDU_rec3	-0.003 (0.049)	-0.046 (0.045)	0.064 (0.040)	0.061 (0.036)	0.031 (0.036)	-0.112* (0.052)	-0.026 (0.042)	0.077 (0.044)
D1_rec1	0.068* (0.027)	-0.043 (0.025)	0.034 (0.022)	0.018 (0.020)	0.025 (0.020)	-0.015 (0.029)	-0.038 (0.023)	0.064** (0.024)
D7_rec1	-0.040 (0.028)	0.121*** (0.026)	0.030 (0.023)	0.079*** (0.021)	0.063** (0.021)	0.016 (0.030)	0.092*** (0.024)	-0.089*** (0.025)
D7_rec2	-0.097* (0.040)	0.227*** (0.036)	0.010 (0.033)	0.118*** (0.029)	0.066* (0.029)	0.014 (0.042)	0.114*** (0.034)	-0.133*** (0.035)
D6_une1	-0.075 (0.054)	-0.062 (0.049)	-0.076 (0.044)	0.001 (0.040)	-0.014 (0.040)	0.223*** (0.057)	-0.008 (0.046)	-0.052 (0.048)
D4_age	-0.001 (0.001)	-0.001 (0.001)	-0.005*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	0.001 (0.001)	-0.0001 (0.001)	-0.002** (0.001)
D10_rec	0.008 (0.007)	0.005 (0.006)	0.010 (0.006)	0.010* (0.005)	0.017*** (0.005)	-0.003 (0.007)	0.028*** (0.006)	-0.008 (0.006)
Constant	0.461*** (0.066)	0.433*** (0.061)	0.404*** (0.054)	0.280*** (0.049)	0.304*** (0.049)	0.426*** (0.070)	0.255*** (0.057)	0.389*** (0.059)
N	854	852	852	849	853	852	851	850
R-squared	0.030	0.070	0.112	0.070	0.077	0.047	0.059	0.067
Adj. R-squared	0.018	0.058	0.100	0.058	0.065	0.035	0.047	0.055

***p < .001; **p < .01; *p < .05

Table 23.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	2702	2705	2707	2704	2703	2708	2706	2701
	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16
D3_rec2	-0.070 (0.184)	-0.640* (0.270)	0.844** (0.324)	-0.122 (0.404)	0.004 (0.351)	-0.286 (0.200)	-0.140 (0.319)	0.223 (0.281)
D8_rec1	0.353 (0.251)	0.248 (0.337)	-0.173 (0.395)	0.369 (0.556)	-0.220 (0.442)	-0.288 (0.233)	-0.089 (0.379)	0.188 (0.382)
D5_rec1	0.063 (0.190)	0.511 (0.269)	0.144 (0.330)	-0.251 (0.405)	-0.811* (0.367)	0.133 (0.205)	0.053 (0.320)	-0.359 (0.291)
EDU_rec2	0.695 (0.463)	0.458 (0.648)	-0.229 (0.548)	0.854 (1.076)	-0.567 (0.653)	-0.087 (0.366)	-0.550 (0.616)	0.698 (0.770)
EDU_rec3	0.612 (0.454)	0.760 (0.625)	-0.037 (0.537)	0.838 (1.057)	-0.123 (0.607)	-0.340 (0.358)	-0.239 (0.570)	1.004 (0.757)
D1_rec1	0.745*** (0.203)	-0.364 (0.257)	-0.326 (0.325)	-0.580 (0.411)	1.231** (0.444)	-0.199 (0.201)	-0.127 (0.321)	0.617* (0.310)
D7_rec1	-0.099 (0.198)	0.640* (0.313)	0.074 (0.347)	1.039 (0.532)	0.987* (0.425)	-0.098 (0.211)	-0.180 (0.346)	-1.040*** (0.307)
D7_rec2	-0.221 (0.286)	1.033** (0.362)	0.310 (0.463)	1.339* (0.615)	0.147 (0.703)	-0.367 (0.322)	0.050 (0.448)	-1.290* (0.547)
D6_une1	-0.989 (0.541)	-14.799 (529.513)	-1.183 (1.034)	-0.303 (1.059)	0.350 (0.649)	0.742* (0.346)	-0.973 (1.039)	-0.443 (0.631)
D4_age	0.015** (0.005)	0.008 (0.007)	-0.029** (0.010)	0.012 (0.012)	0.0002 (0.011)	0.012* (0.006)	0.028** (0.009)	0.003 (0.009)
D10_rec	0.064 (0.045)	-0.006 (0.065)	0.034 (0.074)	-0.184 (0.136)	0.048 (0.087)	-0.058 (0.055)	0.188** (0.067)	-0.217* (0.100)
Constant	-3.522*** (0.579)	-3.841*** (0.796)	-1.817* (0.715)	-5.249*** (1.323)	-3.852*** (0.910)	-1.555** (0.493)	-3.935*** (0.824)	-3.315*** (0.910)
N	847	847	847	847	847	847	847	847
Log Likelihood	-391.480	-238.876	-167.958	-115.502	-137.646	-356.207	-172.913	-196.481
AIC	806.960	501.752	359.917	255.004	299.293	736.415	369.826	416.961

***p < .001; **p < .01; *p < .05

24 United Kingdom

Synthetic variables have been estimated for seven of 14 British (UK) parties available in the original 2019 EES British (UK) voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the criteria see Sect. XXX; for the relevant parties see Table 24.1).

Table 24.1: British (UK) ~~R~~elevant parties

Dep. Var.	Party	Party name (eng)
stack_2801	2801	Conservative Party
stack_2802	2802	Labour Party
stack_2803	2803	Liberal Democrats
stack_2804	2804	Green Party
stack_2805	2805	Scottish National Party
stack_2806	2806	United Kingdom Independence Party
stack_2807	2807	The Brexit Party

Full OLS models converge and coefficients do not show any particular issues (see Table 24.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.031 for party 2807 (The Brexit Party) and a maximum of 0.216 for party 2805 (Scottish National Party). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 0 cases out of 7 null models perform better than full ones (see Table 24.2).

Table 24.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2801	2801	610.463	701.857	-91.395
stack_2802	2802	511.818	692.047	-180.229
stack_2803	2803	502.618	556.253	-53.634
stack_2804	2804	358.451	446.949	-88.498
stack_2805	2805	49.968	246.372	-196.404
stack_2806	2806	291.141	351.711	-60.571
stack_2807	2807	740.111	756.590	-16.479

On the contrary, ~~one~~ ^{two} out of seven logistic regression models (see Table 24.5) show inflated standard errors for ~~some~~ of the coefficients of interest. In particular:

- Model 8: D6_une;
- Model 12: D7_rec (only for category 2).

Nevertheless, Models 8 and 12 constant terms and other regression coefficients are not affected by said inflated standard errors. Therefore, we do not adapt the models.

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.078 for party 2806 (United Kingdom Independence Party) and a maximum of 0.055 for party 2807 (The Brexit Party). Moreover, the differences between Akaike Information Criterion (AIC) values

for logistic full models and null models shows that in 3 cases out of 7 null models perform better than full ones (see Table 24.3).

Table 24.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2801	2801	462.768	475.051	-12.283
stack_2802	2802	611.746	640.123	-28.377
stack_2803	2803	682.703	690.427	-7.724
stack_2804	2804	335.666	333.022	2.644
stack_2805	2805	223.508	214.772	8.736
stack_2806	2806	154.722	145.559	9.162
stack_2807	2807	827.824	877.704	-49.880

Table 24.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	2801	2802	2803	2804	2805	2806	2807
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	0.010 (0.023)	0.007 (0.022)	0.006 (0.022)	0.031 (0.020)	0.010 (0.017)	0.004 (0.020)	-0.024 (0.025)
D8_rec1	-0.041 (0.027)	0.043 (0.026)	-0.025 (0.026)	0.002 (0.024)	-0.043* (0.020)	-0.016 (0.023)	-0.006 (0.030)
D5_rec1	0.036 (0.025)	-0.024 (0.024)	-0.003 (0.024)	-0.028 (0.022)	0.038* (0.019)	0.040 (0.021)	0.061* (0.028)
EDU_rec2	0.005 (0.040)	-0.045 (0.038)	-0.044 (0.038)	-0.001 (0.035)	-0.005 (0.030)	0.064 (0.033)	0.022 (0.044)
EDU_rec3	-0.058 (0.043)	0.043 (0.040)	0.052 (0.040)	0.074* (0.037)	0.023 (0.031)	-0.022 (0.035)	-0.097* (0.046)
D1_rec1	0.012 (0.030)	0.143*** (0.028)	0.071* (0.028)	0.066* (0.026)	0.134*** (0.022)	0.081** (0.025)	0.047 (0.033)
D7_rec1	0.158*** (0.025)	-0.096*** (0.024)	0.071** (0.024)	-0.018 (0.022)	0.030 (0.019)	0.028 (0.021)	0.010 (0.028)
D7_rec2	0.310*** (0.047)	-0.140** (0.044)	0.080 (0.044)	-0.040 (0.041)	0.042 (0.034)	0.030 (0.040)	-0.014 (0.051)
D6_une1	-0.039 (0.047)	0.040 (0.045)	-0.041 (0.045)	-0.054 (0.041)	-0.034 (0.035)	0.049 (0.040)	0.036 (0.052)
D4_age	0.003*** (0.001)	-0.006*** (0.001)	-0.003*** (0.001)	-0.005*** (0.001)	-0.004*** (0.001)	-0.002*** (0.001)	0.001 (0.001)
D10_rec	0.016** (0.006)	0.009 (0.005)	0.007 (0.005)	0.007 (0.005)	0.022*** (0.004)	0.023*** (0.005)	0.020** (0.006)
Constant	0.222*** (0.060)	0.686*** (0.057)	0.496*** (0.057)	0.566*** (0.052)	0.311*** (0.045)	0.219*** (0.050)	0.268*** (0.066)
N	871	869	869	865	852	861	858
R-squared	0.122	0.208	0.083	0.120	0.226	0.091	0.044
Adj. R-squared	0.111	0.197	0.072	0.109	0.216	0.080	0.031

***p < .001; **p < .01; *p < .05

Table 24.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	2801	2802	2803	2804	2805	2806	2807
	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
D3_rec2	0.497 (0.268)	-0.258 (0.219)	-0.231 (0.204)	0.228 (0.330)	-0.096 (0.429)	-0.300 (0.554)	-0.405* (0.179)
D8_rec1	-0.044 (0.296)	0.268 (0.265)	-0.118 (0.230)	0.250 (0.408)	-0.661 (0.444)	-0.323 (0.575)	0.187 (0.209)
D5_rec1	-0.213 (0.282)	-0.187 (0.239)	-0.133 (0.220)	-0.511 (0.344)	-0.009 (0.483)	0.580 (0.702)	0.349 (0.197)
EDU_rec2	0.480 (0.502)	0.229 (0.423)	-0.463 (0.335)	0.960 (0.782)	-0.178 (0.796)	0.474 (1.088)	-0.044 (0.292)
EDU_rec3	0.647 (0.522)	0.392 (0.434)	0.167 (0.342)	1.392 (0.783)	0.468 (0.803)	-0.401 (1.168)	-0.517 (0.327)
D1_rec1	-0.057 (0.346)	0.662** (0.248)	0.011 (0.259)	0.364 (0.382)	1.024* (0.470)	0.547 (0.664)	-0.449 (0.258)
D7_rec1	0.183 (0.294)	-0.530* (0.249)	0.473* (0.217)	-0.112 (0.368)	-0.107 (0.448)	1.158 (0.643)	0.036 (0.195)
D7_rec2	1.251** (0.403)	-1.215* (0.551)	0.138 (0.403)	0.251 (0.583)	-15.203 (804.939)	1.356 (0.914)	-0.054 (0.389)
D6_une1	-15.866 (798.474)	0.069 (0.387)	-1.358 (0.742)	-1.682 (1.041)	-0.263 (1.083)	0.866 (1.165)	0.505 (0.360)
D4_age	0.019* (0.008)	-0.028*** (0.007)	0.010 (0.006)	-0.024* (0.010)	0.004 (0.014)	0.012 (0.018)	0.034*** (0.006)
D10_rec	0.078 (0.061)	0.063 (0.049)	0.018 (0.048)	-0.158 (0.094)	-0.070 (0.105)	0.212 (0.111)	-0.038 (0.048)
Constant	-4.322*** (0.748)	-1.082 (0.560)	-2.110*** (0.522)	-2.829** (0.936)	-3.497** (1.156)	-6.268*** (1.692)	-3.023*** (0.508)
N	875	875	875	875	875	875	875
Log Likelihood	-219.384	-293.873	-329.352	-155.833	-99.754	-65.361	-401.912
AIC	462.768	611.746	682.703	335.666	223.508	154.722	827.824

***p < .001; **p < .01; *p < .05