

# 2019 EES Voter Study - Stacked Data Matrix Codebook

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## Contents

<b>1</b>	<b>Preface</b>	<b>2</b>
<b>2</b>	<b>Introduction</b>	<b>3</b>
2.1	The stacked data matrix . . . . .	3
2.2	Original data file . . . . .	3
2.3	Overview of the SDM data file . . . . .	3
<b>3</b>	<b>Variables</b>	<b>5</b>
3.1	Identification variables . . . . .	5
3.2	Recoded variables . . . . .	5
3.3	Generic categorical variables . . . . .	9
3.4	Generic proximity variables . . . . .	10
3.5	Generic synthetic variables . . . . .	11
	<b>Appendix A - Relevant Parties</b>	<b>13</b>
	<b>Appendix B - Summary of Synthetic Variable Estimation</b>	<b>19</b>
B.1	Austria . . . . .	19
B.2	Belgium . . . . .	24
B.3	Bulgaria . . . . .	31
B.4	Czech Republic . . . . .	36
B.5	Croatia . . . . .	41
B.6	Cyprus . . . . .	46
B.7	Denmark . . . . .	51
B.8	Estonia . . . . .	54
B.9	Finland . . . . .	60
B.10	France . . . . .	64
B.11	Germany . . . . .	67
B.12	Greece . . . . .	70
B.13	Hungary . . . . .	75
B.14	Ireland . . . . .	79
B.15	Italy . . . . .	83

B.16 Latvia . . . . .	86
B.17 Lithuania . . . . .	92
B.18 Luxembourg . . . . .	98
B.19 Malta . . . . .	101
B.20 Netherlands . . . . .	108
B.21 Poland . . . . .	112
B.22 Portugal . . . . .	117
B.23 Romania . . . . .	120
B.24 Slovakia . . . . .	124
B.25 Slovenia . . . . .	129
B.26 Spain . . . . .	134
B.27 Sweden . . . . .	137
B.28 United Kingdom . . . . .	141
<b>References</b>	<b>144</b>

# 1 Preface

This document consists in the codebook of a stacked data matrix based on the dataset of the 2019 European Election Studies (EES) voter study. The creation of this matrix is part of the research activities of [ProConEU](#), a research project aiming to analyse the enlarging gaps between proponents and opponents of the European Union (EU) in terms of party politics, citizen politics, and social media communication. The project is funded by the German Federal Ministry of Education and Research (BMBF), and it involves the Mannheim Centre for European Social Research (MZES) of the University of Mannheim, the Ludwig Maximilian University of Munich, the University of Thessaloniki, and the University of Newcastle.

More specifically, this dataset is the product of the efforts of the ProConEU working package based at the MZES. The preparation of the 2019 EES SDM set was led by Hermann Schmitt and coordinated by Giuseppe Carteny. Wilhelmine Häußling, Julian Leiser, and Matthias Körnig actively participated to the realisation of both dataset and documentation. The data pipeline and workflow were completed between July 2021 and January 2022 making use of R (R Core Team, 2021), and are deposited in a online public repository available at <https://github.com/giucarny/EESstacked>.

## 2 Introduction

### 2.1 The stacked data matrix

A stacked data matrix (hereinafter, SDM) consists of a long format data matrix in which each row represents the (dyadic) relationship between two sets of relevant elements.

Among its applications, this data matrix has been extensively used for the study of voting behaviour, and in particular voters' propensity to vote and vote choice (for a recent application and review, see Schmitt, Segatti, and Eijk 2021). In this setting, the SDM observations are usually voter-party dyads, namely dyadic relationships between individual voters and the relevant vote choices available to each individual voter in a given election. These new observations allow, then, a *shift downward* in terms of unit of analysis (the new units are analytically nested within the original sets of elements), and a *shift upward* in terms of conceptual generalisation, as explained below.

The reason behind the development of the SDM for voting behaviour studies is that it allows to go beyond problems related to the comparability of vote choice across different party systems, especially multi-party ones. By relying on party-voted dyads the SDM allows to address research questions concerning *entire* party systems, thus enhancing the possibility to develop longitudinal and/or cross-national comparative analyses without:

1. Arbitrarily reducing the number of relevant vote choices (parties) of the system;
2. Reducing the vote alternatives available in a given election to a single property of said alternatives (e.g., party positions on the Left-Right continuum).

Hence, the SDM allows to include in the analyses all the relevant individual-, party-, and context-level factors that might affect the vote choice.

### 2.2 Original data file

The dataset from which the SDM (version 1) is computed is the 2019 European Election Study (EES) voter study (Schmitt et al. 2020). This study consists in a cross-national post-election survey, conducted by Gallup International in all 28 EU member states after the 2019 European Parliament elections. Respondents were selected randomly from access panel databases using stratification variables, with the exception of Malta and Cyprus where a multi-stage Random Digit Dialing (RDD) approach was used. In all countries, the samples were stratified by gender, age, region, and type of locality, and the sample size is roughly 1000 interviews in each EU member state (except Cyprus, Luxembourg, and Malta where the sample size is 500), with a total number of observations equal to 26,538.

### 2.3 Overview of the SDM data file

The variables of the dataset are grouped first according to their relationship with the set of variables available in the 2019 EES voter study. The first 131 variables consist in the original variables of said dataset, while the remaining 27 are variables computed from the former ones or, in a few cases, original ones. This codebook refers to the latter set.

The variables computed for the SDM are then grouped as it follows:

- **Identification variables:** A set of variables computed in order to identify EES 2019 respondents', their national contexts, the relevant parties of said contexts, and the dyadic relationships between respondents and relevant parties. Said variables do not share a common suffix;
- **Recoded variables:** These variables consist in the building blocks of the generic variables presented below. More specifically they are recoded versions of a subset of variables included in the original 2019 EES voter study dataset<sup>1</sup>. Said variables are identified by the suffix `_rec`;
- **Generic variables:** The variables represent the specific variables of the SDM. They concern the unit of analysis of the SDM approach, namely the dyadic relationship between each individual observation of the original data matrix (the 2019 EES voter study dataset) and each relevant party of a given party system. These variables share the suffix `_gen`. Generic variables are then subset in three distinct groups, namely *categorical*, *proximity*, and *synthetic* variables.

Political parties are considered “*relevant*” according to two criteria. First, if a 2019 EES voter study includes a propensity to vote (PTV) measure for a given party, then said party is considered relevant. Second, if said party obtained at least one seat in the 2019 EP elections, then it will be considered relevant.

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<sup>1</sup>The original 2019 EES voter study variables' coding is available on the [2019 EES voter study Master Questionnaire](#) and the [2019 EES voter study codebook](#).

## 3 Variables

### 3.1 Identification variables

#### 3.1.1 party

Unique identifier of the relevant parties participating to the European Parliament (EP) elections of 2019. Only parties for which the EES 2019 voter study propensity to vote (PTV) variable is available have been selected. Values equate to those defined in the original EES 2019 vote choice variable referring to the 2019 EP elections (Q7; See the [2019 EES voter study codebook](#)).

#### 3.1.2 stack

Unique identifier combining the individual respondent identification code as assigned in the EES 2019 voter study (`respid`; See the [2019 EES voter study codebook](#)) (`respid`) and party codes (`party`).

#### 3.1.3 countryname and countryshort

The first variable (`countryname`) consists in the complete name of the European Union member states in 2019, whereas the second variable (`countryshort`) consists in the two-digit code (ISO 3166-1 alpha-2) of said states as defined by [Eurostat](#).

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### 3.2 Recoded variables

#### 3.2.1 D1\_rec

Variable measuring whether the respondent is a member of a trade union or not (Recoded from the 2019 EES variable D1).

Values:

- 0 - Not a member of a trade union
- 1 - Member of a trade union
- 98 - Don't know
- 99 - No answer

#### 3.2.2 D3\_rec

Respondent's sex (Recoded from the respondent 2019 EES sex variable, D3).

Values:

- 1 - Male
- 2 - Female
- 3 - Other

#### 3.2.3 D4\_1\_rec

Respondent's age in 2019 (Recoded from the respondent 2019 EES year of birth variable, D4\_1).

#### **3.2.4 D5\_rec**

Respondent's marital status (Recoded from the 2019 EES variable D5).

Values:

- 0 - Single
- 1 - Married/Remarried/Single living with a partner
- 98 - Don't know
- 99 - No answer

#### **3.2.5 D6\_rec**

Respondent's occupational status (Recoded from the 2019 EES variable D6).

Values:

- 1 - Self-employed
- 2 - Employed
- 3 - In school
- 4 - Working in the household
- 5 - Retired
- 6 - Unemployed
- 7 - Other
- 99 - No answer

#### **3.2.6 D6\_std\_rec**

Variable measuring whether the respondent is a student or not (Recoded from the 2019 EES variable D6).

Values:

- 0 - Student
- 1 - Not a student
- 99 - No answer

#### **3.2.7 D6\_une\_rec**

Variable measuring whether the respondent is unemployed or not (Recoded from the 2019 EES variable D6).

Values:

- 0 - Not Unemployed
- 1 - Unemployed
- 99 - No answer

#### **3.2.8 D7\_rec**

Respondent's subjective social class (Recoded from the 2019 EES variable D7).

Values:

- 0 - Working or lower middle class
- 1 - Middle class
- 2 - Upper middle or upper class
- 97 - Other
- 98 - Don't know
- 99 - No answer

### **3.2.9 D8\_rec**

Respondent's area of residency (Recoded from the 2019 EES variable D8).

Values:

- 0 - Rural area or village
- 1 - Small, middle, or large town

### **3.2.10 D9\_rec**

Respondent's religious denomination (Recoded from the 2019 EES variable D9).

Values:

- 0 - Non believer/Atheist/Agnostic
- 1 - Catholic
- 2 - Orthodox
- 3 - Protestant
- 4 - Other Christian
- 5 - Other
- 99 - No answer

### **3.2.11 D10\_rec**

Respondent's frequency of religious service attendance (Recoded from the 2019 EES variable D10).

Values:

- 0 - Never/About once a year
- 1 - Less often
- 2 - About once a year
- 3 - Only on special holy days
- 4 - About each 2 or 3 month
- 5 - Once a month
- 6 - Once a week
- 7 - More than once a week
- 98 - Don't know
- 99 - No answer

N.B.: 0 includes "*Non believer/Atheist/Agnostic*" in D9\_rec if and only if "*No answer*" in D10.



### 3.2.12 EDU\_rec

Respondent's level of education (Recoded from the 2019 EES variables EDU and D2).

Values:

- 1 - Low (15 or less years of schooling)
- 2 - Medium (16-19 years of schooling)
- 3 - High (20+ years of schooling)
- 99 - No answer

### 3.2.13 Q25\_rec

Variable measuring whether the respondent feels close to any political party or not. Differently from the original variable (Q25) party codes have been recoded in order to be line with those of the 2019 EP vote choice variable (Q7, see the [2019 EES voter study codebook](#)).

Values:

- 0 - Respondent does not feel close to a political party
- 90 - Respondent feels close to a party not among the answer categories or a non-relevant party
- 101-2807 Respondent feels close to the party [Q25\_rec value]

### 3.2.14 Q26\_rec

Variable measuring the strength of the respondent closeness to the political identified in Q25\_rec.

Values:

- 0 - Respondent is merely a sympathiser of the party [Q25\_rec value]
- 1 - Respondent is fairly close to the party [Q25\_rec value]
- 2 - Respondent is very close to the party [Q25\_rec value]
- 3 - Not asked (Respondent does not feel close to any party or doesn't know)
- 99 - Respondent does not remember/No answer

### 3.2.15 Q9\_rec

Respondent's (recalled) vote choice at the last national elections prior to 2019. Differently from the original variable (Q9) party codes are in line with those of the 2019 EP vote choice variable (Q7, see the [2019 EES voter study codebook](#)).

Values:

- 0 - Respondent did not vote
- 90 - Respondent voted for another party
- 96 - Respondent did vote blanc or nil
- 98 - Respondent does not remember
- 99 - No answer
- 101-2814 Respondent voted for the party [Q9\_rec value]

### 3.3 Generic categorical variables

#### 3.3.1 Q2\_gen

Variable measuring whether the respondent believes that the stack party would be the best at dealing with the most important issue (as identified by the respondent herself) faced by the respondent's country (Recoded from the 2019 EES variables Q2).

Values:

- 0 - Respondent does not consider the stack party the best at dealing with the most important issue
- 1 - Respondent considers the stack party the best at dealing with the most important issue
- 96 - Not applicable (Answer to Q1 = Don't know)
- 98 - Respondent does not know
- 99 - No answer

#### 3.3.2 Q7\_gen

Variable measuring whether the respondent (recalls to have) voted for the stack party at the 2019 European Parliament (EP) elections (Recoded from the original 2019 EP vote choice variable of the EES voter study, Q7; see the [2019 EES voter study codebook](#)).

Values:

- 0 - Respondent did not vote for the stack party
- 1 - Respondent voted for the stack party
- 98 - Respondent does not remember

N.B.: 0 includes all the cases in which the respondent voted for another party, did not vote, voted blank or nil.

#### 3.3.3 Q9\_gen

Variable measuring whether the respondent (recalls to have) voted for the stack party at the last national general elections (Recoded from Q9\_rec).

Values:

- 0 - Respondent did not vote for the stack party
- 1 - Respondent voted for the stack party
- 98 - Respondent does not remember

N.B.: 0 includes all the cases in which the respondent voted for another party, did not vote, voted blank or nil.

#### 3.3.4 Q25\_gen

Dichotomous variable, measuring whether the respondent feels close to the stack party (Recoded from Q25\_rec).

Values:

- 0 - Respondent does not feel close to the stack party
- 1 - Respondent feels close to the stack party
- 98 - Respondent does not know

N.B.: 0 includes both the cases in which the respondent feels close to another party or does not feel close to any party.

### **3.3.5 Q26\_gen**

Ordinal variable, measuring the extent to which the respondent feels close to the stack party (Recoded from Q26\_rec).

Values:

- 0 - Respondent does not feel close to the stack party
- 1 - Respondent is merely a sympathiser of the stack party
- 2 - Respondent feels fairly close to the stack party
- 3 - Respondent feels very close to the stack party
- 98 - Respondent does not know/No answer

N.B.: 0 includes both the cases in which the respondent feels close to another party or does not feel close to any party.

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## **3.4 Generic proximity variables**

### **3.4.1 Q10\_gen**

Variable measuring the respondent's propensity to vote for the stack party (computed from the 2019 EES variable Q10).

Values:

- 0 - Respondent has a very low propensity to vote for the stack party
- 1 - Respondent has a very high propensity to vote for the stack party
- 98 - Respondent does not know

### **3.4.2 Q11\_Q13\_gen**

Variable measuring the proximity between the respondent's self-placement on the Left-Right ideological axis (Q11) and her perception of a specific party position on the same dimension (Q13).

Values:

- 0 - Respondent is very distant from the stack party
- 1 - Respondent is very close to the stack party
- 98 - Respondent does not know

### 3.4.3 Q23\_Q24\_gen

Variable measuring the proximity between the respondent's position about the EU integration process (Q23) and her perception of a specific party position about the same process (Q24).

Values:

- 0 - Respondent is very distant from the stack party
- 1 - Respondent is very close to the stack party
- 98 - Respondent does not know

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## 3.5 Generic synthetic variables

### 3.5.1 socdem\_synt\_ptv

Variable measuring the affinity between respondent's socio-demographic characteristics and her propensity to vote for the stack party (Q7\_gen). This variable is estimated using the linear predictions of an ordinary least squares (OLS) model. The list predictors for said model is presented below.

Values:

- 0 - Respondent has a very low affinity with the stack party
- 1 - Respondent has a very high affinity with the stack party
- 999 - Not available

N.B.: Values are *not* centered.

### 3.5.2 socdem\_synt\_vc

Variable measuring the affinity between respondent's socio-demographic characteristics and her generic vote choice (Q10\_gen). This variable is estimated using the linear predictions (log-odds) of a binomial logistic regression model. The list predictors for said model is presented below.

Values:

- 2.5 or below - Respondent has a very low affinity with the stack party
- +2.5 or above - Respondent has a very high affinity with the stack party
- 999 - Not available

N.B.: Values are *not* centered.

### 3.5.3 Independent variables for socdem\_synt\_ptv and socdem\_synt\_vc estimation

**Categorical independent variables:**

- D1\_rec: Variable measuring whether the respondent is a member of a trade union (1) or not (0);
- D3\_rec: Respondent's gender (0 = Male, 1 = Female);
- D5\_rec: Whether the respondent is married/remarried/single living with a partner (1) or single/divorced/separated/widowed (0);
- D6\_une\_rec: Variable measuring whether the respondent is unemployed (1) or not (0);

- D7\_rec: Subjective social class (0 = working class or lower middle, 1 = middle class, 2 = upper middle or higher class);
- D8\_rec: Whether the respondent lives in a rural (0) or urban area (1);
- EDU\_rec: Respondent's years of formal education (1 = 15 years or less, 2 = 16-19 years, 3 = 20+).

**Continuous independent variables:**

- D4\_1\_rec: Respondent's age (min = 16, max = 98; ordinal treated as continuous);
- D10\_rec: Respondent's religiosity (min = 0, max = 6; ordinal treated as continuous).

## Appendix A - Relevant Parties

Table A.1: 2019 European Election Study SDM Relevant Parties

Country name	Party	Party name (English)
<b>Austria</b>		
	101	Austrian People's Party
	102	Austrian Social Democratic Party
	103	Austrian Freedom Party
	104	NEOS - The New Austria and Liberal Forum
	105	Alliance for the Future of Austria
	106	The Greens
<b>Belgium (Fl.)</b>		
	201	Christian Democratic and Flemish Party
	202	Green
	203	New Flemish Alliance
	204	Socialist Party Different
	205	Flemish Interest
	206	Open Flemish Liberals and Democrats
<b>Belgium (Wa.)</b>		
	207	Workers Party of Belgium
	208	Francophone Socialist Party
	209	Reform Movement
	210	Humanist Democratic Centre
	211	Ecologists
	212	National Front (Belgium)
	213	Workers Party of Belgium
	214	Francophone Democratic Federalists
<b>Bulgaria</b>		
	301	Citizens for European Development of Bulgaria (GERB)
	302	Coalition for Bulgaria (KB)
	303	Movements for Rights and Freedoms (DPS)
	304	IMRO – Bulgarian National Movement
	305	Democratic Bulgaria
	306	Will
	307	National Union Attack (ATAKA/ATA)
<b>Croatia</b>		
	401	Milan Bandić 365 – The Party of Labour and Solidarity
	404	Croatian Democratic Union
	405	Coalition between HSS and GLAS-IDS
	406	Bridge of Independent Lists

(Continued)

Table A.1: 2019 European Election Study SDM Relevant Parties  
(continued)

Country name	Party	Party name (English)
	412	Social Democratic Party of Croatia
	413	Party of Anti-corruption, Development and Transparency
	414	Human Shield
<b>Cyprus</b>		
	501	Progressive Party of the Working People
	502	Democratic Rally
	503	Democratic Party
	504	United Democratic Union of Centre
	505	Ecological and Environmental Movement (Cyprus Green Party)
	507	National Popular Front
<b>Czech Rep.</b>		
	601	Christian and Democratic Union / Czechoslovak People's Party
	602	Tradition, Responsibility, Prosperity 09 (TOP 09)
	603	Czech Social Democratic Party
	604	Civic Democratic Party
	605	Communist Party of Bohemia and Moravia
	606	ANO 2011
	607	Czech Pirate Party
	608	Freedom and Direct Democracy Tomio Okamura
<b>Denmark</b>		
	701	Social Democratic Party
	702	Liberals
	703	Danish People's Party
	704	Radical Party
	705	Socialist People's Party
	706	Red-Green Unity List
	707	Conservative People's Party
<b>Estonia</b>		
	901	Estonian Reform Party
	902	Estonian Center Party
	903	Conservative People's Party of Estonia
	904	Union for the Republic – Res Publica
	905	Social Democratic Party
	906	Estonia 200
	907	Estonian Greens
<b>Finland</b>		
	1001	Finnish Social Democrats

(Continued)

Table A.1: 2019 European Election Study SDM Relevant Parties  
(continued)

Country name	Party	Party name (English)
	1002	True Finns
	1003	National Coalition
	1004	Finnish Centre
	1005	Green Union
	1006	Left Wing Alliance
	1007	Swedish People's Party
<b>France</b>		
	1101	Unbowed France
	1102	The Republic Onwards!
	1105	Socialist Party
	1110	Generation.s, the movement
	1111	National Rally
	1113	The Republicans
	1114	Europe Ecology - The Greens
<b>Germany</b>		
	801	Christian Democratic Union / Christian Social Union
	802	Sozialdemokratische Partei Deutschlands (SPD)
	803	Alliance 90 / The Greens
	804	The Left
	805	Free Democratic Party
	806	Pirates
	807	Alternative for Germany
<b>Greece</b>		
	1201	Coalition of the Radical Left
	1202	New Democracy
	1203	Golden Dawn
	1204	Panhellenic Socialist Movement/ Movement for Change
	1205	Communist Party of Greece
<b>Hungary</b>		
	1301	Democratic Coalition
	1302	FIDESZ-KDNP Alliance
	1303	Jobbik
	1304	Politics Can Be Different
	1306	Hungarian Socialist Party
	1307	Our Homeland Movement
	1308	Momentum Movement
<b>Ireland</b>		

(Continued)



Table A.1: 2019 European Election Study SDM Relevant Parties  
(continued)

Country name	Party	Party name (English)
	1401	Soldiers of Destiny
	1402	Familiy of the Irish
	1403	Labour Party
	1404	Green Party
	1405	Ourselves Alone
	1406	Solidarity - People Before Profit/
<b>Italy</b>		
	1501	Democratic Party
	1502	Go Italy
	1503	Northern League
	1504	Five Star Movement
	1505	Italian Left
	1506	More Europe (+Europa)
	1507	Brothers of Italy - National Centre-right
<b>Latvia</b>		
	1604	Green and Farmers' Union
	1605	Who owns the state?
	1608	New Conservative Party
	1609	Development/For!
	1610	Social Democratic Party "Harmony"
	1611	For Fatherland and Freedom - National Independence Movement of Latvia
	1616	Unity
<b>Lithuania</b>		
	1701	Homeland Union - Lithuanian Christian Democrats
	1702	Lithuanian Peasant and Greens Union
	1703	Lithuanian Social Democratic Party
	1704	Order and Justice
	1705	Labour Party
	1706	Liberal Movement
	1707	Election Action of Lithuania's Poles
<b>Luxembourg</b>		
	1801	Christian Social People's Party
	1802	Socialist Workers' Party
	1803	Democratic Party
	1804	The Greens
	1805	The Left
	1806	Alternative Democratic Reform Party

(Continued)

Table A.1: 2019 European Election Study SDM Relevant Parties  
(continued)

Country name	Party	Party name (English)
<b>Malta</b>	1807	Pirate Party of Luxembourg
	1901	Labour Party
	1902	Nationalist Party
	1903	Democratic Alternative
	1904	Democratic Party
	1905	Imperium Europa
<b>Netherlands</b>	2001	People's Party for Freedom and Democracy
	2002	Party of Freedom
	2003	Christian Democratic Appeal
	2004	Democrats '66
	2005	Green Left
	2006	Socialist Party
	2007	Labour Party
	2008	Christian Union
	2012	Forum for Democracy
<b>Poland</b>	2102	Spring
	2103	European Coalition
	2104	Law and Justice
	2105	Poland Together
	2106	Kukiz'15
<b>Portugal</b>	2201	Socialist Party
	2202	Social Democratic Party
	2203	Unified Democratic Coalition
	2204	Social Democratic Center-Popular Party
	2206	Left Bloc
	2208	Party for Animals and Nature
<b>Romania</b>	2301	Social Democratic Party
	2302	2020 USR(1642421) -PLUS Alliance(1642422)
	2303	Alliance of Liberals and Democrats
	2305	PRO Romania
	2306	National Liberal Party
	2307	Hungarian Democratic Alliance of Romania

(Continued)

Table A.1: 2019 European Election Study SDM Relevant Parties  
(continued)

Country name	Party	Party name (English)
<b>Slovakia</b>	2308	People's Movement Party
	2501	People's Party Our Slovakia
	2503	Direction - Social Democracy
	2504	Slovak National Part
	2505	Freedom and Solidarity
	2506	Ordinary People and Independent Personalities
	2507	Bridge
	2508	Electoral alliance Progressive Slovakia and TOGEHTER - Civic Democracy
	2509	We are family
	2510	Christian Democratic Movement
<b>Slovenia</b>	2401	Electoral alliance with Slovenian Democratic Party and Slovenian People's Party
	2402	List of Marjan Sarec
	2403	Social Democratic Party
	2404	New Slovene Christian People's Party
	2405	The Left
	2406	Slovenian National Party
	2407	Party of Miro Cerar
	2408	Alliance of Alenka Bratusek
	2409	Democratic Party of Pensioners of Slovenia
<b>Spain</b>	2601	Spanish Socialist Workers' Party
	2602	Popular Party
	2603	Podemos (We Can)
	2604	Citizens - Party of the Citizenry
	2605	Voice
	2606	Republican Left of Catalonia
	2609	Commitment to Europe
<b>Sweden</b>	2701	Left Party
	2702	Social Democratic Labour Party
	2703	Centre Party
	2704	Liberal People's Party
	2705	Moderate Coalition Party
	2706	Christian Democrats
	2707	Green Ecology Party

(Continued)

Table A.1: 2019 European Election Study SDM Relevant Parties  
(continued)

Country name	Party	Party name (English)
	2708	Sweden Democrats
<b>United Kingdom</b>		
	2801	Conservative Party
	2802	Labour Party
	2803	Liberal Democrats
	2804	Green Party
	2805	Scottish National Party
	2806	United Kingdom Independence Party
	2807	The Brexit Party

## Appendix B - Summary of Synthetic Variable Estimation

Synthetic variables consist in variables measuring the affinity between a set of individual characteristics and the set relevant parties identified in each political context (De Sio & Franklin, 2011, pp. 10–15; Eijk et al., 2006, pp. 441–443; Eijk et al., 2021, pp. 34–35; see Eijk & Franklin, 1996, pp. 346–348). These variables, atheoretic in nature, are determined for each political system by (1) taking a set of independent variables and using them in a series of regression analyses that links these variables to each relevant party, and then (2) estimating the linear predictions of said regression analyses. For this reason, such variables are often labeled ‘y-hats.’

### B.1 Austria

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

Table B.1.1: Relevant Austrian 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 B.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 differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in all 6 cases out of 6 full models perform better (see Table B.1.2).

Table B.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 B.1.8) show inflated standard errors for some of the coefficients of interest:

- model 12: D8\_rec, D1\_rec;

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

Model 12's inflated standard errors are due to separation issues. In short, no respondent from rural areas or small cities and members of trade unions voted for party 505 (see Tables B.1.5, B.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 B.1.3). Consequently, synthetic variables for respondents' vote choice for party 105 have been predicted relying on the unconstrained model.

Table B.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 differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 5 cases out of 6 null models perform better than full ones.

Table B.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

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

	<b>101</b>	<b>102</b>	<b>104</b>	<b>106</b>	<b>103</b>	<b>105</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>
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 B.1.8: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	<b>101</b>	<b>102</b>	<b>104</b>	<b>106</b>	<b>103</b>	<b>105</b>
	<b>Model 7</b>	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>
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



## B.2 Belgium

Synthetic variables have been estimated for the full set of Belgian parties available in the original 2019 EES Belgian voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Tables B.2.1 and B.2.2). Note that the Belgian sample is splitted according to the two electoral colleges of Belgium, namely the Dutch and the French electoral college.

Table B.2.1: Relevant Belgian parties in Dutch electoral college

Dep. Var.	Party	Party name (eng)
stack_201	201	Workers Party of Belgium
stack_202	202	Christian Democratic and Flemish Party
stack_203	203	Socialist Party Different
stack_204	204	Open Flemish Liberals and Democrats
stack_205	205	New Flemish Alliance
stack_206	206	Green
stack_207	207	Flemish Interest

Table B.2.2: Relevant Belgian parties in French electoral college

Dep. Var.	Party	Party name (eng)
stack_208	208	Francophone Socialist Party
stack_209	209	Reform Movement
stack_210	210	Humanist Democratic Centre
stack_211	211	Ecologists
stack_212	212	National Front (Belgium)
stack_213	213	Workers Party of Belgium
stack_214	214	Francophone Democratic Federalists

Full OLS models converge and coefficients do not show any particular issue (see Table B.2.11 and Table B.2.13).

For the Dutch electoral college: In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0 for party 203 (Socialist Party Different) and a maximum of 0.062 for party 202 (Christian Democratic and Flemish Party). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models show that in all 2 cases out of 7 null models perform better (see Table B.2.3).

For the French electoral college: In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.027 for party 211 (Ecologists) and a maximum of 0.128 for party 213 (Workers Party of Belgium). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models show that in all 7 cases out of 7 full models perform better (see Table B.2.4).

Also, all seven logistic regression models in the Dutch electoral college show no issue (see Table B.2.12) On the contrary, one out of seven logistic regression models in the French electoral college (see Table B.2.14) show inflated standard errors for some of the coefficients of interest:

- Model 26a: D8\_rec, EDU\_rec, D7\_rec;

Table B.2.3: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_201	201	218.286	221.796	-3.510
stack_202	202	172.948	196.202	-23.255
stack_203	203	312.241	302.151	10.090
stack_204	204	234.958	251.257	-16.299
stack_205	205	433.439	430.468	2.970
stack_206	206	259.913	271.127	-11.213
stack_207	207	498.332	499.672	-1.340

Table B.2.4: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_208	208	224.742	243.907	-19.165
stack_209	209	238.028	251.788	-13.760
stack_210	210	126.949	151.975	-25.026
stack_211	211	238.956	240.069	-1.113
stack_212	212	150.043	161.937	-11.894
stack_213	213	211.229	254.330	-43.100
stack_214	214	132.800	136.790	-3.990

Model 26's of the French electoral college presents a more problematic profile, since the models constant term shows inflated standard errors.

Inflated standard errors are due to separation issues. In short:

- No respondents from rural areas voted for party 212 (Table B.2.8);
- No low and high educated respondents voted for party 212 (Table B.2.9)
- No upper class respondents voted for party 212 (Table B.2.10);

As consequence, a constrained version without said variables (namely, model 26b) was estimated and contrasted with the original, full model (model 26a). Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model does not fit better than the full model) cannot be rejected at  $p < 0.05$  (see Table B.2.5). Consequently, synthetic variables for respondents' vote choice for party 212 have been predicted relying on the constrained model.

Table B.2.5: Likelihood-ratio Test between Model 26a (unconstrained) and Model 26b (constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
372	42.18100			
367	29.34199	5	12.83901	0.024935

In the case of the Dutch electoral college: 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 207 (Flemish Interest) and a maximum of 0.012 for party 203 (Socialist Party Different). Moreover, the differences between Akaike

Information Criterion (AIC) values for logistic full models and null models show that in 5 cases out of 7 null models perform better than full ones (see Table B.2.6).

In the case of the Fench electoral college: 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 212 (National Front (Belgium)) and a maximum of 0.02 for party 210 (Humanist Democratic Centre). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 3 cases out of 7 full models perform better than full ones. According to AIC values the related null model appears to have a better fit than model 26b (see Table B.2.7).

Table B.2.6: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_201	201	256.725	261.229	-4.504
stack_202	202	317.743	314.286	3.457
stack_203	203	572.088	581.032	-8.944
stack_204	204	361.724	357.521	4.203
stack_205	205	486.627	477.614	9.013
stack_206	206	347.090	340.740	6.350
stack_207	207	171.854	163.767	8.087

Table B.2.7: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_208	208	334.675	326.04300	8.632000
stack_209	209	292.012	297.36100	-5.349000
stack_210	210	200.627	206.63700	-6.010000
stack_211	211	331.408	336.11000	-4.702000
stack_212	212	51.342	46.34600	4.996000
stack_212*	212	54.181	46.34632	7.834681
stack_213	213	276.248	277.95700	-1.709000
stack_214	214	150.056	140.68100	9.375000

\* AIC value of 212 refers to Model 26b (constrained).

Table B.2.8: Cross tabulation between vote choice for party 212 and respondents' area of residency

stack_212/D8_rec	0	1	Total
0	152	256	408
1	0	4	4
NA	9	16	25
Total	161	276	437

Table B.2.9: Cross tabulation between vote choice for party 212 and respondents' education

stack_212/EDU_rec	1	2	3	NA	Total
0	48	132	223	5	408
1	0	4	0	0	4
NA	4	9	11	1	25
Total	52	145	234	6	437

Table B.2.10: Cross tabulation between vote choice for party 212 and respondents' subjective social class

stack_212/D7_rec	0	1	2	NA	Total
0	140	196	64	8	408
1	2	2	0	0	4
NA	7	14	1	3	25
Total	149	212	65	11	437

Table B.2.11: Vote choice for a relevant party according to respondents socio-demographic characteristics at Dutch Electoral College (Ordinary square models)

	<b>207</b>	<b>201</b>	<b>204</b>	<b>206</b>	<b>203</b>	<b>202</b>	<b>205</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.046 (0.027)	0.023 (0.025)	0.004 (0.029)	0.005 (0.027)	-0.033 (0.033)	0.076** (0.028)	-0.005 (0.035)
D8_rec1	0.007 (0.027)	-0.044 (0.025)	-0.007 (0.029)	-0.032 (0.027)	-0.042 (0.033)	-0.033 (0.028)	-0.027 (0.035)
D5_rec1	-0.006 (0.028)	0.005 (0.026)	-0.023 (0.030)	-0.013 (0.028)	0.038 (0.034)	-0.025 (0.029)	0.063 (0.036)
EDU_rec2	0.080 (0.050)	0.014 (0.047)	0.018 (0.054)	-0.108* (0.050)	-0.039 (0.061)	0.070 (0.051)	0.026 (0.064)
EDU_rec3	0.070 (0.049)	0.045 (0.046)	0.001 (0.053)	-0.092 (0.049)	0.021 (0.060)	0.093 (0.050)	-0.012 (0.063)
D1_rec1	0.057* (0.028)	-0.047 (0.026)	0.067* (0.030)	0.006 (0.028)	-0.068* (0.034)	0.002 (0.029)	-0.004 (0.036)
D7_rec1	-0.015 (0.029)	0.036 (0.028)	0.016 (0.032)	0.091** (0.029)	-0.012 (0.036)	-0.006 (0.030)	-0.074 (0.038)
D7_rec2	-0.095* (0.048)	-0.031 (0.045)	-0.019 (0.052)	0.103* (0.048)	0.076 (0.059)	-0.018 (0.049)	-0.038 (0.062)
D4_age	-0.002** (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.002** (0.001)	0.001 (0.001)	-0.003*** (0.001)	-0.003** (0.001)
D10_rec	-0.002 (0.008)	0.042*** (0.008)	0.003 (0.009)	0.023** (0.008)	0.011 (0.010)	0.006 (0.008)	0.016 (0.010)
Constant	0.281*** (0.068)	0.351*** (0.064)	0.364*** (0.073)	0.501*** (0.068)	0.497*** (0.084)	0.426*** (0.070)	0.577*** (0.087)
N	508	518	518	519	514	518	519
R-squared	0.045	0.080	0.019	0.068	0.033	0.058	0.040
Adj. R-squared	0.026	0.062	-0.0004	0.049	0.013	0.040	0.021

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.2.12: Vote choice for a relevant party according to respondents socio-demographic characteristics at Dutch Electoral College (Logistic regression models)

	<b>207</b>	<b>201</b>	<b>204</b>	<b>206</b>	<b>203</b>	<b>202</b>	<b>205</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
D3_rec2	0.010 (0.369)	0.406 (0.328)	-0.039 (0.215)	-0.080 (0.291)	-0.352 (0.239)	-0.106 (0.303)	0.709 (0.515)
D8_rec1	-0.184 (0.367)	0.220 (0.327)	-0.213 (0.214)	0.506 (0.306)	-0.247 (0.238)	-0.013 (0.302)	0.065 (0.492)
D5_rec1	0.129 (0.380)	-0.370 (0.325)	-0.200 (0.222)	0.046 (0.312)	0.436 (0.261)	-0.512 (0.307)	0.191 (0.537)
EDU_rec2	-1.077 (0.588)	0.782 (0.691)	0.119 (0.409)	0.613 (0.646)	-0.357 (0.417)	-0.398 (0.506)	0.651 (1.104)
EDU_rec3	-0.520 (0.570)	1.006 (0.665)	0.261 (0.404)	0.382 (0.649)	-0.465 (0.413)	-0.447 (0.489)	0.771 (1.081)
D1_rec1	-0.282 (0.387)	0.164 (0.327)	-0.422 (0.227)	0.847** (0.303)	0.134 (0.245)	0.158 (0.311)	0.534 (0.495)
D7_rec1	-0.368 (0.378)	-0.220 (0.349)	0.127 (0.239)	0.353 (0.323)	-0.093 (0.259)	0.964* (0.383)	-0.268 (0.508)
D7_rec2	-1.936 (1.073)	0.260 (0.508)	0.750* (0.365)	-0.193 (0.599)	-0.386 (0.449)	1.079* (0.527)	-0.820 (1.097)
D4_age	0.008 (0.011)	-0.029** (0.010)	0.022*** (0.006)	0.016 (0.009)	-0.009 (0.007)	-0.003 (0.009)	-0.008 (0.015)
D10_rec	0.352*** (0.086)	-0.044 (0.100)	-0.121 (0.069)	-0.073 (0.090)	0.060 (0.069)	0.098 (0.083)	-0.634 (0.324)
Constant	-2.373** (0.880)	-1.867* (0.829)	-1.977*** (0.569)	-4.168*** (0.893)	-0.715 (0.581)	-2.152** (0.711)	-3.768** (1.398)
N	503	503	503	503	503	503	503
Log Likelihood	-117.362	-147.872	-275.044	-169.862	-232.314	-162.545	-74.927
AIC	256.725	317.743	572.088	361.724	486.627	347.090	171.854

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

Table B.2.13: Vote choice for a relevant party according to respondents socio-demographic characteristics at French Electoral College (OLS regression models)

	<b>208</b>	<b>209</b>	<b>210</b>	<b>211</b>	<b>212</b>	<b>213</b>	<b>214</b>
	<b>Model 15</b>	<b>Model 16</b>	<b>Model 17</b>	<b>Model 18</b>	<b>Model 19</b>	<b>Model 20</b>	<b>Model 21</b>
D3_rec2	0.035 (0.033)	0.027 (0.033)	0.025 (0.029)	0.017 (0.033)	−0.056 (0.030)	−0.008 (0.032)	−0.018 (0.030)
D8_rec1	−0.019 (0.033)	−0.021 (0.034)	−0.030 (0.030)	0.031 (0.034)	−0.010 (0.030)	−0.023 (0.033)	0.043 (0.030)
D5_rec1	0.065 (0.033)	−0.018 (0.034)	0.019 (0.030)	−0.004 (0.034)	0.068* (0.030)	0.044 (0.033)	0.034 (0.030)
EDU_rec2	−0.184** (0.057)	0.0001 (0.059)	−0.032 (0.051)	−0.074 (0.058)	0.009 (0.052)	0.090 (0.058)	−0.109* (0.053)
EDU_rec3	−0.172** (0.055)	0.073 (0.056)	−0.029 (0.049)	0.022 (0.056)	−0.037 (0.050)	−0.020 (0.055)	−0.085 (0.050)
D1_rec1	0.040 (0.035)	−0.056 (0.035)	−0.080* (0.031)	0.027 (0.035)	−0.010 (0.032)	0.100** (0.035)	0.007 (0.031)
D7_rec1	−0.035 (0.036)	0.101** (0.037)	0.085** (0.032)	0.052 (0.037)	−0.045 (0.033)	−0.081* (0.036)	0.063 (0.033)
D7_rec2	−0.112* (0.050)	0.168** (0.051)	0.046 (0.045)	0.066 (0.051)	−0.097* (0.046)	−0.142** (0.050)	0.055 (0.045)
D4_age	−0.003** (0.001)	−0.002 (0.001)	−0.003*** (0.001)	−0.002* (0.001)	−0.002* (0.001)	−0.004*** (0.001)	−0.001 (0.001)
D10_rec	0.011 (0.009)	0.024** (0.009)	0.035*** (0.008)	0.003 (0.009)	0.021** (0.008)	0.004 (0.009)	0.016* (0.008)
Constant	0.652*** (0.070)	0.360*** (0.072)	0.460*** (0.063)	0.479*** (0.071)	0.319*** (0.064)	0.528*** (0.071)	0.401*** (0.064)
N	395	393	392	396	392	387	384
R-squared	0.094	0.082	0.109	0.052	0.078	0.150	0.061
Adj. R-squared	0.071	0.058	0.085	0.027	0.054	0.128	0.035

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

Table B.2.14: Vote choice for a relevant party according to respondents socio-demographic characteristics at French Electoral College (Logistic regression models)

	<b>208</b>	<b>209</b>	<b>210</b>	<b>211</b>	<b>212</b>	<b>212</b>	<b>213</b>	<b>214</b>
	<b>Model 22</b>	<b>Model 23</b>	<b>Model 24</b>	<b>Model 25</b>	<b>Model 26a</b>	<b>Model 26b</b>	<b>Model 27</b>	<b>Model 28</b>
D3_rec2	0.251 (0.296)	0.555 (0.327)	-0.393 (0.440)	-0.092 (0.298)	0.277 (1.084)	0.179 (1.033)	-0.170 (0.334)	-0.132 (0.525)
D8_rec1	-0.677* (0.297)	-0.313 (0.327)	-0.771 (0.420)	0.458 (0.316)	18.905 (5661.450)		-0.205 (0.336)	0.646 (0.593)
D5_rec1	0.538 (0.315)	0.128 (0.333)	0.601 (0.472)	-0.415 (0.300)	-0.522 (1.073)	-0.428 (1.036)	-0.078 (0.336)	-0.685 (0.519)
EDU_rec2	-0.288 (0.493)	1.505 (1.086)	0.596 (0.861)	-1.011 (0.546)	19.728 (10629.430)		0.083 (0.532)	0.683 (1.166)
EDU_rec3	-0.218 (0.466)	1.956 (1.056)	0.545 (0.824)	-0.025 (0.471)	0.037 (11710.110)		-0.506 (0.536)	0.342 (1.145)
D1_rec1	-0.149 (0.319)	-0.197 (0.360)	-0.631 (0.486)	0.377 (0.316)	0.338 (1.154)	0.419 (1.090)	0.644 (0.341)	0.807 (0.544)
D7_rec1	-0.287 (0.323)	0.775 (0.418)	0.566 (0.500)	0.799* (0.382)	-0.089 (1.103)		-0.456 (0.340)	0.996 (0.695)
D7_rec2	-0.545 (0.482)	1.109* (0.518)	0.501 (0.624)	1.150* (0.456)	-18.595 (7868.020)		-2.376* (1.042)	1.282 (0.820)
D4_age	-0.009 (0.009)	0.003 (0.010)	0.006 (0.013)	-0.002 (0.009)	-0.001 (0.031)	0.003 (0.029)	-0.001 (0.010)	0.021 (0.016)
D10_rec	-0.034 (0.085)	-0.204 (0.111)	0.403*** (0.095)	-0.112 (0.087)	0.253 (0.214)	0.290 (0.212)	0.011 (0.087)	0.108 (0.123)
Constant	-0.850 (0.616)	-4.237*** (1.153)	-4.018*** (1.035)	-1.939** (0.641)	-41.918 (12043.120)	-5.298** (1.873)	-1.392* (0.699)	-5.868*** (1.442)
N	378	378	378	378	378	378	378	378
Log Likelihood	-156.337	-135.006	-89.313	-154.704	-14.671	-21.091	-127.124	-64.028
AIC	334.675	292.012	200.627	331.408	51.342	54.181	276.248	150.056

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

### B.3 Bulgaria

Synthetic variables have been estimated for seven out of thirteen relevant parties available in the original 2019 EES Bulgarian voter study (Table B.3.1) and selected according to the criteria stated in the EES 2019 SDM codebook.

Table B.3.1: Relevant Bulgarian parties

Dep. Var.	Party	Party name (eng)
stack_301	301	Citizens for European Development of Bulgaria (GERB)
stack_302	302	Coalition for Bulgaria (KB)
stack_303	303	Movements for Rights and Freedoms (DPS)
stack_304	304	IMRO – Bulgarian National Movement
stack_305	305	Democratic Bulgaria
stack_306	306	Will
stack_307	307	National Union Attack (ATAKA/ATA)

Full OLS models converge and coefficients do not show any particular issue (see Table B.3.13). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.01 for party 306 (Will) and a maximum of 0.036 for party 303 (Movements for Rights and Freedoms (DPS)). Moreover, the difference between Akaike Information Criterion (AIC) values for full OLS models and null models suggests that only one null model performs marginally better than the full ones (see Table B.3.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_301	301	784.128	794.234	-10.106
stack_302	302	392.612	409.552	-16.940
stack_303	303	-348.802	-325.216	-23.586
stack_304	304	319.463	337.587	-18.124
stack_305	305	337.528	342.058	-4.531
stack_306	306	96.336	95.297	1.039
stack_307	307	-185.834	-178.896	-6.938

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

- Model 9a: D8\_rec;
- Model 10a: D7\_rec;
- Model 13a: EDU\_rec;
- Model 14a: D7\_rec and D8\_rec.

The constant term and other regression coefficients of model 10 are not affected by said inflated standard errors, whereas the remaining ones present a more problematic profile. Inflated standard errors due to separation issues affect all the models. In short:

- No respondents from rural areas voted for party 302 (Table B.3.8);
- No upper middle or upper class respondents voted for party 303 (Table B.3.9);



- No low educated people voted for party 306 (Table B.3.10);
- No upper middle or upper class respondents and living in rural areas ones voted for party 307 (Table B.3.12);

As a consequence, constrained versions of the models have been estimated, removing misfitted variables. Likelihood-ratio test results show that  $H_0$  can be rejected only for model 9, while in all the other cases the null hypothesis cannot be rejected.

Consequently, synthetic variables for respondents' vote choice for parties 303, 306, and 307 have been generated relying on the constrained models (models 10b, 13b, 14b).

Table B.3.3: Likelihood-ratio Test between model 9a (unconstrained) and model 9b (constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
880	453.1108			
879	446.4830	1	6.627802	0.0100399

Table B.3.4: Likelihood-ratio Test between model 10a (unconstrained) and model 10b (constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
881	93.53127			
879	91.53421	2	1.997058	0.3684209

Table B.3.5: Likelihood-ratio Test between model 13a (unconstrained) and model 13b (constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
881	233.5034			
879	231.5236	2	1.979863	0.3716022

Table B.3.6: Likelihood-ratio Test between model 14a (unconstrained) and model 14b (constrained)

Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
882	85.21094			
879	82.50028	3	2.710651	0.4384203

In terms of model fit (Table B.3.7), adjusted McFadden's pseudo  $R^2$  values for the logistic full models vary between a minimum value of -0.048 for party 306 (Will) and a maximum of 0.054 for party 302 (Coalition for Bulgaria (KB)). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 6 cases out of 7 null models perform better than full ones. According to AIC values only for model 13b the constrained model appears to have a better fit than the null model (see Table B.3.7).

Table B.3.7: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_301	301	800.542	796.444	4.098
stack_302	302	468.483	497.232	-28.749
stack_303	303	113.534	111.660	1.874
stack_304	304	399.043	392.678	6.365
stack_305	305	411.160	403.798	7.362
stack_306	306	253.524	243.923	9.600
stack_307	307	104.500	102.601	1.900
stack_303*	303	473.111	111.660	361.451
stack_306*	306	111.531	243.923	-132.392
stack_307*	307	251.503	102.601	148.903

\* AIC value refers to models 10b, 13b and 14b (constrained).

Table B.3.8: Cross tabulation between vote choice for party 302 and respondents' area of residency

stack_302/D8_rec	0	1	Total
0	55	834	889
1	0	73	73
NA	3	51	54
Total	58	958	1016

Table B.3.9: Cross tabulation between vote choice for party 303 and respondents' subjective social class

stack_303/D7_rec	0	1	2	NA	Total
0	388	448	94	21	951
1	6	5	0	0	11
NA	17	26	7	4	54
Total	411	479	101	25	1016

Table B.3.10: Cross tabulation between vote choice for party 306 and respondents' education

stack_306/EDU_rec	1	2	3	NA	Total
0	37	268	611	18	934
1	0	5	22	1	28
NA	2	16	36	0	54
Total	39	289	669	19	1016

Table B.3.11: Cross tabulation between vote choice for party 307 and respondents' subjective social class

stack_307/D7_rec	0	1	2	NA	Total
0	390	448	94	21	953
1	4	5	0	0	9
NA	17	26	7	4	54
Total	411	479	101	25	1016

Table B.3.12: Cross tabulation between vote choice for party 307 and respondents' subjective social class

stack_307/D8_rec	0	1	Total
0	55	898	953
1	0	9	9
NA	3	51	54
Total	58	958	1016

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

	<b>301</b>	<b>302</b>	<b>303</b>	<b>304</b>	<b>305</b>	<b>306</b>	<b>307</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.016 (0.024)	-0.014 (0.020)	0.032* (0.013)	-0.020 (0.019)	-0.005 (0.019)	0.0005 (0.017)	-0.016 (0.014)
D8_rec1	0.078 (0.054)	0.089* (0.043)	-0.052 (0.029)	0.062 (0.042)	0.089* (0.042)	0.032 (0.036)	0.013 (0.031)
D5_rec1	0.031 (0.027)	0.009 (0.022)	0.015 (0.015)	0.040 (0.021)	-0.006 (0.021)	0.015 (0.019)	0.021 (0.016)
EDU_rec2	-0.145* (0.072)	-0.188** (0.060)	-0.122** (0.039)	-0.122* (0.057)	-0.043 (0.058)	-0.082 (0.050)	-0.110* (0.044)
EDU_rec3	-0.135 (0.072)	-0.180** (0.060)	-0.127** (0.040)	-0.091 (0.057)	-0.0002 (0.058)	-0.099* (0.050)	-0.116** (0.044)
D1_rec1	0.061 (0.032)	0.027 (0.026)	0.034* (0.017)	0.060* (0.025)	0.062* (0.025)	0.022 (0.022)	0.056** (0.019)
D7_rec1	0.040 (0.026)	0.010 (0.021)	0.016 (0.014)	0.012 (0.020)	0.024 (0.021)	0.015 (0.018)	-0.005 (0.015)
D7_rec2	0.040 (0.044)	0.030 (0.036)	0.020 (0.024)	-0.015 (0.034)	0.055 (0.035)	0.013 (0.031)	-0.023 (0.026)
D4_age	0.001 (0.001)	0.004*** (0.001)	-0.001** (0.0005)	-0.001 (0.001)	-0.0002 (0.001)	-0.001 (0.001)	-0.0002 (0.001)
D10_rec	0.024** (0.007)	0.003 (0.006)	0.006 (0.004)	0.021*** (0.006)	0.008 (0.006)	0.011* (0.005)	0.011** (0.004)
Constant	0.242** (0.083)	0.159* (0.069)	0.256*** (0.045)	0.254*** (0.066)	0.130 (0.067)	0.248*** (0.058)	0.198*** (0.051)
N	923	917	922	923	908	919	922
R-squared	0.032	0.039	0.046	0.040	0.027	0.020	0.029
Adj. R-squared	0.021	0.029	0.036	0.030	0.016	0.010	0.018

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

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

Model	301 8	302 9a	302 9b	303 10a	303 10b	304 11	305 12	306 13a	306 13b	307 14a	307 14b
D3_rec2	0.170 (0.186)	-0.551* (0.264)	-0.562* (0.262)	0.437 (0.676)	0.429 (0.675)	-0.738* (0.305)	-0.412 (0.293)	0.076 (0.399)	0.096 (0.398)	-1.486 (0.855)	-1.545 (0.843)
D8_rec1	0.350 (0.455)	15.830 (868.103)		-1.914* (0.775)	-1.883* (0.746)	0.272 (0.753)	0.989 (1.031)	0.012 (1.058)	0.200 (1.043)	16.049 (2175.581)	
D5_rec1	-0.107 (0.204)	0.075 (0.293)	0.072 (0.290)	-0.714 (0.683)	-0.757 (0.682)	0.533 (0.365)	-0.271 (0.313)	0.568 (0.510)	0.693 (0.506)	-1.333 (0.763)	-1.331 (0.759)
EDU_rec2	-0.566 (0.525)	-1.031 (1.122)	-1.055 (1.119)	0.842 (1.229)	0.754 (1.223)	-0.864 (0.863)	0.177 (1.106)	14.343 (1123.071)		-1.472 (1.428)	-1.643 (1.408)
EDU_rec3	-0.495 (0.523)	-0.475 (1.103)	-0.409 (1.098)	1.060 (1.306)	0.898 (1.294)	-0.378 (0.843)	0.763 (1.090)	14.793 (1123.071)		-1.782 (1.488)	-1.916 (1.471)
D1_rec1	0.517* (0.216)	0.038 (0.317)	0.033 (0.316)	-0.739 (1.119)	-0.715 (1.117)	-0.079 (0.372)	0.481 (0.332)	-0.536 (0.556)	-0.516 (0.556)	2.128** (0.756)	2.121** (0.752)
D7_rec1	0.014 (0.199)	-0.311 (0.274)	-0.254 (0.273)	0.149 (0.682)		-0.031 (0.308)	0.071 (0.313)	0.741 (0.464)	0.756 (0.462)	-0.037 (0.707)	
D7_rec2	0.363 (0.310)	0.104 (0.434)	0.146 (0.432)	-15.966 (1789.433)		-0.624 (0.636)	0.397 (0.467)	0.541 (0.713)	0.610 (0.709)	-15.704 (1740.482)	
D4_age	0.011 (0.007)	0.051*** (0.010)	0.052*** (0.010)	-0.071* (0.032)	-0.069* (0.032)	0.009 (0.011)	0.006 (0.011)	0.013 (0.015)	0.018 (0.014)	0.014 (0.028)	0.018 (0.028)
D10_rec	0.075 (0.055)	0.017 (0.076)	0.020 (0.076)	0.245 (0.191)	0.249 (0.191)	0.081 (0.087)	-0.111 (0.086)	0.091 (0.119)	0.089 (0.119)	0.229 (0.203)	0.212 (0.200)
Constant	-2.325*** (0.651)	-19.844 (868.104)	-4.195*** (1.074)	-1.487 (1.513)	-1.474 (1.486)	-3.184** (1.060)	-4.122** (1.450)	-19.832 (1123.071)	-5.714*** (1.316)	-19.689 (2175.581)	-3.797** (1.289)
N	890	890	890	890	890	890	890	890	890	890	890
Log Likelihood	-389.271	-223.241	-226.555	-45.767	-46.766	-188.522	-194.580	-115.762	-116.752	-41.250	-42.605
AIC	800.542	468.483	473.111	113.534	111.531	399.043	411.160	253.524	251.503	104.500	101.211

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.4 Czech Republic

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

Table B.4.1: 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 B.4.8). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.023, 0.023 for party 603, 608 (Czech Social Democratic Party, Freedom and Direct Democracy Tomio Okamura) and a maximum of 0.203 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 B.4.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_601	601	52.665	237.851	-185.186
stack_603	603	160.505	169.927	-9.422
stack_604	604	389.269	459.680	-70.412
stack_605	605	392.501	411.747	-19.246
stack_606	606	745.102	803.107	-58.006
stack_607	607	525.489	633.168	-107.678
stack_608	608	459.283	468.756	-9.473
stack_602	602	140.632	241.723	-101.090

On the contrary, five out of eight logistic regression models (see Table B.4.9) 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 B.4.5, B.4.6, B.4.7)

As a consequence, a constrained version of model 10 (namely, model 10b) without said variables was estimated and contrasted with the original full model (model 10a). Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model fits better than the full model) cannot be rejected (see Table B.4.3). Consequently, synthetic variables for respondents' vote choice for party 603 have been predicted relying on the constrained model (model 10b).

Table B.4.3: Likelihood-ratio Test between model 10a (unconstrained) and model 10b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	849	163.7771			
Unconstrained	844	153.7958	5	9.981323	0.0757662

In terms of model fit, adjusted McFadden's pseudo  $R^2$  values for the logistic full models vary between a minimum value of -0.065 for party 603 (Czech Social Democratic Party) and a maximum of 0.155 for party 601 (Christian and Democratic Union / Czechoslovak People's Party). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show 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 B.4.4).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_601	601	214.1510	255.3350	-41.184000
stack_602	602	268.2320	275.1270	-6.894000
stack_603	603	177.7960	168.9080	8.888000
stack_603*	603	177.7771	168.9081	8.869078
stack_604	604	473.8810	462.0590	11.822000
stack_605	605	331.0110	331.1770	-0.166000
stack_606	606	723.2760	774.4330	-51.157000
stack_607	607	530.3500	528.9600	1.390000
stack_608	608	395.1280	394.0820	1.046000

\* AIC value refers to model 10b (constrained).

Table B.4.5: 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 B.4.6: 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 B.4.7: 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 B.4.8: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>601</b>	<b>603</b>	<b>604</b>	<b>605</b>	<b>606</b>	<b>607</b>	<b>608</b>	<b>602</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>	<b>Model 8</b>
D3_rec2	0.0003 (0.017)	-0.022 (0.018)	0.016 (0.021)	-0.001 (0.021)	-0.024 (0.026)	0.026 (0.023)	-0.024 (0.022)	0.039* (0.018)
D8_rec1	0.026 (0.019)	0.008 (0.021)	0.001 (0.024)	-0.010 (0.024)	0.012 (0.029)	0.003 (0.026)	0.009 (0.025)	-0.014 (0.021)
D5_rec1	-0.012 (0.018)	-0.030 (0.019)	-0.019 (0.022)	-0.054* (0.022)	0.035 (0.026)	-0.050* (0.023)	0.002 (0.022)	-0.040* (0.019)
EDU_rec2	-0.003 (0.035)	-0.020 (0.038)	0.004 (0.043)	-0.017 (0.043)	-0.025 (0.053)	0.014 (0.046)	0.057 (0.045)	-0.007 (0.038)
EDU_rec3	0.028 (0.036)	-0.031 (0.038)	0.022 (0.044)	-0.044 (0.044)	-0.077 (0.054)	0.038 (0.047)	-0.001 (0.046)	0.023 (0.038)
D1_rec1	0.038 (0.024)	0.121*** (0.025)	0.046 (0.029)	0.077** (0.029)	0.078* (0.035)	-0.025 (0.031)	0.084** (0.030)	0.004 (0.025)
D7_rec1	0.018 (0.019)	0.013 (0.020)	0.036 (0.023)	-0.015 (0.023)	0.032 (0.028)	-0.012 (0.025)	-0.054* (0.024)	0.036 (0.020)
D7_rec2	-0.018 (0.029)	0.040 (0.030)	0.094** (0.035)	-0.017 (0.035)	0.033 (0.043)	0.055 (0.038)	-0.052 (0.036)	0.041 (0.030)
D6_une1	-0.014 (0.070)	0.008 (0.074)	-0.101 (0.085)	0.144 (0.085)	-0.077 (0.104)	0.043 (0.092)	0.097 (0.088)	-0.074 (0.076)
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	0.068*** (0.005)	0.003 (0.005)	0.021*** (0.006)	-0.016* (0.006)	-0.013 (0.008)	0.003 (0.007)	-0.011 (0.006)	0.023*** (0.005)
Constant	0.278*** (0.044)	0.299*** (0.046)	0.469*** (0.053)	0.187*** (0.053)	0.136* (0.065)	0.720*** (0.057)	0.240*** (0.055)	0.453*** (0.046)
N	863	864	864	864	865	863	864	841
R-squared	0.213	0.036	0.101	0.047	0.088	0.140	0.036	0.136
Adj. R-squared	0.203	0.023	0.090	0.034	0.077	0.128	0.023	0.125

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05



Table B.4.9: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	<b>601</b>	<b>603</b>	<b>603</b>	<b>604</b>	<b>605</b>	<b>606</b>	<b>607</b>	<b>608</b>	<b>602</b>
	<b>Model 9</b>	<b>Model 10a</b>	<b>Model 10b</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>	<b>Model 15</b>	<b>Model 16</b>
D3_rec2	0.032 (0.419)	0.111 (0.502)	0.153 (0.495)	-0.039 (0.265)	-0.357 (0.339)	-0.405* (0.199)	-0.027 (0.244)	-0.079 (0.295)	0.001 (0.377)
D8_rec1	0.185 (0.483)	0.547 (0.652)	0.455 (0.645)	-0.056 (0.299)	0.008 (0.383)	-0.002 (0.227)	0.117 (0.282)	0.509 (0.384)	-1.146** (0.379)
D5_rec1	-0.060 (0.436)	-0.277 (0.514)	-0.213 (0.505)	-0.223 (0.269)	-0.354 (0.333)	0.551** (0.213)	0.030 (0.254)	0.846* (0.354)	-0.328 (0.383)
EDU_rec2	-1.014 (0.697)	17.215 (2200.736)		0.025 (0.540)	-0.513 (0.656)	-0.028 (0.484)	0.298 (0.531)	0.945 (1.042)	-0.546 (0.686)
EDU_rec3	-0.680 (0.700)	16.563 (2200.736)		0.060 (0.549)	-0.448 (0.688)	-0.316 (0.500)	0.699 (0.530)	1.144 (1.046)	0.262 (0.666)
D1_rec1	0.030 (0.531)	0.803 (0.556)	0.827 (0.551)	0.175 (0.344)	0.693 (0.405)	0.527* (0.253)	-0.176 (0.347)	0.253 (0.376)	-0.155 (0.529)
D7_rec1	0.653 (0.477)	-0.151 (0.508)		0.206 (0.307)	-0.314 (0.351)	0.554* (0.217)	-0.506 (0.271)	-0.585 (0.329)	0.997 (0.520)
D7_rec2	-1.370 (1.131)	-16.813 (1627.428)		0.805* (0.393)	-0.685 (0.661)	0.618 (0.334)	-0.047 (0.360)	0.229 (0.423)	1.182 (0.626)
D6_une1	-13.302 (1083.416)	-16.379 (4685.595)		-14.133 (681.233)	0.953 (1.107)	-0.308 (1.097)	0.296 (0.804)	-13.887 (671.864)	-14.354 (1089.635)
D4_age	0.004 (0.013)	-0.015 (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	0.579*** (0.081)	0.079 (0.135)	0.052 (0.132)	0.088 (0.069)	-0.159 (0.125)	-0.020 (0.058)	-0.124 (0.087)	-0.093 (0.100)	0.091 (0.094)
Constant	-4.343*** (0.970)	-20.454 (2200.736)	-4.406*** (1.019)	-2.468*** (0.659)	-3.991*** (0.936)	-4.550*** (0.631)	-1.310* (0.630)	-4.985*** (1.187)	-1.905* (0.867)
N	856	856	856	856	856	856	856	856	856
Log Likelihood	-95.076	-76.898	-81.889	-224.940	-153.506	-349.638	-253.175	-185.564	-122.116
AIC	214.151	177.796	177.777	473.881	331.011	723.276	530.350	395.128	268.232

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.5 Croatia

Synthetic variables have been estimated for seven out of fourteen Croatian parties available in the original 2019 EES Croatian voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.5.1).

Table B.5.1: Relevant Croatian 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 B.5.13). 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 differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in all 7 cases out of 7 full models perform better than full ones (see Table B.5.2).

Table B.5.2: 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 B.5.14) show inflated standard errors for some of the coefficients of interest. In particular:

- model 13a: EDU\_rec, D6\_une;
- model 14a: D8\_rec, D5\_rec, EDU\_rec, D7\_rec (only for category 2), D6\_une;

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

The inflated standard errors of model 13a and 14a are due to separation issues. In short, no respondent with low education and unemployment voted for party 413 (see Tables B.5.6, B.5.7). As well as, no respondents from rural areas or small cities who are single, low educated, with high subjective socioeconomic status (SES) and unemployed voted for party 401 (see Tables B.5.8, B.5.9, B.5.10, B.5.11, B.5.12).

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 full model (model 14a, 13a). Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model fits better than the full model) cannot be rejected for party 401 (see Table B.5.3). Consequently, synthetic variables for respondents' vote choice for party 413 have been predicted relying on the constrained model (model 14b). For party 413  $H_0$  cannot be rejected (see Table B.5.4). Consequently, synthetic variables for respondents' vote choice for party 413 have been predicted relying on the constrained model (model 13b).

Table B.5.3: 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 B.5.4: 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 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 B.5.5).

Table B.5.5: 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 B.5.6: 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 B.5.7: 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 B.5.8: 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 B.5.9: 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 B.5.10: 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 B.5.11: 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 B.5.12: 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 B.5.13: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>412</b>	<b>404</b>	<b>414</b>	<b>405</b>	<b>406</b>	<b>413</b>	<b>401</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
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 &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.5.14: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

model	412 8	404 9	414 10	405 11	406 12	413 13a	413 13b	401 14a	401 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 &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.6 Cyprus

Synthetic variables have been estimated for six out of seven Cypriot parties available in the original 2019 EES Cypriot voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.6.1).

Table B.6.1: Relevant Cypriot 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 B.6.11). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of -0.007 for party 504 (United Democratic Union of Centre) and a maximum of 0.079 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 B.6.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_501	501	343.229	362.833	-19.603
stack_502	502	398.664	423.119	-24.454
stack_503	503	263.353	256.408	6.945
stack_504	504	146.189	132.322	13.867
stack_505	505	114.659	107.763	6.896
stack_507	507	205.547	199.847	5.700

On the contrary, three out of six logistic regression models (see Table B.6.12) 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 the constant terms and other regression coefficients of model9 and 12 are not affected by said inflated standard errors, whereas model 11a presents a more problematic profile.

Model 11a inflated standard errors are due to separation issues. In short, no respondent from rural areas or small cities, who is single, low educated, with high subjective socioeconomic status (SES), members of trade unions, and unemployed voted for party 505 (see Tables B.6.5, B.6.6, B.6.7, B.6.8, B.6.9, B.6.10).

As a consequence, a constrained version of model 11 (namely, model 11b) without said variables was estimated and contrasted with the original full model (model 11a). Likelihood-ratio test results show that  $H_0$  (namely,

that the constrained model fits better than the full model) cannot be rejected (see Table B.6.3). Consequently, synthetic variables for respondents' vote choice for party 505 have been predicted relying on the constrained model (model 11b).

Table B.6.3: Likelihood-ratio Test between model 5a (unconstrained) and model 5b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	390	52.23925			
Unconstrained	382	39.43782	8	12.80143	0.1188668

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 0.068 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 B.6.4).

Table B.6.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_501	501	264.62700	285.99700	-21.370000
stack_502	502	358.88900	382.63700	-23.749000
stack_503	503	233.62800	228.82500	4.803000
stack_504	504	151.57100	135.86200	15.709000
stack_505	505	63.43800	55.60500	7.832000
stack_505*	505	60.23925	55.60541	4.633845
stack_507	507	115.46200	116.26300	-0.800000

\* AIC value refers to model 11b (constrained).

Table B.6.5: 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 B.6.6: 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 B.6.7: 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 B.6.8: 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 B.6.9: 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 B.6.10: 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 B.6.11: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>501</b>	<b>502</b>	<b>503</b>	<b>504</b>	<b>505</b>	<b>507</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>
D3_rec2	0.095** (0.036)	−0.057 (0.038)	0.047 (0.032)	0.012 (0.029)	0.054 (0.027)	−0.086** (0.030)
D8_rec1	0.023 (0.046)	−0.039 (0.049)	0.010 (0.041)	0.012 (0.036)	0.007 (0.035)	0.017 (0.039)
D5_rec1	0.041 (0.043)	−0.022 (0.046)	0.036 (0.039)	0.021 (0.034)	0.025 (0.033)	−0.015 (0.036)
EDU_rec2	−0.106* (0.050)	0.111* (0.053)	0.069 (0.045)	0.037 (0.040)	0.015 (0.038)	0.027 (0.042)
EDU_rec3	−0.091 (0.055)	0.152** (0.059)	0.087 (0.050)	0.056 (0.044)	0.062 (0.042)	0.002 (0.046)
D1_rec1	0.022 (0.044)	0.126** (0.047)	0.026 (0.040)	−0.020 (0.035)	−0.009 (0.034)	0.059 (0.037)
D7_rec1	−0.135*** (0.037)	0.099* (0.040)	0.006 (0.034)	−0.003 (0.030)	0.019 (0.029)	−0.006 (0.032)
D7_rec2	−0.015 (0.083)	0.166 (0.089)	0.063 (0.076)	0.110 (0.066)	0.068 (0.064)	−0.073 (0.071)
D6_une1	0.141* (0.062)	0.004 (0.066)	0.048 (0.056)	0.025 (0.049)	0.014 (0.049)	−0.029 (0.054)
D4_age	0.0002 (0.001)	0.002* (0.001)	0.002* (0.001)	−0.0002 (0.001)	−0.001 (0.001)	−0.002 (0.001)
D10_rec	−0.027* (0.012)	0.043*** (0.012)	−0.002 (0.011)	0.010 (0.009)	0.002 (0.009)	0.007 (0.010)
Constant	0.436*** (0.086)	−0.012 (0.093)	0.071 (0.079)	0.118 (0.069)	0.122 (0.067)	0.267*** (0.074)
N	429	429	430	426	426	427
R-squared	0.092	0.103	0.034	0.019	0.035	0.037
Adj. R-squared	0.068	0.079	0.009	−0.007	0.009	0.012

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

Table B.6.12: Vote choice for a relevant party according to respondents' socio-demographic characteristics  
(Logistic regression models)

	<b>501</b>	<b>502</b>	<b>503</b>	<b>504</b>	<b>505</b>	<b>505</b>	<b>507</b>
	<b>Model 7</b>	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11a</b>	<b>Model 11b</b>	<b>Model 12</b>
D3_rec2	0.831*	0.009	−0.026	−0.574	0.765	0.480	−0.710
	(0.376)	(0.289)	(0.396)	(0.535)	(1.003)	(0.948)	(0.666)
D8_rec1	−0.400	−0.590	−0.453	−0.126	17.416		0.650
	(0.405)	(0.342)	(0.458)	(0.695)	(4596.323)		(0.866)
D5_rec1	0.788	−0.058	0.178	−0.254	18.156		0.607
	(0.472)	(0.366)	(0.498)	(0.652)	(4131.731)		(0.859)
EDU_rec2	−0.578	0.084	0.412	−0.706	18.744		0.527
	(0.435)	(0.407)	(0.541)	(0.731)	(4353.602)		(0.830)
EDU_rec3	−0.558	0.567	0.841	−0.133	19.398		−2.071
	(0.552)	(0.474)	(0.657)	(0.748)	(4353.602)		(1.285)
D1_rec1	0.116	0.366	0.500	0.393	−18.666		1.438*
	(0.415)	(0.322)	(0.422)	(0.614)	(4622.859)		(0.629)
D7_rec1	−1.147**	0.862*	−0.585	1.074	−0.675		0.979
	(0.377)	(0.339)	(0.405)	(0.692)	(0.992)		(0.739)
D7_rec2	−1.344	0.869	−15.491	1.801	−19.230		0.864
	(1.081)	(0.677)	(846.929)	(0.990)	(9246.777)		(1.327)
D6_une1	0.740	−0.166	0.593	−0.022	−17.834		−16.117
	(0.517)	(0.577)	(0.610)	(1.079)	(6687.900)		(1678.260)
D4_age	0.031*	0.035***	0.035*	0.005	0.047	0.019	−0.024
	(0.012)	(0.010)	(0.014)	(0.016)	(0.039)	(0.026)	(0.020)
D10_rec	−0.136	0.252**	0.045	0.009	−0.328	−0.294	−0.251
	(0.113)	(0.098)	(0.127)	(0.167)	(0.303)	(0.286)	(0.222)
Constant	−3.008**	−4.667***	−4.409***	−3.456**	−58.902	−4.437**	−3.020*
	(0.979)	(0.799)	(1.124)	(1.269)	(7559.844)	(1.605)	(1.380)
N	394	394	394	394	394	394	394
Log Likelihood	−120.313	−167.444	−104.814	−63.785	−19.719	−26.120	−45.731
AIC	264.627	358.889	233.628	151.571	63.438	60.239	115.462

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

## B.7 Denmark

Synthetic variables have been estimated for seven of ten of Danish parties available in the original 2019 EES Danish voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.7.1).

Table B.7.1: Relevant Danish 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 B.7.4). 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 0.088 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 B.7.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_701	701	600.463	650.130	-49.667
stack_702	702	664.818	698.147	-33.329
stack_703	703	708.256	702.351	5.905
stack_704	704	320.091	385.068	-64.976
stack_705	705	604.462	637.521	-33.060
stack_706	706	651.928	694.182	-42.255
stack_707	707	363.465	431.607	-68.141

Furthermore, there were no unusual standard errors for any coefficients in the logistic regression models. (see Table B.7.5)

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 B.7.3).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_701	701	757.463	771.073	-13.610
stack_702	702	746.983	757.681	-10.698
stack_703	703	591.403	602.927	-11.523
stack_704	704	394.100	379.564	14.536
stack_705	705	524.266	523.116	1.150
stack_706	706	409.327	412.696	-3.369
stack_707	707	316.348	314.621	1.727

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

	<b>701</b>	<b>702</b>	<b>703</b>	<b>704</b>	<b>705</b>	<b>706</b>	<b>707</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.083*** (0.023)	-0.050* (0.024)	-0.068** (0.024)	0.035 (0.020)	0.088*** (0.023)	0.044 (0.024)	-0.086*** (0.020)
D8_rec1	0.069* (0.028)	0.001 (0.029)	0.036 (0.030)	0.001 (0.024)	0.065* (0.028)	0.053 (0.029)	0.020 (0.025)
D5_rec1	-0.008 (0.024)	0.036 (0.025)	0.026 (0.026)	-0.025 (0.021)	-0.022 (0.025)	-0.039 (0.026)	-0.006 (0.022)
EDU_rec2	-0.060 (0.051)	0.112* (0.053)	0.037 (0.055)	-0.034 (0.044)	-0.069 (0.053)	-0.056 (0.054)	0.070 (0.046)
EDU_rec3	-0.023 (0.048)	0.038 (0.049)	-0.005 (0.051)	0.004 (0.041)	-0.004 (0.049)	0.003 (0.050)	0.048 (0.042)
D1_rec1	0.137*** (0.026)	-0.056* (0.027)	-0.002 (0.028)	0.004 (0.022)	0.066* (0.026)	0.040 (0.027)	-0.009 (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	-0.118** (0.036)	0.173*** (0.037)	-0.053 (0.038)	0.048 (0.031)	-0.076* (0.036)	-0.113** (0.037)	0.192*** (0.032)
D6_une1	0.053 (0.047)	-0.057 (0.049)	-0.004 (0.051)	-0.022 (0.041)	-0.043 (0.048)	-0.033 (0.050)	-0.090* (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	0.015* (0.007)	0.023** (0.007)	0.005 (0.007)	0.013* (0.006)	0.013 (0.007)	0.008 (0.007)	0.029*** (0.006)
Constant	0.353*** (0.062)	0.386*** (0.064)	0.312*** (0.066)	0.509*** (0.053)	0.379*** (0.063)	0.490*** (0.065)	0.269*** (0.055)
N	879	878	877	873	863	861	863
R-squared	0.078	0.061	0.018	0.095	0.062	0.072	0.099
Adj. R-squared	0.067	0.049	0.006	0.083	0.050	0.060	0.088

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

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

	<b>701</b>	<b>702</b>	<b>703</b>	<b>704</b>	<b>705</b>	<b>706</b>	<b>707</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
D3_rec2	0.523** (0.193)	-0.191 (0.193)	-0.729** (0.230)	-0.078 (0.296)	0.871*** (0.261)	0.167 (0.284)	-0.356 (0.347)
D8_rec1	0.123 (0.233)	0.007 (0.231)	0.418 (0.296)	-0.134 (0.361)	-0.413 (0.276)	-0.011 (0.348)	-0.484 (0.374)
D5_rec1	0.072 (0.201)	0.408 (0.212)	-0.308 (0.234)	-0.334 (0.310)	-0.074 (0.259)	-0.039 (0.296)	0.190 (0.374)
EDU_rec2	-0.608 (0.418)	-0.463 (0.452)	0.769 (0.652)	0.757 (0.815)	0.059 (0.628)	-0.267 (0.635)	0.413 (0.829)
EDU_rec3	-0.382 (0.372)	-0.330 (0.408)	0.415 (0.630)	0.926 (0.777)	0.547 (0.575)	0.006 (0.584)	-0.252 (0.795)
D1_rec1	0.719** (0.232)	-0.199 (0.216)	-0.234 (0.241)	0.536 (0.366)	-0.224 (0.272)	0.243 (0.320)	0.009 (0.392)
D7_rec1	0.127 (0.213)	0.504* (0.244)	0.130 (0.257)	0.013 (0.335)	0.101 (0.290)	-0.005 (0.299)	0.534 (0.468)
D7_rec2	-0.565 (0.330)	1.006*** (0.290)	-0.174 (0.372)	0.086 (0.458)	0.554 (0.352)	-2.400* (1.034)	1.381** (0.510)
D6_une1	0.166 (0.363)	0.189 (0.407)	-0.184 (0.496)	-0.598 (0.744)	-0.248 (0.545)	-0.884 (0.741)	-0.477 (1.039)
D4_age	0.004 (0.006)	0.012 (0.006)	0.025** (0.008)	-0.012 (0.010)	-0.006 (0.008)	0.003 (0.009)	0.011 (0.011)
D10_rec	0.158** (0.052)	0.063 (0.054)	-0.032 (0.068)	-0.026 (0.086)	0.012 (0.070)	-0.309** (0.110)	0.172 (0.090)
Constant	-2.640*** (0.515)	-2.587*** (0.537)	-3.542*** (0.757)	-3.088*** (0.926)	-2.640*** (0.700)	-2.409** (0.757)	-4.064*** (1.000)
N	874	874	874	874	874	874	874
Log Likelihood	-366.732	-361.492	-283.702	-185.050	-250.133	-192.664	-146.174
AIC	757.463	746.983	591.403	394.100	524.266	409.327	316.348

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

## B.8 Estonia

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 relevant parties see Table B.8.1).

Table B.8.1: Relevant Estonian 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 B.8.13). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.026 for party 906 (Estonia 200) and a maximum of 0.061 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 B.8.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_901	901	648.376	681.225	-32.850
stack_902	902	468.344	482.379	-14.035
stack_903	903	523.076	555.418	-32.342
stack_904	904	315.169	331.505	-16.336
stack_905	905	366.351	406.867	-40.517
stack_906	906	322.705	332.960	-10.255
stack_907	907	171.172	186.800	-15.628

On the contrary, three out of seven logistic regression models (see Table B.8.14) 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 respondent with low education voted for party 906 (see Table B.8.8). Also, no respondent with low education, high subjective social status, who are members of trade unions, unemployed and only very few respondents

who are married or in a partnership (2 and 9; regressor D5\_rec) voted for party 907 (see Tables B.8.9, B.8.10, B.8.11, B.8.12).

As a consequence, a constrained version of model 13 (namely, model 13b) without said variable was estimated and contrasted with the original full model (model 13a). Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model fits better than the full model) cannot be rejected (see Table B.8.3). Consequently, synthetic variables for respondents' vote choice for party 906 have been predicted relying on the constrained model (model 13b).

Table B.8.3: Likelihood-ratio Test between model 13a (unconstrained) and model 13b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	800	202.9630			
Unconstrained	798	198.2016	2	4.761363	0.0924875

Regarding model 14, a constrained version (namely, model 14b) without said variables was estimated and contrasted with the original full model (model 14a). Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model fits better than the full model) cannot be rejected (see Table B.8.4).

Furthermore, another constrained version of model 14 (namely, model 14c) with the same restrictions as model 14b but this time including the variable about marriage (D5\_rec) was estimated. Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model fits better than the full model) cannot be rejected (see Table B.8.5).

Then comparing the fit of 14b and 14c. 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 B.8.5). Consequently, synthetic variables for respondents' vote choice for party 907 have been predicted relying on the less constrained model with D5\_rec (model 14c).

Table B.8.4: Likelihood-ratio Test between model 14a (unconstrained) and model 14b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	803	85.96929			
Unconstrained	798	75.48917	5	10.48012	0.0627196

Table B.8.5: Likelihood-ratio Test between model 14a (unconstrained) and model 14c (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	802	79.88766			
Unconstrained	798	75.48917	4	4.398489	0.3547543

Table B.8.6: Likelihood-ratio Test between model 14b (constrained) and model 14c (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	803	85.96929			
Unconstrained	802	79.88766	1	6.081631	0.0136595

In terms of model fit, adjusted McFadden's pseudo  $R^2$  values for the logistic full models vary between a minimum value of -0.108 for party 907 (Estonian Greens) and a maximum of 0.038 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 model appears to have a better fit than model 13b and 14c (see Table B.8.7).

Table B.8.7: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_901	901	694.22900	705.58000	-11.351000
stack_902	902	508.86500	506.31300	2.552000
stack_903	903	506.76400	528.63400	-21.871000
stack_904	904	415.12500	419.58900	-4.464000
stack_905	905	652.00400	649.26800	2.736000
stack_906	906	222.20200	211.17100	11.030000
stack_906*	906	222.96295	211.17148	11.791471
stack_907	907	99.48900	91.80200	7.687000
stack_907*	907	99.96929	91.80221	8.167081

\* AIC value refers to model 13b for 906\* (constrained) and 14c for 907\* (constrained but including D5\_rec).

Table B.8.8: 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 B.8.9: 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 B.8.10: 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 B.8.11: 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 B.8.12: 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 B.8.13: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>901</b>	<b>902</b>	<b>903</b>	<b>904</b>	<b>905</b>	<b>906</b>	<b>907</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.042 (0.026)	−0.012 (0.023)	−0.127*** (0.024)	−0.039 (0.021)	0.126*** (0.021)	0.035 (0.021)	0.075*** (0.019)
D8_rec1	0.011 (0.029)	0.050 (0.025)	−0.080** (0.026)	−0.112*** (0.023)	0.036 (0.024)	0.027 (0.024)	0.024 (0.021)
D5_rec1	0.009 (0.027)	−0.021 (0.024)	−0.015 (0.025)	−0.034 (0.022)	0.010 (0.023)	0.026 (0.023)	−0.002 (0.020)
EDU_rec2	−0.086 (0.061)	0.074 (0.055)	0.011 (0.058)	0.025 (0.051)	−0.017 (0.052)	−0.045 (0.051)	−0.030 (0.046)
EDU_rec3	−0.034 (0.061)	0.039 (0.055)	−0.012 (0.058)	0.049 (0.051)	0.006 (0.052)	−0.008 (0.051)	−0.006 (0.046)
D1_rec1	−0.066 (0.042)	0.058 (0.038)	−0.008 (0.039)	−0.062 (0.034)	0.028 (0.036)	−0.041 (0.035)	−0.047 (0.032)
D7_rec1	0.100*** (0.027)	−0.042 (0.024)	−0.049 (0.025)	0.001 (0.022)	0.014 (0.023)	0.023 (0.023)	0.009 (0.020)
D7_rec2	0.175*** (0.042)	−0.080* (0.038)	−0.084* (0.039)	−0.042 (0.035)	0.062 (0.035)	0.099** (0.035)	0.032 (0.031)
D6_une1	−0.108 (0.075)	−0.027 (0.067)	0.032 (0.069)	−0.065 (0.061)	−0.047 (0.063)	0.021 (0.063)	0.070 (0.056)
D4_age	−0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.0004 (0.001)	−0.003*** (0.001)	−0.001* (0.001)	−0.002*** (0.001)
D10_rec	−0.022** (0.008)	0.026*** (0.007)	0.014 (0.008)	0.007 (0.007)	−0.003 (0.007)	−0.015* (0.007)	0.003 (0.006)
Constant	0.518*** (0.072)	0.269*** (0.064)	0.361*** (0.067)	0.453*** (0.059)	0.420*** (0.061)	0.366*** (0.060)	0.371*** (0.054)
N	814	817	810	807	814	794	810
R-squared	0.065	0.043	0.065	0.046	0.074	0.040	0.045
Adj. R-squared	0.052	0.030	0.052	0.033	0.061	0.026	0.032

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

Table B.8.14: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

model	901 8	902 9	903 10	904 11	905 12	906 13a	906 13b	907 14a	907 14c
D3_rec2	0.181 (0.204)	-0.163 (0.251)	-1.362*** (0.268)	-0.654* (0.285)	0.571** (0.221)	-0.430 (0.434)	-0.461 (0.432)	0.522 (0.750)	0.447 (0.746)
D8_rec1	0.064 (0.227)	0.453 (0.306)	-0.567* (0.259)	-0.597* (0.288)	-0.208 (0.229)	0.123 (0.522)	0.197 (0.518)	-0.659 (0.759)	-0.583 (0.751)
D5_rec1	0.139 (0.220)	0.010 (0.269)	-0.259 (0.264)	-0.257 (0.295)	-0.114 (0.223)	-0.064 (0.468)	0.039 (0.466)	17.058 (1676.995)	17.268 (1749.196)
EDU_rec2	-0.288 (0.483)	0.676 (0.758)	0.305 (0.646)	0.358 (0.768)	-0.278 (0.488)	14.762 (1014.112)		15.512 (3995.567)	
EDU_rec3	-0.0001 (0.478)	0.463 (0.761)	0.212 (0.648)	0.349 (0.774)	0.054 (0.482)	15.433 (1014.112)		16.573 (3995.567)	
D1_rec1	-0.459 (0.377)	0.387 (0.369)	-0.033 (0.428)	-0.650 (0.612)	0.163 (0.330)	-0.916 (1.035)	-0.833 (1.033)	-17.124 (2956.242)	
D7_rec1	0.564* (0.224)	0.078 (0.267)	-0.066 (0.267)	-0.300 (0.292)	0.150 (0.229)	0.561 (0.481)	0.669 (0.473)	0.597 (0.891)	0.695 (0.875)
D7_rec2	0.732* (0.308)	0.244 (0.390)	0.238 (0.380)	-1.583* (0.750)	0.498 (0.321)	-0.198 (0.829)	-0.015 (0.816)	0.928 (1.043)	1.261 (1.017)
D6_une1	-1.178 (1.034)	-15.134 (795.306)	0.295 (0.670)	-0.601 (1.053)	0.067 (0.638)	0.248 (1.072)	0.277 (1.062)	-16.569 (5415.937)	
D4_age	0.019** (0.006)	0.018* (0.008)	0.011 (0.008)	0.019* (0.009)	0.007 (0.006)	-0.012 (0.014)	-0.010 (0.013)	-0.013 (0.024)	-0.013 (0.023)
D10_rec	-0.207** (0.078)	0.115 (0.074)	0.172* (0.070)	0.036 (0.088)	-0.134 (0.078)	-0.048 (0.154)	-0.052 (0.156)	-0.215 (0.335)	-0.237 (0.337)
Constant	-2.864*** (0.593)	-4.250*** (0.914)	-2.093** (0.734)	-2.752** (0.884)	-2.210*** (0.579)	-18.050 (1014.112)	-3.246*** (0.909)	-36.807 (4333.229)	-21.105 (1749.197)
N	810	810	810	810	810	810	810	810	810
Log Likelihood	-335.115	-242.432	-241.382	-195.562	-314.002	-99.101	-101.481	-37.745	-39.944
AIC	694.229	508.865	506.764	415.125	652.004	222.202	222.963	99.489	95.888

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.9 Finland

Synthetic variables have been estimated for the full set of Finnish parties available in the original 2019 EES Finnish voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.9.1).

Table B.9.1: Relevant Finnish 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 B.9.4). 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 0.135 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 B.9.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1001	1001	503.822	524.434	-20.611
stack_1002	1002	760.632	793.350	-32.719
stack_1003	1003	455.497	567.635	-112.137
stack_1004	1004	213.717	257.058	-43.341
stack_1005	1005	579.991	634.977	-54.986
stack_1006	1006	541.751	575.824	-34.073
stack_1007	1007	185.984	217.272	-31.288

Similarly, only one out of the seven logistic regression models (see Table B.9.5) show 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 -0.08 for party 1007 (Swedish People's Party) and a maximum of 0.076 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 B.9.3).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1001	1001	490.829	497.038	-6.210
stack_1002	1002	646.780	659.969	-13.189
stack_1003	1003	478.675	520.112	-41.437
stack_1004	1004	255.100	260.410	-5.310
stack_1005	1005	540.504	546.870	-6.366
stack_1006	1006	365.669	363.652	2.017
stack_1007	1007	195.727	183.272	12.455

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

	<b>1001</b>	<b>1002</b>	<b>1003</b>	<b>1004</b>	<b>1005</b>	<b>1006</b>	<b>1007</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.046* (0.022)	-0.143*** (0.026)	-0.041 (0.022)	-0.010 (0.019)	0.157*** (0.023)	0.062** (0.023)	-0.002 (0.019)
D8_rec1	0.109*** (0.029)	-0.069* (0.033)	0.044 (0.028)	-0.016 (0.024)	0.070* (0.030)	0.059* (0.029)	0.012 (0.024)
D5_rec1	-0.046* (0.023)	0.032 (0.027)	0.007 (0.022)	-0.017 (0.019)	-0.055* (0.024)	-0.028 (0.023)	-0.050** (0.019)
EDU_rec2	-0.026 (0.045)	0.110* (0.051)	-0.003 (0.043)	0.018 (0.037)	-0.037 (0.047)	-0.027 (0.045)	0.028 (0.037)
EDU_rec3	0.008 (0.042)	0.021 (0.049)	-0.016 (0.041)	0.005 (0.035)	0.012 (0.044)	0.006 (0.043)	0.031 (0.035)
D1_rec1	0.073** (0.023)	-0.016 (0.027)	-0.039 (0.023)	-0.006 (0.020)	0.038 (0.024)	0.063** (0.024)	0.025 (0.019)
D7_rec1	0.004 (0.026)	0.023 (0.030)	0.157*** (0.025)	0.081*** (0.022)	0.031 (0.027)	-0.058* (0.026)	0.066** (0.021)
D7_rec2	-0.100** (0.035)	0.005 (0.040)	0.299*** (0.034)	0.056 (0.029)	-0.021 (0.036)	-0.196*** (0.035)	0.101*** (0.029)
D6_une1	-0.032 (0.037)	0.025 (0.042)	-0.028 (0.036)	0.0004 (0.031)	-0.013 (0.038)	0.0001 (0.037)	0.0001 (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)	0.004 (0.009)	0.028*** (0.007)	0.040*** (0.006)	0.003 (0.008)	0.007 (0.008)	0.029*** (0.006)
Constant	0.282*** (0.060)	0.593*** (0.069)	0.320*** (0.058)	0.329*** (0.050)	0.417*** (0.062)	0.368*** (0.061)	0.170*** (0.049)
N	843	851	847	845	845	846	844
R-squared	0.049	0.062	0.146	0.074	0.087	0.064	0.061
Adj. R-squared	0.037	0.050	0.135	0.062	0.075	0.052	0.049

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

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

	<b>1001</b>	<b>1002</b>	<b>1003</b>	<b>1004</b>	<b>1005</b>	<b>1006</b>	<b>1007</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
D3_rec2	0.020 (0.252)	-0.712** (0.218)	-0.144 (0.255)	-0.019 (0.384)	0.873*** (0.245)	-0.055 (0.307)	-0.713 (0.506)
D8_rec1	0.410 (0.348)	-0.808*** (0.242)	1.040* (0.427)	-0.580 (0.423)	0.236 (0.317)	0.277 (0.427)	-0.538 (0.546)
D5_rec1	0.027 (0.258)	0.013 (0.215)	0.026 (0.259)	0.282 (0.401)	-0.580* (0.244)	-0.404 (0.312)	0.107 (0.488)
EDU_rec2	0.364 (0.656)	0.974 (0.525)	0.436 (0.668)	-0.178 (0.858)	-0.547 (0.411)	0.385 (0.793)	0.091 (1.200)
EDU_rec3	0.656 (0.622)	0.878 (0.507)	0.602 (0.629)	0.030 (0.786)	-0.505 (0.379)	0.875 (0.751)	0.841 (1.095)
D1_rec1	0.650* (0.274)	0.125 (0.219)	-0.007 (0.259)	-0.376 (0.394)	0.168 (0.248)	0.519 (0.333)	-0.057 (0.486)
D7_rec1	-0.138 (0.285)	-0.385 (0.252)	0.890** (0.315)	1.057* (0.448)	0.636* (0.264)	-0.464 (0.342)	0.631 (0.565)
D7_rec2	-0.455 (0.410)	0.538 (0.292)	1.538*** (0.342)	0.287 (0.650)	0.018 (0.392)	-1.597* (0.748)	0.853 (0.651)
D6_une1	-0.242 (0.494)	-0.783 (0.402)	0.463 (0.413)	-15.884 (1057.586)	0.362 (0.365)	-1.179 (0.747)	0.107 (0.797)
D4_age	0.033*** (0.009)	-0.008 (0.007)	0.022** (0.008)	0.015 (0.012)	0.001 (0.007)	0.004 (0.010)	-0.010 (0.015)
D10_rec	0.048 (0.083)	-0.026 (0.069)	0.238** (0.073)	0.241* (0.106)	0.059 (0.079)	-0.152 (0.128)	0.146 (0.134)
Constant	-5.248*** (0.874)	-1.371* (0.611)	-5.783*** (0.856)	-4.311*** (1.069)	-2.606*** (0.602)	-3.517*** (0.994)	-3.863** (1.341)
N	834	834	834	834	834	834	834
Log Likelihood	-233.414	-311.390	-227.338	-115.550	-258.252	-170.835	-85.864
AIC	490.829	646.780	478.675	255.100	540.504	365.669	195.727

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05



## B.10 France

Synthetic variables have been estimated for seven out of fourteen French parties available in the original 2019 EES French voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.10.1).

Table B.10.1: Relevant French 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 B.10.4). 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 differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 7 cases out of 7 full models perform better (see Table B.10.2).

Table B.10.2: 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 issues (see Table B.10.5) 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 differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 2 cases out of 6 full models perform better (see Table B.10.3).

Table B.10.3: 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 B.10.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>1113</b>	<b>1105</b>	<b>1111</b>	<b>1114</b>	<b>1101</b>	<b>1110</b>	<b>1102</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
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 &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.10.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics  
(Logistic regression models)

	<b>1113</b>	<b>1105</b>	<b>1111</b>	<b>1114</b>	<b>1101</b>	<b>1110</b>	<b>1102</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
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

## B.11 Germany

Synthetic variables have been estimated for all of German parties available in the original 2019 EES German voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.11.1).

Table B.11.1: Relevant german 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 B.11.4). 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 0.132 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 B.11.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_801	801	631.253	723.798	-92.544
stack_802	802	479.712	515.917	-36.205
stack_805	805	396.890	446.781	-49.891
stack_803	803	729.551	749.883	-20.332
stack_804	804	562.799	597.527	-34.728
stack_807	807	624.700	634.098	-9.398
stack_806	806	68.843	178.350	-109.507

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

- model 10: D6\_une

Nevertheless, model 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 0.07 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 B.11.3).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_801	801	783.323	844.663	-61.339
stack_802	802	591.363	602.235	-10.872
stack_805	805	371.471	373.555	-2.084
stack_803	803	850.034	850.477	-0.444
stack_804	804	374.707	384.835	-10.128
stack_807	807	592.655	593.786	-1.131
stack_806	806	123.144	111.226	11.918

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

	<b>801</b>	<b>802</b>	<b>805</b>	<b>803</b>	<b>804</b>	<b>807</b>	<b>806</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	-0.038 (0.024)	0.004 (0.022)	0.026 (0.021)	0.040 (0.025)	-0.006 (0.023)	-0.019 (0.024)	-0.016 (0.017)
D8_rec1	-0.039 (0.027)	0.022 (0.025)	-0.033 (0.024)	0.029 (0.029)	0.012 (0.026)	-0.022 (0.027)	0.037 (0.020)
D5_rec1	-0.004 (0.025)	-0.001 (0.023)	0.018 (0.022)	-0.060* (0.027)	-0.021 (0.024)	0.089*** (0.025)	0.031 (0.018)
EDU_rec2	-0.034 (0.042)	-0.029 (0.038)	-0.001 (0.037)	-0.009 (0.044)	-0.018 (0.040)	-0.063 (0.042)	-0.022 (0.031)
EDU_rec3	-0.003 (0.043)	-0.012 (0.039)	0.019 (0.038)	0.028 (0.045)	0.013 (0.041)	-0.052 (0.043)	0.029 (0.031)
D1_rec1	-0.026 (0.030)	0.145*** (0.028)	0.009 (0.027)	0.094** (0.032)	0.143*** (0.029)	0.019 (0.030)	0.095*** (0.022)
D7_rec1	0.091*** (0.026)	0.029 (0.024)	0.044 (0.023)	0.082** (0.028)	-0.074** (0.025)	-0.088*** (0.026)	-0.057** (0.019)
D7_rec2	0.181*** (0.038)	-0.009 (0.035)	0.159*** (0.033)	0.101* (0.040)	-0.162*** (0.036)	-0.071 (0.037)	-0.081** (0.027)
D6_une1	-0.207** (0.066)	-0.108 (0.060)	-0.110 (0.058)	-0.122 (0.071)	0.040 (0.064)	0.018 (0.066)	0.014 (0.049)
D4_age	0.002** (0.001)	0.002* (0.001)	0.0004 (0.001)	-0.001 (0.001)	-0.002* (0.001)	-0.001 (0.001)	-0.005*** (0.001)
D10_rec	0.044*** (0.006)	0.018** (0.006)	0.029*** (0.006)	0.012 (0.007)	-0.007 (0.006)	0.001 (0.006)	0.006 (0.005)
Constant	0.254*** (0.059)	0.249*** (0.054)	0.258*** (0.052)	0.425*** (0.063)	0.451*** (0.057)	0.354*** (0.059)	0.391*** (0.043)
N	866	865	862	867	863	868	854
R-squared	0.124	0.065	0.080	0.048	0.064	0.036	0.143
Adj. R-squared	0.113	0.053	0.068	0.035	0.052	0.023	0.132

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

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

	<b>801</b>	<b>802</b>	<b>805</b>	<b>803</b>	<b>804</b>	<b>807</b>	<b>806</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
D3_rec2	−0.462*	−0.152	0.178	0.315	0.352	−0.553*	0.528
	(0.188)	(0.226)	(0.308)	(0.178)	(0.307)	(0.230)	(0.674)
D8_rec1	−0.349	0.293	0.245	0.400	−0.180	−0.098	1.210
	(0.204)	(0.275)	(0.374)	(0.219)	(0.340)	(0.255)	(1.070)
D5_rec1	−0.058	−0.064	0.580	−0.192	0.044	0.386	0.273
	(0.197)	(0.240)	(0.361)	(0.185)	(0.316)	(0.245)	(0.706)
EDU_rec2	0.189	0.781	−0.138	0.025	−0.384	−0.096	−0.715
	(0.338)	(0.499)	(0.576)	(0.323)	(0.490)	(0.378)	(0.903)
EDU_rec3	0.156	0.778	−0.014	0.286	−0.030	−0.500	−1.026
	(0.344)	(0.503)	(0.576)	(0.327)	(0.503)	(0.401)	(0.983)
D1_rec1	−0.503*	0.902***	−0.372	0.040	0.866*	−0.246	−0.370
	(0.249)	(0.256)	(0.418)	(0.226)	(0.355)	(0.312)	(0.892)
D7_rec1	0.448*	0.321	0.623	0.284	−0.879**	−0.494*	−0.790
	(0.215)	(0.257)	(0.402)	(0.203)	(0.317)	(0.241)	(0.756)
D7_rec2	0.589*	0.084	1.276**	0.669*	−2.590*	−0.570	0.102
	(0.288)	(0.374)	(0.461)	(0.269)	(1.033)	(0.382)	(0.902)
D6_une1	−1.533	−0.878	−13.942	−0.351	1.162*	−0.083	1.054
	(1.035)	(1.038)	(716.924)	(0.561)	(0.551)	(0.640)	(1.166)
D4_age	0.023***	0.027***	0.018	−0.012*	0.010	0.009	−0.039
	(0.006)	(0.007)	(0.010)	(0.005)	(0.010)	(0.007)	(0.021)
D10_rec	0.293***	0.021	0.095	−0.048	−0.215*	−0.118	0.084
	(0.045)	(0.058)	(0.075)	(0.049)	(0.103)	(0.069)	(0.154)
Constant	−2.987***	−4.765***	−5.020***	−1.569***	−2.675***	−1.797**	−3.292*
	(0.500)	(0.694)	(0.879)	(0.449)	(0.754)	(0.568)	(1.605)
N	871	871	871	871	871	871	871
Log Likelihood	−379.662	−283.681	−173.736	−413.017	−175.353	−284.327	−49.572
AIC	783.323	591.363	371.471	850.034	374.707	592.655	123.144

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

## B.12 Greece

Synthetic variables have been estimated for the full set of Greek parties available in the original 2019 EES Greece voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.12.1).

Table B.12.1: Relevant Greece 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 B.12.7). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.015 for party 1204 (Panhellenic Socialist Movement/ Movement for Change) and a maximum of 0.081 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 B.12.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1201	1201	822.224	839.980	-17.757
stack_1202	1202	766.550	831.163	-64.614
stack_1203	1203	131.977	163.404	-31.427
stack_1204	1204	206.109	208.918	-2.809
stack_1205	1205	237.283	258.529	-21.246

On the contrary, two out of five logistic regression models (see Table B.12.8) 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 respondent with low education voted for party 1203 and only two respondents who were union members voted for party 1203. (See Tables B.12.5, B.12.6)

As a consequence, a constrained version of model 8 (namely, model 8b) without said variables was estimated and contrasted with the original full model (model 8a). Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model fits better than the full model) can be rejected (see Table B.12.3). Consequently, synthetic variables for respondents' vote choice for party 1203 have been predicted relying on the unconstrained model (model 8a).

Table B.12.3: Likelihood-ratio Test between model 8a (unconstrained) and model 8b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	851	282.583			
Unconstrained	848	270.891	3	11.69196	0.0085164

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 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 B.12.4).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1201	1201	824.145	828.3560	-4.21100
stack_1202	1202	932.433	944.2880	-11.85500
stack_1203	1203	294.891	294.6670	0.22400
stack_1203*	1203	300.583	294.6668	5.91624
stack_1204	1204	309.280	337.5330	-28.25300
stack_1205	1205	302.786	294.6670	8.11900

\* AIC value refers to model 8b (constrained).

Table B.12.5: 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 B.12.6: 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 B.12.7: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>1201</b>	<b>1202</b>	<b>1203</b>	<b>1204</b>	<b>1205</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
D3_rec2	0.089*** (0.026)	-0.038 (0.025)	-0.031 (0.018)	-0.019 (0.019)	0.057** (0.019)
D8_rec1	-0.025 (0.046)	0.081 (0.044)	0.003 (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)	0.012 (0.021)
EDU_rec2	-0.117 (0.068)	-0.090 (0.065)	0.133** (0.046)	-0.066 (0.048)	-0.072 (0.049)
EDU_rec3	-0.100 (0.065)	-0.104 (0.063)	0.076 (0.045)	-0.055 (0.046)	-0.021 (0.047)
D1_rec1	0.031 (0.044)	-0.030 (0.043)	-0.037 (0.030)	0.104*** (0.032)	0.049 (0.032)
D7_rec1	-0.054* (0.027)	0.114*** (0.026)	-0.040* (0.018)	0.033 (0.019)	-0.060** (0.020)
D7_rec2	-0.121* (0.052)	0.212*** (0.051)	0.024 (0.036)	-0.017 (0.037)	-0.084* (0.038)
D6_une1	-0.060 (0.039)	0.027 (0.038)	0.003 (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*** (0.007)	0.021*** (0.005)	0.004 (0.005)	-0.018*** (0.005)
Constant	0.530*** (0.079)	0.234** (0.077)	0.110* (0.054)	0.180** (0.056)	0.315*** (0.057)
N	898	900	899	886	896
R-squared	0.043	0.092	0.058	0.028	0.047
Adj. R-squared	0.031	0.081	0.046	0.015	0.035

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.12.8: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	<b>1201</b>	<b>1202</b>	<b>1203</b>	<b>1203</b>	<b>1204</b>	<b>1205</b>
	<b>Model 6</b>	<b>Model 7</b>	<b>Model 8a</b>	<b>Model 8b</b>	<b>Model 9</b>	<b>Model 10</b>
D3_rec2	0.133 (0.185)	0.002 (0.171)	-0.449 (0.372)	-0.382 (0.371)	-0.240 (0.354)	-0.055 (0.369)
D8_rec1	-0.014 (0.331)	0.384 (0.328)	0.134 (0.630)	0.141 (0.626)	-0.723 (0.528)	-0.613 (0.515)
D5_rec1	0.235 (0.210)	0.071 (0.192)	-0.113 (0.407)	-0.070 (0.408)	0.513 (0.442)	0.411 (0.424)
EDU_rec2	-0.513 (0.442)	-0.495 (0.408)	16.506 (1571.670)		0.050 (1.158)	-0.500 (0.893)
EDU_rec3	-0.601 (0.423)	-0.454 (0.389)	16.228 (1571.670)		0.039 (1.124)	-0.421 (0.850)
D1_rec1	0.243 (0.296)	-0.207 (0.286)	-16.574 (1154.167)		1.507*** (0.389)	0.466 (0.561)
D7_rec1	-0.061 (0.189)	0.426* (0.181)	-0.678 (0.368)	-0.723* (0.363)	1.425** (0.440)	-0.531 (0.370)
D7_rec2	-0.656 (0.411)	0.689* (0.314)	-1.319 (1.047)	-1.483 (1.040)	-14.887 (773.813)	-0.505 (0.772)
D6_une1	-0.824* (0.342)	0.176 (0.255)	-0.560 (0.631)	-0.399 (0.630)	0.239 (0.533)	0.621 (0.467)
D4_age	0.014 (0.007)	-0.002 (0.007)	0.004 (0.015)	0.008 (0.014)	0.033* (0.014)	-0.001 (0.015)
D10_rec	-0.161*** (0.048)	0.204*** (0.045)	0.158 (0.093)	0.145 (0.093)	0.150 (0.092)	-0.246** (0.093)
Constant	-1.131* (0.531)	-2.015*** (0.515)	-19.391 (1571.670)	-3.443*** (0.930)	-5.823*** (1.310)	-1.656 (0.975)
N	860	860	860	860	860	860
Log Likelihood	-400.072	-454.216	-135.446	-141.291	-142.640	-139.393
AIC	824.145	932.433	294.891	300.583	309.280	302.786

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.13 Hungary

Synthetic variables have been estimated for seven out of eight Hungarian parties available in the original 2019 EES Hungarian voter study selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.13.1).

Table B.13.1: Relevant Hungarian 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 B.13.4). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.021 for party 1308 (Momentum Movement) and a maximum of 0.11 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 B.13.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1301	1301	695.969	736.686	-40.717
stack_1302	1302	818.639	914.037	-95.399
stack_1303	1303	462.137	543.950	-81.813
stack_1304	1304	135.446	146.605	-11.158
stack_1306	1306	296.612	314.278	-17.666
stack_1307	1307	135.544	160.468	-24.924
stack_1308	1308	600.852	608.757	-7.905

On the contrary, three out of seven logistic regression models (see Table B.13.5) 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 differences between Akaike Information Criterion (AIC) values for

logistic full models and null models show that in three cases out of seven null models perform better than full ones (see Table B.13.3).

Table B.13.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1301	1301	711.843	766.824	-54.981
stack_1302	1302	869.347	949.018	-79.671
stack_1303	1303	457.605	455.166	2.439
stack_1304	1304	125.609	119.342	6.268
stack_1306	1306	287.679	293.324	-5.645
stack_1307	1307	221.046	227.216	-6.170
stack_1308	1308	514.295	508.228	6.067

Table B.13.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>1301</b>	<b>1302</b>	<b>1303</b>	<b>1304</b>	<b>1306</b>	<b>1307</b>	<b>1308</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.012 (0.024)	-0.004 (0.025)	-0.032 (0.021)	0.027 (0.017)	0.013 (0.019)	-0.043* (0.018)	0.005 (0.023)
D8_rec1	0.005 (0.029)	-0.020 (0.031)	-0.090*** (0.025)	-0.013 (0.021)	-0.004 (0.023)	0.019 (0.021)	0.073** (0.028)
D5_rec1	-0.002 (0.025)	0.066* (0.026)	-0.032 (0.022)	-0.027 (0.018)	-0.002 (0.020)	0.011 (0.018)	-0.031 (0.023)
EDU_rec2	-0.004 (0.042)	0.002 (0.045)	0.015 (0.037)	-0.0004 (0.031)	-0.020 (0.034)	-0.050 (0.032)	-0.041 (0.040)
EDU_rec3	-0.042 (0.043)	0.013 (0.045)	0.023 (0.037)	0.013 (0.031)	-0.008 (0.034)	-0.015 (0.032)	-0.034 (0.040)
D1_rec1	0.054 (0.037)	-0.016 (0.039)	0.076* (0.032)	0.057* (0.027)	0.081** (0.029)	0.093*** (0.027)	0.034 (0.035)
D7_rec1	-0.020 (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	0.012 (0.057)	0.113 (0.060)	0.001 (0.049)	-0.050 (0.042)	0.027 (0.045)	-0.034 (0.042)	0.016 (0.054)
D6_une1	-0.061 (0.063)	-0.019 (0.066)	-0.052 (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	-0.025*** (0.006)	0.065*** (0.007)	-0.008 (0.006)	-0.008 (0.005)	-0.019*** (0.005)	-0.003 (0.005)	-0.021*** (0.006)
Constant	0.195*** (0.054)	0.180** (0.057)	0.652*** (0.047)	0.370*** (0.039)	0.166*** (0.043)	0.333*** (0.040)	0.397*** (0.051)
N	911	916	918	910	915	880	906
R-squared	0.067	0.120	0.107	0.036	0.042	0.052	0.032
Adj. R-squared	0.055	0.110	0.096	0.024	0.031	0.040	0.021

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.13.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	<b>1301</b>	<b>1302</b>	<b>1303</b>	<b>1304</b>	<b>1306</b>	<b>1307</b>	<b>1308</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
D3_rec2	−0.122 (0.199)	−0.191 (0.173)	−0.438 (0.270)	1.182 (0.693)	−0.084 (0.363)	−1.416** (0.511)	−0.063 (0.248)
D8_rec1	0.122 (0.250)	−0.032 (0.211)	−0.805** (0.284)	0.899 (1.072)	0.968 (0.618)	−0.358 (0.500)	0.798* (0.389)
D5_rec1	−0.159 (0.203)	0.333 (0.184)	−0.184 (0.275)	0.487 (0.700)	0.859* (0.427)	0.271 (0.476)	−0.052 (0.255)
EDU_rec2	−0.008 (0.377)	0.048 (0.330)	0.669 (0.530)	−1.492 (1.455)	−0.627 (0.680)	−0.126 (0.892)	0.419 (0.514)
EDU_rec3	−0.239 (0.387)	0.134 (0.329)	0.704 (0.528)	0.667 (1.117)	−0.253 (0.673)	0.821 (0.823)	0.352 (0.514)
D1_rec1	0.476 (0.286)	−0.053 (0.256)	−0.331 (0.451)	0.324 (0.815)	−0.815 (0.746)	0.628 (0.535)	−0.309 (0.419)
D7_rec1	−0.068 (0.209)	0.261 (0.181)	−0.383 (0.292)	0.737 (0.673)	−0.720 (0.411)	−0.041 (0.425)	0.298 (0.263)
D7_rec2	−0.048 (0.490)	0.639 (0.372)	−0.331 (0.634)	−15.078 (1515.647)	0.021 (0.776)	−16.343 (1536.508)	0.947* (0.462)
D6_une1	−0.069 (0.566)	−0.281 (0.561)	−0.183 (0.657)	1.454 (1.160)	−15.489 (1105.602)	−16.521 (1806.943)	0.216 (0.637)
D4_age	0.048*** (0.007)	0.013** (0.005)	−0.017* (0.008)	−0.005 (0.019)	0.030** (0.012)	−0.022 (0.014)	0.001 (0.007)
D10_rec	−0.203** (0.063)	0.370*** (0.043)	−0.045 (0.077)	0.003 (0.172)	−0.191 (0.123)	−0.257 (0.155)	−0.157 (0.080)
Constant	−3.686*** (0.533)	−2.645*** (0.416)	−1.215* (0.594)	−6.460*** (1.731)	−5.125*** (1.070)	−2.051* (0.931)	−3.348*** (0.658)
N	844	844	844	844	844	844	844
Log Likelihood	−343.922	−422.674	−216.802	−50.805	−131.840	−98.523	−245.148
AIC	711.843	869.347	457.605	125.609	287.679	221.046	514.295

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.14 Ireland

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

Table B.14.1: 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 B.14.6). 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 full models perform better (see Table B.14.2).

Table B.14.2: 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 B.14.7) show inflated standard errors for one of the coefficients of interest:

- model 8: EDU\_rec;

Model 8 presents a problematic profile since its inflated standard error is affecting the constant term and are due to separation issues. In short, only one low educated respondent voted for party 1403 (see Tables B.14.5)

As a consequence, a constrained version of model 8 (namely, model 8b) without said variables was estimated and contrasted with the original full model (model 8a). Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model fits better than the full model) cannot be rejected (see Table B.14.3). Consequently, synthetic variables for respondents' vote choice for party 1403 have been predicted relying on the constrained model (model 8b).

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 (Familiy



Table B.14.3: 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

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 full models perform better. According to AIC values the related null model appears to have a better fit than model 8b (see Table B.14.4).

Table B.14.4: 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 B.14.5: 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 B.14.6: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>1402</b>	<b>1403</b>	<b>1401</b>	<b>1404</b>	<b>1405</b>	<b>1406</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>
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 B.14.7: Vote choice for a relevant party according to respondents' socio-demographic characteristics  
(Logistic regression models)

	<b>1402</b>	<b>1403</b>	<b>1403</b>	<b>1401</b>	<b>1404</b>	<b>1405</b>	<b>1406</b>
	<b>Model 7</b>	<b>Model 8a</b>	<b>Model 8b</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>
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

## B.15 Italy

Synthetic variables have been estimated for the full set of relevant parties available in the original 2019 EES Italian voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.15.1).

Table B.15.1: Relevant Italian parties

Dep. Var.	Party	Party name (eng)
stack_1501	1501	Democratic Party
stack_1502	1502	Go Italy
stack_1503	1503	Northern League
stack_1504	1504	Five Star Movement
stack_1505	1505	Italian Left
stack_1506	1506	More Europe (+Europa)
stack_1507	1507	Brothers of Italy - National Centre-right

Full OLS models converge and coefficients do not show any particular issues (see Table B.15.4). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.026 for party 1507 (Brothers of Italy - National Centre-right) and a maximum of 0.079 for party 1506 (More Europe (+Europa)). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show full models always perform better (see Table B.15.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1501	1501	604.084	635.702	-31.618
stack_1502	1502	379.529	426.389	-46.861
stack_1503	1503	875.306	890.751	-15.445
stack_1504	1504	680.820	708.829	-28.009
stack_1505	1505	208.266	268.839	-60.573
stack_1506	1506	271.014	333.051	-62.037
stack_1507	1507	539.212	552.821	-13.609

Also considering logistic regression models no anomalies were detected. (see Table B.15.5) In terms of model fit, adjusted McFadden's pseudo  $R^2$  values for the logistic full models vary between a minimum value of -0.032 for party 1507 (Brothers of Italy - National Centre-right) and a maximum of 0.005 for party 1501 (Democratic Party). The differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 5 cases out of 7 null models perform marginally better than full ones (see Table B.15.3).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1501	1501	790.955	796.676	-5.721
stack_1502	1502	323.098	320.684	2.414
stack_1503	1503	1013.665	1012.910	0.756
stack_1504	1504	795.498	796.676	-1.178
stack_1505	1505	203.427	200.042	3.384
stack_1506	1506	304.503	302.061	2.442
stack_1507	1507	322.427	314.532	7.895

\* AIC value refers to model 11b (constrained).

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

	<b>1501</b>	<b>1502</b>	<b>1503</b>	<b>1504</b>	<b>1505</b>	<b>1506</b>	<b>1507</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.020 (0.022)	-0.024 (0.020)	0.006 (0.026)	-0.022 (0.023)	0.055** (0.018)	0.067*** (0.019)	-0.017 (0.022)
D8_rec1	0.052 (0.032)	0.014 (0.028)	0.003 (0.037)	0.015 (0.034)	-0.023 (0.026)	-0.012 (0.028)	0.009 (0.031)
D5_rec1	0.007 (0.025)	-0.012 (0.022)	0.003 (0.029)	0.056* (0.026)	0.031 (0.020)	0.003 (0.021)	0.008 (0.024)
EDU_rec2	0.010 (0.039)	-0.020 (0.035)	-0.087 (0.045)	-0.064 (0.041)	-0.047 (0.032)	-0.048 (0.033)	0.028 (0.038)
EDU_rec3	0.066 (0.041)	-0.045 (0.036)	-0.189*** (0.047)	-0.074 (0.042)	0.017 (0.033)	0.010 (0.034)	-0.021 (0.039)
D1_rec1	0.182*** (0.030)	0.083** (0.027)	-0.002 (0.035)	0.009 (0.032)	0.148*** (0.024)	0.136*** (0.026)	0.027 (0.029)
D7_rec1	0.034 (0.025)	0.089*** (0.022)	0.005 (0.028)	-0.025 (0.026)	-0.018 (0.020)	0.037 (0.021)	0.060* (0.024)
D7_rec2	0.064 (0.040)	0.095** (0.035)	0.014 (0.047)	-0.147*** (0.042)	0.018 (0.032)	0.103** (0.034)	0.095* (0.039)
D4_age	0.0001 (0.001)	-0.002** (0.001)	-0.001 (0.001)	-0.004*** (0.001)	-0.002*** (0.001)	-0.003*** (0.001)	-0.0005 (0.001)
D10_rec	0.002 (0.005)	0.020*** (0.004)	0.021*** (0.006)	0.016** (0.005)	-0.009* (0.004)	0.0004 (0.004)	0.019*** (0.005)
Constant	0.177** (0.064)	0.272*** (0.056)	0.530*** (0.074)	0.577*** (0.067)	0.319*** (0.052)	0.335*** (0.054)	0.219*** (0.062)
N	902	903	904	904	896	872	899
R-squared	0.056	0.071	0.038	0.052	0.086	0.090	0.037
Adj. R-squared	0.045	0.061	0.028	0.041	0.076	0.079	0.026

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

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

	<b>1501</b>	<b>1502</b>	<b>1503</b>	<b>1504</b>	<b>1505</b>	<b>1506</b>	<b>1507</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
D3_rec2	0.050 (0.184)	-0.239 (0.336)	-0.228 (0.156)	-0.111 (0.184)	-0.337 (0.457)	0.161 (0.347)	-0.113 (0.336)
D8_rec1	0.613* (0.304)	1.094 (0.740)	0.087 (0.225)	-0.110 (0.257)	-0.586 (0.510)	-0.176 (0.469)	-0.374 (0.438)
D5_rec1	0.263 (0.210)	0.022 (0.369)	0.063 (0.173)	0.330 (0.209)	0.020 (0.486)	-0.660 (0.355)	0.303 (0.395)
EDU_rec2	0.147 (0.345)	-0.639 (0.540)	-0.548* (0.247)	0.515 (0.351)	-0.286 (0.688)	-0.387 (0.670)	0.662 (0.761)
EDU_rec3	0.504 (0.350)	-0.456 (0.545)	-0.857** (0.262)	0.439 (0.365)	-0.065 (0.718)	0.646 (0.640)	0.966 (0.770)
D1_rec1	0.286 (0.238)	0.204 (0.406)	-0.091 (0.210)	-0.214 (0.253)	1.031* (0.492)	-0.299 (0.507)	-1.007 (0.616)
D7_rec1	0.219 (0.210)	0.870* (0.418)	0.151 (0.172)	-0.292 (0.192)	-1.082* (0.515)	-0.152 (0.387)	0.132 (0.377)
D7_rec2	0.752* (0.301)	0.466 (0.638)	0.388 (0.269)	-1.563** (0.485)	-0.471 (0.788)	0.614 (0.527)	-0.013 (0.605)
D4_age	0.016** (0.006)	-0.015 (0.011)	0.004 (0.005)	-0.002 (0.006)	0.016 (0.015)	-0.008 (0.011)	0.010 (0.011)
D10_rec	-0.052 (0.040)	0.157* (0.073)	0.049 (0.034)	0.055 (0.040)	-0.202 (0.108)	-0.120 (0.079)	0.142 (0.073)
Constant	-3.572*** (0.581)	-3.875*** (1.056)	-0.893* (0.431)	-1.885*** (0.551)	-3.041* (1.196)	-2.118* (0.955)	-4.594*** (1.111)
N	873	873	873	873	873	873	873
Log Likelihood	-384.478	-150.549	-495.833	-386.749	-90.713	-141.251	-150.214
AIC	790.955	323.098	1013.665	795.498	203.427	304.503	322.427

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

## B.16 Latvia

Synthetic variables have been estimated for seven out of eighteen Latvian parties available in the original 2019 EES Latvian voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.16.1).

Table B.16.1: Relevant Latvian 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 B.16.15). 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 full models perform better (see Table B.16.2).

Table B.16.2: 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 B.16.16, ??) 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 models 8, 12, 13 and 14 presents a more problematic profile.

Models 8, 12, 13 and 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 B.16.9, B.16.10, B.16.11,

B.16.12). For party 1610 and 1604 no respondents with low education voted for them (see Tables B.16.13, B.16.14).

As a consequence, a constrained version of model 8, 12, 13 and 14 (namely, model 8b, 12b, 13b, 14b) without said variables was estimated and contrasted with the original full model (model 8a, 12a, 13a, 14a). 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 B.16.3). If just EDU\_rec is dropped,  $H_0$  cannot be rejected and the constant term is also not affected (see Table B.16.4). Thus, synthetic variables for respondents' vote choice for party 1611 have been predicted relying on the constrained model (model 8b).
- that for model 12  $H_0$  cannot be rejected (see Table B.16.5). 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 B.16.6). Consequently, synthetic variables for respondents' vote choice for party 1604 have been predicted relying on the unconstrained model.
- that for model 14  $H_0$  can be rejected at  $p < 0.001$  (see Table B.16.7). Consequently, synthetic variables for respondents' vote choice for party 1616 have been predicted relying on the unconstrained model.

Table B.16.3: 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 B.16.4: 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 B.16.5: 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 B.16.6: 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

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



Table B.16.7: 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

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 B.16.8).

Table B.16.8: 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*	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_1611	1611	485.9043	480.1108	5.793550
stack_1610*	1616	597.1950	625.7790	-28.584000

\* AIC value refers to model 8b and 12b (constrained).

Table B.16.9: 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 B.16.10: 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 B.16.11: 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 B.16.12: 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 B.16.13: 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 B.16.14: 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 B.16.15: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>1611</b>	<b>1608</b>	<b>1609</b>	<b>1605</b>	<b>1610</b>	<b>1604</b>	<b>1616</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
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 B.16.16: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	1611	1611	1608	1609	1605	1610	1610	1604	1604
	Model 8a	Model 8b	Model 9	Model 10	Model 11	Model 12a	Model 12b	Model 13	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)	-0.149 (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)	-0.279 (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)	-0.151 (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)	-0.198 (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)	-0.032 (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)	0.035 (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)	-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)	0.031*** (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)	0.0002 (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)	-18.454 (807.771)
N	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	-286.597
AIC	486.099	485.904	296.243	462.494	70.328	70.328	494.924	276.469	597.195

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.17 Lithuania

Synthetic variables have been estimated for the full set of Lithuanian parties available in the original 2019 EES Lithuania voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.17.1).

Table B.17.1: Relevant Lithuanian 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 B.17.12). 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 B.17.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1701	1701	596.205	636.971	-40.766
stack_1703	1703	474.026	466.964	7.062
stack_1706	1706	263.609	290.702	-27.093
stack_1705	1705	260.523	299.923	-39.400
stack_1704	1704	58.720	92.687	-33.967
stack_1707	1707	-195.821	-158.090	-37.731
stack_1702	1702	502.026	515.036	-13.009

On the contrary, three out of seven logistic regression models (see Table B.17.13) 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 issues. These inflated standard errors are due to separation issues which are explored below.

For model 10a, there is no respondent with low education voted for party 1706 (see Table B.17.7). For model 13a, again no respondent with low education and no respondent who is unemployed voted for party 1707 (see Tables B.17.8, B.17.10). Furthermore, only one respondent with high subjective social class voted for party

1707 (see Table B.17.9). Finally, for model 14a Table B.17.11 shows that no respondent with low education voted for party 1702.

As a consequence constrained versions of model 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 B.17.3, B.17.4, B.17.5). 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 B.17.3: Likelihood-ratio Test between model 10a (unconstrained) and model 10b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	803	269.3368			
Unconstrained	801	263.6719	2	5.664943	0.0588672

Table B.17.4: Likelihood-ratio Test between model 13a (unconstrained) and model 13b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	806	80.61689			
Unconstrained	801	72.03682	5	8.580075	0.1270321

Table B.17.5: Likelihood-ratio Test between model 14a (unconstrained) and model 14b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	803	472.2648			
Unconstrained	801	469.0902	2	3.174585	0.2044785

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 0.056 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 B.17.6).

Table B.17.6: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1701	1701	716.68400	761.3430	-44.660000
stack_1702	1702	493.09000	506.9030	-13.813000
stack_1702*	1702	492.26483	506.9028	-14.637938
stack_1703	1703	686.72700	682.5230	4.204000
stack_1704	1704	166.63600	167.1380	-0.502000
stack_1705	1705	313.75500	302.9360	10.819000
stack_1706	1706	287.67200	290.6480	-2.976000
stack_1706*	1706	289.33684	290.6479	-1.311111
stack_1707	1707	96.03700	100.9630	-4.926000
stack_1707*	1707	94.61689	100.9631	-6.346227

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

Table B.17.7: 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 B.17.8: 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 B.17.9: 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 B.17.10: 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 B.17.11: 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 B.17.12: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>1701</b>	<b>1703</b>	<b>1706</b>	<b>1705</b>	<b>1704</b>	<b>1707</b>	<b>1702</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	−0.012 (0.024)	0.030 (0.022)	−0.002 (0.020)	0.025 (0.020)	0.017 (0.018)	0.001 (0.015)	0.006 (0.022)
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	−0.120 (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	−0.054 (0.066)	−0.088 (0.062)	0.008 (0.056)	0.005 (0.055)	0.030 (0.049)	−0.002 (0.042)	−0.042 (0.063)
D1_rec1	0.024 (0.037)	0.072* (0.034)	0.080** (0.030)	0.122*** (0.030)	0.102*** (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	0.162*** (0.035)	−0.002 (0.033)	0.053 (0.029)	0.007 (0.029)	−0.00003 (0.026)	−0.015 (0.023)	−0.029 (0.034)
D6_une1	0.017 (0.061)	0.063 (0.056)	0.122* (0.050)	0.179*** (0.050)	0.094* (0.045)	0.059 (0.039)	0.134* (0.058)
D4_age	−0.001 (0.001)	−0.0003 (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)	0.006 (0.006)	−0.0003 (0.005)	0.004 (0.005)	0.001 (0.005)	0.007 (0.004)	0.007 (0.006)
Constant	0.403*** (0.074)	0.511*** (0.069)	0.422*** (0.062)	0.327*** (0.061)	0.258*** (0.055)	0.145** (0.047)	0.319*** (0.070)
N	887	888	881	888	884	879	887
R-squared	0.068	0.017	0.054	0.067	0.061	0.066	0.039
Adj. R-squared	0.057	0.004	0.042	0.055	0.050	0.054	0.027

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.17.13: 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	−0.318 (0.204)	0.444* (0.218)	−0.389 (0.381)	−0.450 (0.378)	0.490 (0.371)	0.202 (0.540)	0.341 (0.803)	0.168 (0.768)	0.283 (0.266)	0.279 (0.264)
D8_rec1	0.296 (0.299)	0.211 (0.301)	0.504 (0.622)	0.505 (0.620)	−0.075 (0.463)	−1.372* (0.547)	0.774 (1.183)	0.549 (1.105)	−0.999*** (0.281)	−1.011*** (0.281)
D5_rec1	0.241 (0.220)	0.240 (0.227)	0.111 (0.414)	0.172 (0.414)	−0.163 (0.364)	0.607 (0.616)	0.536 (0.912)	0.544 (0.855)	0.448 (0.292)	0.493 (0.290)
EDU_rec2	−0.787 (0.632)	−0.818 (0.570)	13.954 (729.702)		0.454 (1.114)	0.324 (1.200)	17.674 (4946.833)		14.498 (734.059)	
EDU_rec3	−0.415 (0.618)	−0.665 (0.564)	14.776 (729.702)		0.524 (1.112)	0.027 (1.201)	16.269 (4946.833)		14.208 (734.059)	
D1_rec1	−0.171 (0.314)	0.148 (0.319)	1.243** (0.416)	1.302** (0.411)	0.825 (0.452)	0.206 (0.715)	1.389 (0.800)	1.332 (0.746)	−0.664 (0.539)	−0.683 (0.538)
D7_rec1	0.405 (0.220)	−0.286 (0.228)	0.462 (0.381)	0.543 (0.377)	−0.472 (0.368)	−0.590 (0.617)	−0.050 (0.740)		0.056 (0.272)	−0.012 (0.267)
D7_rec2	0.849** (0.276)	0.272 (0.284)	−0.404 (0.665)	−0.206 (0.659)	−1.330 (0.758)	0.542 (0.676)	−17.224 (2320.377)		−0.219 (0.412)	−0.304 (0.404)
D6_une1	−14.348 (437.118)	−0.607 (0.754)	0.144 (1.067)	−0.002 (1.059)	0.851 (0.669)	0.345 (1.091)	−16.347 (5145.352)		0.523 (0.585)	0.620 (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	0.174** (0.054)	0.028 (0.056)	−0.194 (0.103)	−0.190 (0.102)	0.006 (0.097)	0.228 (0.152)	0.664** (0.231)	0.650** (0.225)	−0.022 (0.071)	−0.025 (0.070)
Constant	−3.289*** (0.699)	−2.337*** (0.649)	−17.947 (729.702)	−3.932*** (0.940)	−3.163** (1.205)	−1.421 (1.387)	−24.323 (4946.834)	−6.897*** (1.943)	−17.580 (734.059)	−3.256*** (0.619)
N	813	813	813	813	813	813	813	813	813	813
Log Likelihood	−346.342	−331.363	−131.836	−134.668	−144.877	−71.318	−36.018	−40.308	−234.545	−236.132
AIC	716.684	686.727	287.672	289.337	313.755	166.636	96.037	94.617	493.090	492.265

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.18 Luxembourg

Synthetic variables have been estimated for seven out of ten Luxembourgian parties available in the original 2019 EES Luxembourgian voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.18.1).

Table B.18.1: Relevant Luxembourgian 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 B.18.4). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.013 for party 1806 (Alternative Democratic Reform Party) and a maximum of 0.136 for party 1804 (The Greens). 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 B.18.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1801	1801	307.051	321.535	-14.484
stack_1802	1802	198.883	208.287	-9.404
stack_1803	1803	252.751	277.718	-24.967
stack_1804	1804	264.835	320.320	-55.485
stack_1805	1805	160.767	168.247	-7.480
stack_1806	1806	56.601	51.752	4.849
stack_1807	1807	28.790	45.389	-16.599

On the contrary, four out of seven logistic regression models (see Table B.18.5) show inflated standard errors for one of the coefficients of interest. In particular:

- model 8, 9, 10 and 12: D6\_une.

Nevertheless, the constant term and other regression coefficients of models 8, 9, 10 and 12 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 -0.074 for party 1805 (The Left) and a maximum of 0.022 for party 1801 (Christian Social People's Party). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 6 cases out of 7 null models perform better than full ones (see Table B.18.3).

Table B.18.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1801	1801	374.770	385.253	-10.483
stack_1802	1802	278.141	270.650	7.491
stack_1803	1803	433.856	426.431	7.425
stack_1804	1804	416.070	408.096	7.975
stack_1805	1805	200.446	188.620	11.825
stack_1806	1806	179.297	171.048	8.248
stack_1807	1807	155.919	152.574	3.345

Table B.18.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>1801</b>	<b>1802</b>	<b>1803</b>	<b>1804</b>	<b>1805</b>	<b>1806</b>	<b>1807</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.009 (0.032)	-0.009 (0.029)	0.009 (0.030)	0.056 (0.031)	0.006 (0.027)	-0.026 (0.024)	0.005 (0.024)
D8_rec1	-0.004 (0.032)	-0.028 (0.029)	0.022 (0.030)	-0.0002 (0.031)	-0.003 (0.028)	0.011 (0.025)	-0.016 (0.024)
D5_rec1	0.013 (0.036)	-0.029 (0.032)	-0.052 (0.034)	-0.033 (0.034)	-0.013 (0.030)	0.0003 (0.027)	-0.058* (0.026)
EDU_rec2	0.115 (0.059)	0.169** (0.053)	0.083 (0.056)	-0.041 (0.057)	-0.053 (0.051)	0.065 (0.046)	-0.087* (0.044)
EDU_rec3	0.110 (0.057)	0.099 (0.051)	0.077 (0.054)	0.033 (0.055)	0.012 (0.049)	0.020 (0.044)	-0.083* (0.042)
D1_rec1	0.005 (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)	0.097* (0.041)	0.173*** (0.043)	0.175*** (0.043)	-0.012 (0.039)	-0.033 (0.035)	0.031 (0.034)
D7_rec2	-0.026 (0.048)	0.154*** (0.043)	0.198*** (0.045)	0.219*** (0.046)	-0.010 (0.041)	-0.031 (0.037)	-0.012 (0.035)
D6_une1	-0.192 (0.114)	-0.012 (0.107)	-0.221* (0.107)	-0.166 (0.108)	0.098 (0.097)	0.215* (0.092)	0.172* (0.084)
D4_age	-0.0001 (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	0.053*** (0.010)	-0.001 (0.009)	0.003 (0.009)	-0.012 (0.009)	-0.015 (0.008)	0.015* (0.007)	-0.004 (0.007)
Constant	0.270*** (0.080)	0.307*** (0.072)	0.365*** (0.076)	0.531*** (0.077)	0.439*** (0.068)	0.183** (0.062)	0.426*** (0.059)
N	454	449	453	454	453	446	453
R-squared	0.077	0.068	0.098	0.157	0.063	0.038	0.082
Adj. R-squared	0.054	0.044	0.076	0.136	0.040	0.013	0.059

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.18.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics  
(Logistic regression models)

	<b>1801</b>	<b>1802</b>	<b>1803</b>	<b>1804</b>	<b>1805</b>	<b>1806</b>	<b>1807</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
D3_rec2	0.279 (0.281)	-0.020 (0.345)	-0.020 (0.254)	0.153 (0.261)	0.379 (0.435)	-0.587 (0.477)	0.259 (0.519)
D8_rec1	-0.203 (0.279)	0.160 (0.352)	0.084 (0.257)	0.053 (0.265)	0.204 (0.446)	-0.858 (0.474)	-0.643 (0.511)
D5_rec1	-0.250 (0.302)	0.137 (0.381)	0.340 (0.300)	-0.091 (0.289)	-0.354 (0.451)	0.202 (0.530)	-0.747 (0.524)
EDU_rec2	1.419* (0.674)	0.528 (0.603)	0.532 (0.588)	-0.412 (0.493)	-0.446 (0.755)	-0.067 (0.734)	-0.422 (0.701)
EDU_rec3	1.264 (0.670)	-0.401 (0.607)	0.622 (0.563)	-0.113 (0.450)	0.020 (0.688)	-0.550 (0.733)	-0.988 (0.688)
D1_rec1	0.157 (0.281)	0.593 (0.349)	-0.162 (0.258)	-0.088 (0.267)	0.449 (0.448)	0.399 (0.472)	0.357 (0.534)
D7_rec1	-0.687 (0.365)	-0.597 (0.479)	0.890* (0.448)	0.582 (0.418)	-0.895 (0.553)	0.106 (0.566)	-0.173 (0.570)
D7_rec2	-0.729 (0.387)	0.259 (0.462)	0.811 (0.462)	0.568 (0.435)	-0.774 (0.585)	-0.877 (0.723)	-1.473 (0.858)
D6_une1	-14.981 (901.653)	-14.425 (885.645)	-14.974 (884.461)	-0.115 (1.098)	-13.885 (863.380)	1.511 (1.157)	1.245 (1.229)
D4_age	0.020* (0.008)	-0.012 (0.011)	0.003 (0.008)	-0.015 (0.008)	0.0005 (0.013)	0.004 (0.015)	-0.013 (0.016)
D10_rec	0.232** (0.074)	0.067 (0.097)	0.014 (0.076)	-0.169 (0.090)	-0.244 (0.162)	-0.140 (0.163)	-0.151 (0.178)
Constant	-3.629*** (0.856)	-2.139* (0.840)	-3.116*** (0.771)	-1.027 (0.655)	-2.212* (0.999)	-2.220* (1.116)	-0.925 (1.028)
N	443	443	443	443	443	443	443
Log Likelihood	-175.385	-127.070	-204.928	-196.035	-88.223	-77.648	-65.959
AIC	374.770	278.141	433.856	416.070	200.446	179.297	155.919

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

## B.19 Malta

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

Table B.19.1: Relevant Maltese 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 B.19.19). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.058 for party 1901 (Labour Party) and a maximum of 0.105 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 B.19.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1901	1901	328.713	339.868	-11.155
stack_1902	1902	241.813	267.804	-25.991
stack_1903	1903	2.060	20.944	-18.884
stack_1904	1904	-86.223	-56.098	-30.124
stack_1905	1905	-59.754	-47.221	-12.532

On the contrary, three out of five logistic regression models (see Table B.19.20) 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.

The constant terms and other regression coefficients of models 8a, 9a and 10a 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 B.19.7, B.19.8, B.19.9, B.19.10, B.19.11).

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 B.19.12, B.19.13, B.19.14).

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 B.19.15, B.19.16, B.19.17, B.19.18).

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 full model (model 8a, 9a and 10a).

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 B.19.3). 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 B.19.4). 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 B.19.5). Consequently, synthetic variables for respondents' vote choice for party 1905 have been predicted relying on the constrained model (model 10b).

Table B.19.3: Likelihood-ratio Test between model 8a (unconstrained) and model 8b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	319	42.95925			
Unconstrained	312	28.50452	7	14.45473	0.0436599

Table B.19.4: Likelihood-ratio Test between model 9a (unconstrained) and model 9b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	316	54.49792			
Unconstrained	312	45.14544	4	9.352487	0.0528682

Table B.19.5: Likelihood-ratio Test between model 10a (unconstrained) and model 10b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	318	62.42784			
Unconstrained	312	53.36654	6	9.0613	0.1701599

In terms of model fit, adjusted McFadden's pseudo  $R^2$  values for the logistic full models vary between a minimum value of -0.157 for party 1904 (Democratic Party) and a maximum of 0.04 for party 1901 (Labour Party). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show 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 B.19.6).

Table B.19.6: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_1901	1901	429.65800	449.66400	-20.006000
stack_1902	1902	324.54300	337.57100	-13.028000
stack_1903	1903	52.50500	53.63500	-1.131000
stack_1904	1904	69.14500	61.75600	7.389000
stack_1904*	1904	70.49792	61.75601	8.741919
stack_1905	1905	77.36700	69.53500	7.831000
stack_1905*	1905	74.42784	69.53533	4.892508

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

Table B.19.7: 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 B.19.8: 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 B.19.9: 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 B.19.10: 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 B.19.11: 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 B.19.12: 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 B.19.13: 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 B.19.14: 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 B.19.15: 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 B.19.16: 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 B.19.17: 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 B.19.18: 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 B.19.19: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>1901</b>	<b>1902</b>	<b>1903</b>	<b>1904</b>	<b>1905</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
D3_rec2	0.009 (0.040)	0.017 (0.036)	0.048 (0.025)	0.031 (0.023)	0.023 (0.023)
D8_rec1	-0.054 (0.120)	0.122 (0.112)	0.069 (0.081)	0.106 (0.072)	0.081 (0.074)
D5_rec1	0.051 (0.046)	-0.061 (0.041)	-0.033 (0.029)	-0.036 (0.026)	-0.059* (0.027)
EDU_rec2	-0.099* (0.046)	0.010 (0.042)	0.029 (0.030)	0.010 (0.026)	0.037 (0.027)
EDU_rec3	-0.174** (0.058)	0.153** (0.052)	0.132*** (0.038)	0.071* (0.033)	-0.030 (0.035)
D1_rec1	0.086 (0.048)	-0.049 (0.042)	0.014 (0.030)	0.015 (0.027)	0.0004 (0.028)
D7_rec1	-0.145*** (0.042)	0.117** (0.038)	0.021 (0.027)	0.038 (0.024)	0.010 (0.025)
D7_rec2	-0.184* (0.075)	0.229*** (0.066)	0.046 (0.047)	0.078 (0.042)	0.001 (0.044)
D6_une1	-0.052 (0.086)	0.162* (0.080)	-0.051 (0.055)	-0.038 (0.049)	0.012 (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)	0.018* (0.007)	-0.0003 (0.005)	0.005 (0.005)	0.005 (0.005)
Constant	0.838*** (0.141)	0.115 (0.131)	0.144 (0.094)	0.103 (0.083)	0.136 (0.086)
N	366	363	368	368	367
R-squared	0.087	0.124	0.105	0.132	0.090
Adj. R-squared	0.058	0.096	0.077	0.105	0.062

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.19.20: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	<b>1901</b>	<b>1902</b>	<b>1903</b>	<b>1904</b>	<b>1904</b>	<b>1905</b>	<b>1905</b>
	<b>Model 6</b>	<b>Model 7</b>	<b>Model 8</b>	<b>Model 9a</b>	<b>Model 9b</b>	<b>Model 10a</b>	<b>Model 10b</b>
D3_rec2	−0.265 (0.242)	0.128 (0.295)	−2.373 (1.456)	−1.437 (1.153)	−1.496 (1.112)	−0.175 (0.825)	−0.225 (0.785)
D8_rec1	−1.157 (1.219)	0.029 (1.206)	16.044 (20639.260)	17.178 (13271.490)		16.553 (13818.120)	
D5_rec1	0.561 (0.293)	−0.151 (0.345)	2.365 (1.765)	−1.079 (0.980)	−1.159 (0.965)	−1.927* (0.956)	−1.718 (0.918)
EDU_rec2	−0.677* (0.283)	0.470 (0.375)	18.869 (3592.839)	0.952 (1.381)	1.005 (1.156)	0.757 (0.885)	
EDU_rec3	−0.958** (0.358)	0.950* (0.438)	20.630 (3592.839)	−0.537 (1.531)	0.248 (1.442)	−17.021 (3155.681)	
D1_rec1	0.581* (0.291)	−0.256 (0.367)	−19.465 (4241.033)	0.620 (0.965)	0.658 (0.921)	−0.199 (1.138)	−0.483 (1.111)
D7_rec1	−0.845*** (0.256)	1.164** (0.365)	1.069 (1.345)	17.402 (2518.866)		−1.467 (0.871)	
D7_rec2	−1.335** (0.452)	1.605** (0.504)	−18.873 (5741.919)	19.172 (2518.866)		−18.094 (4498.985)	
D6_une1	−0.594 (0.577)	1.004 (0.600)	−15.495 (9574.639)	−15.842 (6600.938)		−17.585 (6559.436)	
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	−0.006 (0.050)	0.061 (0.063)	−0.380 (0.259)	−0.022 (0.175)	−0.034 (0.169)	−0.031 (0.159)	−0.034 (0.146)
Constant	1.446 (1.321)	−4.111** (1.402)	−33.136 (20949.640)	−38.323 (13508.410)	−4.105** (1.528)	−18.828 (13818.120)	−2.818** (1.017)
N	324	324	324	324	324	324	324
Log Likelihood	−202.829	−150.271	−14.252	−22.573	−27.249	−26.683	−31.214
AIC	429.658	324.543	52.505	69.145	70.498	77.367	74.428

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.20 Netherlands

Synthetic variables have been estimated for nine of sixteen Dutch parties available in the original 2019 EES Dutch voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.20.1).

Table B.20.1: 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 issues (see Table B.20.4). 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 0.287 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 B.20.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2001	2001	454.279	531.738	-77.459
stack_2002	2002	548.978	581.994	-33.017
stack_2003	2003	217.757	350.169	-132.411
stack_2004	2004	330.443	390.042	-59.599
stack_2005	2005	473.891	525.482	-51.591
stack_2006	2006	335.561	364.542	-28.981
stack_2007	2007	429.023	448.610	-19.586
stack_2008	2008	40.047	315.802	-275.755
stack_2012	2012	625.283	658.327	-33.044

Full logit models converge and coefficients do not show any particular issues (see Table B.20.5).

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 0.431 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 B.20.3).

Table B.20.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2001	2001	481.305	489.018	-7.712
stack_2002	2002	357.133	353.172	3.962
stack_2003	2003	317.331	317.798	-0.467
stack_2004	2004	250.381	247.659	2.723
stack_2005	2005	364.861	364.576	0.285
stack_2006	2006	342.485	329.791	12.694
stack_2007	2007	636.889	643.259	-6.369
stack_2008	2008	165.732	293.155	-127.423
stack_2012	2012	620.365	639.394	-19.029

Table B.20.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2012</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>	<b>Model 8</b>	<b>Model 9</b>
D3_rec2	−0.073*** (0.022)	−0.096*** (0.023)	−0.034 (0.019)	−0.006 (0.020)	0.024 (0.022)	0.007 (0.020)	−0.019 (0.022)	−0.001 (0.017)	−0.103*** (0.024)
D8_rec1	−0.023 (0.024)	−0.040 (0.025)	−0.057** (0.021)	−0.014 (0.022)	0.039 (0.024)	0.050* (0.022)	0.027 (0.024)	−0.025 (0.019)	−0.045 (0.027)
D5_rec1	0.005 (0.023)	0.029 (0.024)	0.023 (0.020)	−0.029 (0.021)	−0.052* (0.023)	−0.025 (0.022)	−0.023 (0.023)	0.007 (0.018)	0.036 (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)	−0.060 (0.032)	0.022 (0.046)
EDU_rec3	0.003 (0.040)	0.0004 (0.042)	−0.009 (0.035)	0.023 (0.037)	−0.030 (0.040)	0.043 (0.037)	−0.041 (0.039)	−0.017 (0.031)	0.059 (0.044)
D1_rec1	0.011 (0.024)	0.068** (0.026)	0.031 (0.021)	0.057* (0.023)	0.056* (0.025)	0.076*** (0.023)	0.103*** (0.024)	0.028 (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)	−0.001 (0.020)	−0.050 (0.028)
D7_rec2	0.188*** (0.031)	−0.102** (0.033)	0.094*** (0.027)	0.078** (0.029)	−0.006 (0.032)	−0.127*** (0.029)	0.014 (0.031)	0.011 (0.025)	−0.100** (0.035)
D6_une1	−0.023 (0.049)	0.042 (0.052)	−0.039 (0.043)	−0.038 (0.046)	0.012 (0.050)	0.024 (0.046)	−0.019 (0.049)	−0.057 (0.039)	−0.084 (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	0.003 (0.005)	−0.009 (0.006)	0.035*** (0.005)	−0.005 (0.005)	0.006 (0.005)	0.004 (0.005)	−0.003 (0.005)	0.069*** (0.004)	−0.015** (0.006)
Constant	0.463*** (0.054)	0.525*** (0.057)	0.476*** (0.047)	0.524*** (0.051)	0.554*** (0.055)	0.393*** (0.051)	0.465*** (0.054)	0.292*** (0.043)	0.555*** (0.061)
N	852	852	850	851	850	850	851	849	842
R-squared	0.110	0.063	0.166	0.091	0.083	0.058	0.048	0.296	0.063
Adj. R-squared	0.099	0.050	0.155	0.080	0.071	0.046	0.035	0.287	0.051

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.20.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2012</b>
	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>	<b>Model 15</b>	<b>Model 16</b>	<b>Model 17</b>	<b>Model 18</b>
D3_rec2	-0.134 (0.261)	-0.995** (0.343)	-0.545 (0.350)	-0.189 (0.400)	0.400 (0.316)	0.008 (0.328)	0.017 (0.216)	1.727*** (0.495)	-0.830*** (0.225)
D8_rec1	0.234 (0.291)	-0.239 (0.335)	-0.564 (0.346)	0.311 (0.473)	0.816 (0.421)	0.179 (0.368)	0.092 (0.234)	-0.234 (0.491)	-0.329 (0.227)
D5_rec1	-0.325 (0.269)	-0.024 (0.334)	0.049 (0.368)	-0.318 (0.417)	-0.316 (0.322)	-0.147 (0.340)	0.146 (0.231)	0.313 (0.541)	0.396 (0.240)
EDU_rec2	0.469 (0.590)	-0.524 (0.536)	-1.713** (0.553)	-0.811 (0.875)	-0.970 (0.542)	0.107 (0.657)	-0.166 (0.432)	0.090 (0.788)	0.135 (0.452)
EDU_rec3	0.459 (0.568)	-0.358 (0.509)	-0.965* (0.474)	0.671 (0.698)	-0.129 (0.461)	0.294 (0.642)	0.103 (0.416)	-0.604 (0.791)	0.100 (0.441)
D1_rec1	-0.180 (0.304)	0.388 (0.331)	-0.024 (0.374)	0.420 (0.416)	-0.038 (0.353)	0.363 (0.356)	0.558* (0.230)	0.288 (0.486)	-0.358 (0.258)
D7_rec1	1.195** (0.408)	-0.649 (0.355)	0.515 (0.426)	0.201 (0.518)	0.116 (0.371)	-0.083 (0.353)	0.320 (0.263)	-0.706 (0.538)	0.260 (0.255)
D7_rec2	1.860*** (0.435)	-0.742 (0.451)	0.392 (0.501)	0.627 (0.547)	0.243 (0.435)	-1.049 (0.590)	0.507 (0.311)	-0.196 (0.606)	-0.171 (0.332)
D6_une1	0.055 (0.635)	0.124 (0.642)	0.850 (0.654)	-0.174 (1.059)	0.245 (0.643)	0.251 (0.636)	-0.189 (0.547)	-0.584 (1.733)	-0.655 (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	-0.029 (0.065)	-0.045 (0.078)	0.158* (0.071)	-0.040 (0.097)	-0.055 (0.081)	-0.052 (0.087)	-0.113 (0.058)	0.981*** (0.140)	-0.230** (0.071)
Constant	-4.160*** (0.760)	-1.264 (0.689)	-2.555*** (0.737)	-2.741** (0.948)	-2.422*** (0.731)	-3.947*** (0.913)	-3.678*** (0.611)	-8.086*** (1.320)	-1.619** (0.575)
N	842	842	842	842	842	842	842	842	842
Log Likelihood	-228.653	-166.567	-146.665	-113.191	-170.430	-159.243	-306.445	-70.866	-298.182
AIC	481.305	357.133	317.331	250.381	364.861	342.485	636.889	165.732	620.365

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05



## B.21 Poland

Synthetic variables have been estimated for five out of six Polish parties available in the original 2019 EES Poland voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.21.1).

Table B.21.1: Relevant Polish 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 B.21.8). 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 0.125 for party 2104 (Law and Justice). 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 B.21.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2104	2104	833.338	943.422	-110.085
stack_2106	2106	437.048	502.658	-65.610
stack_2102	2102	469.635	555.309	-85.674
stack_2105	2105	193.751	222.690	-28.939
stack_2103	2103	112.730	127.620	-14.890

On the contrary, one out of the five logistic regression models (see Table B.21.9) show 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 its 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 respondent who is unemployed or of high subjective social status voted for party 2105. Only one respondent with low education voted for party 2105. (See tables B.21.5, B.21.6, B.21.7)

As a consequence, a constrained version of model 9 (namely, model 9b) without said variables was estimated and contrasted with the original full model (model 9a). Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model fits better than the full model) cannot be rejected (see Table B.21.3). Consequently, synthetic variables for respondents' vote choice for party 2105 have been predicted relying on the constrained model (model 9b).

In terms of model fit, adjusted McFadden's pseudo  $R^2$  values for the logistic full models vary between a

Table B.21.3: Likelihood-ratio Test between model 9a (unconstrained) and model 9b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	901	165.5611			
Unconstrained	896	155.4471	5	10.11397	0.0720696

minimum value of -0.062 for party 2105 (Poland Together) and a maximum of 0.071 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 B.21.4).

Table B.21.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2102	2102	544.1240	548.0700	-3.946000
stack_2103	2103	1020.6860	1082.1110	-61.424000
stack_2104	2104	946.7780	1020.9980	-74.219000
stack_2105	2105	179.4470	170.9330	8.514000
stack_2105*	2105	179.5611	170.9328	8.628321
stack_2106	2106	477.0260	480.2080	-3.182000

\* AIC value refers to model 9b (constrained).

Table B.21.5: 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 B.21.6: 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 B.21.7: 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 B.21.8: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>2104</b>	<b>2106</b>	<b>2102</b>	<b>2105</b>	<b>2103</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
D3_rec2	−0.050 (0.026)	−0.003 (0.021)	0.095*** (0.021)	0.054** (0.018)	0.024 (0.017)
D8_rec1	0.038 (0.035)	−0.015 (0.028)	−0.008 (0.029)	0.021 (0.025)	0.002 (0.023)
D5_rec1	0.039 (0.030)	0.041 (0.024)	0.064* (0.025)	0.074*** (0.021)	0.029 (0.020)
EDU_rec2	−0.034 (0.065)	0.027 (0.052)	0.047 (0.054)	0.009 (0.047)	0.018 (0.043)
EDU_rec3	−0.001 (0.061)	0.047 (0.049)	0.034 (0.050)	−0.004 (0.043)	0.007 (0.040)
D1_rec1	0.010 (0.034)	−0.013 (0.028)	0.030 (0.028)	0.012 (0.024)	0.047* (0.023)
D7_rec1	−0.037 (0.029)	−0.006 (0.023)	−0.027 (0.024)	−0.045* (0.020)	0.00005 (0.019)
D7_rec2	0.005 (0.041)	−0.032 (0.033)	−0.045 (0.034)	−0.046 (0.029)	0.015 (0.027)
D6_une1	0.008 (0.075)	0.043 (0.061)	−0.005 (0.063)	0.007 (0.055)	0.022 (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	0.060*** (0.005)	0.017*** (0.004)	−0.041*** (0.005)	−0.017*** (0.004)	−0.018*** (0.004)
Constant	0.203** (0.071)	0.473*** (0.058)	0.438*** (0.059)	0.352*** (0.051)	0.308*** (0.048)
N	905	900	889	884	907
R-squared	0.136	0.093	0.114	0.056	0.040
Adj. R-squared	0.125	0.082	0.103	0.044	0.028

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.21.9: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	<b>2104</b>	<b>2106</b>	<b>2102</b>	<b>2105</b>	<b>2105</b>	<b>2103</b>
	<b>Model 6</b>	<b>Model 7</b>	<b>Model 8</b>	<b>Model 9a</b>	<b>Model 9b</b>	<b>Model 10</b>
D3_rec2	−0.168 (0.166)	−0.066 (0.261)	0.396 (0.245)	0.250 (0.503)	0.128 (0.496)	−0.248 (0.159)
D8_rec1	0.056 (0.216)	0.284 (0.384)	−0.052 (0.338)	1.126 (1.047)	1.111 (1.040)	0.305 (0.230)
D5_rec1	0.561** (0.209)	−0.304 (0.296)	0.177 (0.279)	0.105 (0.595)	0.155 (0.586)	−0.189 (0.182)
EDU_rec2	0.087 (0.451)	0.583 (0.708)	0.246 (0.685)	16.045 (2361.013)		0.216 (0.453)
EDU_rec3	0.226 (0.422)	1.037 (0.664)	0.185 (0.652)	16.329 (2361.013)		0.301 (0.428)
D1_rec1	0.070 (0.209)	0.339 (0.309)	−0.184 (0.361)	0.641 (0.570)	0.706 (0.559)	−0.090 (0.219)
D7_rec1	−0.087 (0.187)	−0.083 (0.281)	0.038 (0.261)	−0.632 (0.501)		0.434* (0.181)
D7_rec2	0.218 (0.253)	−0.641 (0.482)	−0.456 (0.429)	−17.149 (1491.045)		0.630* (0.249)
D6_une1	0.015 (0.499)	0.567 (0.581)	0.601 (0.580)	−16.565 (3253.938)		−0.988 (0.635)
D4_age	0.003 (0.005)	−0.034*** (0.009)	0.010 (0.008)	−0.004 (0.017)	−0.0004 (0.016)	0.032*** (0.005)
D10_rec	0.317*** (0.039)	0.022 (0.057)	−0.213*** (0.053)	−0.007 (0.108)	−0.026 (0.106)	−0.134*** (0.033)
Constant	−3.074*** (0.508)	−1.988** (0.766)	−2.611*** (0.757)	−20.769 (2361.013)	−5.193*** (1.407)	−2.566*** (0.504)
N	908	908	908	908	908	908
Log Likelihood	−461.389	−226.513	−260.062	−77.724	−82.781	−498.343
AIC	946.778	477.026	544.124	179.447	179.561	1020.686

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.22 Portugal

Synthetic variables have been estimated for six out of thirteen Portuguese parties available in the original 2019 EES Portuguese voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.10.1).

Table B.22.1: Relevant Portuguese parties

Dep. Var.	Party	Party name (eng)
stack_2202	2202	Social Democratic Party
stack_2204	2204	Social Democratic Center-Popular Party
stack_2201	2201	Socialist Party
stack_2203	2203	Unified Democratic Coalition
stack_2206	2206	Left Bloc
stack_2208	2208	Party for Animals and Nature

Full OLS models converge and coefficients do not show any particular issues (see Table B.22.4). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.009 for party 2203 (Unified Democratic Coalition) and a maximum of 0.087 for party 2202 (Social Democratic Party). Moreover, the differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 4 cases out of 6 full models perform better (see Table B.22.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2202	2202	482.135	553.585	-71.451
stack_2204	2204	343.262	402.717	-59.455
stack_2201	2201	608.395	624.614	-16.219
stack_2203	2203	369.656	366.563	3.093
stack_2206	2206	546.537	546.208	0.328
stack_2208	2208	483.690	550.687	-66.998

Also the full Logit models converge and coefficients do not show any particular issues (see Table B.22.5). In terms of model fit, adjusted McFadden's pseudo  $R^2$  values for the logistic full models vary between a minimum value of -0.052 for party 2203 (Unified Democratic Coalition) and a maximum of 0.032 for party 2208 (Party for Animals and Nature). Moreover, the differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 4 cases out of 6 full models perform better (see Table B.22.3).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2202	2202	556.232	573.650	-17.419
stack_2204	2204	283.912	291.392	-7.480
stack_2201	2201	847.996	873.875	-25.879
stack_2203	2203	290.764	278.322	12.442
stack_2206	2206	598.693	582.534	16.159
stack_2208	2208	461.538	478.821	-17.283

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

	<b>2202</b>	<b>2204</b>	<b>2201</b>	<b>2203</b>	<b>2206</b>	<b>2208</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>
D3_rec2	-0.035 (0.021)	-0.011 (0.020)	-0.017 (0.023)	-0.017 (0.020)	-0.002 (0.022)	0.040 (0.021)
D8_rec1	-0.004 (0.030)	0.004 (0.027)	0.036 (0.032)	0.0002 (0.028)	-0.015 (0.031)	0.008 (0.030)
D5_rec1	-0.022 (0.022)	-0.028 (0.021)	-0.020 (0.024)	0.011 (0.021)	0.012 (0.023)	0.004 (0.022)
EDU_rec2	-0.019 (0.039)	-0.040 (0.036)	-0.053 (0.041)	-0.040 (0.036)	0.011 (0.040)	0.017 (0.039)
EDU_rec3	0.054 (0.037)	0.017 (0.035)	-0.043 (0.040)	-0.022 (0.035)	0.008 (0.038)	0.036 (0.037)
D1_rec1	0.006 (0.029)	-0.004 (0.026)	0.051 (0.031)	0.089** (0.027)	0.084** (0.030)	0.006 (0.029)
D7_rec1	0.064** (0.022)	0.033 (0.021)	0.069** (0.024)	-0.008 (0.021)	0.034 (0.023)	-0.001 (0.022)
D7_rec2	0.146*** (0.040)	0.122** (0.038)	-0.065 (0.043)	-0.012 (0.038)	-0.021 (0.042)	0.021 (0.040)
D6_une1	0.015 (0.039)	0.052 (0.036)	0.049 (0.041)	-0.018 (0.037)	0.077 (0.040)	-0.034 (0.039)
D4_age	-0.002** (0.001)	-0.002** (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.006*** (0.001)
D10_rec	0.035*** (0.005)	0.032*** (0.005)	0.022*** (0.005)	-0.002 (0.005)	-0.011* (0.005)	-0.007 (0.005)
Constant	0.357*** (0.052)	0.299*** (0.048)	0.466*** (0.056)	0.359*** (0.049)	0.429*** (0.054)	0.615*** (0.052)
N	908	907	908	899	911	906
R-squared	0.098	0.086	0.041	0.021	0.024	0.094
Adj. R-squared	0.087	0.075	0.029	0.009	0.012	0.082

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

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

	<b>2202</b>	<b>2204</b>	<b>2201</b>	<b>2203</b>	<b>2206</b>	<b>2208</b>
	<b>Model 7</b>	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>
D3_rec2	−0.469 (0.242)	−0.095 (0.367)	0.009 (0.180)	0.228 (0.374)	0.068 (0.229)	0.336 (0.267)
D8_rec1	−0.121 (0.329)	−0.050 (0.510)	0.119 (0.259)	−0.179 (0.504)	0.070 (0.330)	−0.095 (0.368)
D5_rec1	0.172 (0.259)	−0.205 (0.375)	0.247 (0.193)	0.116 (0.390)	0.005 (0.240)	0.274 (0.284)
EDU_rec2	−0.373 (0.453)	−0.264 (0.708)	0.265 (0.331)	0.590 (0.783)	0.119 (0.422)	0.180 (0.512)
EDU_rec3	0.300 (0.417)	0.133 (0.650)	0.009 (0.328)	0.478 (0.771)	0.030 (0.412)	0.282 (0.493)
D1_rec1	0.369 (0.295)	−2.025 (1.036)	0.277 (0.234)	0.034 (0.504)	0.340 (0.292)	−0.096 (0.358)
D7_rec1	0.294 (0.254)	0.308 (0.419)	0.218 (0.187)	−0.414 (0.412)	0.170 (0.239)	0.288 (0.284)
D7_rec2	0.352 (0.403)	1.544** (0.505)	−0.429 (0.390)	0.464 (0.587)	−0.126 (0.464)	0.950* (0.415)
D6_une1	−0.702 (0.609)	0.557 (0.570)	−0.575 (0.394)	0.061 (0.627)	0.459 (0.366)	−1.157 (0.737)
D4_age	0.015* (0.008)	0.007 (0.011)	0.024*** (0.006)	0.018 (0.012)	0.011 (0.007)	−0.036*** (0.010)
D10_rec	0.186*** (0.051)	0.251** (0.080)	0.132*** (0.039)	−0.203* (0.101)	−0.028 (0.053)	−0.216** (0.073)
Constant	−3.498*** (0.615)	−4.270*** (0.920)	−3.341*** (0.487)	−4.224*** (1.049)	−2.970*** (0.591)	−1.286* (0.639)
N	899	899	899	899	899	899
Log Likelihood	−266.116	−129.956	−411.998	−133.382	−287.346	−218.769
AIC	556.232	283.912	847.996	290.764	598.693	461.538

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



## B.23 Romania

Synthetic variables have been estimated for seven out of eight Romanian parties available in the original 2019 EES Romanian voter study selected according to the criteria stated in the EES 2019 SDM codebook ( for the relevant parties see Table B.23.1).

Table B.23.1: Relevant Romanian 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 B.23.7). 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 4 cases out of 6 full models perform better (see Table B.23.2).

Table B.23.2: 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 B.23.8) show 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. Its inflated standard errors are due to separation issues. In short, no respondent with low education and in unemployment voted for party 2307 (see Tables B.23.5, B.23.6).

As a consequence, a constrained version of model 12 (namely, model 12b) without said variables was estimated and contrasted with the original full model (model 12a). Likelihood-ratio test results show that  $H_0$  (namely, that the constrained model fits better than the full model) cannot be rejected (see Table B.23.3). Consequently, synthetic variables for respondents' vote choice for party 2307 have been predicted relying on the constrained model (model 12b).

Table B.23.3: Likelihood-ratio Test between model 12a (unconstrained) and model 12b (constrained)

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

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 differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 4 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 B.23.4).

Table B.23.4: 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 B.23.5: 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 B.23.6: 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 B.23.7: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>2301</b>	<b>2303</b>	<b>2305</b>	<b>2306</b>	<b>2307</b>	<b>2308</b>	<b>2302</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
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 &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.23.8: Vote choice for a relevant party according to respondents' socio-demographic characteristics  
(Logistic regression models)

	<b>2301</b>	<b>2303</b>	<b>2305</b>	<b>2306</b>	<b>2307</b>	<b>2307</b>	<b>2308</b>	<b>2302</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12a</b>	<b>Model 12b</b>	<b>Model 13</b>	<b>Model 14</b>
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

## B.24 Slovakia

Synthetic variables have been estimated for nine out of ten 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 relevant parties see Table B.24.1).

Table B.24.1: Relevant Slovakian 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 B.24.8). 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 0.141 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 B.24.2).

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

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2510	2510	122.988	249.895	-126.907
stack_2501	2501	603.763	604.122	-0.359
stack_2509	2509	337.752	363.837	-26.085
stack_2503	2503	616.661	633.097	-16.436
stack_2505	2505	404.605	403.405	1.200
stack_2506	2506	370.421	373.616	-3.195
stack_2508	2508	615.166	627.328	-12.162
stack_2504	2504	217.881	223.280	-5.399
stack_2507	2507	-159.866	-157.311	-2.555

On the contrary, two out of nine logistic regression models (see Table B.24.9) 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 respondent 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 [B.24.5](#), [B.24.6](#), [B.24.7](#))

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 [B.24.3](#)). Consequently, synthetic variables for respondents' vote choice for party 2507 have been predicted relying on the constrained model (model 18b).

Table B.24.3: Likelihood-ratio Test between model 18a (unconstrained) and model 18b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	888	98.52036			
Unconstrained	884	92.23932	4	6.281031	0.1791207

In terms of model fit, adjusted McFadden's pseudo  $R^2$  values for the logistic full models vary between a minimum value of -0.059 for party 2507 (Bridge) and a maximum of 0.1 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 [B.24.4](#)).

Table B.24.4: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2501	2501	500.2010	488.3540	11.848000
stack_2503	2503	481.8520	498.2260	-16.374000
stack_2504	2504	247.7260	237.3100	10.416000
stack_2505	2505	415.8300	404.5320	11.298000
stack_2506	2506	286.6800	278.1040	8.576000
stack_2507	2507	116.2390	111.7950	4.444000
stack_2507*	2507	114.5204	111.7951	2.725274
stack_2508	2508	668.4200	673.2700	-4.850000
stack_2509	2509	325.4510	310.2900	15.161000
stack_2510	2510	299.7850	335.0130	-35.228000

\* AIC value refers to model 18b (constrained).

Table B.24.5: 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 B.24.6: 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 B.24.7: 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 B.24.8: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>2510</b>	<b>2501</b>	<b>2509</b>	<b>2503</b>	<b>2505</b>	<b>2506</b>	<b>2508</b>	<b>2504</b>	<b>2507</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>	<b>Model 8</b>	<b>Model 9</b>
D3_rec2	−0.023 (0.017)	−0.017 (0.023)	0.057** (0.020)	−0.008 (0.023)	−0.010 (0.020)	0.004 (0.020)	0.020 (0.023)	−0.027 (0.018)	−0.012 (0.015)
D8_rec1	−0.002 (0.018)	−0.032 (0.024)	−0.013 (0.020)	−0.009 (0.024)	0.0001 (0.021)	−0.007 (0.021)	0.020 (0.024)	−0.015 (0.019)	−0.031* (0.016)
D5_rec1	−0.002 (0.018)	0.014 (0.024)	0.010 (0.021)	0.038 (0.024)	−0.015 (0.021)	−0.009 (0.021)	0.017 (0.024)	0.008 (0.019)	0.001 (0.016)
EDU_rec2	0.009 (0.037)	0.033 (0.048)	0.028 (0.041)	−0.092 (0.048)	0.009 (0.043)	−0.022 (0.042)	−0.098* (0.049)	−0.064 (0.039)	−0.040 (0.031)
EDU_rec3	0.015 (0.037)	−0.020 (0.048)	−0.012 (0.042)	−0.097* (0.049)	0.034 (0.043)	−0.009 (0.042)	−0.062 (0.049)	−0.096* (0.039)	−0.021 (0.032)
D1_rec1	0.006 (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	0.007 (0.019)	−0.051* (0.025)	−0.005 (0.022)	0.023 (0.025)	0.048* (0.022)	0.014 (0.022)	0.072** (0.026)	0.027 (0.020)	0.015 (0.016)
D7_rec2	0.007 (0.029)	−0.079* (0.038)	−0.076* (0.032)	−0.038 (0.038)	0.046 (0.034)	−0.010 (0.033)	0.102** (0.038)	−0.004 (0.030)	0.006 (0.025)
D6_une1	0.048 (0.038)	0.044 (0.050)	0.070 (0.043)	−0.001 (0.050)	−0.047 (0.045)	0.035 (0.044)	−0.089 (0.052)	−0.003 (0.040)	−0.032 (0.033)
D4_age	0.00002 (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* (0.001)	0.001 (0.0005)
D10_rec	0.043*** (0.004)	−0.003 (0.005)	−0.001 (0.004)	0.003 (0.005)	−0.003 (0.004)	0.007 (0.004)	−0.005 (0.005)	0.006 (0.004)	0.009** (0.003)
Constant	0.132** (0.041)	0.383*** (0.054)	0.429*** (0.047)	0.157** (0.054)	0.371*** (0.048)	0.411*** (0.048)	0.432*** (0.056)	0.241*** (0.044)	0.141*** (0.036)
N	904	906	906	907	906	904	891	905	901
R-squared	0.152	0.024	0.052	0.041	0.023	0.027	0.038	0.030	0.027
Adj. R-squared	0.141	0.012	0.040	0.030	0.011	0.015	0.026	0.018	0.015

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05



Table B.24.9: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

model	2510 10	2501 11	2509 12	2503 13	2505 14	2506 15	2508 16	2504 17	2507 18a	2507 18b
D3_rec2	−0.219 (0.344)	−0.158 (0.256)	0.336 (0.345)	−0.212 (0.260)	0.033 (0.289)	−0.495 (0.374)	0.071 (0.209)	−0.397 (0.413)	0.633 (0.712)	0.699 (0.711)
D8_rec1	−0.217 (0.346)	−0.072 (0.269)	0.073 (0.364)	0.437 (0.292)	−0.0001 (0.309)	−0.176 (0.379)	0.467* (0.236)	0.803 (0.511)	−1.565* (0.712)	−1.513* (0.705)
D5_rec1	−0.171 (0.359)	0.188 (0.274)	−0.046 (0.356)	−0.162 (0.270)	−0.452 (0.297)	−0.212 (0.387)	0.212 (0.227)	−0.048 (0.426)	−0.002 (0.715)	0.114 (0.714)
EDU_rec2	0.052 (0.717)	−0.256 (0.546)	−0.094 (0.694)	−0.162 (0.662)	−0.208 (0.612)	−0.331 (0.723)	−1.032* (0.405)	−0.610 (0.851)	16.902 (3243.229)	
EDU_rec3	0.372 (0.716)	−0.216 (0.552)	−0.207 (0.711)	−0.550 (0.685)	0.213 (0.607)	−0.160 (0.726)	−0.998* (0.411)	−0.653 (0.876)	16.615 (3243.229)	
D1_rec1	−0.193 (0.473)	−0.417 (0.393)	0.382 (0.418)	0.171 (0.342)	0.352 (0.359)	−0.796 (0.620)	0.254 (0.264)	0.283 (0.517)	−17.225 (2191.015)	
D7_rec1	−0.638 (0.382)	−0.352 (0.274)	−0.387 (0.363)	0.269 (0.282)	0.189 (0.334)	−0.334 (0.420)	0.615* (0.247)	0.115 (0.431)	−0.624 (0.784)	−0.614 (0.782)
D7_rec2	0.073 (0.495)	−0.479 (0.450)	−0.721 (0.658)	0.298 (0.451)	0.450 (0.458)	0.468 (0.527)	0.570 (0.354)	−1.227 (1.075)	1.255 (0.900)	1.042 (0.818)
D6_une1	−0.439 (0.783)	0.926* (0.425)	−0.005 (0.759)	0.143 (0.633)	−0.403 (0.750)	−15.376 (913.004)	−0.953 (0.737)	−0.198 (1.061)	−17.201 (3833.733)	
D4_age	0.006 (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	0.495*** (0.080)	−0.054 (0.054)	−0.126 (0.078)	0.076 (0.050)	−0.119 (0.064)	0.117 (0.071)	−0.035 (0.043)	0.079 (0.078)	0.059 (0.131)	0.054 (0.129)
Constant	−4.704*** (0.899)	−2.082*** (0.615)	−2.654*** (0.798)	−5.075*** (0.777)	−2.761*** (0.688)	−3.138*** (0.829)	−2.796*** (0.486)	−4.836*** (1.035)	−21.546 (3243.229)	−5.535*** (1.408)
N	896	896	896	896	896	896	896	896	896	896
Log Likelihood	−137.892	−238.101	−150.726	−228.926	−195.915	−131.340	−322.210	−111.863	−46.120	−49.260
AIC	299.785	500.201	325.451	481.852	415.830	286.680	668.420	247.726	116.239	114.520

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.25 Slovenia

Synthetic variables have been estimated for the full set of Slovene parties available in the original 2019 EES Slovene voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.25.1).

Table B.25.1: Relevant Slovene 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 B.25.10). 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 differences between Akaike Information Criterion (AIC) values for full OLS models and null models show that in 8 cases out of 9 full models perform better (see Table B.25.2).

Table B.25.2: 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 B.25.11, ??) 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's constant term and other regression coefficients are not affected by said inflated standard errors, whereas models 14a and 17a present a more problematic profile.

Model 14's 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 B.25.7, B.25.8). In model 17a, no respondents with low education voted for party 2408 (see Table B.25.9).

As a consequence, constrained versions of model 14 and 17 (namely, models 14b, 17b) without said variables were estimated and contrasted with the original full model (models 14a, 17a). 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 B.25.3). However, if just EDU\_rec is dropped  $H_0$  cannot be rejected. (See Table B.25.4). For model 17  $H_0$  cannot be rejected (see Table B.25.5). Consequently, synthetic variables for respondents' vote choice for party 2405 have been predicted relying on a constrained model, only dropping EDU\_rec (model 14b). Regarding model 17, synthetic variables for respondents' vote choice for party 2408 have been predicted relying on the constrained model (model 17b).

Table B.25.3: Likelihood-ratio Test between model 14a (unconstrained) and model 14 (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 B.25.4: Likelihood-ratio Test between model 14a (unconstrained) and model 14b (constrained)

Model	Resid. Df	Resid. Dev	Df	Deviance	Pr(>Chi)
Constrained	849	282.3458			
Unconstrained	847	276.8023	2	5.543542	0.0625511

Table B.25.5: 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 differences between Akaike Information Criterion (AIC) values for logistic full models and null models show that in 5 cases out of 9 full models perform better. According to AIC values the related null models don't appear to have a better fit than model 14b and 17b (see Table B.25.6).

Table B.25.6: 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 B.25.7: 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 B.25.8: 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 B.25.9: 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 B.25.10: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>2401</b>	<b>2402</b>	<b>2403</b>	<b>2404</b>	<b>2405</b>	<b>2406</b>	<b>2407</b>	<b>2408</b>	<b>2409</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>	<b>Model 8</b>	<b>Model 9</b>
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 &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.25.11: 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 &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.26 Spain

Synthetic variables have been estimated for seven of fifteen Spanish parties available in the original 2019 EES Spanish voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.26.1).

Table B.26.1: Relevant Spanish 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

Full OLS models converge and coefficients do not show any particular issues (see Table B.26.4). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.033 for party 2601 (Spanish Socialist Workers' Party) and a maximum of 0.151 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 B.26.2).

Table B.26.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2601	2601	705.870	725.668	-19.798
stack_2602	2602	557.069	694.177	-137.108
stack_2603	2603	594.433	689.794	-95.361
stack_2604	2604	555.534	615.298	-59.764
stack_2605	2605	406.763	515.855	-109.092
stack_2606	2606	295.035	327.931	-32.896
stack_2609	2609	225.770	262.243	-36.474

On the contrary, one out of seven logistic regression models (see Table B.26.5) show 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 -0.086 for party 2609 (Commitment to Europe) and a maximum of 0.085 for party 2602 (Popular 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 B.26.3).

Table B.26.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2601	2601	1034.103	1023.898	10.205
stack_2602	2602	661.246	724.588	-63.343
stack_2603	2603	642.191	671.944	-29.752
stack_2604	2604	702.135	691.187	10.948
stack_2605	2605	411.134	414.884	-3.750
stack_2606	2606	244.572	250.879	-6.307
stack_2609	2609	88.819	83.795	5.024

Table B.26.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>2601</b>	<b>2602</b>	<b>2603</b>	<b>2604</b>	<b>2605</b>	<b>2606</b>	<b>2609</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.050*	-0.022	0.020	0.011	-0.081***	-0.024	-0.006
	(0.024)	(0.022)	(0.023)	(0.022)	(0.020)	(0.019)	(0.019)
D8_rec1	0.043	-0.054	0.031	0.006	-0.076**	0.032	0.027
	(0.033)	(0.031)	(0.032)	(0.031)	(0.028)	(0.027)	(0.026)
D5_rec1	-0.012	-0.010	0.008	0.004	0.009	0.019	0.010
	(0.026)	(0.024)	(0.025)	(0.024)	(0.022)	(0.021)	(0.021)
EDU_rec2	0.061	0.013	-0.047	0.007	-0.016	-0.031	-0.042
	(0.047)	(0.043)	(0.045)	(0.043)	(0.040)	(0.037)	(0.037)
EDU_rec3	0.055	0.049	-0.091*	0.045	0.033	-0.097**	-0.071*
	(0.044)	(0.040)	(0.041)	(0.040)	(0.037)	(0.035)	(0.035)
D1_rec1	0.082**	-0.016	0.136***	0.004	0.039	0.128***	0.150***
	(0.031)	(0.029)	(0.029)	(0.029)	(0.026)	(0.025)	(0.024)
D7_rec1	-0.016	0.086***	-0.035	0.037	0.024	-0.024	-0.023
	(0.026)	(0.024)	(0.025)	(0.024)	(0.022)	(0.021)	(0.021)
D7_rec2	-0.011	0.128***	-0.068	0.125***	0.091**	-0.013	-0.007
	(0.040)	(0.037)	(0.038)	(0.037)	(0.034)	(0.032)	(0.032)
D6_une1	-0.093*	0.036	-0.017	-0.026	0.079*	-0.025	-0.025
	(0.041)	(0.038)	(0.039)	(0.038)	(0.035)	(0.033)	(0.033)
D4_age	-0.003***	0.0004	-0.004***	-0.002*	-0.0005	-0.001	-0.001*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
D10_rec	-0.013*	0.057***	-0.027***	0.036***	0.042***	-0.005	-0.002
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)
Constant	0.537***	0.188**	0.629***	0.318***	0.207***	0.268***	0.298***
	(0.063)	(0.058)	(0.060)	(0.058)	(0.054)	(0.051)	(0.051)
N	905	905	901	905	904	893	865
R-squared	0.045	0.161	0.122	0.086	0.135	0.060	0.065
Adj. R-squared	0.033	0.151	0.111	0.075	0.124	0.048	0.053

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05



Table B.26.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics  
(Logistic regression models)

	<b>2601</b>	<b>2602</b>	<b>2603</b>	<b>2604</b>	<b>2605</b>	<b>2606</b>	<b>2609</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
D3_rec2	0.232 (0.157)	-0.198 (0.211)	-0.229 (0.213)	0.234 (0.205)	-0.732* (0.302)	-0.277 (0.407)	0.332 (0.806)
D8_rec1	0.073 (0.219)	-0.879*** (0.259)	0.740* (0.345)	0.067 (0.292)	-0.296 (0.390)	0.211 (0.566)	-0.125 (1.124)
D5_rec1	0.047 (0.170)	0.064 (0.237)	-0.031 (0.227)	-0.068 (0.222)	-0.080 (0.330)	0.425 (0.456)	0.327 (0.886)
EDU_rec2	0.268 (0.318)	-0.016 (0.452)	-0.420 (0.376)	0.406 (0.480)	1.314 (1.059)	-0.117 (0.613)	-1.577 (1.492)
EDU_rec3	0.296 (0.297)	0.257 (0.417)	-0.397 (0.343)	0.766 (0.448)	1.655 (1.031)	-1.251* (0.624)	-0.850 (1.164)
D1_rec1	0.339 (0.194)	-0.713* (0.322)	0.592* (0.244)	-0.315 (0.281)	-0.549 (0.411)	0.681 (0.482)	1.190 (0.818)
D7_rec1	-0.061 (0.170)	0.817** (0.261)	-0.573* (0.225)	-0.144 (0.223)	0.008 (0.333)	0.234 (0.445)	-0.522 (0.950)
D7_rec2	-0.136 (0.263)	1.119*** (0.334)	-0.779* (0.394)	-0.111 (0.333)	0.387 (0.428)	0.423 (0.704)	1.169 (0.990)
D6_une1	-0.638* (0.301)	0.135 (0.363)	-0.100 (0.360)	-0.501 (0.394)	0.311 (0.468)	0.374 (0.657)	0.870 (1.193)
D4_age	-0.0003 (0.005)	0.011 (0.007)	-0.011 (0.007)	0.0002 (0.006)	-0.005 (0.009)	0.032* (0.013)	0.030 (0.026)
D10_rec	-0.036 (0.036)	0.269*** (0.043)	-0.281*** (0.064)	0.058 (0.044)	0.188** (0.059)	-0.405** (0.154)	-17.167 (2163.353)
Constant	-1.412*** (0.426)	-2.907*** (0.596)	-0.999 (0.536)	-2.592*** (0.609)	-3.775** (1.152)	-4.647*** (1.118)	-5.436* (2.200)
N	891	891	891	891	891	891	891
Log Likelihood	-505.051	-318.623	-309.096	-339.068	-193.567	-110.286	-32.410
AIC	1034.103	661.246	642.191	702.135	411.134	244.572	88.819

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

## B.27 Sweden

Synthetic variables have been estimated for the full set of Swedish parties available in the original 2019 EES Swedish voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.27.1).

Table B.27.1: Relevant Swedish 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 B.27.4). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.02 for party 2702 (Social Democratic Labour Party) and a maximum of 0.103 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 B.27.2).

Table B.27.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2702	2702	736.830	742.960	-6.131
stack_2705	2705	583.583	623.368	-39.785
stack_2707	2707	397.673	479.613	-81.940
stack_2704	2704	221.126	263.305	-42.179
stack_2703	2703	216.840	266.672	-49.831
stack_2708	2708	836.810	856.252	-19.442
stack_2706	2706	470.258	502.935	-32.677
stack_2701	2701	542.761	577.778	-35.018

On the contrary, one out of eight logistic regression models (see Table B.27.5) show 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 error 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 -0.041 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 B.27.3).

Table B.27.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2702	2702	806.614	820.036	-13.422
stack_2705	2705	501.736	522.644	-20.909
stack_2707	2707	360.001	359.457	0.544
stack_2704	2704	256.021	247.996	8.025
stack_2703	2703	299.075	299.837	-0.762
stack_2708	2708	736.057	735.017	1.040
stack_2706	2706	371.163	370.795	0.368
stack_2701	2701	419.663	424.960	-5.297

Table B.27.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>2702</b>	<b>2705</b>	<b>2707</b>	<b>2704</b>	<b>2703</b>	<b>2708</b>	<b>2706</b>	<b>2701</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>	<b>Model 8</b>
D3_rec2	0.017 (0.026)	-0.028 (0.024)	0.090*** (0.021)	0.018 (0.019)	0.042* (0.019)	-0.091** (0.027)	-0.019 (0.022)	0.056* (0.023)
D8_rec1	0.042 (0.033)	0.026 (0.030)	0.019 (0.027)	0.040 (0.025)	0.021 (0.024)	-0.047 (0.035)	0.027 (0.028)	-0.003 (0.030)
D5_rec1	-0.017 (0.027)	-0.001 (0.025)	-0.052* (0.022)	-0.026 (0.020)	-0.027 (0.020)	0.035 (0.028)	0.007 (0.023)	-0.054* (0.024)
EDU_rec2	0.026 (0.050)	-0.063 (0.046)	0.034 (0.041)	0.031 (0.037)	-0.003 (0.037)	-0.041 (0.053)	-0.038 (0.043)	0.049 (0.045)
EDU_rec3	-0.004 (0.049)	-0.045 (0.045)	0.063 (0.040)	0.061 (0.036)	0.031 (0.036)	-0.112* (0.052)	-0.025 (0.042)	0.075 (0.044)
D1_rec1	0.068* (0.027)	-0.043 (0.025)	0.034 (0.022)	0.017 (0.020)	0.024 (0.020)	-0.015 (0.029)	-0.038 (0.023)	0.064** (0.024)
D7_rec1	-0.039 (0.028)	0.121*** (0.026)	0.031 (0.023)	0.080*** (0.021)	0.065** (0.021)	0.016 (0.030)	0.094*** (0.024)	-0.089*** (0.025)
D7_rec2	-0.097* (0.040)	0.227*** (0.036)	0.011 (0.032)	0.120*** (0.029)	0.068* (0.029)	0.013 (0.042)	0.118*** (0.034)	-0.134*** (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)	-0.007 (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	0.012 (0.007)	0.005 (0.006)	0.014* (0.006)	0.012* (0.005)	0.019*** (0.005)	-0.003 (0.007)	0.029*** (0.006)	-0.003 (0.006)
Constant	0.454*** (0.066)	0.433*** (0.061)	0.397*** (0.054)	0.275*** (0.049)	0.297*** (0.049)	0.427*** (0.070)	0.248*** (0.057)	0.383*** (0.059)
N	854	852	852	849	853	852	851	850
R-squared	0.032	0.070	0.115	0.073	0.081	0.047	0.062	0.065
Adj. R-squared	0.020	0.058	0.103	0.061	0.069	0.035	0.050	0.053

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.27.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics (Logistic regression models)

	<b>2702</b>	<b>2705</b>	<b>2707</b>	<b>2704</b>	<b>2703</b>	<b>2708</b>	<b>2706</b>	<b>2701</b>
	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>	<b>Model 15</b>	<b>Model 16</b>
D3_rec2	−0.065 (0.184)	−0.641* (0.270)	0.845** (0.325)	−0.122 (0.404)	0.008 (0.351)	−0.290 (0.200)	−0.126 (0.318)	0.205 (0.281)
D8_rec1	0.347 (0.251)	0.250 (0.337)	−0.175 (0.396)	0.369 (0.556)	−0.228 (0.442)	−0.283 (0.233)	−0.103 (0.378)	0.207 (0.382)
D5_rec1	0.061 (0.190)	0.512 (0.269)	0.146 (0.330)	−0.259 (0.404)	−0.818* (0.368)	0.135 (0.205)	0.059 (0.320)	−0.359 (0.291)
EDU_rec2	0.704 (0.463)	0.457 (0.648)	−0.227 (0.548)	0.850 (1.075)	−0.555 (0.654)	−0.095 (0.367)	−0.545 (0.616)	0.677 (0.769)
EDU_rec3	0.612 (0.454)	0.762 (0.625)	−0.034 (0.537)	0.823 (1.057)	−0.124 (0.607)	−0.340 (0.358)	−0.235 (0.569)	0.974 (0.755)
D1_rec1	0.747*** (0.203)	−0.364 (0.257)	−0.324 (0.325)	−0.576 (0.411)	1.232** (0.444)	−0.197 (0.201)	−0.123 (0.321)	0.596 (0.309)
D7_rec1	−0.095 (0.198)	0.640* (0.313)	0.074 (0.347)	1.020 (0.531)	0.995* (0.425)	−0.102 (0.212)	−0.161 (0.345)	−1.043*** (0.307)
D7_rec2	−0.212 (0.286)	1.033** (0.361)	0.314 (0.463)	1.302* (0.614)	0.157 (0.703)	−0.374 (0.322)	0.078 (0.447)	−1.320* (0.547)
D6_une1	−0.990 (0.541)	−14.798 (529.544)	−1.183 (1.034)	−0.325 (1.058)	0.349 (0.649)	0.742* (0.346)	−0.964 (1.039)	−0.458 (0.630)
D4_age	0.015** (0.005)	0.008 (0.007)	−0.029** (0.010)	0.012 (0.012)	0.0003 (0.011)	0.012* (0.006)	0.028** (0.009)	0.003 (0.009)
D10_rec	0.070 (0.046)	−0.010 (0.065)	0.026 (0.075)	−0.129 (0.124)	0.063 (0.087)	−0.067 (0.056)	0.173* (0.069)	−0.149 (0.089)
Constant	−3.545*** (0.580)	−3.836*** (0.798)	−1.812* (0.717)	−5.244*** (1.322)	−3.889*** (0.913)	−1.535** (0.495)	−3.938*** (0.824)	−3.314*** (0.910)
N	847	847	847	847	847	847	847	847
Log Likelihood	−391.307	−238.868	−168.000	−116.010	−137.538	−356.029	−173.582	−197.832
AIC	806.614	501.736	360.001	256.021	299.075	736.057	371.163	419.663

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

## B.28 United Kingdom

Synthetic variables have been estimated for seven out of fourteen British (UK) parties available in the original 2019 EES British (UK) voter study and selected according to the criteria stated in the EES 2019 SDM codebook (for the relevant parties see Table B.28.1).

Table B.28.1: Relevant British (UK) 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 B.28.4). In terms of model fit, the adjusted coefficient of determination ( $R^2$ ) values vary between a minimum value of 0.033 for party 2807 (The Brexit Party) and a maximum of 0.225 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 B.28.2).

Table B.28.2: Akaike Information Criterion values for OLS full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2801	2801	608.974	701.857	-92.883
stack_2802	2802	511.047	692.047	-180.999
stack_2803	2803	501.942	556.253	-54.311
stack_2804	2804	358.272	446.949	-88.678
stack_2805	2805	40.646	246.372	-205.726
stack_2806	2806	284.626	351.711	-67.085
stack_2807	2807	738.940	756.590	-17.650

On the contrary, two out of seven logistic regression models (see Table B.28.5) 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, the constant terms and other regression coefficients of models 8 and 12 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 -0.083 for party 2806 (United Kingdom Independence Party) and a maximum of 0.054 for party 2807 (The Brexit 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 B.28.3).

Table B.28.3: Akaike Information Criterion values for logistic full and null models

Dep. Var.	Party	Full Mod.	Null Mod.	Diff. (Full-Null)
stack_2801	2801	463.434	475.051	-11.617
stack_2802	2802	611.773	640.123	-28.350
stack_2803	2803	682.822	690.427	-7.605
stack_2804	2804	336.476	333.022	3.455
stack_2805	2805	223.256	214.772	8.485
stack_2806	2806	155.407	145.559	9.848
stack_2807	2807	828.182	877.704	-49.522

Table B.28.4: Propensity to vote for a relevant party according to respondents' socio-demographic characteristics (OLS regression models)

	<b>2801</b>	<b>2802</b>	<b>2803</b>	<b>2804</b>	<b>2805</b>	<b>2806</b>	<b>2807</b>
	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
D3_rec2	0.011 (0.023)	0.007 (0.022)	0.007 (0.022)	0.032 (0.020)	0.011 (0.017)	0.004 (0.019)	-0.023 (0.025)
D8_rec1	-0.039 (0.027)	0.044 (0.026)	-0.024 (0.026)	0.003 (0.024)	-0.041* (0.020)	-0.014 (0.023)	-0.005 (0.030)
D5_rec1	0.036 (0.025)	-0.024 (0.024)	-0.003 (0.024)	-0.028 (0.022)	0.037* (0.019)	0.040 (0.021)	0.061* (0.028)
EDU_rec2	0.006 (0.040)	-0.044 (0.038)	-0.043 (0.038)	-0.0001 (0.035)	-0.003 (0.029)	0.066* (0.033)	0.024 (0.044)
EDU_rec3	-0.057 (0.043)	0.043 (0.040)	0.053 (0.040)	0.074* (0.037)	0.024 (0.031)	-0.020 (0.035)	-0.095* (0.046)
D1_rec1	0.008 (0.030)	0.141*** (0.028)	0.069* (0.028)	0.065* (0.026)	0.126*** (0.022)	0.074** (0.025)	0.043 (0.033)
D7_rec1	0.157*** (0.025)	-0.097*** (0.024)	0.070** (0.024)	-0.019 (0.022)	0.027 (0.019)	0.025 (0.021)	0.008 (0.028)
D7_rec2	0.307*** (0.047)	-0.142** (0.045)	0.078 (0.044)	-0.041 (0.041)	0.037 (0.034)	0.025 (0.039)	-0.017 (0.051)
D6_une1	-0.037 (0.047)	0.041 (0.045)	-0.040 (0.045)	-0.053 (0.041)	-0.031 (0.035)	0.052 (0.040)	0.038 (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	0.018** (0.006)	0.010 (0.005)	0.008 (0.005)	0.007 (0.005)	0.025*** (0.004)	0.027*** (0.005)	0.022*** (0.006)
Constant	0.213*** (0.060)	0.681*** (0.057)	0.491*** (0.057)	0.563*** (0.052)	0.297*** (0.045)	0.205*** (0.050)	0.258*** (0.066)
N	871	869	869	865	852	861	858
R-squared	0.124	0.208	0.084	0.120	0.235	0.098	0.045
Adj. R-squared	0.112	0.198	0.072	0.109	0.225	0.087	0.033

\*\*\*p &lt; .001; \*\*p &lt; .01; \*p &lt; .05

Table B.28.5: Vote choice for a relevant party according to respondents' socio-demographic characteristics  
(Logistic regression models)

	<b>2801</b>	<b>2802</b>	<b>2803</b>	<b>2804</b>	<b>2805</b>	<b>2806</b>	<b>2807</b>
	<b>Model 8</b>	<b>Model 9</b>	<b>Model 10</b>	<b>Model 11</b>	<b>Model 12</b>	<b>Model 13</b>	<b>Model 14</b>
D3_rec2	0.504 (0.268)	-0.251 (0.219)	-0.229 (0.204)	0.210 (0.329)	-0.102 (0.429)	-0.273 (0.554)	-0.410* (0.179)
D8_rec1	-0.044 (0.296)	0.271 (0.266)	-0.121 (0.230)	0.241 (0.408)	-0.670 (0.444)	-0.297 (0.575)	0.189 (0.209)
D5_rec1	-0.212 (0.282)	-0.189 (0.239)	-0.132 (0.220)	-0.507 (0.345)	-0.008 (0.483)	0.600 (0.699)	0.349 (0.197)
EDU_rec2	0.476 (0.502)	0.231 (0.423)	-0.467 (0.335)	0.944 (0.780)	-0.186 (0.796)	0.453 (1.087)	-0.043 (0.292)
EDU_rec3	0.652 (0.521)	0.398 (0.434)	0.170 (0.342)	1.364 (0.781)	0.465 (0.802)	-0.390 (1.168)	-0.520 (0.327)
D1_rec1	-0.043 (0.347)	0.654** (0.250)	0.023 (0.260)	0.365 (0.386)	1.047* (0.470)	0.540 (0.668)	-0.457 (0.259)
D7_rec1	0.191 (0.294)	-0.535* (0.249)	0.478* (0.217)	-0.110 (0.368)	-0.091 (0.449)	1.148 (0.643)	0.030 (0.195)
D7_rec2	1.265** (0.404)	-1.224* (0.552)	0.148 (0.403)	0.253 (0.584)	-15.172 (805.417)	1.352 (0.915)	-0.064 (0.389)
D6_une1	-15.862 (798.462)	0.077 (0.386)	-1.357 (0.742)	-1.696 (1.041)	-0.276 (1.083)	0.895 (1.164)	0.504 (0.360)
D4_age	0.020* (0.008)	-0.027*** (0.007)	0.010 (0.006)	-0.025* (0.010)	0.003 (0.014)	0.014 (0.018)	0.034*** (0.006)
D10_rec	0.060 (0.062)	0.063 (0.050)	0.006 (0.049)	-0.134 (0.091)	-0.088 (0.107)	0.193 (0.114)	-0.025 (0.048)
Constant	-4.323*** (0.748)	-1.112* (0.563)	-2.100*** (0.523)	-2.772** (0.939)	-3.430** (1.163)	-6.330*** (1.699)	-3.025*** (0.510)
N	875	875	875	875	875	875	875
Log Likelihood	-219.717	-293.886	-329.411	-156.238	-99.628	-65.704	-402.091
AIC	463.434	611.773	682.822	336.476	223.256	155.407	828.182

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



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