

Summary of Synthetic Variables Estimation

EES 2019 Voter Study (Austrian, Croatian, French, Irish, Latvian, Portugues, Romanian
and Slovenian samples)

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1 Austria

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 issue (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 0.058, 0.058 for party 102, 104 (Austrian Social Democratic Party, NEOS - The New Austria and Liberal Forum). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models shows 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	682.375	720.163	-37.787
stack_102	102	624.274	665.472	-41.198
stack_104	104	421.355	462.888	-41.533
stack_106	106	668.762	698.015	-29.253
stack_103	103	782.815	810.946	-28.131
stack_105	105	48.952	78.412	-29.460

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 respondents 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 12 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	93.61638			
854	78.81738	2	14.799	0.0006116

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.027 for party 105 (Alliance for the Future of Austria) and a maximum of 0.085 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	792.119	868.142	-76.023
stack_102	102	810.678	845.471	-34.793
stack_104	104	479.493	483.460	-3.967
stack_106	106	621.067	625.784	-4.717
stack_103	103	794.266	806.568	-12.302
stack_105*	105	102.817	102.106	0.711

* 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	−0.012 (0.024)	0.005 (0.023)	−0.027 (0.021)	0.035 (0.024)	−0.073** (0.026)	−0.025 (0.017)
D8_rec1	0.003 (0.025)	0.067** (0.025)	0.037 (0.022)	0.036 (0.025)	−0.041 (0.027)	0.010 (0.018)
D5_rec1	0.027 (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)	0.002 (0.032)	0.029 (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	−0.026 (0.026)	0.143*** (0.025)	−0.017 (0.022)	0.027 (0.026)	−0.019 (0.027)	0.024 (0.018)
D7_rec1	0.032 (0.029)	0.006 (0.028)	0.032 (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)	−0.062 (0.039)	−0.028 (0.026)
D6_une1	−0.013 (0.064)	−0.046 (0.062)	−0.036 (0.055)	−0.041 (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)	−0.008 (0.006)	0.019*** (0.005)	−0.001 (0.006)	−0.009 (0.006)	0.002 (0.004)
Constant	0.362*** (0.051)	0.395*** (0.050)	0.427*** (0.045)	0.412*** (0.051)	0.479*** (0.054)	0.311*** (0.036)
N	877	879	873	878	875	869
R-squared	0.066	0.069	0.070	0.057	0.056	0.057
Adj. R-squared	0.054	0.058	0.058	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	102	104	106	103	105
	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
D3_rec2	0.321 (0.184)	0.052 (0.182)	-0.578* (0.263)	0.389 (0.219)	-0.620*** (0.188)	0.258 (0.694)
D8_rec1	-0.031 (0.191)	0.165 (0.194)	-0.329 (0.266)	0.188 (0.231)	-0.140 (0.192)	18.220 (2394.693)
D5_rec1	0.194 (0.196)	-0.351 (0.189)	0.043 (0.271)	0.069 (0.228)	0.416* (0.201)	-0.069 (0.694)
EDU_rec2	0.066 (0.254)	0.375 (0.281)	0.300 (0.384)	0.154 (0.341)	-0.072 (0.237)	0.010 (0.906)
EDU_rec3	-0.366 (0.276)	0.648* (0.289)	0.644 (0.386)	0.806* (0.332)	-0.578* (0.273)	-0.015 (0.946)
D1_rec1	-0.128 (0.194)	1.041*** (0.187)	-0.125 (0.275)	-0.299 (0.241)	-0.007 (0.195)	-18.081 (2507.533)
D7_rec1	0.206 (0.230)	0.417 (0.225)	0.209 (0.326)	0.257 (0.279)	-0.171 (0.209)	-1.056 (0.758)
D7_rec2	0.790** (0.276)	0.192 (0.287)	0.498 (0.382)	0.535 (0.326)	-0.442 (0.294)	-1.052 (1.141)
D6_une1	-1.789 (1.038)	0.114 (0.489)	0.645 (0.579)	-0.260 (0.636)	-0.064 (0.479)	0.066 (1.122)
D4_age	0.019*** (0.006)	0.016** (0.006)	-0.029*** (0.008)	-0.016* (0.007)	0.009 (0.006)	-0.030 (0.022)
D10_rec	0.316*** (0.043)	-0.121* (0.048)	-0.032 (0.066)	-0.031 (0.056)	-0.092 (0.048)	-0.083 (0.204)
Constant	-3.430*** (0.424)	-3.100*** (0.428)	-1.221* (0.539)	-2.124*** (0.480)	-1.345*** (0.395)	-19.871 (2394.694)
N	866	866	866	866	866	866
Log Likelihood	-384.060	-393.339	-227.746	-298.534	-385.133	-39.409
AIC	792.119	810.678	479.493	621.067	794.266	102.817

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

2 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 2.1).

Table 2.1: 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 issue (see Table 2.13). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.029 for party 413 (Party of Anti-corruption, Development and Transparency) and a maximum of 0.119 for party 404 (Croatian Democratic Union). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models shows that in all 7 cases out of 7 null models perform better than full ones (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_412	412	666.758	739.344	-72.586
stack_404	404	310.472	415.168	-104.696
stack_414	414	293.685	342.782	-49.098
stack_405	405	240.279	292.137	-51.857
stack_406	406	140.904	166.996	-26.092
stack_413	413	26.159	39.969	-13.810
stack_401	401	-228.581	-153.443	-75.137

On the contrary, two out of seven logistic regression models (see Table 2.14) 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 its models constant terms through their inflated standard errors.

Model 8a and 13a inflated standard errors are due to separation issues. In short, no respondents with low education and in unemployment did vote for party 413 (see Tables 2.6, 2.7). As well as no respondents

from rural areas or small cities, single, low educated, with high subjective socioeconomic status (SES) and unemployed did vote for party 401 (see Tables 2.8, 2.9, 2.10, 2.11, 2.12).

As a consequence, a constrained version of model 8 and 13 (namely, Model 14b, 13b) without said variables was 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 2.3). For party 413 H_0 cannot be rejected (see Table 2.4). Consequently, synthetic variables for respondents' vote choice for party 401 and 413 have been predicted relying on the constrained model (Model 14b, 13b).

Table 2.3: Likelihood-ratio Test between Model 14a (Unconstrained) and Model 8b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	883	65.66908			
Unconstrained	876	52.29526	7	13.37382	0.0635075

Table 2.4: Likelihood-ratio Test between Model 13a (Unconstrained) and Model 13b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	879	145.7295			
Unconstrained	876	142.1282	3	3.60133	0.3078558

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 413 (Party of Anti-corruption, Development and Transparency) and a maximum of 0.098 for party 412 (Social Democratic Party of Croatia). 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 models appear to have a better fit than Model 13b and 14b (see Table 2.5).

Table 2.5: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_401	401	76.29500	73.92600	2.369000
stack_401*	401	75.66908	73.92592	1.743168
stack_404	404	406.63000	425.29500	-18.665000
stack_405	405	292.77400	303.31300	-10.539000
stack_406	406	193.08600	185.68300	7.403000
stack_412	412	599.94700	667.24200	-67.294000
stack_413	413	166.12800	154.17300	11.955000
stack_413*	413	163.72954	154.17283	9.556711
stack_414	414	481.70400	472.07800	9.626000

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

Table 2.6: 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 2.7: 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 2.8: 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 2.9: 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 2.10: 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 2.11: 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 2.12: 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 2.13: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	412	404	414	405	406	413	401
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	−0.021 (0.023)	−0.001 (0.019)	0.005 (0.019)	0.006 (0.019)	0.003 (0.017)	−0.028 (0.017)	0.014 (0.014)
D8_rec1	−0.038 (0.030)	0.008 (0.024)	−0.037 (0.024)	0.028 (0.024)	−0.004 (0.022)	0.034 (0.022)	0.009 (0.018)
D5_rec1	−0.093*** (0.025)	0.005 (0.021)	−0.045* (0.021)	−0.068** (0.021)	−0.022 (0.019)	−0.023 (0.019)	−0.027 (0.015)
EDU_rec2	−0.095 (0.062)	−0.098 (0.051)	−0.131** (0.050)	−0.157** (0.052)	−0.133** (0.046)	−0.167*** (0.048)	−0.045 (0.038)
EDU_rec3	−0.067 (0.063)	−0.060 (0.052)	−0.174*** (0.051)	−0.110* (0.053)	−0.139** (0.047)	−0.168*** (0.049)	−0.074 (0.038)
D1_rec1	0.050 (0.027)	0.066** (0.022)	−0.008 (0.022)	0.008 (0.022)	0.014 (0.020)	0.034 (0.020)	−0.005 (0.016)
D7_rec1	0.105*** (0.025)	0.047* (0.021)	0.014 (0.020)	0.083*** (0.020)	0.039* (0.019)	0.051** (0.019)	0.037* (0.015)
D7_rec2	0.099** (0.037)	0.113*** (0.030)	0.015 (0.030)	0.083** (0.030)	0.037 (0.028)	0.032 (0.027)	0.025 (0.023)
D6_une1	0.026 (0.042)	−0.013 (0.035)	0.024 (0.034)	0.006 (0.034)	0.041 (0.031)	−0.005 (0.031)	−0.030 (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)	−0.001 (0.004)	−0.022*** (0.004)	0.015*** (0.004)	−0.008* (0.004)	0.020*** (0.003)
Constant	0.311*** (0.071)	0.089 (0.058)	0.574*** (0.058)	0.332*** (0.059)	0.347*** (0.053)	0.313*** (0.055)	0.231*** (0.043)
N	911	912	911	868	911	829	910
R-squared	0.099	0.130	0.075	0.082	0.051	0.042	0.101
Adj. R-squared	0.088	0.119	0.064	0.070	0.040	0.029	0.090

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

Table 2.14: 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 8	Model 9	Model 10	Model 11	Model 12	Model 13a	Model 13b	Model 14a	Model 14b
D3_rec2	−0.129 (0.220)	−0.514 (0.290)	−0.456 (0.263)	0.827* (0.375)	−0.095 (0.477)	−0.423 (0.541)	−0.459 (0.539)	0.701 (0.893)	0.568 (0.875)
D8_rec1	0.323 (0.324)	−0.239 (0.346)	−0.198 (0.317)	0.774 (0.622)	0.462 (0.660)	−0.292 (0.666)	−0.225 (0.660)	18.994 (5163.834)	
D5_rec1	−0.374 (0.236)	0.525 (0.346)	0.168 (0.287)	0.118 (0.391)	−0.111 (0.517)	0.102 (0.603)	0.152 (0.604)	18.677 (3933.114)	
EDU_rec2	−0.189 (0.826)	0.037 (0.707)	−0.362 (0.563)	−0.474 (1.142)	−1.281 (0.781)	14.858 (1761.469)		18.318 (9794.447)	
EDU_rec3	−0.054 (0.823)	0.428 (0.709)	−0.271 (0.578)	−0.271 (1.134)	−1.348 (0.816)	15.390 (1761.469)		17.456 (9794.447)	
D1_rec1	0.575* (0.238)	0.515 (0.296)	−0.116 (0.305)	0.478 (0.391)	0.662 (0.487)	0.059 (0.601)	0.112 (0.601)	−0.967 (1.119)	−0.707 (1.107)
D7_rec1	0.666** (0.251)	0.250 (0.338)	−0.187 (0.284)	0.928* (0.455)	−0.151 (0.522)	−0.108 (0.625)	0.007 (0.613)	0.675 (0.927)	
D7_rec2	0.713* (0.350)	1.181** (0.400)	−0.041 (0.397)	1.280* (0.552)	0.100 (0.720)	0.791 (0.704)	0.979 (0.685)	−17.869 (6002.379)	
D6_une1	−0.945 (0.613)	−0.250 (0.627)	0.344 (0.432)	−0.263 (0.762)	−0.262 (1.057)	−15.334 (1237.430)		−19.065 (7686.376)	
D4_age	0.053*** (0.009)	−0.001 (0.011)	−0.025* (0.011)	0.028* (0.013)	0.006 (0.018)	0.022 (0.020)	0.030 (0.020)	−0.026 (0.034)	−0.002 (0.029)
D10_rec	−0.202*** (0.057)	0.273*** (0.065)	−0.024 (0.061)	−0.314** (0.104)	0.292** (0.109)	−0.082 (0.133)	−0.093 (0.131)	0.473* (0.208)	0.444* (0.202)
Constant	−4.496*** (0.933)	−4.112*** (0.860)	−0.755 (0.677)	−5.633*** (1.365)	−4.225*** (1.136)	−19.746 (1761.469)	−5.198*** (1.273)	−60.802 (11750.140)	−6.646*** (1.667)
N	888	888	888	888	888	888	888	888	888
Log Likelihood	−287.974	−191.315	−228.852	−134.387	−84.543	−71.064	−72.865	−26.148	−32.835
AIC	599.947	406.630	481.704	292.774	193.086	166.128	163.730	76.295	75.669

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

3 France

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 3.1).

Table 3.1: 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 issue (see Table 3.4). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.038, 0.038 for party 1105, 1111 (Socialist Party, National Rally) and a maximum of 0.122 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 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_1113	1113	403.730	484.329	-80.599
stack_1105	1105	389.302	413.135	-23.833
stack_1111	1111	793.339	817.144	-23.805
stack_1114	1114	502.767	556.941	-54.174
stack_1101	1101	372.314	453.519	-81.205
stack_1110	1110	116.558	210.757	-94.199
stack_1102	1102	657.229	705.587	-48.357

Also the full Logit models converge and coefficients do not show any particular issue (see Table 3.5) In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.078 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 3.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1113	1113	404.384	454.071	-49.687
stack_1105	1105	332.931	317.328	15.603
stack_1111	1111	772.123	771.426	0.696
stack_1114	1114	547.599	547.508	0.090
stack_1101	1101	388.236	383.077	5.159
stack_1110	1110	215.168	201.572	13.596
stack_1102	1102	710.954	774.865	-63.911

Table 3.4: 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)	0.019 (0.018)	-0.025 (0.024)
D8_rec1	0.010 (0.022)	0.033 (0.022)	-0.022 (0.027)	0.012 (0.023)	-0.008 (0.022)	0.011 (0.020)	0.073** (0.025)
D5_rec1	-0.001 (0.022)	-0.007 (0.022)	0.024 (0.028)	-0.030 (0.024)	0.001 (0.022)	-0.011 (0.021)	-0.023 (0.026)
EDU_rec2	-0.010 (0.039)	0.035 (0.039)	0.131** (0.049)	-0.015 (0.042)	0.014 (0.039)	0.023 (0.036)	-0.044 (0.046)
EDU_rec3	-0.038 (0.038)	0.052 (0.038)	0.036 (0.047)	0.026 (0.040)	0.011 (0.038)	0.029 (0.035)	-0.025 (0.044)
D1_rec1	0.055 (0.030)	0.121*** (0.029)	0.117** (0.036)	0.109*** (0.031)	0.149*** (0.029)	0.173*** (0.027)	0.043 (0.034)
D7_rec1	0.089*** (0.023)	0.046* (0.023)	-0.056* (0.029)	0.067** (0.024)	-0.011 (0.023)	0.051* (0.021)	0.118*** (0.027)
D7_rec2	0.189*** (0.030)	-0.005 (0.030)	-0.026 (0.037)	0.027 (0.032)	-0.090** (0.030)	-0.011 (0.027)	0.194*** (0.035)
D6_une1	-0.011 (0.045)	0.027 (0.044)	-0.002 (0.055)	-0.016 (0.048)	0.071 (0.045)	0.030 (0.042)	-0.087 (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)	-0.0003 (0.001)
D10_rec	0.035*** (0.006)	-0.008 (0.006)	0.013 (0.007)	-0.016** (0.006)	-0.001 (0.006)	0.002 (0.005)	0.011 (0.006)
Constant	0.242*** (0.050)	0.309*** (0.050)	0.356*** (0.062)	0.560*** (0.053)	0.437*** (0.050)	0.301*** (0.046)	0.274*** (0.058)
N	902	901	900	902	888	810	898
R-squared	0.108	0.050	0.050	0.081	0.110	0.134	0.075
Adj. R-squared	0.096	0.038	0.038	0.070	0.099	0.122	0.064

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

Table 3.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics
(Logistic regression models)

	1113	1105	1111	1114	1101	1110	1102
	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
D3_rec2	0.381 (0.287)	0.189 (0.344)	-0.153 (0.192)	0.195 (0.242)	0.191 (0.306)	-0.089 (0.458)	-0.460* (0.201)
D8_rec1	-0.414 (0.291)	0.019 (0.365)	-0.218 (0.199)	-0.429 (0.244)	-0.612* (0.302)	0.389 (0.526)	0.383 (0.224)
D5_rec1	0.715 (0.379)	-0.229 (0.364)	-0.059 (0.211)	-0.063 (0.264)	0.037 (0.333)	-0.532 (0.474)	-0.274 (0.223)
EDU_rec2	-0.068 (0.611)	1.202 (1.051)	0.484 (0.408)	-0.173 (0.452)	-0.446 (0.545)	0.962 (1.084)	0.181 (0.479)
EDU_rec3	-0.280 (0.598)	1.231 (1.042)	0.208 (0.407)	0.098 (0.434)	-0.080 (0.521)	0.689 (1.087)	0.708 (0.459)
D1_rec1	-0.376 (0.488)	-0.607 (0.632)	0.220 (0.279)	0.521 (0.309)	0.337 (0.411)	1.035 (0.544)	-0.214 (0.318)
D7_rec1	0.937* (0.425)	-0.357 (0.384)	-0.525* (0.210)	0.723* (0.281)	-0.234 (0.312)	0.021 (0.494)	0.592* (0.258)
D7_rec2	1.895*** (0.452)	-0.019 (0.480)	-0.584* (0.291)	0.069 (0.402)	-1.515* (0.639)	-0.159 (0.720)	1.294*** (0.291)
D6_une1	0.389 (0.660)	-0.268 (0.758)	-0.385 (0.456)	0.415 (0.473)	-1.185 (1.033)	-0.345 (1.059)	-1.965 (1.025)
D4_age	0.038*** (0.010)	0.005 (0.011)	0.015* (0.006)	-0.010 (0.008)	0.003 (0.009)	-0.001 (0.014)	0.028*** (0.006)
D10_rec	0.220*** (0.066)	-0.027 (0.100)	0.019 (0.053)	-0.126 (0.074)	-0.058 (0.092)	-0.204 (0.156)	-0.015 (0.055)
Constant	-6.287*** (0.938)	-4.235*** (1.184)	-2.216*** (0.524)	-1.989*** (0.565)	-2.219** (0.720)	-4.307*** (1.306)	-3.983*** (0.603)
N	905	905	905	905	905	905	905
Log Likelihood	-190.192	-154.466	-374.061	-261.799	-182.118	-95.584	-343.477
AIC	404.384	332.931	772.123	547.599	388.236	215.168	710.954

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

4 Ireland

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 4.1).

Table 4.1: 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 issue (see Table 4.6). 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 difference between Akaike Information Criterion (AIC) values for full OLS models and null models shows that in 6 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_1402	1402	482.194	542.391	-60.197
stack_1403	1403	254.212	273.301	-19.090
stack_1401	1401	405.420	494.195	-88.775
stack_1404	1404	452.410	463.429	-11.018
stack_1405	1405	419.079	482.320	-63.242
stack_1406	1406	354.990	374.578	-19.587

On the contrary, one out of six logistic regression models (see Table 4.7) shows inflated standard errors for one of the coefficients of interest:

- Model 8: EDU_rec;

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

Model 8a inflated standard errors are due to separation issues. In short, only one low educated respondent did vote for party 1403 (see Tables 4.5)

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 4.3). Consequently, synthetic variables for respondents' vote choice for party 1403 have been predicted relying on the constrained model (Model 8b).

Table 4.3: Likelihood-ratio Test between Model 8a (Unconstrained) and Model 8b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	818	175.4496			
Unconstrained	816	171.8613	2	3.588386	0.1662616

In terms of model fit, adjusted McFadden’s pseudo R^2 values for the logistic full models vary between a minimum value of -0.039 for party 1403 (Labour Party) and a maximum of 0.033 for party 1402 (Family of the Irish). Moreover, the difference between Akaike Information Criterion (AIC) values for logistic full models and null models shows 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 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_1401	1401	526.5670	532.3840	-5.817000
stack_1402	1402	702.4450	728.4990	-26.055000
stack_1403	1403	195.8610	190.4440	5.417000
stack_1403*	1403	195.4496	190.4442	5.005436
stack_1404	1404	534.5190	536.8130	-2.294000
stack_1405	1405	443.6380	447.6410	-4.003000
stack_1406	1406	235.9670	233.1430	2.825000

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

Table 4.5: 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 4.6: 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	0.007 (0.022)	0.031 (0.019)	−0.047* (0.021)	0.055* (0.022)	−0.019 (0.021)	0.021 (0.021)
D8_rec1	0.029 (0.024)	0.050* (0.021)	0.017 (0.023)	0.035 (0.023)	−0.026 (0.023)	0.020 (0.022)
D5_rec1	0.029 (0.025)	0.009 (0.022)	0.006 (0.024)	0.005 (0.025)	0.010 (0.024)	0.018 (0.024)
EDU_rec2	−0.059 (0.042)	−0.052 (0.037)	0.070 (0.041)	−0.031 (0.042)	0.039 (0.041)	−0.032 (0.040)
EDU_rec3	−0.022 (0.041)	−0.002 (0.036)	0.036 (0.040)	0.015 (0.041)	−0.016 (0.040)	−0.055 (0.039)
D1_rec1	−0.016 (0.025)	0.021 (0.022)	−0.036 (0.024)	0.018 (0.025)	0.025 (0.024)	0.055* (0.023)
D7_rec1	0.075** (0.024)	0.062** (0.021)	0.098*** (0.023)	0.081*** (0.023)	−0.020 (0.023)	−0.040 (0.022)
D7_rec2	0.137*** (0.040)	0.078* (0.035)	0.140*** (0.038)	0.050 (0.040)	−0.030 (0.039)	−0.038 (0.038)
D6_une1	−0.098* (0.046)	−0.028 (0.040)	−0.034 (0.044)	−0.083 (0.046)	0.037 (0.045)	0.110* (0.044)
D4_age	−0.001 (0.001)	−0.001 (0.001)	−0.002** (0.001)	0.001 (0.001)	−0.006*** (0.001)	−0.002** (0.001)
D10_rec	0.030*** (0.005)	0.009* (0.004)	0.039*** (0.004)	−0.002 (0.005)	0.003 (0.004)	−0.007 (0.004)
Constant	0.338*** (0.052)	0.325*** (0.045)	0.321*** (0.050)	0.348*** (0.052)	0.599*** (0.050)	0.477*** (0.050)
N	848	848	846	841	848	826
R-squared	0.092	0.047	0.123	0.038	0.096	0.049
Adj. R-squared	0.080	0.035	0.111	0.026	0.084	0.036

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

Table 4.7: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	1402	1403	1403	1401	1404	1405	1406
	Model 7	Model 8a	Model 8b	Model 9	Model 70	Model 71	Model 72
D3_rec2	0.040 (0.199)	0.036 (0.469)	0.092 (0.466)	-0.416 (0.247)	-0.131 (0.241)	-0.105 (0.273)	0.290 (0.415)
D8_rec1	-0.102 (0.208)	1.522* (0.759)	1.518* (0.757)	0.220 (0.266)	0.166 (0.262)	-0.562* (0.273)	0.018 (0.446)
D5_rec1	0.065 (0.226)	-0.101 (0.510)	0.006 (0.508)	0.152 (0.281)	-0.038 (0.269)	0.697* (0.343)	0.741 (0.513)
EDU_rec2	-0.515 (0.378)	15.396 (1180.765)		1.199 (0.751)	-0.663 (0.456)	0.288 (0.498)	0.038 (0.805)
EDU_rec3	-0.129 (0.367)	15.791 (1180.765)		1.321 (0.746)	-0.184 (0.429)	-0.526 (0.511)	-0.055 (0.816)
D1_rec1	-0.337 (0.236)	0.516 (0.490)	0.496 (0.488)	0.039 (0.273)	0.389 (0.257)	0.161 (0.295)	0.709 (0.438)
D7_rec1	0.149 (0.216)	0.276 (0.518)	0.396 (0.505)	0.246 (0.264)	0.875** (0.277)	-0.241 (0.284)	-0.643 (0.455)
D7_rec2	0.052 (0.348)	0.291 (0.848)	0.409 (0.828)	0.088 (0.439)	0.844* (0.401)	-1.267 (0.747)	-0.911 (1.051)
D6_une1	-0.574 (0.545)	0.058 (1.079)	-0.046 (1.064)	0.481 (0.476)	-0.277 (0.622)	-0.976 (0.749)	1.782** (0.544)
D4_age	0.026*** (0.006)	0.028 (0.016)	0.026 (0.015)	0.017* (0.008)	0.015* (0.008)	-0.021* (0.010)	0.004 (0.015)
D10_rec	0.143*** (0.040)	-0.178 (0.104)	-0.180 (0.104)	0.130** (0.049)	-0.032 (0.049)	0.029 (0.056)	-0.171 (0.095)
Constant	-3.025*** (0.491)	-21.694 (1180.765)	-6.214*** (1.182)	-4.899*** (0.858)	-3.176*** (0.576)	-1.501* (0.620)	-4.090*** (1.121)
N	828	828	828	828	828	828	828
Log Likelihood	-339.222	-85.931	-87.725	-251.283	-255.260	-209.819	-105.984
AIC	702.445	195.861	195.450	526.567	534.519	443.638	235.967

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

5 Latvia

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 5.1).

Table 5.1: 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 issue (see Table 5.15). In terms of model fit, the adjusted coefficient of determination (R^2) values vary between a minimum value of 0.008 for party 1608 (New Conservative Party) and a maximum of 0.047 for party 1610 (Social Democratic Party "Harmony"). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models shows that in 5 cases 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_1611	1611	417.189	427.783	-10.593
stack_1608	1608	313.166	308.067	5.099
stack_1609	1609	298.365	304.472	-6.107
stack_1605	1605	-52.283	-52.571	0.288
stack_1610	1610	610.902	638.014	-27.112
stack_1604	1604	225.227	225.784	-0.556
stack_1616	1616	432.780	446.309	-13.529

On the contrary, six out of seven logistic regression models (see Tables 5.16, ??) 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 model 8,12,13,14 presents a more problematic profile.

Models 8,12,13,14 inflated standard errors are due to separation issues. In short, no respondents with low education and unemployment did vote for party 1611 and 1616 (see Tables 5.9, 5.10, 5.11, 5.12). For party 1610 and 1604 no respondents with low education voted for them (see Tables 5.13, 5.14).

As a consequence, a constrained version of model 8,12,13,14 (namely, Model 8b,12b,13b,14b) without said variables was estimated and contrasted with the original (Model 8a,12a,13a,14a), full model. 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 5.3). 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 5.4). 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 5.5). 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 5.6). 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 5.7). Consequently, synthetic variables for respondents' vote choice for party 1616 have been predicted relying on the unconstrained model (Model 14).

Table 5.3: Likelihood-ratio Test between Model 8a (Unconstrained) and (Fully Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
784	471.7312			
781	462.0985	3	9.632677	0.021961

Table 5.4: Likelihood-ratio Test between Model 8a (Unconstrained) and Model 8b (Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
783	465.9043			
781	462.0985	2	3.805825	0.1491336

Table 5.5: Likelihood-ratio Test between Model 12a (Unconstrained) and Model 12b (Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
783	474.9240			
781	469.9404	2	4.98362	0.08276

Table 5.6: Likelihood-ratio Test between Model 13a (Unconstrained) and Model 13b (Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
783	259.4469			
781	252.4689	2	6.977971	0.0305318

Table 5.7: Likelihood-ratio Test between Model 14 (Unconstrained and Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
783	589.2081			
781	573.1949	2	16.01324	0.0003332

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 5.8).

Table 5.8: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1604	1604	276.4690	270.1370	6.332000
stack_1611*	1604	279.4469	270.1366	9.310303
stack_1605	1605	70.3280	72.5630	-2.235000
stack_1608	1608	296.2430	282.6840	13.559000
stack_1609	1609	462.4940	456.5220	5.972000
stack_1610	1610	493.9400	493.8890	0.051000
stack_1610	1610	494.9240	493.8894	1.034646
stack_1611	1611	486.0990	480.1110	5.988000
stack_1610*	1611	485.9043	480.1108	5.793550
stack_1616	1616	597.1950	625.7790	-28.584000
stack_1604*				

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

Table 5.9: 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 5.10: 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 5.11: 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 5.12: 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 5.13: 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 5.14: 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 5.15: 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	−0.029 (0.023)	0.010 (0.022)	0.029 (0.022)	0.014 (0.017)	0.050 (0.026)	0.032 (0.020)	0.033 (0.023)
D8_rec1	−0.108*** (0.028)	−0.077** (0.027)	−0.055* (0.026)	−0.051* (0.021)	0.177*** (0.031)	−0.029 (0.025)	−0.057* (0.028)
D5_rec1	−0.044 (0.026)	−0.015 (0.024)	−0.062* (0.024)	−0.013 (0.019)	0.028 (0.029)	−0.001 (0.023)	−0.034 (0.026)
EDU_rec2	0.079 (0.071)	0.003 (0.067)	0.065 (0.066)	0.035 (0.052)	0.003 (0.078)	0.020 (0.061)	0.047 (0.070)
EDU_rec3	0.118 (0.071)	0.031 (0.067)	0.119 (0.066)	0.061 (0.053)	−0.060 (0.079)	0.086 (0.062)	0.128 (0.070)
D1_rec1	0.025 (0.030)	0.003 (0.028)	0.009 (0.028)	−0.008 (0.022)	0.027 (0.034)	0.019 (0.026)	0.027 (0.030)
D7_rec1	0.038 (0.024)	0.021 (0.023)	0.017 (0.022)	0.020 (0.018)	0.013 (0.027)	0.038 (0.021)	0.030 (0.024)
D7_rec2	0.034 (0.045)	−0.011 (0.043)	−0.007 (0.043)	0.021 (0.034)	−0.022 (0.050)	0.038 (0.039)	0.029 (0.045)
D6_une1	−0.082 (0.060)	−0.103 (0.055)	0.044 (0.057)	−0.003 (0.043)	0.043 (0.066)	0.012 (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	0.0001 (0.006)	0.004 (0.006)	−0.009 (0.006)	−0.0003 (0.005)	0.010 (0.007)	0.002 (0.006)	0.001 (0.006)
Constant	0.281** (0.089)	0.376*** (0.084)	0.384*** (0.083)	0.280*** (0.065)	0.138 (0.098)	0.229** (0.076)	0.202* (0.088)
N	784	768	767	770	792	790	789
R-squared	0.041	0.022	0.036	0.028	0.060	0.028	0.044
Adj. R-squared	0.027	0.008	0.022	0.014	0.047	0.014	0.030

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

Table 5.16: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	1611	1611	1608	1609	1605	1610	1610	1604	1604	1616
	Model 8a	Model 8b	Model 9	Model 10	Model 11	Model 12a	Model 12b	Model 13a	Model 13b	Model 14
D3_rec2	-0.402 (0.261)	-0.376 (0.260)	0.050 (0.365)	0.118 (0.271)	-0.566 (1.022)	-0.566 (1.022)	0.269 (0.258)	-0.149 (0.374)	-0.092 (0.373)	-0.149 (0.225)
D8_rec1	-0.152 (0.305)	-0.181 (0.304)	-0.420 (0.408)	-0.759** (0.286)	-2.391* (1.091)	-2.391* (1.091)	1.129* (0.438)	-0.717 (0.395)	-0.804* (0.394)	-0.279 (0.251)
D5_rec1	-0.208 (0.287)	-0.167 (0.286)	-0.221 (0.394)	-0.525 (0.276)	17.895 (2703.384)	17.895 (2703.384)	-0.176 (0.275)	0.310 (0.451)	0.331 (0.447)	-0.151 (0.246)
EDU_rec2	16.015 (1358.359)		-1.380 (0.821)	-0.347 (0.779)	-2.112 (1.475)	-2.112 (1.475)		13.702 (849.755)		15.051 (807.771)
EDU_rec3	16.146 (1358.359)		-0.917 (0.806)	-0.176 (0.783)	-2.407 (1.632)	-2.407 (1.632)		14.637 (849.755)		15.782 (807.771)
D1_rec1	0.241 (0.315)	0.264 (0.313)	-0.021 (0.471)	0.270 (0.336)	0.412 (1.216)	0.412 (1.216)	0.224 (0.305)	0.509 (0.434)	0.624 (0.429)	-0.198 (0.301)
D7_rec1	-0.026 (0.270)	-0.001 (0.268)	0.025 (0.380)	0.228 (0.275)	0.057 (1.056)	0.057 (1.056)	0.423 (0.274)	0.392 (0.408)	0.497 (0.405)	-0.032 (0.229)
D7_rec2	0.268 (0.463)	0.304 (0.459)	0.130 (0.678)	-0.357 (0.638)	2.371 (1.467)	2.371 (1.467)	0.403 (0.465)	0.359 (0.701)	0.549 (0.692)	0.035 (0.431)
D6_une1	-16.014 (1087.082)	-15.184 (675.024)	-15.525 (1096.940)	0.414 (0.579)	3.005* (1.175)	3.005* (1.175)	0.494 (0.563)	0.838 (0.810)	0.443 (0.776)	-15.058 (652.557)
D4_age	0.007 (0.008)	0.008 (0.008)	-0.002 (0.012)	0.006 (0.009)	0.062 (0.043)	0.062 (0.043)	0.005 (0.008)	0.002 (0.012)	0.003 (0.012)	0.031*** (0.007)
D10_rec	0.082 (0.068)	0.079 (0.068)	0.090 (0.094)	-0.094 (0.081)	-0.403 (0.348)	-0.403 (0.348)	0.078 (0.067)	-0.094 (0.111)	-0.103 (0.112)	0.0002 (0.061)
Constant	-18.424 (1358.359)	-2.426*** (0.636)	-1.641 (1.110)	-1.624 (0.974)	-22.634 (2703.385)	-22.634 (2703.385)	-3.976*** (0.710)	-17.389 (849.755)	-3.219*** (0.926)	-18.454 (807.771)
N	793	793	793	793	793	793	793	793	793	793
Log Likelihood	-231.049	-232.952	-136.122	-219.247	-23.164	-23.164	-237.462	-126.234	-129.723	-286.597
AIC	486.099	485.904	296.243	462.494	70.328	70.328	494.924	276.469	279.447	597.195

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

6 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 6.1).

Table 6.1: 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 issue (see Table 6.8). 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 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 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_2301	2301	553.736	625.062	-71.326
stack_2303	2303	526.983	546.879	-19.896
stack_2305	2305	344.164	365.221	-21.057
stack_2306	2306	708.604	720.286	-11.682
stack_2307	2307	-105.959	-84.132	-21.826
stack_2308	2308	383.403	383.805	-0.402
stack_2302	2302	693.376	721.675	-28.299

On the contrary, one out of seven logistic regression models (see Table 6.9) show inflated standard errors for some of the coefficients of interest:

- Model 12: EDU_rec, D6_une;

It 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 did vote for party 2307 (see Tables 6.6, 6.7).

As a consequence, a constrained version of model 12 (namely, Model 11b) 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

6.3). However, if just EDU_rec is dropped H_0 cannot be rejected (see Table 6.4). 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).

Table 6.3: Likelihood-ratio Test between Model 12a (Unconstrained) and (Fully Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
886	210.8894			
883	205.7107	3	5.178703	0.1591697

Table 6.4: Likelihood-ratio Test between Model 12a (Unconstrained) and Model 12b (Constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
885	210.0202			
883	205.7107	2	4.309481	0.1159333

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.039 for party 2307 (Hungarian Democratic Alliance of Romania) and a maximum of 0.048 for party 2301 (Social Democratic 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. According to AIC values the related null model appears to have a better fit than Model 12b (see Table 6.5).

Table 6.5: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2301	2301	580.5250	611.9490	-31.423000
stack_2302	2302	1032.0560	1071.5910	-39.535000
stack_2303	2303	371.1440	376.2380	-5.094000
stack_2305	2305	368.8180	358.8130	10.005000
stack_2306	2306	911.0000	908.7000	2.301000
stack_2307	2307	229.7110	223.0520	6.659000
stack_2307*	2307	230.0202	223.0515	6.968671
stack_2308	2308	381.8020	370.4750	11.327000

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

Table 6.6: 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 6.7: 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 6.8: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	2301	2303	2305	2306	2307	2308	2302
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
D3_rec2	−0.010 (0.022)	0.016 (0.022)	0.022 (0.020)	0.001 (0.024)	−0.018 (0.015)	−0.012 (0.020)	−0.004 (0.025)
D8_rec1	0.077* (0.033)	0.062 (0.033)	0.029 (0.030)	−0.056 (0.036)	−0.039 (0.023)	−0.001 (0.030)	0.019 (0.037)
D5_rec1	0.033 (0.026)	0.035 (0.026)	0.042 (0.024)	−0.007 (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	−0.054 (0.051)	−0.052 (0.051)	−0.035 (0.047)	−0.075 (0.056)	−0.031 (0.036)	−0.002 (0.048)	0.075 (0.057)
D1_rec1	0.029 (0.028)	0.031 (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)	0.022 (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)	0.014 (0.023)	−0.011 (0.031)	0.029 (0.037)
D6_une1	0.071 (0.083)	−0.093 (0.082)	−0.044 (0.075)	−0.050 (0.091)	0.006 (0.058)	−0.113 (0.076)	−0.257** (0.092)
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)	0.024*** (0.005)	0.014* (0.006)	0.013*** (0.004)	0.016** (0.005)	−0.005 (0.006)
Constant	−0.120 (0.064)	0.080 (0.065)	0.165** (0.059)	0.641*** (0.070)	0.199*** (0.045)	0.269*** (0.060)	0.518*** (0.072)
N	908	904	893	911	899	896	874
R-squared	0.098	0.045	0.047	0.036	0.048	0.025	0.056
Adj. R-squared	0.087	0.034	0.035	0.025	0.036	0.013	0.044

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

Table 6.9: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	2301	2303	2305	2306	2307	2307	2308	2302
	Model 8	Model 9	Model 10	Model 11	Model 12a	Model 12b	Model 13	Model 84
D3_rec2	−0.228 (0.233)	0.373 (0.313)	0.122 (0.316)	−0.218 (0.172)	−0.843 (0.455)	−0.809 (0.453)	−0.312 (0.315)	0.248 (0.157)
D8_rec1	−0.002 (0.358)	1.916 (1.025)	0.141 (0.500)	−0.130 (0.243)	−1.115* (0.509)	−0.918 (0.495)	0.006 (0.464)	0.046 (0.238)
D5_rec1	0.664* (0.315)	0.322 (0.386)	0.989* (0.493)	−0.211 (0.198)	−0.431 (0.479)	−0.314 (0.474)	−0.200 (0.350)	0.137 (0.187)
EDU_rec2	0.109 (0.669)	0.282 (1.079)	0.692 (1.068)	0.208 (0.385)	14.980 (911.317)		0.153 (0.790)	0.310 (0.407)
EDU_rec3	0.119 (0.647)	0.288 (1.055)	0.446 (1.054)	−0.059 (0.382)	15.482 (911.317)		−0.082 (0.779)	0.950* (0.401)
D1_rec1	0.040 (0.281)	0.540 (0.347)	0.227 (0.365)	0.442* (0.201)	0.176 (0.520)	0.186 (0.520)	0.218 (0.374)	−0.660** (0.217)
D7_rec1	−0.188 (0.292)	−0.526 (0.334)	−0.070 (0.394)	−0.144 (0.209)	−0.543 (0.508)	−0.530 (0.506)	−0.360 (0.354)	0.618** (0.203)
D7_rec2	0.611 (0.319)	−1.116* (0.500)	0.193 (0.456)	−0.011 (0.255)	0.275 (0.565)	0.264 (0.562)	−0.129 (0.439)	0.131 (0.255)
D6_une1	1.294 (0.690)	−14.721 (975.564)	0.430 (1.081)	0.058 (0.613)	−14.993 (1595.657)	−14.000 (982.695)	−13.763 (605.885)	−0.222 (0.677)
D4_age	0.037*** (0.008)	0.029** (0.010)	0.015 (0.010)	−0.011* (0.005)	0.009 (0.014)	0.016 (0.013)	0.020* (0.010)	−0.021*** (0.005)
D10_rec	0.139* (0.056)	−0.047 (0.076)	0.095 (0.077)	0.081 (0.042)	−0.072 (0.104)	−0.069 (0.103)	−0.093 (0.076)	−0.088* (0.038)
Constant	−5.070*** (0.847)	−6.304*** (1.563)	−5.548*** (1.272)	−0.760 (0.472)	−17.352 (911.317)	−2.688** (0.909)	−3.121** (0.957)	−0.981* (0.478)
N	895	895	895	895	895	895	895	895
Log Likelihood	−278.263	−173.572	−172.409	−443.500	−102.855	−105.010	−178.901	−504.028
AIC	580.525	371.144	368.818	911.000	229.711	230.020	381.802	1032.056

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

7 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 7.1).

Table 7.1: 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 issue (see Table 7.10). 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 0.093 for party 2401 (Electoral alliance with Slovenian Democratic Party and Slovenian People's Party). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models shows that in 8 cases out of 9 null models perform better than full ones (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_2401	2401	492.524	564.516	-71.993
stack_2402	2402	622.271	631.346	-9.075
stack_2403	2403	454.770	463.393	-8.624
stack_2404	2404	156.681	223.585	-66.904
stack_2405	2405	424.234	442.635	-18.402
stack_2406	2406	355.738	359.973	-4.235
stack_2407	2407	-6.900	0.717	-7.616
stack_2408	2408	45.308	41.280	4.028
stack_2409	2409	-84.887	-82.166	-2.721

On the contrary, three out of nine logistic regression models (see Tables 7.11, ??) 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 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) did vote for party 2405 (see Tables 7.7, 7.8). In Model 17a, no respondents with low education did vote for party 2408 (see Table 7.9).

As a consequence, a constrained version of model 14 and 17 (namely, Model 14b,17b) without said variables was estimated and contrasted with the original (Model 14a,17a), full model. 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 7.3). However, if just EDU_rec is dropped H_0 can be rejected at $p < 0.1$ (See Table 7.4). For model 17 H_0 cannot be rejected (see Table 7.5). 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 7.3: Likelihood-ratio Test between Model 14a (Unconstrained) and (Fully Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	851	292.9527			
Unconstrained	847	276.8023	4	16.15043	0.0028238

Table 7.4: Likelihood-ratio Test between Model 14a (Unconstrained) and Model 14b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	851	292.9527			
Unconstrained	847	276.8023	4	16.15043	0.0028238

Table 7.5: Likelihood-ratio Test between Model 17a (Unconstrained) and Model 17b (Constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	849	134.8392			
Unconstrained	847	132.3788	2	2.460367	0.292239

In terms of model fit, adjusted McFadden's pseudo R^2 values for the logistic full models vary between a minimum value of -0.051 for party 2409 (Democratic Party of Pensioners of Slovenia) and a maximum of 0.14 for party 2401 (Electoral alliance with Slovenian Democratic Party and Slovenian 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 9 null models perform better than full ones. According to AIC values the related null model appears to have a better fit than Model 14b and 17b (see Table 7.6).

Table 7.6: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2408*	2408	154.8392	161.1619	-6.322664
stack_2401	2401	480.4460	560.9320	-80.486000
stack_2402	2402	649.8930	647.8300	2.063000
stack_2403	2403	477.3410	496.7800	-19.439000
stack_2404	2404	214.6000	221.0530	-6.454000
stack_2405	2405	300.8020	307.1020	-6.300000
stack_2405*	2405	302.3458	307.1019	-4.756039
stack_2406	2406	290.5380	281.8270	8.711000
stack_2407	2407	104.2410	101.9590	2.282000
stack_2408	2408	156.3790	161.1620	-4.783000
stack_2409	2409	132.8190	128.3320	4.486000

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

Table 7.7: 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

Table 7.8: 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 7.9: 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 7.10: 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	−0.032 (0.022)	−0.020 (0.024)	−0.016 (0.022)	−0.035 (0.018)	−0.006 (0.021)	−0.064** (0.021)	−0.0001 (0.017)	−0.001 (0.017)	0.002 (0.016)
D8_rec1	−0.0003 (0.023)	−0.008 (0.025)	−0.003 (0.023)	0.008 (0.019)	−0.015 (0.022)	−0.034 (0.022)	−0.026 (0.017)	0.002 (0.018)	−0.014 (0.017)
D5_rec1	−0.039 (0.025)	0.020 (0.027)	−0.029 (0.025)	0.009 (0.021)	−0.057* (0.024)	−0.001 (0.023)	−0.026 (0.019)	−0.015 (0.019)	−0.015 (0.018)
EDU_rec2	−0.002 (0.045)	−0.086 (0.049)	0.011 (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)	−0.083 (0.050)	0.018 (0.045)	−0.067 (0.038)	0.076 (0.043)	−0.024 (0.042)	0.010 (0.034)	−0.035 (0.035)	−0.046 (0.032)
D1_rec1	−0.042 (0.025)	0.065* (0.027)	0.019 (0.025)	−0.023 (0.021)	0.051* (0.024)	0.022 (0.023)	0.035 (0.019)	0.021 (0.019)	0.042* (0.018)
D7_rec1	0.050* (0.024)	0.002 (0.026)	0.021 (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	0.071 (0.037)	0.003 (0.041)	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	0.051 (0.039)	0.019 (0.042)	−0.021 (0.038)	0.002 (0.032)	0.010 (0.038)	0.027 (0.036)	0.015 (0.029)	−0.048 (0.030)	−0.020 (0.028)
D4_age	−0.001 (0.001)	0.004*** (0.001)	0.003** (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*** (0.006)	−0.015* (0.006)	−0.010 (0.005)	0.041*** (0.005)	−0.026*** (0.005)	0.010 (0.005)	−0.006 (0.004)	−0.007 (0.004)	−0.005 (0.004)
Constant	0.248*** (0.057)	0.361*** (0.061)	0.237*** (0.056)	0.161*** (0.046)	0.362*** (0.054)	0.354*** (0.052)	0.311*** (0.042)	0.169*** (0.043)	0.152*** (0.040)
N	847	846	843	841	848	847	840	848	845
R-squared	0.105	0.036	0.036	0.100	0.047	0.030	0.035	0.021	0.029
Adj. R-squared	0.093	0.023	0.023	0.088	0.034	0.018	0.022	0.008	0.016

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

Table 7.11: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

Model	2401 10	2402 11	2403 12	2404 13	2405 14a	2405 14b	2406 15	2407 16	2408 17a	2408 17b	2409 18
D3_rec2	−0.512* (0.255)	0.039 (0.210)	−0.502 (0.261)	−0.325 (0.438)	−0.424 (0.349)	−0.421 (0.348)	−0.407 (0.372)	0.516 (0.743)	0.262 (0.539)	0.292 (0.536)	−0.740 (0.645)
D8_rec1	−0.247 (0.257)	0.145 (0.225)	0.059 (0.276)	0.858 (0.507)	0.042 (0.366)	0.053 (0.363)	−0.859* (0.377)	−0.904 (0.755)	0.045 (0.572)	0.072 (0.568)	−0.380 (0.618)
D5_rec1	0.361 (0.313)	0.425 (0.256)	−0.317 (0.279)	0.188 (0.501)	−0.484 (0.359)	−0.443 (0.358)	0.114 (0.426)	−1.084 (0.744)	0.779 (0.692)	0.775 (0.692)	−0.550 (0.647)
EDU_rec2	0.531 (0.538)	−1.142** (0.363)	0.205 (0.639)	−1.338* (0.668)	16.321 (1247.687)		0.355 (0.698)	−2.434 (1.288)	14.959 (1120.176)		−0.307 (1.101)
EDU_rec3	0.083 (0.562)	−1.012** (0.363)	0.162 (0.642)	−1.035 (0.639)	16.414 (1247.687)		0.152 (0.726)	−0.739 (0.953)	14.400 (1120.176)		−1.493 (1.281)
D1_rec1	0.102 (0.277)	0.180 (0.237)	0.540 (0.279)	−1.024 (0.583)	−0.289 (0.436)	−0.267 (0.435)	0.054 (0.403)	0.114 (0.755)	−0.108 (0.679)	−0.107 (0.675)	0.762 (0.663)
D7_rec1	0.254 (0.270)	−0.085 (0.232)	0.512 (0.291)	0.598 (0.496)	−0.437 (0.356)	−0.409 (0.355)	0.274 (0.393)	−1.276 (1.136)	0.746 (0.590)	0.726 (0.588)	−0.736 (0.711)
D7_rec2	−0.244 (0.489)	0.170 (0.329)	1.110** (0.370)	0.932 (0.631)	−16.652 (1047.658)	−16.767 (1070.521)	0.290 (0.598)	1.203 (0.759)	0.527 (0.885)	0.436 (0.871)	−0.467 (1.095)
D6_une1	0.248 (0.443)	−0.111 (0.381)	0.416 (0.417)	−0.700 (1.050)	−0.101 (0.559)	−0.113 (0.552)	−0.412 (0.753)	−15.697 (1779.231)	0.009 (1.087)	0.099 (1.082)	−0.231 (1.079)
D4_age	0.029** (0.009)	0.022** (0.008)	0.041*** (0.010)	−0.0002 (0.015)	−0.004 (0.012)	−0.001 (0.012)	−0.021 (0.014)	0.006 (0.026)	0.098*** (0.029)	0.100*** (0.028)	0.073** (0.028)
D10_rec	0.478*** (0.057)	−0.037 (0.054)	−0.121 (0.073)	0.378*** (0.094)	−0.270* (0.116)	−0.286* (0.115)	0.070 (0.086)	−0.013 (0.177)	−0.058 (0.147)	−0.067 (0.144)	−0.136 (0.171)
Constant	−5.164*** (0.731)	−2.381*** (0.512)	−4.544*** (0.801)	−4.194*** (0.910)	−17.946 (1247.687)	−1.829** (0.678)	−2.304** (0.835)	−2.800* (1.224)	−25.024 (1120.177)	−10.473*** (2.078)	−6.218** (1.933)
N	859	859	859	859	859	859	859	859	859	859	859
Log Likelihood	−228.223	−312.946	−226.671	−95.300	−138.401	−141.173	−133.269	−40.121	−66.189	−67.420	−54.409
AIC	480.446	649.893	477.341	214.600	300.802	302.346	290.538	104.241	156.379	154.839	132.819

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