

Codebook

Government and Armed Actors Relations Dataset (GAARD)

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The *Government and Armed Actors Relations Dataset (GAARD)* provides detailed information on all major armed groups and their fluctuating alignments with the state between 1989 and 2007. GAARD identifies when armed groups fight with or against the government and when they lack relationships with the government altogether. It further provides information on all changes in group alignments and documents when and how these occurred. To this end, armed groups are tracked and coded throughout their entire lifespan, from formation to termination. This document describes GAARD’s universe of cases, its underlying sources, its definitions and coding rules as well as its data structure and variables.

1 Case universe

GAARD includes non-state armed actors which have been involved in collective violence as defined by Uppsala Conflict Data Program (UCDP). The universe of cases is defined by armed groups coded by UCDP (2012 Versions) as well as the Pro-government Militia Database (PGMD Version 1.0, Carey, Mitchell and Lowe 2013) between 1989 and 2007. Our point of departure is the UCDP Actor Dataset (version 2.1-2012). The UCDP Actor Dataset contains all state and non-state armed actors included in UCDP datasets on organized violence. The UCDP Actor Dataset therefore includes all actors recorded in the UCDP Armed Conflict Dataset, One-sided Violence Dataset, and Non-state Conflict Dataset. To be included, each group’s violent activity has to cross the threshold of 25 battle deaths or civilian fatalities per year (Gleditsch et al. 2002; Eck and Hultman 2007; Sundberg, Eck and Kreutz 2012). From the UCDP list, we extracted all non-state actors. UCDP distinguishes between formally and informally organized non-state groups. The former is defined as “any non-governmental group of people having announced a name for their group and using armed force” (Pettersson and Themnér 2012, 2; see also UCDP 2012). The latter is defined as a group without an announced name and that is not “permanently organized for combat, but occasionally use their organizational structures for such purposes.” This includes political parties or identity groups (Sundberg, Eck and Kreutz 2012, 353; see also Pettersson and Themnér 2012). GAARD does not record groups that do not carry out violence such as political parties or identity groups. For more details on the distinction see Sundberg, Eck and Kreutz (2012).

The list of formally organized armed groups can be divided in two broad categories. The first category contains groups that use violence to influence the outcome of an announced incompatibility. These groups correspond to the groups that GAARD classifies as having an anti-government alignment. The second category consists of organized armed groups that have been recorded exclusively in the UCDP One-sided Violence Dataset or the UCDP Non-state Conflict Dataset. Groups in this category have carried out organized violence according to UCDP coding rules, but UCDP does not provide information on the groups’ alignment. There are four group types in this category: i) anti-government groups that fail to reach 25 battle-deaths when fighting the government, ii) pro-government groups, iii) armed groups that do not take sides in armed conflicts, and iv) violent gangs. While UCDP provides some

of the best data on organized violence, it does not offer information on the alignments of these groups (Sundberg, Eck and Kreutz 2012, 353).¹ GAARD aims at filling this gap. To this end, GAARD draws on PGMD (Version 1.0, Carey, Mitchell and Lowe 2013).

PGMD contains information on pro-government militias, defined as any armed group that is identified as pro-government or sponsored by the government, not part of the regular security forces, armed, and has some level of organization (Carey, Mitchell and Lowe 2013, 250). In contrast to UCDP, PGMD includes groups that are equipped to carry out violence, but they do not have to commit violence to be recorded (Carey, Mitchell and Lowe 2013, 251). The scope of PGMD therefore goes beyond civil wars and collective violence.

For ensuring comparability between recorded groups, GAARD follows an elaborate procedure to ensure that it only contains pro-government groups that were involved in collective violence. To this end, GAARD is based on two strategies. First, we made use of information from the UCDP Conflict Encyclopedia.² When a pro-government group is mentioned in the Encyclopedia it is included in GAARD. Second, we screened all data available from the UCDP customized reports, which provide additional information beyond the Encyclopedia. The data can be downloaded from the UCDP homepage.³ If information on pro-government groups could be retrieved in the customized reports, these groups are included in GAARD.⁴ This coding procedure provides a high level of confidence that a respective pro-government group was involved in collective violence exceeding the 25 fatality threshold of UCDP.

2 Sources

The two major challenges in coding armed group alignments and changes thereof stem from the scarcity of group-level details and from conflicting information on groups. To address the scarcity of group-level details, GAARD captures armed groups involved in instances of collective violence. Groups involved in episodes of collective violence are likely to receive more coverage and scrutiny by the news media and researchers than groups that refrained from pursuing their goals without conflict and violence. To reduce problems with reporting biases including non-reporting, GAARD draws on information from news sources as well as from a variety of other sources, including policy reports, field research reports, articles, books, and other historical sources. Furthermore, GAARD focuses on the period between 1989 to 2007 since groups' activities prior to 1989 are less well documented (Kreutz 2015, 122). GAARD is also transparent about the level of accuracy for each piece of information. It offers precision values on the formation, termination, and alignment change variables of

¹The UCDP Non-state Conflict Dataset records only a low number of apolitical organizations such as gangs. Sundberg, Eck and Kreutz (2012, 353) argue that “gang warfare [is] only infrequently included in the UCDP dataset, mainly due to the fact that it is rare that 25 annual fatalities can definitively be attributed to a single conflicting dyad.”

²The UCDP Encyclopedia is publicly available: <http://www.ucdp.uu.se>. Last accessed September 2, 2016.

³UCDP allows users to download customized generated dataset, see: http://www.pcr.uu.se/research/ucdp/datasets/generate_your_own_datasets/customized_report/. Last accessed September 2, 2016.

⁴In some cases the UCDP customized reports do not mention the names of pro-government groups but refer to them as “militias.” We coded such cases using additional information provided by PGMD.

each group. Furthermore, critical coding decisions were made in consultation with country and conflict experts from various research institutions.⁵

3 Compatibility with other datasets

GAARD is fully compatible with most datasets in conflict and violence research. It lists the corresponding UCDP actor ID, making it fully compatible with all UCDP datasets on collective violence, such as the UCDP/PRIO Armed Conflict Dataset (Gleditsch et al. 2002), the Non-state Conflict Dataset (Sundberg, Eck and Kreutz 2012), the One-sided Violence Dataset (Eck and Hultman 2007), and the Actor Dataset (Pettersson and Themnér 2012). GAARD can also be easily linked to the Pro-Government Militia Database (Carey, Mitchell and Lowe 2013), the Non-state Actor Dataset (Cunningham, Gleditsch and Salehyan 2013), the ACD2EPR dataset (Wucherpfennig et al. 2012), the Sexual Violence in Armed Conflict Dataset (Cohen and Nordås 2014), and the Foundations of Rebel Group Emergence Dataset (Braithwaite and Cunningham 2019). GAARD also reports Gleditsch and Ward (1999) country codes, extending its potential use to a wide variety of country-level indicators used in research on political violence and state repression.

4 Definitions and coding rules

4.1 Alignments

Given the fundamental role of the state in civil conflict, an armed group’s alignment vis-à-vis the national government lies at the core of GAARD. *Alignment refers to an armed group’s visible action to support or to oppose the government.* The definition implies that group alignments do not have to be signified by formal agreements but can be delineated by a myriad of behavioral activities. It also implies that an armed group can be unaligned when it is active during periods of organized violence but neither opposes nor supports the government.

The reference point of GAARD for capturing the alignment(s) of an armed group is the national government of the country in which the group operates in. If an armed group is simultaneously or subsequently active in more than one country, we code the group and its alignment(s) for each country. Please see the coding rules in Section 7 for cases in which the state disintegrated into several states (e.g., Yugoslavia). Furthermore, our classification of alignments is based on observable behavior rather than on shared preferences, ideology, or ethnicity. The alignment of each group remains stable until there is evidence that the alignment has changed or the group ceased to exist. We code three different types of alignment:

- **Pro-government.** In accordance with Carey, Mitchell and Lowe (2013) pro-government groups are linked to the government due to specific behavior and activities such as

⁵Full documentation of every coding decision is provided in the supplementary material, which is available from the authors upon request.

shared information, financing, equipment and training, shared operations, and/or political office. Simply sharing the same enemy with the government, being tolerated by the government, or not being opposed by the it is not sufficient to be coded as a pro-government group (Carey, Mitchell and Lowe 2013, 251).⁶ Armed groups linked to the government and not part of the regular security apparatus are classified as *pro-government*.

- **Anti-government.** Armed groups that are not linked to the government and have a contested incompatibility over territory and/or the government (Gleditsch et al. 2002, 619) are classified as *anti-government*.
- **No alignment with the government.** Armed groups that are not linked to the government and have *no* contested incompatibility over territory and/or the government are classified as *unaligned*.

There are two types of ambiguous cases when coding pro-government alignments. First, in some cases there is evidence that the group was sponsored by the government, but UCDP classified the group fighting against it. For such cases, GAARD prioritizes the the link with the government. GAARD therefore records such groups as pro-government. Second, UCDP captures some groups only for their involvement in non-state conflicts or one-sided violence but not for their presence in civil wars. When available information clearly suggests that groups were challenging the government—even though their military interactions with the government never exceeded the 25 fatality threshold in state-based conflicts—we code these groups as anti-government. We flag these cases with a separate variable, which allows users to deliberately include or exclude such groups from the analysis.

4.2 Alignment changes

GAARD distinguishes two general types of alignment changes: *deliberate* and *contextual*. To capture both types, we assess whether the armed group under study is the decisive initiator in changing its relationship with the central government. Since GAARD focuses on the group-level, only armed groups that have “the [...] capacity to act collectively and militarily” (Staniland 2012, 21) are in a position to change their alignment. Such changes occur collectively with the *majority* of group members transitioning to a new alignment at the same time. This distinguishes alignment changes from individual defections (see Kalyvas 2008).⁷ In line with other data projects, we do not define an exact threshold to identify the majority of a group. We follow Wucherpfennig et al. (2012, 95, footnote 61) and posit that in absence of “rebel censuses,” this constitutes a sub-optimal but reasonable effort to capture collective alignment changes. When the majority of group members is difficult to pin down,

⁶Please consult the PGMD codebook for more details.

⁷Armed groups frequently experience a loss of members due to individual defections or desertions (Kalyvas 2008; Oppenheim et al. 2015). We explain below why this should not be conflated with alignment changes.

we assess whether high-ranking leaders with a reasonable amount of fighters changed their alignment.

Note the usefulness of the distinction between *deliberate* and *contextual* alignment changes rests on the specific research question at hand. GAARD therefore offers researchers full control over whether and how to aggregate the eight types that underlie deliberate and contextual alignment changes.

We define the two aggregate types of alignment changes as follows:

- 1. Deliberate alignment change.** Occurs when an armed group collectively and intentionally changes its alignment with the central government *during civil conflict*.

Given the difficulties in capturing the *intention* of armed groups to actively change their alignment with the national government, GAARD codes the observable behavior and not the groups' preferences or motivation. GAARD approximates intention by focusing on the actions that a group undertakes to join the side of its former enemies. These actions have to be credible. Ignoring orders, for example with a pro-government group not carrying out an assigned task by the government or violating a ceasefire agreement, are not coded as collective side switching since in both cases the group does not turn against former supporters and comrades. In line with Staniland (2012, 19), GAARD codes a deliberate alignment change when an armed group changes its pattern of targeting and operation. GAARD does not impose a time span when this change in targeting and operation has to be observed empirically. Due to data scarcity, it may be difficult to find clear evidence that the group has changed its pattern of targeting and operation. GAARD therefore also codes alignment changes if one can plausibly assume that an armed group is willing to change its pattern of targeting and operation. To be fully transparent about such coding decisions, GAARD contains a precision variable indicating the level of confidence for each recorded alignment change.

For deliberate alignment changes, we code the following subtypes:

- **Co-optation by the government.** This deliberate alignment change occurs when an armed group joins a negotiated peace agreement which results in the group's co-optation by the government. This formalized way of alignment change is often implicitly or explicitly conditional on the group's support in counterinsurgency operations and intelligence provision against non-signatory groups. For instance, the Sudan Liberation Movement/Army - Mini Minawi Faction (SLM/A-MM) signed Darfur Peace Agreement in May 2006, after which it served as a counter-insurgency force receiving weapons and money from the government of Sudan.

The coding is based on the UCDP Peace Agreement Dataset (Harbom, Högbladh and Wallensteen 2006; Högbladh 2012) and the UCDP Encyclopedia. GAARD code co-optations if armed groups sign peace agreements which contain specific political concessions, if the conflict is ongoing after the peace agreement has been

signed and if the armed group actively takes steps to comply with the agreement. To be coded as co-optation the political concessions have to establish a link between the group and the government. This includes: Integration in government, inclusion in interim government, or power-sharing with government (Harbom, Högbladh and Wallensteen 2006; Högbladh 2012). All other types of peace agreements, which do not contain said provisions, are not coded as alignment changes. Also not coded are ceasefire agreements (as explained above). The date of alignment change is the day on which the armed groups takes steps to comply with the peace agreement, for example when a rebel leader is inaugurated as minister. For cases in which information on the precise action taken is unavailable, GAARD records the day after signing the peace agreement.

- **Defection from a peace agreement.** This deliberate alignment change occurs when an armed group defects from a peace agreement and resumes operations against the government. GAARD records this alignment change whenever an armed group defects from a peace agreement described above. This change implies that the group takes any means to actively withdraw from the obligation of the peace agreement, for example if a former rebel leader who became minister resigns from his post and starts with the group fighting the government. For instance, stipulated by the Linas-Marcoussis peace accord in Ivory Coast, the Movement for Justice and Peace (MJP) became part of the Government of National Reconciliation in the beginning of 2003. However, in September MJP left the government and took up arms against the government once more.
- **Other types of deliberate alignment.** This deliberate alignment change captures all changes that were not formalized in the context of a peace agreement including joining the government or defecting from it. This sub-type is often referred to as side switching (Otto 2018). For instance, the Iraqi government recruited Kurdish combatants into the state sponsored Jash militia in Iraq. During the Kurdish revolt against the Ba'athist regime, the Jash militia broke away from the Iraqi government and joined the Kurdish uprising in January 1991.

2. Contextual alignment change. Occurs when an actor other than the armed group itself causes a change in the group's alignment with the government or if an armed group seizes power. Contextual alignment changes can occur *during and outside of civil conflict*.

For contextual alignment changes, we code the following subtypes:

- **Affiliated government loses power.** The national government with which an armed group is affiliated with loses power therefore changing the alignment of the latter. For instance, the Mexican political party Institutional Revolutionary Party (PRI) relied on the pro-government group Paz y Justicia to fight the opposition in Chiapas. When the PRI lost power in the elections in 2000, the Paz y Justicia also lost its status as a pro-government group.

- **Affiliated government returns to power.** A government which is affiliated with an armed group or supports it rises to power. For instance, the Mohajir Quami Movement (MQM) in Pakistan has been heavily involved in electoral politics. In 1997 Nawaz Sharif won the elections and became prime minister. Sharif invited the MQM to become a coalition partner.
- **Loss of support by government.** The national government stops supporting an armed group by intentionally cutting off its ties with the group. This includes banning, out-lawing, or demobilization attempts of a pro-government group by the government. For instance, after the group's human rights violations became too massive the Nigerian government withdrew its support for the Bakassi Boys and outlawed the group in 2006.
- **Reaching power.** An armed group seizes power, essentially becoming part of the government. For instance, Rwandan Patriotic Front (RPF) seized power in 1994.
- **Pro-government group is removed from power.** An armed group that seized power is ousted by other actors. For instance, in 1998 the AFRC-RUF coalition in Sierra Leone was ousted from government and Ahmad Tejan Kabbah reinstalled. The ARFC and RUF once more became anti-government groups.
- **Unclear.** This residual subtype captures all contextual alignment changes that do not fit the above mentioned categories.

4.3 Formation and Termination

- **Formation date.** For groups that emerged before 1989, GAARD codes the date when an armed group was formed. In cases where it was not possible to pin down the formation date, we follow Carey, Mitchell and Lowe (2013) and code the date when the armed group was first mentioned.
- **Start date.** For groups that emerged after 1989, GAARD gives the start date of the armed group. In cases where it was not possible to pin down the formation date, we follow Carey, Mitchell and Lowe (2013) and code the date when the armed group was first mentioned.
- **Termination date.** GAARD codes when the group ceased to exist as a physical entity with the group being incapable of carrying out further violence in an organized and collective manner. For instance, signing a disarmament agreement does not necessarily mean that an armed group is terminated. GAARD records that a group ceased to exist, when there is evidence that the majority of its members were disarmed. Note that groups are not coded as terminated if they only stop carrying out violence.
- **Type of termination.** GAARD codes how an armed group ceased to exist as a physical entity. GAARD records several types of termination, which are not mutually exclusive. Armed groups can terminate in on one or more of the following ways:

- Officialization. Armed group is integrated in the formal state apparatus.
- Surrender. Capitulation by an armed group.
- Merge. Armed group merges with other armed group.
- Dissolution. Armed group dissolves due to reason other than surrender.
- Demobilized. Armed group hands over weapons in formalized procedure.
- Defeated. Armed group is militarily defeated.
- Turned into politics. Armed group turns into political party.
- Split. Armed group disintegrates into several armed groups of which none satisfies the definition of armed groups (see above).
- NA. Lack of sufficient information to code how armed group is terminated.

Between 1989 and 2007, 54% (272) of armed groups captured by GAARD ceased to exist. Table 1 demonstrates that the pathways of armed groups’ termination differ greatly across groups. GAARD offers detailed information on the group termination in 48% of the cases. For the remaining 52% there is clear-cut evidence that the group ceased to exist but insufficient information on the termination type. The most common termination type among armed actors is demobilization (25%). If groups are not demobilized, they commonly vanish because of mergers (20%), dissolution (19%), or military defeat (19%). 16% of the groups became part of the state security apparatus while 12% decided to pursue their goals as a non-violent political party. The least two common termination types are splintering (5%) and surrender (4%).

Type of termination	Frequency	Percent
Unclear	103	52.3%
Demobilization	49	24.9%
Merge	39	19.8%
Dissolution	38	19.3%
Defeat	37	18.8%
Officialization	32	16.2%
Politics	24	12.2%
Split	10	5.1%
Surrender	7	3.6%

Table 1: Type of termination

5 Data structure and variables

5.1 Data structure

GAARD captures the alignment of each major armed group in each country. As outlined above, we code the alignment of each group in relation to the government until it changes, the armed group terminates, or the last year of time covered by GAARD is reached. The unit of observation in the dataset is the group-alignment-spell.

For instance, if a group never changes its alignment, it occupies one line in the dataset. The formation date/start date corresponds to the group’s formation and the end date corresponds to the group’s termination date (if occurred before 2007). If a group changes its alignment once, it occupies two lines in GAARD. The earliest formation/start date corresponds to the group’s formation. The end date in the first dataset line corresponds to the end date of the first alignment of the group. The start date of the second dataset line corresponds to the beginning of the group’s second alignment. The end date in the second dataset line for this group gives the group’s termination.

5.2 Variables

GAARD records information on the following variables:

haadID [numeric]: Unique identifier of each armed group.

country [string]: Country name.

gwno [numeric]: Gleditsch/Ward country number of the group’s location.

ucdp_actorID [numeric]: UCDP Actor ID of group.

ucdp_name [string]: UCDP Actor name of group.

pgmd_id [numeric]: PGMD Actor’s ID of group.

pgmd_name [string]: PGMD Actor’s name.

formation [string]: Start date of group if before 1989. “NA” if formation date after 1988. Format: DD–MM–YYYY (e.g. 01–01–2001 for 1st of January 2001).

form_prec [numeric]: Precision level of formation date identified.

1 - Day/month/year precisely coded

2 - Day/month/year; month/year precisely coded; day assigned but day might differ

3 - Month/year precisely coded, day set to the 15th of coded month

4 - Year precisely coded; month assigned but might differ; day set to the 15th of coded month

5 - Year precisely coded; date and month set to July 1 of the coded year

6 - Year; year assigned but might differ; date and month set to July 1 of the coded year

7 - Date assigned by PGMD

9 - Year precisely coded, but date adapted to source (e.g. when source gives “in early 1992”.)⁸

⁸This coding scheme is valid for all data precision variables recorded in GAARD.

formation_add [string]: Format: DD–MM–YYYY (e.g. 01-01-2001).

This variable records the more reliable date if start dates from different sources are conflicting. “NA” if no additional formation date before 1989.

add_form_prec [numeric]: Precision level of date identified.⁹

start [string]: Format: DD–MM–YYYY (e.g 01–01–2001). Date of formation after 1988. “NA” if formation date before 1989.

start_prec [numeric]: Precision level of start date identified.¹⁰

start_add [string]: Format: DD–MM–YYYY (e.g 01-01-2001).

This variable records the more reliable date if start dates from different sources are conflicting. “NA” if no additional start date after 1988.

prec_add_start_date [numeric]: Precision level of date identified.¹¹

end [string]: Format: DD–MM–YYYY (e.g 01-01-2001).

Left blank if group terminated after 2007.

end_prec [numeric]: Precision level of date identified.¹²

add_end_date [string]: Format: DD–MM–YYYY (e.g 01-01-2001).

This variable records the more reliable date if termination dates from different sources are conflicting. Left blank if group terminated after 2007.

prec_add_end_date [numeric]: Precision level of date identified.¹³

entry_type [categorical]: Armed groups’ alignment at beginning of spell.

0 - Anti-government

1 - Pro-government

2 - Unaligned

exit_type [categorical]: Armed groups’ alignment at the end of spell.

0 - Anti-government

1 - Pro-government

2 - Unaligned

⁹Coded as outlined in form_prec.

¹⁰Coded as outlined in form_prec.

¹¹Coded as outlined in form_prec.

¹²Coded as outlined in start_prec.

¹³Coded as outlined in start_prec.

deliberate [categorical]: Deliberate alignment change.

- 0 - No deliberate alignment change
- 1 - Co-optation by the government
- 2 - Defecting from peace agreement
- 3 - Other types of deliberate alignment

contextual [categorical]: Contextual alignment change.

- 0 - No contextual alignment change
- 1 - Loss of support by government
- 3 - Affiliated government loses power
- 5 - Reaching power
- 6 - Affiliated government returns to power
- 8 - Kicked out of power
- 9 - Unclear

prec_a_change [categorical]: Precision level of alignment change.

- 0 - No alignment change.
- 1 - Extremely high precision: More than one sources report side switching and these sources either rely on primary sources (e.g. interviews) or report source of information.
- 2 - Very high precision: More than one sources report side switching.
- 3 - High precision: One source reports side switching.
- 4 - Borderline case due to conflicting information or imprecise information.

termination_type [categorical]: Way how armed group ceased to exist. More than one termination type possible. If so, types are separated by comma.

- 0 - Still exists
- 1 - Officialization
- 2 - Surrender
- 3 - Merge
- 4 - Unclear
- 5 - Dissolution
- 6 - Demobilized
- 7 - Defeated
- 8 - Turned into politics
- 9 - Split

agin_ocountry [integer]: Dichotomous variable assuming the value of 1 if group is coded as anti-government in its main country of activity, 0 otherwise.

ag_inf [integer]: Dichotomous variable capturing whether an anti-government alignment was inferred for a given group. This is the case for groups that UCDP did not code as

being anti-government. The variable assumes the value of 1 if a group was inferred to be anti-government based on its incompatibility with the government but did not reach the 25 battle-deaths threshold. The variable therefore indicates that the coding differs from the coding by UCDP.

6 One-to-many group matches

For some armed groups GAARD provides one-to-many matches to link groups recorded in both UCDP and PGMD. One-to-many matches indicate that one group recorded by one of the two datasets correspond to two or more groups in the other dataset. This implies that a group in one dataset is duplicated by the number of groups recorded in the other dataset. There are two main reasons for one-to-many relations.

First, as correctly pointed out by Cunningham, Gleditsch and Salehyan (2013, 522): “While most rebel organizations have some formal command structure, there are a handful of groups that exist as disparate factions with very little leadership. The UCDP Armed Conflict Dataset, for example, identifies a handful of groups simply as “insurgents” (examples include Kashmiri Insurgents, Patani Insurgents and Sikh Insurgents) because it is difficult to identify actual organizations in these conflicts.” These groups should be understood as some kind of artificial conglomerate of groups but we do not know of how many individual groups these aggregate groups consists. GAARD therefore deals with these aggregate groups by linking them to the individual groups recorded in PGMD using one-to-many matches.

Second, sometimes different groups form an umbrella organization but the individual, original group structures continue to exist. For instance, in Congo Brazzaville UCDP records, among others, the Cocoyes. PGMD, in contrast, desegregates this actor and codes the Aubevillois and the Zulus. In this case, GAARD uses one-to-many matches record the links between the groups across both datasets. GAARD links the Cocoyes (UCDP) with the Aubevillois (PGMD) and it links the Cocoyes (UCDP) with the Zulus (PGMD). We believe that one-to-many matches ensure the greatest level of transparency. We leave it to users to decide whether to aggregate these observations to the UCDP version or to utilize the GAARD coding.

While the the one-to-many matches allow GAARD to link most groups recorded in UCDP and PGMD datasets, there are a few groups that pose a particular challenge. This challenge occurs if aggregate actors and individual groups demonstrate different behavior. For example, UCDP records the group “Kashmir Rebels.” This is an aggregate actor consisting of several individual rebel groups. It, however, remains unclear which these constituent groups exactly are. PGMD, on the other hand, records the Ikhwan-ul-Muslimoon, which is known to belong to the Kashmir rebels. The challenge for GAARD emerges from the fact that Ikhwan-ul-Muslimoon behave differently than the rest of the Kashmir rebels. The group switched sides and became pro-government, while the rest of the Kashmir rebels continued to challenge the state. GAARD therefore faces a case where there is only one link between UCDP

and PGMD but the coded groups behave differently. For such groups, GAARD codes the (aggregate) group(s) only once since there is only one group recorded in UCDP and PGMD. GAARD then records the described alignment change. The case thus exemplifies the limits of GAARD. It does not provide further information on the anti-government rebels which continued among the Kashmir Rebels after the Ikhwan-ul-Muslimoon had switched sides and became pro-government. We recommend that users interested in scrutinizing the dynamics of alignments use GAARD as is. Users, who prefer to build their analysis closer to UCDP may want to add one group observation with information on the Kashmir Rebels as originally recorded by UCDP.

7 Armed groups in dissolving and emerging countries

Cases like the dissolution of Yugoslavia and the subsequent emergence of Croatia, Bosnia-Herzegovina, Serbia, Montenegro, and Kosovo are particularly challenging for the systematic coding of formation, termination, and alignments of armed groups. Armed actors might emerge, dissolve, or alter their alignments as a result of changes in the country system. GAARD rests on the information on state independence by Gleditsch and Ward (1999).

We provide a description of the coding procedures that GAARD uses to record armed groups in changing environments of statehood below. We illustrate the coding procedures by drawing on a generic case that comprises major challenges in the coding of armed actors. This hypothetical case consist of a country A (e.g., Yugoslavia) that experiences a split-off by country B (e.g., Bosnia-Herzegovina) declaring its independent from A. Country A features three armed groups: X, Y, and Z. Group X (e.g., the Republic of Bosnia-Herzegovina in Yugoslavia) was active in country A and fought for the secession of country B. Group Y (e.g., Republika Srpska in Yugoslavia and in Bosnia-Herzegovina) had been active in country A prior to secession and only remained active in country B after B's succession. Group Z had been active in country A prior to the secession but remained active in country A and B (e.g Serbian Irregulars in Yugoslavia). GAARD uses the following procedures to code the armed groups X, Y, and Z.

Coding procedure for group X:

- The armed group X enters GAARD in one set of observations. The set of observations captures all relevant information on the armed group X in country A till the succession of country B.
- For the time before the succession of country B, GAARD provides data on the formation date and the (changes in) political alignment of X. This data is recorded in accordance with the coding rules outlined above. The secession of country B marks a fundamental breaking-point in the group's alignment. X not only changes alignment but becomes the government of country B. It therefore loses its status as a non-state actor and does no longer belong to the population of groups captured by GAARD. To record this

status change, GAARD records the day before the independence of country B as the group's termination date. The termination date and type are specifically marked in the dataset. For such cases, GAARD records the temporal precision score of "9 - Year precisely coded, but adapted to source" for the termination date and a score of "4 - Unclear" for the termination type. GAARD also provides a short comment for the respective observation.

Coding procedure for group Y:

- The armed group Y enters GAARD in two sets of observations. The first observation set captures all relevant information of the armed group Y in country A till the secession of country B. The second observation set records information on Y in country B.
- For the time before the succession of country B, GAARD provides data on the formation date and the (changes in) political alignment of Y. Information is determined and coded in accordance with the coding rules outlined above. The secession of country B marks a potentially breaking-point in the group's alignment and the territory it is active in. Accordingly, GAARD records the day before the independence of country B as the group's termination date in country A. The independence of B marks the end of the coding for the armed group Y in country A. Termination date and type of B in country A are specifically marked in the dataset. For such cases, GAARD records the temporal precision score of "9 - Year precisely coded, but adapted to source" for the termination date and a score of "4 - Unclear" for the termination type. GAARD also provides a short comment for the respective observation.
- The second set of observations for the armed group Y captures the group's characteristics after the succession of country B. In line with the termination date for the group in country A, the formation date of Y in country B matches the date of independence of B. For such cases, GAARD uses a temporal precision score of "9 - Year precisely coded, but adapted to source" for the formation date. GAARD also provides a short comment for the respective observation. Information on the (changing) political alignment, the termination date, and the termination type of armed group Y are coded in accordance with the GAARD coding rules.

Coding procedure for group Z:

- The armed group Z enters GAARD in two sets of observations. The first set of observations records all relevant information on the armed group Z till its termination in country A. The second set of observations codes information of the group till its termination in country B. In most cases the termination dates for the same armed group are identical. However, for some armed groups, the complexity of the case as well as the lack of precise information necessitates the use of modified and slightly diverging

termination dates. In these cases, GAARD draws on the activity reports by UCDP to code the respective termination date. These cases are clearly marked in GAARD.¹⁴

- Information on the characteristics of the armed group Z in country A is coded independently of the secession of country B. Formation date, (changes in the) political alignment, termination date, and termination type are determined and the coded in accordance with the GAARD coding rules.
- The second set of observations for the armed group Z captures the group’s characteristics after the succession of country B. The formation date of Z in country B is coded to match the date of independence of country B. Information on the (changing) political alignment is coded with regard to the government of country B. Termination date and type of the armed group Y are coded in accordance with the GAARD coding rules if sufficient information is available (see above).

The outlined coding procedures have further implications for the coding of armed groups in cases of changing statehood. For an armed group that has been active in various, newly formed countries, GAARD provides the equivalent number of sets of observations. For example, the armed group “Serbian Irregulars” was active in Yugoslavia, in Croatia, and in Bosnia-Herzegovina. Accordingly, there are three sets of observations for this group in GAARD. For umbrella groups, GAARD also updates the link between UCDP and PGMD for each country in which such group operate in. GAARD utilizes one-to-many matches to establish these links. For every independent country, GAARD provides an updated set of these matches. For example, in Yugoslavia GAARD links the UCDP armed actor “Serbian Irregulars” to six militia groups captured by PGMD. However, “Serbian Irregulars” were also active in Croatia but only consisted of five militia groups according to PGMD. Accordingly, GAARD only links these five militia groups to the “Serbian Irregulars” in Croatia.

8 Conceptual scope of GAARD

8.1 The distinction between alignments and alliances

GAARD captures alignments of armed groups. The changes in alignment are qualitatively different from *changing alliances*. In the literature on inter-state wars, alliances are the cooperation between states against threats (Fuhrman and Sechser 2014; Morrow 1991, 2000; Walt 1987). While the conventional definition entails a certain degree of formalization this assumption is often implicitly or explicitly relaxed for the study of alliances in civil wars.¹⁵ Civil war alliances are usually seen as an informal security cooperation between at least two

¹⁴For example, we were not able to obtain precise information on the termination of “Serbian irregulars” in Croatia. Moreover, we know that at least parts of the armed actor were active in Bosnia later on. We therefore utilize UCDP activity information to record the termination date for this armed actor in Croatia. For such cases the precision score is “9 - Year precisely coded, but adapted to source” with the termination type being recorded as “4 - Unclear.” GAARD also provides a short comment for the respective observation.

¹⁵Alliances are based on credible commitments—either in form of words, e.g. signing a contract, or deeds, e.g. deploying military forces to the allied country—between at least two parties specifying obligations and shared interests (Fuhrman and Sechser 2014; Morrow 1991, 2000; Walt 1987).

conflict actors that share resources or cooperate tactically (Bapat and Bond 2012; Christia 2012). Alliances in civil wars can only be forged by actors who fight on the “same side” of the conflict. Changing an alliance therefore requires that an armed group not only re-aligns and joins the same side of another actor but also that both groups engage in some form of cooperation (Fjelde and Nilsson 2012; Nygaard and Weintraub 2014). In contrast, alignment change as understood by GAARD implies that an armed group simply changes its alignment with the government. The switching armed group therefore can but does not have to enter into an alliance with other actors. GAARD is therefore sensitive to cases where, for example, a pro-government group switches sides and becomes anti-government but does not cooperate with other anti-government groups. Alignment changes as captured by GAARD can thus be understood as the wider pre-condition for the formation or breaks of rebel alliances.

8.2 The distinction between alignment changes and coups

The alignment changes recorded by GAARD are also different from *coups*. A coup is an illegal and overt unseating of the sitting government by the military or other elites within the state (Powell and Thyne 2011, 252). Coup plotters therefore belong to the formal state apparatus. The focus of GAARD is capturing armed group outside the formal state security apparatus independent of their relation with the government. Groups can be pro-government, anti-government, and unaligned, and can oscillate between these alignments.

GAARD offers systematic information on armed groups recorded in both UCDP and PGMD. UCDP includes groups which participated in coups which caused 25 battle-deaths or more. Groups, on the other hand, that staged coups without causing fatalities are not recorded in UCDP and therefore are also not part of GAARD. Users who seek to exclude groups involved in coups from GAARD can do so using information by Powell and Thyne (2011).¹⁶

8.3 The distinction between alignment changes and military defections

GAARD does also not capture *military defections*. First, GAARD focuses on armed groups outside the regular security apparatus. Military defections, on the other hand, are commonly undertaken by soldiers belonging to the military apparatus. Second, military defection refers to processes when the military shifts its loyalty from the government and towards a government opponent like, for example, protesters (Brinton 1965; Wickham-Crowley 1992; Barany 2011; Nepstad 2013). The defection of the military usually breaks the government’s monopoly of force. This is qualitatively different from alignment changes of armed groups, which leave the state intact.

Finally, GAARD does not capture the so-called *sobel* phenomenon. “Sobels” are soldiers by day and rebels by night. Even though soldiers may show this behavior during civil conflict, this usually does not include the majority of individuals that belong to an armed actor. Sobels are therefore not recorded in GAARD.

¹⁶The list of actors involved in both coups and the Uppsala/PRIO Armed Conflict Dataset is publicly available: http://www.uky.edu/~clthyn2/coup_data/appendix_T1.pdf.

References

- Bapat, Navin A. and Kanisha D. Bond. 2012. "Alliances between Militant Groups." *British Journal of Political Science* 42(4):793–824.
- Barany, Zoltan. 2011. "Comparing the Arab Revolts: The Role of the Military." *Journal of Democracy* 22(4):28–39.
- Braithwaite, Jessica Maves and Kathleen Gallagher Cunningham. 2019. "When Organizations Rebel: Introducing the Foundations of Rebel Group Emergence (FORGE) Dataset." *International Studies Quarterly* online first.
- Brinton, Crane. 1965. *The Anatomy of Revolution*. Prentice Hall.
- Carey, Sabine, Neil Mitchell and Will Lowe. 2013. "States, the Security Sector, and the Monopoly of Violence: A New Database on Pro-Government Militias." *Journal of Peace Research* 50(2):249–258.
- Christia, Fotini. 2012. *Alliance Formation in Civil War*. Cambridge University Press.
- Cohen, Dara Kay and Ragnhild Nordås. 2014. "Sexual Violence in Armed Conflict: Introducing the SVAC dataset, 1989-2009." *Journal of Peace Research* 51(3):418–428.
- Cunningham, David E., Kristian Skrede Gleditsch and Idean Salehyan. 2013. "Non-State Actors in Civil Wars: A New Dataset." *Conflict Management and Peace Science* 30(5):516–531.
- Eck, Kristine and Lisa Hultman. 2007. "One-Sided Violence Against Civilians in War: Insights from New Fatality Data." *Journal of Peace Research* 44(2):233–246.
- Fjelde, Hanne and Desirée Nilsson. 2012. "Rebels against Rebels: Explaining Violence between Rebel Groups." *Journal of Conflict Resolution* 56(4):604–628.
- Fuhrman, Matthew and Todd S. Sechser. 2014. "Signaling Alliance Commitments Hand-Tying and Sunk Costs in Extended Nuclear Deterrence." *American Journal of Political Science* 58(4):919–935.
- Gleditsch, Kristian S. and Michael D. Ward. 1999. "Interstate System Membership: A Revised List of the Independent States since 1816." *International Interactions* 25(4):393–413.
- Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg and Håvard Strand. 2002. "Armed Conflict 1946-2001: A New Dataset." *Journal of Peace Research* 39(5):615–637.
- Harbom, Lotta, Stina Högladh and Peter Wallensteen. 2006. "Armed Conflict and Peace Agreements." *Journal of Peace Research* 43(5):617–631.
- Högladh, Stina. 2012. "Peace Agreement Dataset Codebook Version 2.0." Uppsala Conflict Data Program.
- Kalyvas, Stathis N. 2008. "Ethnic Defection in Civil War." *Comparative Political Studies* 41(8):1043–1068.
- Kreutz, Joakim. 2015. "The War that Wasn't There: Managing Unclear Cases in Conflict Data." *Journal of Peace Research* 52(1):120–124.

- Morrow, James D. 1991. "Alliances and Asymmetry: An Alternative to the Capability Aggregation Model of Alliances." *American Journal of Political Science* 35(4):904–33.
- Morrow, James D. 2000. "Alliances: Why Write Them Down?" *Annual Review of Political Science* 2:63–83.
- Nepstad, Sharon Erickson. 2013. "Mutiny and Nonviolence in the Arab Spring: Exploring Military Defections and Loyalty in Egypt, Bahrain, and Syria." *Journal of Peace Research* 50(3):337–349.
- Nygaard, Haavard Mogleiv and Michael Weintraub. 2014. "Bargaining Between Rebel Groups and the Outside Option of Violence." *Terrorism and Political Violence* 0:1:24.
- Oppenheim, Ben, Abbey Steele, Juan F. Vargas and Michael Weintraub. 2015. "True Believers, Deserters, and Traitors: Who Leaves Insurgent Groups and Why." *Journal of Conflict Resolution* 59(5):794–823.
- Otto, Sabine. 2018. "The Grass Is Always Greener? Armed Group Side Switching in Civil Wars." *Journal of Conflict Resolution* 62(7):1459–1488.
- Pettersson, Therése and Lotta Themnér. 2012. "UCDP Actor Dataset Codebook Version 2.1-2012." Uppsala Conflict Data Program (UCDP), Department of Peace and Conflict Research, Uppsala University.
- Powell, Jonathan M. and Clayton L. Thyne. 2011. "Global Instances of Coups from 1950 to 2010: A New Dataset." *Journal of Peace Research* 48(2):249–259.
- Staniland, Paul. 2012. "Between a Rock and a Hard Place: Insurgent Fratricide, Ethnic Defection, and the Rise of Pro-State Paramilitaries." *Journal of Conflict Resolution* 56(1):16–40.
- Sundberg, Ralph, Kristine Eck and Joakim Kreutz. 2012. "Introducing the UCDP Non-State Conflict Dataset." *Journal of Peace Research* 49(2):351–362.
- UCDP. 2012. "UCDP Non - State Conflict Codebook. Version 2.4 - 201 2." Uppsala Conflict Data Program.
- Walt, Stephen. 1987. *The origins of Alliances*. Ithaca: Cornell University Press.
- Wickham-Crowley, Timothy P. 1992. *Guerrillas and Revolution in Latin America. A Comparative Study of Insurgents and Regime since 1956*. Princeton: Princeton University Press.
- Wucherpfennig, Julian, Nils W. Metternich, Lars-Erik Cederman and Kristian Skrede Gleditsch. 2012. "Ethnicity, the State, and the Duration of Civil War." *World Politics* 64(1):79–115.