Nicos Christodoulakis

# An Economic Analysis of Conflicts

## With an Application to the Greek Civil War 1946-1949

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# An Economic Analysis of Conflicts

# Preface

This book has been a product of serendipity. In 2013, I was doing research on the economic and currency crisis that hit Greece in the interwar period and then started to look at economic developments in the 1940s. The lack of statistical data covering the period of Axis Occupation (1941–1945) and the subsequent Civil War (1946–1949) led me to search for studies and reports prepared by the British and US missions in Greece at that time.

Eventually, I visited the US National Archives in Washington DC and asked for some declassified reports that were prepared in the late 1940s by JUSMAG, the Joint US Military Advisory Group to Greece. The material consisted mostly of trivial reports on the economic situation, except that some documents included a systematic recording of all the battles that took place during the Civil War. There were monthly data covering battle casualties and army formations of the guerrillas and the Greek National Army, as well as their geographical dispersion for the period stretching from January 1948 to December 1949.

I couldn't believe my luck. As far as I know, this is one of the very few systematic recordings of a civil war that is available to date, even if recent intrastate conflicts worldwide are taken into account.

Upon returning to Greece, I set about to complete the data series backwards and thus obtain a full record since the start of the Civil War in 1946. To that effect, all available military archives of the Greek Army and a number of reports released by the Communist Party of Greece were classified in a pattern similar to that of the US series. In this way, a complete monthly battle database was obtained for 1946–1947. Additional data covering persecutions of political opponents and the destruction of productive activities during the conflict were also compiled from relevant sources.

Reading the prolific academic literature on civil wars, either contemporary or past ones, I was impressed by the scarcity of quantitative and systematic evidence available on the evolution of specific civil wars over time. The vast majority of empirical work is based on cross-country data. Usually, these series cover total battle casualties and aggregate socio-economic conditions and are subsequently



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used in cross-estimates to test alternative hypotheses on intrastate conflicts. Apart from implicitly making the assumption that countries respond to such conflicts in a similar manner, cross-section analysis is not capable of capturing the dynamics of a civil war. The particular patterns each conflict has followed, or the specific conditions under which it broke out or was terminated, are not possible to analyse.

For that reason, I thought that it would perhaps be useful to concentrate on how a civil war can be modelled in a single country. The task involved the derivation of appropriate combat models or a substantial modification of existing ones, as well as setting up a number of econometric procedures so as to properly estimate battle interactions. Then the battle time series available on the Greek conflict were used to test the properties of the dynamic process. Occasionally, some of the model predictions are compared by using the Correlates of Civil War (COCW) database. I hope that the outcome will contribute both to theoretical aspects of modelling conflict situations and to a detailed description and understanding of the dynamic patterns observed in the Greek Civil War. Although motivated by the examination of a civil war in a particular country, this book hopes to offer some analytical tools that are useful in improving the analysis on—and the understanding of—many others.

Athens, Greece
April 2016

Nicos Christodoulakis

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Chapter 2, Sects. 3.7, 4.7, 6.2, 6.3, 7.6, 8.5, 8.7, 9.2, 10.1, 10.2, and Data Appendix are derived, in part, from two articles published in the Journal of Defence and Peace Economics on 28 Jan 2015 and 02 Mar 2015, respectively, available online: http://dx.doi.org/10.1080/10242694.2014.1000010, http://dx.doi.org/10.1080/10242694.2015.1016297

# Abbreviations

| | |
|---|---|
| COCW | Correlates of Civil War |
| DAG | Democratic Army of Greece |
| GCW | Greek Civil War |
| GDP | Gross Domestic Product |
| GNA | Greek National Army |
| HQ | Headquarters |
| JUSMAG | Joint US Military Advisory Group to Greece |
| KKE | The Communist Party of Greece |
| SIPRI | Stockholm International Peace Research Institute |
| UK | United Kingdom |
| US | United States of America |
| USSR | The Soviet Union |
| WW1 | First World War |
| WW2 | Second World War |

## Mathematical

| | |
|---|---|
| i.i.d. | independent and identically distributed |
| LHS | left-hand side |
| OLS | ordinary least squares |
| RHS | right-hand side |
| SUR | seemingly unrelated regression |
| w.r.t. | with respect to |

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