Introducing the Targeted Mass Killing Dataset for the Study and Forecasting of Mass Atrocities

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Abstract

This article describes a new dataset for the study of genocide, politicide, and similar atrocities. Existing datasets have facilitated advances in understanding and policy-relevant applications such as forecasting, but have been criticized for insufficient transparency, replicability, and for omitting failed or prevented attempts at genocide/politicide. More general datasets of mass civilian killing do not typically enable users to isolate situations in which specific groups are deliberately targeted. The Targeted Mass Killing (TMK) dataset identifies 201 TMK episodes, 1946-2017, with annualized information on perpetrator intent, severity, targeted groups and new ordinal and binary indicators of genocide/politicide that can serve as alternatives to existing measures. Users are also able to construct their own indicators based on their research questions or preferred definitions. The article discusses the concept and operationalizaton of TMK, provides comparisons with other datasets, and highlights some of the strengths and new capabilities of the TMK data. [147 words]

1 Introduction

This article describes the Targeted Mass Killing (TMK) dataset, a new resource for the study of genocide and other mass atrocities that target particular ethnic, religious or political groups.[1] In quantitative social science, genocide and mass killing are under-researched topics, relative to their devastating impacts. By one estimate (Anderton, 2014), more than 84 million civilians were killed in genocide and mass-killing episodes since 1900, while roughly 36 million combatants died in inter- and intra-state wars, and just under 250,000 people were killed in incidents of terrorism. Yet, there are fewer than 50 quantitative studies of genocide and mass killing, compared to more than 500 of inter-state war and more than 100 each of terrorism and civil war (Anderton and Carter, 2015).

To an extent, this gap is also reflected in efforts to predict genocide and mass-killing. Advances in social science mean that forecasting some high-impact events is a reasonable goal. This includes forecasts of U.S. national and local election outcomes and turnout (Campbell, 1992, 2014; Lewis-Beck and Rice, 1984), forecasts of civil and interstate war (Brandt et al., 2011; Schrodt and Gerner, 1997; Hegre et al., 2017; Tikuisis et al., 2013), political instability, (Goldstone et al., 2010; O'Brien, 2002) ethnic conflict (Weidmann and Duffy Toft, 2010), and forecasts of specific events and decisions (Bueno de Mesquita, 1997; Organski and LustOkar, 1997; Schrodt and Gerner, 1997; Gleditsch and Ward, 2013). To the best of our knowledge, there are three groups producing genocide-related forecasts based on quantitative models (Goldsmith and Butcher, 2018; Harff, 2012; Ulfelder, 2013), and two rely on genocide data produced by the Political Instability Task Force (PITF, (Marshall et al., 2017)).[2] This paper outlines a new dataset designed to stimulate quantitative work on the analysis and prediction of genocide and related mass atrocities.

In part due to the use of different definitions of genocide (Verdeja, 2012), considerable disagreement persists over its basic correlates and causes (Stewart, 2013). While we do not claim to develop the single "correct" definition for all scholars or all purposes, we have

[1] The TMK dataset, codebook, data diaries and other related materials are available at: [authors' website].

[2] The Early Warning Project (https://earlywarningproject.ushmm.org/) uses data on "State Sponsored Mass Killings" which are overlapping but conceptually different from genocide/politicide, as we discuss below.

reconceptualized the definition that is most commonly used in quantitative analyses and forecasts in a way that we believe is better suited to these purposes (Verdeja, 2013, 41). Taking our cues from the path-breaking work of Barbara Harff and co-authors (e.g., Harff and Gurr, 1988), we developed the concept of Targeted Mass Killing to improve connections between concepts and measurement, improve documentation and reproducible codings, include non-state actors and capture attempted (and possibly thwarted) genocides (Goldsmith and Butcher, 2018; Ulfelder, 2013; Ulfelder and Valentino, 2008; Verdeja, 2013).

The TMK dataset employs a baseline measure of atrocity severity and perpetrator intent to identify 201 episodes, 1946-2017. Indicators of higher-level intent and severity, precise start and end dates, perpetrator and target groups, as well as descriptions of triggering events and episode endings are provided for each case. The TMK data improve on the PITF data by: (1) clarifying ambiguities and measurement problems associated with intent to destroy specific groups, while maintaining a distinction between mass killing, repression and terrorism, (2) enabling users to customize thresholds of intent and severity for particular research questions, e.g., to identify genocide/politicide episodes as a subset of TMK events, (3) explicitly and systematically identifying state and non-state actors as perpetrators,[3] (4) identifying *attempted* episodes of genocide, and (5) providing extensive documentation of coding decisions and source material.

This article proceeds by first outlining existing datasets on genocide/politicide and mass civilian killing, addressing how our conceptualization and operationalization of TMK departs from these. We then show the distribution of TMK events across time and regions and comparisons with the PITF Genocide/Politicide data, State Sponsored Mass Killing (SSMK) data, and Uppsala Conflict Data Program's One Sided Violence (OSV) data (Eck and Hultman, 2007). We next extend Wayman and Tago's (2010) data exploration using our new data, point to some potentially promising implications for analysis, prediction, and prevention, and conclude.

[3]The PITF Genocide/Politicide data do identify non-state perpetrators in the qualitative case descriptions.

2 Existing Datasets

As noted, the main source of quantitative data on genocide and politicide (hereafter, "genocide") is the PITF dataset (available in their "State Failure Problem Set" data file). The PITF definition is widely employed in empirical research (Colaresi and Carey, 2008; Goldsmith et al., 2013; Harff, 2003; Rost, 2013; Krain, 1997), and is based on the definition developed by Barbara Harff over decades (Harff and Gurr, 1988; Harff, 2003, 1992). The term politicide refers to the deliberate mass killing of a politically defined group of people (e.g., Communists) in order to eliminate them, in whole or in part, while genocide refers to such killing directed at a "communal" group (often defined by ethnicity, e.g., Sri Lankan Tamils). Specifically:

Genocides and politicides are the promotion, execution, and/or implied consent of sustained policies by governing elites or their agents – or, in the case of civil war, either of the contending authorities – that are intended to destroy, in whole or part, a communal, political, or politicized ethnic group. In genocides the victimized groups are defined by their perpetrators primarily in terms of their communal characteristics. In politicides, in contrast, groups are defined primarily in terms of their political opposition to the regime and dominant groups (Harff and Gurr, 1988, 360).

The PITF data have enabled significant advances in our understanding of the dynamics of genocide, but have some shortcomings. First, while the inclusion of "intent" to destroy "in whole or part" a political or communal group differentiates the PITF data from other projects not specifically focused on genocide (Verdeja, 2012), it is problematic to judge whether the "ultimate" intent was elimination (even partial) or other aims such as subjugation of the survivors or terrorizing them so that they flee a territory (Semelin, 2007). The actual destruction of an ethnic or political group of people appears to be exceedingly difficult to achieve - even the Nazis did not achieve this.[4] The qualification *in part* makes

[4]We have found references to the destruction or extinction of a number of groups of indigenous peoples in imperial or settler societies such as Brazil (Olson, 1991, 170, 314-15, 341, 369 (or near-extinction, 11,

Harff's definition (and the legal definition in the United Nations Genocide Convention) more plausible, but also too vague for many purposes in social science.

In terms of measurement, PITF judge that the intent to destroy "in whole or in part" is established when violence is directed against a political or communal group for longer than six months, resulting in the killing of a "substantial portion" of that group (Marshall, 2017, 15). As a consequence, the PITF data capture episodes of implemented genocide while excluding attempted episodes that were thwarted, for example by peacekeepers or other external intervention. East Timor (1999), Libya (2011) and Ivory Coast (2011) are possible examples. This is problematic, as these states were at high risk of genocide, but are not included in the dependent variables that current models aim to predict, potentially leading to underestimates of genocide risk, or overlooked independent variables. Moreover, PITF does not currently provide documentation for their coding decisions, especially numbers of people killed and estimated target-group size, making measurement of destruction in whole or part unreplicable. Since evidence of partial destruction of a group is, we believe, often not very informative of intent, but evidence of total destruction is exceedingly rare, our approach is to measure intent more directly.

A number of projects do not specifically aim to study genocide but speak to the core question of mass violence against civilians such that comparison can help illustrate the nature and contribution of the TMK data. Ulfelder and Valentino (2008) define "mass killing" for the purposes of the SSMK dataset as "any episode in which the deliberate actions of state agents or other organizations of the state kill at least 1000 noncombatant civilians from a discrete group." This definition reduces problems associated with establishing intent to destroy a group, but the lower criterion for intent makes it difficult to separate low-level violence or repression of a general nature from episodes of group-specific violence intended to terrorize or intimidate social groups. For example, SSMK data include cases that endure for 20 years or more (including Haiti, 1958-1986, South Africa, 1976-1994, Iran 1979-2010),

176, 178, 404, 412)) or Russia (Olson et al., 1994, 114 (or near-extinction, 301)) (groups such as Tasmanian Aborigines and Yana Indians of Northern California may also fit this description), which suggest that total destruction of groups may have been more common during the 19th and early 20th centuries than post-1945. We thank an anonymous reviewer for calling our attention to such cases.

making prediction of genocidal periods within these episodes difficult, such as the imprisonment and murder of Bahai in Iran in 1979-1980 and the eradication of political opponents, 1979-1988. Cases of genocide committed by non-state actors are also omitted, such as the Alliance of Democratic Forces for the Liberation of Congo (ADFL) in 1997 and more recently Islamic State in Iraq and Syria (ISIS). Neither do the SSMK data presently provide documentation for coding decisions. The SSMK dataset is a valuable resource but focuses on a different class of events than TMKs (a superset, as we show below), and thus cannot be effectively used specifically for the analysis or forecasting of genocide.

The OSV data (Eck and Hultman, 2007) also focus on a broader class of violence against civilians. This includes events of repression and acts short of systematic campaigns of civilian killing entailed by genocide, but has the advantage of including non-state as well as state actors. We draw upon the OSV data below, but like SSMK, these are not ideally suited to studying genocide. The TMK data likewise differ from the Armed Conflict Location and Event Data (ACLED) project's "Violence against civilians," which requires civilians to be deliberately targeted, but not necessarily as part of a broader campaign with the higher levels of intent implied by definitions of genocide.

The Worldwide Atrocities Dataset also covers a wider universe than TMK, recording events of atrocity against non-combatant civilians that result in more than 5 deaths worldwide, but for the limited period 1995-2018 (Schrodt and Ulfelder, 2016). These data record information on perpetrator and victim identity and include indicators of perpetrator intent to kill non-combatant civilians. TMKs require more than intent to kill non-combatants – the targeted group(s) must share an ethnic, religious or political identity to enter the TMK data. Our measure of intent is also sensitive to changed evidence of intentions after an episode has started. For example, while execution of opposition members by the Ethiopian Derg (junta) began in 1976, it was not until 1977 that a key Derg leader declared "for every revolutionary killed, a thousand counter-revolutionaries executed" and the killings known as the "Red Terror" escalated (Africa Watch, 1991, 102). We believe this makes the TMK datset better suited to studying escalation to higher levels of atrocity including genocide.

Finally, Rummel's (1997) "democide" data have been used to study mass-killing of civilians. However, these instances of "death by government" again include a wider set of events, while excluding non-state perpetrators, and have not been updated beyond 1999. Thus there are alternative sources of data that measure the mass-killing of civilians. But, other than PITF's genocide/politicide data, none of these is well-suited to the study or forecasting of genocide in particular.

3 Targeted Mass Killing

TMKs are a set of events that cross a minimum threshold of severity and intent for killing specific identity groups. From this broad set of cases, researchers can focus on all TMKs, or customize their thresholds for higher levels of atrocity, including those that fit common conceptions of genocide and politicide.

TMK is defined as follows:

Targeted mass killing is the direct killing of noncombatant members of a group by a formally organized armed force that results in 25 or more deaths in an annual period, with the intent of destroying the group or intimidating the group by creating a perception of imminent threat to its survival. A targeted group is defined in terms of political and/or ethnic and/or religious identity.

There are three key aspects to the baseline definition of TMK: (1) a (low) minimum death threshold, (2) the inclusion of state and non-state actors and, (3) intent conceived as either intent to destroy or intent to intimidate a group by creating the perception of an imminent threat to that group's survival. First, the low death threshold means that we include nascent episodes of genocide or politicide that fail to escalate to higher thresholds. Second, the focus on formal armed actors permits the inclusion of non-state actors.[5] Third,

[5]We were guided by UCDP's definition of a formally organized armed group: "any non-governmental group of people having announced a name for their group and using armed force" (Eck and Hultman, 2007). A range of armed groups, for example drug cartels, therefore, are possible TMK perpetrators. However, we excluded some groups due to a lack of confirming evidence of their organized nature (i.e., lacking a group name), including: Nyangatom raiders (Ethiopia, 1987), Dayak tribal militias (Indonesia, 1997, 1999-2001), and Assam tribal militias (India, 1983).

our intent requirement implies that people of a particular ethnic, religious or political group are selectively killed with the intent of communicating to other members of that group that the group's survival may be in jeopardy. Thus, the individual targets and the audience of the mass killing campaign are closely tied, in terms of identity markers. Perpetrators must have a military presence in the target country, which excludes mass casualty transnational terrorist attacks that may otherwise be designed to intimidate national groups. Our concept of TMK is therefore more inclusive than genocide but more restrictive than state-led mass killing, repression or terrorism.

Targeted mass killing is similar to genocide because of the group-selective nature of the violence and the close overlap between the targets of the violence and the audience (Straus, 2007, 2001). Although the goal might usually be impossible to reach, genocide is often characterized as those cases for which the intent of the perpetrator is to entirely destroy a social group (Harff, 2003). The TMK data also include cases where the intent is intimidation of a social group by creating the perception of an existential threat. TMK thus captures the idea that some perpetrators may seek a "final" solution, while others (most, in our view) are seeking a political one, more akin to ethnic cleansing in which populations are expelled, cowed into irrelevance, or scapegoated for the sake of in-group mobilization, but not totally or even substantially physically eliminated. All cases of genocide are also cases of targeted mass killing, but not all cases of targeted mass killing are cases of genocide. There exist cases with similarly high levels of intent, but that result in far fewer fatalities. Even many cases usually characterized as genocides, such as Bosnia (1992-95) and Darfur (2003-11), did not involve the large-scale killing seen in other prominent cases, like Cambodia (1975-79) or Rwanda (1994), in which substantial portions of the targeted groups were actually eliminated.

TMKs are distinct from mass killings due to the higher requirement for evidence of intent to destroy or existentially intimidate an entire ethnic, religious or political group. For example, mass killings can include cases in which civilians are killed during civil war as a consequence of the pursuit of broader military goals, such as the taking of a rebel-held

city, which would be unlikely to meet our criteria for intent. Mass killings may also include cases where the government kills civilians or dissidents to deter future participation in anti-government activity without necessarily aiming to destroy all dissidents or even creating this perception.

Repression is the use of coercion to deter present and future collective action or dissent, but is not necessarily group-selective. Repression can be indiscriminate and designed to intimidate and/or deter other dissidents, or dissidence in general, regardless of pre-existing membership in social groups (Davenport, 2007). Most TMKs are examples of extremely violent and group-specific repression. However, not all cases of repression are also cases of targeted mass killing.

In cases of terrorism, the direct targets of violence may or may not belong to the same social group as the intended audience (which, in many cases is the mass public in general, or the government leadership specifically). TMKs overlap with terrorism only where members of a particular ethnic, religious or political group are targeted with the intent of intimidating the entire identity group. Our requirement that actors have a minimum local military presence in the target zone also means mass-casualty terrorist attacks, such as the 9/11 attacks on the United States, are excluded.

3.1 Operationalizing TMK

With this definition translated into coding guidelines, we coded cases of TMK from 1946 through 2017. First, we collected a broad pool of *potential* TMK cases, relying on existing datasets and our own historical research. The datasets, chosen to ensure as wide a pool as possible of potential TMK candidates, were OSV, SSMK, and Major Episodes of Political Violence (MEPV; Marshall (2017)).[6] To locate additional possible cases we consulted the

[6]Specifically, we used all active years of OSV, SSMK and active years of MEPV episodes that incurred at least 500 deaths over the course of the episode and were characterized as more serious than "sporadic or expressive political violence" (i.e., they scored 2 or higher on the CIVTOT scale). These provided a pool of cases in which civilian killings were identified, but based on various inclusion criteria that are broader in terms of group targeting and/or intention than our TMK definition. These datasets were used only to identify a set of *candidate* events as the starting point for research for evidence as to whether each specific case fulfilled TMK criteria. For example, we researched all OSV cases as possible candidates for TMK, but only 28% of these were coded as TMK. There is, therefore a large empirical difference between OSV (for

genocide and mass atrocities literature, historical accounts, and area and genocide studies experts. This research led to the inclusion of, for example, events from the Chittagong Hill Tract conflict in Bangladesh (discrete episodes in the 1980s and early 1990s) and the Gukurahundi massacres in Zimbabwe (1983-1987). News media reports, government and NGO publications were also consulted for the period covered by the OSV dataset, locating additional cases involving some armed combat, such as Sri Lanka (2009), Egypt (2013) and Uzbekistan (2005).

From this broad pool of potentially relevant events, we then applied our coding criteria and made decisions based on extensive research into each case's characteristics. Coding guidelines as well as a "data diary" for each included case are available alongside the dataset to make these choices as transparent as possible. Our process was designed to minimize the chances of omitting relevant TMK cases, and we went to considerable lengths to track down reliable information on obscure or under-reported events. Our confidence in the data quality and coverage are high, but, as with any such dataset, there are potential shortcomings and limitations based on biases in news media reporting, government censorship, language barriers and event severity, and we discuss these in the supporting online materials.

From this broad set of potential cases, a new episode of TMK was coded when there was evidence that an organized armed actor:

(1) killed 25 or more civilians in a year, and

(2) these civilians were deliberately targeted by that actor, and

(3) one (or more) political, ethnic or religious group(s) were disproportionately targeted, and

(4) the group was targeted in order to substantially reduce its numbers, expel, or affect the political activity of that specific group.

An active TMK episode was coded when all four of these criteria were met. Criterion (1) is a baseline measure of severity. Criterion (2) differentiates TMK from events in which civil-

example) and TMK which reflects the stricter intent criteria. This was then repeated for active MEPV years as defined above and SSMK years. Including MEPV and OSV datasets also helped identify non-state actors as potential perpetrators.

ians are killed incidentally in conflict. Criterion (3) constitutes evidence of group-selective violence and criterion (4) requires the goal of annihilation or that the intended audience of the violence was the targeted social group, such that group members could plausibly believe that their lives were at risk simply because of their identity. New TMK episodes start in the year that a new actor engages in civilian killing that crosses the TMK threshold or where the same actor re-engages in such activity after a period of non-activity of 1 calendar year or more. Episodes end when they drop below the 25-deaths annual threshold. A country-year may experience multiple TMK events. The 201 TMK episodes comprise over 524 episode-years, 1946-2017.

Two examples can illustrate the role of intent in identifying TMK events. The Government of Sri Lanka began their final operation against the Tamil Tigers (LTTE) in September 2008, but the transition of operations to the deliberate targeting of Tamil civilians and civilian areas where the LTTE were based began in January 2009, when we code a TMK onset (United Nations, 2011, 2012). This distinguishes the TMK onset date from that recorded in the PITF genocide data, which is September 2008. The First Sudanese Civil War, while destructive and fought between ethnic Arabs and ethnic Equatorian Southern Sudanese, to the best of our knowledge yields little evidence for intent to target a specific group or groups beyond the purposes of war fighting. PITF classes the entire civil war, 1956-1972, as a genocide. Our coding, on the other hand, found two distinct 1965 massacres in Juba and Wau that meet the criteria for targeted mass killing, but no other such incidents over the 16-year period (Kaufman, 2006; Poggo, 2009).

3.2 Severity and Intent Variables

Once an episode was classed as TMK, additional measures of intent and severity were coded that allow users to customize thresholds for genocide/politicide or other mass-atrocity types, such as ethnic cleansing. Annual indicators of severity measured in the number of civilians killed and an indicator of the severity of the total episode were coded where possible. When sources disagree on the number of victims, we provide high, low and best (in our judgment)

estimates, documenting the sources and reasons for preferring a particular estimate.

Two higher order measures of genocidal intent were recorded: (1) public statements and (2) systematic preparation. First, we examined primary and secondary sources for public statements of intent to destroy a group, or public statements that deadly violence was specifically directed towards a group (as "enemies of the state," for example). Specific types of hate speech are, anecdotally, common precursors to genocidal violence (Semelin, 2007). Where evidence of publicly stated intent was found, we coded a 1, and 0 otherwise, for the variable *Intent - Public Statements*.

Governments and non-state perpetrators do not always announce their intentions, and evidence of systematic political, logistical or organizational preparation to facilitate large-scale killing of targeted groups was recorded. Verdeja (2013, 310) suggests that genocidal intent can often be inferred from: level of lethality, degree of coordination, and scope (portion of the victim group affected). While lethality and the proportion of the victim group affected enter our operationalization under the category of severity, which we treat as distinct from intent, Verdeja's "degree of coordination" captures activities that may signal preparation for genocide. Clear territorial control by the perpetrator group in the affected area, separation of people on the basis of identity, destruction of cultural symbols, systematic use of sexual violence against a population, the pattern of refugee origin and internal displacement, and the clear development of organizational infrastructure for genocide, all potentially contribute to evidence of intent. Where we found this sort of evidence, we coded a 1, and 0 otherwise, for the variable *Intent - Organization*.

For example, in the Central African Republic in 2013, Christian self-defence militias calling themselves "anti-Balaka" were responsible for killings of Muslims. Anti-Balaka militias entered villages over which they established clear territorial control, selected out Muslim men, women and children to be murdered, destroyed Mosques and sometimes announced that they were going to "kill all Muslims" in the village (HRW, 2013; Kane, 2014). The latter counts as public-statement evidence of intent, while the territorial control, separation of Muslims, and targeting of cultural symbols count as organizational evidence of intent.

Each intent variable is coded annually, but additional evidence is not required in subsequent years to maintain the coding (e.g., there does not have to be a new public statement of the intent to kill all members of a group in each subsequent year, after the initial such statement). The strongest evidence of intent exists when both categories are met: perpetrators declare they plan to kill the targeted group on a mass scale *and* they make the observable preparations using the resources of the state or other resources at their command. Only these cases reach the highest level of intent in our framework (see Table 1).

Score	Intent	Total Deaths
1	NO Stated OR Organizational Intent	>= 25 AND <= 999
2	NO Stated OR Organizational Intent	>= 1,000
3	Stated OR Organizational Intent	>= 25 AND <= 999
	TMK GENOCIDE/POLITICIDE THRESHOLD	
4	Stated OR Organizational Intent	>= 1,000
5	Stated AND Organizational Intent	>= 25 AND <= 999
6	Stated AND Organizational Intent	>= 1,000
7	Stated AND Organizational Intent	>= 10,000
8	Stated AND Organizational Intent	>= 100,000

Table 1: A TMK Ordinal Scale

Precise start and end dates, perpetrator actors, the specific ethnic, religious or political target groups and numbers killed by group were all recorded where possible. Victim death counts were broken down annually and by targeted group where possible. We also record identifiable triggering events, and characterize the process by which the TMK event ended. With these variables users can customize thresholds to identify episodes of genocide, or employ multiple thresholds. Users should also consult the TMK *Coding Guidelines*, which document the dataset and provide the instructions used to code each variable. A further resource is the *Data Diaries*, providing additional information on each case, including data sources, coding justifications, and the coder's degree of confidence in the codings. There is one data diary for each TMK case.

Figure 1 graphs the annual number of new TMK events (onsets) recorded, the number of ongoing TMK events, and the number of TMK episodes that cross one possible threshold for genocide or politicide – at least a total of 1000 deaths across the entire episode and either

public statements of intent or evidence of preparations for genocide/politicide at some point during the episode (level 4 in Table 1).

Figure 1

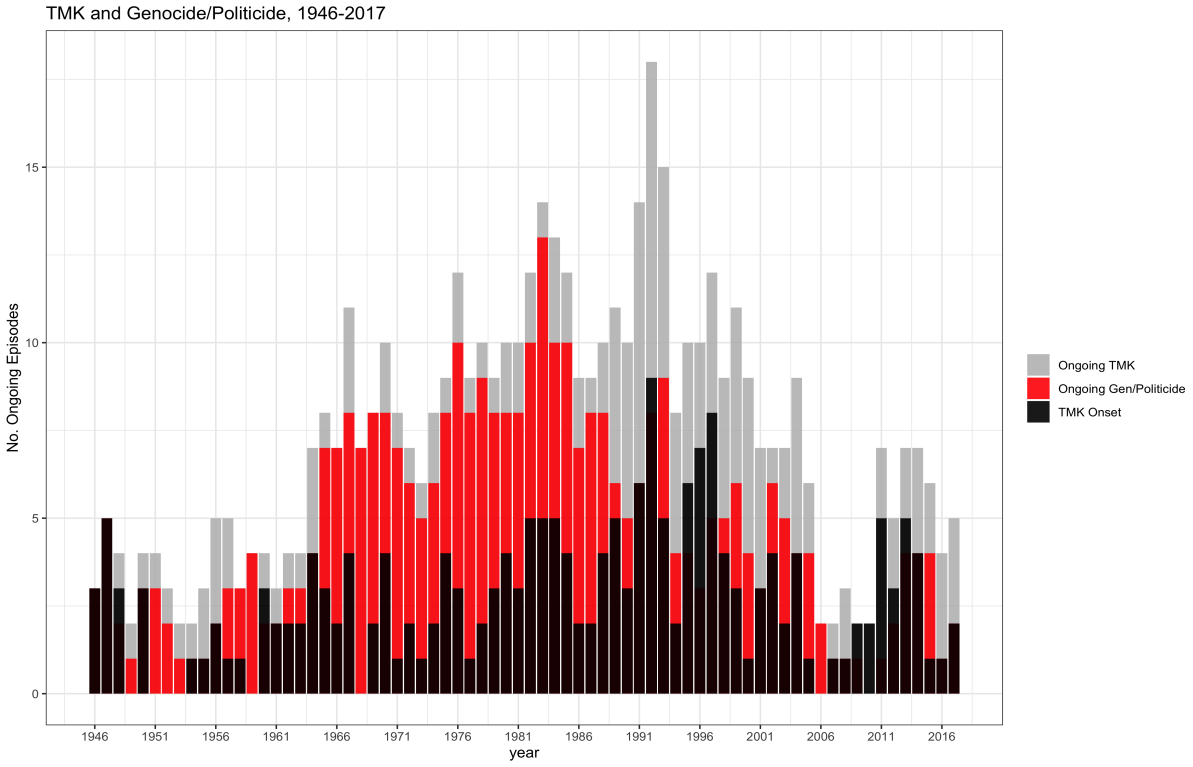


Figure 1 suggests that TMK episodes have fallen since a peak in 1992, and risen again since 2011, while onsets were relatively stable from 1946 through 1981, with spikes in 1982-84, 1992, 1997-98 and 2011-2013. Episodes meeting the above-mentioned threshold of genocide have steadily fallen as a proportion of all ongoing TMKs since 1989, suggesting that while attempts are stable, they are less likely to escalate after the Cold War. Due to better news media coverage we may also capture more attempted events over time, although the decline in absolute numbers of TMK events and genocide/politicide episodes since 1992 is observed despite this possibility.

The temporal patterns suggest a possible role for the characteristics of the international system in driving the frequency and severity of targeted mass killing, something which has been studied for intrastate conflict in general (Kalyvas and Balcells, 2010), but less so for mass atrocities. They also demonstrate an important feature of the dataset – the ability to distinguish between levels of atrocity within the broad class of TMKs, for the purpose of better understanding causation, escalation and trends.

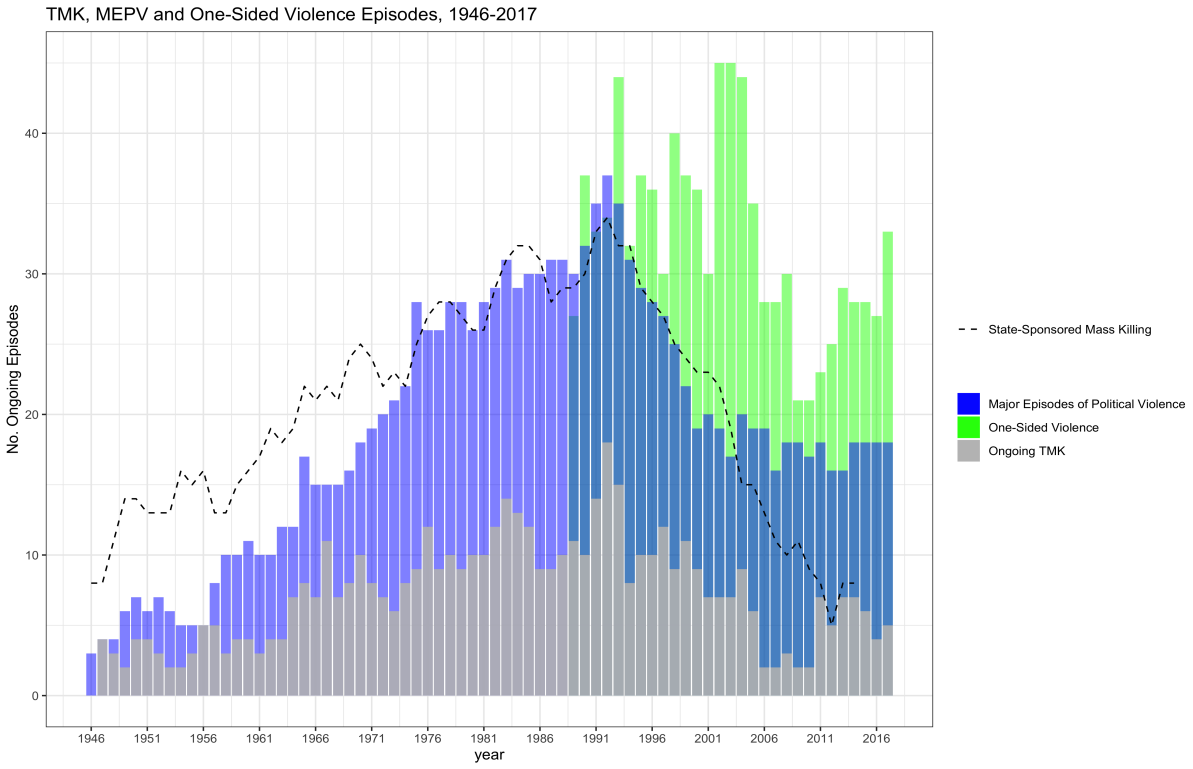
4 Comparisons with other Datasets

Here we compare the TMK dataset with datasets that have more inclusive criteria regarding intent or target groups – specifically the OSV, SSMK and MEPV data – and the PITF data with more restrictive inclusion criteria regarding the level of violence. We would expect TMKs to form a subset of the former, and to encompass all cases of the latter. Figure 2 shows the distribution of ongoing TMK episodes compared with ongoing episodes of OSV, SSMK and the number of countries with MEPV episodes that crossed our designated threshold.[7] TMK episodes clearly appear to be a subset of OSV and SSMK events, indicating that TMK isolates a set of events which manifest the intent to use violence against civilians to eliminate or influence the political activity of specific groups.

Figure 3 compares ongoing TMK episodes with PITF Genocide and Politicide episodes. TMK events are more frequent, reflecting the more inclusive concept in terms of intent

[7] As discussed above this is $CIVTOT \geq 2$.

Figure 2

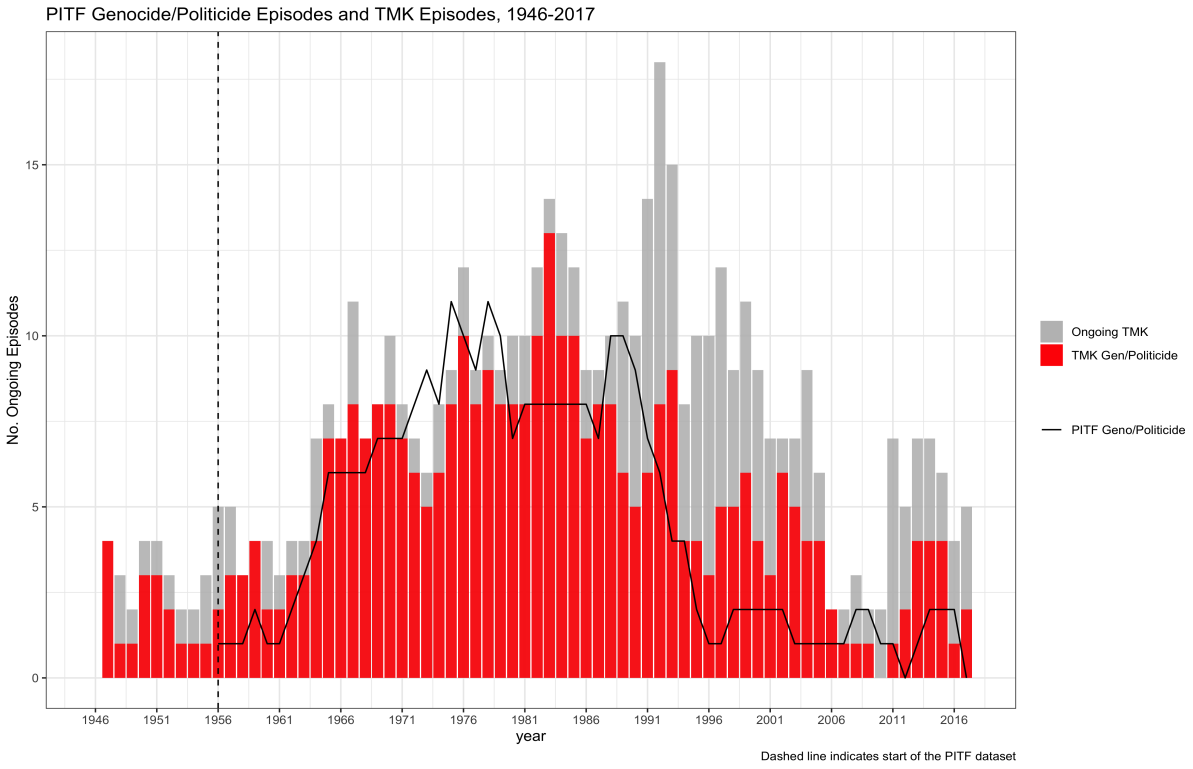


and severity thresholds. Moreover, our selected threshold for genocide/politicide in the TMK data (see Table 1, level 4) maps on to the PITF episodes fairly well, with the added advantages of a more consistent and transparent coding scheme for genocide and politicide, easy customization of genocide indicators in terms of thresholds of severity and intent, and other conditioning variables such as perpetrator and target types.

A closer look at the geographic distribution of the datasets indicates that the higher frequency of TMK onsets pertains in all global regions, although the Middle East and North Africa (MENA) region and the Asia-Pacific show the greatest difference between PITF and TMK rates of onset (Figure 4).

Table 1 and Figure 5 illustrate how the TMK dataset can be used to construct an ordinal measure of genocidal violence based on the level of intent and severity. One possibility is the 8-point ordinal scale in Table 1. The genocide/politicide threshold level of 4 is that used in figures 3 and 4. It identifies 85 cases of genocide/politicide. Over the period 1955-2017 the PITF data identify 44 while we find 72. The full case list can be found in the online materials. In Figure 5, the y-axis shows the total logged deaths over the episode, while the

Figure 3

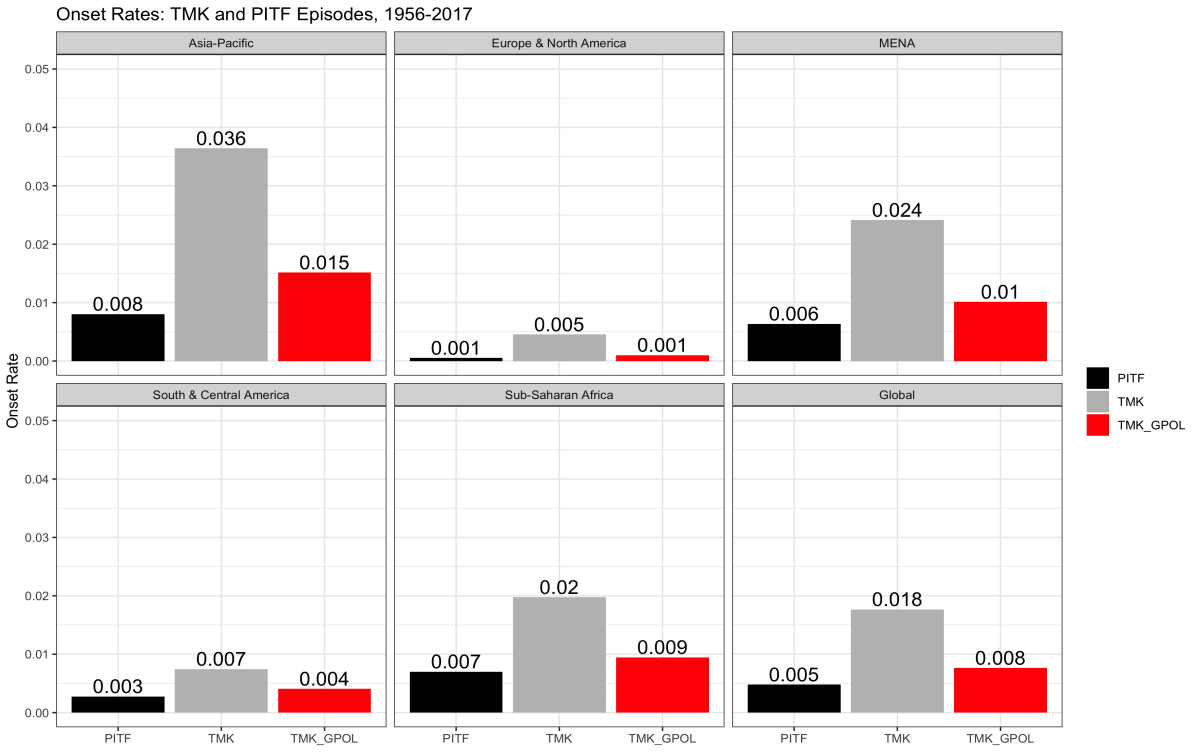


x-axis shows the distribution over years. The size of the circles is proportional to the logged severity (total deaths) of the episode. Grey dots are those that qualified as TMK episodes but we found no evidence of systematic preparations or stated intentions to eradicate or remove the target group. Orange circles indicate evidence for either type of intent, and in red are cases where we found evidence for both. Users could construct alternative indices of genocide/politicide by combining these dimensions in various ways.

Figure 5 shows that the severity of TMK episodes has declined over time, and that evidence of intent is not always accompanied by the highest levels of severity. After the end of the Cold War, escalation of some cases was arguably prevented by the international community, such as Indonesia (East Timor, 1999) and the Central African Republic (2011-2013). Some orange cases also appear to have been defused before escalation such as Libya (2011) and South Sudan (2013). The ability to identify attempted episodes is a useful feature of the TMK data. Harff (2003) uses years of political instability (civil war or adverse regime changes)[8] to identify cases where genocide/politicide are likely. However, political instability

[8]She uses the term "state failure," following the earlier designation of these events by PITF.

Figure 4



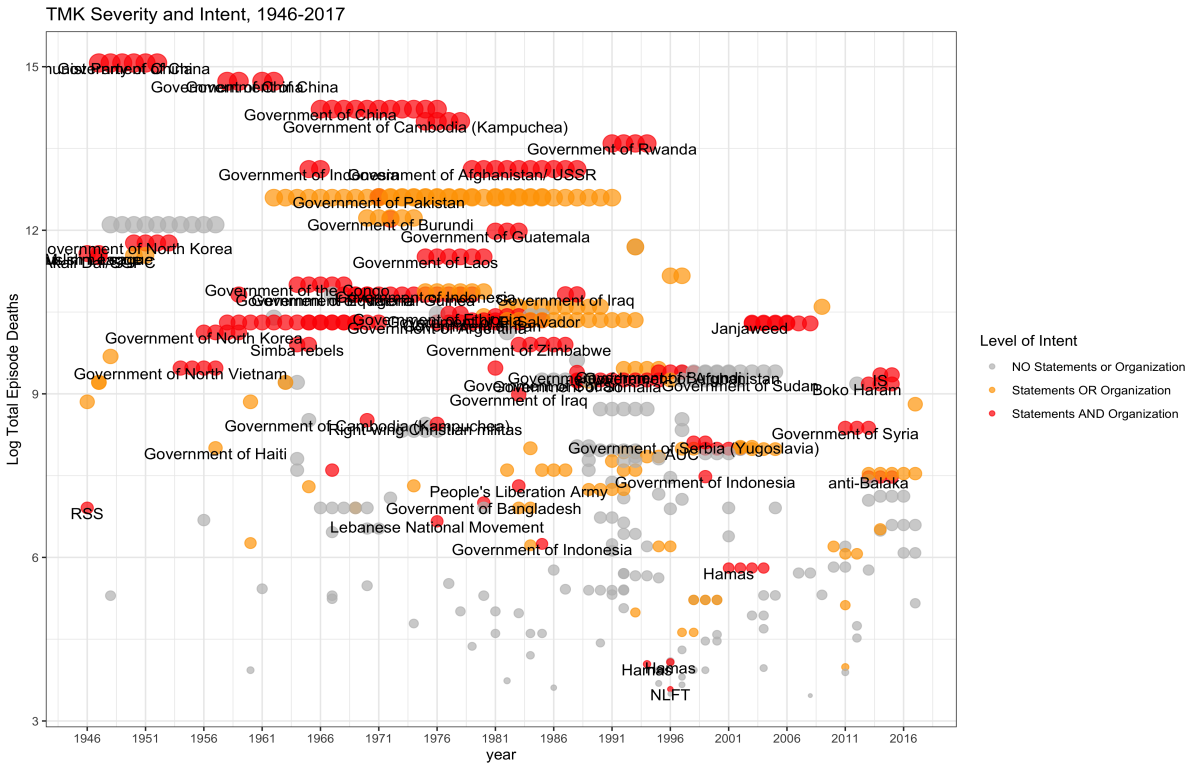
would be a poor proxy for attempted genocide (and there is no indication that she intended it as such). As a brief example, in 2013 there was ongoing instability (as identified by the PITF) in 26 countries, while we record only 7 cases of TMK in this year, including cases that are plausibly attempted genocides. The South Sudan case in particular was at significant risk of escalating to genocide if not for the intervention of the UN (HRW, 2014). Serious political instability at best weakly suggests probable attempted genocides that the TMK data capture with a lower death threshold and a closer focus on actor intent. A handful of these cases involve non-state actors such as Hamas, the Lebanese National Movement, or the Simba Rebels (Democratic Republic of Congo).[9]

The differences in onsets of TMK and PITF genocide/politicide are displayed in Figure 6.[10] In green are the number of onsets that match (are the same across the TMK and PITF

[9]Figure 5 also displays more grey dots after roughly 1970, which may indicate an improved ability to detect low-severity events over time.

[10]We choose to match onsets of all targeted mass killing events, rather than just those that meet our criteria of genocide/politicide, with the PITF genocide/politicide events in order to be as inclusive as possible of PITF cases and focus on the most distinct discrepancies between the datasets. However, we also note that PITF genocide/politicide is often coded for an extensive period. For example, in Burundi from 1965 through 1973, a PITF genocide is coded when we did not find evidence of targeted mass killing between 1966 and

Figure 5



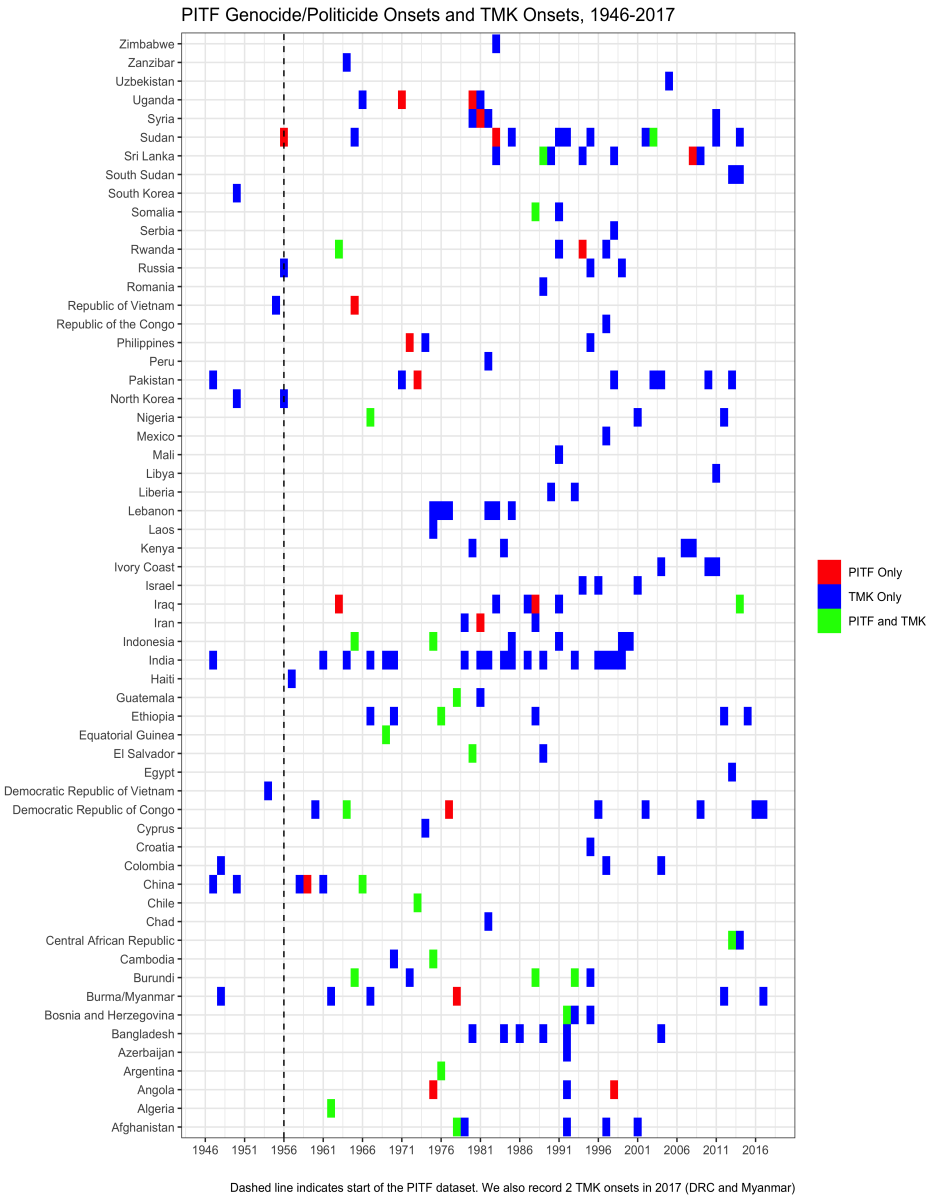
datasets). In blue are onsets identified by TMK only and in red are PITF-only onsets. There are 24 matches and 147 onsets that are TMK only. Interestingly, 18 onsets are PITF only. The majority are cases where we identify onsets earlier or later than PITF (for example, in Uganda, Syria, Sudan, Sri Lanka, Myanmar, Philippines, Iraq, Iran, China). However, at least 5 appear to be genuine discrepancies where on our assessment PITF episodes did not qualify as TMK episodes (Angola 1975 and 1998, Iraq 1963, Zaire 1977, Pakistan 1973).

We can briefly explore reasons for the discrepancies using the two cases from the Angolan Civil War that did not qualify for inclusion in our dataset, but are included in the PITF genocide/politicide dataset. PITF codes genocide events in Angola for 1975 through 1994 and again for 1998 through 2002. In our assessment the civil war included the regular targeting of civilians, but the available evidence indicates that most civilian deaths were caused by war-related disease and starvation, not direct violence, and analysis of those direct killings indicates that civilian targeting was mainly linked to battlefield territorial

1971. This suggests that start dates may mark the start of political violence more generally in the PITF data, but not of genocidal violence in particular.

loss. Specifically, while retreating in the aftermath of battles, Angolan government forces and those of the rebels (UNITA) were just as likely to target their co-ethnics and supporters as they were other ethnic groups or supporters of the other side. Ziemke (2012, 29) argues that this is due to both sides fearing civilian defections when the war looked to be turning against them, such that "combatants preemptively strike out, deliberately honing their violence to appear irrational and harsh in order to send a message to others" (see also Heywood (2011); Thaler (2012)). In the absence of evidence of *disproportionate* targeting of an ethnic, religious or political group, these cases do not qualify as targeted mass killing, and cannot meet our criteria for genocide.

Figure 6



5 Correlates of TMK Onset

This section presents an extension of Wayman and Tago (2010) as an initial comparison of the correlates of TMK onsets with the correlates of onsets of PITF genocide/politicide and SSMK.[11] Wayman and Tago (2010) analyze the 1949-1987 period and we expand this to 1946-2016. We focus on the same categories of variables, although measured differently as new data have become available. Specifically we examine: (1) how intra-state war,

[11] We don't examine democides as Wayman and Tago do because of the more limited time series.

inter-state war and the occurrence of coups d'état condition the onset of TMK with the UCDP Armed Conflict Database and the INSCR Coups Dataset, and (2) associations with types of political regimes, specifically with the Regimes of the World indicators (Lührmann et al., 2018) for closed and electoral autocracy, and electoral and liberal democracy (with the reference category being closed autocracy). We also examine, (3) associations with development measured as GDP per capita (logged and lagged by 1 year) from the World Bank Databank. Further extensions include a variable for the total population of each country (in log), and a dummy variable for the post-Cold War period (i.e., post-1990). Table 2 shows the results of logit models of the following dependent variables: (1) SSMK onset, (2) TMK onset, (3) TMK genocide/politicide onset, (4) PITF genocide/politicide onset, (5) TMK onset (Government Actors only), and (6) TMK onset (Non-state actors only). The results should be interpreted as associations only – we make no causal claims.

	State-led Mass Killing Onset	TMK Onset	TMK Geno-Politicide Onset	PITF Geno-Politicide Onset	TMK Onset (GOV)	TMK Onset (NGOV)
Intercept	-3.51^{*}	-4.13^{**}	-2.72	-6.69^{**}	-2.64	-9.61^{***}
	(1.46)	(1.36)	(1.81)	(2.58)	(1.69)	(2.53)
Electoral Autocracy	0.54^{*}	0.64^{*}	0.53	0.18	0.10	1.78^{**}
	(0.25)	(0.25)	(0.32)	(0.42)	(0.29)	(0.59)
Electoral Democracy	-1.54^{*}	0.65^{*}	-0.60	-16.84	-1.32^{*}	2.25^{***}
	(0.66)	(0.32)	(0.61)	(971.44)	(0.63)	(0.64)
Liberal Democracy	-15.58	-1.05	-14.74	-15.45	-15.00	0.42
	(538.86)	(0.79)	(529.29)	(930.82)	(533.07)	(1.00)
Log GDP per capita	-0.28	-0.32^{*}	-0.61^{**}	-0.18	-0.58^{**}	0.05
	(0.16)	(0.15)	(0.21)	(0.28)	(0.20)	(0.25)
Intra-state Conflict	0.44^{***}	0.39^{***}	0.32^{**}	0.41^{**}	0.37^{***}	0.46^{***}
	(0.10)	(0.08)	(0.11)	(0.13)	(0.09)	(0.14)
Inter-state Conflict	0.71	1.11^{***}	1.41^{***}	0.11	1.07^{**}	1.07^{*}
	(0.46)	(0.32)	(0.41)	(0.80)	(0.40)	(0.52)
No. Successful Coups	1.65^{***}	1.36^{***}	1.47^{***}	1.58^{***}	1.41^{***}	0.93
	(0.27)	(0.30)	(0.34)	(0.40)	(0.32)	(0.69)
Log Population	0.14	0.28^{***}	0.21^{*}	0.23	0.26^{**}	0.35^{**}
	(0.09)	(0.07)	(0.10)	(0.15)	(0.10)	(0.12)
Post-Cold War	-0.34	-0.04	0.72	1.12	0.04	-0.20
	(0.28)	(0.26)	(0.44)	(0.70)	(0.35)	(0.41)
AIC	713.34	838.58	511.84	307.30	581.49	383.61
BIC	799.78	925.10	598.36	392.48	668.01	470.13
Log Likelihood	-343.67	-406.29	-242.92	-140.65	-277.75	-178.80
Deviance	687.34	812.58	485.84	281.30	555.49	357.61
Num. obs.	5704	5741	5741	5177	5741	5741

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 2: Logit Regression Analysis, Onset of Mass Atrocities, 1946-2016

When comparing results using the TMK measure of genocide with that of PITF, one striking result is that economic development is negatively and significantly associated with the likelihood of genocide as measured with the TMK data, but not as measured by PITF. The same negative association also holds for TMKs perpetrated by governments. These are intuitive findings – wealthier countries are less likely to experience genocide and less likely to have governments that target and kill ethnic, religious or political groups. Possible explanations include that citizens in such countries are less easily pitted against each other in seemingly existential competition because they do not suffer from extreme scarcity of basic resources, that minority groups are less likely to rebel because their basic welfare needs can be met even if they suffer some disadvantage relative to dominant group(s), and that the state has the internal intelligence and security capability to deter or combat military challenges without resorting to mass murder. The fact that these associations emerge with TMK data but not with other datasets may suggest how the consistent coding and conceptual focus of the TMK data allow theoretically expected relationships to be identified while the potentially noisier PITF[12] or broader SSMK data obscure them.

The ability to disaggregate TMKs based on whether the government or a non-governmental group is the perpetrator highlights another potential advantage. This gives insight into the conditions under which regime type matters for understanding mass atrocities. The results suggest that middle-range regimes, that is, electoral autocracies and electoral democracies, are more prone to TMKs perpetrated by non-government actors, while regime type is not significantly associated with TMKs committed by governments. This provides a potentially revealing insight into the finding of Fein (1995) that there is "more murder in the middle," and suggests why it might contradict findings using the PITF genocide data (Harff, 2003).

The online supporting materials show a more direct comparison with Wayman and Tago (2010) using their data from 1949-1987, attaching the TMK onset data and using Cox proportional hazards. The main difference is that TMK onsets are significantly correlated

[12]Specifically, we would expect the TMK genocide/politicide indicator to be less noisy than the PITF genocide/politicide indicator due to TMK's explicit coding guidelines and emphasis on transparency. Discrepancies highlighted above such as the cases from civil wars in Angola, Sri Lanka, and Sudan, as well as discrepancies regarding onset year, are, we believe, indicative of this.

with interstate wars while democide onsets from Rummel and politicde onsets are not. TMKs are correlated with intrastate wars and coups, but not democracy, autocracy, military or communist regimes.

The purpose here is to demonstrate the distinctiveness and potential utility of the TMK data, rather than to present particular new findings, but we believe the results demonstrate the unique features of the TMK dataset, and its considerable promise for improving the understanding and forecasting of mass atrocities in general and genocide/politicide in particular.

6 Conclusion

This article has described the TMK dataset, discussed differences between existing datasets measuring mass atrocities and genocide, and its utility for improving our understanding of these horrific events. We have described the TMK definition and coding process and visualized the basic features and distribution of the data across time and global regions, in addition to graphical and statistical comparisons with the PITF genocide/politicide data and other related atrocity datasets. While assessment of the added value of the TMK data must await its use for more in-depth analysis, we hope the promise of the data is clear. We believe that the new measurements of intent, severity and perpetrators, the potential to be customized for specific research problems, and the reliability and validity of the indicators provided, can facilitate advances in knowledge, prediction, and ultimately prevention of mass atrocities.

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7 Online Supplementary Materials

7.1 Replication of Wayman and Tago 2010: R

We attempted to replicate the original Wayman and Tago (2010) study using R. While we used their replication data and ran Cox proportional hazard models with Breslow ties, we were unable to exactly replicate the coefficients and standard errors in their study. The results below are very similar and we have re-run the replication in STATA 15, where we were able to replicate the original results. To the replication data in Wayman and Tago (2010) we have added our TMK onset variable and dropped cases of ongoing TMK. Cases (countries) become 'at-risk' of TMK again after a year where there was no ongoing TMK episode, as in Wayman and Tago (2010). Extra-state wars were removed as they perfectly predict no TMKs.

rotating

	Democide model 1	Democide model 2	Democide model 3	Politicide model 1	Politicide model 2	Politicide model 3	TMK model 1	TMK model 2	TMK model 3
Interstate war	0.24	0.21	0.76	0.79	0.78	0.64	1.09**	1.11**	1.09**
	(0.54)	(0.55)	(0.55)	(0.50)	(0.50)	(0.51)	(0.38)	(0.38)	(0.38)
Intrastate War	1.53***	1.60***	1.07*	1.86***	1.88***	1.78***	2.12***	2.10***	2.12***
	(0.33)	(0.33)	(0.42)	(0.39)	(0.39)	(0.39)	(0.27)	(0.27)	(0.27)
Extrastate War	1.13	1.07	1.32	2.00**	1.96*	2.04**			
	(0.72)	(0.73)	(0.72)	(0.76)	(0.76)	(0.75)			
Coups	1.13***	1.20***	0.69*	1.33***	1.35***	1.40***	0.66*	0.64*	0.65*
	(0.22)	(0.21)	(0.27)	(0.34)	(0.34)	(0.33)	(0.31)	(0.30)	(0.30)
Democracy	−0.61*			−0.22			0.06		
	(0.30)			(0.59)			(0.34)		
Per capita energy	−0.15*	−0.18*	−0.27***	−0.99**	−1.00**	−1.08***	−0.92***	−0.91***	−0.91***
	(0.07)	(0.07)	(0.08)	(0.33)	(0.31)	(0.31)	(0.22)	(0.21)	(0.22)
Autocracy		0.39			0.22			−0.13	
		(0.23)			(0.36)			(0.26)	
Communist			3.13***			0.73			−0.03
			(0.36)			(0.49)			(0.48)
AIC	1180.99	1182.40	1134.67	435.17	434.96	433.33	859.59	859.35	859.61
R^2	0.03	0.03	0.04	0.02	0.02	0.02	0.03	0.03	0.03
Max. R^2	0.36	0.36	0.36	0.10	0.10	0.10	0.19	0.19	0.19
Num. events	83	83	83	33	33	33	63	63	63
Num. obs.	2782	2782	2782	4643	4643	4643	4603	4603	4603
Missings	2082	2082	2082	221	221	221	261	261	261
PH test	0.00	0.00	0.00	0.28	0.14	0.03	0.05	0.06	0.02

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 3: Replication of Wayman and Tago 2010: R

7.2 Replication of Wayman and Tago 2010: Stata

The results below replicate the Wayman and Tago (2010) study exactly in STATA 15. We then add our TMK data and run survival models set up in the same way as in Wayman and Tago (2010).

	Demo. 1	Demo. 2	Demo. 3	Polit. 1	Polit. 2	Polit. 3	TMK 1	TMK 2	TMK 3
Interstate War	0.526	0.606	0.613	0.730	0.730	0.707	0.807*	0.833*	0.913*
	(0.98)	(1.12)	(1.13)	(1.32)	(1.32)	(1.27)	(2.10)	(2.16)	(2.34)
Intrastate War	1.379***	1.325***	1.193***	2.241***	2.269***	2.219***	1.987***	1.956***	2.058***
	(4.52)	(4.35)	(3.67)	(5.87)	(5.96)	(5.70)	(7.33)	(7.23)	(7.55)
Extrastate War	1.554*	1.401	1.584*	1.634*	1.538	1.562			
	(2.12)	(1.92)	(2.16)	(2.00)	(1.87)	(1.89)			
Coups	0.858***	0.843***	0.720***	0.933**	0.958**	0.963**	0.816**	0.794**	0.794*
	(5.04)	(5.01)	(3.47)	(2.80)	(2.92)	(2.71)	(2.70)	(2.63)	(2.43)
Democracy	-0.614*			-0.484			0.134		
	(-2.15)			(-0.83)			(0.39)		
Energy per capita	-0.047	-0.058	-0.076	-0.483	-0.536*	-0.565*	-0.894***	-0.873***	-0.851***
	(-1.19)	(-1.29)	(-1.30)	(-1.73)	(-1.97)	(-2.05)	(-4.13)	(-4.21)	(-4.11)
Autocracy		0.500*			0.300			-0.151	
		(2.16)			(0.83)			(-0.58)	
Communist			1.378***			0.264			-0.679
			(4.31)			(0.52)			(-1.37)
Military			0.582			0.021			-0.120
			(1.69)			(0.04)			(-0.37)
N	2782	2782	2782	4643	4643	4643	4455	4455	4455
N failures	83	83	83	33	33	33	63	63	63

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 4: Replication of Wayman and Tago 2010: STATA

7.3 Potential Limitations

Users should be cognizant of a number of limitations to the data involving potential biases due to unavailable sources and/or the under-representation of cases or actors. The first and most serious is that we are seeking information that participating actors have an incentive to misrepresent or conceal. Governments and rebel actors may cover up evidence of genocidal intent in terms of public statements and preparations. Arguably these incentives have become stronger over time as the international community has raised the costs of engaging in violence against civilians or if human rights norms have strengthened over time (Fariss, 2014). In the case of public statements of intent, we have relied on English-language sources, but intent may be publicly communicated in local languages and never make it into the English-language record, and our dataset. There is little that can be done about this type of bias in general and it arguably hampers most cross-national atrocity-related data collection efforts. We have, however, drawn on historical accounts of the countries and conflicts involved that utilize local-language sources and information from agencies such as Human Rights Watch, Amnesty International and Genocide Watch. Local language newswire digests (translated into English) such as *Africa News* and *BBC World Monitoring* arguably mitigate some of the issues. We are also more confident in the codings attached to severe events as these tend to be better documented in news media and historical accounts (Weidmann, 2016). We have attempted to make all coding decisions transparent and will modify existing codings in light of new information. In addition, the variable recording public statements of intent is more likely to be subject to this kind of bias than the variable assessing preparations, so users may wish to more heavily weight this organizational variable as a signal of intent.

Non-state actors and cases during the Cold War probably remain under-represented in our data. The availability of the UCDP OSV data provides us with a near census of potential events of violence against civilians that involve state and non-state actors from 1989 onwards, reducing the probability that we have failed to identify potential TMK episodes in the post-Cold War period.[13] No comparable source is available for the Cold War, but we have

[13]The exceptions are borderline cases where protesting civilians engage in limited violence such as stone-throwing. These cases are not included in the OSV data.

mitigated this for state-based actors with the SSMK data, and to a lesser extent for non-state groups by drawing on MEPV to identify episodes of internal violence. Both MEPV and SSMK include the full temporal and spatial windows we cover (all countries, 1946-2017).

In addition, OSV data give conservative estimates for the number of people killed while sources for the Cold War period do not use the same stringent criteria for counting civilian deaths and can include deaths from starvation, disease and other indirect causes. For the "Total deaths" variable we have used the OSV's "High" estimate to ensure some consistency (all sources used for casualty figures can be found in the data diaries). We have used a 1-year threshold to separate episodes of TMK. Poorer documentation further back in time may mean that 1-year changes in severity that would cause an episode to "end" for a year are less detectable. Episodes may also drop below the 25-death threshold for a given year but scarce source material and conservative death estimates mean the real number was higher. Users may wish to consider 2- or 3-year periods.

7.4 Case List

Location	Actor Name	Onset Year	Ordinal Score	Severity
Afghanistan	Government of Afghanistan	1978	4	50000
Afghanistan	Government of Afghanistan/ USSR	1979	8	5e+05
Afghanistan	Jamiat-I Islami	1992	1	300
Afghanistan	Hezb-I Wahdat	1992	4	2000
Afghanistan	Ittihad-I Islami	1992	4	2770
Afghanistan	Government of Afghanistan	1997	7	11914
Afghanistan	UIFSA	2001	2	1000
Algeria	FLN	1962	2	32788
Angola	Government of Angola	1992	2	1200
Argentina	Government of Argentina	1976	7	30000
Azerbaijan	Republic of Nagorno-Karabakh	1992	1	763
Bangladesh	Government of Bangladesh	1980	6	1100
Bangladesh	Government of Bangladesh	1984	1	67
Bangladesh	Shanti Bahini	1984	1	100
Bangladesh	Government of Bangladesh	1986	1	320
Bangladesh	Shanti Bahini	1986	1	37
Bangladesh	JSS/SB	1989	1	221
Bangladesh	Government of Bangladesh	1992	1	300
Bangladesh	Jagrata Muslim Janata Bangladesh	2004	1	53
Bosnia-Herzegovina	Government of Bosnia-Herzegovina	1992	1	159
Bosnia-Herzegovina	Serbian Republic of Bosnia and Hercegovina, Serbian irregulars	1992	4	12888
Bosnia-Herzegovina	Croatian Republic of Bosnia-Herzegovina	1993	4	147
Bosnia-Herzegovina	Croatian Republic of Bosnia-Herzegovina	1995	1	40
Burundi	Government of Burundi	1965	2	5000
Burundi	Hutu Rebels	1972	2	1200
Burundi	Government of Burundi	1972	8	2e+05
Burundi	Government of Burundi	1988	2	15000
Burundi	Burundian Army	1993	2	120000
Burundi	FRODEBU	1993	4	120000
Burundi	Government of Burundi	1995	7	12101
Cambodia (Kampuchea)	Khmer Rouge	1970	4	204000
Cambodia (Kampuchea)	Government of Cambodia (Kampuchea)	1970	6	5000
Cambodia (Kampuchea)	Government of Cambodia (Kampuchea)	1975	8	1200000
Central African Republic	Government of Central African Republic	2013	2	1650
Central African Republic	anti-Balaka	2013	6	1763
Central African Republic	FPRC	2014	1	660
Chad	Government of Chad	1982	4	40000
Chile	Government of Chile	1973	2	4115
China	Communist Party of China	1947	8	3500000
China	Government of China	1950	8	3500000
China	Government of China	1958	8	2500000
China	Government of China	1961	8	2500000
China	Government of China	1966	8	1500000
Colombia	Ambiguous (Conservative and Liberal Party Backed Militias)	1948	2	180253
Colombia	AUC	1997	6	2963
Colombia	AUC	2004	1	201
Congo	Cobras	1997	1	39
Congo	Government of Congo	1997	2	1171
Croatia	Government of Croatia	1995	1	277
Cyprus	EOKA B	1974	1	120
DR Congo (Zaire)	Batshoke militia	1960	1	51
DR Congo (Zaire)	Government of the Congo	1960	4	525
DR Congo (Zaire)	Katanga gendarmes	1960	4	7000

DR Congo (Zaire)	Government of the Congo	1964	7	60000
DR Congo (Zaire)	Simba rebels	1964	7	20000
DR Congo (Zaire)	Interahamwe, MAGRIVI	1996	1	984
DR Congo (Zaire)	Mayi Mayi - Ngilima	1996	1	60
DR Congo (Zaire)	Government of DR Congo (Zaire)	1996	2	1746
DR Congo (Zaire)	AFDL	1996	4	70645
DR Congo (Zaire)	FNI	2002	4	2940
DR Congo (Zaire)	FRPI, RCD-K-ML	2002	4	3000
DR Congo (Zaire)	UPC	2002	4	3066
DR Congo (Zaire)	Government of Rwanda	2009	1	203
DR Congo (Zaire)	Government of DR Congo (Zaire)	2016	1	438
DR Congo (Zaire)	Bana Mura	2017	1	174
Egypt	Government of Egypt	2013	2	1150
El Salvador	Government of El Salvador	1980	7	33706
El Salvador	Government of El Salvador	1989	2	2400
Equatorial Guinea	Government of Equatorial Guinea	1969	7	50000
Ethiopia	Government of Ethiopia	1967	1	642
Ethiopia	Government of Ethiopia	1970	1	685
Ethiopia	Government of Ethiopia	1976	7	35218
Ethiopia	Government of Ethiopia	1988	2	3100
Ethiopia	Government of Ethiopia	2012	1	92
Ethiopia	Government of Ethiopia	2015	1	731
Guatemala	Government of Guatemala	1978	1	150
Guatemala	Government of Guatemala	1981	8	160000
Haiti	Government of Haiti	1957	7	3000
India	Arya Samaj	1946	4	7000
India	RSS	1946	6	1000
India	Muslim League	1946	8	106250
India	Akali Dal/SGPC	1947	8	1e+05
India	Hindu activists/ABVP	1961	1	227
India	RSS/Hindu Nationalists	1964	2	2464
India	BJS/RSS	1967	1	189
India	Hindu Dharma Raksha Samiti	1969	4	1000
India	Shiv Sena	1970	1	240
India	RSS	1979	1	79
India	RSS	1981	1	150
India	Utter Pradesh PAC	1982	1	42
India	Shiv Sena	1984	3	504
India	Government of India	1984	4	2987
India	Ahmedabad police force	1985	1	100
India	Utter Pradesh PAC	1987	1	225
India	Sikh insurgents	1989	2	2878
India	NSCN-IM	1993	1	288
India	NSCN-IM	1996	1	33
India	NLFT	1996	5	36
India	Ranvir Sena	1997	1	74
India	ATTF	1997	3	102
India	NLFT	1998	1	185
India	Ranvir Sena	1999	1	87
Indonesia	Government of Indonesia	1965	8	5e+05
Indonesia	Government of Indonesia	1975	7	53000
Indonesia	Government of Indonesia	1985	5	517
Indonesia	Government of Indonesia	1991	1	515
Indonesia	Government of Indonesia	1999	6	1775
Indonesia	Laskar Jihad	2000	1	98
Iran	Government of Iran	1979	7	31200
Iran	Government of Iran	1988	7	12000
Iraq	Government of Iraq	1983	6	8000

Iraq	Government of Iraq	1987	7	50225
Iraq	Government of Iraq	1991	2	1602
Iraq	IS	2014	7	11488
Israel	Hamas	1994	5	57
Israel	Hamas	1996	5	59
Israel	Hamas	2001	5	332
Ivory Coast	Government of Ivory Coast	2004	1	109
Ivory Coast	Government of Ivory Coast	2010	3	493
Ivory Coast	FRCI	2011	1	49
Ivory Coast	AJPSN	2011	3	54
Kenya	Government of Kenya	1980	1	200
Kenya	Government of Kenya	1984	4	1000
Kenya	Government of Kenya	2007	1	303
Kenya	Mungiki	2008	1	32
Laos	Government of Laos	1975	8	1e+05
Lebanon	Right-wing Christian militas	1975	6	4677
Lebanon	Lebanese National Movement	1976	5	782
Lebanon	People's Liberation Army	1977	1	250
Lebanon	Right-wing Christian militas	1982	4	2000
Lebanon	Lebanese Forces Militia	1983	1	145
Lebanon	People's Liberation Army	1983	6	1500
Lebanon	Amal Movement	1985	4	2000
Liberia	INPFL	1990	1	84
Liberia	NPFL	1990	2	6127
Liberia	LPC	1993	4	2568
Libya	Government of Libya	2011	3	168
Mali	Government of Mali	1991	1	204
Mexico	Paz y Justicia	1997	1	45
Myanmar (Burma)	Ethnic Burmese militias	1948	1	200
Myanmar (Burma)	Government of Myanmar (Burma)	1962	4	295952
Myanmar (Burma)	Government supported Burmese mobs	1967	1	200
Myanmar (Burma)	Government of Myanmar (Burma)	2012	1	115
Myanmar (Burma)	Governemnt of Myanmar	2017	4	6700
Nigeria	Government of Nigeria	1967	7	50000
Nigeria	Government of Nigeria	2001	1	594
Nigeria	Boko Haram	2012	6	9711
North Korea	Government of North Korea	1950	8	129000
North Korea	Government of North Korea	1956	7	25000
North Vietnam	Government of North Vietnam	1954	7	13000
Pakistan	Pakistani Baluchi soldiers	1947	4	10000
Pakistan	Muslim League	1947	8	106250
Pakistan	Government of Pakistan	1971	8	3e+05
Pakistan	LeJ	1998	1	51
Pakistan	LeJ	2003	1	139
Pakistan	LeJ	2004	1	139
Pakistan	LeJ	2010	1	338
Pakistan	LeJ	2013	1	320
Peru	Sendero Luminoso	1982	4	31333
Philippines	Government of the Philippines	1974	4	1500
Philippines	ASG	1995	1	51
Rumania	Government of Rumania	1989	2	2000
Russia (Soviet Union)	Government of Russia (Soviet Union)	1995	2	2471
Russia (Soviet Union)	Government of Russia (Soviet Union)	1999	2	2718
Rwanda	Government of Rwanda	1963	2	10000
Rwanda	Parmehutu self-defence militias	1963	4	10000
Rwanda	Government of Rwanda	1991	8	8e+05
Rwanda	Government of Rwanda	1997	2	4176
Serbia (Yugoslavia)	Government of Serbia (Yugoslavia)	1998	6	3321

Somalia	Government of Somalia	1988	7	10234
Somalia	Government of Somalia	1991	1	455
South Korea	Government of South Korea	1948	4	16092
South Korea	Government of South Korea	1950	4	102700
South Sudan	Government of South Sudan	2013	4	1877
South Sudan	SPLM/A In Opposition	2014	4	676
South Vietnam	Government of South Vietnam	1955	4	
Soviet Union	Government of the Soviet Union	1956	1	800
Sri Lanka	Sinhalese vigilantes	1983	4	1000
Sri Lanka	LTTE	1989	4	1402
Sri Lanka	Government of Sri Lanka	1990	1	838
Sri Lanka	LTTE	1994	4	494
Sri Lanka	LTTE	1998	4	185
Sri Lanka	Government of Sri Lanka	2009	4	40000
Sudan	Government of Sudan	1965	4	1476
Sudan	Government of Sudan	1985	7	10449
Sudan	SSDF	1991	4	2361
Sudan	SPLM/A	1992	1	621
Sudan	SPLM/A	1995	2	1287
Sudan	Government of Sudan	2002	7	10449
Sudan	Janjaweed	2003	7	29926
Sudan	Government of Sudan	2011	3	431
Sudan	Government of Sudan	2014	2	1239
Syria	Government of Syria	1980	2	1000
Syria	Government of Syria	1982	2	25000
Syria	Government of Syria	2011	6	4341
Taiwan	Government of the Republic of China	1947	4	10000
Uganda	Government of Uganda	1966	4	1000
Uganda	Government of Uganda	1981	4	3e+05
Uzbekistan	Government of Uzebekistan	2005	2	1000
Zanzibar	Afro-Shirazi Youth League	1964	2	2000
Zimbabwe	Government of Zimbabwe	1983	7	20000