Unified Dataset of Fatalities in Northern Ireland Conflict

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MERGING DATASETS ON FATALITIES

This dataset (N=3,702) is formed from merging evidence across three existing sources on fatalities during the Northern Ireland conflict - McKeown (2009), Sutton (2001), and McKittrick et al. (2001), and coding a battery of new variables based on these and many other sources (total number of variables = 120).

The first two of these sources are publicly available online. The first one is a well-structured existing dataset in Excel format. It was used for coding most variables. The second reports fatalities in chronological order online with short textual information about each. Its unique strength is that it provides the exact date of death. The third source is an extensive book containing detailed descriptive information on most fatalities. It is arguably the most reliable of the three.

We drew on existing variables in the first and used the second and third sources for three purposes: complement the first in terms of observations, help with inconsistencies across the sources, and code new variables, such as employment status and occupation, which are not contained in McKeown (2009) and Sutton (2001).

While their many observations overlap, some observations are unique to each source. During the course of merger, we also discovered a number of inconsistencies across the three sources. These concern mostly names, gender, dates (years), victim's status, specific organization responsible, motivation, etc. When one of the sources reported a data point that contradicted those in the other two sources, we relied on the latter for (re)coding a value. If all three differed, we preferred McKittrick et al. (2001). In some cases (around a hundred), other online sources, particularly newspaper articles, were consulted for clarification.

Some problems were more consequential than others. For example, McKeown (2009) reports Robert Bates (Protestant male, killed in 1997 by non-specified loyalist group) as a non-combatant. However, this is disputable because, despite the fact that he was killed shortly after leaving prison, Robert Bates was one of the notorious members of the infamous "Shankill Butchers" gang, responsible for a number of abductions of innocent Catholic civilians, their subsequent brutal torture and killing. Another case is for instance the coding of gender: around 10 percent of victims coded as female (n=372) in McKeown (2009) were in fact males.

One of the key drawbacks in McKeown dataset that was also solved using McKittrick et al. data is a large number of fatalities with insufficiently specified responsible group. In the case of non-specified republican killings, there are 109 such observations; for non-specified loyalist killings, 364. Using McKittrick et al. (2001), Sutton (2001) and other sources, we were able to bring these numbers down to 35 and 33, respectively.

McKittrick et al. (2001) was also used to code two new employment-related variables for victims - employment (n=3710, with 1210 unknown values) and occupation (n=3710, with 1387 unknown values).

VARIABLES AND SOURCES

After the merger of the three sources on fatalities, we coded details on fifteen organizations responsible for killings during the conflict (the second component of our dataset) and on eighteen Northern Ireland parliamentary constituencies (the third component). The second component contains group-level variables, including the organization's base territories, capabilities, external resources, structure, and ideology. The third component includes constituency-level population size, religious breakdown, electoral support for Unionist and Nationalist parties, and military presence that date back to 1969 and are coded from a variety of census and electoral data. The values for variables were derived and triangulated from a variety of sources. As the number and borders of sub-national constituencies in Northern Ireland have changed over time, we took great care in converting evidence by utilizing information and maps of wards, local government districts, and parliamentary constituencies.

To account for the hypothesis that fighting groups are less likely to victimize civilians in geographic areas where they have their key bases, we constructed a dichotomous measure of *Home* for each armed group. For Loyalist and Republican paramilitary groups it takes the value of 1 if the killing was carried out in a constituency from which they originated and where they had their strongholds. The same does not apply for state forces, however, because for the latter having more bases in a particular area is likely to indicate the opposite: in Northern Ireland, they were likely to be more present in areas where they lacked support (Republican areas), and less present in areas where they had more support. To construct this measure for state forces, we draw their deployment data – location and number of barracks, stations, and camps. For the British Army, *Home* takes the value of 0 except for Great Britain and for Northern Ireland constituencies of East Antrim and Strangford where there were no BA or UDR/RIR barracks, which we take to indicate as no need for BA/RIR presence and hence higher support for them (both were predominantly Protestant constituencies in 1971 – 77.6% and 88.3%, respectively). We coded this variable as 0 in the case of UDR if the location has at least one BA or UDR/RIR barrack, and 1 if otherwise. We code 1 for RUC if there were less than five RUC (police) stations in a constituency,[1] which we take to indicate smaller need and higher support for RUC.

To account for the geographic dimension of cleavages, we constructed a dichotomous measure of *Co-ethnic Area* for each armed group in each constituency. It takes the value of 1 if the constituency's population was at least 60 percent of the ethno-religious identity of the fighting group in 1971 and 0 if otherwise. Given the predominantly Protestant composition of state forces, for them we code *Co-ethnic Area* as 1 if the constituency is 60+ percent Protestant and 0 if otherwise.

[1] One standard deviation below the mean 8. The maximum is 20 and minimum 0. The number of RUC stations and population size in a constituency are not correlated, so a per capita measure of RUC stations does not add value.

To account for territorial control, we construct a measure of *Dominance* that is similar to the one developed by Humphreys and Weinstein (2007). It indicates the estimated size of each armed group relative to the estimated total size of opposing groups in each constituency. We first estimated the average size of each armed group in each of the 18 constituencies. For the paramilitary groups, we divided each group's total average size by the number of its base territories and then placed the resulting quotient in each constituency where the paramilitary group had a base. For the state forces – BA, UDR/RIR and RUC – we estimated their average sizes in each of the 18 locations by dividing their total average size by the total number of barracks and multiplying the number of barracks in each of the 18 locations by the resulting average barrack size (e.g., 57 in the case of RUC). Next, we summed up the estimated size of each armed camp in each constituency. Finally, we divided the estimated size of each armed group in each constituency by the estimated summed sizes of opposing camps and converted the results onto a logarithmic scale to avoid skew. For locations outside Northern Ireland, all dominance measures were set to zero except for the British Army in Great Britain.

To proxy for the capabilities, *Size* is based on the estimated average active membership of each group during the course of the conflict and is converted onto a logarithmic scale. The second aspect of armed groups' capability concerns their recruits' level of military experience, which can affect targeting patterns. In the absence of systematic data on this, we draw a dichotomous measure of *Experience* from existing assessments to indicate whether group members on average had military experience.

While lootable resources that are linked to conflicts elsewhere were absent in the case of the Northern Ireland conflict, during its course some armed groups received sizeable material support from external sponsors. The Provisional IRA reportedly received assistance from the Republic of Ireland, Libya, Iran, Palestine Liberation Organization (PLO), and diaspora groups in the United States. The Official IRA allegedly secured help from USSR, North Korea, and East Germany. Loyalist groups, such as UDA and UVF, also obtained material resources from outside, most notably from Canada and South Africa as well as from Scotland and allegedly through colluding with, infiltrating and being infiltrated by state forces.[2] The nature and size of such support is difficult to establish consistently. *External Support* for each armed group indicates whether there is evidence from across various sources that the group has received such support. Since all groups received support from outside Northern Ireland in one way or another and, therefore, estimating a model with a dichotomous variable on this that lacks variation will not be useful, here we focus on external support from outside the UK.

As in some other civil wars, groups fighting in Northern Ireland raised funds through another form of securing external resources – organized crime. It is plausible that such behavior affected civilian victimization. Our measure of *Crime Rents* for each group is based on reported evidence of links to four forms of organized crime –

[2] Stevens Report 2003; de Silva, 2012; Police Ombudsman 2016.

robberies, racketeering, drug trade, and counterfeiting – by first building dichotomous measures for each and then combining them in a single variable ranging from 0 to 4.

We coded two dichotomous measures of internal characteristics of armed groups – *Coherent Structure* and *Discipline*. There was significant variation among different groups in this regard. While some groups like the Republican INLA or Loyalist RHC had loose organizational structures and weak discipline, others, such as the Provisional IRA became tightly organized a few years into the conflict, and by 1975, into a highly effective cellular structure and had strong intra-organizational policing (Operation Banner 2006).

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SUMMARY STATISTICS

Variable		Obs	Mean	Std. Dev.	Min	Max
id	ID number	3,702			1	3703
LLIDNo	Lost Lives ID number	3,543			4	3708
McKid	McKeown ID number	3,636			1	3638
name	Name of victim					
year	Year	3,702	1979.79	8.064	1969	2005
post76	1= Post-1976 period	3,702	0.490	0.500	0	1
date	Exact date of death	3,549				
period3	6 periods	3,702	3.037	1.249	1	6
period2	6 periods with exact dates	3,533	3.040	1.279	1	6
age	Age of victim	3,664	32.593	14.107	0	91
male	Victim is male=1 (McKeown)	3,702	0.911	0.285	0	1
religion	Religion of victim	3,702	1.766	0.764	1	3
STATUS	STATUS VARIABLES---					
statusg	Victim's status group	3,702	3.222	1.640	1	6
noncom	1=Noncombatant	3,702	0.560	0.496	0	1
noncomcat	1 = Catholic Noncombatant	3,702	0.322	0.467	0	1
noncomprot	1 = Protestant Noncombatant	2,074	0.332	0.471	0	1
noncomtype	Noncombatant type	2,074	9.122	2.237	1	10
civmain	Noncom exc alleged informers, politicians and ex sec service	3,702	0.520	0.500	0	1
civcat	1=Catholic civilian	3,702	0.306	0.461	0	1
civprot	1=Protestant civilian	3,702	0.167	0.373	0	1
civ3	Civilians by religion	1,925	1.501	0.657	1	3
civ2	1=civ, but RUC and UDR are coded as civ	3,702	0.657	0.475	0	1
civprot2	1=civ, but RUC and UDR are coded as civ prot	3,702	0.304	0.460	0	1

noncom2	1=noncom, but RUC and UDR are coded as noncom	3,702	0.698	0.459	0	1
AGENCY	RESPONSIBLE AGENCY VARIABLES---					
agency	agency - McKeown corrected with LL and Sutton	3,672	6.197	3.977	0	21
agencyg	Agency group	3,672	2.562	0.760	1	4
nkill	N killed by agency	3,672	990.900	717.507	1	1735
nkillnonc	N of noncombatants killed by agency	3,369	508.210	239.136	0	708
baseter1	Agency's base territory 1	3,372	5.939	5.946	1	22
baseter2	Agency's base territory 2	3,372	2.620	1.767	0	14
baseter3	Agency's base territory 3	3,372	7.458	5.131	0	17
dominance1	Log dominance	3,361	7.488	7.280	4.60E-06	23.61364
agage05	Agency age, by 2005 if not disbanded by 2005	3,372	64.017	90.163	0	345
yoper98	Years of operation	3,369	27.876	5.534	1	32
agsize	Estimated average active membership, 1969-2005 (refined)	3,369	2203.826	4215.422	7	15000
agexp	Evidence of members experienced in warfare	3,372	0.962	0.192	0	1
supstate	Evidence of state material support	3,372	0.409	0.492	0	1
supuk	Evidence of material support from other parts of UK	3,372	0.400	0.490	0	1
supnonuk	Evidence of non-UK external material support	3,372	0.819	0.385	0	1
supdias	Evidence of diaspora support	3,372	0.673	0.469	0	1
supn	Estimated number of primary external sponsors	3,372	0.673	0.469	0	1
supndem	Estimated fraction of democratic primary external sponsors	3,372	0.130	0.128	0	1
drugs	Has been linked to illicit drug trade	3,372	0.348	0.477	0	1
rob	Has been linked to robberies	3,372	0.881	0.324	0	1
rackeet	Has been linked to rackeeteering	3,372	0.862	0.345	0	1
orgcrime	Has been linked to other organized crime	3,372	0.351	0.477	0	1
counterfeit	Has been linked to counterfeiting	3,372	0.660	0.474	0	1
ethnichg	Ethnic homogeneity	3,372	0.759	0.428	0	1
cohorg	Evidence of strong coherent organization	3,372	0.801	0.400	0	1

discipline	Evidence of strong disciplinary structures	3,372	0.610	0.488	0	1
civlegtarget	1=Declared civilians as legitimate targets	3,372	0.009	0.092	0	1
unionism	British unionism	3,372	0.303	0.460	0	1
farleft	1=ideology is Marxism-Leninism or Trotskyism	3,672	0.050	0.218	0	1
uloyalism	Ulster loyalism	3,372	0.303	0.460	0	1
uselfdet	Ulster self-determination	3,372	0.006	0.075	0	1
anticath	Anti-Catholicism	3,372	0.294	0.456	0	1
protfundam	Protestant fundamentalism	3,372	0.003	0.054	0	1
irepub	Irish republicanism	3,372	0.585	0.493	0	1
irnat	Irish nationalism	3,372	0.560	0.496	0	1
marlen	Marxism-Leninism	3,372	0.053	0.225	0	1
irepubsoc	Irish republican socialism	3,372	0.062	0.241	0	1
trotskyism	Trotskyism	3,372	0.001	0.030	0	1
opposedgfa	1=Opposed GFA	3,372	-0.357	0.992	-3	1
CONSTITUENCY	CONSTITUENCY VARIABLES---					
location	Location (const'cy) new, reordered, where the event took place	3,639	8.001	5.776	1	21
wardname	Ward name where the event took place					
home1	1 if location==baseter[1/2/3], BA, RUC, UDR all 0	3,484	0.420	0.494	0	1
home1a	1 if location==baseter[1/2/3], with corrected BA, RUC, UDR v.1	3,504	0.419	0.493	0	1
home1aa	1 if location==baseter[1/2/3], with corrected BA, RUC, UDR v.2	3,504	0.512	0.500	0	1
home2	1 if cath/prot==1 & agencyg==3/2	3,639	0.234	0.423	0	1
home2a	Coethnic: 1 if cath/prot==1 & agencyg==3/2, 1 if prot==1&agencyg==1	3,639	0.266	0.442	0	1
home3	1 if westuni70==1&agencyg==2westnat70==1&agencyg==3	3,702	0.397	0.489	0	1
cath	1=constituency population 60+ Catholic	3,381	0.075	0.263	0	1
prot	1=constituency population 60+ Protestant	3,381	0.410	0.492	0	1
pop71	Total population of constituency in 1971	3,381	85731.060	18784.510	41680	109123

cath71	Catholic population of constituency in 1971, %	3,381	40.084	16.503	11.7	64.3
prot71	Protestant and other Christian population of constituency in 1971, %	3,381	59.916	16.503	35.7	88.3
pop81	Total population of constituency in 1981	3,381	81376.270	17821.690	44380	122700
cath81	Catholic population of constituency in 1981, %	3,381	41.897	17.650	4.3	68.5
prot81	Protestant and other Christian population of constituency in 1981, %	3,381	58.103	17.650	31.5	95.7
parity71	The degree of parity between Catholic and Protestant populations	3,381	0.528	0.268	0.132503	0.90795
voteuni69	Estimated percentage of seats in NI House of Commons won by Unionists, 1929-1969	3,381	72.607	20.640	45	100
votenat69	Estimated percentage of seats in NI House of Commons won by Nat-s, 1929-1969	3,381	22.608	21.641	0	75
lgeuni73	Percent Unionist vote (DUP, VULC, Loy Coal, Off U, Ind U), LGE 1973	3,381	54.171	15.285	33.3	80.4
lgenat73	Percent Nationalist vote (SDLP, Rep C, Nat/Unity), LGE 1973	3,381	27.326	18.749	0	51.9
assemuni73	Estimated percentage of seats in NI Assembly won by Unionists, 1973	3,381	50.207	25.814	0	83.3
assemnat73	Estimated percentage of seats in NI Assembly won by Nationalists, 1973	3,381	37.853	22.515	0	71.4
assemuni82	Estimated percentage of seats in NI Assembly won by Unionists, 1982	3,381	50.946	15.456	25	80
assemnat82	Estimated percentage of seats in NI Assembly won by Nationalists, 1982	3,381	33.955	16.763	0	50
westuni70	1=Unionist MP, Westminster Elections 1970	3,381	0.664	0.472	0	1
westnat70	1=Nationalist MP, Westminster Elections 1970	3,381	0.336	0.472	0	1
westuni74	1=Unionist MP, Westminster Elections 1974	3,381	0.737	0.440	0	1
westnat74	1=Nationalist MP, Westminster Elections 1974	3,381	0.263	0.440	0	1
westuni79	1=Unionist MP, Westminster Elections 1979	3,381	0.737	0.440	0	1
westnat79	1=Nationalist MP, Westminster Elections 1979	3,381	0.263	0.440	0	1

westuni83	1=Unionist MP, Westminster Elections 1983	3,381	0.731	0.444	0	1
westnat83	1=Nationalist MP, Westminster Elections 1983	3,381	0.269	0.444	0	1
westsf83	1=Sinn Fein MP, Westminster Elections 1983	3,381	0.195	0.396	0	1
westuni87	1=Unionist MP, Westminster Elections 1987	3,381	0.576	0.494	0	1
westnat87	1=Nationalist MP, Westminster Elections 1987	3,381	0.424	0.494	0	1
westsf87	1=Sinn Fein MP, Westminster Elections 1987	3,381	0.195	0.396	0	1
westuni92	1=Unionist MP, Westminster Elections 1992	3,381	0.576	0.494	0	1
westnat92	1=Nationalist MP, Westminster Elections 1992	3,381	0.424	0.494	0	1
westsf92	1=Sinn Fein MP, Westminster Elections 1992	3,381	0.000	0.000	0	0
westuni97	1=Unionist MP, Westminster Elections 1997	3,381	0.545	0.498	0	1
westnat97	1=Nationalist MP, Westminster Elections 1997	3,381	0.455	0.498	0	1
westsf97	1=Sinn Fein MP, Westminster Elections 1997	3,381	0.226	0.418	0	1
barecom	1=Hosts BA Regional Command; 0=otherwise, 1994	3,381	0.226	0.418	0	1
babarracks	Number of British Army barracks, 1994	3,381	1.109	0.647	0	2
bacamps	Number of British Army Garrison Camps, 1994	3,381	0.123	0.328	0	1
rirbarracks	Number of Royal Irish Regiment Barracks, 1994	3,381	0.671	0.630	0	2
CIRCUMSTAN~S	CIRCUMSTANCES (MCKEOWN)---					
causality	Causality	3,626	2.825	0.427	1	3
rationale	Rationale	3,637	6.068	2.201	0	8
sectarian	sectarian=1	3,637	0.271	0.444	0	1
indiscrimi~e	indiscriminate=1	3,626	0.156	0.363	0	1
context	Context	3,639	5.257	2.233	0	13
mistaken	1=Mistaken identity	3,626	0.018	0.135	0	1