



COMMENTS ON
*ECONOMIC SHOCKS AND CIVIL CONFLICT:
EVIDENCE FROM THE CONSTRAINTS OF
THE OPEN-ECONOMY TRILEMMA*
BY HULL AND IMAI



Tetsuya Saito

*Department of Economics, SUNY at Buffalo
357 Fronczak Hall, Buffalo, NY 14260*

E-mail: tsaito5@buffalo.edu

Brief Conceptual Summary



- **Income-Conflict Nexus: Quick-Look at My Own View**
 - Income growth increases the gain from rebellion; whence, the autocratic government needs to make concessions to avoid violent actions (Acemoglu & Robinson, 2006, *Economic Origins of Democracy and Dictatorship*)—otherwise, revolts or coups take place
 - Income growth is reinforced by protection of individual property rights—for example, Acemoglu et al. (2002, QJE, 117(4), 1231-94), Engerman & Sokoloff (1996, republished in 2002, *Economía*, 3(1), 41-88; 2005, JEH, 65(4), 891-921), Ehrlich (2007, NBER Working Papers, No. 12868)
 - ✦ Protection of individual property rights reduces the probability of violent civil conflicts (cf. Minimalist Approach to Democracy)
 - ✦ Income growth may encourage reinforcing the military power to suppress civil wars instead of preparing for the external fears (cf. the guns-or-butter and arms race arguments)
 - ✦ Influence of natural environment may affect the formation of capital stock (Acemoglu et al., 2001, AER, 91(5), 1369-1401; Easterly & Levine, 2003, JME, 50(1), 3-39)
 - ✦ Some sort of endogeneity problems do exist whereas they are not identified completely
- **Trilemma (Mundell-Fleming SOE Model)**
 - Impossibility of maintaining the three policies: fixed exchange rate, capital mobility and independent monetary policy
 - ✦ For an SOE intending to maintain the fixed-exchange rate regime loses the control either in int'l capital flow or monetary policy; hence, such a country is more likely affected by the world economic surge than floating exchange rate regime countries
 - ✦ Therefore, the fixed exchange rate indicator is expected to be a valid indicator to measure the vulnerability to violent civil conflicts

Comments



- Identification of one of sources of civil conflicts, in economics using the trilemma variable (exchange rate regime, or int'l capital flow policy) to test the impact of economic fluctuations, as well as pointing out the problems in the existing estimations, such as endogenous correlations
- Extending the Sub-Saharan model to the world civil conflict cases
 - Instantaneous economic shocks to affect the civil conflicts and long-run economic growth
 - Ethnic divergence to affect the likelihood of violent civil conflicts (i.e., elite vs. non-elite)
 - ✦ For example, economic fluctuations may affect each “ethnolinguistic group” differently
- In addition, this paper has shown empirical evidence that the SOEs using fixed exchange rate regimes (currency pegs) are more vulnerable as world economic fluctuations likely affect the domestic economies to induce civil conflicts
 - This conclusion is intuitively plausible and it proposes a relationship between an economic variable and civil conflicts
 - Endogeneity problems are examined from various aspects in the main regression and in robustness checks: My concern is about the first-stage R^2
 - ✦ At most ca. 0.08, and typically less than 0.05—how about the model F-stat.?
 - ✦ It affects the tests of validity of the instrument as well as the significance in the second-stage regression (I don't know any good reference to the impact of the error of first-stage regression in the mentioned test stats.)

Some Ideas to Increase the R-squared



- In the first stage regression (1), the GDP growth is regressed on time trend, exchange rate relevant variables and capital flow relevant variables
- Include the lag variable for the GDP (growth)
- Include the usual production factor variables such as population and capital formation
 - The cost of including these variables is the necessity of handling another endogeneity problem; whence, use 3SLS or assume exogeneity
 - ✦ For example, capital formation may include the openness of capital market and exchange rates as endogenous variables
- In addition, the interest rate is also relevant to determine the GDP (growth)
 - In the WDI, or in other popular cross-country database, we cannot obtain interest rates that are actually imposed on the public
 - I usually include the growth of capital formation and inflation as these two will determine the effective real interest rate (available in the WDI)
 - ✦ Urban population share and population density are statistically significant
 - To eliminate the time trend, sacrificing the *efficiency*, I include year dummies: the sample size to estimate each year dummy could be, at least, larger than 50
 - ✦ As the estimated year-dummy typically show fairly linear increase, if we want to say *insignificance*, time-trend variable is better than the year-dummy
 - In my own study, the R-squared to estimate the GDP goes to ca. 0.7

Extensive Comment and Question



EXTENSIVE COMMENT

- Suppose the economic fluctuation is the trigger of civil conflicts
 - The civil conflict indicator does not tell the magnitude of conflicts
- Is there any good reason of ending (or dragging) the conflicts?
 - For example, in Margo & Collins (2007, JEH, 67(4), 849-83) identifies rainfall is a valid instrument of determining the end of riots in the Civil Rights Movement United States

ADDITIONAL QUESTION FOR FURTHER ROBUSTNESS

- Table A1 tells we have many developed countries
- In developed countries, the possibility of the Civil War is extremely small at any event and they usually use *some sort of* floating exchange rate regime (or more flexible int'l capital flow policy)
- Is the argument robust to the following comment?
 - Politically stable countries use floating exchange rate regime, so that, they do not have any conflicts even in the period of worldwide economic downturns
 - In this sense, we cannot test the hypothesis of trilemma so long as politically stable countries are included in the regression (as an alternative robustness check to Section V.A.)
 - ✦ For example, OECD, G8, or G20 countries are possible objective classifications
 - ✦ Not all of OECD and G20 countries are large ones in the financial market (maybe the US only)
 - ✦ The classification of Small Open Economy is not practically easy: for example, Magee & Magee (2008, RIE, 16(5), 990-1004) suggest the US is a small country in each commodity market