

# Economic Shocks and Conflict

## The Role of Financial Institutions in Reducing Civil War Onset

Babak RezaeeDaryakenari<sup>1</sup> & Cameron G. Thies<sup>2</sup>

School of Politics & Global Studies Arizona State University



### Abstract

Although scholars have previously studied the effect of political institutions on civil conflict processes, the influence of economic and financial institutions on the likelihood of conflict has not been explored in any detail. Currently, the literature assumes that access to financial services is spatially and temporally constant and thus inconsequential to conflict processes. In this paper, we relax this assumption by developing a theoretical framework that links individuals decisions about engaging in conflict to their differential access to financial institutions. This framework contains four different mechanisms related to financial institutions that may reduce the likelihood of civil war onset: *providing saving and credit, reducing looting opportunities, increasing state capacity, and easing inter-temporal deprivation*. Finally, we statistically evaluate our hypotheses using data from established models of civil war onset. As expected, our empirical findings support the claim that having access to financial services reduces the likelihood of civil war onset.

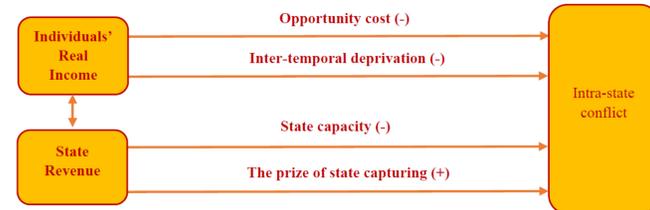


Figure 1: Schematic diagram of the linkage between individuals decision in response to economic shocks and conflict process

### Theory



Figure 2: Schematic diagram of theories that link economic shocks to conflict

Having access to financial services reduces the number of civilians who join insurgents as a response to economic shocks through four mechanisms:

- Reducing looting opportunities
- Increasing state capacity

#### Hypothesis 1

Having access to financial services decreases the likelihood of civil war onset.

- Providing saving and credit
- Easing inter-temporal deprivation.

#### Hypothesis 2

Having access to financial services decreases the likelihood of civil war onset in periods with negative economic shocks.

### Research Design

- Dependent variable: Conflict onset (Fearon & Laitin 2003; UCDP 1950-2011)
- Independent variable: Domestic credit provided by banking sector (WorldBank website)
- Measured economic shocks: GDP shock (Penn World 8.1), Rainfall shock (GPCP 2.2), Disaster(EMDAT)
- Control Variables:
  - Fearon & Laitin models: Prior war, GDP per capita, Population, Non-contiguous state, Oil exporter, New state, Instability, Polity2, Polity2 squared, Ethnic fractionalization, Religious fractionalization

### Introduction

Some studies in this literature find a negative association between economic shocks and conflict likelihood, others find a positive relationship, and some do not observe a significant correlation between economic shocks and conflict at all. Bazzi & Blattman (2014) argue that inconsistencies in the empirical studies are rooted in (i) the use of different commodities and years, (ii) relying on aggregate shocks for testing mechanisms, and (iii) modeling and measuring conflict differently and sometimes incorrectly. We suggest one more possibility, which is overlooking the factors and mechanisms that vary across different cases and affect the relationship between economic shocks and conflict. All studies in the literature assume that the access to financial services is constant spatially and temporally while we know that is simply not true. The question we address in this paper is whether or not this assumption is problematic.

Financial institutions have three main purposes: credit provision, liquidity provision, and risk management services (Baily & Elliott 2015). If shocks distort the economic environment of a state and negatively affect citizens budgets such that these changes make the country more liable to experience intra-state conflict, then we should expect that having access to financial services mitigates the negative effects of shocks. Thus, in addition to changing the political status quo via violent actions in order to deal with financial needs, an individual can consider using services provided by financial institutions as a non-violent solution to alleviate the burden of negative economic shocks.

Ignoring the quantity and quality of financial institutions in studying the association between economic shocks and conflict produces a higher level of expected conflict in the theoretical models and in the resulting empirical analyses, which suffer from omitted variable bias. This study remedies this problem by examining how access to financial institutions affects the suggested mechanisms in the literature for linking economic shocks to conflict process. We find support for our central hypothesis that access to financial institutions decreases the likelihood of conflict in a cross-national statistical analysis.

### Literature Review

How do economic shocks influence conflict processes? To answer this question, we need to examine which micro- and macro-level economic mechanisms are linked to conflict processes. Studies in the literature connect economic conditions to conflict via four main mechanisms.

– UCDP models: Peace years, Peace years squared, Peace years cubed, GDP per capita, Population, Oil exporter, Polity2, Polity2 squared, Ethnic fractionalization, Religious fractionalization

- Estimation methods: Logit and Probit
- Clustered errors by country
- Robust standard errors
- Although all regressors are lagged one period to alleviate endogeneity problem, we use rainfall shock and disaster as instrumental variables for economic shock.

### Results

Here, we report first, the estimated marginal effect of economic shock on the the probability of conflict onset, second, the estimated coefficients for *Bank Credit* and its interaction with negative economic shocks, and finally, the marginal effects of *Bank Credit* on the likelihood of conflict onset.

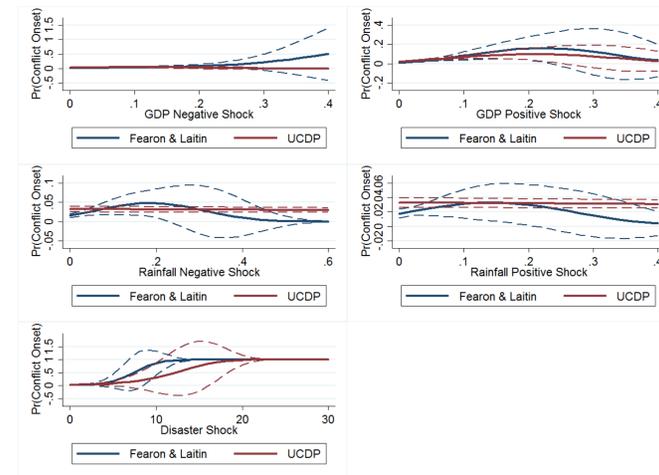


Figure 3: Estimated marginal effects of shock variables

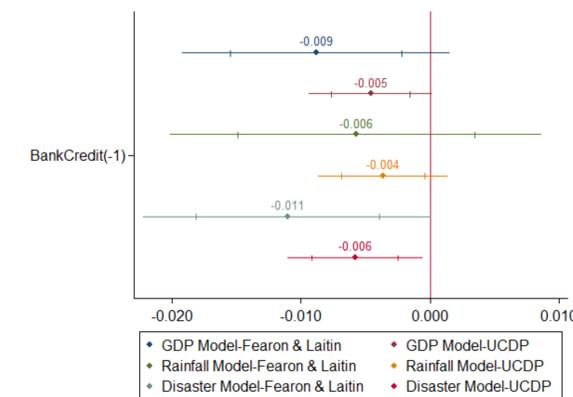


Figure 4: Estimated coefficients for Bank Credit in different models

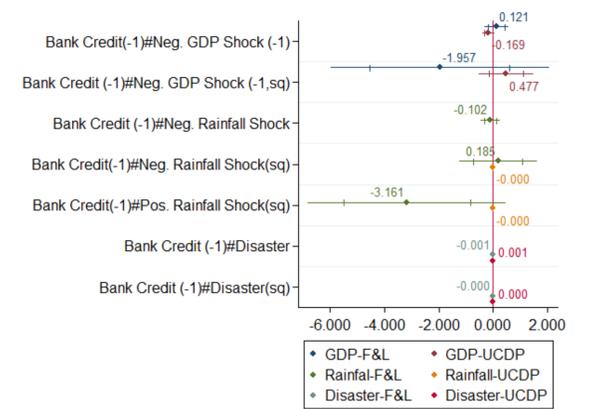


Figure 5: Estimated coefficients for the interaction between Bank Credit and negative economic shock in different models

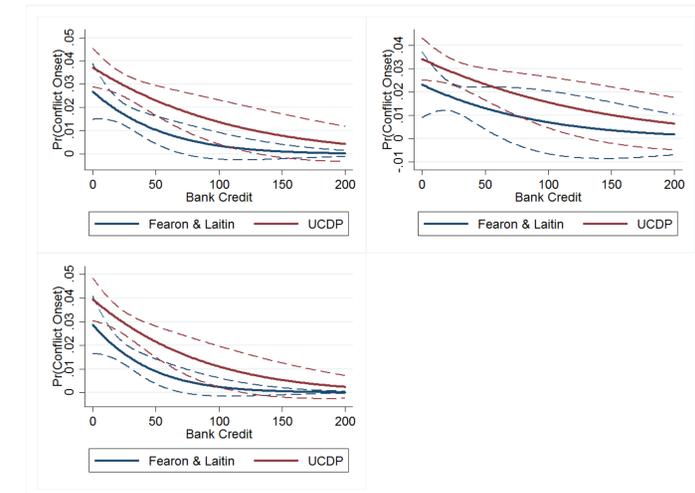


Figure 6: Estimated marginal effects of Bank Credit

### Conclusions

- The results of regression models provide enough evidence not to reject the hypothesis that the provision of credit by banking sector decreases the likelihood of conflict onset (Hypothesis 1).
- We find partial support that having access to financial institutions decreases the likelihood of conflict *more* in periods with negative economic shock (Hypothesis 2).

### Contact

1 srezaeed@ASU.edu  
2 Cameron.Thies@ASU.edu