

SUPPLEMENTAL MATERIALS:

**CIVIL WAR DESTRUCTION AND THE
PROSPECTS FOR ECONOMIC GROWTH**

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APPENDIX
Measurement of Variables and Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Duration	6041	169.3432	889.2334	0	13551
Death Per Capita	5647	.000388	.004305	0	.08001
Civil War Destruction	5685	.0276308	.8193961	-.4092	12.5029
Opposition Victory	6041	.0331071	.1789311	0	1
UN Peacekeeping	5326	.0079324	.0668342	0	.6938311
GDP Growth	4728	3.599196	6.142368	-41	106
Gross Capital Growth	4048	6.279644	24.30761	-376	310
Gov't Expend. Growth	3992	4.167335	11.69171	-68	168
Inflation	3891	40.00026	472.0251	-11	23773
Export Growth	4064	7.02436	56.32675	-95	3471
Real GDP Per Capita	4672	5838.296	9030.976	64	56381
Population Growth	5824	1.526271	1.6489	-44	18
Democracy	5010	-.0043912	7.80484	-10	10
Aid Per Capita	4073	51.49919	85.07115	-44.387	1505.87
Ethnic Fractionalization	4581	.4079262	.2774854	.01	.89
Urban Population	6001	46.32461	24.47198	2	100
Agriculture Growth	3816	2.647275	9.456186	-100	78
Tropics	6041	.454726	.4979873	0	1
Post-Cold War	6041	.2640291	.4408514	0	1

All of the economic data are obtained from the World Development Indicators (2003) available for order at <http://www.worldbank.org/data/wdi2003/index.htm> .

- Civil War Destructiveness Index: It is measured using standardized values in an additive scale of civil war duration and total deaths from civil wars in the period 1960-2001. Civil war duration is measured according to the cumulative, maximum duration of the war in number of days for each civil war experienced by a nation that had ended by 1997. Death rate is measured as the cumulative number of deaths experienced by the nation, divided by population, for each civil war experienced by a nation that had ended by 1997. When a nation experienced multiple civil wars, we

add the effects of the previous civil war(s) (deaths and duration) to their effects after the current war. These variables are measured only after civil wars are coded as ended in the COW data set. For example, if a nation experienced one civil war from 1972-1976, the civil war index measures take on values beginning in 1977. If that nation experiences another civil war, say from 1982-1986, beginning in 1987 we count the civil war index from the first civil war and add to those the data from the recent civil war. We do so because we believe that chronic civil wars have lasting cumulative effects on an economy. The index measures “0” for nations that never experience a civil war, and for those years before a nation experiences a civil war. Source: COW Intrastate War Data set.

- Opposition victory: Using COW’s “winner” variable, we code this variable as “1” when an opposition movement wins a civil war that has ended. Otherwise “0.”
- UN Peacekeeping: We measure the presence of UN peacekeeping by the number of deployed troops per square kilometers of a country, if any, in a civil war nation. Such forces may be deployed during a civil war, but since we do not analyze these periods, this variable is observable only after a civil war has concluded. The number of deployed UN peacekeepers is from Paul Diehl available at <http://www.pol.uiuc.edu/faculty/diehl.html>. Country size is from WDI (2003).
- Gross Capital Growth: This is a measurement of investment to increase physical capital stock and inventory. The annual growth rate of gross capital formation in constant 1995 U.S. dollars is used.

- Government expenditure growth: We base government budget management on central government expenditures for purchases of goods and services in constant 1995 U.S. dollars and use its annual growth rate.
- Inflation: A country's price stability is measured by the annual percentage change in the consumer price index. Since some countries experienced hyperinflation before or after civil wars, we take a log of inflation rates to normalize the data.
- Export Growth: The degree of economic openness and related performance is measured with the annual growth rate of exports of goods and services in constant 1995 U.S. dollars.
- Previous Year Income: As in general economic growth studies, we use real GDP per capita as the economic base on which a post-civil war economy will be built. For conceptual comparability, we lag this variable by one year and normalize values by taking the log.
- Population growth: We use the annual growth rate of population.
- Democracy: We use the democracy rating (-10 through 10 scale) in the Polity IV Data Set available at <http://www.cidcm.umd.edu/inscr/polity/index.htm>.
- Foreign aid: We use official development assistance from OECD. The amount of foreign aid is net, inflation-adjusted per capita in US dollars. Considering both low initial absorptive capacity after civil war and diminishing return, we first lag foreign aid by one year and use its quadratic term.
- Ethnic Fractionalization: Data are from Matthew Krain (1997) and are available at <http://www.wooster.edu/polisci/mkrain/Ethfrac.html>

- Urban population: We measure this variable by the ratio of population living in areas defined as urban to total population in a country.
- Agricultural Growth: We measure agricultural growth with annual changes in crops, livestock production, forestry, hunting, and fishing. This is also net value-added in constant 1995 U.S. dollars after subtracting intermediate inputs from outputs.
- Tropics: We code this variable as “1” if a country is located between latitude 23°27' north and 23°27' south from the equator. Otherwise “0.” The latitude information was obtained from CIA’s *The World Fact Book* available at <http://www.cia.gov/cia/publications/factbook/>.
- Post-Cold War: We consider the years from 1990 as the post-Cold War era and code it as “1”. Otherwise “0.”