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Analysis of the 2021 Bundestag elections. 1/4. Representativeness of the parties and the Bundestag

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Analysis of the 2021 Bundestag Elections. 1/4. Representativeness of the Parties and the Bundestag

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Abstract

This is the first out of four papers devoted to the 2021 German federal elections continuing our analysis of the 2009, 2013 and 2017 Bundestag elections by the methods of the mathematical theory of democracy. This one estimates the policy representation ability of the 39 parties that participated in the 2021 elections and the Bundestag. For this purpose, the positions of the parties on 38 topical issues are compared with the results of recent public opinion polls. Then the parties' indices of popularity (the average percentage of the population represented) and universality (frequency in representing a majority) are constructed. Assuming that the Bundestag's position on the 38 issues is determined by the Bundestag majority, the Bundestag's indices of popularity and universality are estimated as well. The main conclusion is that the representativeness of the Bundestag parties and the Bundestag (before coalition-formation) has significantly increased since 2017. In particular, the election winner, the SPD, is now ranked 4 instead of 22 in 2017, having the mean index (popularity + universality) / 2 = 65% instead of 52 % in 2017. The Bundestag's mean index is now equal to 61% instead of former 40%. As for the ruling 'Traffic light coalition', SPD+GRÜNE+FDP, its compatibility is as low as 45% and the representativeness is not the best either.

Keywords: Policy representation, representative democracy, direct democracy, elections, coalitions.

JEL Classification: D71

Contents

1 Introduction

This is the first out of four papers devoted to the 2021 German federal elections, continuing our analysis of the 2009, 2013 and 2017 Bundestag elections by the methods of the mathematical theory of democracy [Tangian 2014, 2017a, 2020]. The structure of the paper follows [Tangian 2017b], from which we quote for the reader's convenience with no special reference.

The historical motivation for the actual approach is caused by the fact that the late 18th century founding debate on political representation focused primarily on two questions: *Who should be represented?*, i.e. who is entitled to vote (males or also females, with which civil and property status, etc.) and *Who can be a representative?* (sons of the constituency or all trusted citizens, taxpayers of a certain level, etc.) [Manin 1997]. The question *What should be represented?*, i.e. which policies should be pursued on behalf of the electorate and how well the political system represents the electorate's policy preferences, was of secondary importance. The question *What?* — as opposed to the questions *Who?* — started to be widely discussed only since the 1960s when the notion of *policy representation* has been coined [Miller and Stokes 1963, Pitkin 1967]; for the later studies see [Klingemann et al. 2006, Cerami 2007, Budge and McDonald 2007, Soroka and Wlezien 2010, Volkens et al 2013]. To monitor policy representation in modern democracies, a special database has been created within the prize-winning *Manifesto* project (Berlin), aimed at 'quantitative content analysis of parties' election programs from more than 50 countries covering all free, democratic elections since 1945' [WZB 2021].

Most studies in policy representation consider one-dimensional models, locating the policy preferences of parties, governments and voters either on particular policy axes (budgeting for defence, education, health, etc.) or on the left-right ideological axis. However, the modern electorate, parties and governments locate themselves with respect to numerous policy issues, making policy preferences essentially multi-dimensional or hardly reducible to the left–right alignment:

> ... in a number of Western societies ... no socioeconomic or cultural cleavage is evidently more important and stable than others. To be sure, citizens do not constitute a homogeneous mass that can be divided in any manner by the choices they are offered, but the social and cultural lines of cleavage are numerous, crosscutting, and rapidly changing. ... The number of floating voters who do not cast their ballot on the basis of stable party identification is increasing. A growing segment of the electorate tends to vote according to the stakes and issues of each election.
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> [Manin 1997, *Principles of Representative Government,* pp. 223, 231]

The idea of multi-dimensional policy representation is implemented in so-called voting advice applications (VAAs). Following the Dutch *StemWijzer (Vote match)* launched on the internet in 1998, several European countries created sites to help electors compare their policy preferences with party manifestos. They include *Wahlkabine (Voting booth)* in Austria, *Glasovoditel (Vote guide)* in Bulgaria, *Kohovolit (Whom to vote for)* in Czech Republic, *Vote&Vous* (Vote&You) in France, *Wahl-O-Mat (Election automate)* in Germany, *Vote Match* in the UK, *Te kit vàlasztanàl? (Whom would you choose?)* in Hungary, *Vote Match* in Ireland, *Cabine Eletorale (Voting booth)* in Italy, *Providus (The farsighted)* in Latvia, *Latarnik Wyborczy (Election lantern)* in Poland, *Testeaza-ti votul! (Test your vote!)* in Romania, *Kohovolit (Whom to vote for)* in Slovakia, *Elecciones.es (Elections.es)* in Spain and *Smartvote* Switzerland [Garzia and Marschall 2014, Vote match Europe 2017]. In 2006, the Free University of Amsterdam developed a general *Election compass* whose applications range from the university's works council to the US president and the European Parliament [Kieskompas 2006, EU profiler 2009]. This device not only evaluates the preference proximity between voters and candidates but also locates them on a two-dimensional landscape with five-point 'Left–Right' and 'Conservative–Progressive' axes.

Following the model from [Tangian 1994] and the current trends, we measure policy representation of German political parties and the Bundestag with respect to multiple policy issues. We compare the

positions of the parties and the Bundestag on 38 topical issues with the recent public opinion polls on the same issues and construct the parties' indices of popularity (the average percentage of the population represented on numerous issues) and universality (frequency in representing a majority) as well as that of the Bundestag.

Unlike the previous studies, the actual results are encouraging. The representativeness of the Bundestag parties and the Bundestag itself has significantly increased since 2017. In particular, the election winner, the SPD,[1] is now ranked 4 instead of 19 in 2013 and 22 in 2017, having the current mean index (popularity + universality) / 2 = 65% instead of 57% in 2013 and 52 % in 2017. The Bundestag's mean index is now equal to 61% instead of 52% in 2013 and 40% in 2017. All of these mean that the decline in the representativeness gives way to significant increase, which shows that the German politicians significantly better respond to the public demand.

Section 2, 'Representativeness of German parties and the Bundestag', describes the data sources, defines the indices of popularity and universality of German parties and the Bundestag, and presents the computational results.

Section 3, 'Representativeness of possible Bundestag coalitions', the indices of popularity and universality of four most consistent Bundestag coalitions are computed and commented.

In Section 4, 'Conclusions', the findings of the paper are recapitulated and placed into context.

The Appendix (Section 5) contains full references to the polls of public opinion used in the study, including exact formulation of the poll questions.

2 Representativeness of German parties and the Bundestag

Table 1 shows the 39 German paries that take part in the 2021 federal election (the union CDU/CSU is considered as one party), and Tables 2–3 display the balance of public opinion and party positions on 38 policy questions.

The questions and the party positions are from the *Wahl-O-Mat* — the voting advice application of the German Federal Agency for Civic Education [Bundeszentrale für politische Bildung 2021]. The *Wahl-O-Mat* (an invented word composed from the German *Wahl* = election and *Automat*) is the German version of the Dutch Internet site *StemWijzer* ('VoteMatch') [Pro demos 2021], which was originally developed in the 1990s to involve young people in political participation. Both websites help the users locate themselves on the political landscape by testing how well their opinions match with party positions. Before an election (local, regional, federal and even European), a special governmental supervising committee compiles a list of questions on topical policy issues ('General speed limit on motorways?'— Yes/No, 'Germany should increase its defense spending?'—Yes/No, etc.) and asks the parties participating in the election for their answers. A user of the site answers the same questions, eventually attributing weights to reflect their importance, and then the program compares his or her political profile with that of the parties and finds the best-matching party, the next-best-matching party, etc.

The *Wahl-O-Mat* provides no statistics for individual answers, but even if they were available, they would be biased toward internet users.[2] For this reason, we refer to the public opinion polls that pertain to 38 *Wahl-O-Mat* questions and which were conducted during the recent years. For the German formulation of the Wahl-O-Mat questions, their translation into English, the references to relevant public opinion polls, their dates and outcomes see Section 5.

Each *Wahl-O-Mat* question divides the society into two groups: protagonists (Yes-group) and antagonists (No-group); abstentions are not considered. A party, answering these questions, represents the Yes-groups for some questions and the No-groups for others. To evaluate the representativeness of a

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[1]The capitalization of party names follows the way the parties themselves do it.

[2]Before the 2021 Bundestag elections, the *Wahl-O-Mat* site has been visited over 21.3 million times [Bundeszentrale für politische Bildung 2021].

Table 1: German parties in the 2021 Bundestag elections

Party logo	Party description	Number of members		Percentage of votes	
		2017	2021	2017	2021
	SPD, Sozial-demokratische Partei Deutschlands (Social Democratic Party), founded in 1863.	441784	404305	20.508	25.743
	CDU/CSU, union of Germany's main conservative parties, Christlich Demokratische Union Deutschlands (Christian Democratic Union of Germany), founded in 1950, and Christlich-Soziale Union in Bayern (Christian Social Union of Bavaria), founded in 1945.	572412	536120	32.930	24.069
	GRÜNE, BÜNDNIS 90/DIE GRÜNEN (Alliance 90/The Greens), founded in 1993 as the merger of DIE GRÜNEN (West Germany) and BÜNDNIS 90 (East Germany), both with a social-democratic background.	62100	122000	8.940	14.754
	FDP, Freie Demokratische Partei (Free Democratic Party) is founded in 1948, stands for political liberalism and wants to strengthen the freedom, self-determination and responsibility of the individual within the framework of the social market economy. It has been represented in the Bundestag since 1949 — with an interruption from 2013 to 2017.	58000	75000	10.743	11.455
	AfD, Alternative für Deutschland (Alternative for Germany) is founded in 2013 to protest against financial aid for economically struggling EU member states. By criticizing the asylum and refugee policy, it has increasingly distinguished itself as a right-wing populist protest party. It is represented in all German state parliaments and in the Bundestag.	28000	32000	12.637	10.344
	DIE LINKE (The Left), founded in 2007 as the merger of East German communists and the Electoral Alternative for Labor and Social Justice (WASG), a left-wing breakaway from the SPD. It advocates democratic socialism and the expansion of the welfare state and sees itself as a peace party that advocates nonviolence. It or its predecessor PDS has been represented in the Bundestag since 1990.	58910	60350	9.238	4.890
	FREIE WÄHLER (Free Voters) is founded in 2009 from the amalgamation of local political movements. It is a conservative party opposing EU financial policies and standing for local government, city councils and mayors. It is represented in the state parliament in Bavaria as well as in Rhineland-Palatinate.	6000	7030	0.996	2.428
	Tierschutzpartei: Mensch Umwelt Tierschutz (Animal Protection Party: People–Environment–Animal Protection) is founded in 1993 and is committed to consistent environmental and animal protection. It is also closely linked to the peace movement and other citizens' initiatives. In 2014 and 2019 it won one mandate in the European Parliament.	1350	2017	0.804	1.454

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Party logo	Party description	Number of members		Percentage of votes	
		2017	2021	2017	2021
	dieBasis, Basisdemokratische Partei Deutschland (Basic Democratic Party of Germany) is founded in 2020 by opponents of government measures to combat the Covid-19 pandemic. It advocates more direct democracy for equal participation of all citizens and against mandatory vaccinations.	–	22753	–	1.357
	Die PARTEI, Partei für Arbeit, Rechtstaat, Tierschutz, Eliteförderung und basisdemokratische Initiative (Party for Work, Rule-of-Law, Protection of Animals, Advancement of Elites and Grass-root Democratic Initiative) is founded in 2004 by members of the editorial team of the magazine "Titanic". As a satirical party, it parodies the established parties and the political system. It holds a mandate in the European Parliament and has been represented in the Bundestag by a deferred member of the SPD since 2020.	24087	52486	0.977	0.994
	Team Todenhöfer, Team Todenhöfer — Die Gerechtigkeitspartei (Todenhöfer's Team — The Justice Party) is founded in 2020 by former CDU member of the Bundestag Jürgen Todenhöfer. The party advocates the end of all foreign missions of the Bundeswehr and demands, among other things, a limitation of the term of office of MPs and a ban on party donations over 5,000 euros.	–	7800	–	0.462
	PIRATEN, Piratenpartei Deutschland (Pirate Party of Germany) is founded in 2006 as a part of the international Pirate movement promoting an information society with free access to all digital media. Initially focused on network politics, it made a name for itself as a left-wing liberal party in the areas of data protection, informational self-determination, transparency, freedom on the Internet and citizen participation. From 2011 to 2017 they were represented in up to four state parliaments.	11138	6050	0.373	0.366
	Volt, Volt Deutschland (Volt Germany) is founded in 2018 from a pan-European citizens' movement that supports European unification. It advocates the promotion of education and digitization as well as economic innovations. It is represented by one member in the European Parliament.	–	2973	–	0.356
	ÖDP, Ökologisch-Demokratische Partei (Ecological Democratic Party) is founded in 1982 and has its origins in the environmental movement. Its political convictions are based on ecological and value-conservative views that the party derives from Christian-humanist values. It has had a seat in the European Parliament since 2014.	6163	8086	0.311	0.242
	NPD, National-demokratische Partei Deutschlands (National Democratic Party of Germany) is founded in 1964. It rejects free democracy and represents xenophobic and aggressive social-populist positions. The Office fior the Protection of the Constitution classifies it as right-wing extremist, the Federal Constitutional Court attests its political concept as disregarding the human dignity.	5000	4000	0.378	0.139

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Table 1: (continued) German parties in the 2021 Bundestag election

Party logo	Party description	Number of members		Percentage of votes	
		2017	2021	2017	2021
	SSW, Südschleswigscher Wählerverband (South Schleswig Association of Voters) is founded in 1948. It represents the political interests of the Danish minority and the Frisian ethnic group and is therefore exempt from the threshold clause. It has been continuously represented in the Schleswig-Holstein state parliament since 1958. It is running for the first time since 1961 in the federal election.	–	3300	–	0.120
	Gesundheitsforschung, Partei für Gesundheitsforschung (Party for Health Research) is founded in 2015. Its only political goal is improving research on age-related diseases with no consideration of other policy issues. In particular, it calls for ten percent of the federal budget to be invested annually in this research area.	173	300	0.050	0.106
	Humanisten, Partei der Humanisten (Party of Humanists) is founded in Berlin in 2014 and represents a worldview based on natural laws and science. The party wants jointly negotiated norms that get by without religions, ideologies or dogmas and are achieved in a rational-critical discourse.	307	1920	0.013	0.103
	Bündnis C, Bündnis C - Christen für Deutschland (Alliance C party) is founded in 2015 from the merger of two Christian fundamentalist parties. It advocates the promotion of traditional family models and wants to preserve creation in the sense of her Christian understanding of politics.	–	1200	–	0.086
	BP, Bayernpartei (Bavaria Party) is founded in 1946 and describes itself as a political organization of the Franconian, Swabian, Old Bavarian and free-minded people in the Free State. Bavarian statehood is their core demand, as is the expansion of direct democracy.	6127	6000	0.125	0.071
	V-Partei[3] — Partei für Veränderung, Vegetarier und Veganer (V-Party[3] — Party for Change, Vegetarians and Vegans) is founded in 2016 and wants to draw attention to the effects of growth, consumption and eating behavior. It calls for a bio-vegan orientation in agriculture, the long-term withdrawal from livestock farming and the improvement of consumer, climate and animal protection.	1200	8086	0.138	0.069
	UNABHÄNGIGE, UNABHÄNGIGE für bürgernahe Demokratie (INDEPENDENTS for community-based democracy) is founded in 2002 and advocates more citizen participation and direct democracy. It calls for the introduction of referendums at federal level, advocates freedom of research and opinion and advocates transparent political processes.	–	155	–	0.049
	Die Grauen — Für alle Generationen (The Grays — For All Generations) is established in 2017. It is committed to social justice and calls, among other things, for more citizen participation, referendums at the federal level and a lowering of the voting age to 14 years. Despite its name, the party does not see itself as a pure advocacy group for older people. It deals also with strengthening of direct democracy and reduction of the five per cent hurdle for parties in representative bodies.	281	135	0.022	0.042

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Party logo	Party description	Number of members		Percentage of votes	
		2017	2021	2017	2021
	du, Die Urbane. Eine HipHop Partei (The Urbans. A HipHop Party) is founded in 2017 and invokes the values of hip-hop culture. It campaigns against racism, anti-Semitism and all forms of discrimination and calls for a reorganization of the political and social balance of power worldwide.	221	325	0.007	0.038
	MLPD, Marxistisch-Leninistische Partei Deutschlands (Marxist-Leninist Party of Germany), founded in 1982, orients its program on the teachings of Marx, Engels, Lenin, Stalin and Mao Tse-tung. It pursues the goal of building a communist society worldwide. The Office for the Protection of the Constitution classifies the party as left-wing extremist.	1900	2800	0.064	0.038
	DKP, Deutsche Kommunistische Partei (German Communist Party) is founded in 1968 as the successor to the banned KPD. In the Marxist-Leninist tradition, it strives to establish a socialist system and to break with capitalist power and property relations. The Offuce for the Protection of the Constitution classifies it as left-wing extremist.	3000	3000	0.025	0.032
	Tierschutzallianz, Allianz für Menschenrechte, Tier- und Naturschutz (Alliance for Human Rights, Animal and Nature Conservation) is founded in 2013 as a split from the Animal Welfare Party. Its central theme is animal welfare. It also calls for more citizen participation, unconditional basic security and uniform framework conditions for the education system, among other things.	134	97	0.069	0.029
	LIEBE, Europäische Partei LIEBE (European party LOVE) is founded in 2018 and is a pro-European party. For the party, love is the starting point and driving force of all social coexistence and political action, towards fellow human beings, but also towards animals and nature.	–	53	–	0.028
	LKR, Liberal-Konservative Reformer (Liberal Conservative Reformers) is founded in 2015 by the former AfD federal spokesman Bernd Lucke.It represents economically liberal and conservative positions and calls for a fundamental reform of the EU. By converting the party from the AfD, it is represented by individual members of parliament in state parliaments and in the Bundestag.	–	1300	–	0.024
	LfK, Partei für Kinder, Jugendliche und Familien Lobbyisten für Kinder (Party for children, young people and families - lobbyists for children) is founded in 2021 and is committed to ensuring that the interests of minors and parents are given greater consideration in political decisions. It calls for more investment in education and families as well as a lowering of the voting age.	–	120	–	0.020
	III. Weg, DER DRITTE WEG (The Third way party) is founded in 2013. Anti-Semitism, racism, ethnic view of man and the striving for a social order based on historical National Socialism characterize the party. The Office for the Protection of the Constitution classifies it as right-wing extremist.	–	700	–	0.017

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Table 1: (continued) German parties in the 2021 Bundestag election

Party logo	Party description	Number of members		Percentage of votes	
		2017	2021	2017	2021
	Gartenpartei (Garden Party) is founded in 2013 as Magdeburger Gartenpartei. It protests against the construction of houses on garden plots, the increase of public debt and differences between education systems in German states.	361	349	0.012	0.016
	BÜRGERBEWEGUNG, Bürgerbewegung für Fortschritt und Wandel (Citizens' movement for progress and change), is founded in 2021. Above all, it advocates more direct citizen participation. It also wants to support small and medium-sized companies, among other things, and demands that employees benefit more from digitization.	–	174	–	0.016
	DiB, Demokratie in Bewegung (Democracy in Motion) is founded in 2017 and works for more participation and justice and against racism and discrimination. Among other things, it calls for a binding lobby register, the creation of a federal European republic and an unconditional basic income.	225	224	0.131	0.015
	Menschliche Welt (Humane World) is founded in 2013 and advocates a holistic, spiritual lifestyle. She is critical of the state measures to combat the Covid 19 pandemic, wants the abolition of factory farming and an end to the expansion of the 5G network.	505	721	0.025	0.008
	BÜNDNIS21, diePinken/BÜNDNIS21 (the Rose/Alliance21) unites various small parties and political groups and is founded in early 2021. The party sees itself as the liberal-conservative political center and relies on a functioning constitutional state, the self-determination of the individual and the social market economy.	–	455	–	0.008
	PdF, Partei des Fortschritts (Party of progress) is founded in 2020. Its aim is to enable all citizens to participate equally in society and politics. That is why it advocates more direct democracy, speaks out against lobbying and calls for more transparency at European level.	–	220	–	0.007
	SGP, Sozialistische Gleichheitspartei — Vierte Internationale (Socialist Equality Party — Fourth International), founded in 1971 as BSA, Bund Sozialistischer Arbeiter (Alliance of Socialist Workers) and called from 1997 to 2017 PSG, Partei für Soztiale Gleichheit (Party of Social Equality), a Trotskyist anticapitalist party aimed at uniting the international workforce and implementing socialist principles. It belongs to a world-wide network of Trotskyist organizations and is classified as left-wing extremist by the Office for the Protection of the Constitution.	300	280	0.003	0.003
	BüSo, Bürgerrechtsbewegung Solidarität (Civil Rights Movement Solidarity) is founded in 1992 and sees itself as part of a movement that goes back to the US political activist Lyndon LaRouche, who died in 2019. It warns of the collapse of the global financial and economic system and advocates increased cooperation with China and Russia.	1000	530	0.014	0.002

Sources: [Bundeszentrale für politische Bildung 2021, Bundeswahlleiter 2017, Bundeswahlleiter 2021]

Table 2: Public opinion on the 2021 *Wahl-O-Mat* questions

Questions	Question weights		Public opinion	
	Equal	Google hits in $\log_2 K$	Protago-nists, %	Antago-nists, %
1 *Speed limit on motorways.* A general speed limit should apply on all motorways.	1	8.13	64	36
2 *Increase of defense spending.* Germany should increase its defense spending.	1	5.76	50	46
3 *Voting at 16.* In Bundestag elections, young people aged 16 and over should also be allowed to vote.	1	10.13	21	75
4 *Wind energy.* The promotion of wind energy is to be ended.	1	11.32	12	75
5 *Limiting the increase of appartment rents.* The possibilities of real estate owners to increase apartment rents should be more strictly limited by law.	1	6.31	61	30
6 *Patents for vaccines.* Vaccines against Covid-19 should continue to be protected by patents.	1	6.50	54	34
7 *Phase-out of coal-fired power.* The phase-out of coal-fired power generation planned for 2038 should be brought forward.	1	5.70	73	25
8 *Statutory pensions.* All employed persons should have to be insured in the statutory pension insurance.	1	14.05	62	38
9 *Abolishing family reunification.* The right of recognized refugees to family reunification is to be abolished.	1	5.06	49	28
10 *Tax on digital services.* A national tax is to be levied on the turnover achieved in Germany with digital services.	1	14.67	68	13
11 *Traditional family.* The traditional family of father, mother and children should be promoted more strongly than other unions.	1	13.70	23	73
12 *Donations to parties.* Donations from companies to political parties should continue to be allowed.	1	7.21	54	46
13 *Parent-independent BAFöG (statutary grant for students).* Students should receive BAföG regardless of their parents' income.	1	5.20	59	40
14 *Double citizenship.* In Germany it should generally be possible to have a second citizenship in addition to German.	1	7.99	35	58
15 *No gender neutral language.* Federal authorities should linguistically take into account different gender identities in their publications.	1	5.44	65	26
16 *Nord Stream 2.* The Baltic Sea pipeline 'Nord Stream 2', which transports gas from Russia to Germany, should be allowed to go into operation as planned.	1	13.87	75	17
17 *No solidarity surcharge.* The solidarity surcharge is to be completely abolished.	1	6.00	51	48
18 *Headscarf at the office.* The wearing of a headscarf should generally be permitted for civil servants on duty.	1	12.97	17	78
19 *Internal combustion engine.* The approval of new cars with internal combustion engines should also be possible in the long term.	1	10.85	42	43

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Table 2: (continued) Public opinion on the 2021 *Wahl-O-Mat* questions

Questions	Question weights		Public opinion	
	Equal	Google hits in $\log_2$K	Protago-nists, %	Antago-nists, %
20 *School policy.* The federal government should have more re-sponsibilities in school policy.	1	8.91	60	28
21 *Antisemitism.* The federal government should support projects to combat Antisemitism more financially.	1	12.49	66	29
22 *Orders for Chinese companies.* Chinese companies should not be allowed to receive orders for the expansion of the commu-nications infrastructure in Germany.	1	12.67	70	30
23 *Chirch tax.* The state should continue to collect church tax for religious communities.	1	9.61	16	65
24 *Sale of cannabis.* The controlled sale of cannabis should gen-erally be allowed.	1	15.10	43	44
25 *Exit from the EU.* Germany is to leave the European Union.	1	13.00	18	76
26 *Women and men in politics.* The state lists of the parties for the elections to the German Bundestag should have to be filled alternately with women and men.	1	7.71	76	19
27 *Flat rate for hospitalization.* Inpatient treatment in the hospital should continue to be billed using a flat rate per case.	1	5.10	48	52
28 *Tax on property.* A tax should again be levied on high wealth.	1	13.97	58	33
29 *Face recognition for video surveillance.* Face recognition soft-ware should be allowed to be used for video surveillance of public places.	1	6.70	67	22
30 *Married couples without children.* Married couples without children should also continue to enjoy tax breaks.	1	12.97	49	48
31 *Organic agriculture.* Organic agriculture should be promoted more strongly than conventional agriculture.	1	3.71	83	14
32 *Islamic associations.* Islamic associations should be able to be recognized by the state as religious communities.	1	8.77	12	86
33 *Increasing CO2 prices.* The state-set price for the emission of CO2 when heating and driving is expected to rise more sharply than planned.	1	10.13	42	54
34 *Debt brake.* The debt brake in the Basic Law is to be retained.	1	9.06	72	24
35 *Asylum for the politically persecuted.* Asylum should continue to be granted only to politically persecuted people.	1	11.76	71	21
36 *Increasing the minimum wage.* The statutory minimum wage is to be increased to at least 12 euros by 2022 at the latest.	1	10.68	78	22
37 *Tax on air traffic.* Air traffic should be taxed higher.	1	6.79	70	30
38 *Home office.* Companies should decide for themselves whether they allow their employees to work from home.	1	14.48	56	40

Sources: [Bundeszentrale für politische Bildung 2021] (questions)
       Google on 17 October 2021 (question weights)
       Section 5 (balance of public opinion)

Table 3: The German party positions on the 2021 *Wahl-O-Mat* questions: +[1]—Yes, −[1]—No, ?—Neutral or missing

Question number	SPD	CDU/CSU	GRÜNE	FDP	AfD	DIE LINKE	FREIE WÄHLER	Tierschutzpartei	dieBasis	Die PARTEI	Team Todenhöfer	PIRATEN	Volt	ÖDP	NPD	SSW	Gesundheitsforschung	Die Humanisten	Bündnis C	BP	V-Partei[3]	UNABHÄNGIGE	Die Grauen	du.	MLPD	DKP	Tierschutzallianz	LIEBE	LKR	LfK	III. Weg	Gartenpartei	BÜRGERBEWEGUNG	DiB	Menschliche Welt	BÜNDNIS21	PdF	SGP	BüSo
1	+	−	+	−	−	+	−	+	?	+	−	−	+	+	−	+	?	?	+	−	+	−	−	+	+	+	?	+	−	+	?	?	?	+	+	−	−	+	−
2	+	+	−	+	+	−	+	−	−	−	−	−	−	−	−	+	?	?	−	+	+	−	?	?	−	−	−	−	+	+	−	+	?	?	−	−	−	+	−
3	+	−	+	+	−	+	−	+	−	+	?	+	+	+	−	+	?	+	−	−	+	?	−	+	+	+	+	+	−	+	−	?	−	+	?	−	?	−	+
4	−	−	−	?	+	−	−	−	?	−	−	−	−	−	−	+	−	?	−	+	?	−	+	?	−	−	−	−	+	+	?	+	?	−	−	+	+	−	+
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Source: [Bundeszentrale für politische Bildung 2021]

party, we consider two indices. The party's *popularity* is defined to be the average size of the group it represents, averaged over all the questions. The *universality* of a party is its frequency in representing a majority. Both indices are computed in two versions: for equally weighted questions, meaning their equal importance, and for the questions weighted with the base 2 logarithm of thousand Google hits for the questions' keywords (the question titles in German — in order to restrict the search to the German area) — it is assumed that the number of relevant search results reflects the importance of the question.

Let us illustrate the construction of representativeness indices using Figure 1. It displays the 38 *Wahl-O-Mat* questions together with their original numbers and color bars indicating the balance of public opinion and the positions of the Bundestag parties (those who received $\geq 5\%$ of the electoral votes, or at least three direct mandates — as DIE LINKE, or represent a minority — as the SSW, which has only one seat and is therefore not visible in Figure 1). For a specific example, we take Question 2, '*Increase of defense spending*'. The balance of public opinion, with 50% for (protagonists) and 46% against (antagonists), is shown by the grey bar. Its length is normalized, that is, the abstentions have been removed from consideration, and the total bar length is brought up to 100%, as shown by the framing box. The bar's segments to the left and to the right of the central axis are proportional to the percentage of antagonists and protagonists in the society, respectively. Thus the prevailing public opinion is visualized by the bias of the grey bar's frame from the center. A Bundestag faction is depicted by a rectangle in the official party color; its length is equal to the party's quota in the Bundestag derived from the second votes. The 'No/Yes' party opinion on the question is reflected by the positioning of the rectangle to the left or to the right of the central axis, respectively. If a party abstains, its rectangular is not shown, and the Bundestag's balance of No/Yes-opinions is brought up to the total of 100% and displayed by the framing box whose bias from the center indicates the Bundestag's majority opinion — the side where the box surpasses the 50%-thresholds shown by dotted lines.

For every question, the given party represents a certain percentage of the population, as revealed by the corresponding public opinion poll; see Table 2. For instance, the SPD with its 'Yes' answer to Question 1 represents the opinion of 64% of the population versus the 36% who answer 'No'. Hence, the SPD's *representativeness* for Question 1:

$$r_{\mathrm{SPD},1} = \frac{64}{64+36} = 0.64 \ .$$

With the 'Yes' answer to Question 2, '*Increase of defense spending*', the SPD expresses the opinion of 50% of the population versus 46%. After removal of abstentions and normalization (bringing the total to 1), we obtain the following SPD representativeness for Question 2:

$$r_{\mathrm{SPD},2} = \frac{50}{50+46} \approx 0.52 \ ,$$

and so on. Taking the average SPD's representativeness over the 38 questions, we obtain the party's unweighted *popularity* index

$$\mathrm{P}_{\mathrm{SPD}} = \sum_{q=1}^{38} \frac{r_{\mathrm{SPD},q}}{38} = \frac{0.64}{38} + \frac{0.52}{38} + \cdots \approx 0.59 \quad (\times 100\% \approx 59\%) \ . \tag{1}$$

Replacing the weights $\frac{1}{38}$ in the above formula with the normalized Google-weights from Table 2 (that is, proportionally reduced to the total $= 1$), we obtain the Google-weighted version of popularity $\mathrm{P}_{\mathrm{SPD}} \approx 60\%$.

The SPD unweighted universality index $\mathrm{U}_{\mathrm{SPD}}$ is the percentage of the questions for which the SPD represents a non-strict majority of the electorate ($\geq 50\%$). Since the SPD represents a non-strict majority on 27 out of 38 questions (see Tables 2–3 and Figure 1),

$$\mathrm{U}_{\mathrm{SPD}} = \sum_{q:r_{\mathrm{SPD},q} \geq 0.5} \frac{1}{38} = \sum_{q=1}^{38} \frac{\mathrm{round}\left[r_{\mathrm{SPD},q}\right]}{38} = \frac{27}{38} \quad (\times 100\% \approx 71\%) \ . \tag{2}$$
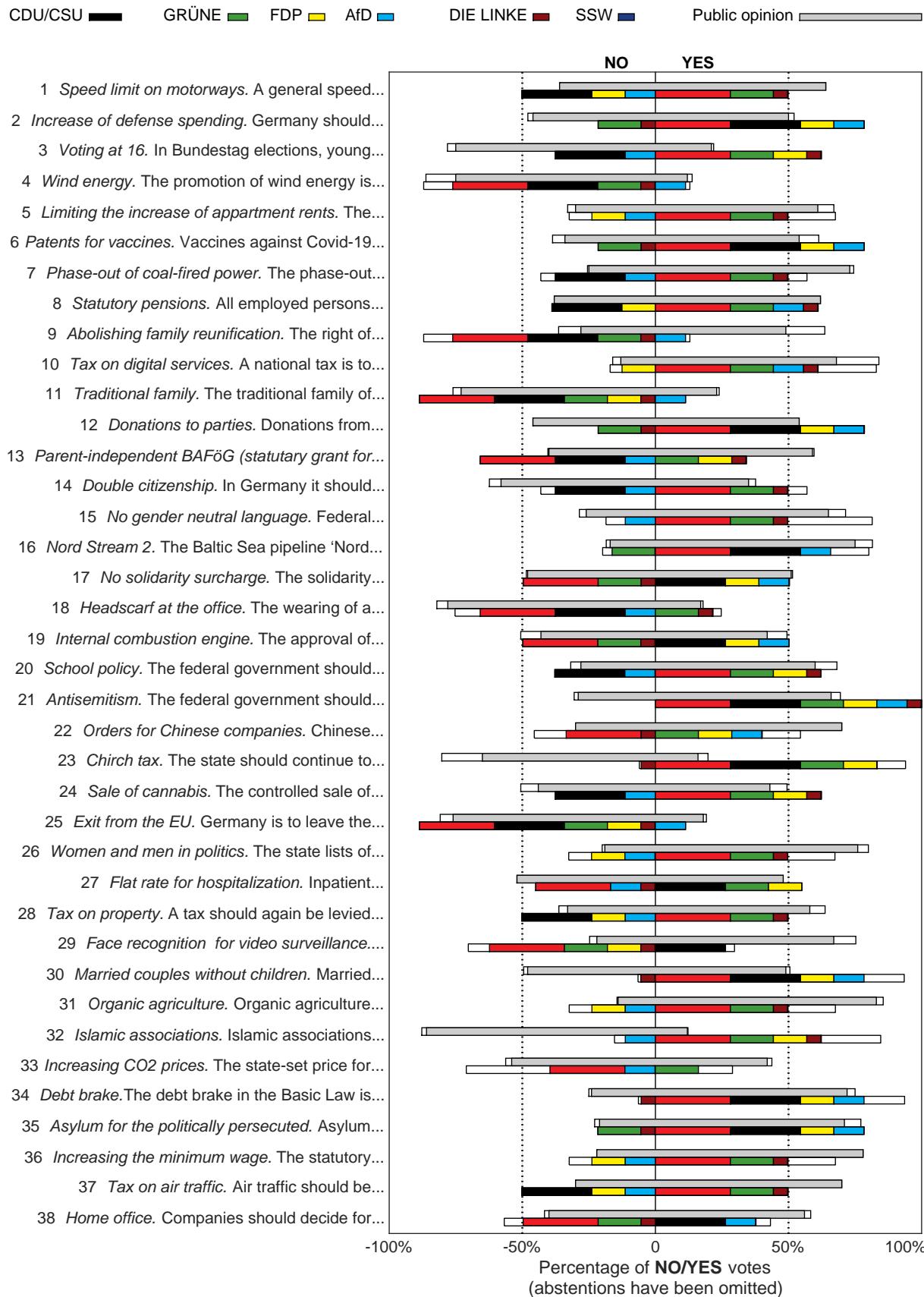
Figure 1: Public opinion and representation thereof by the 2021 Bundestag

Table 4: Spearman rank correlation between the electoral votes and representativeness indices of the parties except for *Gesundheitsforschung* and *Gartenpartei* that answered no *Wahl-O-Mat* question

	Votes	P unweighted	P Google-weighted	U unweighted	U Google-weighted	Mean index
Votes	1.00	−0.05	−0.04	0.02	0.05	0.00
P unweighted	−0.05	1.00	0.96***	0.84***	0.78***	0.88***
P Google-weighted	−0.04	0.96***	1.00	0.85***	0.82***	0.90***
U unweighted	0.02	0.84***	0.85***	1.00	0.95***	0.99***
U Google-weighted	0.05	0.78***	0.82***	0.95***	1.00	0.96***
Mean index	0.00	0.88***	0.90***	0.99***	0.96***	1.00

***		PVAL	<	0.01
**	0.01 <	PVAL	≤	0.05
*	0.05 <	PVAL	≤	0.10

If the questions are counted with the normalized Google-weights from Table 2 instead of 1/38, we obtain the Google-weighted version of the universality index $U_{SPD} \approx 72\%$.

The indices of other parties are computed similarly, using the data from Tables 2–3 and the vector-matrix formulas derived in [Tangian 2020, Section 6.4]. It should be however noted that for each party we consider only the questions backed up with public opinion polls and definite party answers, so the question weights after normalization may vary from one party to another. For instance, the union CDU/CSU answers to 29 out of 38 *Wahl-O-Mat* questions, so the CDU/CSU unweighted indices are counted with the weights $\frac{1}{29}$ instead of $\frac{1}{38}$, and the Google-weights are normalized also for these 29 questions only.

The popularity and universality indices of the Bundestag (before coalition building) are based on the Bundestag majority opinions on the issues. For instance, the Bundestag's position on Question 2, *Increase of defense spending*, is the one of the YES-factions: SPD+CDU/CSU+FDP+AfD, which constitutes the Bundestag majority; see Figure 1. Having defined the Bundestag's majority opinion on every issue, we compute the Bundestag's popularity and universality indices in the same way as for the parties.

Figure 2 displays the indices of popularity P and universality U for all German parties that have participated in the 2021 federal election as well as that of the 2021 Bundestag, each in two versions: for unweighted questions (marked with 'u') and Google-weighted questions (marked with 'g'). The parties are sorted in decreasing order of the mean of the four indices. The mean index makes sense because the popularity and universality indices are correlated, being defined as expected representativeness and expected rounded representativeness, respectively; cf. (1) with (2). Table 4 shows that all correlations between the indices of representativeness are very close to 1.00. It is noteworthy that the votes received by the parties are little or even negatively correlated with their indices of representativeness, meaning that voters overlook policy representation in their choices.

As we see, the main election winners, the centrist-left SPD and the centrist-right CDU/CSU are ranked 4 and 9, respectively, which is significantly better than at the previous 2017 elections (ranked 22 and 25, respectively). On the other hand, the rank of other Bundestag parties, SSW, AfD, LINKE, GRÜNE and FDP are much worse: 18, 23, 26, 31 and 38, respectively.
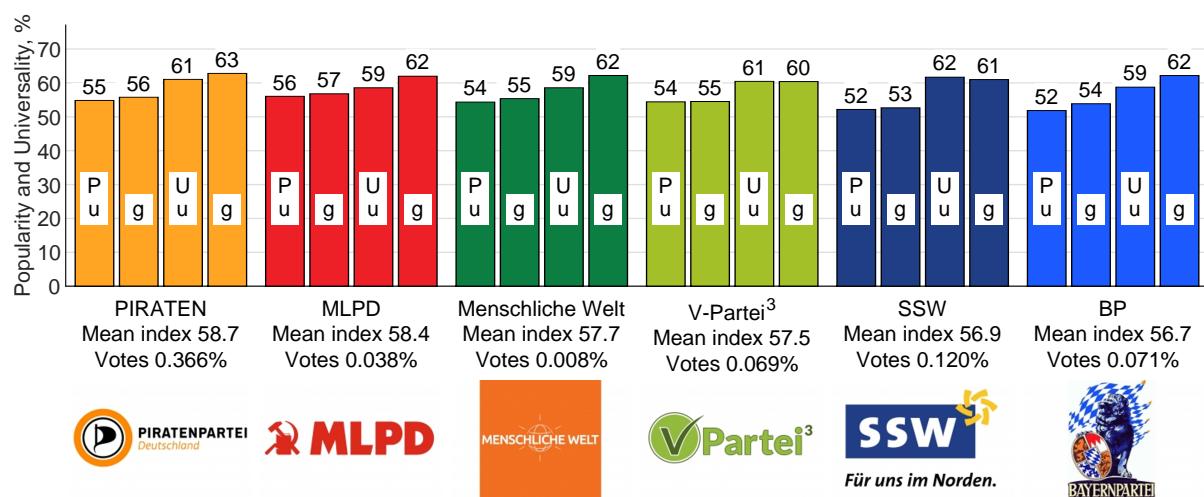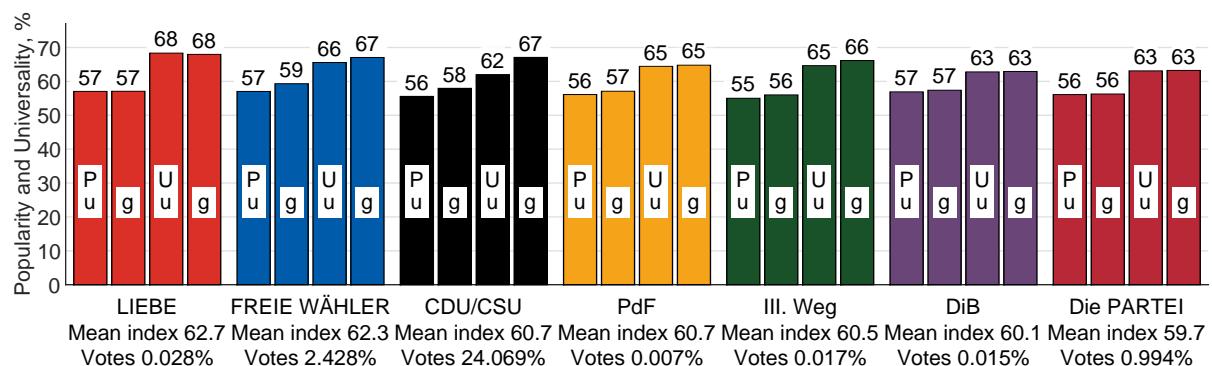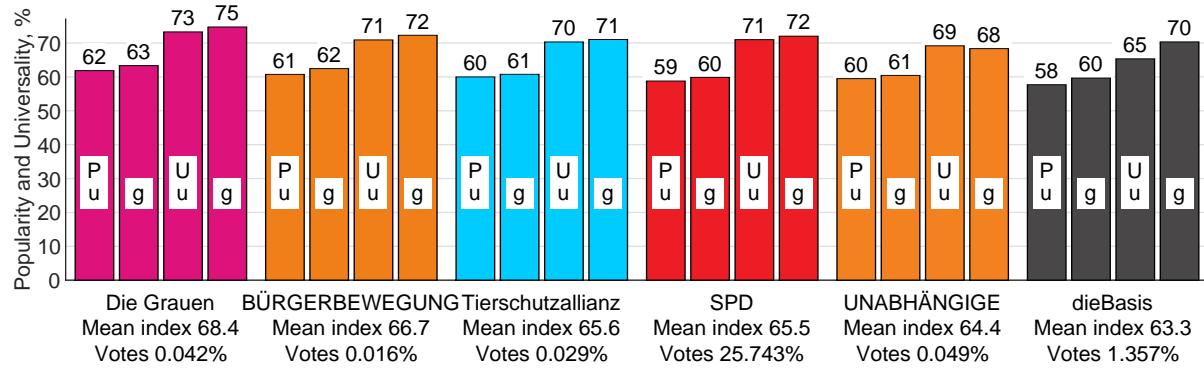
Figure 2: The 2021 representativeness indices of German parties and the Bundestag: P—popularity, U—universality, u—for unweighted questions, and g—for Google-weighted questions
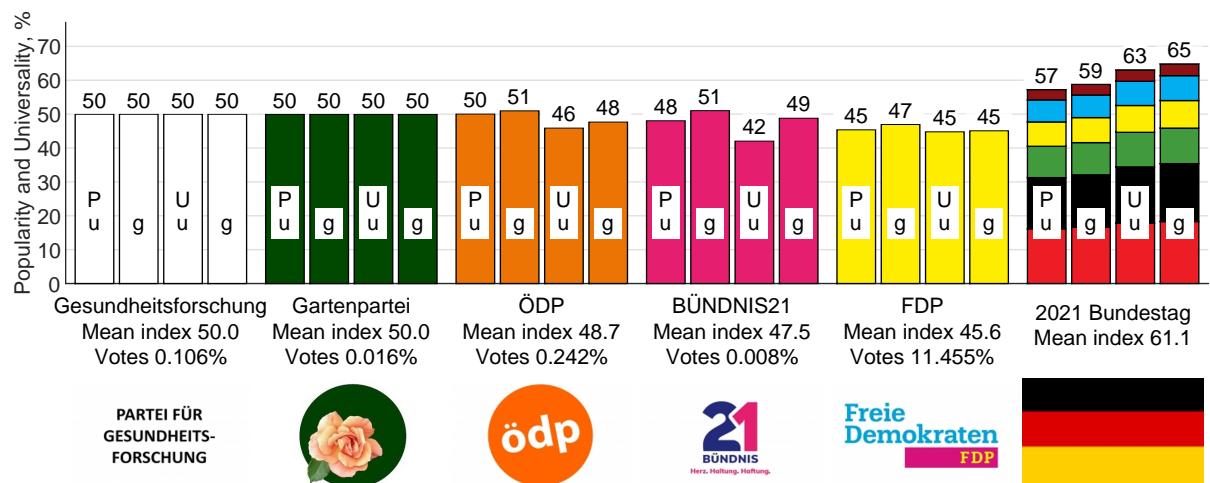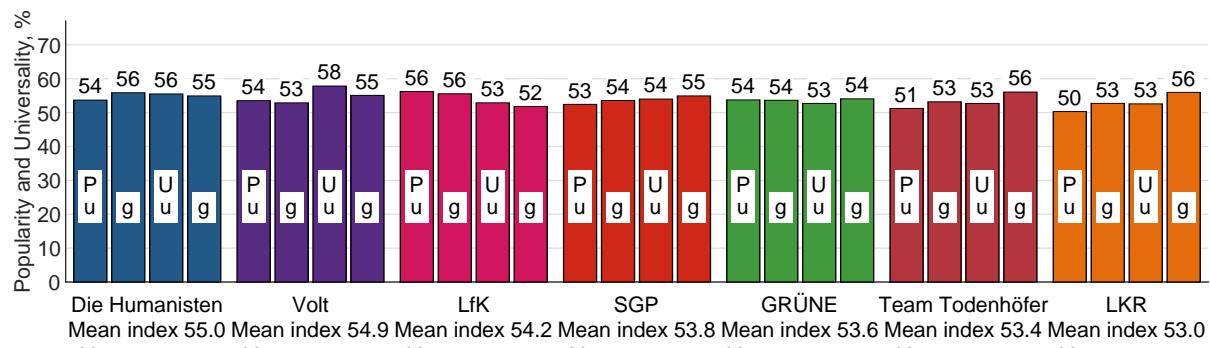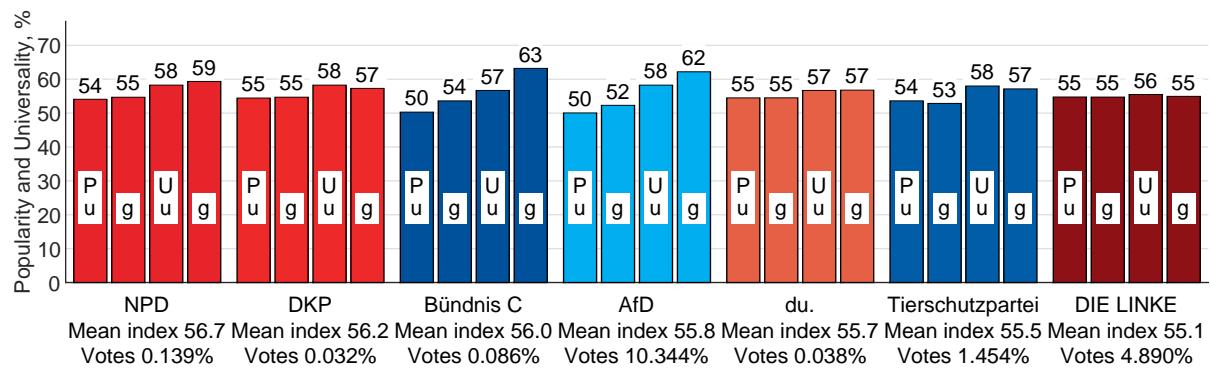
Figure 2: (continued) The 2021 representativeness indices of German parties and the Bundestag: P—popularity, U—universality, u—for unweighted questions, and g—for Google-weighted questions

3 Representativeness of possible Bundestag coalitions

Table 5, which is illustrated in Figure 3, characterizes the minimum eligible coalitions, consisting of those Bundestag parties that together constitute a Bundestag majority. In real politics, eligible coalitions are usually *minimum*, i.e., they include no more parties than necessary, because the more parties, the more complex the negotiations and the less power enjoyed by each faction; cf. with Riker's minimum winning coalitions [Riker 1962]. For instance, the coalition SPD+CDU/CSU+GRÜNE is eligible but not minimum; that is, the coalition SPD+CDU/CSU, being itself eligible, does not need GRÜNE.

The first column of Table 5 includes four minimum eligible coalitions. The second column shows the sum of the party quotas in % of the Bundestag seats. The quotas are proportional to the number of votes the parties receive in elections. They are used to allocate the integer number of Bundestag seats to within the accuracy of 0.5 seat; the implications are considered later in [Tangian 2022], and now we assume that the power of party factions is the same as prescribed by the quotas. For example, the actual ruling coalition SPD+GRNE+FDP with quotas of ca. 28%, 16% and 13% has the power of ca. 57%, and the coalition SPD+CDU/CSU with ca. 28% and 26% has the power of ca. 55%.[3] The third column of the table contains the degree of *unanimity*. It is the total weight of the questions on which the coalition members have the same position (partial abstentions are allowed, and in the case of missing data, we consider only the questions that are backed up by public opinion polls and are definitely answered by at least one coalition member).

The coalitions in the table are ordered by decreasing unanimity, taking into account the importance of this criterion for coalition building. A high unanimity facilitates coalition formation because parties with close positions cooperate more easily. However, the most unanimous coalition CDU/CSU+FDP+AfD failed because of ideological inconsistencies: no party wanted to cooperate with the far-right AfD.

The indices of popularity and universality displayed in the next columns need additional explanations. If a coalition is unanimous on an issue, then its position on the issue is that of every non-abstaining member. If the coalition members disagree, then the probabilities of the coalition's Yes/No position could be assumed proportional to the protagonist-to-antagonist ratio within the coalition. As expressed in a personal conversation with the author, Tobias Lindner, Bundestag member (GRÜNE), characterizes the reality as even more uncertain. To introduce this *additional* uncertainty, we define the *faction weight factor (in coalition decisions)* f, $0 \leq f \leq 1$, which we explain using an example.

Suppose that, for a certain question, the protagonist-to-antagonist ratio within a coalition is 3:1, that is, the Yes-faction is three times larger than the No-faction. The $f = 0$ denotes the total uncertainty, when the faction weight plays no role and the coalition adopts both answers 'Yes' and 'No' with equal chances $1/2$. The $f = 1$ denotes no uncertainty, when the coalition adopts the answers 'Yes' and 'No' with the probabilities equal to the relative weights of the Yes-faction $3/(3 + 1) = 3/4$ and the No-faction $1/4$. The medium uncertainty $f = 1/2$ means that the faction influence on the coalition decision is a mix of the two extreme cases in proportion $f = 1/2$ and $1 - f = 1/2$:

$$\mathrm{Prob(Yes)} = \underbrace{f}_{1/2} \times \underbrace{3/4}_{\substack{\text{Weight influence} \\ \text{of Yes-faction}}} + \underbrace{(1-f)}_{1/2} \times \underbrace{1/2}_{\substack{\text{No influence} \\ \text{of weight}}} = 5/8$$

$$\mathrm{Prob(No)} = \underbrace{f}_{1/2} \times \underbrace{1/4}_{\substack{\text{Weight influence} \\ \text{of No-faction}}} + \underbrace{(1-f)}_{1/2} \times \underbrace{1/2}_{\substack{\text{No influence} \\ \text{of weight}}} = 3/8 \; .$$

---

[3]The summation error is caused by rounding the terms to be added and their sum for non-rounded terms. In the given case, the actual quotas of 28.17% ≈ 28% and 26.34% ≈ 26%, whereas 28.17 + 26.34 = 54.51% ≈ 55%. Such errors are studied by [Mosteller et al. 1967].

Table 5: Unweighted indices of the 2021 Bundestag minimum eligible coalitions with unanimity $> 40\%$ assuming the impact of faction size on the coalition decisions $f = 0.5$

Coalition	Bundestag quotas	Unanimity	Popularity		Universality	
			Expec-tation	Standard deviation	Expec-tation	Standard deviation
	%/Rank	%/Rank	%/Rank	%/Rank	%/Rank	%/Rank
CDU/CSU+FDP+AfD	26+13+11=50/4	65.79/1	49.63/4	±2.27/2	52.47/4	±4.62/1
SPD+CDU/CSU	28+26=55/3	63.16/2	58.10/1	±1.56/1	71.01/1	±4.92/2
SPD+GRÜNE+FDP	28+16+13=57/1	44.74/3	53.21/2	±2.39/3	68.70/2	±5.87/3
CDU/CSU+GRÜNE+FDP	26+16+13=55/2	34.21/4	52.70/3	±2.73/4	62.30/3	±6.51/4
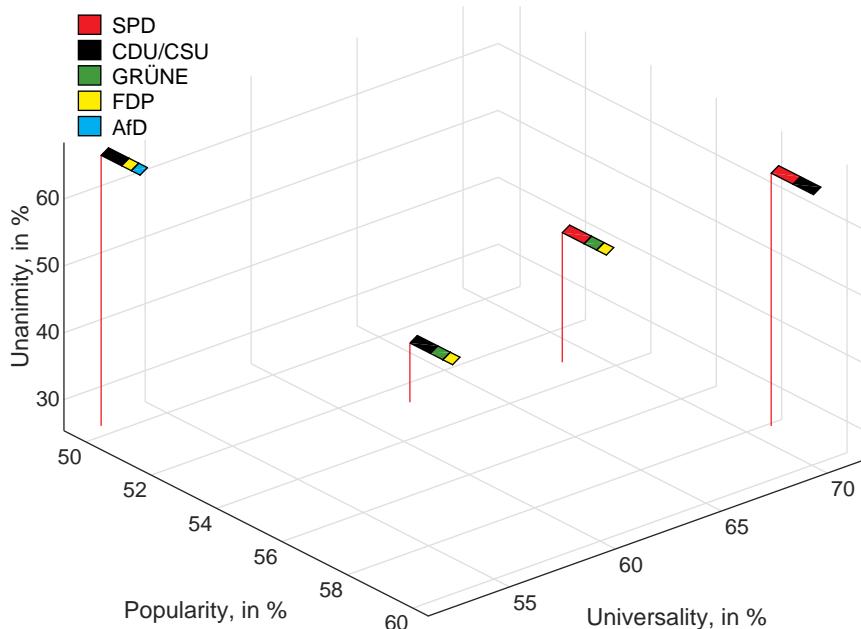
Figure 3: Visualization of Table 5

In this paper, we assume the medium uncertainty with the faction weight factor $f = 1/2$, and all the coalition indices are computed by the vector-matrix formulas derived in [Tangian 2020, Section 8.4].

Under uncertainty, the coalitions' popularity and universality indices turn into random variables. Then the *coalition's popularity* and *universality* are defined as the *expected* size of the group represented, and as the *expected* frequency in representing a majority, respectively. These indices are no longer exact magnitudes but expected estimates, with their standard deviation regarded as the estimation accuracy. Therefore, higher ranks in Table 5 are attributed to greater popularity and universality indices but smaller standard deviations, which mean better accuracy. Since a higher unanimity means that the disagreed-upon issues, which introduce uncertainty, are fewer, the standard deviation of the coalition's popularity and universality is smaller — as reflected by close ranks of the unanimity indices and standard deviations in Table 5.

Due to uncertainty, the coalition's representativeness is not determined directly by the representativeness of its members. By our definition, if a coalition is not unanimous on an issue then there is a chance that its decisions favor either the society's majority or its minority. Hence, a coalition can be more or less

representative than its members, and its representativeness can significantly deviate from their indices of representativeness as well.

For example, consider the second most unanimous coalition SPD+CDU/CSU. The *unweighted* popularity and universality indices of the SPD and CDU/CSU are 59, 71, 56, 62 (see Figure 2). To compute their mean index in the coalition-building context, we take into account their in-coalition weights derived from their Bundestag quotas in Table 5:

$$w_{\text{SPD}} = \frac{28}{28+26} \approx 0.52$$
$$w_{\text{CDU/CSU}} = \frac{26}{28+26} \approx 0.48 \,.$$

Then the weighted mean of the unweighted indices of the coalition members is equal to

$$w_{\text{SPD}} \times \frac{59+71}{2} + w_{\text{CDU/CSU}} \times \frac{56+62}{2} \approx 61.$$

This weighted mean index of 61 is significantly lower than that of the coalition SPD+CDU/CSU, which is equal to $(58+71)/2 \approx 65$ (see Table 5). Due to the probabilistic effects described, the joint representativeness of SPD and CDU/CSU is better than their mean representativeness indexed 61; moreover, there is no loss of representativeness for the SPD whose mean index is equal to $(59+71)/2 \approx 65$.

In this respect, the ruling red-yellow-green 'Traffic light coalition' SPD+GRÜNE+FDP is different. The Bundestag quotas of the parties are 28%, 16% and 13%, respectively (see Table 5), implying their in-coalition weights

$$w_{\text{SPD}} = \frac{28}{28+16+13} \approx 0.49$$
$$w_{\text{GRÜNE}} = \frac{16}{28+16+13} \approx 0.28$$
$$w_{\text{FDP}} = \frac{13}{28+16+13} \approx 0.23 \,.$$

Therefore, the weighted mean of the unweighted popularity and universality indices of the coalition members is equal to

$$w_{\text{SPD}} \times \frac{59+71}{2} + w_{\text{GRÜNE}} \times \frac{54+53}{2} + w_{\text{FDP}} \times \frac{45+45}{2} \approx 59.$$

The mean of unweighted popularity and universality indices of coalition SPD+GRÜNE+FDP is equal to $53+69 \approx 61\%$; see Table 5. Hence, there is a gain in the joint representativeness for coalition members GRÜNE and FDP whose mean unweighted indices, according to Figure 2, are equal to $(54+53)/2 \approx 54$ and $(45+45)/2 = 45$, respectively, but a loss for the SPD whose mean unweighted index is equal to $(59+71)/2 = 65\%$.

The last coalition in Table 5 is the black-green-yellow 'Jamaica coalition' CDU/CSU+GRÜNE+FDP. It's unanimity of 34% means the internal disagreement on two out of every three issues. So it is not surprising that GRÜNE and FDP preferred the 'Traffic light coalition' with the SPD.

4   Conclusions

Obviously, real-world elections involve numerous considerations beyond policy representation. The relations between the parties and the electorate, understood in a broad sense, are many-sided. Large established parties, which in our evaluation are ranked rather low like the GRÜNE and FDP, are much closer to the electorate than little parties with high indices of representativeness — like Die Grauen

or BÜRGERBEWEGUNG, each with less than 200 members and a few thousand votes received. The closeness to the electorate is mostly due to reputation, networking, experience, traditions, etc., which cannot be overlooked.

Nevertheless, policy representation is becoming an increasingly important factor. Compared with the 2009, 2013 and 2017 Bundestag elections we analyzed previously, the electoral success and policy representation are becoming more interrelated. Since 2017, both former and actual election winners, the SPD and CDU/CSU, improved their mean indices of representativeness from 52 to 65 and from 49 to 61, as well as the corresponding ranks among other parties — from 22 to 4 and from 25 to 9, respectively.

As for the ruling coalition, the situation is less rational. The compatibility index — the unanimity — of the currently ruling coalition, SPD+GRÜNE+FDP, is as low as 45%, which means disagreement on 55% of the issues. Moreover, the coalition's representativeness is not the best possible either. On the other hand, the two-member coalition with simpler coordination, SPD+CDU/CSU, failed being better in every respect. Probably, the election winner, the SPD, has decided to change its former coalition partner, the CDU/CSU, for less influential, less experienced, less compatible and, not least, less representative ones. Let's hope this will work well.

5   Appendix: Public opinion polls relevant to the Wahl-O-Mat questions

References

[1] *Wahl-O-Mat question:* Tempolimit auf Autobahnen. Auf allen Autobahnen soll ein generelles Tempolimit gelten.

English translation: Speed limit on motorways. A general speed limit should apply on all motorways.

Reference to public opinion poll: Statista (30.04.2021). Sollte aus ihrer Sicht ein Tempolimit von 130 km/h auf deutschen Autobahnen umgesetzt werden? [Pros] (Eher) ja: $(22) + 42 = 64\%$. [Cons] (Eher) nein: $(15) + 21 = 36\%$. Details: Deutschland; infas; Institut für sozial-ökologische Forschung; November und Dezember 2020; 2.115 Befragte; ab 14 Jahre; laut Quelle repräsentativ. https://de.statista.com/statistik/daten/studie/258757/umfrage/umfrage-zum-tempolimit-auf-autobahnen/\#professional. Detailed report: Ingenieur.de (22.09.2021) Tempolimit: Umfrage-Ergebnis dürfte viele überraschen. https://www.ingenieur.de/technik/fachbereiche/verkehr/tempolimit-deutsche-autobahn/.

280000 Google hits for "Deutschland Tempolimit auf Autobahnen". Cited 17 Oct 2021.

[2] *Wahl-O-Mat question:* Erhöhung der Verteidigungsausgaben. Deutschland soll seine Verteidigungsausgaben erhöhen.

English translation: Increase of defense spending. Germany should increase its defense spending.

Reference to public opinion poll: Statista (05.08.2019) Deutsche sind bei den Militärausgaben gespalten. Soll Deutschland die Verteidigungsausgaben auf 2 Prozent des BIP erhöhen? [Pros] Ja: 50%. [Cons] Nein: 46%. Basis: 1003 Befragte in Deutschland (ab 18 Jahren); 29./30. Juli 2019; Quelle: ARD-DeutschlandTREND. https://de.statista.com/infografik/18911/umfrage-zur-erhoehung-der-verteidigungsausgaben-nach-parteipraeferenz/.

54200 Google hits for "Deutschland Erhöhung der Verteidigungsausgaben". Cited 17 Oct 2021.

[3] *Wahl-O-Mat question:* Wählen ab 16. Bei Bundestagswahlen sollen auch Jugendliche ab 16 Jahren wählen dürfen.

English translation: Voting at 16. In Bundestag elections, young people aged 16 and over should also be allowed to vote.

Reference to public opinion poll: Der Tagesspiegel (07.03.2019) Wählen mit 16: Mehrheit ist gegen Absenkung des Wahlalters [Pros] (Eher) ja: $(10.2) + 11.2 = 21.4\%$. [Cons] (Eher) nein: $(17.4) + 58.0 = 75.4\%$. Statistische Fehler Gesamtergebnis: 2.5%. Stichprobengröße: 5021. Befragungszeitraum: 03.03.2019–07.03.2019. https://www.tagesspiegel.de/politik/waehlen-mit-16-mehrheit-ist-gegen-absenkung-des-wahlalters/24076690.html.

1120000 Google hits for "Deutschland Wählen ab sechzehn". Cited 17 Oct 2021.

[4] *Wahl-O-Mat question:* Windenergie. Die Förderung von Windenergie soll beendet werden.

English translation: Wind energy. The promotion of wind energy is to be ended.

Reference to public opinion poll: Ariadne Projekte (2021) Soziales Nachhaltigkeitsbarometer der Energie- und Verkehrswende −> Akzeptanz −> Sozio-politische Akzeptanz −> Förderung des Ausbaus Erneuerbarer-Energien-Technologien. Frage: Die Energiewende umfasst unter anderem den Ausbau unterschiedlicher Erneuerbarer-Energie-Technologien. Bitte geben Sie an, inwieweit Sie den Ausbau und die Förderung folgender Erneuerbare-Energie-Technologien ablehnen oder befürworten. Windenergieanlagen an Land lehne ich (eher) ab: $6.1 + (8.4) = 14.5\%$; (eher) befürworte ich: $(41.0) + 30.4 = 71.4\%$. Windenergieanlagen auf See lehne ich (eher) ab: $3.3 + (5.6) = 8.9\%$; (eher) befürworte ich: $(32.4) + 46.7 = 79.1\%$. 6822 Antworten. https://ariadneprojekt.de/nachhaltigkeitsbarometer-2021/.

[Pros: $(14.5 + 8.9)/2 = 11.7\%$. Cons: $(71.4 + 79.1)/2 = 75.25\%$.]

2550000 Google hits for "Deutschland Windenergie Förderung". Cited 17 Oct 2021.

[5] *Wahl-O-Mat question:* Begrenzung für Mieterhöhungen. Die Möglichkeiten der Vermieterinnen und Vermieter, Wohnungsmieten zu erhöhen, sollen gesetzlich stärker begrenzt werden.

English translation: Limiting the increase of appartment rents. The possibilities of real estate owners to increase apartment rents should be more strictly limited by law.

Reference to public opinion poll: Welt.de (24.04.2021) Die Mehrheit der Deutschen will den Mietendeckel. Frage: Wünschen Sie sich, dass nachdem Bundesverfassungsgericht den Berliner Mietendeckel geklappt hat, eine Bundesregelung beschlossen wird, die regionale Mietendecke zulässt? [Pros] (Eher) ja: $(11.9) + 48.9 = 60.8\%$. [Cons] (Eher) nein: $(7.4) + 22.9 = 30.3\%$. 2.5% Statistische Fehler, 4596 Stichproben. Quelle: Civey, i.A.Hemeday. Infografik Welt. https://www.welt.de/finanzen/immobilien/article230497301/Die-Mehrheit-der-Deutschen-will-den-Mietendeckel.html.

79200 Google hits for "Deutschland Begrenzung für Mieterhöhungen". Cited 17 Oct 2021.

[6] *Wahl-O-Mat question:* Patentschutz für Impfstoffe. Impfstoffe gegen Covid-19 sollen weiterhin durch Patente geschützt sein.

English translation: Patents for vaccines. Vaccines against Covid-19 should continue to be protected by patents.

Reference to public opinion poll: Spiegel (10.05.2021) Spiegel-Umfrage zu Corona-Impfstoffen. Mehrheit ist gegen Aufweichung des Patentschutzes. Umfrage: Sollte der Patentschutz für Corona-Impfstoffe aufgehoben werden? Nein: 54%. Ja: 34%. [Pros: 54%. Cons: 34%.] Befragungszeitraum: 07.05–10.05. 2021; Befragte: 5125; Stichprobenfehler: +/− 2.5%. https://www.spiegel.de/politik/deutschland/corona-impfstoff-mehrheit-will-patentschutz-beibehalten-umfrage-a-38abbb29-f31b-4b94-a031-90161791b84b.

90500 Google hits for "Deutschland Patentschutz für Impfstoffe". Cited 17 Oct 2021.

[7] *Wahl-O-Mat question:* Ausstieg aus der Kohleverstomung. Der für das Jahr 2038 geplante Ausstieg aus der Kohleverstromung soll vorgezogen werden.

English translation: Phase-out of coal-fired power. The phase-out of coal-fired power generation planned for 2038 should be brought forward.

Reference to public opinion poll: ZDF-Politbarometer Januar II 2019 (25.01.2019) Deutliche Mehrheit für Kohleausstieg so schnell wie möglich. "Einen möglichst schnellen Kohleausstieg finden 73 Prozent sehr wichtig oder wichtig, 18 Prozent weniger wichtig und nur 7 Prozent überhaupt nicht wichtig (Rest zu 100 Prozent hier und im Folgenden jeweils 'weiß nicht')." [Pros] Ja: 73%. [Cons] Nein: 25%. https://presseportal.zdf.de/pressemitteilung/mitteilung/zdf-politbarometer-januar-ii-2019/.

52000 Google hits for "Deutschland Ausstieg aus der Kohleverstromung". Cited 17 Oct 2021.

[8] *Wahl-O-Mat question:* Gesetzliche Rentenversicherung. Alle Erwerbstätigen sollen in der gesetzlichen Rentenversicherung versichert sein müssen.

English translation: Statutory pensions. All employed persons should have to be insured in the statutory pension insurance.

Reference to public opinion poll: PolitPro (DE) Aktuelle Meinungsumfragen zu politischen Themen (15.10.2021). Die Einführung einer gesetzlichen Aktienrente fände ich... [Pros] (Eher) sinnvoll: (22) + 41 = 63%. [Cons] (Eher) nicht sinnvoll: 24 + (14) = 38%. 6061 Befragte. https://politpro.eu/de/deutschland/umfragen.

17000000 Google hits for "Deutschland Gesetzliche Rentenversicherung". Cited 17 Oct 2021.

[9] *Wahl-O-Mat question:* Abschaffung des Familiennachzugs. Das Recht anerkannter Flüchtlinge auf Familiennachzug soll abgeschafft werden.

English translation: Abolishing family reunification. The right of recognized refugees to family reunification is to be abolished.

Reference to public opinion poll: CICERO (07.11.2017) CICERO-Umfrage: Mehrheit der Bevölkerung gegen Familiennachzug. "Im Zuge der Umfrage sprach sich nur jeder vierte Befragte (27.8 Prozent) für den Familiennachzug von anerkannten Flüchtlingen aus. Fast die Hälfte (48.9 Prozent) ist dagegen, der Rest enthält sich." [Pros: 48.9%. Cons: 27.8%.] https://www.cicero.de/innenpolitik/cicero-umfrage-mehrheit-gegen-familiennachzug.

33300 Google hits for "Deutschland Abschaffung des Familiennachzugs". Cited 17 Oct 2021.

[10] *Wahl-O-Mat question:* Steuer auf digitale Dienstleistungen. Auf den Umsatz, der in Deutschland mit digitalen Dienstleistungen erzielt wird, soll eine nationale Steuer erhoben werden.

English translation: Tax on digital services. A national tax is to be levied on the turnover achieved in Germany with digital services.

Reference to public opinion poll: Statista (30.08.201911.09.2019) In Frankreich müssen Konzerne wie Amazon, Apple, Facebook und Google zukünftig eine extra Digitalsteuer auf ihre Werbeeinnahmen zahlen. Denken Sie, Deutschland sollte auch eine solche Steuer für ausländische Internetkonzerne einführen? [Pros] Ja: 67.9%. [Cons] Nein: 13.4%. Erhebungszeitraum: 30.08.2019–11.09.2019. Anzahl der Befragten: 1.000. Altersgruppe: ab 16 Jahre. Art der Befragung: Online. https://de.statista.com/statistik/daten/studie/1057328/umfrage/digitalsteuer-fuer-auslaendische-internetkonzerne-in-deutschland/\#:~:text=Knapp\%2068\%20Prozent\%20der\%20im,ausl\%C3\%A4ndische\%20Internetkonzerne\%20eingef\%C3\%BChrt\%20werden\%20sollte.

26000000 Google hits for "Deutschland Steuer auf digitale Dienstleistungen". Cited 17 Oct 2021.

[11] *Wahl-O-Mat question:* Traditionelle Familie. Die traditionelle Familie aus Vater, Mutter und Kindern soll stärker als andere Lebensgemeinschaften gefördert werden.

English translation: Traditional family. The traditional family of father, mother and children should be promoted more strongly than other unions.

Reference to public opinion poll: Statista (Juni 2017) Sollte es bei gleichgeschlechtlichen Lebenspartnerschaften eine rechtliche Gleichstellung mit der Ehe geben? Nein: 23%. Ja: 73%. [Pros: 23%. Cons: 73%.] Deutschland; Forschungsgruppe Wahlen; 20.06.2017–22.06.2017; 1.261 Befragte; ab 18 Jahre; Wahlberechtigte; Telefonische Befragung. https://de.statista.com/statistik/daten/studie/718472/umfrage/rechtliche-gleichstellung-von-gleichgeschlechtlichen-lebenspartnerschaften-in-deutschland/.

13300000 Google hits for "Deutschland Förderung traditionelle Familie". Cited 17 Oct 2021.

[12] *Wahl-O-Mat question:* Parteispenden. Spenden von Unternehmen an Parteien sollen weiterhin erlaubt sein.

English translation: Donations to parties. Donations from companies to political parties should continue to be allowed.

Reference to public opinion poll: PolitPro.eu (DE) Aktuelle Meinungsumfragen zu politischen Themen (15.10.2021). Parteispenden sollten grundsätzlich verboten werden. (Eher) ja: $(13) + 33 = 46\%$. (Eher) nein: $(19) + 35 = 54\%$. [Pros: 54%. Cons: 46%.] 7000 Befragte. https://politpro.eu/de/deutschland/umfragen.

148000 Google hits for "Deutschland Parteispenden". Cited 17 Oct 2021.

[13] *Wahl-O-Mat question:* Elternunabhängiges BAföG. Studentinnen und Studenten sollen BAföG unabhängig vom Einkommen ihrer Eltern erhalten.

English translation: Parent-independent BAföG (statutary grant for students). Students should receive BAföG regardless of their parents' income.

Reference to public opinion poll: PolitPro (DE) Aktuelle Meinungsumfragen zu politischen Themen (15.10.2021). BAföG soll generell unabhängig vom Einkommen der Eltern gezahlt werden. [Pros] Stimme zu: $(20) + 39 = 59\%$. [Cons] Stimme nicht zu: $21 + (19) = 40\%$. 955 Befragte https://politpro.eu/de/deutschland/umfragen.

36800 Google hits for "Deutschland Elternunabhängiges BAföG". Cited 17 Oct 2021.

[14] *Wahl-O-Mat question:* Doppelte Staatsbürgerschaft. In Deutschland soll es generell möglich sein, neben der deutschen eine zweite Staatsbürgerschaft zu haben.

English translation: Double citizenship. In Germany it should generally be possible to have a second citizenship in addition to German.

Reference to public opinion poll: ARD-DeutschlandTREND Morgenmagazin (April 2017) Frage: Es wir immer wieder über das Thema doppelte Staatsbürgerschaft diskutiert. Was ist Ihre Meinung? Befürworten Sie die Möglichkeit einer doppelten Staatsbürgerschaft oder sind Sie dagegen? Für doppelte Staatsangehörigkeit [Pros]: 35%. Gegen doppelte Staatsangehörigkeit [Cons]: 58%. Grundgesamtheit: Wahlberechtigte Bevölkerung in Deutschland. 934 Befragte. https://www.infratest-dimap.de/umfragen-analysen/bundesweit/umfragen/aktuell/mehr-als-die-haelfte-der-deutschen-gegen-doppelte-staatsbuergerschaft/.

255000 Google hits for "Deutschland Doppelte Staatsbürgerschaft". Cited 17 Oct 2021.

[15] *Wahl-O-Mat question:* Sprachliche Berücksichtigung von Geschlechtsidentitäten. Bundesbehörden sollen in ihren Veröffentlichungen unterschiedliche Geschlechtsidentitäten sprachlich berücksichtigen.

English translation: No gender neutral language. Federal authorities should linguistically take into account different gender identities in their publications.

Reference to public opinion poll: Infratest dimap (10.–16. Mai 2021) "Nur eine Frage zu einer geschlechtsneutralen Sprache, also so genannten Gendersprache. Dafür wird beispielweise beim so-genannten 'Binnen-I' nicht von Wählerinnen und Wählern, sondern in einem Wort von 'WählerInnen' gesprochen, d.h. mit kürzer Pause vor dem 'i'. Außerdem werden beispielweise aus den Zuhörern die Zuhörenden. Wie stehen Sie zur Nutzung einer solchen Gendersprache in Presse, Radio und Fernsehen sowie bei öffentlichen Anlässen? Befürworten Sie dies voll und ganz, eher, lehnen Sie dies eher ab oder voll und ganz ab?" Frage: Bewertung gendergerechter Sprache. [Pros] Lehne (eher) ab: $(29) + 36 = 65\%$. [Cons] Befürworte: $10 + (16) = 26\%$. 1.198 Befragte. Erhebungszeitraum 10.–11. Mai 2021. Schwankungsbreite: 2 bis 3 Prozentpunkte. https://www.infratest-dimap.de/umfragen-analysen/bundesweit/umfragen/aktuell/weiter-vorbehalte-gegen-gendergerechte-sprache/.

43500 Google hits for "Deutschland Sprachliche Berücksichtigung von Geschlechtsidentitäten". Cited 17 Oct 2021.

[16] *Wahl-O-Mat question:* Nord Stream 2. Die Ostsee-Pipeline 'Nord Stream 2', die Gas von Russland nach Deutschland transportiert, soll wie geplant in Betrieb gehen dürfen.

English translation: Nord Stream 2. The Baltic Sea pipeline 'Nord Stream 2', which transports gas from Russia to Germany, should be allowed to go into operation as planned.

Reference to public opinion poll: Ost-Ausschuss der deutschen Wirtschaft (20.05.2021) forsa-Umfrage zum Projekt Nord Stream 2 im Auftrag des Ost-Ausschusses der Deutschen Wirtschaft. Klare Mehrheit für Fertigstellung von Nord Stream 2. P. 4. Grafische Darstellung der Umfrageergebnisse. Sind Sie dafür, Nord Stream 2, gegen den Widerstand der USA zu Ende zu bringen? [Pros] Ja: 75%. [Cons] Nein: 17%. 1001 Befragte. https://www.ost-ausschuss.de/sites/default/files/pm_pdf/OA-Forsa-Umfrage-Nord-Stream-handout.pdf.

15000000 Google hits for "Deutschland Nord Stream 2". Cited 17 Oct 2021.

[17] *Wahl-O-Mat question:* Abschaffung des Solidaritätszuschlag. Der Solidaritätszuschlag soll vollständig abgeschafft werden.

English translation: No solidarity surcharge. The solidarity surcharge is to be completely abolished.

Reference to public opinion poll: Statista (Nov 2017) Sollte der 'Soli in den nächsten Jahren komplett abgeschafft werden oder nur für niedrige und mittlere Einkommen abgeschafft werden oder sollte der 'Soli unverändert beibehalten werden? Komplett abschaffen: 51%. Nur für niedrige Einkommen abschaffen: 29%. Unverändert bleiben: 18%. [Pros: 51%. Cons: 48%.] Umfrage: 06.07.11.2017. 1.005 Befragte. Altersgruppe: ab 18 Jahre. Besondere Eigenschaften: Wahlberechtigte. https://de.statista.com/statistik/daten/studie/240129/umfrage/umfrage-zur-abschaffung-des-soldaritaetszuschlags/.

63900 Google hits for "Deutschland Abschaffung des Solidaritätszuschlags". Cited 17 Oct 2021.

[18] *Wahl-O-Mat question:* Kopftuch im Dienst. Das Tragen eines Kopftuchs soll Beamtinnen im Dienst generell erlaubt sein.

English translation: Headscarf at the office. The wearing of a headscarf should generally be permitted for civil servants on duty.

Reference to public opinion poll: Civey.com (2018). Sollte das Tragen von Kopftüchern im öffentlichen Dienst erlaubt oder verboten sein? [Pros] Es sollte erlaubt sein: 16.9%. [Cons] Es sollte verboten sein: 77.8%. Stichprobengröße: 5.098. 2.5%Repräsentativ. Befragungszeitraum : 19.03.201815.06.2018. https://civey.com/umfragen/256/sollte-das-tragen-von-kopftuchern-im-offentlichen-dienst-erlaubt-oder-verboten-sein.

8000000 Google hits for "Deutschland Kopftuch im Dienst". Cited 17 Oct 2021.

[19] *Wahl-O-Mat question:* Verbrennungsmotor. Die Zulassung von neuen Autos mit Verbrennungsmotor soll auch langfristig möglich sein.

English translation: Internal combustion engine. The approval of new cars with internal combustion engines should also be possible in the long term.

Reference to public opinion poll: RND (27.11.2020) Umfrage: Hauchdünne Mehrheit der Deutschen plädiert für Verbot von Verbrennungsmotoren. "42.8 Prozent sprechen sich darin für ein Verbot aus, 42.3 Prozent dagegen. Der Rest wollte sich nicht festlegen oder machte keine Angaben. Von den Befürwortern wiederum sind die meisten für ein Ende des Verbrenners spätestens ab 2030, etwas weniger plädierten für das Jahr 2025." [Pros: 42.3%. Cons: 42.8%.] https://www.rnd.de/wirtschaft/umfrage-hauchdunne-mehrheit-der-deutschen-pladiert-fur-verbot-von-verbrennungsmotoren-TUGYKBJF3TPEOMWNNGXVI5MYFE.html.

1850000 Google hits for "Deutschland Verbrennungsmotor". Cited 17 Oct 2021.

[20] *Wahl-O-Mat question:* Schulpolitik. Der Bund soll mehr Zuständigkeiten in der Schulpolitik erhalten.

English translation: School policy. The federal government should have more responsibilities in school policy.

Reference to public opinion poll: ifo Schnelldienst (2020/9, 16.09.2020) Zur Diskussion gestellt: Schulschließungen, fehlende Ausbildungsplätze, keine Jobs: Generation ohne Zukunft? P. 42, Abb. 1. Sollen wichtige Bildungsentscheidungen vom Bund getroffen werden? Frage: In Deutschland werden die wichtigen bildungspolitischen Entscheidungen jeweils von den Bundesländern getroffen. Sind Sie dafür oder dagegen, dass bildungspolitische Entscheidungen stattdessen grundsätzlich von der Bundesregierung getroffen werden? [Pros] Sehr (eher) dafür: $25 + (35) = 60\%$. [Cons] (Eher) dagegen: $(20) + 8 = 28\%$. https://www.ifo.de/DocDL/sd-2020-09-corona-schulschliessung-bildung.pdf.

481000 Google hits for "Deutschland Schulpolitik". Cited 17 Oct 2021.

[21] *Wahl-O-Mat question:* Antisemitismus. Der Bund soll Projekte zur Bekämpfung des Antisemitismus stärker finanziell unterstützen.

English translation: Antisemitism. The federal government should support projects to combat Antisemitism more financially.

Reference to public opinion poll: Eurobarometer (2019) Perception of Antisemitism. Attachments/Fact Sheet −> ebs_484_fact_de_en.pdf −> QD1. Sind Sie der Meinung, dass Antisemitismus in [Germany] ein Problem oder nicht? [Pros] Ja: 66%. [Cons] Nein: 29%. Deutschland: 1526 Interviews. 04–19/12/2018. Downloadable from https://europa.eu/eurobarometer/surveys/detail/2220.

5760000 Google hits for "Deutschland Antisemitismus". Cited 17 Oct 2021.

[22] *Wahl-O-Mat question:* Aufträge an chinesische Firmen. Chinesische Firmen sollen keine Aufträge für den Ausbau der Kommunikationsinfrastruktur in Deutschland erhalten dürfen.

English translation: Orders for Chinese companies. Chinese companies should not be allowed to receive orders for the expansion of the communications infrastructure in Germany.

Reference to public opinion poll: WirtschaftsWoche (18.11.2020) Umfrage: Deutsche wollen, dass europäische Unternehmen die 5G-Netze ausbauen. "Die Deutschen stehen China generell skeptisch gegenüber. Ihr Misstrauen — vor allem gegen chinesische Unternehmen — hat sich in den vergangenen Jahren verstärkt, zeigt eine repräsentative Studie in 13 Ländern. Noch hat die Politik nicht abschließend entschieden, welche Unternehmen in Deutschland am Ausbau der 5G-Netze beteiligt sein dürfen. Die Bevölkerung hat jedoch eine klare Präferenz für europäische Unternehmen. 70.5 Prozent der Deutschen sagen, dass sich europäische Unternehmen beteiligen sollen. Für eine

Einbindung chinesischer Unternehmen sprechen sich dagegen nur 30.8 Prozent aus. Dies geht aus einer repräsentativen Umfrage in 13 europäischen Ländern hervor, die der WirtschaftsWoche exklusiv vorliegt." [Pros] Ja: 70.5%. [Cons] Nein: 30.8%. https://www.wiwo.de/politik/europa/umfrage-deutsche-wollen-dass-europaeische-unternehmen-die-5g-netze-ausbauen/26633538.html.

6500000 Google hits for "Deutschland Aufträge an chinesische Firmen". Cited 17 Oct 2021.

[23] *Wahl-O-Mat question:* Kirchensteuer. Der Staat soll weiterhin für Religionsgemeinschaften die Kirchensteuer einziehen.

English translation: Chirch tax. The state should continue to collect church tax for religious communities.

Reference to public opinion poll: Domradio.de (19.12.2016) Ergebnisse einer aktuellen Umfrage zur Kirchensteuer: Mehrheit gegen Kirchensteuer-Einzug durch Staat. "65 Prozent der Deutschen sind dafür, dass der Einzug der Kirchensteuer durch den Staat abgeschafft wird. 16 Prozent wollen laut einer INSA-Umfrage für die Bild-Zeitung (Montag) die bisherige Praxis beibehalten; 19 Prozent machten keine Angaben". [Pros: 16%.] [Cons: 65%.] https://www.domradio.de/themen/bischofskonferenz/2016-12-19/ergebnisse-einer-aktuellen-umfrage-zur-kirchensteuer.

781000 Google hits for "Deutschland Kirchensteuer". Cited 17 Oct 2021.

[24] *Wahl-O-Mat question:* Verkauf von Cannabis. Der kontrollierte Verkauf von Cannabis soll generell erlaubt sein.

English translation: Sale of cannabis. The controlled sale of cannabis should generally be allowed.

Reference to public opinion poll: Statista/YouGov (09.07.2021). Finden Sie, dass Marihuana (Cannabis) für alle Deutschen legalisiert werden sollte? "In einer Umfrage zur Legalisierung von Marihuana sprachen sich rund 44 Prozent der befragten Deutschen dafür aus, dass Marihuana in Deutschland (eher) nicht legalisiert werden sollte. Mit einem Anteil von 43 Prozent waren fast genauso viele der Befragten (eher) für die Legalisation von Marihuana in Deutschland." [Pros: 43%. Cons: 44%.] Erhebungszeitraum: 15. Juli 2020. Anzahl der Befragten: 1.401 Befragte. Altersgruppe: ab 18 Jahre. Besondere Eigenschaften: Deutschsprachige Bevölkerung. https://de.statista.com/statistik/daten/studie/1249179/umfrage/umfrage-zur-legalisierung-von-marihuana-in-deutschland/.

35100000 Google hits for "Deutschland Verkauf von Cannabis". Cited 17 Oct 2021.

[25] *Wahl-O-Mat question:* Austritt aus der EU. Deutschland soll aus der Europäischen Union austreten.

English translation: Exit from the EU. Germany is to leave the European Union.

Reference to public opinion poll: Statista (12.0210.03.2021) Inwieweit stimmen Sie der Aussage zu, dass Deutschland besser für die Zukunft gerüstet wäre, wenn es nicht Mitglied der EU wäre? [Pros] Stimme (eher) zu: $7 + (11) = 18\%$. [Cons] Stimme (eher) nicht zu: $52 + (24) = 76\%$. Deutschland; Kantar; 12.02.202110.03.2021; 1.575 Befragte; ab 15 Jahre; Computergestützte persönliche Interviews (CAPI)

8180000 Google hits for "Deutschland Austritt aus der EU". Cited 17 Oct 2021.

[26] *Wahl-O-Mat question:* Frauen und Männer auf Landeslisten. Die Landeslisten der Parteien für die Wahlen zum Deutschen Bundestag sollen abwechselnd mit Frauen und Männern besetzt werden müssen.

English translation: Women and men in politics. The state lists of the parties for the elections to the German Bundestag should have to be filled alternately with women and men.

Reference to public opinion poll: Bundesministerium für Familie, Senioren, Frauen und Jugend (26.03.2021) Mehr Gleichstellung im Beruf, mehr Partnerschaftlichkeit im Privaten. Frauen- und

Männerbefragung zu Fragen der Gleichstellung. P. 18, Abb. 9. Frage 15: Und wie ist das mit der Politik: Gäbe es hier eine Verbesserung, wenn Männer und Frauen besser gleichgestellt würden, oder eher nicht? (z.B. im Bundestag oder den Parteien)? [Pros] (Eher) ja: $40 + (36) = 76\%$. [Cons] (Eher) nein: $(14) + 5 = 19\%$. Erhebungszeitraum: 17.–30. November 2020. 1.000 Befragte. https://www.bmfsfj.de/resource/blob/176914/cb19d020cf65b063077bac142a0da39c/20210326-kantar-befragung-gleichstellung-data.pdf.

210000 Google hits for "Deutschland Frauen und Männer auf Landeslisten". Cited 17 Oct 2021.

[27] *Wahl-O-Mat question:* Abrechnung über Fallpauschalen. Stationäre Behandlungen im Krankenhaus sollen weiterhin über eine Fallpauschale abgerechnet werden.

English translation: Flat rate for hospitalization. Inpatient treatment in the hospital should continue to be billed using a flat rate per case.

Reference to public opinion poll: Deutsche Berufsverband für Pflegeberufe (2020) Ziel erreicht? Ergebnisse einer Online-Umfrage zu Effekten der Pflegepersonaluntergrenzen im Krankenhaus. P. 14: Wie schätzen Sie persönlich die Effekte der PpUG einFür Patient/innen [Pros] Positiv: 47.8%. [Cons] Negativ: 52.2%. https://www.dbfk.de/media/docs/download/Allgemein/Bericht-Umfrage-Pflegepersonaluntergrenzen-2020-05-19.pdf.

34200 Google hits for "Deutschland Abrechnung über Fallpauschalen". Cited 17 Oct 2021.

[28] *Wahl-O-Mat question:* Steuer auf hohe Vermögen. Auf hohe Vermögen soll wieder eine Steuer erhoben werden.

English translation: Tax on property. A tax should again be levied on high wealth.

Reference to public opinion poll: Civey (2019) Wie bewerten Sie den Vorschlag von Thorsten Schäfer-Gümbel (SPD), wieder eine Vermögensteuer in Deutschland einzuführen? [Pros] (Eher) positiv: $40.6 + (17.8) = 58.4\%$. [Cons] (Eher) negativ: $(9.2) + 23.3 = 32.5\%$. Kennzahlen repräsentatives Gesamtergebnis: Stichprobengröße 5.047. Befragungszeitraum 23.8.194.9.19. Statistischer Fehler 2.5%. https://civey.com/umfragen/6022/wie-bewerten-sie-den-vorschlag-von-thorsten-schafer-gumbel-spd-wieder-eine-vermogensteuer-in-deutschland-einzufuhren.

16000000 Google hits for "Deutschland Steuer auf hohe Vermögen". Cited 17 Oct 2021.

[29] *Wahl-O-Mat question:* Gesichtserkennung bei Videoüberwachung. Bei der Videoüberwachung öffentlicher Plätze soll Gesichtserkennungssoftware eingesetzt werden dürfen.

English translation: Face recognition for video surveillance. Face recognition software should be allowed to be used for video surveillance of public places.

Reference to public opinion poll: Statista (2019).Wie stehen Sie zu einem Einsatz von automatisierter Gesichtserkennung durch Behörden? "Nach einer von YouGov für das Handelsblatt durchgeführten Umfrage aus dem Jahr 2019 tendierten 50% der Befragten dazu, einen Einsatz von automatisierter Gesichtserkennung durch Behörden unter strengen Auflagen zu gestatten. Komplett verbieten 22%. Für einen freien Einsatz von automatisierter Gesichtserkennung sprachen sich 17% der Befragten aus." [Pros: $17 + (50) = 67\%$. Cons: 22%.] Region Deutschland. Erhebungszeitraum 2019. Anzahl der Befragten 671 Befragte. https://de.statista.com/statistik/daten/studie/1091820/umfrage/umfrage-zum-einsatz-von-automatisierter-gesichtserkennung-durch-behoerden/.

104000 Google hits for "Deutschland Gesichtserkennung bei Videoüberwachung". Cited 17 Oct 2021.

[30] *Wahl-O-Mat question:* Ehepaare ohne Kinder. Auch Ehepaare ohne Kinder sollen weiterhin steuerlich begünstigt werden.

English translation: Married couples without children. Married couples without children should also continue to enjoy tax breaks.

Reference to public opinion poll: Gutefrage.net (03.09.2021) Ist es gerecht, dass Ehepaare ohne Kinder steuerlich begünstigt sind? Ja: 59% Nein: 35% 17 Abstimmungen https://www.gutefrage.net/frage/ist-es-gerecht-dass-ehepaare-ohne-kinder-steuerlich-beguenstigt-sind.

Finanzfrage.net (07.09.2021) Sollten Ehepaare auch ohne Kinder steuerlich begünstigt werden? Ja: 36%. Nein: 64% 14 Abstimmungen https://www.finanzfrage.net/g/frage/sollten-ehepaare-auch-ohne-kinder-steuerlich-beguenstig-werden.

[Pros: $(59 * 17 + 36 * 14)/(17 + 14) = 48.6\%$. Cons: $(35 * 17 + 64 * 14)/(17 + 14) = 48.1\%$]

8010000 Google hits for "Deutschland Ehepaare ohne Kinder". Cited 17 Oct 2021.

[31] *Wahl-O-Mat question:* Ökologische Landwirtschaft. Ökologische Landwirtschaft soll stärker gefördert werden als konventionelle Landwirtschaft.

English translation: Organic agriculture. Organic agriculture should be promoted more strongly than conventional agriculture.

Reference to public opinion poll: Angelika Gellrich (2021) 25 Jahre Umweltbewusstseinsforschung im Umweltressort Langfristige Entwicklungen und aktuelle Ergebnisse. Dessau-Roßlau, Umwelt Bundesamt. P. 31, Abb. 14. Den Ausbau der ökologischen Landwirtschaft stärker fördern [Pros] (Eher) ja: $54 + (38) = 92\%$. [Cons] (Eher) nein: $(5) + 3 = 8\%$. Präsentativerhebung bei 2115 Befragten ab 14 Jahren, Online-Befragung. https://www.umweltbundesamt.de/sites/default/files/medien/5750/publikationen/2021_hgp_umweltbewusstseinsstudie_bf.pdf.

19000000 Google hits for "Deutschland Ökologische Landwirtschaft". Cited 17 Oct 2021.

[32] *Wahl-O-Mat question:* Islamische Verbände. Islamische Verbände sollen als Religionsgemeinschaften staatlich anerkannt werden können.

English translation: Islamic associations. Islamic associations should be able to be recognized by the state as religious communities.

Reference to public opinion poll: Alice Schwarzer Stiftung (11.06.2021). Umfrage: Islam und Islamismus. Berlin. Kapitel "Kritische Punkte: Relativierung der deutschen Rechtsordnung und die Auslandsfinanzierung", Tabelle "Umgang mit dem Islam". Frage: Islamische Organisationen sollten in Deutschland genauso stark vom Staat gefördert und finanziert werden wie christliche Organisationen. Richtig: 12%. Frage: Islamische Organisationen, die religiöse Gebote über das Grundgesetz stellen, sollten verboten werden. Richtig: 86%. [Pros: 12%. Cons: 86%.] Quelle: Alensbacher Archiv, IfD-Umfrage 12035, 1.027 Interviews mit einem repräsentativen Querschnitt der Bevölkerung ab 16 Jahre.) https://alice-schwarzer-stiftung.de/2021/06/11/umfrage-islam-und-islamismus/.

438000 Google hits for "Deutschland Islamische Verbände". Cited 17 Oct 2021.

[33] *Wahl-O-Mat question:* Anstieg des CO2-Preises.Der staatlich festgelegte Preis für den Ausstoß von CO2 beim Heizen und Autofahren soll stärker steigen als geplant.

English translation: Increasing CO2 prices. The state-set price for the emission of CO2 when heating and driving is expected to rise more sharply than planned.

Reference to public opinion poll: Verbraucherzentrale Bundesverband e.V. (20.09.2021) CO2-BEPREISUNG. Ergebnisse einer VerbraucherInnen-Befragung. Frage: Würden Sie eine noch höhere CO2-Bepreisung unterstützen, wenn dieses Geld vollständig an die Gesamtheit der privaten VerbraucherInnen zurückfließt? (Eher) ja: $34 + (25) = 59\%$. (Eher) nein: $(14) + 22 = 36\%$. Frage: Würden Sie eine noch höhere CO2-Bepreisung unterstützen, wenn die Einnahmen in den Staatshaushalt fließen? (Eher) ja: $11 + (14) = 25\%$. (Eher) nein: $(25) + 46 = 71\%$. [Pros: $(59 + 25)/2 =$

42%. Cons: $(36 + 71)/2 = 54\%$.] 1.009 Personen, 22. 06–23.06.2021, statistische Fehlertoleranz max. +/–3 Prozentpunkte in der Gesamtstichprobe https://www.vzbv.de/pressemitteilungen/co2-bepreisung-verbraucherfreundlicher-gestalten.

1120000 Google hits for "Deutschland Anstieg des CO2-Preises". Cited 17 Oct 2021.

[34] *Wahl-O-Mat question:* Schuldenbremse. Die Schuldenbremse im Grundgesetz soll beibehalten werden.

English translation: Debt brake.The debt brake in the Basic Law is to be retained.

Reference to public opinion poll: Wirtschaftswoche (17.02.2020) Hände weg von der Schuldenbremse! Exklusive Umfrage: Volks- und Betriebswirte warnen davor, eine lockerere Haushaltspolitik zu erlauben. "Die meisten Ökonomen sehen das anders. In einer Umfrage des Bundesverbands Deutscher Volks- und Betriebswirte (bdvb) exklusiv für die WirtschaftsWoche sprechen sich 72 Prozent gegen ein Ende der Schuldenbremse aus, 24 Prozent plädieren dafür." [Pros: 72%. Cons: 24%.] https://www.wiwo.de/politik/deutschland/staatsschulden-haende-weg-von-der-schuldenbremse/25540526.html.

534000 Google hits for "Deutschland Schuldenbremse". Cited 17 Oct 2021.

[35] *Wahl-O-Mat question:* Asyl nur für politisch Verfolgte. Asyl soll weiterhin nur politisch Verfolgten gewährt werden.

English translation: Asylum for the politically persecuted. Asylum should continue to be granted only to politically persecuted people.

Reference to public opinion poll: Ipsos (2021) World Refugee Day June 2021. Global attitudes towards refugees. P. 3. Thinking about your country, do you agree or disagree with the following statements? People should be able to take refuge in other countries, including in [Germany], to escape from war or persecution. [Pros] Ja: 71%. [Cons] Nein: 21%. Base: The precision of Ipsos online polls is calculated using a credibility interval with a poll of 1000 accurate to +/– 3.5 percentage points. https://www.ipsos.com/sites/default/files/ct/news/documents/2021-06/Ipsos\ %20World\ %20Refugee\ %20Day\ %202021\ %20report_1.pdf.

3470000 Google hits for "Deutschland Asyl nur für politisch Verfolgte". Cited 17 Oct 2021.

[36] *Wahl-O-Mat question:* Erhöhung des Mindestlohns. Der gesetzliche Mindestlohn soll spätestens im Jahr 2022 auf mindestens 12 Euro erhöht werden.

English translation: Increasing the minimum wage. The statutory minimum wage is to be increased to at least 12 euros by 2022 at the latest.

Reference to public opinion poll: Deutscher Gewerkschaftsbund (12.06.2020) Umfrage: Große Mehrheit für 12 Euro Mindestlohn. "78 Prozent der Deutschen sagen, der Mindestlohn sollte auf 12 Euro je Stunde angehoben werden. Das ist ein Ergebnis einer repräsentativen Umfrage, die das Meinungsforschungsinstitut Kantar im Auftrag des DGB durchgeführt hat." [Pros] Ja: 78%. [Cons] Nein: 22%[?] https://www.dgb.de/themen/++co++dea24b1c-ac0b-11ea-b18f-52540088cada.

1640000 Google hits for "Deutschland Erhöhung des Mindestlohns". Cited 17 Oct 2021.

[37] *Wahl-O-Mat question:* Besteuerung des Flugverkehrs. Der Flugverkehr soll höher besteuert werden.

English translation: Tax on air traffic. Air traffic should be taxed higher.

Reference to public opinion poll: Statista (2019) Sind Sie für eine CO2-Steuer auf Flüge zur Bekämpfung des Klimawandels? [Pros] (Eher) ja: $(32) + 39 = 71\%$. [Cons] (Eher) nein: $(18) + 12 = 30\%$. Erhebungszeitraum: Oktober 2019. https://de.statista.com/statistik/daten/studie/1105890/umfrage/umfrage-zur-co2-flugsteuer-zur-bekaempfung-des-klimawandels/.

111000 Google hits for "Deutschland Besteuerung des Flugverkehrs". Cited 17 Oct 2021.

[38] *Wahl-O-Mat question:* Homeoffice. Unternehmen sollen selbst entscheiden, ob sie ihren Beschäftigten das Arbeiten im Homeoffice erlauben.

English translation: Home office. Companies should decide for themselves whether they allow their employees to work from home.

Reference to public opinion poll: Bitkom Research (26.10.2020) Mehrheit gegen Recht auf Home-office "Die Pläne des Bundesarbeitsministeriums für ein Recht auf Homeoffice stoßen in der deutschen Bevölkerung überwiegend auf Ablehnung. Eine Mehrheit von 56 Prozent würde einen gesetzlichen Rechtsanspruch auf Homeoffice, wie er aktuell diskutiert wird, nicht begrüßen. Dem stehen 40 Prozent gegenüber, die den Vorschlag willkommen heißen. Das ist das Ergebnis einer repräsentativen Befragung von mehr als 1.000 Personen in Deutschland ab 16 Jahren im Auf-trag des Digitalverbands Bitkom. Das Bundesarbeitsministerium plant, ein Recht auf Homeof-fice einzuführen, wonach alle Erwerbstätigen, deren Tätigkeit von Zuhause aus ausgeübt werden kann, einen Anspruch darauf haben, ihren Arbeitsort an einer bestimmten Anzahl von Tagen im Jahr frei zu wählen... Dabei wurden 1.005 Personen ab 16 Jahren in Deutschland telefonisch be-fragt. Die Umfrage ist repräsentativ." [Pros: 56%. Cons: 40%.] https://www.bitkom-research.de/de/pressemitteilung/mehrheit-gegen-recht-auf-homeoffice.

22800000 Google hits for "Deutschland Homeoffice". Cited 17 Oct 2021.

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