2011

Democratic Strength and Terrorism: An Economic Approach

Brian P. Winter
Claremont McKenna College

CLAREMONT McKENNA COLLEGE

DEMOCRATIC STRENGTH AND TERRORISM: AN ECONOMIC APPROACH

SUBMITTED TO

PROFESSOR S. BROCK BLOMBERG

AND

DEAN GREGORY HESS

BY

BRIAN P. WINTER

FOR

SENIOR THESIS

SPRING 2011

APRIL 25, 2011

TABLE OF CONTENTS

INTRODUCTION

Under the George W. Bush administration, the United States actively pursued two seemingly confluent foreign policy objectives: to promote democracy worldwide and to deter terrorism, not just in the United States, but worldwide. While these two objectives seemed to go hand in hand theoretically ("If they can vote, they won't need to bomb anything to coerce public officials."), they did not work so neatly together in practice.

Other studies have investigated the interactions of terrorism, democracy, and the economy, yet few have looked at these three in as much detail as they ought to have. Democracy is neither well-defined nor easily encapsulated as a binary variable. For this reason, I use the POLITY IV data set to split government regimes in to three different types of regimes, autocracies, anocracies, and democracies in order to challenge old assumptions and to perhaps create new assumptions – assumptions which may prove to be useful in determining public policy.

DEFINING DEMOCRACY

In his 1991 book entitled The Third Wave: Democratization in the Late Twentieth Century, the late American historian Samuel Huntington argued that in 1974 the number of democracies began to surge for the third time in history.[1] However, it was not until 1991 that the first African leader peacefully stepped down after losing an election. Since

[1] Samuel P. Huntington, The Third Wave: Democratization in the Late Twentieth Century (Norman: University of Oklahoma Press, 1991), 3.

this groundbreaking election in Benin, at least nine other African leaders have similarly stepped down.[2]

One of the shortcomings of Huntington's hypothesis is that, while few would argue that African countries have not made significant gains in political freedoms and civil liberties over the past few decades, it remains difficult to call them true democracies. Rather, they rest somewhere in the middle of the spectrum between consolidated democracies and full autocracies.

There are many different approaches to defining what makes a true democracy. The minimalists say that it only requires elections, whereas more elaborate definitions include the necessity of various civil liberties. One of the most prominent definitions of a true electoral democracy comes from the trusted, Washington-based think tank known as Freedom House. According to their definition, an electoral democracy includes:

1. A competitive, multiparty political system.
2. Universal adult suffrage for all citizens (with exceptions for restrictions that states may legitimately place on citizens such as sanctions for criminal offenses).
3. Regularly contested elections conducted in conditions of ballot secrecy, reasonable ballot security, and in the absence of massive voter fraud that yield results that are unrepresentative of the public will.
4. Significant public access of major political parties to the electorate through the media and through generally open political campaigning.[3]

While the absence of one of these criteria means that a nation cannot be considered an electoral democracy, Freedom House may deem that the country is still 'Partly Free.' Such a designation shows that even influential think tanks believe that democracies cannot easily be defined as a dichotomous 'yes' or 'no'.

---

[2] "A Good Example." The Economist. October 22, 2009. <http://www.economist.com/node/14699869?story_id=14699869>

[3] Freedom House, "Methodology." http://www.freedomhouse.org/template.cfm?page=35&year=2005

Other democracy indices go yet even further than Freedom House. The Economist Intelligence Unit's (EIU) Index of Democracy[4] includes the functioning of government, meaning that 'if democratically based decisions cannot or are not implemented then the concept of democracy is not very meaningful or it becomes an empty shell." The EIU also includes the political culture in its calculations. A nation with a high political culture score would have a fervently active citizenry that would regularly be divided into winners and losers, yet the losers would allow for the peaceful transition of power. Another index, Vanhanen's 'Polyarchy Index,' pays particular attention to participation.[5] A democracy in which a significant portion of the population does not participate can hardly be expected to represent the will of the people. For this paper, I have opted to use the Polity IV data set, which is similar to that of the EIU. I will go into further detail about this set later under the data section.

Having discussed what an ideal democracy would look like, it is important to look at the alternatives. At the far opposite end of the spectrum, there are countries like North Korea, which is about as autocratic as possible. Fully authoritarian regimes harshly crack down on any dissent, do not have multi-party elections, and generally do not respect universal human rights.

Clearly presenting democracy as a binary variable creates a false dichotomy. If a country is not a full democracy, one cannot assume that it is a full autocracy. Take the

---

[4] Laza Kekic. "The Economist Intelligence Unit's Index of Democracy." The Economist Intelligence Unit. 2007. pp 1-2
http://www.economist.com/media/pdf/DEMOCRACY_INDEX_2007_v3.pdf

[5] Tatu Vanhanen, "Introduction: Measures of Democratization," Center for the Study of Civil Wars, March 2000, 6-9
http://www.prio.no/misc/Download.aspx?file=%2fprojects%2fdataset-website-workspace%2fPolyarchy%2520Dataset%2520Manuscript%2ffile42501_introduction.pdf

nation of Turkey as an example. According to Freedom House, they were partly free in 2010.[6] Their level of freedom and democracy simply were not up to the same levels as, nations like the United States, yet it was clearly above others such as Saudi Arabia. These in-between nations are called by many different names, including flawed democracies, hybrid regimes, and even anocracies, but for the remainder of this paper, they will be referred to as anocracies, as that is what the Polity IV scale calls them.

While defining democracy is difficult enough, actually trying to quantify the strength of a democracy becomes an added challenge. Munck and Verkuilen (2002) claim there are three challenges surrounding this process: conceptualization, measurement, and aggregation.[7]

In order to conceptualize an index of democracy, one must first settle upon its definition. The 'thicker' the definition is, the more variables one must include, which runs the risk of adding 'theoretically irrelevant attributes.'[8] Similarly, if I take too minimalist of a definition, I run the risk of leaving out potentially important attributes. While I am not about to say there is a single, perfect definition I must strive for, these are problems that must be carefully thought out before the analyzing can even begin.

Having decided upon a certain definition and its attributes, I must determine how to measure them. For example, if the attribute is that elections are regularly contested, one might choose the number of years between elections as an indicator. These indicators

---

[6] Freedom House, "Map of Freedom in the World 2010," http://www.freedomhouse.org/template.cfm?page=363&year=2010

[7] Gerardo L. Munck and Jay Verkuilen, "Conceptualizing and Measuring Democracy: Evaluating Alternative Indices," Comparative Political Studies, February 2002, vol. 35 no. 1. 4-6, http://cps.sagepub.com/content/35/1/5.short?rss=1&ssource=mfc

[8] Ibid., pp 4-6.

ought to be reasonably homogenous, require minimal distinctions and should be able to be cross-checked through multiple sources.

TERRORISM

In this section I will look at prior academic findings to define terrorism, to explain how often it occurs, and to discuss how it affects the economy while controlling for different regime types (autocracy, anocracy, and democracy).

While one man's terrorist may be another's freedom fighter, I must still come to an apolitical definition of terrorism to continue. According to Enders and Sandler (2005), terrorism is defined as:

> 'the premeditated use or threat of use of extranormal violence or brutality by subnational groups or individuals to obtain a political objective through intimidation or fear directed at a large audience.'[9]

This is in line with most other definitions, including the United States' legal definition of terrorism, which is that it involves 'acts dangerous to human life that are a violation of the criminal laws of the United States or of any State' and is intended to intimidate a civilian population and influence government policy. [10]

In effect, terrorism is little more than deadly theater. Terrorists use mass media to stir up a frenzy among the populace and divert attention to their goals, which can be

[9] Walter Enders and Todd Sandler, "Transnational Terrorism 1968-2000: Thresholds, Persistence, and Forecasts," Sourthern Economic Journal. Vol. 71, No. 3. 2003 pp467-482. http://www.jstor.org/stable/20062054

[10] Legal Information Institute. "United States Code: Title 18,2331." Cornell Law, June 29, 2010 http://www.law.cornell.edu/uscode/718/usc_sec_18_00002331----000-.html

political, social, religious, nationalist, or ethnic, etc. Their terror is greatly amplified by their seemingly random time and locations.

Abadie and Gardeazabal quoted a Congressional Joint Economic Committee which found that terrorism has four main economic effects:

1. Capital stock (human and physical) of a country is reduced as a result of terrorist attacks
2. The terrorist threat induces higher levels of uncertainty.
3. Terrorism promotes increases in counter-terrorism expenditures, drawing resources from productive sectors for use in security.
4. Terrorism is known to affect negatively specific industries such as tourism[11]

The majority of these channels are not the direct results of the destruction wrought upon the country, but rather are the results of our reactions. With the possible exception of outlier attacks such as the collapse of the World Trade Centers on September 11th, 2001, terrorist attacks themselves have proportionally much smaller effect than the public's reaction to them.

In addition to these four effects, the Milken Institute published the "Economic Impacts of Global Terrorism: From Munich to Bali" which further describes the different economic effects of terrorism. One of their discoveries is that terrorist attacks act as a 'frictional cost and, unlike increased taxes or tariffs, does not provide public revenue.' Indeed, doubling the number of terrorist attacks reduces bilateral trade by approximately 4 percent[12].

---

[11] Alberto Abadie and Javier Gardeazabal. "Terrorism and the World Economy." University of the Basque Country," August 2007, 2. http://www.dfaeii.ehu.es/s0044-con/en/contenidos/informacion/00044_documentos/en_00044_dc/adjuntos/wp2005-19.pdf

[12] James R. Barth, Tong Li, Don McCarthy, Triphon Phumiwasana, and Glenn Yago. "Economic Impacts of Global Terrorism: From Munich to Bali." Milken Institute.

Many studies have empirically shown that terrorist attacks, especially deadly ones, occur more frequently in democratic countries than in autocratic countries. For example, in "The Macroeconomic Consequences of Terrorism," Blomberg, Hess and Orphanides showed that the incidence of terrorism was almost twice as likely in a rich democracy (0.425) than in a non-democracy (.233). However, when terrorism is viewed on a per capita basis, the 'relationship between governance, income, and terrorism is somewhat smaller.'[13] Such findings may come as a surprise to some who believe that democracy allows citizens to peacefully and regularly change the path their country is taking, therefore eliminating the need for political violence.

There are likely to be many causes why democracies face so many more terrorist attacks. One potential explanation concerns the information liberalization and the globalization that occurs when a country democratizes. Citizens have access to much more information, including seditious or hateful works which have the potential to incite political violence. They also have easy access to the information necessary to pulling off an attack.

Another reason democracies are more susceptible to attacks is inherent to the government's structure. Stephen Nemeth explains this as the 'loyalty index,' the ratio of

---

October 2006. pp 13-16 <http://www.milkeninstitute.org/pdf/econ_impact_terrorism.pdf> (accessed April 4, 2011)

[13] Brock Blomberg, Gregory Hess, Athanasios Orphanides, "The Macroeconomic Consequences of Terrorism." *Journal of Monetary Economics.* Vol. 51 Issue 5 2004. pp 10- 12 http://ideas.repec.org/a/eee/moneco/v51y2004i5p1007-1032.html

the "winning coalition" to the "selectorate."[14] The selectorate is the subset of the population that can influence public policy, which in a democracy is the electorate and in an autocracy it could be a few elites or party members. The winning coalition is a subset of this selectorate which is loyal to the leader in charge, which could simply be members of the majority party in a democracy.

Since the winning coalition can be highly variable in a democracy, and since the selectorate is virtually everyone, terrorists have an incentive to launch devastating public attacks. The fear is spread among the masses, forcing the leaders to take action. Furthermore, in a democracy with independent media, it is likely that the fright which the attacks impose is even greater.

By approaching the logic behind terrorist attacks, it becomes easier to understand why certain types of governments suffer different types of terrorism. In highly autocratic regimes, one is most likely to see assassinations, kidnappings, and acts of sabotage, whereas democracies are most likely to witness public attacks. In fact, for the past two decades, democracies have been the exclusive victim of suicide attacks.[15] Nemeth showed that, regardless of region, countries "scoring low on the Polity IV democracy score provided the highest level of attacks on political leaders and the lowest on the

---

[14] Stephen Nemeth. "Adaptive Tactics: Terrorist Targeting and Regime Type" University of Iowa. 2006. pp 9-14
http://myweb.uiowa.edu/snemeth/MPSA%20Terrorism%20Paper.pdf
[15] Robert A. Pape "The Strategic Logic of Suicide Terrorism." American Political Science Review Vol. 97, No3. August 2003, pp 2-4.
<http://www.danieldrezner.com/research/guest/Pape1.pdf>

public."[16] The public may not clamor to change policy after a kidnapping as much as they would if they felt their own lives were at stake.

Terrorists also consider democracies to be weaker than authoritarian regimes.[17] The government is subject to the will of the people, and therefore politicians must show their supporters that they are working to prevent future attacks. They can do this through stricter security or through concessions to the terrorists. Even if the politicians chose to do nothing, the terrorists could alter the national conversation about their grievances and pave the way for concessions down the road.

The Polity IV project provides ample reasoning to investigate this issue. Using their measures, they have shown that the annual likelihood of an act of political instability is most likely to occur in the anocracy range (-5<polity<5).[18] While this measure does not include terrorism, it is worth examining if this trend applies to terrorism as well.

Finally, while I have methodically gone through much of the literature explaining democracy and terrorism, there has been an odd lack of information of the effect of terrorism on regimes besides OECD and 'others.' This paper hopes to spur further literature on the subject.

---

[16] Nemeth, pg 6
[17] Pape, pp 3-7
[18] Monty G. Marhall and Keith Jaggers. "Polity IV Project: Political Regime Characteristics and Transitions, 1800-2009," April 2009. <http://www.systemicpeace.org/polity/polity4.htm>

DATA

The majority of the economic data comes from the World Bank's World Development Indicators (WDI) and the Africa Development Index (WDI). The WDI contains national data from 213 countries beginning in 1960.[19] These indicators cover a wide range of topics, from health care to the environment to the economies of each of these countries. The majority of the data used in this paper originated from this publication.

The WDI provided the measure I used for the net inflows of foreign direct investment (FDI). FDI is an important measure as it can be used as a bellwether for the level of risk associated with doing business in the country. Foreign investors have great flexibility in choosing where they want to do business. If two countries are relatively comparable in costs, but there is a higher probability of an attack in one (thus increasing the expected cost there), firms will shift to the more stable country.

I also looked at a country's gross capital formation rate, calculated annually. A country's gross capital formation attempts to identify the value of fixed, immovable investments which are created in a year. Again, these types of investments are a type of proxy for the market risk for long run stability. If a firm believes that any conflicts were about to occur in a region, they would not likely invest significant sums of money into fixed capital.

The total population used in this data set represents the total number of permanent residents in a country. The WDI includes all residents regardless of legal status or

[19] World Bank, "World Development Indicators," http://data.worldbank.org/data-catalog/world-development-indicators

citizenship – except for refugees and asylum-seekers, who are still considered residents of their country of origin. The total population measure is useful for it allows us to make per capita calculations and hopefully discover more significant results.

The 1990s were a period of great commodity price inflation. Since most economies in sub-Saharan Africa are not highly industrialized, they often rely on exporting primary commodities to other countries where value is added. Since reliance on primary goods leads to a significantly higher probability of suffering the resource curse or the 'Dutch Disease,' economic conditions that ought to be controlled for, I decided to use the WDI's data on primary commodities exports as a percentage of GDP.

The extent to which a country has an open economy could be a significant factor in determining how much a terrorist attack affects an economy. I took a country's net trade, measured as the sum of exports and imports as a percentage of GDP. The higher this percentage is, the more vulnerable an economy is to outside influences. In highly volatile world markets, or in markets skittish about investing in risky locations, investors might be quick to exit the market. As mentioned in the literature review, terrorist attacks tend to create costly barriers to trade as governments try to increase border security. With these reasons in mind, I decided to investigate whether the trade percentage rate would affect how much a terrorist attack affects the economy.

By the beginning of the twenty first century, the rate of urbanization in sub-Saharan Africa was higher than any other region in the world.[20] Some cities have even experienced growth rates between 11 and 15 % per year. While urbanization under

[20] Thomas D. Sisk, "City Level Democracy in the 21st Century," International Institute for Democracy and Electoral Assistance. 2002, pp1-3. <www.idea.int/publications/dll_africa/upload/Essay.pdf>

normal circumstances leads to greater economic specialization and is good for the economy in the long run, such extreme urbanization rates can significantly strain the ability of a government to maintain control and provide sufficient social services. Bearing these problems in mind, I decided to include WDI's urbanization rates.

For the real GDP, I found a United States Department of Agriculture data set which provides this data for 190 countries starting in 1969, computed with statistics from the WDI and the International Monetary Fund's International Financial statistics.[21] Overall, it is a strong data set, however, when it does not have adequate information for a given country and year, it proceeds to interpolate that information. Such straight-line interpolation hinders our efforts to examine the macroeconomic effects of terrorism, so I decided to drop this information. This has the unfortunate consequence of reducing the total number of observations for what are often countries within the middle to lower democracy levels.

In order to examine the level of democracy in a country I used the Polity IV index as compiled in the ADI. Polity IV's Institutionalized Democracy Index (IDI) is of particular importance to us. The IDI is an additive, weighted scale ranging from 0-10 and attempts to display the quality of democratic institutions based upon this definition (Marshall, Gurr, and Harff):

> A mature and internally coherent democracy, for example, might be operationally defined as one in which (a) political participation is unrestricted, open, and fully competitive; (b) executive recruitment is elective, and (c) constraints on

[21] United States department of Agriculture, "International Macroeconomic Data Set," http://www.ers.usda.gov/Data/Macroeconomics/

> the chief executive are substantial.[22]

The weighted variables used to create a working index out of this index are: competitiveness of executive recruitment, openness of executive recruitment, constraint on Chief Executive, and electoral competitiveness.[23] Using these variables as a basis, the IDI is able to discern between different types of regimes, even showing variation amongst those countries generally considered Western liberal democracies. The Polity IV codebook uses the example of France to say that the nation under Charles De Gaulle had a lower democracy score than later once he was out of office.[24]

The IDI is often used in conjunction with Polity IV's Institutionalized Autocracy Index (IAI). The IAI is similar to the IDI in its structure, as they are both additive, weighted indices whose range of scores run from 0-10. The IAI defines autocracy operationally as:

> In mature form, autocracies sharply restrict or suppress competitive political participation. Their chief executives are chosen in a regularized process of selection within the political elite, and once in office they exercise power with few institutional constraints. [25]

To create an index out of this definition, the IAI looks at five differently weighted variables. These are: competitiveness of executive recruitment, openness of executive recruitment, constraints on Chief Executive, regulation of participation, and

---

[22] Monty G. Marhall, Ted Robert Gurr, and Keith Jaggers. "Polity IV Project: Political Regime Characteristics and Transitions, 1800-2009," April 2009. pp 17-20. <www.systemicpeace.org/inscr/p4manualv2009.pdf >
[23] Idem., pp. 19-20.
[24] Idem., pg. 20
[25] Idem., pp 19-21

competitiveness of participation.

Many studies and organization use a combination of the IAI and the IDI known as the Combined Polity Index, which is included in the WDI. To compute this index, one subtracts the IAI from the IDI, meaning that the new variable is on a scale ranging from -10 to 10. According to Polity IV, the far left end of the spectrum, -10, can be considered a hereditary monarchy, whereas the far right end is a consolidated democracy.[26] There are also three ranges of democracies, which I discussed in the Democracy section of the literature review. Polity defines an autocracy as having a combined polity score of -6 or less, an anocracy has a score between -5 and +5, and a democracy has a score equal to or greater than +6.

Although this Combined Polity index is easily found through the World Bank, I decided against using this data set and instead opted to only use the IDI. The reason for doing so is explained by the Polity codebook, which notes 'that the middle of the implied POLITY 'spectrum' is somewhat muddled in terms of the original theory, masking various combinations of DEMOC and AUTOC scores with the same POLITY score.'[27] Since the combined polity score does not reflect exactly what I am looking for, I decided to concentrate on the IDI. In a similar fashion, I grouped the variables into three groups. Autocracies would be in the 0-3 range, anocracies would be either 4, 5, or 6, and democracies would be from 7-10. For this paper, I created a variable called RegimeType, in which 1 is autocracy, 2 is anocracy, 3 is democracy, and 4 means that there was no information.

[26] Idem., pp 20-22
[27] Idem., pp 19-21.

For my terrorism data, I used the open source Global Terrorism Database, which includes information on over 87,000 terrorist attacks since 1970. For an act to be included in the database, it must have these three attributes:

1. The incident must be intentional
2. The incident must entail some level of violence or threat of violence
3. The perpetrators of the incidents must be sub-national actors

Furthermore, the event must satisfy at least two of the following three criteria to be included.

1. The act must be aimed at attaining a political, economic, religious, or social goal.
2. There must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) than the immediate victims.
3. The action must be outside the context of legitimate warfare activities.[28]

This definition falls in line with the definition I discussed earlier in the literature review.

It can be difficult to determine whether coordinated terrorist attacks should be considered parts of a larger attack or individual attacks altogether. For example, should the planes that attacked the Pentagon on September 11th be considered part of the same attack, which included the planes that hit the World Trade Centers? According to the Global Terrorism Database, the answer is no. If either the location or times of occurrence of the attacks are discontinuous, then they will be regarded as individual attacks.[29]

There are several limitations to the data. The process by which the data is gathered is one such limitation. The data set is collected from news sources, both official and unofficial. Official statistics may try to downplay the extent of the damage caused by the

[28] National Consortium for the Study of Terrorism and Responses to Terrorism, "Global Terrorism Database," May 2010, pp-4-5. http://www.start.umd.edu/gtd/downloads/Codebook.pdf
[29] Idem., pp 6-7

attack, whereas the media may speculate too much or have inaccurate statistics. Some attacks may also be misattributed to a certain group, perhaps on purpose or maybe just on accident. Another limitation is that the quality, accuracy, and volume of information all vary greatly by country.[30] The known information can be very ambiguous, and some countries (and their respective independent media) may not have the resources to commit to a full investigation.

For this paper, I generated another two variables from the data set. First, I added the number of people killed and added it to the number of people wounded to generate a variable representing the total number of casualties. Secondly, I generated a list of the number of terrorist attacks per year for each country. These numbers hope to capture both the magnitude and the rate of attacks over this period.

In order to fully investigate the economic consequences of terrorism, I must control for internal conflicts. To do so, I turned to the Political Instability Task Force's (PITF) PITF-State Failure Problem Set which contains data for 307 events between 1955 and 2009. The events are separated into four separate categories: ethnic wars, revolutionary wars, adverse regime changes, and genocide or politicide.[31]

The PITF defines a revolutionary war as an 'episode of violent conflict between governments and politically organized groups (political challengers) that seek to overthrow the central government, to replace its leaders, or to seize power in one

[30] National Counterterrorism Center, "Country Reports on Terrorism 2005," Statistical Annex. April 7, 2006, 4. < www.state.gov/documents/organization/65489.pdf>
[31] Monty G. Marshall, Ted Robert Gurr, and Barbara Harff. PITF-State Failure Problem Set. Dataset and Coding Guidelines. May 7 2010. pp 1-5. <www.systemicpeace.org/inscr/PITFProbSetCodebook2009.pdf>

region."[32] It is operationally defined as a having at least 100 armed agents, demonstrators, troops, etc. and having at least 1000 direct conflict-related deaths over the full course of the conflict and having at least one year in which more than 100 were killed.

Ethnic wars arise between governments and ethnic communities which attempt to challenge their status in society. Similar to revolutionary wars, there must be more than 1000 people mobilized to cross the mobilization threshold and more than 1000 direct conflict-related deaths must be accounted for over the time period for the conflict to be designated as an ethnic war.[33]

Adverse regime changes involve a significant, adverse shift in governance. Using the combined POLITY index, there must be at least a six-point drop on the scale.[34] This could be the result of a coup, an armed conflict, or even by popular referendum. By relying upon the Polity scale, this variable encounters many of the same problems.

The PITF defines genocides and politicides as events which 'involve the promotion, execution, and/or implied consent of sustained policies by governing elites or their agents that result in the deaths of a substantial portion of either communal group.'[35] Their operational definition has three different criteria which must be satisfied: complicity in mass murder must be well established, the period must last at least six months, and their victims are non-combatants. The total number of people killed does not play a role in determining an event's status of genocide, as the victimized group may not have started off very large.

---

[32] Idem., 4
[33] Idem., 5
[34] Idem., 10-14
[35] Idem., 14-16

This data set is very comprehensive, but there can be problems in compiling them together. For example, some of the conflicts may be considered both an ethnic war and a genocide. If I were to simply combine everything, I would run the risk of double counting certain events. Therefore, to prevent this from happening when I was compiling this into one data set, 'Internal Conflict,' I simply used a dummy variable to show that there existed an internal conflict in that country during that year. While this prevents double counting, I cannot adequately investigate how the magnitude of the internal conflict affects our model.

Just as it was important to control for internal conflict, I must also control for external ones. To do so, I turned to the International Crisis Behavior Project dataset. This dataset defines an external conflict as a 'specific act, event or situational change which leads decision-makers to perceive a threat to basic values, time pressure for response and heightened probability of involvement in military hostilities.'[36] While their dataset consists of a variety of different types of external conflicts, I only include those which have an element of violence. Then, similar to the internal conflict data, I created a dummy variable to determine whether a country had an external conflict during a given year.

[36] Johnathan Wilkenfeld and Michael Brecher, "Codebook for ICB2 – International Crisi Behavior Project." July 2010, pp13-15. http://www.cidcm.umd.edu/icb/data/ICB2-2010-final.pdf

RESULTS

BASIC STATISTICS

Table 1 contains basic statistics for all sub-Saharan African countries for the years between 1970 and 2009. When I look at dy, the variable for logged real GDP growth, some statistics jump out at us. First of all, sixteen countries averaged negative growth rates. While the average for the nation is positive, much of the continent has yet to fully realize its potential.

Sub-Saharan African countries averaged approximately 3.21 terrorist attacks a year. However, this figure is beset by many outliers and irregularities in the data. For example, simply controlling for South Africa (ZAF) reduces the average number of terrorist attacks to 2.04. Similarly, this measure neither shows the distribution of attacks over the years nor shows if they were clustered together. Nonetheless, it is helpful to start here to see which countries have been hit the most over these years.

Investment, which is the log of gross capital expenditures, seems to be relatively well distributed. Perhaps surprisingly, Equatorial Guinea has the highest level (3.52), whereas the Central Africa Republic has the lowest (2.40). There exists a strong correlation between investment and trade as a percentage of GDP, which is defined as the sum of net imports and exports divided by the total GDP. To prevent collinearity from throwing off the results, I have proceeded to only use trade as a percentage of GDP in future statistics.

REGRESSION ON TERRORISM INCIDENTS

Table 2 is a panel regression looking at different variables to determine if they influence the rate of terrorism. The first regressions include dy and the existence of external conflict during the year (E), but continue to include a country's urbanization rate (Urb), institutionalized democracy index level (Dem), commodity exports as a percentage of GDP (ComExp), the log of international trade as a percentage of GDP (Open), and number of internal conflicts per year (IC).

Without any discrimination amongst the countries, I see that only Dem remains significant as variables are included. As the country becomes more democratic it tends to experience more terrorism. This is what I expected to find, as most literature has found similar results. Internal conflicts also tend to increase the number of terrorist attacks, which also makes sense. However, the robust standard error for IC is rather large, diminishing its effect in helping us investigate the causes of terrorism. Furthermore, even after all of the variables are taken into account, only approximately 24% of the variation is explained.

Having looked at all the countries together, I split the countries into autocracies, anocracies, and democracies and proceeded to run the same panel regressions. When a country is an autocracy (Regime 1), little information can be extracted. However, internal conflict continues to have a significant impact, and its standard error is smaller, which is the silver lining to these regressions.

Little more information is available for anocracies. Again, income has no significant impact on the incidence of terrorism. However, the existence of an external conflict in a given year significantly *decreases* the number of attacks. We must take this

revelation with a grain of salt, as there are not enough observations to continue investigating its significance, but it remains something which ought to be considered in the future.

Democracies here have the most significant – and interesting – findings. While democracies have a higher average rate of democracy, once they are in the 'democracy' range, they begin to endure fewer terrorist events as Dem increases. While this seems to fly in the face of most of the literature, we must consider another fact. Perhaps once a government passes a certain threshold, a democracy begins to have fewer attacks. This begs the question if I should further subdivide democracies and run panel regressions to investigate their effects, but this will not be answered in this paper. There is also the significant chance that I do not have enough observations, that there have too few democracies for enough years to truly say for sure.

REGRESSIONS ON GDP GROWTH

I have decided to run panel regressions in the very same manner to determine the macroeconomic consequences of terrorism.

The panel regression with all of the countries contains many significant variables, the most important one being T, the number of terrorist attacks in a year. Throughout the entire panel, the number of terrorist attacks remains significant and negative at the 5% level. Later, the number of casualties becomes significant at the same level – leadings us to believe that there indeed is a strong correlation between the economy and both the number of and the magnitude of the attacks.

Several other variables start off significant but lose this status as more variables are added. The most interesting case of this involves the institutionalized democracy index. At one point, Dem was significant at the 1% level, but began to drop off once I included commodities as a percentage of GDP (ComExp) and is no longer significant once openness is included.

Luckily I get better panel regression results when looking at the variables causing growth. In the first case, autocracy, I see that neither the magnitude (cas) nor the rate (T) of terrorist attacks become significant until I include several variables. However, the results are mixed. T follows the traditional model, and each attack has a significant and adverse (albeit small) effect on dy, but the number of casualties actually correlates to a *positive* increase in dy. However, these effects only become significant once the number of observations drops from 1145 to 407 after I include the ComExp variable, leading me to believe that this is the result of outliers in a smaller sample.

While it does not extend throughout all of the regressions, terrorism does seem to have a significant impact on dy. However, I did not expect the results to be positive throughout the entire panel. This may be a result of only using 179 (or, later, only 88) observations. On the other hand, I have at least one regression which shows that the magnitude of terrorism indeed has a very significant (at the 1% level) and negative effect.

The last panel regression looks at the channels which affect real GDP per capita growth. Until the last few variables are added, terrorism has a significant but negative effect, yet this result changes once I add the variable ComExp. The results are not perfect, but it is not a bad assumption to say that terrorism affects dy, but only by a small magnitude.

CONCLUSION

I started this paper to determine whether it was foolish to limit democracy to a binary variable when studying the effects of terrorism. Having run several regressions, I can finally arrive at several conclusions.

Just as the literature said, I found that democracies do indeed suffer from higher levels of terrorist attacks, but the relationship between democracy and terrorist incidents does not seem to be completely linear or continuous. My data show that democracies have a higher mean of attacks, yet my regressions say up to the 1% confidence level that, once a nation becomes a democracy, further democratization actually brings about a desirable solution to terrorism.

The strength of the correlation between regime type and number of terrorist attacks breaks down pretty quickly once I move on to anocracies and autocracies. While the data shows that the relationship between anocracy and terrorism is at least somewhat significant and negative, the evidence is not strong enough to warrant any significant conclusions.

I can reach similar conclusion concerning the economic effects of terrorism. I see that both the quantity and magnitude of terrorist attacks affect growth through different yet significant channels. Why the regressions have shown that casualties actually correlate to a small increase in growth is something which the model does not explain, yet is worth exploring in future papers.

When I looked at the same effects on a regime basis, I came across results which were both expected and unexpected. I both expected and found terrorism to have a statistically significant and negative relation to growth in democracies, but I did not think that anocracies would have statistically significant and *positive* results. For this reason, I suspect that my hypothesis that terrorism has different effects on different types of regimes is correct, but the assumption of the channels through which this occurs requires further studies.

TABLES

Country List

Country Code	Country
AGO	Angola
BDI	Burundi
BEN	Benin
BFA	Burkina Faso
BWA	Botswana
CIV	Cote d'Ivoire
CMR	Cameroon
COG	Congo, Republic of
COM	Comoros
CPV	Cape Verde
DJI	Djibouti
ERI	Eritrea
ETH	Ethiopia
GAB	Gabon
GHA	Ghana
GIN	Guinea
GMB	Gambia, The
GNB	Guinea-Bissau
GNQ	Equatorial Guinea
KEN	Kenya
LBR	Liberia
LSO	Lesotho
MDG	Madagascar
MLI	Mali
MOZ	Mozambique
MRT	Mauritania
MUS	Mauritius
MWI	Malawi
NAM	Namibia
NER	Niger
NGA	Nigeria

RWA	Rwanda
SDN	Sudan
SEN	Senegal
SLE	Sierra Leone
SOM	Somalia
STP	Sao Tome and Principe
SWZ	Swaziland
SYC	Seychelles
TCD	Chad
TGO	Togo
TZA	Tanzania
UGA	Uganda
ZAF	South Africa
ZAR	Congo, DR
ZMB	Zambia
ZWE	Zimbabwe

Basic Country Statistics

Country	dy	T	Investment	Trade (%GDP)
AGO	0.02	11.98	2.65	112.32
BDI	0.00	8.70	2.29	33.16
BEN	0.01	0.23	2.79	45.86
BFA	0.01	0.08	2.94	35.16
BWA	0.05	0.20	3.45	100.29
CIV	-0.01	1.00	2.65	73.51
CMR	0.01	0.53	2.95	45.96
COG	0.01	0.63	3.29	113.77
COM	-0.01	0.13	2.88	55.90
CPV	0.04	0.18	3.37	74.08
DJI	-0.02	0.48	2.54	99.65
ERI	0.00	0.00	3.11	84.88
ETH	0.01	3.28	2.88	28.28
GAB	0.01	0.10	3.44	96.65
GHA	0.00	0.43	2.63	57.04
GIN	0.01	0.30	2.93	56.58
GMB	0.01	0.08	2.86	100.66
GNB	0.00	0.18	3.15	54.86
GNQ	0.04	0.03	3.52	126.39
KEN	0.01	3.48	3.01	59.55
LBR	-0.04	0.00	2.47	108.82
LSO	0.03	0.60	3.50	134.86
MDG	-0.02	0.50	2.55	47.00
MLI	0.01	1.13	2.94	51.76
MOZ	0.02	5.58	2.82	51.82
MRT	0.01	0.25	3.12	101.28
MUS	0.04	0.00	3.24	118.36
MWI	0.01	0.10	3.02	61.83
NAM	0.00	3.55	3.00	108.40
NER	-0.01	1.30	2.52	43.89
NGA	0.01	7.35		57.39
RWA	0.01	3.30	2.71	32.75
SDN	0.02	4.50	2.74	27.89
SEN	0.00	2.23	2.80	64.45

SLE	0.00	2.20	2.28	48.09
SOM		13.43	3.13	56.89
STP	0.00	0.00		
SWZ	0.01	0.38	3.04	153.70
SYC	0.02	0.05	3.30	152.43
TCD	0.00	1.10	2.61	55.59
TGO	-0.01	1.20	2.97	88.89
TZA	0.01	0.25	2.96	49.24
UGA	0.01	7.88	2.51	32.58
ZAF	0.00	59.27	3.03	52.01
ZAR	-0.03	3.06	2.24	44.40
ZMB	-0.01	1.50	2.97	74.35
ZWE	-0.01	4.23	2.83	57.32
Total	0.01	3.34	2.90	72.40

PANEL REGRESSIONS

Panel 1:
Regressions on T

T	Basic	1	2	3	4	5
dy	-6.714778	-5.381776	-5.947839	-17.00118	-4.738465	-6.790697
	[3.95462]	[3.967298]	[4.631401]	[11.49534]	[11.03414]	[12.81577]
E	0.7127112	1.132087	1.322257	-3.178603	-4.362972	-6.202729
	[1.265667]	[1.26918]	[1.330112]	[3.023609]	[3.522537]	[5.911022]
Urb		-0.3323698***	-0.2075133*	-0.1203773	-0.4104052	0.0759146
		[0.1299773]	[0.1163457]	[0.3943392]	[0.4362243]	[0.4710139]
Dem			0.7227101***	1.482313***	1.605265***	1.623269***
			[0.2087057]	[0.002]	[0.4832094]	[0.4260908]
ComExp				-11.58517***	-3.927183	-3.37204
				[3.793256]	[3.205379]	[3.107236]
Open					-7.010301***	34.66291
					[1.756738]	[6.593354]
IC						5.480265***
						[7.202556]
Obs.	1848	1838	1558	594	593	593
R^2	0.0006	0.0026	0.0183	0.0414	0.0522	0.2404

Notes: Robust standard errors are presented in square brackets. *, ** and *** represent statistical significance at the .10, .05 and .01 levels, respectively. All specifications include time and individual fixed e□ects. Models (1) through (5) are di□erent specifications of panel T regressions. Models (1) through (5) are the basic OLS model adding separately other variables such as the urbanization rate (Urb), the institutionalized democracy level (Dem), external wars (W), commodity exports as a percentage of GDP (ComExp), and net trade as a percentage of GDP (Open). Included in each regression is the lag of GDP per capita (dy) and dummy variable for the presence of external conflicts (E). R-squared is calculated without fixed e□ects.

Panel 2:
Regime 1: Regressions on T

T	Basic	1	2	3	4	5
dy	3.357636 [3.343248]	3.793113 [3.420067]	3.797585 [3.436255]	3.583856 [9.675705]	6.115701 [9.924302]	7.711821 [10.93254]
E	0.5502543 [0.6739511]	0.5023535 [0.7033981]	0.5023649 [0.7044133]	0.1123656 [2.475329]	-0.0240621 [2.492795]	-0.0975372 [2.107476]
Urb		0.0279693 [0.1242099]	0.0279911 [0.1239641]	0.4655204 [0.3970032]	0.3546688 [0.4191705]	0.4931313 [0.4333099]
Dem			0.0004986 [0.1797106]	-0.1095606 [0.53198]	0.0638892 [0.4991586]	-0.3970162 [0.5039452]
ComExp				-2.06178 [2.855946]	0.5124643 [2.718066]	0.8528496 [2.30658]
Open					-2.275075** [0.9514146]	-0.6627574 [1.141557]
IC						13.45967*** [3.812997]
Obs.	1149	1145	1145	407	406	406
R^2	0.0009	0.0009	0.0009	0.0086	0.0146	0.1499

Notes: Robust standard errors are presented in square brackets. *, ** and *** represent statistical significance at the .10, .05 and .01 levels, respectively. Models (1) through (5) are di□erent specifications of panel T regressions. Models (1) through (5) are the basic OLS model adding separately other variables such as the urbanization rate (Urb), the institutionalized democracy level (Dem), external wars (W), commodity exports as a percentage of GDP (ComExp), and net trade as a percentage of GDP (Open). Included in each regression is the lag of GDP per capita (dy) and dummy variable for the presence of external conflicts (E). R-squared is calculated without fixed e□ects.

Panel 3:
Regime 2: Regressions on T

T	Basic	1	2	3	4	5
dy	3.035089 [6.026472]	4.730578 [8.821934]	14.56877 [11.4536]	1.547419 [2.227183]	1.675774 [2.186149]	1.189719 [2.358108]
E	-2.451905*** [0.8933275]	-2.163614** [0.6246251]	-1.099797*** [0.4131589]			
Urb		-0.0710914** [0.157418]	0.0735618 [0.1147829]	-0.060855 [0.1479711]	-0.0571513 [0.1502276]	-0.0236371 [0.148381]
Dem			-4.74175*** [1.791588]	-0.346266 [0.6968985]	-0.565339 [0.6364979]	-0.5616728 [0.642561]
ComExp				2.795451 [2.817392]	0.677612 [3.535348]	0.3763759 [3.692345]
Open					1.282515 [0.9057561]	1.378482 [0.890614]
IC						0.8499823 [1.048992]
Obs	180	179	179	88	88	88
R^2	0.0008	0.0011	0.1469	0.0201	0.0386	0.042

Notes: Robust standard errors are presented in square brackets. *, ** and *** represent statistical significance at the .10, .05 and .01 levels, respectively. Models (1) through (5) are di□erent specifications of panel T regressions. Models (1) through (5) are the basic OLS model adding separately other variables such as the urbanization rate (Urb), the institutionalized democracy level (Dem), external wars (W), commodity exports as a percentage of GDP (ComExp), and net trade as a percentage of GDP (Open). Included in each regression is the lag of GDP per capita (dy) and dummy variable for the presence of external conflicts (E). R-squared is calculated without fixed e□ects.

Panel 4:

Regime 3: Regressions on T

T	Basic	1	2	3	4	5
dy	-35.88067*** 14.05418	-35.11378** 14.80339	-94.63734** 48.68246	-189.9495 141.5096	-78.86417 131.315	155.3015 125.2353
E	1.019145 4.493351	1.211445 4.519595	-8.144114 12.2562	-36.66727*** 12.60153	-49.95343*** 11.64871	-37.58856** 15.69967
Urb		-0.6613947*** 0.2702969	-6.341106*** 1.669998	-8.225093*** 3.24474	-6.686573* 3.667184	-9.392554*** 3.647633
Dem			-15.43894*** 3.87441	-26.83744*** 6.616655	-26.523*** 6.486658	-19.79242*** 4.653891
ComExp				-106.5957*** 30.38288	-65.39357** 30.16607	-59.40707*** 19.33918
Open					-57.24056*** 19.29783	11.59368 15.17744
IC						108.0213** 16.55012
Obs.	519	514	234	99	99	99
R^2	0.0064	0.0087	0.1264	0.2257	0.2938	0.6527

Notes: Robust standard errors are presented in square brackets. *, ** and *** represent statistical significance at the .10, .05 and .01 levels, respectively. Models (1) through (5) are di□erent specifications of panel T regressions. Models (1) through (5) are the basic OLS model adding separately other variables such as the urbanization rate (Urb), the institutionalized democracy level (Dem), external wars (W), commodity exports as a percentage of GDP (ComExp), and net trade as a percentage of GDP (Open). Included in each regression is the lag of GDP per capita (dy) and dummy variable for the presence of external conflicts (E). R-squared is calculated without fixed e□ects.

Notes: For the remaining tables, robust standard errors are presented in square brackets. *, ** and *** represent statistical significance at the .10, .05 and .01 levels, respectively. Models (1) through (7) are di□erent specifications of panel growth regressions. Models (1) through (7) are the basic OLS model adding separately other variables such as the urbanization rate (Urb), the institutionalized democracy level (Dem), the dummy variable for the presence of an external conflict (E), commodity exports as a percentage of GDP (ComExp), the number of casualties as a result of terrorist attacks (cas), internal conflict (IC) and net trade as a percentage of GDP (Open). Included in each regression is the lag of GDP per capita (lnylag) and the number of terrorist attacks (T). R-squared is calculated without fixed effects.

Effects on Growth

dy	Basic	With E	With E, Urb	With E, Urb, Dem	with E, Urb, Dem, Cas	with E, Urb, Dem, Cas, ComExp	with E, Urb. Dem, Cas, ComExp, Open	with E, Urb, Dem, Cas, ComExp, Open, IC
T	-0.0001127** [0.0000566]	-.0001098** [0.0000569]	-0.0001028* [0.0000574]	-0.0000953** [0.0000532]	-0.0002124** [0.0001134]	-0.0005644** [0.0002518]	-.0004904** [.0002412]	-.0004713** [0.0002191]
lnylag	0.0025497 [0.0014746]	.0024239* [0.0014768]	0.0034096** [0.0015863]	0.0027989* [0.001721]	0.0029747** [0.0016984]	0.0023011 [0.0026485]	-0.0013288 [.0027372]	-0.0013823 [.00272]
E		-.0244934* [0.0093559]	-0.0276512*** [0.0091981]	-0.0221312** [0.0101454]	-0.0225846** [0.0101455]	-0.0262583 [0.0209036]	-0.0194164 [.0199336]	-0.019029 [.0196916]
Urb			0.0025975*** [0.000954]	0.0025893*** [0.0009165]	0.0025716*** 0.0009181	0.0026099 [0.0021022]	0.0033975 [.0021431]	0.0033279 [.0021957]
Dem				0.0022592*** [0.0004808]	0.0023152*** [0.0004727]	0.0015219* [0.0008522]	0.0013143 [.0008239]	0.0012832 [.0008339]
Cas					0.0000296 [0.0000325]	0.0001244* [0.0000691]	.0001254** [.0000673]	.0001277** [.0000694]
ComExp						0.0582308** [0.0260883]	0.0373713 [.0249586]	0.0375155 [.0249047]
Open							.0265491*** [.0077967]	.0260778*** [.0078309]
IC								-0.0047274 [.0105551]
Obs.	663	1838	1611	1558	1558	594	593	593
R^2	0.028	0.0141	0.0366	0.0225	0.0266	0.0897	0.1183	0.1188

Effects on Growth: Regime 1

dy	Basic	With E	With E, Urb	With E, Urb, Dem	with E, Urb, Dem, Cas	with E, Urb, Dem, Cas, ComExp	with E, Urb. Dem, Cas, ComExp, Open	with E, Urb, Dem, Cas, ComExp, Open, IC
T	0.0002254 [0.0002881]	0.0002296 [0.0002904]	0.0002262 [0.0002967]	0.0002274 [.0002418]	0.0000291 [0.0002592]	-0.0008272** [0.0003102]	-0.0007559* [0.000306]	-0.0007499* [0.0003152]
lnylag	0.0008992 [0.0023033]	0.0007936 [0.0023021]	0.0010602 [0.0023269]	0.0017501 [.0020072]	0.001864 [0.0020049]	0.0035219 [0.0040539]	-0.0024352 [0.0043286]	-0.0024465 [0.0043363]
E		-0.0217179** [0.011406]	-0.0240583** [0.0113405]	-0.0235758** [0.0114506]	-0.0241127** [0.0114362]	-0.0198861 [0.0274706]	-0.0171038 [0.0270436]	-0.0170977 [0.0270776]
Urb			0.001624 [0.0011633]	.001999** [.000921]	0.0019745* [0.0009197]	0.0023564 [0.0016294]	0.0035374** [0.001636]	0.0035252** [0.001645]
Dem				.0083823*** [.0025987]	0.0081655*** [0.0025968]	0.0094774*** [0.004672]	0.0080778* [0.0046133]	0.0081093** [0.0046357]
Cas					0.0000274 [0.000013]	0.0001403* [0.0000268]	0.0001391** [0.0000264]	0.0001395* [0.0000268]
ComExp						0.0684119** [0.0168856]	0.050746** [0.0178017]	0.0507498* [0.0178241]
Open							0.0281068*** [0.007731]	0.0280433*** [0.0077808]
IC								-0.0008015 [0.0099577]
Observations	1149	1149	1145	1145	1145	407	406	406
R^2	0.0009	0.004	0.0068	0.0115	0.0196	0.1187	0.1505	0.1505

Effects on Growth: Regime 2

dy	Basic	E	E, Urb	E, Urb, Dem	E, Urb, Dem, Cas	E, Urb, Dem, Cas, ComExp	E, Urb. Dem, Cas, ComExp, Open	E, Urb, Dem, Cas, ComExp, Open, IC
T	0.0001031	0.0001119	0.00013	0.0004949**	0.000916***	0.0021843	0.0021824	0.00241
	[0.0001857]	[0.0002904]	[0.000224]	[0.0004592]	[0.0004831]	[0.0038077]	[0.0038309]	[0.0038069]
lnylag	.0079249**	0.0075774**	0.0051768	0.0029596	0.0026231	-0.0001756	0.0006333	0.0020019
	[0.0034743]	[0.0034938]	[0.0033532]	[0.0041678]	[0.0041089]	[0.0069535]	[0.0085952]	[0.0085853]
E		0.0473279***	0.0102854	0.0099162	0.0074411			
		[0.0050476]	[0.0074428]	[0.0482011]	[0.0475045]			
Urb			0.0076247***	0.0071556***	0.0076521***	0.0128332***	0.0130422***	0.0149519**
			[0.0014269]	[0.0013297]	[0.0013253]	[0.0049604]	[0.0051546]	[0.0052815]
Dem				0.0118961**	0.0086408	0.0133314	0.0135302	0.013322
				[0.0057996]	[0.0058624]	[0.0133199]	[0.0134568]	[0.0133622]
Cas					-0.0002527***	-0.0005776	-0.0005759	-0.0007779
					[0.0001016]	[0.0011534]	[0.0011605]	[0.0011605]
ComExp						-0.0760205*	-0.0700854	-0.0859015
						[0.054178]	[0.0656775]	[0.0660997]
Open							-0.0044043	-0.0008887
							[0.0271904]	[0.0271041]
IC								0.0497375***
								[0.0339519]
Observations	180	180	179	179	179	88	88	88
R^2	0.0184	0.0229	0.1808	0.2003	0.2281	0.1607	0.161	0.1832

Effects on Growth: Regime 3

dy	Basic	With E	With E, Urb	With E, Urb, Dem	with E, Urb, Dem, Cas	with E, Urb, Dem, Cas, ComExp	with E, Urb. Dem, Cas, ComExp, Open	with E, Urb, Dem, Cas, ComExp, Open, IC
T	-0.0002047*** [0.0000619]	-0.0001999*** [0.000062]	-.0002058*** [.0000624]	-0.0001296*** [0.000071]	-0.0002974** [0.0001979]	-0.0002595 [0.0002149]	-0.0002122 [0.0002105]	0.000035 [0.0002249]
lnylag	0.0036481 [0.0024007]	0.0033691 [0.0024216]	0.0051225 [.0033346]	0.0033628 [0.002542]	0.0034946 [0.0025471]	-0.0008034 [0.0046798]	-0.0017122 [0.00458]	-0.0017258 [0.0044387]
E		-0.0356461** [0.0157848]	-.0359985** [.0158016]	-0.0111501 [0.0159784]	-0.0108276 [0.0159885]	-0.0329317* [0.0228164]	-0.0207846 [0.0228287]	-0.0142066 [0.0222678]
Urb			0.0027451 [.0028646]	0.0003136 [0.0018508]	0.0003485 [0.0018519]	-0.0042843 [0.0037818]	-0.0048796 [0.0036967]	-0.0022566 [0.0037209]
Dem				0.0074891*** [0.0032788]	0.0074772** [0.00328]	0.0022585*** [0.005577]	0.0036602 [0.0054708]	0.0060071 [0.0053778]
Cas					0.0000502 [0.0000553]	0.0000503 [0.0000573]	0.0000566 [0.000056]	0.000041 [0.0000546]
ComExp						0.0583168** [0.0366163]	0.0399636 [0.036532]	0.0481779 [0.0355451]
Open							0.0346876* [0.0145606]	0.0169964 [0.015654]
IC								-0.0408386* [0.0156407]
Obs.	519	519	514	234	234	99	99	99
R^2	0.0116	0.0194	0.0264	0.069	0.0923	0.1072	0.1601	0.2199

BIBLIOGRAPHY

Abadie, Alberto and Javier Gardeazabal, "Terrorism and the World Economy," University of the Basque Country. August 2007, pp 2. <http://www.dfaeii.ehu.es/s0044-con/en/contenidos/informacion/00044_documentos/en_00044_dc/adjuntos/wp2005-19.pdf> (accessed April 19, 2011)

Barth, James R., Tong Li, Don McCarthy, Triphon Phumiwasana, and Glenn Yago, "Economic Impacts of Global Terrorism: From Munich to Bali," Milken Institute. October 2006, pp 13-16. <http://www.milkeninstitute.org/pdf/econ_impact_terrorism.pdf> (accessed April 4, 2011)

Blomberg, Brock, Gregory Hess, Athanasios Orphanides, "The Macroeconomic Consequences of Terrorism." *Journal of Monetary Economics.* Vol. 51 Issue 5 2004. 10- 12 <http://ideas.repec.org/a/eee/moneco/v51y2004i5p1007-1032.html> (accessed January 24, 2011)

Enders, Walter and Todd Sandler, "Transnational Terrorism 1968-2000: Thresholds, Persistence, and Forecasts," Southern Economic Journal. Vol. 71, No.3. 2003. pp 467-482. <http://www.jstor.org/stable/20062054> (accessed March 27, 2011)

Freedom House, "Methodology," <http://www.freedomhouse.org/template.cfm?page=35&year=2005> (accessed March 17, 2011)

Freedom House, "Map of Freedom in the World 2010," <http://www.freedomhouse.org/template.cfm?page=363&year=2010> (accessed March 17, 2011)

Huntington, Samuel P. *The Third Wave: Democratization in the Late Twentieth Century* (Norman: University of Oklahoma Press, 1991), pp3.

Kekic, Laza. "The Economist Intelligence Unit's Index of Democracy." The Economist Intelligence Unit. pp. 1-2 <http://www.economist.com/media/pdf/DEMOCRACY_INDEX_2007_v3.pdf> (accessed February 21, 2011)

Legal Information Institute. "United States Code: Title 18,2331." Cornell Law. June 29 2010. <http://www.law.cornell.edu/uscode/718/usc_sec_18_00002331----000-.html> (accessed March 20, 2011)

Marshall, Monty G, Ted Robert Gurr, and Barbara Harff, "PITF-State Failure Problem Set. Dataset and Coding Guidelines," May 7 2010. pp 1-10, 14-16. <www.systemicpeace.org/inscr/PITFProbSetCodebook2009.pdf> (accessed February 21, 2010)

Marhall, Monty G., Ted Robert Gurr, and Keith Jaggers. "Polity IV Project: Political Regime Characteristics and Transitions, 1800-2009," April 2009. pp 17-22. <www.systemicpeace.org/inscr/p4manualv2009.pdf> (accessed February 21, 2011)

Munck, Gerardo L. and Jay Verkuilen, "Conceptualizaing and Measuring Democracy: Evaluating Alternative Indices," Comparative Political Studies Vol. 35 No.1, 2002. pp. 4-6<http://cps.sagepub.com/content/35/1/5/> (accessed April 4, 2011)

National Counterterrorism Center. Country Reports on Terrorism 2005, Statistical Annex. April 7, 2006, 4. < www.state.gov/documents/organization/65489.pdf> (accessed March 24, 2011)

Nemeth, Stephen. "Adaptive Tactics: Terrorist Targeting and Regime Type." 2006. University of Iowa. pp 6, 9-14 <http://myweb.uiowa.edu/snemeth/MPSA%20Terrorism%20Paper.pdf> (accessed April 6, 2011)

Pape, Robert A. "The Strategic Logic of Suicide Terrorism." American Political Science Review Vol. 97, No3. August 2003, pp 2-7. <http://www.danieldrezner.com/research/guest/Pape1.pdf> (accessed April 3, 2011)

"Polity and the Onset of Political Instability Events, 1995-2006." Center for Systemic Peace. 2008. <http://www.systemicpeace.org/polity/PTfig03.htm> (accessed February 21, 2011)

Sisk, Thomas D. "City Level Democracy in the 21st Century," International Institute for Democracy and Electoral Assistance. 2002, pp 1-3. <www.idea.int/publications/dll_africa/upload/Essay.pdf> (accessed April 3, 2011)

Vanhanen, Tatu "Introduction: Measures of Democratization," Center for the Study of Civil Wars, March 2000, pp 6-9 <http://www.prio.no/misc/Download.aspx?file=%2fprojects%2fdataset-website-workspace%2fPolyarchy%2520Dataset%2520Manuscript%2ffile42501_introduction.pdf> (accessed February 15, 2011)

Wilkenfeld, Johnathan and Michael Brecher, "Codebook for ICB2 – International Crisi Behavior Project." July 2010, pp13-15. http://www.cidcm.umd.edu/icb/data/ICB2-2010-final.pdf (accessed April 12, 2011).