Supplementary Appendix for:
Ronald R. Krebs and Roy Licklider, "United They Fall: Why the International Community Should Not Promote Military Integration After Civil War," *International Security* 40:3 (winter 2015/2016).

This supplementary appendix presents the data comparing our 11 cases of post-civil war military integration with the larger universe of cases. We draw this larger set from Caroline Hartzell's compendium of civil war settlements between 1945 and 2006 that included military integration provisions.[1] We thus compare our 11 cases to an additional 34, listed in Appendix A, Table 1 (below).[2] The data in Table 1 come largely from Hartzell, supplemented with military force data from Professor Reed Wood,[3] the *World Military Expenditures and Arms Transfers* series,[4] and the National Material Capabilities Dataset (of the Correlates of War project),[5] and with some GDP data from Kristian Gleditsch.[6] We are grateful to our colleagues for sharing this data and to Jennifer Spindel for her assistance in collecting and analyzing this data.

As we note in the article, however, we cannot make strong claims regarding the similarities and differences between our cases and the larger universe because the quantitative literature on civil war is so contradictory, so sensitive to small changes in the specification of the key variables, and based on such poor data.[7]

Appendix A, Table 2 (below) presents some summary data on key factors, along with the difference, recorded in percentage terms, between our 11 cases and the other 34 civil wars. Presumably due to the relatively small number of cases, difference-of-means tests indicate that the differences between our 11 cases and the other 34 are generally not statistically significant. The exceptions include the number of rebel troops at war's end, which is statistically different from zero but weakly so, at the 0.08 level, and battle deaths, which is more strongly significant, at the 0.03 level. These difference-of-means tests are recorded in Appendix B.

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[1] Caroline A. Hartzell, "Mixed Motives? Explaining the Decision to Integrate Militaries at Civil War's End," in Roy Licklider, ed., *New Armies from Old: Merging Competing Military Forces after Civil Wars* (Washington, D.C.: Georgetown University Press, 2014), pp. 13-27.

[2] Our total count differs slightly from Hartzell's because, for the purposes of the qualitative analysis, we combined what Hartzell lists as two distinct civil wars in Burundi and two distinct civil wars in Rwanda as actually a single, longer civil war in each nation respectively. Thus our case of Burundi is equivalent to the fourth and fifth civil wars in that nation in Hartzell's dataset, and our case of Rwanda is equivalent to the second and third civil wars in that nation in Hartzell's dataset.

[3] Reed M. Wood, "Opportunities to Kill or Incentives for Restraint? Rebel Capabilities, the Origins of Support, and Civilian Victimization in Civil War," *Conflict Management and Peace Science*, Vol. 31, No. 5 (November 2014), pp. 461-480. To generate his data, Wood draws from the UCDP Conflict Encyclopedia, available at http://www.ucdp.uu.se/gpdatabase/search.php.

[4] Available at http://www.state.gov/t/avc/rls/rpt/wmeat/.

[5] Available at http://cow.dss.ucdavis.edu/data-sets/national-material-capabilities.

[6] Kristian Skrede Gleditsch, "Expanded Trade and GDP Data," *Journal of Conflict Resolution*, Vol. 46, No. 5 (October 2002), pp. 712-724.

[7] For general discussion of these issues in the literature, see Nicholas Sambanis, "What Is Civil War? Conceptual and Empirical Complexities of an Operational Definition," *Journal of Conflict Resolution,* Vol. 48, No. 6 (2004), pp. 814-858; Håvard Hegre and Nicholas Sambanis, "Sensitivity Analysis of Empirical Results on Civil War Onset," *Journal of Conflict Resolution,* Vol. 50, No. 4 (2006), pp. 508-535; Charles T. Call, *When Peace Fails: The Causes and Prevention of Civil War Recurrence* (Washington, D.C.: Georgetown University Press, 2012), pp. 65-66.

Appendix A, Table 1

Cases in Krebs and Licklider, "United They Fall"

case	Ccode	End	Battle-related deaths	ln (battle-related deaths)	Intensity (battle-related deaths/duration)	Duration (months)	No. of Rebel Groups	Total Population (thousands, year prior to war)	Peacekeeping Mission?	GDP/capita, at war's end	Rebel Troops, at war's end	Gov't troops, at war's end	Rebel troops, at war's end, per capita	Gov't troops, at war's end, per capita	Ratio, Rebel to Gov't Forces, at War's End
Bosnia	346	11/1/95	263000	12.47991	6152.05	42.75	4	4409	1	2266.05	65,000	97333	0.01474	0.02208	0.66781
Burundi (4&5)	516	10/8/03	153500	11.91839	1223.11	125.5	3	5786	1	375.14	21,500	49667	0.00372	0.00858	0.43288
Democratic Republic Congo (5)	490	8/31/99	75000	11.22524339	6250.00	12	4	14106	1	177.76	42,000	84133	0.00298	0.00596	0.49921
Lebanon (2)	660	10/13/90	163000	12.00151	934.10	174.5	11	2737	1	8693.25	15,000	36000	0.00548	0.01315	0.41667
Mozambique	541	10/4/92	122000	11.71178	983.87	124	2	12453	1	370.02	20,000	50000	0.00161	0.00402	0.40000
Philippines (2)	840	9/2/96	120000	11.69525	418.12	287	2	37862	0	2117.9	12,000	118667	0.00032	0.00313	0.10112
Rwanda (2&3)	517	7/19/94	805500	13.59921848	21337.75	37.75	2	7007	1	391.74	12,000	30000	0.00171	0.00428	0.40000
Sierre Leone (2)	451	7/7/99	10500	9.25913	411.76	25.5	4	4297	1	508.93	15,000	3600	0.00349	0.00084	4.16667
South Africa	560	5/10/94	16000	9.680344	123.71	129.33	3	30686	1	5232.72	42,000	80000	0.00137	0.00261	0.52500
Sudan1	625	2/28/72	501000	13.12436	4960.40	101	3	11616	0	1364.11	11,000	35000	0.00095	0.00301	0.31429
Zimbabwe	552	12/28/79	12000	9.392662	142.86	84	5	5550	1	225	20,000	38000	0.00360	0.00685	0.52632
MEAN			203772.73	11.46	3903.43	103.94	3.91	12409.91	0.82	1974.78	25045.45	56581.82	0.00	0.01	0.77
Standard Deviation			244498.3	1.46	6268.39	79.46	2.55	11527.61		2689.054	17,246	34150	0.00398	0.00610	1.13613
MEDIAN			122000	11.71	983.87	101	3	7007	1	508.93	20000	49667	0.00298	0.00428	0.43288

Appendix A, Table 1 (cont.)

Other Cases of Military Integration after Civil War

case	Ccode	End	Battle-related deaths	ln (battle-related deaths)	Intensity (battle-related deaths/duration)	Duration (months)	No. of Rebel Groups	Total Population (thousands, year prior to war)	Peacekeeping Mission?	GDP/capita, at war's end	Rebel Troops, at war's end	Gov't troops, at war's end	Rebel troops, at war's end, as proportion of population	Gov't troops, at war's end, as proportion of population	Ratio, Rebel to Gov't Forces, at War's End
Afghanistan3	700	12/1/01	33000	10.40426	523.81	63	8	19661	0	369.81	1500	.	0.00008		
Angola2	540	5/31/91	74000	11.21182	3523.81	21	2	8700	1	2521.36	46500	150000	0.00534	0.01724	0.31000
Angola3	540	11/15/94	48000	10.77896	1959.18	24.5	2	9515	1	1751.03	55000	120000	0.00578	0.01261	0.45833
Angola4	540	4/4/02	26000	10.16585	658.23	39.5	2	11569	0	2504.54	45000	100000	0.00389	0.00864	0.45000
Azerbaijan	373	5/5/94	18000	9.798127	486.49	37	2	7187	1	2553.23	10000	50000	0.00139	0.00696	0.20000
Burma/Myanmar2	775	3/12/89	60000	11.0021	123.46	486	3	18119	0	991.43	8000	200000	0.00044	0.01104	0.04000
Burma/Myanmar3	775	3/1/95	60000	11.0021	143.88	417	4	21289	0	1328.5	10000	322000	0.00047	0.01513	0.03106
Burundi6	516	11/16/06	1330	7.192934	42.90	31	2	7211	1	373.73	2500	35000	0.00035	0.00485	0.07143
Cambodia2	811	10/23/91	65000	11.08214	422.08	154	4	6824	1	762.35		112000		0.01641	
Chad2	483	8/7/88	.	.		100.5	4	4379	0	788.79		33000		0.00754	
Chad3	483	5/1/98	4250	8.354674	47.75	89	7	5556	0	777.75		30000		0.00540	
Congo Republic3	484	11/16/99	12000	9.392662	1090.91	11	4	2745	0	2265.72	2000	10000	0.00073	0.00364	0.20000
CongoRepublic4	484	3/17/03	380	5.940171	31.67	12	2	2974	0	2069.93	2500	12000	0.00084	0.00404	0.20833
Democratic Republic Congo 6	490	4/2/03	20000	9.903487	754.72	26.5	4	51654	1	200.46		100000		0.00194	
Djibouti	522	12/26/94	1000	6.907755	26.32	38	2	300	0	2393.09	4500	8000	0.01500	0.02667	0.56250
Dominican Republic	42	9/6/65	3000	8.006368	666.67	4.5	3	3687	1	2400.24		17000		0.00461	
El Salvador	92	1/16/92	75000	11.22524	498.34	150.5	6	4353	1	4323.96		49000		0.01126	
Georgia1	372	7/1/92	3000	8.006368	166.67	18	2	5464	1	3631.46	13500	49000	0.00247	0.00897	0.27551
Guinea Bissau	404	11/1/98	1000	6.907755	210.53	4.75	2	1112	0	472.34	6000	7000	0.00540	0.00630	0.85714
Iraq2	645	3/11/70	105000	11.56172	1036.22	101.33	3	6885	0	5420.92		95000		0.01380	
Ivory Coast	437	4/6/05	1965	7.583248	64.43	30.5	4	16928	1	1328.6		18000		0.00106	
Laos2	812	8/23/75	10000	9.21034	2000.00	5	4	3257	0	746.12		46000		0.01412	
Liberia2	450	8/1/96	50000	10.81978	2000.00	25	7	2640	1	166.88		.			
Liberia3	450	8/20/03	3500	8.160519	67.31	52	3	2666	1	369.21	6500	10000	0.00244	0.00375	0.65000
Mali	432	1/13/95	1000	6.907755	18.35	54.5	6	7960	0	707.31		10000		0.00126	
Nepal	790	11/21/06	145000	11.88449	1124.03	129	2	21465	1	1068.35	15000	90000	0.00070	0.00419	0.16667
Nicaragua2	93	8/4/89	30000	10.30895	325.20	92.25	5	2771	1	2235.14	20000	65000	0.00722	0.02346	0.30769
Russia	365	8/31/96	79000	11.2772	3821.96	20.67	2	148146	0	7939.12	10000	1300000	0.00007	0.00878	0.00769
Sierra Leone1	451	11/30/96	30000	10.30895	441.18	68	3	3172	0	677.18	4000	5000	0.00126	0.00158	0.80000
Sierra Leone3	451	5/2/01	10500	8.039157	411.76	25.5	4	4717	1	586.95		14000		0.00297	
Sudan2	625	1/9/05	2000000	14.50866	7874.02	254	4	19802	1	1875.45	10000	120000	0.00051	0.00606	0.08333
Tajikistan	702	6/27/97	50000	10.81978	816.33	61.25	5	5464	1	772.09	5000	10000	0.00092	0.00183	0.50000
Uganda3	500	1/25/86	250000	12.42922	3937.01	63.5	6	13225	0	508.01		15000		0.00113	
Yemen Arab Republic2	678	3/1/70	15000	9.615806	168.54	89	3	4130	0	1426.3		13000		0.00315	
Other Cases Mean			99573.48	9.72	1075.26	82.33	3.71	13397.85	0.50	1714.92	13875.00	100468.80	0.00276	0.00814	
Other Cases Median			26000	10.17	486.49	45.75	3.50	6190.00	0.5	1198.425	9000	40500	0.00109	0.00618	
Other Cases Standard Deviation			344979.9	1.92	1633.71	107.91	1.70	25700.77		1640.926	15880.21	229332	0.03624	0.00652	
All cases -- mean			125623.3	10.15	1782.31	87.61	3.76	13156.36	57%	1778.444	17838.71	89241.86	0.00307	0.00779	
All cases - standard deviation			323344.6	1.95	3557.91	101.28	1.91	22929.95		1917.197	16981.55	198675.2	0.00371	0.00637	

Appendix A, Table 2

	Cases in "United They Fall"	Other Cases of Military Integration After Civil War	All Military Integration Cases	Percent Difference ("United They Fall" vs. Other Cases)
War duration (months)	103.9	82.3	87.6	26.25%
Battle-related deaths	203,772.7	99,573.5	125,623.3	104.7%
Intensity (battle-related deaths/duration)	3,903.4	1,075.3	1,782.3	263%
Rebel Groups (number)	3.9	3.7	3.7	5.4%
Population (thousands)	12,409.9	13,397.8	13,156.3	-7.3%
Peacekeeping missions (% of cases)	82%	50%	57%	64%
GDP/capita, at war's end	1,974.7	1,714.9	1,778.4	15.2%
Rebel troops, at war's end	25,045.4	13,875	17,838.7	80.5%
Government troops, at war's end	56,581.8	100,468.8	89,241.9	-43.7%
Rebel troops, at war's end, per capita	0.0036	0.0027	0.003	31.4%
Government troops, at war's end, per capita	0.0068	0.0082	0.0078	-16.7%

Appendix B. Difference-of-Means Tests

WAR DURATION

```
ttest wardur, by(kl)

Two-sample t test with equal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      34    82.33088    18.50668    107.9116    44.67875     119.983
       1 |      11    103.9391     23.9581    79.46002    50.55713    157.3211
---------+--------------------------------------------------------------------
combined |      45    87.61289    15.09735    101.2761    57.18617    118.0396
---------+--------------------------------------------------------------------
    diff |           -21.60821    35.38298               -92.96478    49.74837
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =  -0.6107
Ho: diff = 0                                     degrees of freedom =       43

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.2723         Pr(|T| > |t|) = 0.5446          Pr(T > t) = 0.7277
```

BATTLE DEATHS (unequal variance)

```
. ttest casualties, by(kl) unequal

Two-sample t test with unequal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      33    1075.265    284.3929    1633.713    495.9752    1654.554
       1 |      11    3903.429    1889.991    6268.393   -307.7342    8114.593
---------+--------------------------------------------------------------------
combined |      44    1782.306    536.3744    3557.906    700.6036    2864.008
---------+--------------------------------------------------------------------
    diff |           -2828.165    1911.268               -7061.68    1405.351
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =  -1.4797
Ho: diff = 0                     Satterthwaite's degrees of freedom =  10.4563

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0842         Pr(|T| > |t|) = 0.1684          Pr(T > t) = 0.9158
```

REBEL FACTIONS

```
. ttest rebfac, by(kl)

Two-sample t test with equal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      34    3.705882    .2910716    1.697224    3.113693    4.298072
       1 |      11    3.909091    .7681684    2.547726    2.197505    5.620677
---------+--------------------------------------------------------------------
combined |      45    3.755556    .2845439    1.908778    3.182095    4.329016
---------+--------------------------------------------------------------------
    diff |           -.2032086    .6690409               -1.552458    1.146041
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =  -0.3037
Ho: diff = 0                                     degrees of freedom =       43

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.3814         Pr(|T| > |t|) = 0.7628          Pr(T > t) = 0.6186
```

TOTAL POPULATION

```
. ttest tpop, by(kl)

Two-sample t test with equal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      34    13397.85    4407.645    25700.77    4430.431    22365.28
       1 |      11    12409.91    3475.706    11527.61    4665.554    20154.26
---------+--------------------------------------------------------------------
combined |      45    13156.36    3418.196    22929.95    6267.435    20045.28
---------+--------------------------------------------------------------------
    diff |            987.9439    8044.325               -15234.98    17210.87
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =   0.1228
Ho: diff = 0                                     degrees of freedom =       43

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.5486         Pr(|T| > |t|) = 0.9028          Pr(T > t) = 0.4514
```

GDP PER CAPITA (unequal variance)

```
. ttest gdppc, by(kl) unequal

Two-sample t test with unequal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      34    1714.922    281.4165    1640.926    1142.376    2287.468
       1 |      11    1974.784    810.7802    2689.054    168.2528    3781.315
---------+--------------------------------------------------------------------
combined |      45    1778.444    285.7989    1917.197    1202.454    2354.434
---------+--------------------------------------------------------------------
    diff |           -259.8616    858.2306               -2121.529    1601.806
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =  -0.3028
Ho: diff = 0                     Satterthwaite's degrees of freedom =  12.4996

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.3835         Pr(|T| > |t|) = 0.7670          Pr(T > t) = 0.6165
```

REBEL TROOPS AT WAR'S END

```
. ttest rebtroopwarend, by(kl)

Two-sample t test with equal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      20       13875    3550.922    15880.21    6442.835    21307.16
       1 |      11    25045.45    5199.849    17245.95    13459.47    36631.44
---------+--------------------------------------------------------------------
combined |      31    17838.71    3049.977    16981.55    11609.83    24067.59
---------+--------------------------------------------------------------------
    diff |           -11170.45    6142.707               -23733.7    1392.793
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =  -1.8185
Ho: diff = 0                                     degrees of freedom =       29

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.0397         Pr(|T| > |t|) = 0.0793          Pr(T > t) = 0.9603
```

GOVERNMENT TROOPS AT WAR'S END (unequal variance)

```
. ttest govtroopwarend, by(kl) unequal

Two-sample t test with unequal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      32    100468.8    40540.55      229332    17785.75    183151.7
       1 |      11    56581.82    10296.59    34149.93    33639.58    79524.05
---------+--------------------------------------------------------------------
combined |      43    89241.86    30297.68    198675.2    28098.66    150385.1
---------+--------------------------------------------------------------------
    diff |            43886.93    41827.69               -41055.73    128829.6
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =   1.0492
Ho: diff = 0                     Satterthwaite's degrees of freedom =  34.6811

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.8493         Pr(|T| > |t|) = 0.3013          Pr(T > t) = 0.1507
```

GOVERNMENT TROOPS PER CAPITA

```
. ttest govtroopspc, by(kl)

Two-sample t test with equal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      32    .0081364    .0011522    .0065179    .0057864    .0104863
       1 |      11    .0067739    .0018405    .0061041    .0026731    .0108747
---------+--------------------------------------------------------------------
combined |      43    .0077878    .0009716     .006371    .0058271    .0097485
---------+--------------------------------------------------------------------
    diff |            .0013625    .0022437               -.0031687    .0058936
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =   0.6072
Ho: diff = 0                                     degrees of freedom =       41

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.7265         Pr(|T| > |t|) = 0.5470          Pr(T > t) = 0.2735
```

REBEL TROOPS PER CAPITA

```
. ttest rebtroopspc, by(kl)

Two-sample t test with equal variances
------------------------------------------------------------------------------
   Group |     Obs        Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------------
       0 |      20     .002764    .0008102    .0036235    .0010681    .0044598
       1 |      11    .0036329    .0012001    .0039803    .0009589    .0063069
---------+--------------------------------------------------------------------
combined |      31    .0030723    .0006666    .0037115    .0017109    .0044337
---------+--------------------------------------------------------------------
    diff |           -.0008689    .0014078               -.0037482    .0020104
------------------------------------------------------------------------------
    diff = mean(0) - mean(1)                                      t =  -0.6172
Ho: diff = 0                                     degrees of freedom =       29

    Ha: diff < 0                 Ha: diff != 0                 Ha: diff > 0
 Pr(T < t) = 0.2709         Pr(|T| > |t|) = 0.5419          Pr(T > t) = 0.7291
```