

Online Appendices for Knutsen, Dahlum, Rasmussen and Wig:
Behind the throne: Regime support coalitions around the world, 1789-2020

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Appendix I: Codebook, with questions and full clarifications, for the expert-coded V-Dem regime questions.

See separate .pdf file with the V-Dem Regimes survey.

Appendix II: Regression results for country-year- and country-year-coder level reliability assessments

Table A1: Correlates of standard deviation for measurement model-adjusted scores, for Regime support groups size.

	Model 1 Parsimonious specification	Model 2 Add squared term coal. size	Model 3 Add econ. + instit. controls	Model 4 Add democracy dummy	Bivariate Pearson's r coefficients (with std.dev. MM-adj. scores sup.coal. size)
Number coders	-0.02** (-7.65)	-0.02** (-9.59)	-0.02** (-7.38)	-0.02** (-7.34)	-0.42
Linear time trend (year)	-0.00* (-2.22)	-0.00** (-3.05)	-0.00 (-1.27)	-0.00 (-1.11)	-0.33
Historical V-Dem observation	-0.04** (-2.69)	-0.04* (-2.59)	-0.03 (-1.79)	-0.03 (-1.75)	0.11
Latin America	0.09** (3.08)	0.09** (3.40)	0.11** (4.38)	0.11** (4.52)	0.11
MENA	0.04 (1.20)	0.07* (2.25)	0.08** (2.90)	0.09** (3.03)	-0.06
S.S. Africa	0.04 (1.54)	0.04 (1.87)	0.06* (2.30)	0.06* (2.37)	-0.09
Western Europe + N. America	0.11** (3.87)	0.06** (2.68)	0.03 (1.48)	0.04 (1.71)	0.23
Asia-Pacific	0.01 (0.36)	0.01 (0.54)	0.04 (1.44)	0.04 (1.67)	-0.13
Support coalition size (normalized)	0.03 (0.79)	-1.87** (-17.23)	-2.08** (-16.70)	-2.09** (-16.50)	-0.11
Support coal. size (norm.) squared		1.77** (18.74)	1.95** (17.85)	1.96** (17.42)	-0.01
Ln GDP p.c.			-0.00 (-0.07)	-0.00 (-0.04)	0.00
Impartial administration			0.07 (1.75)	0.07 (1.76)	0.16
Freedom expression index			-0.03 (-1.17)	-0.01 (-0.20)	0.04
Ln population			-0.01 (-1.58)	-0.01 (-1.61)	-0.27
Democracy (dummy)				-0.03 (-1.59)	0.01
Constant	1.31** (4.53)	1.91** (7.50)	1.71** (5.31)	1.64** (5.03)	
N	25,975	25,975	19,894	19,772	
R ²	0.23	0.50	0.51	0.51	

Note: * p<.05; ** p<.01. Coefficients from OLS regressions with errors clustered by country and country-year as unit of analysis. T-values in parentheses.

Table A2: Correlates of different measures of (expert-level) reliability, for the regime support groups size measure. Outcome variable specified in top row.

Outcome:	Abs. difference expert-score and mean score	Beta parameter, expert reliability, meas. model	Expert's self-reported confidence in coding
Linear time trend (year)	-0.00** (-3.16)	-0.00 (-0.07)	0.00 (1.75)
Latin America	0.03 (0.48)	-0.05 (-0.73)	0.06* (2.26)
MENA	0.08 (0.76)	-0.10 (-1.57)	0.04 (1.66)
S.S. Africa	0.10 (1.30)	-0.09 (-1.46)	0.03 (1.12)
Western Europe + N. America	-0.05 (-0.67)	0.07 (0.82)	0.00 (0.17)
Asia-Pacific	0.05 (0.57)	-0.04 (-0.57)	0.05 (1.56)
Ln GDP p.c.	0.01 (0.31)	0.01 (0.23)	0.00 (0.46)
Impartial administration	-0.34 (-1.69)	0.12 (1.33)	0.02 (0.65)
Freedom expression index	-0.10 (-1.21)	-0.01 (-0.15)	-0.02 (-0.93)
Ln population	-0.00 (-0.06)	-0.01 (-1.15)	0.00 (0.22)
Democracy	-0.16** (-3.17)	0.05* (2.12)	0.03* (2.01)
Nr coders for country-year-question	0.01 (0.60)	0.01 (1.18)	-0.00 (-0.05)
Sympathy liberal democracy principle	-0.00 (-0.06)	0.02 (1.03)	0.01 (1.68)
Sympathy electoral dem. principle	0.02 (1.11)	0.01 (0.47)	0.02* (2.44)
Coding motivation: Improves my work	-0.02 (-0.16)	0.38** (4.35)	0.05 (1.60)
Motivation: Additional work opportune.	0.02 (0.14)	-0.19 (-1.80)	0.08 (1.88)
Motivation: Benefits reputation	-0.21* (-2.03)	0.28** (2.69)	0.07 (1.76)
Motivation: Valuable scholars/p. makers	-0.09 (-0.99)	0.26** (3.52)	0.05* (2.14)
Motivation: V-Dem coding fun	-0.18 (-1.68)	-0.26* (-2.25)	0.01 (0.10)
Motivation: Accurate info. about country	-0.10 (-1.07)	0.30** (3.73)	-0.00 (-0.05)
Motivation: Acc. info. about area of exp.	-0.14 (-1.44)	0.22* (2.51)	0.06 (1.96)
Motivation: Other	0.09 (0.43)	0.23 (1.71)	0.07 (1.53)
Satisfaction V-Dem coding	0.04** (3.03)	-0.06** (-3.52)	0.00 (0.37)
Time usage coding	-0.00 (-0.16)	-0.00 (-1.54)	0.00 (1.30)
Constant	5.57** (4.29)	0.90 (1.21)	-0.22 (-0.58)
N	40252	109117	40903
R ²	0.14	0.07	0.06

Note: * $p < .05$; ** $p < .01$. Coefficients from OLS regressions with errors clustered by country and country-year-expert as unit of analysis. T-values in parentheses. Top subset of variables are measured at country-level, and bottom subset are expert-level variables.

Appendix III: Validating our support group measures with measures on the social and occupational background of cabinet ministers.

In this appendix, we present another validation exercise than the one presented in the paper (comparing our measures with measures from the Political Settlements Data). This second validation exercise comes from comparing our meso-level support group measures with related micro-level measures of the social background for a subset of particularly powerful individuals in the support coalition, namely cabinet ministers. Nyrup et al. (2023) are currently in the process of collecting data on the educational, occupational, and social background of all ministers, since 1966, in countries with more than 10 million inhabitants. We borrowed their currently finalized data for about 60 countries. We selected some (of the several) measures that could be used to match the background of ministers with particular support coalition categories (such as military officers) or aggregates of several categories (e.g., working class background, collapsing urban and rural working classes in our scheme). We then calculated a series of bivariate correlations (Pearson's R), for the overall sample (about 2800 country-years), by regime type (using the Skaaning et al. (2015) measure for identifying electoral democracies) and for selected years (every fifth year from 1970-2020).

The upper panel in Figure A1 illustrates one particularly strong (and consistent) correlation, namely that between the share of cabinet ministers with a military occupation as the main occupation prior to becoming a minister and the score on our (continuous, 0-1) military as support group measure. We note that we would not – even absent any measurement errors in the two measures – expect a perfect correlation, as they capture two different concepts. As discussed, the support group concept rests on a broad notion of power, influenced through different (formal and informal) channels at different government levels – countries may, e.g., have influential militaries even without their representatives holding many official government positions. Yet, we anticipated a moderate, positive correlation, and we find that countries with more cabinet ministers with military background are typically much more likely to be coded by our experts as having the military as part of the support coalition. The bivariate correlation is typically above .5 prior to 2010, and slightly lower thereafter. When splitting the sample by regime type, the correlation is much higher in autocracies than in democracies.

Similar correlations between our and Nyrup et al.'s measures are generally lower, and more time-variant, once moving to broader social group categories, such as “the middle classes” or “working classes”. The middle plot aggregates our two (rural and urban) middle class support group measures and correlates it with Nyrup et al.'s coding of the share of middle class cabinet ministers, based on the class background of cabinet minister's families (primary caretakers). The lower plot does the same for the corresponding working class measures. The middle class measures were weakly correlated until 1985, but since then the two measures have correlated between .35 and .6. Interestingly, the correlation is about twice as strong in democracies as in autocracies. The working class measures have displayed even lower correlations (between 0.1 and 0.45) from 1970 to 2020, with somewhat higher correlations in the early years. However, the low correlation is primarily due to the democratic part of the sample (overall Pearson's r of 0.08, for all years), and the correlation is quite strong for autocracies ($r=0.51$). Autocracies with (urban and rural) working classes represented in the support coalition also tend to have higher shares of cabinet ministers with working class background.¹

¹ Note again that we would not expect a perfect correlation: For example, in societies with great social mobility, cabinet ministers with middle class occupations and allegiance to the middle classes may typically have grown up in families with urban or rural working class background, and large social groups such as the middle and working classes may hold large sway over politics and policy making, and be part of the support coalition, even if they are underrepresented in the cabinet.

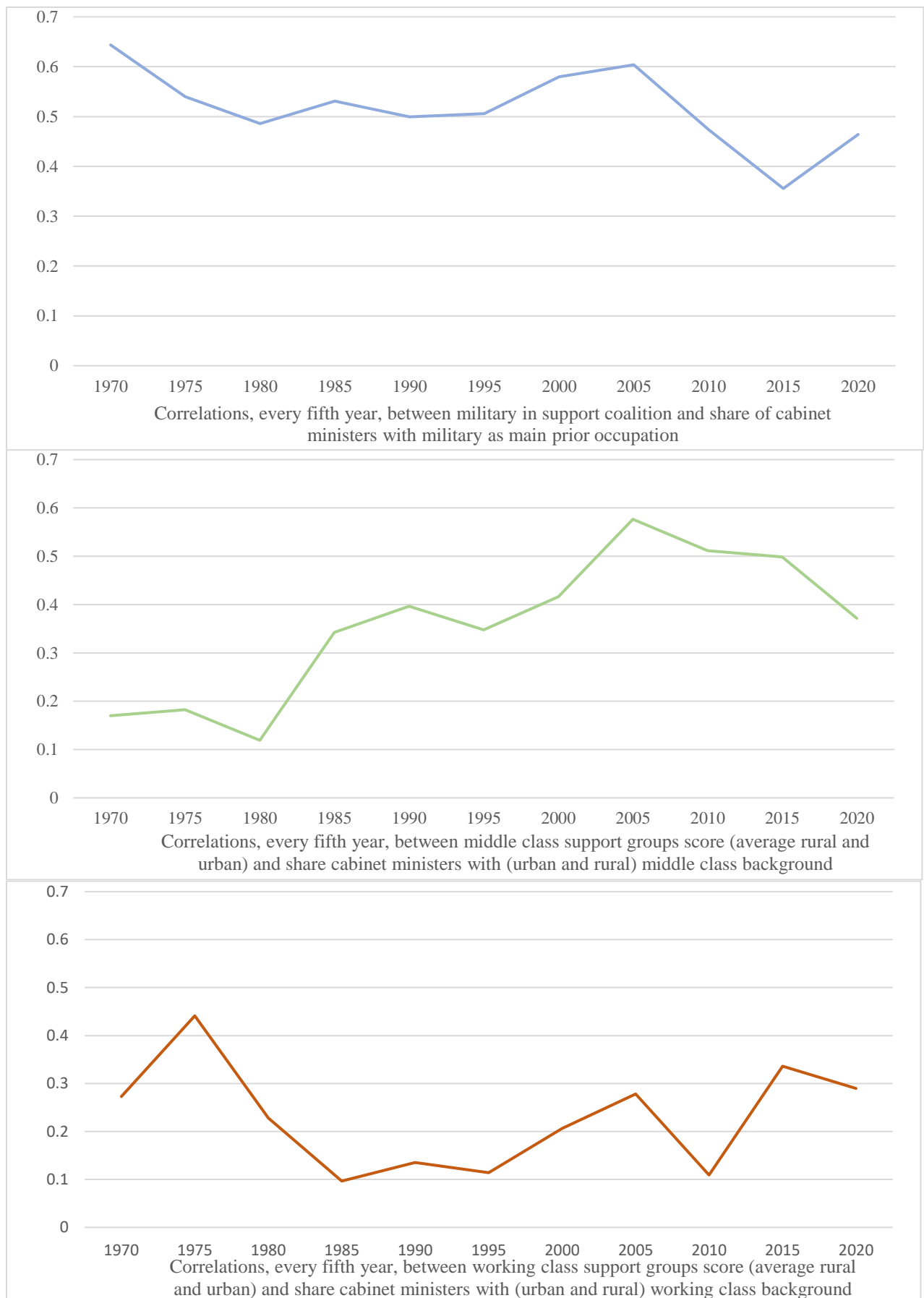


Figure A1: Bivariate correlations, every fifth year, between support group measures and relevant measures (from Nyrup et al. 2023) of share cabinet positions by occupational or social group.

Appendix IV: Assessing between- and within variance for GWF regime units and CHISOLS leader groups

As summarized in Section IV of the paper, we assessed the between- and within-regime variance for regime units as operationalized by Geddes et al (2014; henceforth GWF). Insofar as we can plausibly assume that regime support groups are more stable within the time span of a particular regime than across regimes, assessing the relative share of variances between- and within-units may be viewed as an external validation test of the data. This is an especially relevant test since GWF draws on a similar definition of regimes as the one applied for operationalizing the (Historical Regimes Data; HRD) regime units underlying the coding of ReSOG's variables (see Djuve et al. 2020 for an extensive discussion and assessment of the similarities and differences between the GWF and HRD definitions and operationalizations).

The results for ReSOG's regime support groups size, the 14 regime support groups (from the multiple choice version of the variable allowing for multiple groups), and the number of support groups variable constructed and described in the paper are listed in Table A3. In general, the within-regime variance is substantially smaller than the total variance for all variables, and especially the 14 regime support groups ones. The share of within-regime variance as percent of total variance for the latter variables range between 4.0% (The aristocracy) and 8.3% (Business elites). For regime support groups size, the corresponding share is 6.7%. When assessing within-regime variance as percentage share of within-country variance, these numbers are still relatively low and range between 17.3% (The aristocracy) and 38.5% (Ethnic or racial groups). While there is variation in support groups composition within regime units, as defined by GWF, there is thus substantially more variation across regimes, even within the same country. This pattern broadly follows our expectations. We note that the differences in between- and within-variances are typically even larger, although not by much, when we exclude the first and last years of a regime, compared to in Table A.3.

One exception to the clear pattern is the composite number of regime support groups variable, which displays more within-regime variation. For this variable, within-regime variation makes up about half of the within-country variance, across the 1946-2010 timespan of the GWF coding. The more considerable within-regime variance may reflect (more mechanically) the count nature of the variable. The aggregated measure will vary if any one of the more fourteen specific support group measures change (above or below their 0.50 thresholds) from one year to the next. While the share of within-variance is relatively higher, we therefore do not consider this to be a clear sign of lacking validity for the variable.

In Table A.4, we present similar results when considering within- and between-variation for periods demarcated by years with change in source of leader support (SOLS), according to CHISOLS's (v.5) *solschdum* variable (Mattes et al. 2016). The underlying assumption that we must make here is that – while conceptually distinct -- these groups of related leaders correlate fairly highly with regimes, as we define them, in the global sample across 1919-2018. Indeed, we find very similar results for these assessments as the ones relying on GWF regime units, and the share of within-regime variance is notably lower also for the number of regime support groups variable in Table A.4.

Finally, in Table A.5, we use the original HRD coded regime units to define within vs. between-variance, and display selected variance statistics for number of regime support groups and regime support groups size. The intention with this table is thus not external validation, but rather to showcase a different point noted in the paper. There exists within-

regime variation for different regime types, both democracies and autocracies (again using the same LIED-based dichotomous democracy variable as used in the paper). Interestingly, we see from Table A.5 that the share of within-regime variance of total variance is actually higher for (the typically longer-lived) democracies for both the regime support groups size and number of regime support groups variables, but if we consider the absolute magnitude of the within-regime variance, this is higher for autocracies (which also have considerably larger total variance) for the regime support groups size variable. As a final restrictive assessment, we checked whether there is any within-regime variance at all for very stable democracies, restricted here to the 762 democratic country-years that have also, according to the HRD operationalization, have had their specific regime in place for more than 50 years. (For Norway, for example, this requirement was met in 1995, as the post-WWII democratic regime coded by HRD started in 1945). Also among these very stable democracies, we find considerable within-regime variation in number of regime support groups (about one-fifth of total variance is within-regime variance), whereas within-regime variance is much lower for the regime support groups size variable (only about one-fiftieth of total variance).

Table A3: Variance for ReSOG regime support groups variables between and within GWF regime units

ReSOG Variable	Mean	Total variance	Between-regime variance	Within-regime variance	Within-regime variance as % total variance	Within-country variance	Within-regime variance as % within-country variance
Nr regime support groups	3.999	4.418	3.471	0.479	10.8	0.945	50.7
Regime support groups size	0.920	1.281	1.190	0.086	6.7	0.367	23.5
<i>Support group variables</i>							
The Aristocracy	0.173	0.053	0.039	0.002	4.0	0.012	17.3
Agrarian elites	0.218	0.050	0.050	0.003	6.6	0.014	23.4
Party elites	0.632	0.085	0.075	0.005	5.6	0.024	20.0
Business elites	0.440	0.085	0.080	0.007	8.3	0.025	28.3
The state bureaucracy	0.480	0.062	0.056	0.005	7.4	0.013	35.8
The military	0.500	0.107	0.087	0.006	6.0	0.034	18.8
Ethnic/racial group	0.158	0.044	0.037	0.002	5.3	0.006	38.5
Religious group	0.143	0.040	0.030	0.002	5.8	0.009	26.6
Local elites	0.239	0.047	0.041	0.003	5.7	0.010	25.7
Urban working classes	0.278	0.075	0.048	0.004	5.8	0.017	25.2
Urban middle classes	0.333	0.085	0.056	0.005	5.5	0.021	22.1
Rural working classes	0.245	0.058	0.038	0.004	6.5	0.013	27.8
Rural middle classes	0.237	0.065	0.038	0.003	5.1	0.011	30.3
Foreign government	0.147	0.047	0.055	0.004	8.2	0.018	21.6

Notes: The statistics are calculated for 7,754 observations across 480 GWF regimes (average lifespan of 16.15 years), globally from 1946-2010.

Table A4: Variance between and within periods demarcated by years with change in source of leader support (SOLS), according to CHISOLS's (v.5) *solschdum* variable.

Variable	Mean	Total variance	Between-regime variance	Within-regime variance	Within-regime variance as % total variance	Within-country variance	Within-regime variance as % within-country variance
Nr regime support groups	3.937	4.322	4.331	0.402	9.3	1.261	31.87
Regime support groups size	0.845	1.327	1.197	0.095	7.1	0.476	19.93
<i>Support group variables</i>							
The Aristocracy	0.199	0.064	0.042	0.002	3.8	0.020	11.74
Agrarian elites	0.231	0.056	0.052	0.003	5.0	0.023	12.48
Party elites	0.613	0.086	0.068	0.006	6.9	0.028	21.26
Business elites	0.451	0.078	0.065	0.006	7.8	0.029	20.81
The state bureaucracy	0.463	0.062	0.054	0.004	7.3	0.017	25.76
The military	0.486	0.104	0.090	0.006	6.0	0.036	17.11
Ethnic/racial group	0.165	0.046	0.039	0.002	4.4	0.007	28.03
Religious group	0.148	0.040	0.036	0.002	4.2	0.011	15.54
Local elites	0.243	0.048	0.040	0.003	6.1	0.012	24.54
Urban working classes	0.259	0.073	0.075	0.003	4.5	0.023	14.44
Urban middle classes	0.318	0.081	0.082	0.004	4.9	0.025	15.90
Rural working classes	0.228	0.057	0.055	0.003	5.3	0.017	17.90
Rural middle classes	0.227	0.064	0.070	0.003	3.9	0.013	18.58
Foreign government	0.154	0.050	0.040	0.005	10.1	0.022	22.71

Notes: The statistics are calculated for 11,184 observations from 1206 periods (average lifespan of 9,27 years) globally from 1919-2018. CHISOL's *solschdum* variable does not take into account minor SOLS changes and SOLS changes lasting less than 30 days.

Table A5: Variance between and within HRD-coded regime units for autocracies (as coded in the paper; LIED<4) democracies (LIED≥4), and very stable democracies (LIED≥4 and HRD regime duration surpassed 50 years).

	Mean	Total variance	Between-regime variance	Within-regime variance	Within-regime variance as % total variance
<i>All HRD observations (n=25,724)</i>					
Nr regime support groups	3.601	4.995	4.174	0.494	9.9
Regime support groups size	-0.076	2.286	1.850	0.080	3.5
<i>Autocracies only (n=18,632)</i>					
Nr regime support groups	3.239	4.554	4.093	0.401	8.8
Regime support groups size	-0.562	1.780	1.621	0.085	4.8
<i>Democracies only (n=6,453)</i>					
Nr regime support groups	4.793	4.683	4.272	0.734	15.7
Regime support groups size	1.439	0.806	0.982	0.052	6.4
<i>Democracies having lived ≥50 years (n=762)</i>					
Nr regime support groups	5.302	3.375	3.456	0.696	20.6
Regime support groups size	1.913	0.346	0.910	0.006	1.9

Appendix V: Issues with identifying (explicit and active) “unsuccessful” opposition groups and with distinguishing regime support groups from opposition groups

Despite the various strategies and measures, described in the paper, that we take to enhance the reliability and validity of the ReSOG coding, these variables are inevitably hard to code without error. As discussed in Sections III and IV, we even anticipate that there will be some systematic sources of error, which readers and dataset users should pay attention to when interpreting results based on these data. While our country experts are typically academics coming from or living in -- and with long track-records of working on -- their respective countries, some regime support or opposition groups might, for example, be more visible in the news media, academic literature, and other sources. One might speculate, for instance, that military- and party elites may be more “high-profile” and visible even to experts than, e.g., rural working classes, and thus be more frequently coded as relevant groups, all else equal.

One particular such (potential) bias that we want to draw attention to pertains, more specifically, to the coding of “Explicit and active regime opposition groups”. This variable pertains to groups that “include a significant share of individuals who engage in active and explicit opposition to the regime to promote its removal. These actors make explicit statements of dissent from the regime, publicly voice their preference for regime change, and may possibly engage in other actions intended to further the removal of the regime such as anti-regime demonstrations, sit-ins, boycotts, strikes, the formation of anti-system parties, acts of sabotage, or armed rebellion” (see Appendix I for the full clarification). One notable issue with this question is that the sources may over-report on instances where groups mobilize and are successful in removing the regime, since regime change is a high-profile event documented in various media outlets. Opposition campaigns successfully driving regime change could also be subject to more academic case studies than failed ones. This is a type of selection bias due to “streetlight effects” that would affect any observational coding of mass opposition mobilization (see Dworschak 2023).

There are some features of our data that may reduce such a “streetlight” bias towards observing successful opposition mobilization. First, we highlight that a group, in order to be counted as a mobilized opposition group, must have expressed explicit opposition to the regime, and we list a number of observable (and often quite high-profile) activities and tactics (anti-regime demonstrations, strikes, sabotage, armed rebellion, etc.) in our clarification to the expert coders. These may be observed and reported on even in absence of their eventual success, as vocal opposition groups – especially when they are repressed -- are often brought to the attention of international audiences via activists, diaspora networks, or journalists. Recent examples include the (secular) opposition from, e.g., the urban middle classes in Tehran, Iran, the Tamils in Sri Lanka, and the Uighurs in China. These unsuccessful opposition groups have received ample attention, also by scholars.

Yet, it remains a concern that eventual success may bias the coding of this variable. Successful opposition groups preceding a high-profile regime change event will likely more often be observed in various sources than unsuccessful ones, especially if the unsuccessful opposition peters out without high-profile repression by the regime. Given the high likelihood of this systematic selection, we therefore warn dataset users and readers against interpreting

the magnitude of any correlations between mobilized opposition groups and, e.g., regime breakdown (or related variables such as democratization) as causal effect estimates.

A second concern related to measurement errors concerns “dormant” opposition groups – i.e., those that should be coded as “opposition groups” but not as “active opposition groups” in ReSOG -- that are co-opted by the regime. In the presence of effective co-optation strategies by the regime (see, e.g., Gandhi 2008; Wintrobe 1998), it is hard to know when a group is a) co-opted and therefore not in opposition to the regime (anymore), or b) co-opted and therefore not active in opposition. We should, in principle, be able to capture the groups in scenario b) with ReSOG’s variables as “dormant” opposition groups, although ReSOG data alone would then not allow us to separate between these inactive opposition groups and others that have not been co-opted. Other types of data, for instance group-specific proxies of co-optation such as military spending or targeted welfare policies, and thoughtful empirical strategies might allow researchers to shed light on this distinction when combined with our data, although this is certainly no easy task.

We therefore highlight the very real possibility that many “opposition groups” in our dataset are co-opted by the regime, in a strategic attempt to mitigate the magnitude of the threat. These groups would still like to see the regime removed, and could contribute to this outcome under certain scenarios, but refrain from taking on the costs and risks of actively mobilizing against the regime due to various side-payments. Indeed, one may also imagine scenarios where initial regime opposition groups are co-opted to such an extent that they enter the regime support coalition: Some powerful groups, originally in opposition to the regime, may gain so much from the ongoing benefits from co-optation strategies that they can start supporting the regime and even actively aid its continuation. This, we surmise, may be more likely in the presence of strong expectations of continued co-optation. While the time-varying nature of our data might be of some help in describing such a possible dynamic, especially when combined with other data sources, there are inevitably tricky conceptual and operational issues with delineating co-opted opposition groups from co-opted regime support groups. Experts could rely on various time-varying signals in the form of expressed support and various forms of cooperation with the regime, although such signals can also be subject to strategic manipulation by the different actors. It is hard to gauge the extent of such measurement error in our data, absent other observable and generally applicable yardsticks (at least that we can think of). Yet, we speculate that it may be higher for regime-group pairs where the regime relies heavily on cooptation strategies.

Appendix VI: Additional figures displaying descriptive statistics

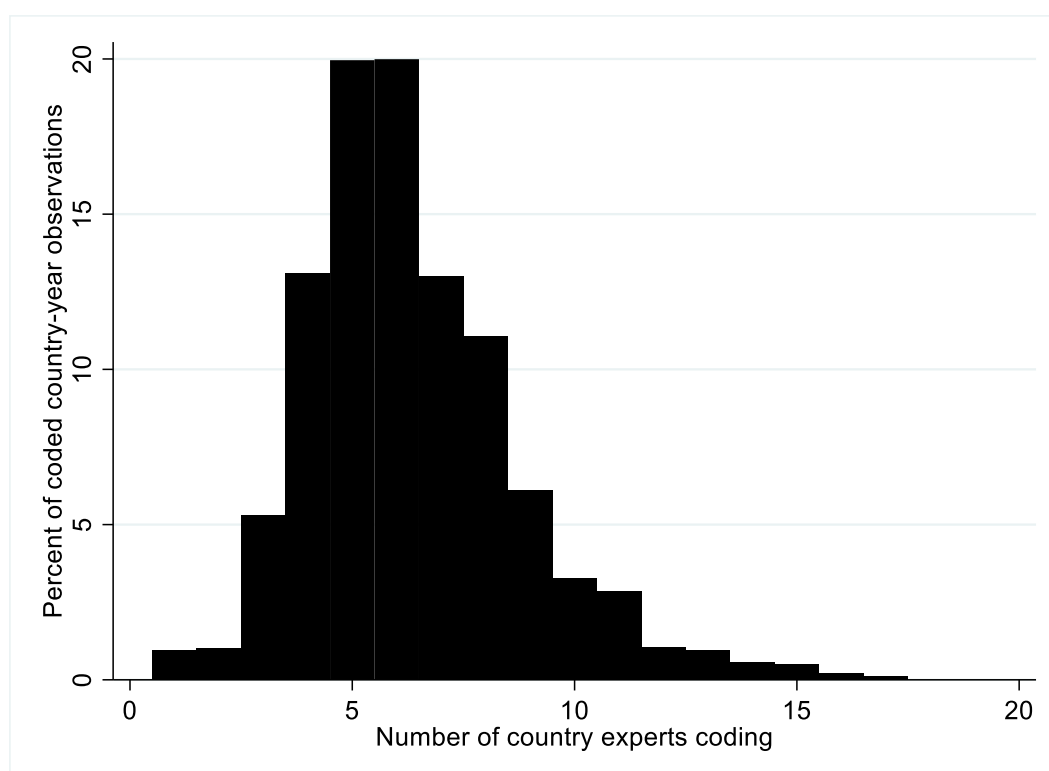
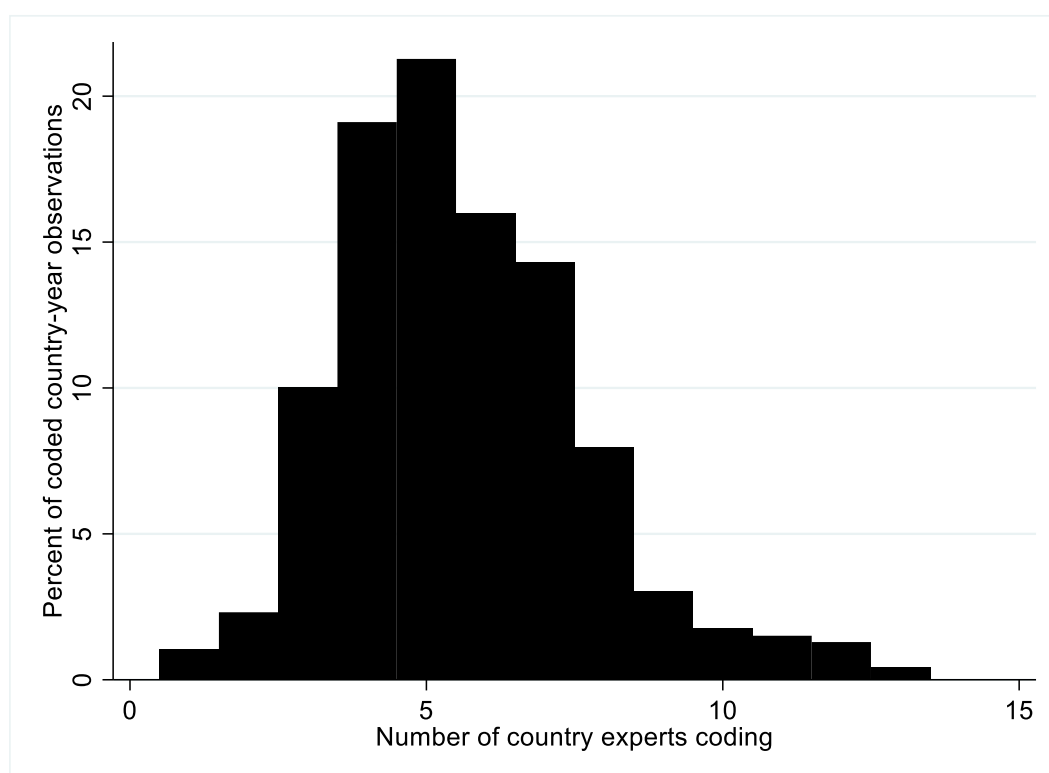


Figure A2: Histogram of number of country-experts coding each country-year observation from 1900-2020 for Regime opposition groups (top) and Regime support groups (bottom) .

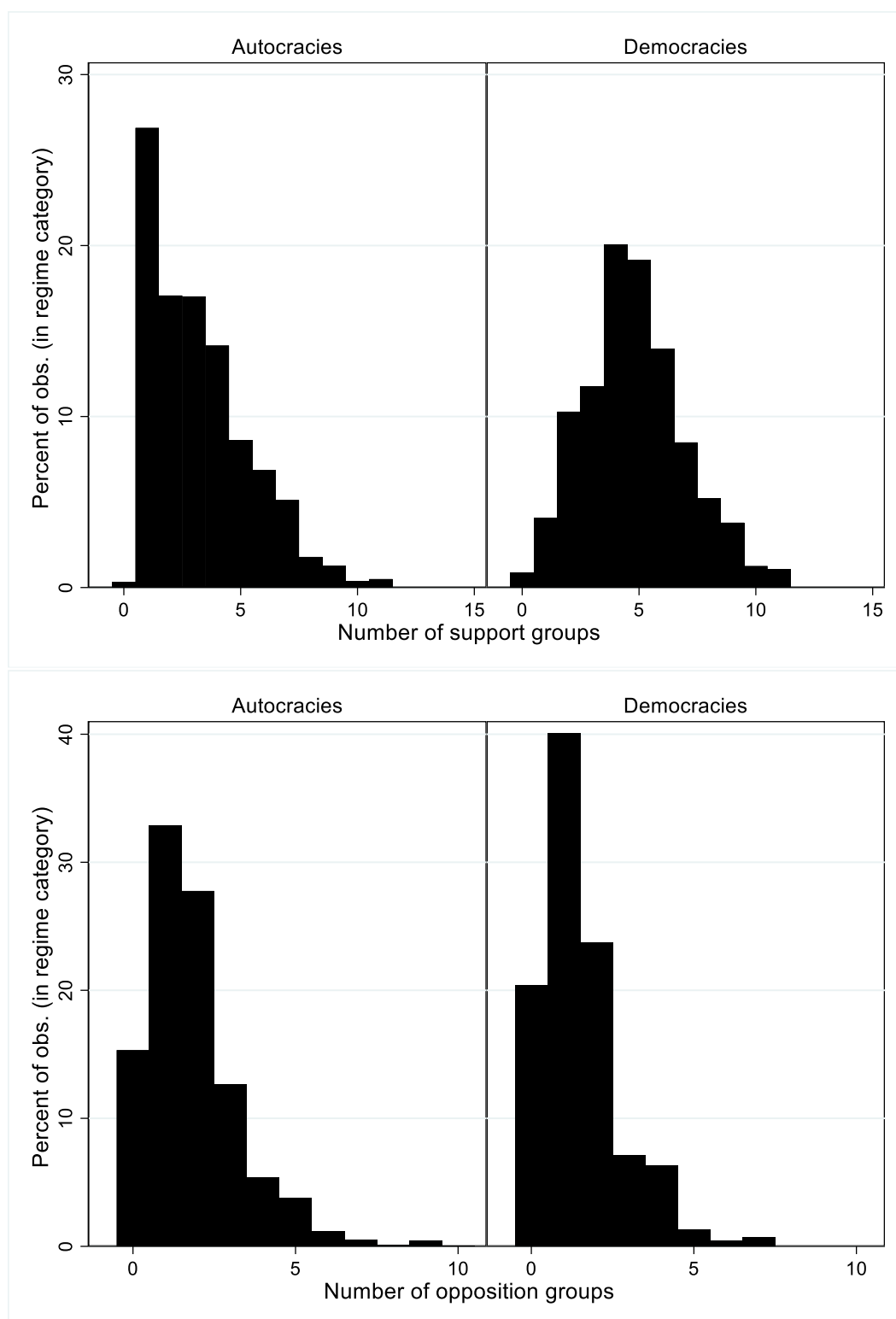


Figure A3: Histograms for number of support groups (top) and opposition groups (bottom), by regime type, all countries and years included.

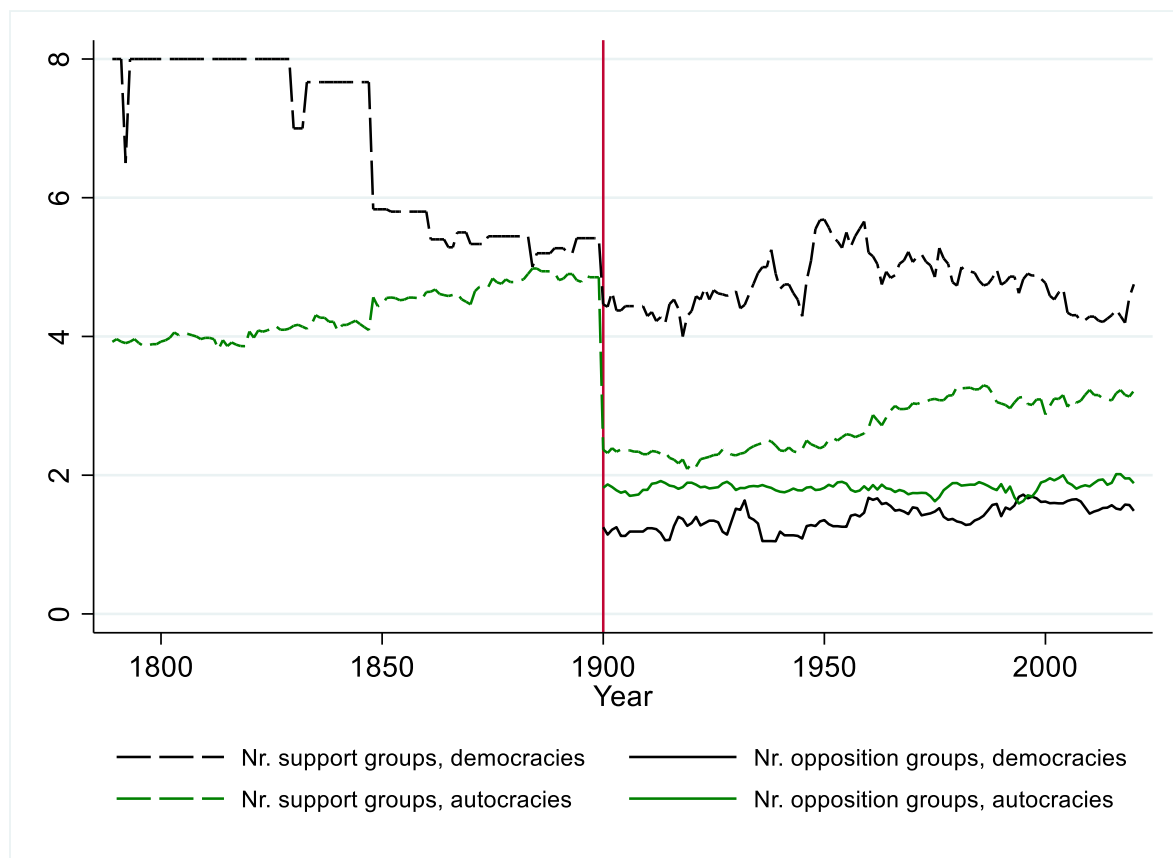


Figure A4: Global averages number of support and opposition groups, by regime type, using dummy based on LIED (contested elections) to distinguish democracies from autocracies.

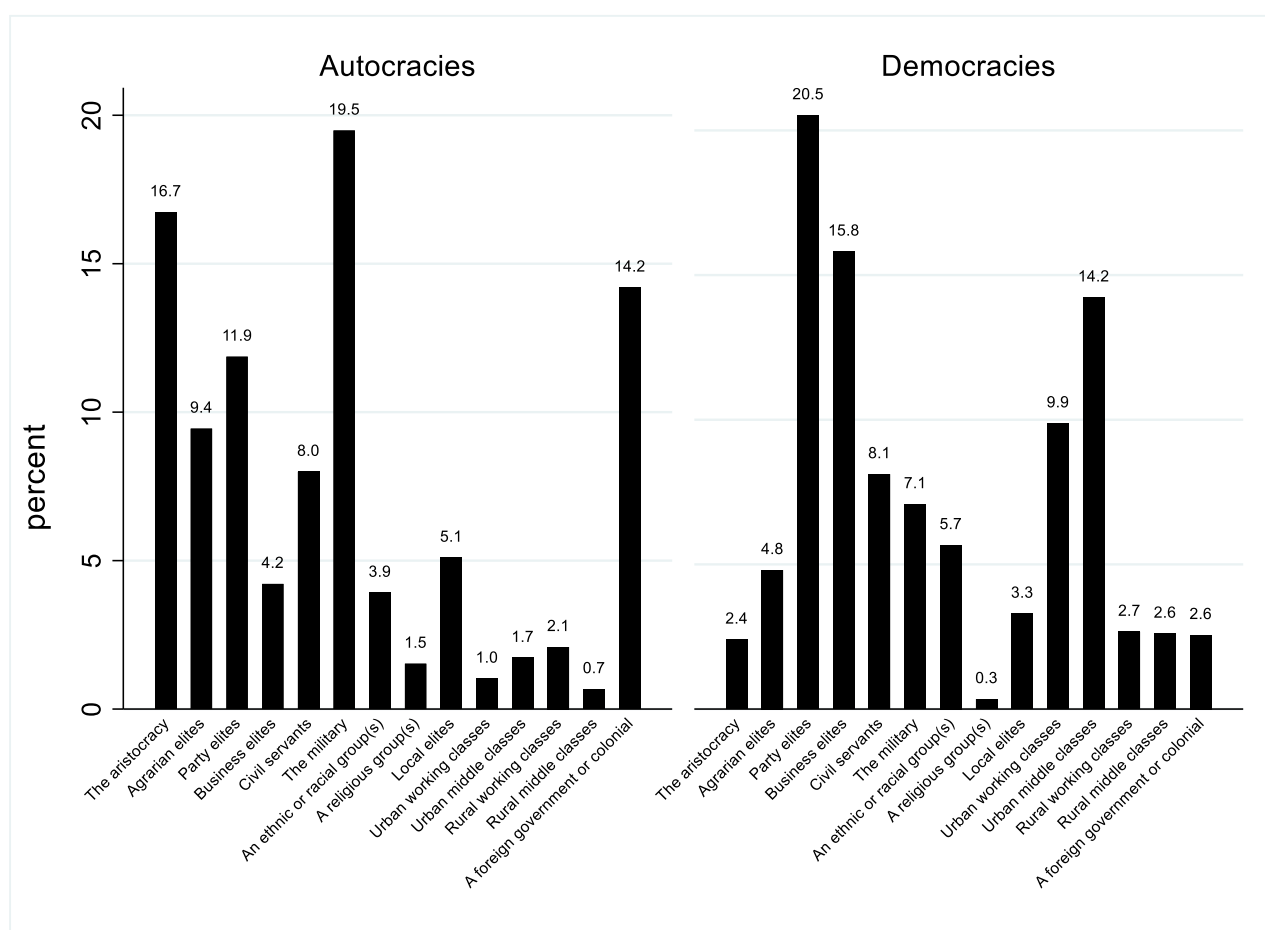


Figure A5: Shares of observations with most important support groups, by regime type

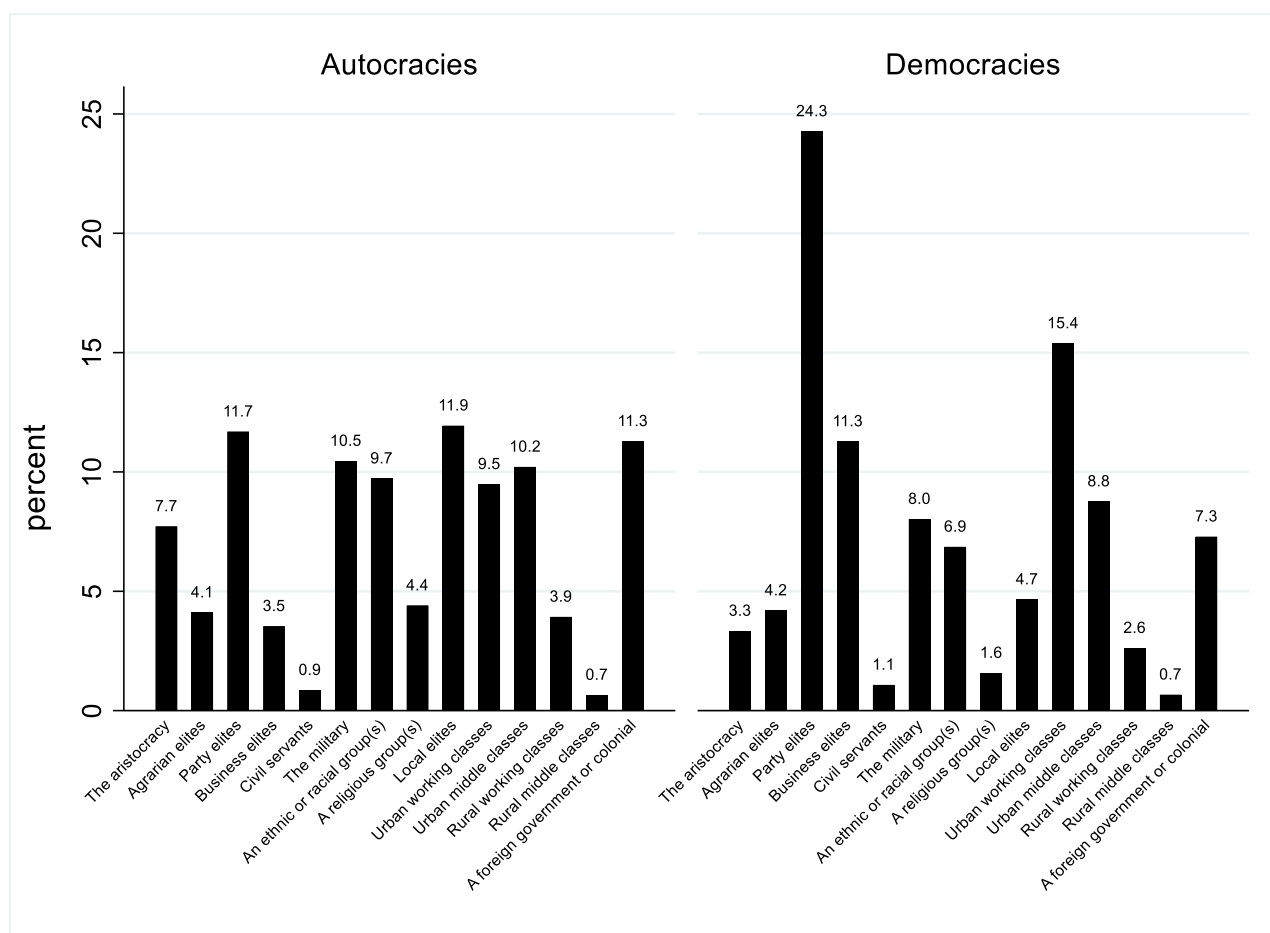


Figure A6: Shares of observations with most important opposition groups, by regime type

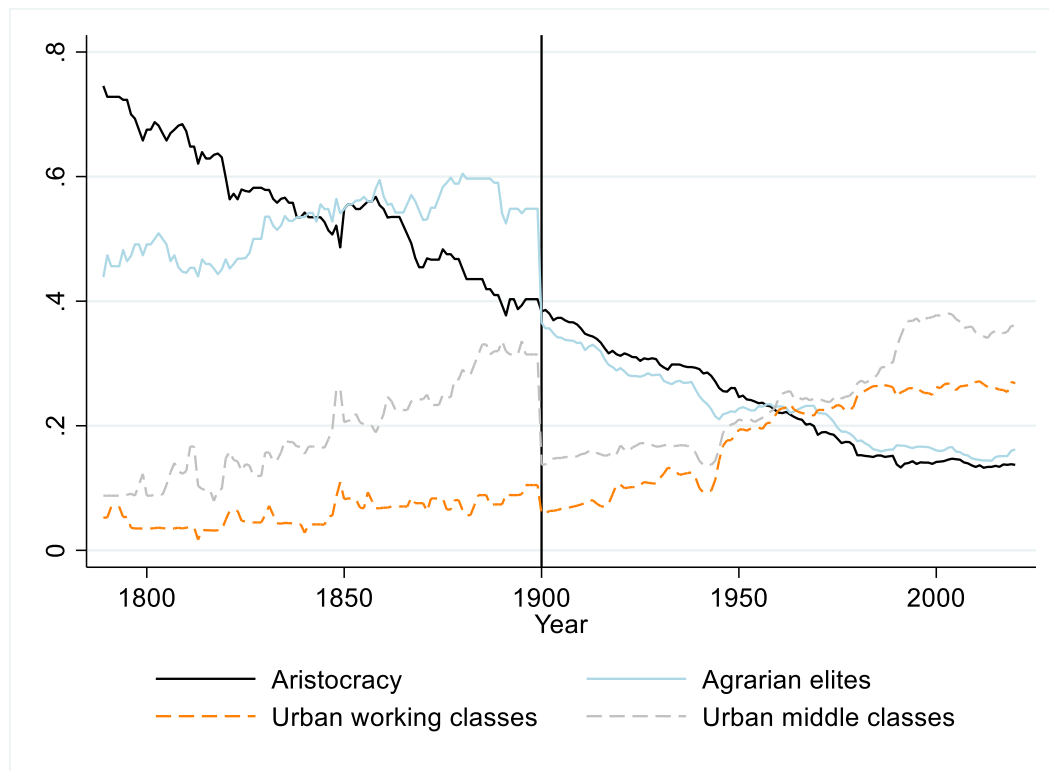


Figure A7: Share of regimes, globally, with specific group included in the support coalition, based on original (interval) measure

As discussed in the paper, there is ample regional heterogeneity under the aggregated global trends displayed in Figure 6 (and the corresponding Figure A7, which is based on the original interval measures of support groups rather than the dichotomized support group measures). For example, for the Urban middle classes, the share of countries where it is included in the support coalition is very high, around 70%, for Western Europe and North America, and the share was, in fact, around 60% already in the 1880s. In Latin America, where the corresponding share was around 25% from after WWII to the 1980s, the share has grown considerably in recent decades, but still remains around 40%. In Eastern Europe, which experienced a sudden increase in urban middle class representation with the end of the Cold War, the share has decreased somewhat in later decades and is today around the same level as Latin America (and Asia-Pacific), that is 40%. In Sub-Saharan Africa and the MENA region, only around 20% of regime support coalitions include the urban middle class, even today.

The graphs disaggregated by regions, in Figures A8-A13, also provide other interesting nuances that help illuminate a couple of the more surprising global trends. First, the urban working class score has not increased since the 1980s, globally, and this is despite an increase in several regions, including Latin America, Asia-Pacific, and Sub-Saharan Africa. However, Eastern Europe experienced a sharp decline in its urban working class share with the end of the Cold War and collapse of various worker-backed communist regimes. In 1980, the share of countries with urban working classes in the support coalition was above 50%, whereas in 2020, it sits below 30%. The flat global trend for urban working class inclusion in support coalitions over the last decades is thus an aggregate of regional trends with opposing signs.

A second notable trend was the increase in the Agrarian elite global mean scores across the 19th century, which was very different from the downward sloping trendline for The aristocracy. The 19th century sample is composed mainly by European and American countries (together making up 47 of 73 countries with data in 1850, for example), and for European (and North American) countries, the trend for agrarian elites is more or less flat, though with some fluctuations. In contrast, Latin America experienced a sharp rise in agrarian elite participation during the middle of the 19th century. The economic and political dominance of plantation owners in Latin American politics, both under colonial rule (e.g., Sokoloff and Engerman 2000) and long after independence (e.g., Albertus 2017), has been widely documented and discussed. Our support coalition data indicates that the importance of agrarian elites in Latin American politics peaked around 1860, when they were part of about 80% of the support coalitions in South and Central American countries

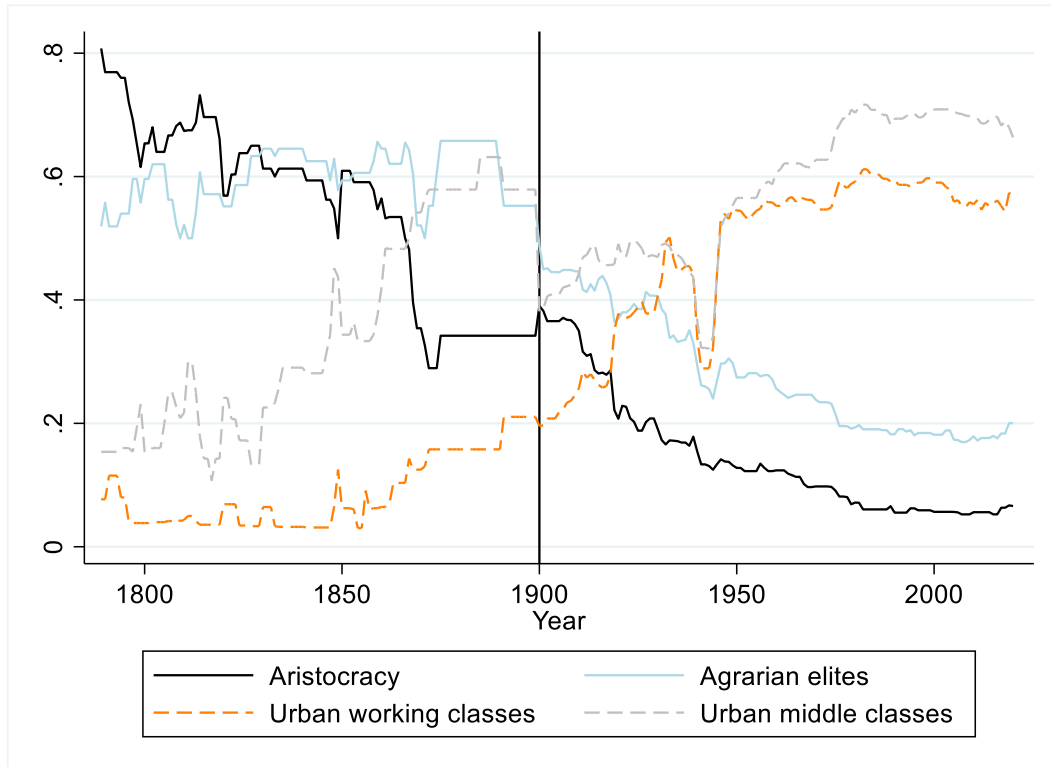


Figure A8: Share of regimes, Western Europe and North America, with specific group included in the support coalition, based on original (interval) measure

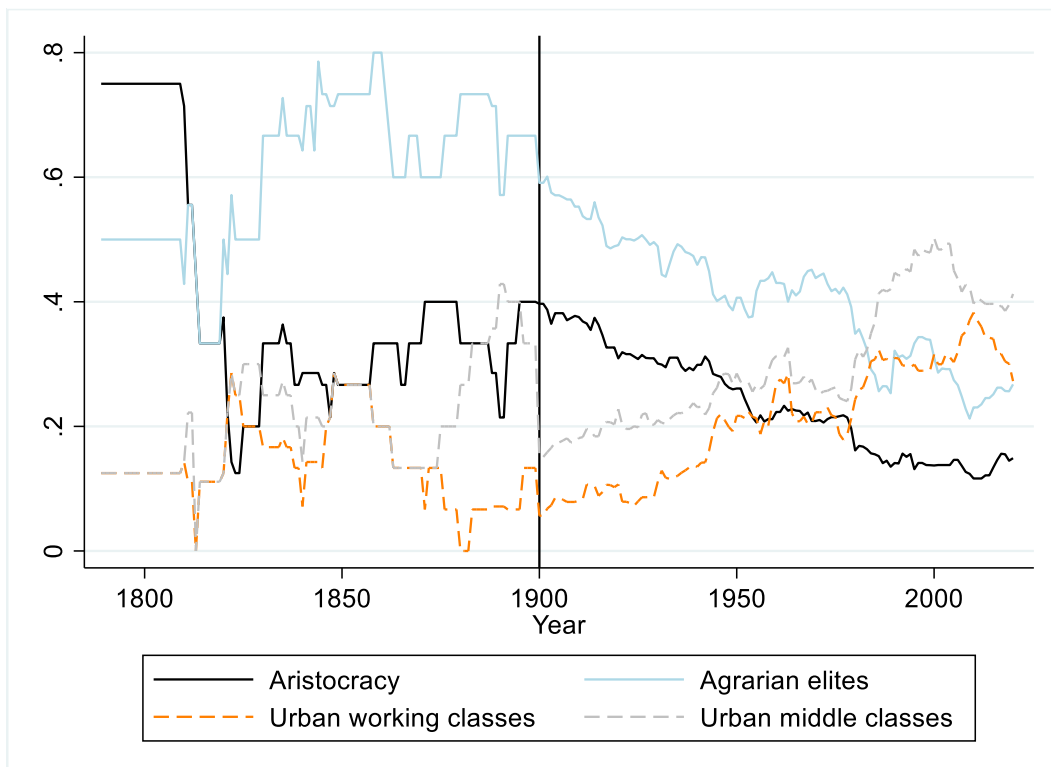


Figure A9: Share of regimes, Latin America, with specific group included in the support coalition, based on original (interval) measure

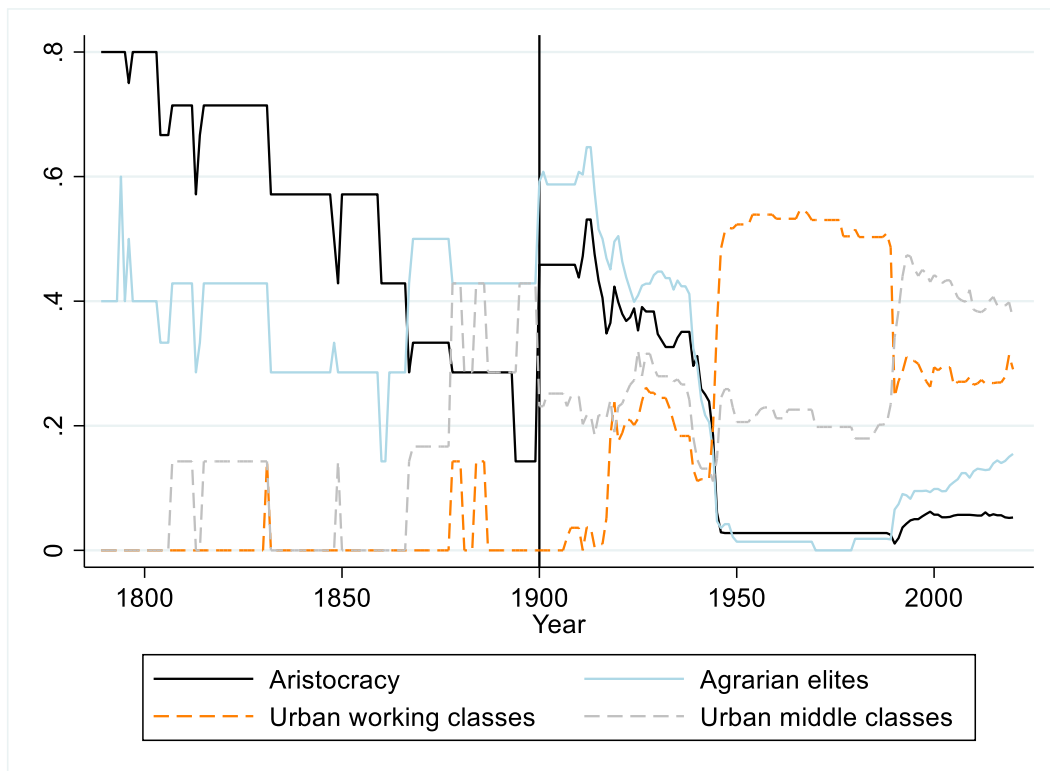


Figure A10: Share of regimes, Eastern Europe and ex-Soviet space, with specific group included in the support coalition, based on original (interval) measure

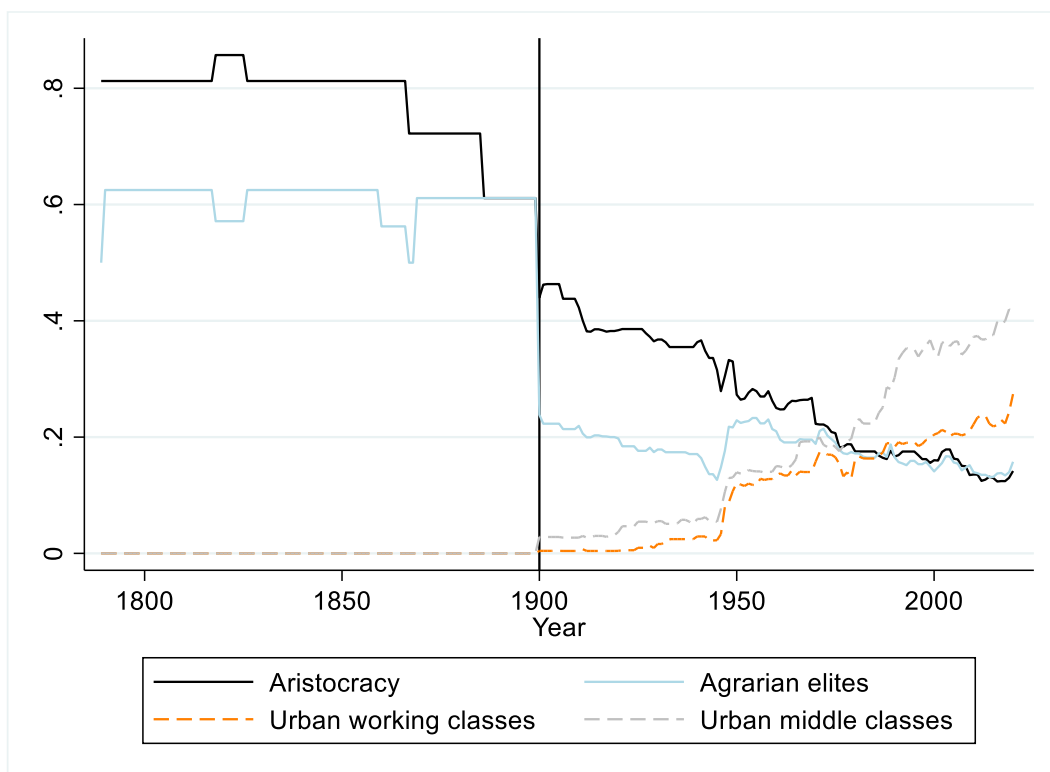


Figure A11: Share of regimes, Asia-Pacific, with specific group included in the support coalition, based on original (interval) measure

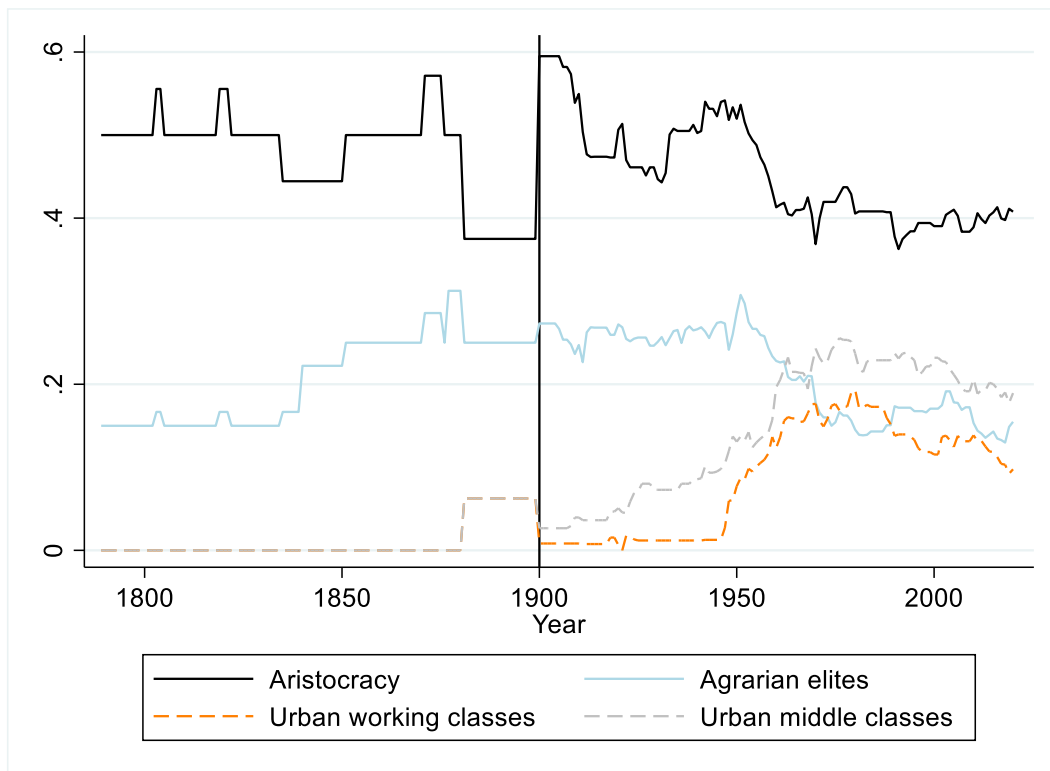


Figure A12: Share of regimes, MENA, with specific group included in the support coalition, based on original (interval) measure

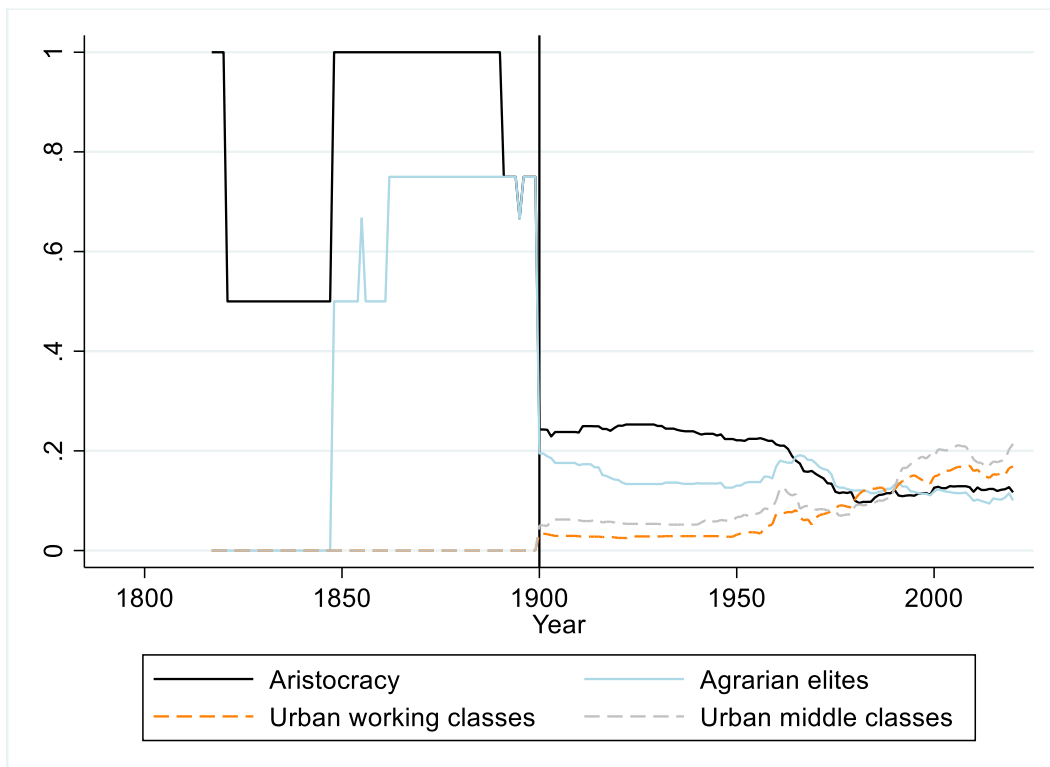


Figure A13: Share of regimes, S.S. Africa, with specific group included in the support coalition, based on original (interval) measure

Appendix VII: Sensitivity to altering cut-off for regime support group dummies

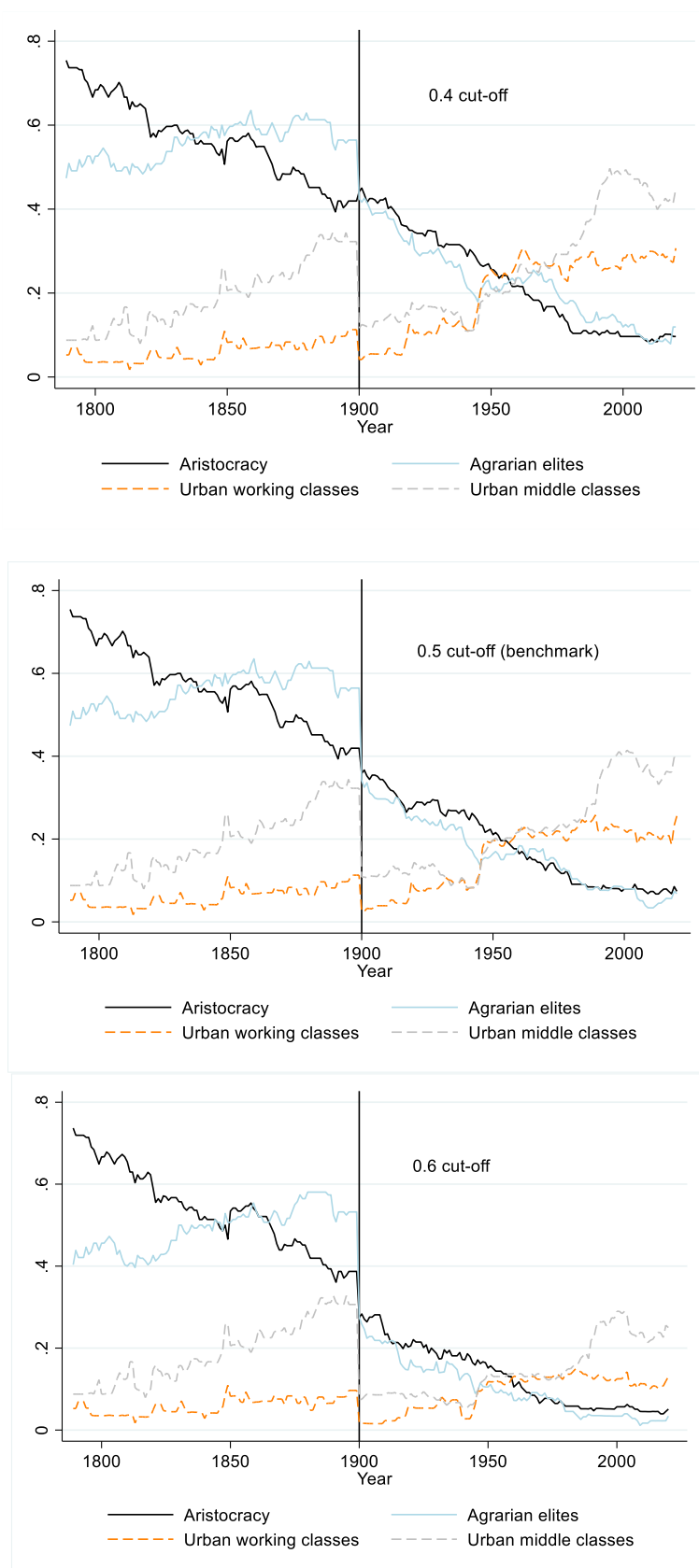
In the paper, we draw heavily on dummy variables indicating the presence (1) or absence (0) of particular regime support groups for our descriptive analyses, but also when, e.g., constructing the count variable (number of regime support groups) reflecting the diversity of the regime's support coalition. These dummies, as described in Section V, take the originally reported support group variables, which register the share of experts agreeing that the group in question should be counted as a regime support group, and place a threshold at 0.5 on the original variable for coding a score of 1 on the corresponding dummy. In other words, a 1-score indicates that a majority of coders score the support group as present in the given country-period. In this appendix, we assess the sensitivity of these dummies, as well as descriptive analyses using them, to applying different cut-offs for dummy construction than the original 0.5. More specifically, we re-construct the dummies by using, respectively, 0.40, 0.45, 0.55, and 0.60 as thresholds.

Table A.6 displays bivariate correlation coefficients (Pearson's r) between the original regime support group dummies with 0.5 as cut-off and corresponding dummies using the alternative cut-offs. The various correlation coefficients mostly range from 0.8 to 1.0, reflecting that the dummy variables are not overtly sensitive to moderate changes in the threshold. The correlations are especially high when setting the threshold at 0.40 or 0.45. Some correlations are below .8 (the lowest one is .74), and this goes, in particular, for the more demanding 0.60 cut-off for some of the broader and presumably more heterogeneous categories. The latter include Ethnic or racial groups, Local elites, Urban working classes, Rural working classes, and Rural middle classes. We speculate that the higher sensitivity for these dummies (reflecting more expert disagreement) could come from these broader categories being open for more idiosyncratic expert interpretations than the arguably more homogeneous (typically elite-centered) categories such as The Aristocracy, Party elites, The military, and Foreign government. These latter differences notwithstanding, Figure A.14 – re-drawing Figure 6 in the paper when altering the cut-offs for different support group dummies -- indicates that analyses of global trends in the presence of various regime support groups yield quite similar patterns over time.

Table A.6: Bivariate correlations between original regime support group dummies (with cut-off at 0.50) and corresponding dummies using different cut-offs, as indicated by top row.

Regime support group \ Alternative cut-off point	0.40	0.45	0.55	0.60
The Aristocracy	.933	.999	.899	.884
Agrarian elites	.902	.995	.861	.838
Party elites	.924	.997	.897	.866
Business elites	.916	.994	.848	.812
The state bureaucracy	.870	.989	.843	.805
The military	.901	.994	.868	.842
Ethnic/racial group	.883	.994	.777	.744
Religious group	.901	.993	.867	.863
Local elites	.871	.989	.814	.779
Urban working classes	.880	.991	.852	.768
Urban middle classes	.901	.993	.886	.825
Rural working classes	.873	.991	.825	.745
Rural middle classes	.897	.990	.854	.783
Foreign government	.957	.997	.920	.912
Nr. of regime sup. groups	.897	.994	.805	.787

Figure A.14: Re-drawing Figure 6 of global means in regime support group presence over time after altering the cut-offs for constructing support group dummies



Notes: The cut-offs applied are 0.6 for top plot, 0.5 (benchmark) for middle plot, and 0.4 for bottom plot.

Appendix VIII: Sensitivity to omitting observations with few coders

As highlighted in the paper, the number of expert coders is very likely related to the reliability of country-year scores. In particular, we highlighted how the somewhat lower number of coders for the opposition group variables for the post-1900 period may contribute to relatively lower reliability than for the support groups variables. Figure A.2 shows the distribution of numbers of coders for the multiple-choice Regime opposition groups and Regime support groups variables, and other variables within the two clusters have fairly similar distributions. However, the measurement errors induced by certain country-year-variables having fewer experts need not generate any clear biases in descriptive analyses of, e.g., global trends or cross-regime differences in support group characteristics.

That being said, we advise users of the ReSOG data (and V-Dem data, more generally) to assess robustness of descriptive (or, e.g., regression) results to omitting less reliable observations with fewer country-experts. Appendix Figures A.15-A.19 thus re-draws various figures presented in the paper or other appendices after omitting all observations coded by three or fewer expert coders. This exclusion drops 7.3% of the post-1900 observations for the Regime support groups variable and 13.4% for the Regime opposition groups variable. Yet, for the descriptive analyses conducted in this paper, this restriction does not alter the results by much and does not affect any substantive conclusions.

Figure A.15: Re-drawing Figure 6 for the post-1900 era when including all observations (top plot) and when excluding observations with three or fewer coders (bottom plot).

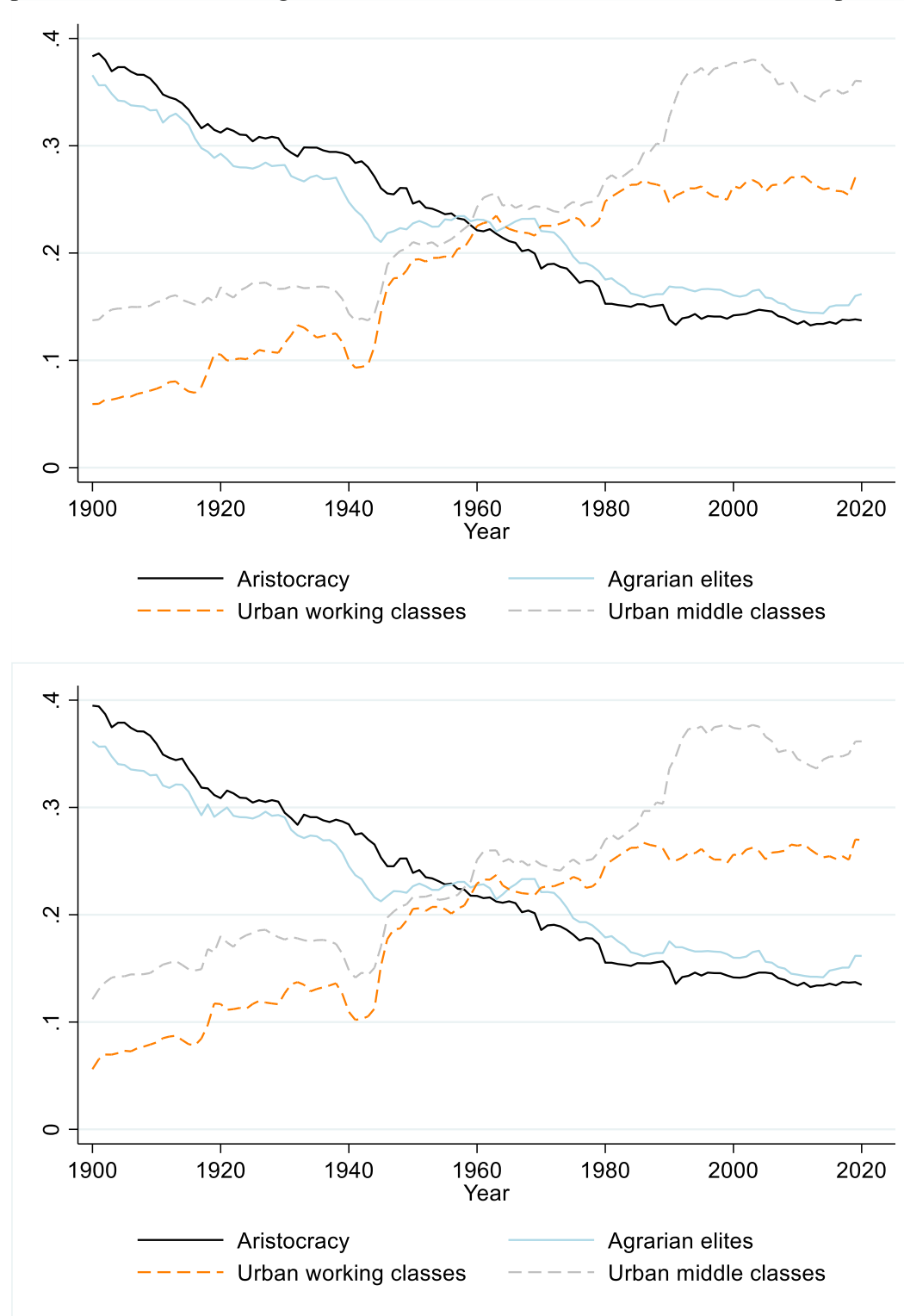


Figure A.16: Re-drawing Regime support groups size from Figure 5 for the post-1900 era when including all observations (top plot) and when excluding observations with three or fewer coders (bottom plot).

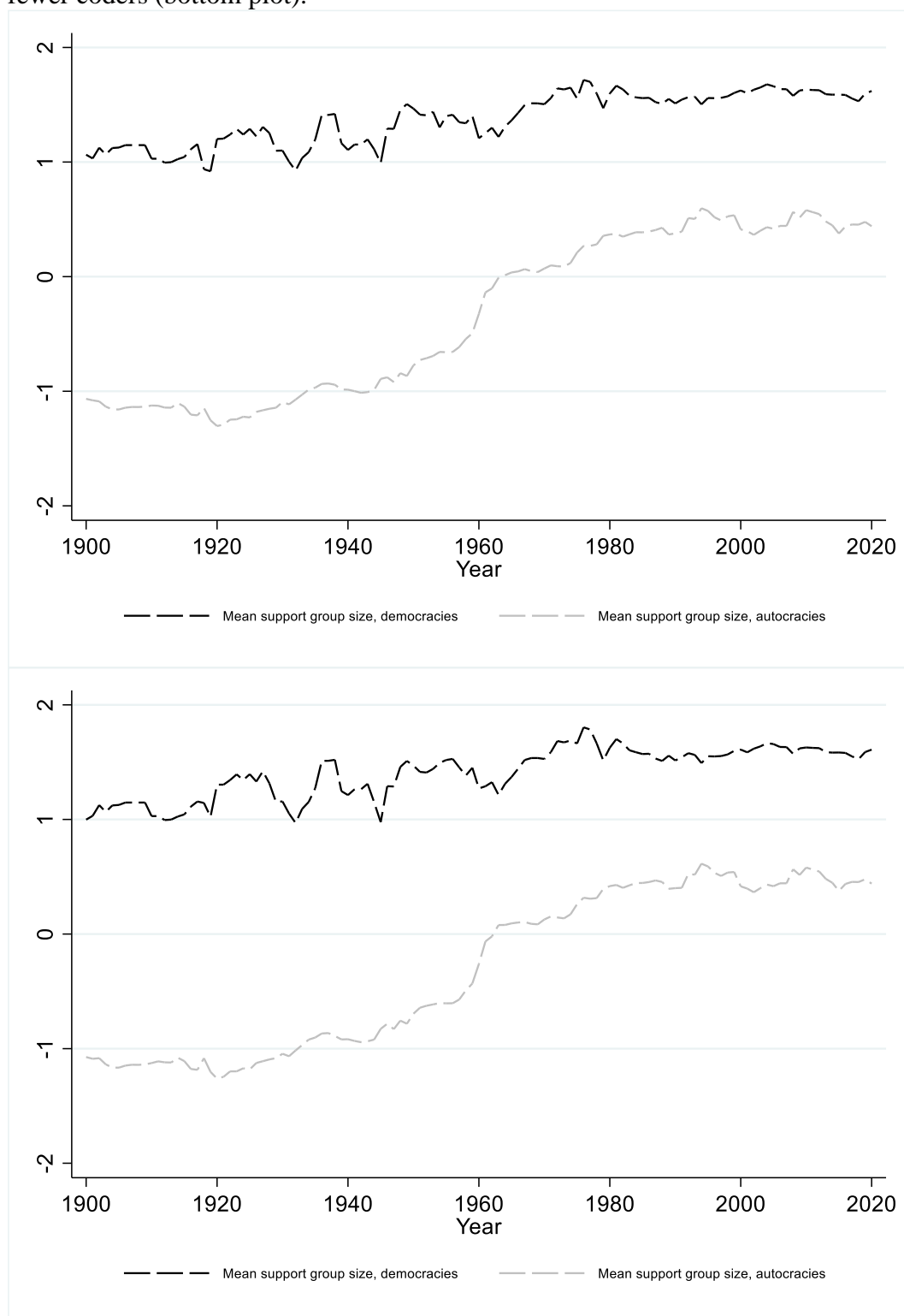


Figure A.17: Re-drawing trends in Regime opposition groups size from Figure 5 for the post-1900 era when including all observations (top plot) and when excluding observations with three or fewer coders (bottom plot).

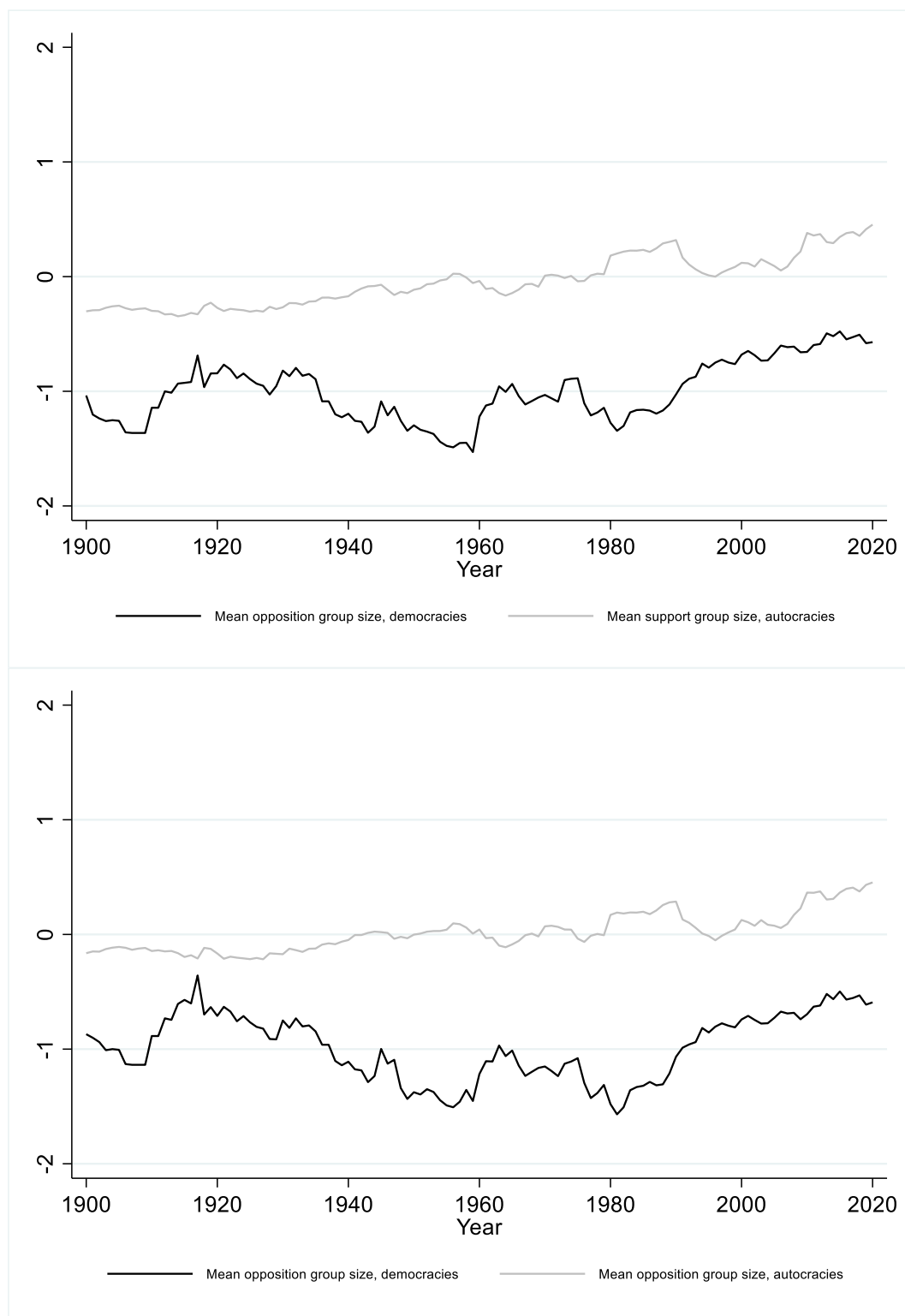


Figure A.18: Re-drawing the top plot in Figure A.3 for the post-1900 era when including all observations (top plot) and when excluding observations with three or fewer coders (bottom plot).

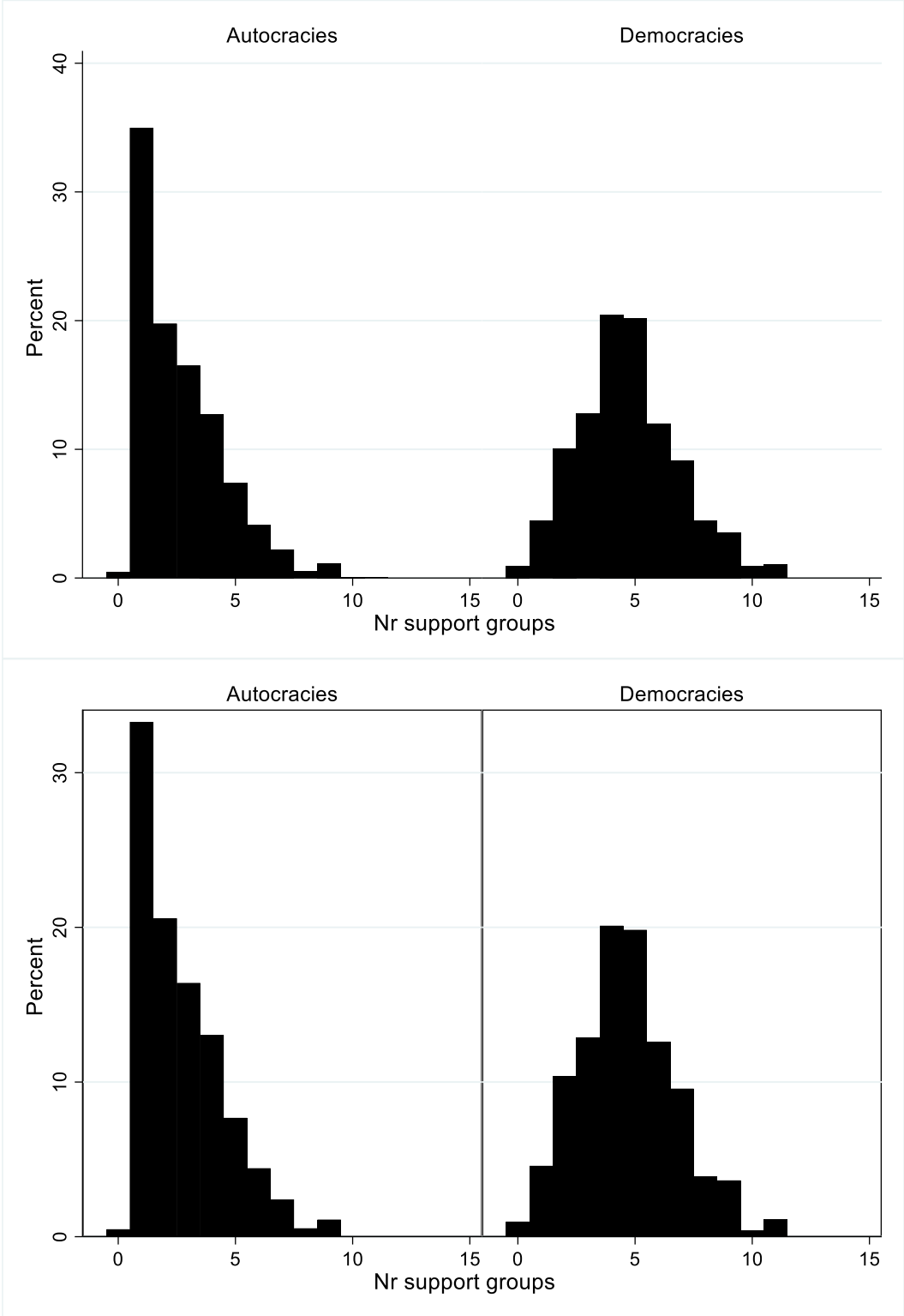
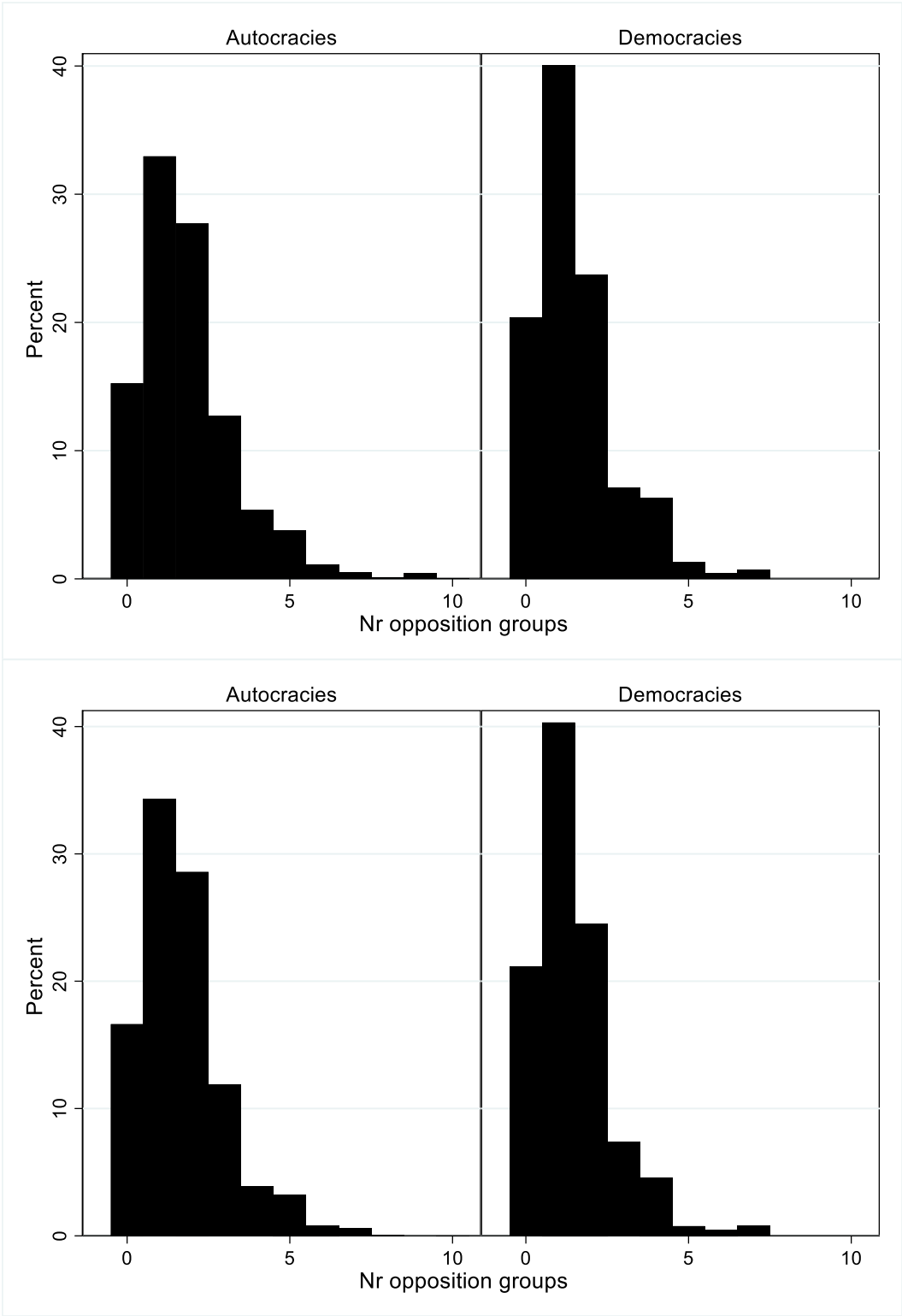


Figure A.19: Re-drawing the bottom plot in Figure A.3 for the post-1900 era when including all observations (top plot) and when excluding observations with three or fewer coders (bottom plot).



Appendix IX: Sensitivity of Regime support group measures to leaving out one expert coder at the time from the aggregation

In this appendix, we report results from so-called leave-one-out (LOO) tests. For these tests, we leave out one expert coder per observation at the time and recalculate the aggregate country-period scores. Thereafter, we correlate these measures based on the coding of $n-1$ experts with the original measures based on the coding of n experts, thereby assessing the robustness of different ReSOG measures to coder uniqueness.

We conducted various versions of these LOO tests, both for the regime support- and opposition group variables and when distinguishing between observations with relatively few (<4) and many coders, but (naturally) always excluding observations with only one coder (almost exclusively pre-1900 observations).

To execute these tests, we used the V-Dem assigned country expert identity numbers to, first, assign expert number for a particular observation (i.e., expert number 1 for the lowest V-Dem id number coding the observation, 2 for the second-lowest, etc.). While we had no clear reason to expect any systematic correlation between V-Dem expert id number and scores, we first assessed this assumption for a subset of variables. This was done by conducting LOO tests when dropping, for each observation, coder number 1, then coder number 2, and so on up until coder number 5. These tests are reported in Appendix Table A.7. As expected, expert coder number does not seem to matter in any systematic fashion. (The higher correlations for dropping expert number 3 when considering observations with few coders is simply due to the mechanical omission of experts with four coders in this test.) Hence, we proceeded by assessing a larger set of variables in Table A.8, dropping expert number 1 from all LOO-recalculations.

Overall, these tests show a high degree of robustness, and especially for observations with relatively many coders (and for the sample overall), with correlations typically exceeding .95. Observations that originally have <4 coders -- in particular for some of the opposition group variables -- show somewhat more sensitivity to omitting coders before re-calculating aggregates. This reinforces the point made in the article and previous appendices that observations with fewer expert coders are less reliable than those with many expert coders. Yet, also when considering the observations with three or fewer coders, most LOO measures display correlations $>.8$ with the original ones.

Table A.7: Leave-one-out (LOO) tests, dropping coder number 1 through 5 (dropped coder indicated by top row) for selected Regime support groups. Coefficients are pairwise correlations between mean for original measure based on all coder and LOO mean.

Leaving out expert nr:	1	2	3	4	5
All observations with >1 coders					
Aristocracy	0.95	0.95	0.97	0.98	0.98
Party elites	0.97	0.97	0.98	0.98	0.98
Urban middles classes	0.96	0.96	0.97	0.98	0.98
All observations with >1 coders, but <4 coders					
Aristocracy	0.86	0.86	0.94		
Party elites	0.88	0.87	0.95		
Urban middles classes	0.86	0.71	0.93		
All observations with >3 coders					
Aristocracy	0.97	0.97	0.97	0.97	0.98
Party elites	0.98	0.98	0.98	0.98	0.98
Urban middles classes	0.97	0.97	0.97	0.98	0.98
All observations with >5 coders					
Aristocracy	0.99	0.98	0.98	0.98	0.98
Party elites	0.99	0.99	0.99	0.99	0.98
Urban middles classes	0.98	0.98	0.98	0.98	0.98

Table A.8: Leave-one-out (LOO) tests, dropping coder number 1 for all Regime support groups. Coefficients are pairwise correlations between mean for original measure based on all coders and LOO mean. Tests calculated separately for observations that initially have a pre-specified number of coders (as indicated in top row).

	Regime support groups			Regime opposition groups		
	All obs. >1 coder (n=26,104)	All obs. >1 coder, but <4 coders (n=2,044)	All obs. >3 coders (n=24,060)	All obs. >1 coder (n=18,510)	All obs. >1 coder but <4 coders (2,310)	All obs. >3 coders (n=16,200)
The Aristocracy	0.95	0.86	0.97	0.87	0.76	0.92
Agrarian elites	0.93	0.87	0.96	0.88	0.77	0.91
Party elites	0.97	0.88	0.98	0.91	0.88	0.92
Business elites	0.95	0.90	0.96	0.88	0.83	0.91
The state bureaucracy	0.93	0.84	0.95	0.81	0.62	0.86
The military	0.94	0.78	0.97	0.94	0.86	0.95
Ethnic/racial group	0.92	0.85	0.95	0.93	0.81	0.95
Religious group	0.93	0.85	0.96	0.93	0.87	0.95
Local elites	0.91	0.81	0.94	0.90	0.78	0.93
Urban working classes	0.97	0.89	0.98	0.91	0.84	0.93
Urban middle classes	0.96	0.87	0.97	0.90	0.84	0.92
Rural working classes	0.96	0.88	0.96	0.89	0.72	0.93
Rural middle classes	0.96	0.90	0.97	0.84	0.69	0.90
Foreign government	0.97	0.90	0.98	0.91	0.84	0.93

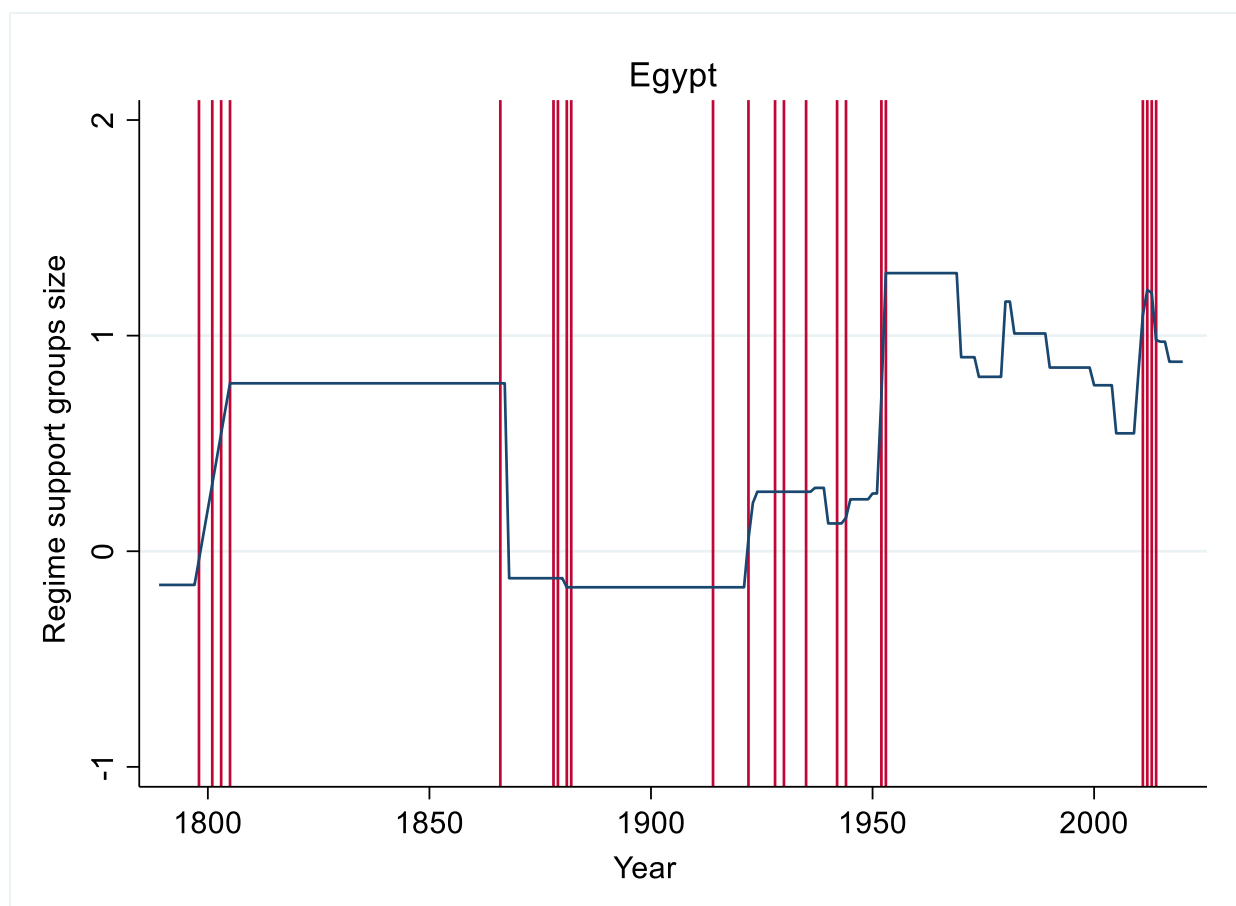
Appendix X: Country-case examples: Regime support groups size and Regime support groups dummies

In this final appendix, we include figures displaying “regime histories” of selected countries according to our regime support groups size measure as well as the measures capturing the fourteen group categories for the regime support groups measure.

To provide simpler illustrations, we use the dichotomized versions for the regime support groups measures, based on the ratings of the majority of experts, instead of the raw scores reporting the share of experts coding a particular group as a support group.

In Section V of the paper, we discussed how Egypt under Nasser provided an example of an autocratic regime with a relatively large regime support coalition. Indeed, Figure A.20 illustrates this point, showing that the regime support groups size score of Egypt was at an “all-time high” of 1.3 during the early period (1953-69) of the HRD-coded “Free Officer” regime, which ended with the ouster of Hosni Mubarak during the Arab Spring in 2011. We may also note how the figure illustrates that regime support coalition size may vary within the lifespan of a regime; the score declined notably, to 0.9, in 1970 (the year of Nasser’s death) and in the late-2000s under Mubarak, the score had declined to 0.5. However, we remark that the score was far lower under several previous regimes, including the Mamluk duumvirate (lasting to 1798) and British “veiled protectorate” (1882-1914) and British protectorate (1914-1922), with scores dipping to -0.2.

Figure A.20: Regime support groups size over time in Egypt. Red, vertical lines mark years of regime changes, as registered in HRD (Djuve et al. 2020).



Figures A.21 and A.23 provide similar figures, displaying estimated regime support groups size over time – with red, vertical lines demarcating HRD regime changes – for France and Spain, respectively. We selected these case illustrations not only because they are countries which histories will be familiar to many readers, but also because they provide “rich regime variation”, for instance with periods under different types of autocracy as well as democratic regimes (also varying, e.g., in terms of how extensive suffrage rights are). To further enrich the illustration, we add two figures (A.22 and A.24) showing, in blue shade, the time periods when these two countries score “1” (interpreted as presence of the support group) for the dichotomized versions of the 14 regime support group variables.

To quickly comment on the coding of France, we see that prior to the French Revolution – the first date of coding is January 1, 1789 – the size of the regime’s support coalition, as estimated by our Regime Support Groups size measure, was very small in numbers, indeed the lowest in the recorded history of the country (Figure A.21). Notably, regime support groups size has shifted substantially together with various regime changes, for example increasing with the 1848 Revolution and the introduction of the Second Republic, but decreasing markedly again after Louis Napoleon’s self-coup and the introduction of the Second Empire three years later. Other marked increases come with the July Revolution of 1830 and the introduction of the more liberal (compared to the previous Bourbon regime) monarchy under Louis Philippe, the Fourth Republic and the subsequent introduction for suffrage for women in 1946, as well as the introduction of the Fifth Republic in 1959 (whereafter France has maintained its historically highest score until the present).

Concerning specific regime support groups, there is also notable over-time variation following regime changes, at least for some groups. We remind that Figure A.22 displays scores on the dichotomized versions of these variables, with blue shade signifying 1-scores and thus that 50% or more of country experts for France agree on the presence of a particular group in the regime support coalition. For instance, under the pre-revolutionary *L’ancien Regime*, the aristocracy was registered as a regime support group, but it was no longer so after the revolution of 1798. In French history, the presence of this group in the regime support coalition has gone together with low regime support groups size (notably the restored Bourbon monarchy from 1815 to the July Revolution of 1830, where regime support groups size is estimated to be substantially lower during the latter years of the regime).

In contrast, other elite groups have been a more consistent feature of support coalitions under the different French regimes that replaced each other after revolutions and “counter-revolutions” during the 18th and 19th centuries. Notably, business elites is registered as a regime support group not only during the post-revolutionary regime (1789-1792), but all the way through the (more and less democratic) political regimes through the Third Republic (1870-1940). Indeed, business elites have also been a fixture of more recent regimes, such as the current Fifth Republic.

The urban working and middle classes are only intermittently present as regime support groups prior to the 20th century, notably in the post-revolutionary 1789 regime and – for the urban middle classes -- also the following First Republic (1792-1799). The military coup of 18 Brumaire (1799), introducing “The Consulate Regime”, coincided with the autocratization of French politics under the First Consul, Napoleon Bonaparte, and the urban middle classes losing their status as support groups. The Consulate Regime and the subsequent Napoleonic Empire

relied, instead, on support from the aristocracy, the military, agrarian elites, and business elites. With the fall of Napoleon and the introduction of the Bourbon regime (1815-1830), the military no-longer kept its role as a regime support group with, instead, the state bureaucracy emerging as a decisive group supporting the regime (alongside other elite groups: business elites, agrarian elites and the aristocracy).

The so-called July Monarchy (1830-1848) or the “Bourgeoise monarchy” , following the upheavals of the July revolution, rested on a somewhat broader social base, centered on the urban middle classes as well as agrarian and business elites. Marx (1850), described the regime by quoting liberal banker Laffitte, who noted that “From now on the bankers will rule.” Our measures indicate that not only business elites, but also the urban middle classes played a key role in upholding the regime.

The Second Republic (1848-1851) was instituted through one of the many popular revolutions shaking Europe in 1848, substantially increasing the number of groups included in the regime support coalition. Notably, the regime support coalition now included the rural middle and working classes. To once again quote Marx (1850), “instead of only a few factions of the bourgeoisie, all classes of French society were suddenly hurled into the orbit of political power, forced to leave the boxes, the stalls, and the gallery and to act in person upon the revolutionary stage!” The self-coup introducing the Second Empire (1851-1870) marked a decline in the size of the regime support coalition, according to our data, but also the exit of the rural working classes as a regime support group. In general, during the 19th century, periods in which working or middle classes (rural, urban or both) are registered as regime support groups are also characterized by marked increases in regime support coalition size, notably with the establishment of the Third Republic (1870-1940) and its electoral democracy with universal male suffrage. The urban and rural middle classes have also been (quite) consistent regime support groups during the post-war Fourth and Fifth Republics, according to our data.

Figure A.21: Regime support groups size over time in France. Red, vertical lines mark years of regime changes, as registered in HRD (Djuve et al. 2020).

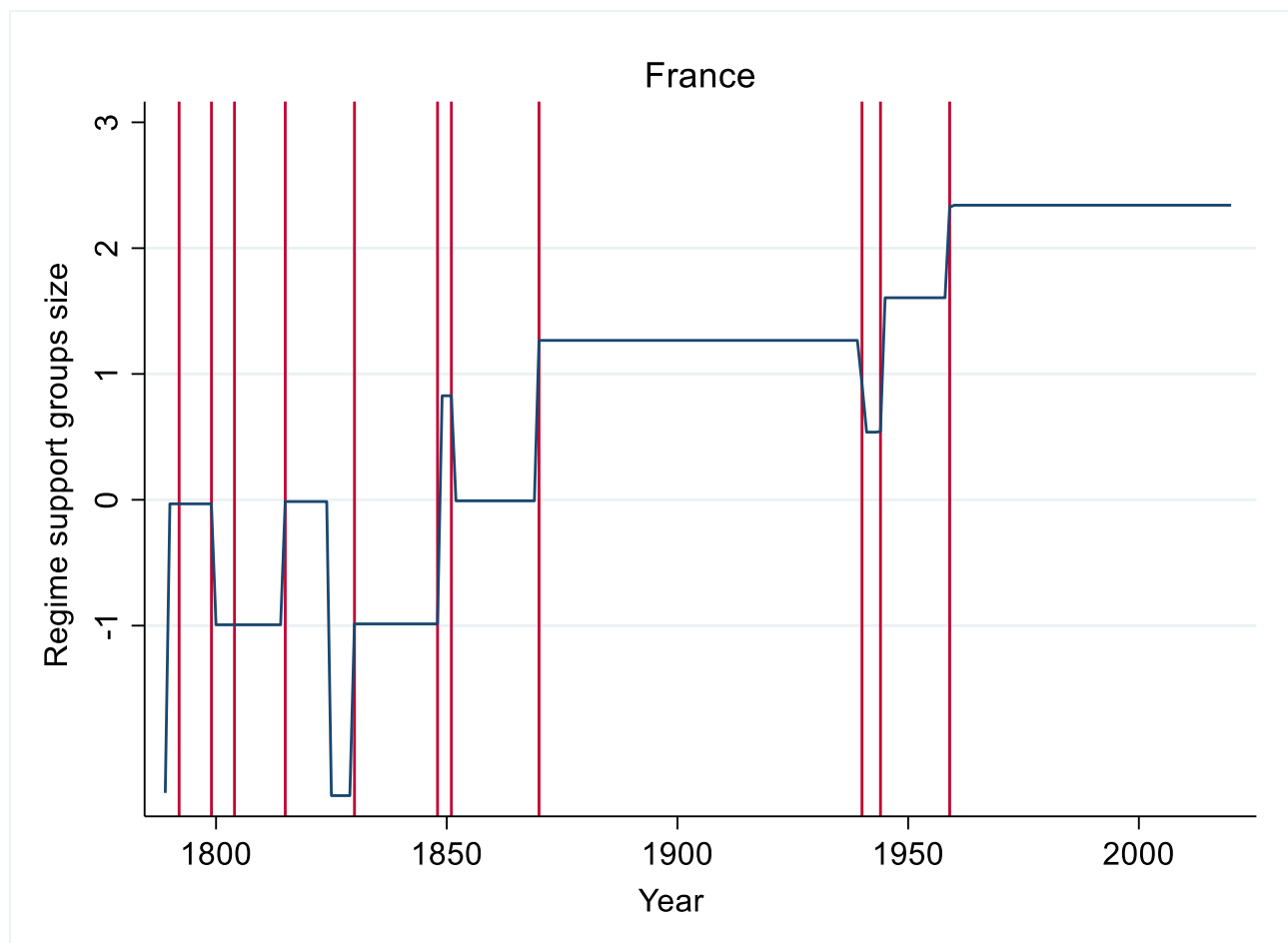
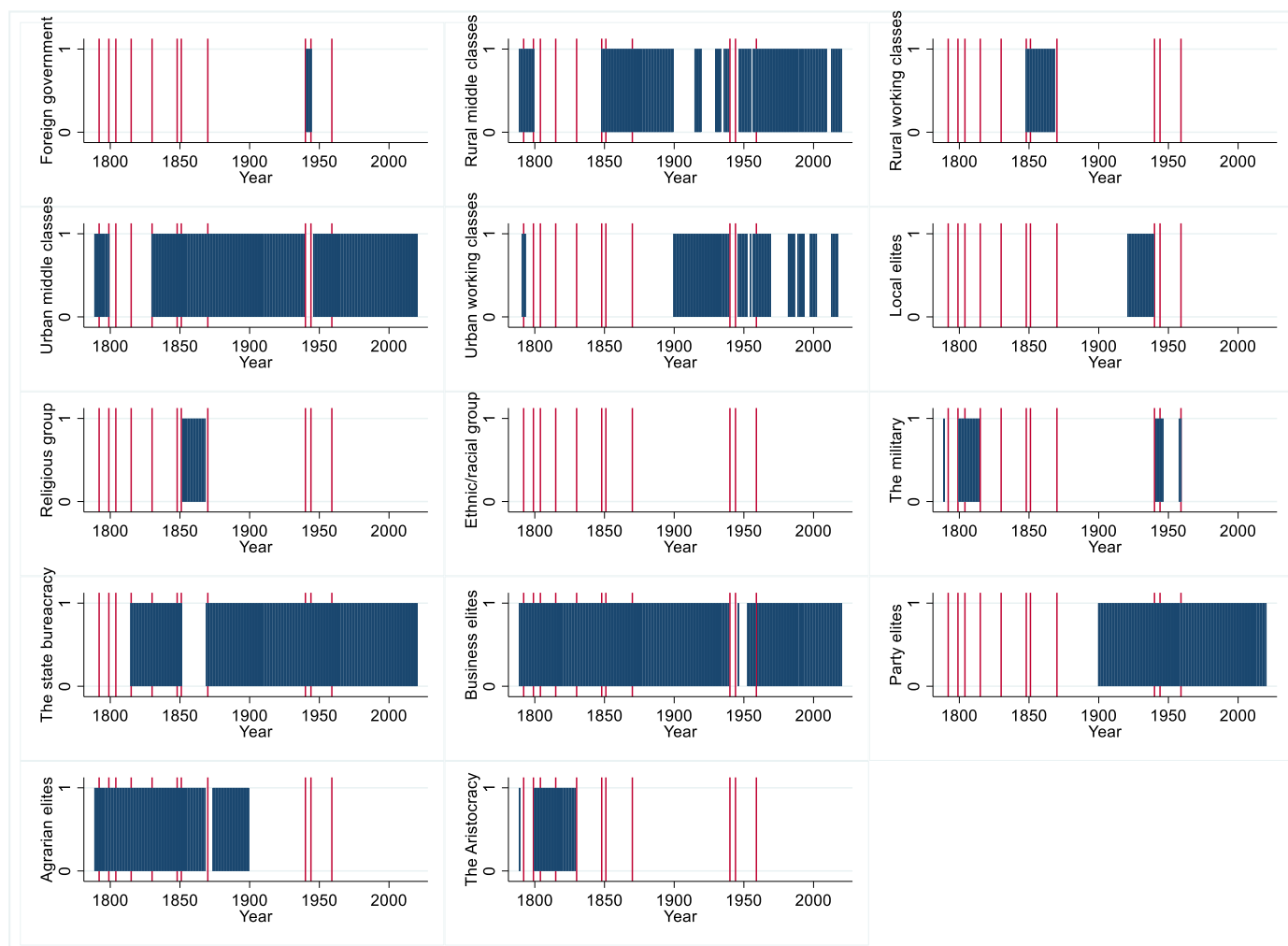


Figure A.22: Regime support groups (dichotomized versions for all fourteen group categories) over time in France. Blue shading means 1-score (interpreted as presence of regime support group, following the scores of the majority of expert coders). Red, vertical lines mark years of regime changes, as registered in HRD (Djuve et al. 2020).



Let us also very briefly comment on the coding of Spain, which is displayed in Figures A.23 (Regime support groups size) and A.24 (Regime support groups, dichotomized using the 0.50 threshold). As for France, we observe considerable over-time variation coinciding with particular regime changes in Spanish history. To mention a couple of examples, Regime support groups size drops markedly, to the lowest level across the time series, with the French/Napoleonic occupation of 1808. Simultaneously, foreign government and urban middle classes enter as regime support groups whereas, e.g., the aristocracy, local elites, and agrarian elites exit.

Another marked drop in regime support groups size comes with the end of The Second Republic in 1939 and the exit of the urban middle and working classes from the regime support coalition. In the subsequent Franco regime, “religious group”, agrarian elites, the aristocracy and, the military are recorded as regime support groups that enter the smaller and elite-centered (but still fairly heterogeneous, in terms of number of recorded groups) support coalition. With the post-Franco transition to democracy in the 1970s, all of these mentioned groups, except the military, exited from the regime support coalition.

However, as was the case for France, there is also continuity in regime support coalition features across regime changes, especially in the 19th century (which were numerous, often instigated by coups and at other times by incumbent-guided regime transitions of different kinds; see Djuve et al. 2020). Throughout much of the 19th century (and beyond), agrarian elites, the aristocracy, local elites, and the military are registered as regime support groups, according to our data.

More recently, business elites and the state bureaucracy have been mainstays of Spanish regime support coalitions. Indeed, they have been so since the inception of the Franco regime in 1939 and until today, despite the democratization of the 1970s and associated other changes in the regime support coalition (such as increased size and the inclusion of both urban and rural working classes as well as urban and rural middle classes).

Figure A.23: Regime support groups size over time in Spain. Red, vertical lines mark years of regime changes, as registered in HRD (Djuve et al. 2020).

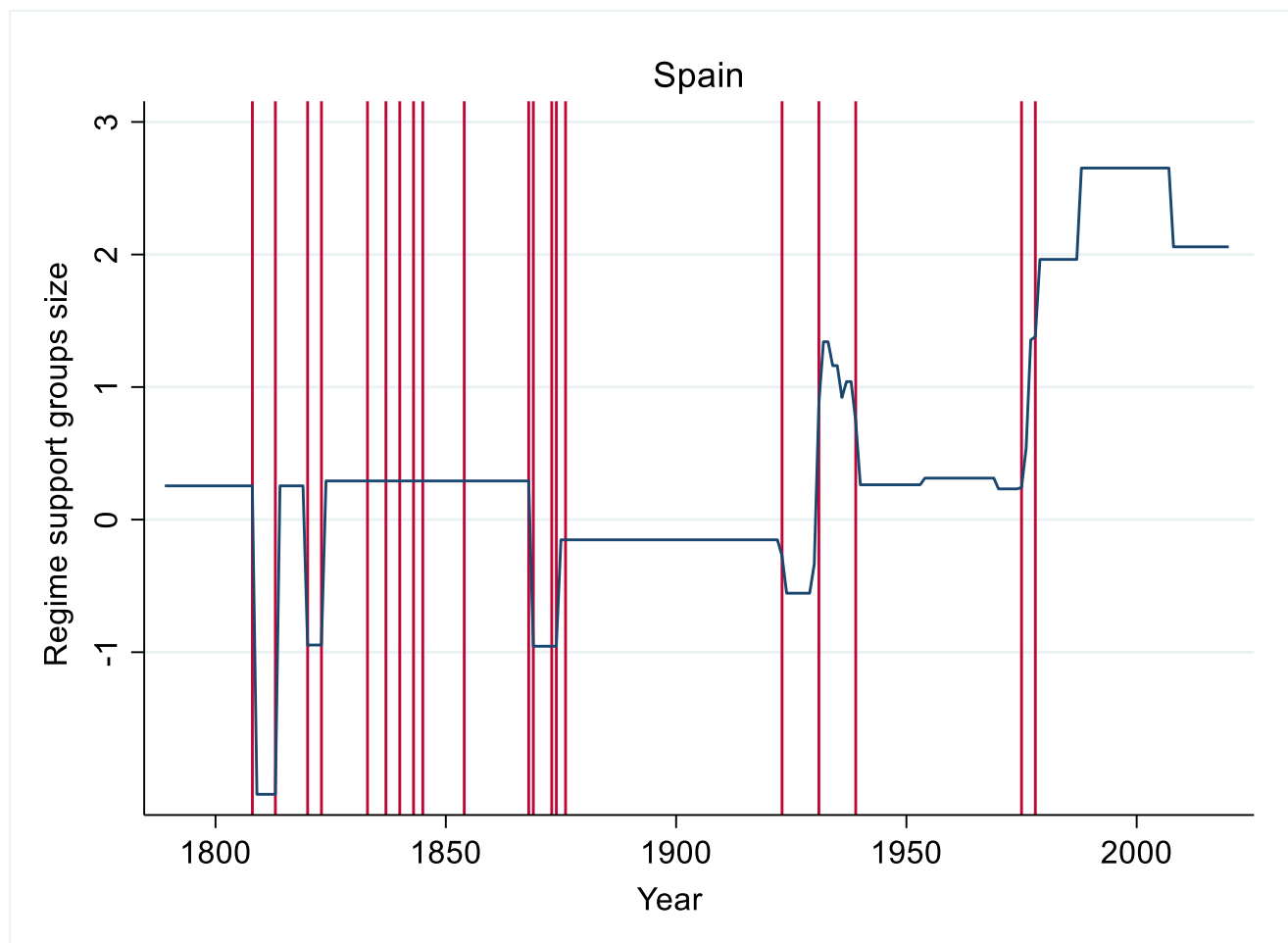
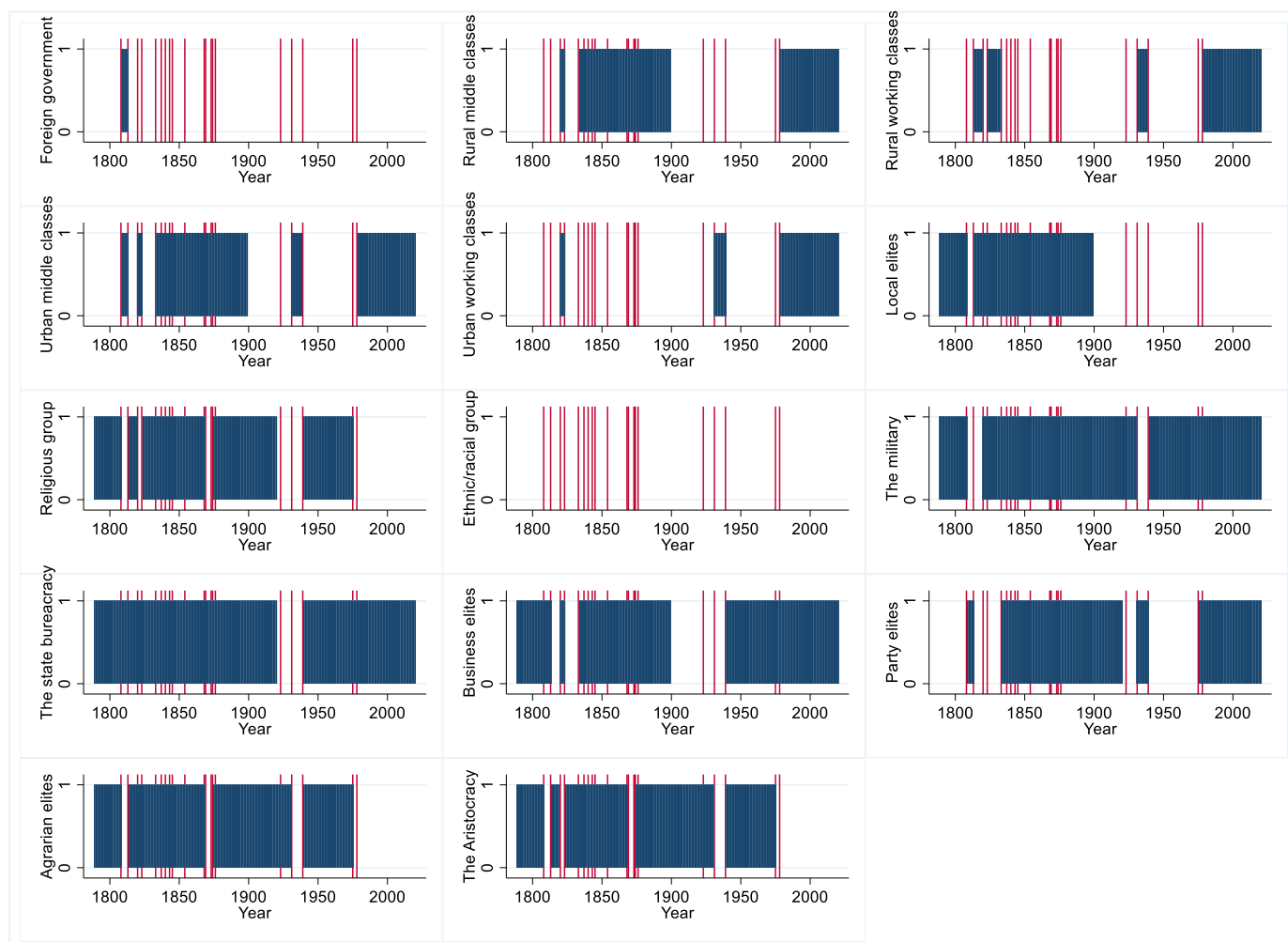


Figure A.24: Regime support groups (dichotomized versions for all fourteen group categories) over time in Spain. Blue shading means 1-score (interpreted as presence of regime support group, following the scores of the majority of expert coders). Red, vertical lines mark years of regime changes, as registered in HRD (Djuve et al. 2020).



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