
ECONOMIC FREEDOM AND CONFLICT: AN EMPIRICAL NOTE

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ABSTRACT

This paper explores the relationship between economic freedom, political institutions, and conflict. We use a relatively new measure of peace that offers the unique advantage of capturing both internal and external conflicts, and we use a Freedom House measure of civil liberties for political liberties. According to our findings, countries with higher levels of economic freedom, other things equal, also have lower levels of external and internal conflict. In addition, we find a statistically significant relationship between the degree of civil liberty protection in a country and conflict. Our preliminary findings provide further evidence of the negative relationship between economic freedom and conflict (or positive relationship between economic freedom and peace).

INTRODUCTION

In pre-modern times, engaging in war and conflict with other nations was frequently viewed as a possible way to improve the economic well-being of a country. Thus it was sometimes viewed as being lucrative to engage in conflict, in particular when one was the aggressor, if the expected benefits of the conflict were greater than the expected costs. In the modern world, however, engaging in violent conflict is more appropriately viewed as something to be avoided. Yet, violent conflict continues to persist, both within countries as well as between countries. Determining the causes of violent conflict as well as possible solutions is one of the most important social science questions of our time.

In the academic literature, there are two primary factors that have been suggested as contributing to a reduction in conflict or an increase in peace, which can be viewed as both sides of the same question. First, free trade is said to reduce conflict between nations. According to the 19th century French economist, Frederic

Bastiat, if goods don't cross borders, armies will (Boudreaux, 2007). Bastiat's basic message is something that can be traced to Enlightenment philosophers of the 18th century and classical liberals of the 19th century. Immanuel Kant (1795), for example, argued that one of the keys to "perpetual peace" was economic interdependence. In his farewell address to the nation, President George Washington spoke positively of economic interdependence and warned against political interdependence. More recently, the economic interdependence hypothesis of the classical liberals has been more formally developed into the "trade-peace" hypothesis of international relations and trade theory (Mansfield and Pollins, 2001; Polachek, 2007; Schnabel, 2007).

According to another prominent line of inquiry, democracy and representative government lead to peace (Brawley 1993; Ray 1998; Russett and Oneal 2001). Russett and Oneal, in particular, have performed numerous tests on what they call "the Kantian tripod," and they have found that all three legs of Kant's tripod—democracy, economic interdependence, and affiliations with international organizations—matter. Among other things, the so-called 'democratic peace' observed in the data comes from democratic institutions, which make political leaders accountable for the costs of war.

Recently, the primacy of both theories has been challenged, in part, by empirical work showing the relationship between free-market capitalism and peace (Gartzke, 2007; Weede, 2007). In much of the empirical work, the degree to which a country's economic institutions are consistent with laissez-faire capitalism is measured by the Economic Freedom of the World index, produced annually by the Fraser Institute. While the freedom to trade is certainly a part of economic freedom, it is only a part, and other parts of economic freedom might contribute to both international and domestic peace (Hall and Lawson, 2009). For example, the ability to freely work in labor markets without belonging to a particular ethnic or racial group might lessen reasons for domestic conflict. Additionally, when governments consume a smaller share of overall output, they reduce opportunities for internal conflict over the distribution of public resources.

The relationship between increased democracy and conflict reduction has also been called into question by research focusing on the relationship between capitalism and peace. As Gartzke (2005a) has argued, "the 'democratic peace' is a mirage created by the overlap between economic and political freedom." The mirage is largely due to the fact that more economic freedom and increased democracy typically occur simultaneously. Thus if economic freedom causes peace, it would be easy to find democracy also contributing to peace, especially if economic

freedom was not taken into account. According to Gartzke, after controlling for economic freedom, there is no statistically significant relationship between democracy and peace (Gartzke 2005b). In fact, changes in economic freedom are fifty times more important in encouraging peace than changes in democracy (Gartzke 2005a). Tures (2003) also finds a positive relationship between economic freedom and conflict reduction.

This paper further explores the relationship between economic freedom, political institutions, and conflict. We do so in two ways. First, we use a relatively new measure of peace, which measures the degree to which a country is currently engaged in both internal and external conflicts. Second, most of the literature measures democracy using the standard Polity IV data. Here we look specifically at protection of civil liberties by the government. When governments are limited and protect civil liberties of their citizens, they should be less likely to go to war with other nations or to foster internal conflict. According to our findings, countries with higher levels of economic freedom, other things equal, also have lower levels of external and internal conflict. In addition, we find a statistically significant relationship between the degree of civil liberty protection in a country and conflict. Our preliminary findings provide further evidence of the negative relationship between economic freedom and conflict (or positive relationship between economic freedom and peace) as well as suggest some avenues for future research as more data becomes available.

DATA AND EMPIRICAL APPROACH

Our analysis of the relationship between economic freedom, civil liberties, and violent conflict uses cross-sectional data on 106 countries for 2006. We are limited to a cross-sectional analysis for two reasons. First, our measure of conflict comes from the *Global Peace Index* (Economics Intelligence Unit, 2007) which has only been collected and published since 2006. Second, our measure of the degree to which a country's economic institutions are consistent with free-market capitalism is measured with a two year lag. Thus, given our desire to use a measure of peace that captures both internal and external peace, a cross-section reflecting freedom and conflict in 2006 is the only methodological approach available.

As mentioned, our dependent variable *Conflict* is obtained from the *Global Peace Index* (Economic Intelligence Unit, 2007). The 2007 *Global Peace Index* reviews the state of peace across countries for the year 2006. The index takes into consideration twenty-four independent factors per nation including such aspects as:

ongoing domestic and international conflict, measures of societal safety and security, and measures of militarization. A score from one to five is assigned for each of the 24 indicators. Scores of one indicate greater peace and scores of five indicate areas of conflict. The scores are then weighted and summed to produce an overall score for the entire country. Thus the composite score for a country ranges from one to five, with a score of one representing a country with a high level of peace and five representing a country with a high level of conflict and turmoil. For 2006, the *Global Peace Index* ranked 121 countries, with Norway having the most peace at 1.357 and Iran having the most conflict at 3.437.

The variable *Economic Freedom* is obtained from the annual *Economic Freedom of the World* (EFW) report published by the Fraser Institute (Gwartney and Lawson, 2008). The cornerstones of economic freedom are personal choice, voluntary exchange, freedom to compete, and security of private property. The authors of the report then use 42 different variables to measure the degree to which a country's policies are economically free. Each variable is assigned a score on a 0-10 scale, with zero representing an extremely low level of economic freedom and 10 being a high level of economic freedom. The scores are then aggregated to create an economic freedom score for the country as a whole. The data used to compile the EFW index are all obtained from third-party sources, and therefore reflect a two-year time lag. Thus data from the *Economic Freedom of the World: 2008 Annual Report* was used to reflect the level of economic freedom for 141 countries in 2006. In 2006, Hong Kong had the highest level of economic freedom at 8.94 and Zimbabwe had the lowest level with a score of 2.67.

The variable *Military Expenditure* is the percentage of Gross Domestic Product (GDP) spent by a country on the military and defense in 2006 (measured in 2006 U.S. dollars) and was obtained from the Stockholm International Peace Research Institute (2008). Military and defense expenditures are expressed as a percentage of Gross Domestic Product in order to gain a realistic perspective of the amount a country is spending per its fiscal size. Theoretically, military expenditures have two possible effects. On the one hand, government can buy peace through might (i.e., "hard power") by spending on the military. However, countries currently engaged in international conflict are likely to have high military expenditures as a percentage of GDP. So theoretically, the sign on military expenditures will be ambiguous.

The degree to which government respect their citizens civil liberties is measured with *Civil Constraint*, which is obtained from Freedom House's (2007) annual *Freedom in the World Report*. The report evaluates the ability for individuals

to act spontaneously and independently of their government in two broad categories: political rights and civil liberties. Our interest here is not in political rights, which have been covered by previous research on democracy and conflict, but with civil liberties. As defined by Freedom House, civil liberties allow for the freedoms of expression and belief, associational and organizational rights, rule of law, and personal autonomy without interference from the state. The total number of points awarded to a country or territory is based on the evaluation of fifteen civil liberties measures. Each geopolitical area was then assigned a rating between one and seven, with one representing the highest level of civil liberties and seven the lowest level. By naming our variable *Civil Constraint*, a higher score means less liberty and more constraints. We expect a positive relationship between civil liberties and conflict: when countries do not respect civil liberties, they will be more likely to have both internal and external conflict. (For a full list of countries included in the study see the Appendix).

The final dependent variable is a binary variable, *Africa*. It takes the value of one if a country is located on the continent of Africa and zero otherwise. The *Africa* variable was used for the purpose of determining whether or not Africa represented a unique case study in the relationship between economic freedom and conflict as it is in many other cases, such as economic growth (see, for example, Barro, 1991). *A priori*, we expect a positive relationship between *Africa* and *Conflict*.

Variable	Mean	SD	Min	Max
Conflict	1.98	0.38	1.37	3.03
Economic Freedom	6.76	0.91	2.67	8.57
Military Expenditure	2.36	1.80	0.20	11.40
African	0.22	0.41	0	1
Civil Constraint	2.80	1.58	1	6

After excluding countries with missing data, our sample consists of 106 countries. Summary statistics for each of the variables are provided in Table 1. Although *Conflict* has a possible maximum score of 5, the average country's score is centered about 1.98 with a standard deviation of about .38. The average country has an *Economic Freedom* score of 6.78 (consistent with the level of Uganda or

Poland) with a standard deviation of .91. The mean of *Military Expenditure* is 2.36 with a standard deviation of 1.80. In terms of civil liberties, the mean country had a score of 2.80 on the 1-7 scale, which means countries are, on average, more likely to protect civil liberties than violate them.

EMPIRICAL APPROACH AND RESULTS

To determine empirically if there exists a relationship between economic freedom and conflict, we estimated the relationship between the independent variables described in Section 2 and our dependent variable *Conflict* using Ordinary Least Squares (OLS). Our results are presented in Table 2. Our specification does a fairly good job of explaining cross-country variation in *Conflict*, with an r-squared of 0.43. Both multicollinearity and heteroskedasticity were tested for and neither was found to be a problem. While the correlation coefficient of 0.59 between *Economic Freedom* and *Civil Liberties* is cause for concern, tests of the variable inflation factor show that each variable is well below the acceptable threshold of ten. Both the Breusch-Pagan test and the White test were used to test for heteroskedasticity and in both cases we failed to reject the null of homoskedasticity.

Variable	Coefficient	Standard Error
Constant	2.8297***	0.3216
Economic Freedom	-0.1616***	0.4107
Military Expenditure (log)	0.0281	0.0405
African	-0.0556	0.0785
Civil Constraint	0.0864***	0.0232
N	106	
R-sq	0.4275	
* indicates significance at the 10% level, ** at 5% level and *** at the 1% level		

In terms of our primary variable of interest, *Economic Freedom*, we have the expected negative sign and the coefficient of -0.16 is statistically significant at the one percent level. Everything else being equal, a one unit increase in a country's

economic freedom score is expected to reduce *Conflict* by 0.16 units. Our secondary variable of interest, *Civil Constraint*, is also statistically significant at the one percent level and has the expected sign. Since higher values mean *less* protection of civil liberties, the positive sign on the coefficient is the sign we expected; civil liberties, as measured by Freedom House (2007), do have a positive impact on peace, holding constant the impact of economic freedom on peace. Our other independent variables, *Military Expenditure* and *Africa*, are not statistically or economically significant. (*Military Expenditures* were expressed in log form to make sure heteroskedasticity was not a problem in our regressions).

CONCLUSION

Our results indicate some further evidence of a relationship between economic freedom and conflict reduction. In addition, civil liberties continue to be important for peace, even after controlling for economic freedom. Like many other studies in the growth literature, African countries are at a disadvantage when it comes to conflict reduction. Our results are consistent with work being done in international relations, and they support the idea that constitutional liberalism is consistent with both peace and prosperity.

When more data become available, a particularly fruitful line of research would be to run panels and explore the effect of economic freedom on peace over time. While our findings indicate that freer countries are more prosperous, it would be interesting to explore the effect of changes in economic freedom on peace. With more data, it would also be useful to check causality to determine if there are any positive feedback loops: in particular, as countries become more peaceful because of economic freedom, do they then promote more economic freedom?

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APPENDIX

LIST OF COUNTRIES INCLUDED IN ANALYSIS

Algeria, Angola, Argentina, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belgium, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Ethiopia, Finland, France, Gabon, Germany, Ghana, Greece, Guatemala, Honduras, Hong Kong, Hungary, India, Indonesia, Iran, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Latvia, Lithuania, Macedonia, Madagascar, Malawi, Malaysia, Mexico, Moldova, Morocco, Mozambique, Namibia, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russia, Senegal, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sweden, Switzerland, Syria, Taiwan, Tanzania, Thailand, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States of America, Uruguay, Venezuela, Vietnam, Zambia, and Zimbabwe.

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