Does Democracy Promote Transnational Terrorist Incidents?

QUAN LI
Assistant Professor
Department of Political Science
The Pennsylvania State University
107 Burrowes Building
University Park, PA 16802
Email: quanli@psu.edu
Phone: 814.865-6575
Fax: 814.863-8979

Does democracy promote transnational terrorist activities? The effect of democracy on transnational terrorism is debated. Two theoretical arguments posit exactly opposite effects by democracy (see, e.g., Eubank and Weinberg 1994; Eyerman 1998; Ross 1993). According to one argument, democratic societies should be associated with less terrorism. Democracies offer access for citizens to seek recourse to their grievances and democratic rules ensure the non-violent resolution of conflicts of interest. To further their interest, groups in democratic societies are more likely to pursue available non-violent alternatives than costly terrorist activities. According to the competing argument, democratic countries should be associated with more terrorism. Democracies provide relative more freedom of speech, movement, association, and access to government buildings, which not only permits parochial interests to get organized but also reduces the costs of conducting terrorist activities. In other words, open democratic societies encourage terrorism.

Most but not all of the empirical evidence to date supports the notion that democracy encourages transnational terrorism. In a pioneering paper, Eubank and Weinberg (1994) examine whether democratic or authoritarian regimes host more terrorist groups. They find that one is more likely to find terrorist groups in democratic societies than in authoritarian ones. They conclude that political and civil liberties are positively associated with political terrorism. Sandler (1995) challenges the finding by Eubank and Weinberg (1994) on methodological grounds. He argues that events data, rather than the number of terrorist groups, are more appropriate for assessing the relationship between democracy and terrorism. Responding to the criticism, Eubank and Weinberg (1998) re-analyze the relationship between democracy and terrorism by looking at the events data from the Rand-St Andrews Chronology of International Terrorism and the US State Department. They investigate whether the political regime type is linked to the frequency of terrorist events occurring within countries in 1994 and 1995. They find that terrorist events are substantially more likely to occur in free and democratic countries. Countries undergoing regime change are more likely to
experience terrorism. In a multivariate negative binomial regression analysis based on an alternative
Established democracies are found to experience fewer terrorist events than non-democracies
although new democracies are more likely to experience terrorist incidents than other types of states.
In a follow up analysis, Eubank and Weinberg (2001) also employ the ITERATE database to classify
terrorist events based on their location, the nationality of perpetrator and the nationality of victim.
They find that terrorist attacks occur most often in stable democracies and that both the
perpetrators and victims of those attacks are from the same democracies. More recently, Li and
Schaub (2004) use the ITERATE data to analyze how economic globalization affects transnational
terrorist incidents within countries. In their multivariate negative binomial regression, they find that
democracy as a control variable has a statistically significant positive effect on terrorist incidents
within countries.

While most empirical evidence appears to substantiate the positive effect of democracy on
terrorism, existing theoretical and empirical work suffers several important weaknesses. First, there
is a disconnection between the theoretical arguments and empirical analysis. As noted, competing
theoretical expectations derive from different attributes of democracy. But existing empirical
employ aggregate indicators of regime type. To be exact, the aggregate indicator of regime type can
not separate the positive and negative effects at the same time if both effects are at work. The
competing theoretical arguments are not fairly assessed empirically. Second, the positive effect of
democracy may be an artifact of reporting bias that has been ignored in previous empirical work.
Autocratic regimes repress the reporting of terrorist events while democratic countries tend to cover
extensively terrorist incidents. Without controlling for such bias explicitly, the validity of previous
empirical evidence may be compromised. Third, the widely cited analyses by Eubank and Weinberg
(1994, 1998, 2001) do not control for the influence of other factors such as economic development and income inequality that may have confounded their findings. The multivariate analysis by Eyerman (1998) fails to address important statistical problems such as heteroskedasticity and serial correlation in the error term, which may cause his statistical inferences to be invalid. The analysis by Li and Schaub (2004) does not focus on the effect of democracy and hence, fails to address the issues noted above. The relationship between democracy and terrorism needs to be evaluated as the focus of an appropriate multivariate analysis to ensure the validity of statistical inferences. Finally, at the theoretical level, the two competing arguments may not necessarily exhaust the various causal mechanisms by which regime type affects terrorist incidents. The effect of civil liberties may be epiphenomenal of other regime attributes. It is important to take those other effects into consideration and assess them empirically as well.

In this paper, I focus on the various mechanisms by which regime type affects transnational terrorism and assess them empirically through a multivariate analysis in a sample of 110 countries from 1975 to 1995 using the ITERATE database. The findings have significant foreign policy implications for the war on terrorism and promoting democratic governance around the world. In the following sections, I lay out the various ways by which regime type affects terrorism, discuss the research design for the empirical analysis, present the empirical findings and finally conclude the paper with theoretical and policy implications.

HOW DOES DEMOCRACY AFFECT TRANSNATIONAL TERRORISM?

Theoretically, democracy has both positive and negative effects on transnational terrorism. This section seeks to specify various causal mechanisms through which democracy affects terrorist incidents. One goal is to identify some effects of democracy that previous research has largely
ignored. The other goal is to formulate testable hypotheses corresponding to the various causal mechanisms for the empirical analysis in the next section to address.

**NEGATIVE EFFECT OF DEMOCRACY**

The notion that aspects of democracy reduce terrorism is not challenged in the literature. While the evidence from the aggregate indicator of democracy does not support this argument, the same evidence fails to reject it because of the aggregate nature of the indicator. To test this argument, it is hence important to specify the testable hypothesis that pinpoints exactly what aspects of democracy help to reduce terrorism.

Democracies permit dissenters to express their policy preferences and seek redress (Ross 1993). Democratic rules enable non-violent resolution of political conflicts. Different social groups can participate in the democratic political process to further their interest through peaceful means such as voting and forming political parties (Eubank and Weinberg 1994, 2001). As democracy lowers the cost of achieving political goals through legal means, groups should find costly illegal terrorist activities less attractive (Ross 1993; Eyerman 1998). In contrast, in non-democratic societies, the lack of opportunity for political participation induces political grievances and dissatisfaction among dissenters, motivating terrorism (Crenshaw 1981, 283). Therefore, the above discussion leads one to expect the following hypothesis.

**Hypothesis 1:** Democratic societies that minimize political grievance and ensure political participation and efficacy remove incentives for groups to engage in terrorist activities.

**POSITIVE EFFECT OF DEMOCRACY**
The argument that democracy encourages terrorism derives from the premise that democracies allow more civil liberties. **Democracies typically provide relative more freedom of speech, movement, association, and access to government buildings.** By guaranteeing citizens’ civil liberties, democracies allow terrorist groups much greater room to maneuver, **reducing the costs of conducting terrorist activities** (Ross 1993; Eyerman 1998). Expansive and secure civil liberties also make it harder for democratic governments to prevent or retaliate against violent political unrest including terrorism (Eubank and Weinberg 1994, 2001). As Crenshaw (1981, 383) notes, “the desire to protect civil liberties constrains security measures.” Hence, the above argument should lead one to expect the following hypothesis.

Hypothesis 2: The degree of civil liberties is positively correlated with terrorist incidents.

Hypotheses 1 and 2 summarize the expectations from the literature on how democracy affects terrorism. There are two issues, however, one theoretical and the other empirical, that previous research has largely ignored. These two issues suggest potential problems in conceptualization and empirical testing in previous research. The theoretical problem concerns the effect of civil liberties on terrorism. I argue that there is another dimension of democratic polity that drives the positive effect of civil liberties on terrorism but is uncorrelated with the negative effect of democracy. I refer to the political constraints on the decision making power of the democratic government. The democratic government does not enjoy unlimited authority, but is held accountable by the legislature and the electorate. Democratic leaders that abuse power get thrown out of office. The political constraints prevent the democratic government from encroaching on civil liberties, weakening its ability to retaliate using force against terrorist groups. In essence, the positive effect of civil liberties on terrorism is epiphenomenal of the driving force of political
constraints on the democratic government. Constraints on the democratic government, however, are most likely uncorrelated with the negative effect of democracy on terrorism. Democracy reduces terrorism by ensuring political efficacy and reducing grievances. Because the winning coalition in democracy tends to be larger, a diverse range of social interests have access to public policymaking. Constraints on the democratic government imply that the government is held accountable to a wide range of interests. Policy inaction and political deadlock often occur in democratic polity due to constraints over the policymaking power of the government. The more constrained the government is, the less likely its policy inaction can reduce grievances and the more likely public frustration ensues. In contrast, repressive military regimes, for example, can afford to crush terrorist organizations and reduce terrorist incidents, disregarding civil liberties (Crenshaw 1981). Such regimes can disregard civil liberties because they are held accountable only to the narrowly based elite interest.

These discussions have an important implication for the effect of civil liberties. If the political constraint argument holds, the positive effect of civil liberties is simply driven by the existence of political constraints. The empirical implication is that once the effect of political constraints is controlled for, civil liberties should have no effect. The above theoretical discussion should lead one to expect the following two hypotheses. Note that Hypothesis 3 below contradicts Hypothesis 2, an expectation widely shared in the literature.

Hypothesis 3: Civil liberties do not affect terrorism, once political constraints are controlled for.
Hypothesis 4: Political constraints on the democratic government have a positive effect on terrorist incidents.
A significant empirical issue that has been ignored in previous research is the effect of reporting bias on statistical inferences. The data on terrorist incidents are collected from open sources. Because democracies tend to have more press freedom, terrorist incidents are more likely to be reported in democratic countries but less so in non-democratic countries. Maybe, incidents in democratic countries are more often reported in the media as a result of the fewer restrictions that democratic countries place on the media. Non-democratic countries may experience the same number of incidents, but they impose censorship on the reporting of such incidents (see similar discussions by Sandler 1995; Li and Schaub 2004). Such reporting bias between democracy and non-democracy needs to be assessed empirically. More important, an empirical analysis that evaluates the above hypotheses without controlling for the reporting bias may arrive at incorrect statistical inferences.

In addition to causing the reporting bias, press freedom may also induce more terrorist behaviors at the theoretical level. To terrorize a wide audience, the terrorist group pursues recognition and attention by seeking to expand publicity and media coverage of their activities (see, e.g., Crenshaw 1981; Atkinson, Sandler and Tschirhart 1983). The desire of a terrorist group for publicity, unfortunately, can motivate additional terrorist activities, all else equal. The difficulty is to distinguish empirically the reporting bias effect and the publicity seeking effect of press freedom. Regardless, however, one should control for the following effect in empirical assessment of the effect of democracy on terrorism.

Hypothesis 5: Press freedom alone has an independent positive effect on terrorist incidents.

RESEARCH DESIGN
In this section, I design an empirical analysis to test the different hypotheses specified in the previous section. The unit of analysis is the country year. The estimation sample covers 110 countries from 1975 to 1995. A pooled time-series cross-sectional (TSCS) design is employed for the sake of generalizability over time and across countries.

**DEPENDENT VARIABLE**

The dependent variable is the number of transnational terrorist events that occur in a country in a year. Data are collected from the International Terrorism: Attributes of Terrorist Events (ITERATE) database (Mickolus 1982; Mickolus et al 1989; Mickolus et al 1993; Mickolus et al 1995; Mickolus et al 2002). The same dependent variable measure is also employed in various previous studies (see, e.g., Eyerman 1998; Eubank and Weinberg 2001; Li and Schaub 2004). The estimation sample for the statistical model is smaller than the size of the data on the dependent variable because of data limitations on several independent variables.

**INDEPENDENT VARIABLES**

Four indicators are employed to test the five hypotheses on the effects of democracy. The first indicator PRESS FREEDOM is based on the press freedom measure of Van Belle (1997; 2000). Based on the descriptive summaries of the International Press Institute’s annual report, country reports by area experts and other country specific historical documents, Van Belle codes a country’s press freedom condition into five categories: Press non-existent, free press, imperfectly free press (due to corruption or unofficial influence), restricted press, and government controlled press. As in Van Belle (1997, 2000), the PRESS FREEDOM measure is dichotomous, coded one if a country’s

---

1 See discussions in these studies and Sandler (1995) of weaknesses of the ITERATE events data.
press is clearly free and imperfectly free and zero if its press is restricted or controlled. Based on Hypothesis 5, the variable should have a positive sign.

CIVIL LIBERTY measures the degree of civil liberties within countries, including the freedom to develop opinions, institutions, and personal autonomy without interference from the state. The indicator ranges from 1 to 7, with higher values indicating the lack of civil rights. Data are from Freedom House. Because press freedom is part of civil liberties, one needs to separate press freedom out from civil liberties in order to control for the reporting bias due to press freedom and to distinguish Hypothesis 2 or 3 from Hypothesis 5 empirically. To derive an appropriate measure for Hypotheses 2 and 3, I regress the original civil liberty indicator from Freedom House on the PRESS FREEDOM dummy and use the unexplained residual as the measure CIVIL LIBERTY. Based on Hypothesis 2, CIVIL LIBERTY should take on a negative sign as smaller values indicate more civil liberties. But based on Hypothesis 3, CIVIL LIBERTY could be positive, negative, or statistically insignificant.

GOVT CONSTRAINT measures the extent of institutionalized constraints on the decision making power of chief executives, reflecting the checks and balances between the various parts of the policy decision making process. This variable is based on the Executive Constraints variable from the POLITY IV database (Marshall and Jaggers 2000). It is on a seven point scale, with one indicating unlimited authority and seven denoting executive parity or subordination. Because press freedom reflects the degree of government restrictions over the press, the Executive Constraints variable also contains information on the extent to which the government influences or restricts the press. To separate Hypotheses 4 and 5 empirically, I adopt the same strategy with the civil liberty

---

2 Because the civil liberty measure is bounded between 1 and 7, I apply TOBIT for estimation in order to constrain the predicted value between 1 and 7 as well. I also use OLS to derive the measure. The findings of the paper are not sensitive to this estimator choice.
variable. The Executive Constraints variable is regressed using Tobit on the PRESS FREEDOM dummy and the unexplained residual from the model is the GOVT CONSTRAINT variable, measuring political constraints on the government independent from press freedom. Based on Hypothesis 4, GOVT CONSTRAINT should take on a positive sign.

To test Hypothesis 1, a measure of political participation, efficacy and grievance is required. I construct the measure DEM_VOTE based on the electoral participation variable in Vanhanen’s (2000a, 2000b) Polyarchy dataset and the overall freedom index from Freedom House. The overall freedom index from Freedom House codes each country’s overall status as being Free, Partly Free, or Not Free, based on the combined average of each country’s political rights and civil liberties ratings. Vanhanen’s electoral participation variable is the percentage of the population that actually voted in elections.

Voter turnout usually is a useful indicator of political participation and efficacy because it is behavior based, reflecting revealed preference and satisfaction of the citizenry about a country’s political system. But two issues may thwart the effort of using this variable to measure accurately political efficacy and grievance. First, voter turnout may be high in non-democratic countries because of the repressive nature of the regime (e.g., Iran, Libya). These countries often have high voter turnout based on Vanhanen’s electoral participation variable, but these statistics do not suggest that the citizenry are generally satisfied with the political regime because turnout is often involuntary. To solve this problem, the DEM_VOTE variable is coded as equal to Vanhanen’s electoral participation variable only if the Freedom House overall index indicates the
country as being Free, and zero otherwise.\textsuperscript{3} Second, voter turnout in some highly advanced countries such as the US is often low, not because the citizens are unhappy but rather because they are generally satisfied and rarely have extremely serious issues to take with the political system. To control for this confounding effect, real GDP per capita must be included in the model.\textsuperscript{4} Based on Hypothesis 1, DEM_VOTE should take on a negative sign.

\textbf{CONTROL VARIABLES}

RGDPPC, which measured the level of economic development of a country, is the real GDP per capita (Laspeyres), adjusted for purchasing power parity (PPP). Data are from the Penn World Tables 6.1. Li and Schaub (2004) find that economic development tends to reduce the number of terrorist incidents. As noted above, this variable also helps to control for wealthy democratic countries that may have low voter turnout.

AUT_VOTE controls for the confounding effect of high voter turnout in non-democratic countries. It is the percentage of the population that actually voted in elections (based on Vahanen’s participation variable) in politically Not Free countries (based on the Freedom House overall index), and zero otherwise. In fact, high voter turnout in a politically not free country should correlate with the degree of repressiveness of the regime. Where voting is coerced, high turnout shows that the regime is effective in repression and control. As Crenshaw (1981, 383)

\textsuperscript{3} The behavior based electoral participation variable may correlate with other attribute variables of democracy in the model. To reduce such collinearity, the electoral participation variable is centered or demeaned before it is used to construct the DEM_VOTE variable, following the suggestion of Aiken and West (1991).

\textsuperscript{4} Because such countries typically belong to the OECD group, I also assess whether the results are sensitive to the inclusion of the OECD membership variable. Statistical findings for the independent variables remain robust in the presence of the OECD dummy.
points out, one should expect such regimes to be effective in controlling terrorism. Hence, AUT_VOTE should have a negative sign.

GINI measures income inequality within countries. Income inequality is often argued to engender terrorist behaviors. Because democracy may correlate with less income inequality, it is important to control for inequality in assessing the effect of democracy on terrorism. GINI ranges from 0 to 100, with larger values indicating greater inequality. Data are from Deininger and Squire (1996). Because GINI is based on national income surveys which are not conducted every year for every country, the variable contains many missing values. Following previous studies (Feng and Zak 1999; Li and Reuveny 2003; Li and Schaub 2004), missing values are filled with predictions from estimating GINI as a function of GDP per capita, GDP per capita squared, and regional dummies. As a result, the collinearity between GINI and GDP per capita may cause them to be statistically insignificant. Since these are control variables, the insignificant result should not be a cause of concern, but ought to be interpreted with caution.

REGIME DURABILITY is the number of years since the most recent regime change, defined by a three-point change in the POLITY score over a period of three years or less, the end of transition period defined by the lack of stable political institutions, or the year 1900, whichever came last. It is log transformed to address skewed distribution. The variable is taken from the POLITY IV database to capture the effect of regime change on terrorism. Several previous studies (e.g., Eubank and Weinberg 1998; Eyerman 1998) find that countries with regime changes are more likely to experience terrorist incidents and that new democracies experience more terrorist incidents than other countries. The confounding effect of regime change thus has to be controlled for in analyzing the effect of democracy on terrorism. The variable should take on a negative sign.

SIZE denotes the size of a country, measured as its total population. It is logged to control for skewed distribution. The size of a country is often positively associated with terrorist incidents.
Large countries tend to be more heterogeneous, where alienated segments of the population may resort to terrorism to influence their governments. Large countries also are more difficult to police.

GOVERNMENT CAPABILITY is an annual composite percentage index of a state’s share of the world’s total population, GDP per capita, GDP per unit of energy, military manpower and military expenditures. The variable is taken from Li and Schaub (2004) as a proxy of potential resources the government can use to control terrorism.

PAST INCIDENTS measures the history of a country being a location of terrorist incidents. Many countries experience persistence of terrorism (e.g., Israel). Li and Schaub (2004) control for the effect using the number of transnational terrorist events in a country in the previous year. The use of the lagged dependent variable, however, has two weaknesses. Its first weakness is that it excessively soaks up variance in the dependent variable that should be explained by other substantive variables (see, e.g., Achen 2000). Its second weakness is that the lagged dependent variable reflects a short memory from the immediate past. A country’s historical involvement with terrorism runs much longer than that. In this paper, PAST INCIDENTS is the average annual number of terrorist incidents for each country since 1945 or since its independence after 1945, logged transformed for the sake of skewed distribution. The variable should have a positive sign.

CONFLICT is coded one if a state is engaged in interstate military conflict or war and zero otherwise. Data are from Gleditsch, et al (2002). Its effect on transnational terrorism may be indeterminant. On the one hand, a country’s external conflict induces enmity, often causing foreign terrorists to attack its domestic targets or domestic terrorists to attack foreign targets within the country. On the other hand, a country that is engaged in external military conflict adopts rigorous security measures, more effectively preventing terrorist activities.
As Li and Schaub (2004), five regional dummy variables (Europe, Middle East, Africa, Asia, and America) are included to control for unevenly geographical distribution of terrorist incidents. The Middle East is used as the reference category in the model.

POST COLD WAR is a dummy variable coded one since 1991 and zero otherwise. Enders and Sandler’s (1999) find that the end of the Cold War has led to a decline in transnational terrorist incidents worldwide. This variable controls for the Cold War and the post Cold War difference.

STATISTICAL METHOD

Because the dependent variable is an event count variable, OLS estimates can be inefficient, inconsistent and biased (Long 1997). The Poisson regression model is often applied to model event counts. The Poisson regression model assumes that the conditional mean of the dependent variable equals the conditional variance. This assumption, which is often violated, causes underestimated standard errors and spurious statistical significance. Therefore, the negative binomial regression which allows the conditional variance of the dependent variable to exceed the conditional mean by adding a dispersion parameter to model the unobserved heterogeneity among observations, is applied in this analysis.

Statistical models for the pooled time-series cross sectional data often suffer heteroskedasticity and serial correlation in the error term. To deal with these potential problems, robust standard errors clustered over countries are estimated, which are robust to both heteroskedasticity and to a general type of serial correlation within any cross sectional unit (Rogers 1993; Williams 2000). The PAST INCIDENTS and POST COLD WAR variables also help to control for temporal dependence in the data.

FINDINGS AND IMPLICATIONS
Table 1 presents the statistical results from testing the five hypotheses on the different effects of democracy on terrorism. Model 1 includes all four key independent variables: PRESS FREEDOM, CIVIL LIBERTY, GOVT CONSTRAINT, and DEM_VOTE, Model 2 omits GOVT CONSTRAINT, and Model 3 omits CIVIL from Model 1. These model specifications allow us to construct appropriate tests of those five hypotheses.

For each of the three models, the test of the dispersion parameter indicates that the conditional variance of the dependent variable exceeds its conditional mean at a statistically significant level. It justifies the use of the negative binominal model over the Poisson regression. The Wald test of the model fit is statistically significant at the 1% level for each of all three models.

Model 1 aims at testing four of the five hypotheses, except for Hypothesis 2. Recall that based on previous research, CIVIL_LIBERTY should have a negative sign, encouraging terrorism (Hypothesis 2). Also recall that I argue, however, Hypothesis 2 is not appropriate and it ought to be replaced by Hypotheses 3 and 4, because civil liberties also may generate both positive and negative effects (Hypothesis 3) and because the positive effect of civil liberties is in fact driven by the degree of political constraints on the democratic government (Hypothesis 4). As Model 1 includes both CIVIL_LIBERTY and GOVT CONSTRAINT, it tests Hypotheses 3 and 4, but not Hypothesis 2. With this clarification, let’s turn to the results in Model 1.

As expected in Hypothesis 5, PRESS FREEDOM has a statistically significant positive effect on the number of transnational terrorist incidents. Countries with more press freedom experience more transnational terrorist incidents within their borders. The positive effect of press freedom may have resulted from either the reporting bias difference between democracy and non-democracy, or the publicity seeking incentive of terrorists, or both. Empirically these two effects are indistinguishable. But the finding suggests the importance of separating the press freedom effect
away from the effects of other attributes of democratic polity, if one intends to understand exactly how democracy affects terrorism. Without isolating the effect of press freedom, other measures of democracy may capture the possible reporting bias effect of press freedom, leading to incorrect theoretical conclusions.

The effect of GOVT CONSTAINT is positive and statistically significant, consistent with the expectation of Hypothesis 4. Democratic governments that are more politically constrained are less able to adopt and enforce stringent security measures to tackle terrorist activities. In addition, the more constrained the democratic governments are, the more often they are caught in political deadlock and policy inaction. The situation may motivate impatient groups to seek violent means to express their frustration and grievance. Finally, while the democratic government caters to a wide range of interests, democratic polity is in essence national and territorial. Unlikely to receive equal treatment, foreign citizens and groups may find it much harder to deal with the wide range of interests in democratic countries in order to further their own interest. Democratically constrained governments may be less able to pacify foreign interests that may resort to violence.

Consistent with Hypothesis 3, the effect of CIVIL_LIBERTY is statistically not different from zero once the effect of political constraints is controlled for. Fundamentally, it is the political constraints over the government that helps to ensure that civil liberties are not infringed upon at the will of the government. The possible positive effect of civil liberties on terrorism is epiphenomenal of a deeper root—the political constraints on the democratic government.

Finally, Model 1 shows DEM_VOTE is statistically significant and positive, as Hypothesis 1 suggests. Voter turnout in democratic countries, as a measure of political efficacy and grievance among the public, reduces the number of terrorist incidents within these countries. Previous research has failed to find any evidence substantiating this effect. The problem, as noted, lies in the
use of the aggregate indicator of regime type, conflating the positive and negative effects of democracy on terrorism.

Model 2 omits the government constraint variable as a test of Hypothesis 2, where the effect of political constraints on democratic government is not considered. The CIVIL_LIBERTY variable is negative as expected, but is marginally significant at 10% level for the one tailed test only. There appears to be some evidence supporting Hypothesis 2. While the significance level is not very high, the size of the coefficient changes from 0.01 in Model 1 to -0.06 in Model 2, a substantial increase in the size of the effect.

The marginal significance of the CIVIL_LIBERTY variable may be due to the possibility that civil liberties also correlate with the negative effect of democracy on terrorism. As noted, the lack of political participation and efficacy engenders political grievances, which in turn motivate groups to resort to terrorist activities. Civil liberties themselves are critical for ensuring effective political participation and reducing political grievances. Citizen enjoying more civil liberties are more likely to participate in democratic political process and are more successful in doing so. As a result, civil liberties may correlate with the negative effect of democracy on terrorism as well. The evidence appears to suggest that the dominant effect of civil liberties is positive on terrorism.

Model 3 omits the CIVIL_LIBERTY variable from Model 1 specification. The results here are quite consistent with those of Model 1. PRESS FREEDOM and GOVT CONSTRAINT are positive and significant, while DEM_VOTE is negative and statistically significant. These results support Hypotheses 1, 4 and 5.

Next I turn to discuss results for the control variables. Voter turnout in the non-democratic countries (AUT_VOTE), as a measure of the degree of repressiveness of political regime, has a negative and significant effect on terrorism. It indicates that the repressiveness of non-democratic countries appears effective in reducing transnational terrorist incidents, consistent with the
expectation in Crenshaw (1981). What is most interesting is that the null hypothesis that the size of the effect of AUT_VOTE equals to that of DEM_VOTE can not be rejected. The same empirical effect has very different political causal mechanisms in different regime types.

Real GDP per capita, as a measure of economic development, reduces the number of transnational terrorist incidents within countries. The result is consistent with the finding by Li and Schaub (2004). GINI, measuring income inequality, is positive but insignificant. As noted, this may be due to its high correlation with GDP per capita (-0.74) in the estimation sample.

As expected, regime durability is negative and statistically significant in all three models. Countries going through regime change are vulnerable to more transnational terrorist attacks.

The size of a country is positively associated with the number of transnational terrorist incidents inside the country. Larger countries are exposed to greater risks of transnational terrorist incidents than smaller countries.

As Li and Schaub (2004) find, the government capability variable is statistically significant but positive. While more capable governments may have more resources to control terrorist incidents, they also constitute more effective and valuable targets for terrorist groups. The ability to engage in terrorist activities against more capable governments gives a terrorist group more media coverage and wider influence. While terrorist groups may have to pay higher costs to act against more capable governments, the returns can be expected to be much higher as well.

The past incidents variable is statistically significant and positive. Countries that have a history of persistent terrorist activities continue to experience more terrorist attacks. Terrorist groups, once operational organizationally, tend to engage in activities continuously.

The interstate military conflict variable is negative and significant in all three models. This result differs from the finding in Li and Schaub (2004). They find no significant result for the
variable. The evidence here suggests that external military conflict often leads to tightening of domestic security measures, raising the costs of engaging in terrorist activities.

The post cold war dummy is statistical significant and negative in all three models. The result is consistent with the finding in Enders and Sandler (1999). That is, transnational terrorist incidents actually declined in the post cold war era.

The results for the regional variations appear to be consistent with the findings in Li and Schaub (2004). The Middle East and Europe are most susceptible to terrorist attacks, while Asia, America and particularly Africa tend to experience fewer incidents relative to the Middle East.

CONCLUSION

The theoretical literature presents different two main causal mechanisms through which democracy increases and decreases transnational terrorist attacks. Empirical analyses of the effects of democracy have never separated these two effects empirically. All of them have employed some aggregate indicator of regime type in analysis. In this paper, I argue that to understand correctly the effect of democracy on terrorism, one must evaluate these contradicting effects separately. Evidence from the aggregate indicator may be helpful for assessing one of the two arguments, but certainly not both at the same time.

I further argue that previous theoretical work has failed to recognize the epiphenomenal nature of the civil liberties argument. It is the political constraints over the democratic government that is driving the positive effect of civil liberties on terrorism. In contrast, previous empirical work has failed to recognize the importance of the reporting bias associated with regime type attributes. Put simply, democratic countries are more likely to report terrorist attacks due to press freedom while autocratic regimes are more likely to repress the reporting of those events due to press
censorship. These issues need to be addressed at the same time if one intends an appropriate assessment of the effects of democracy on terrorism.

Statistical evidence based on a sample of 110 countries from 1975 to 1995 shows that democracy can reduce and encourage terrorist incidents. Political efficacy and electoral participation in democratic countries help to reduce the number of terrorist incidents. While there is only weak evidence supporting the argument in the literature that civil liberties in democracy promote terrorist attacks, strong evidence emerges supporting the notion that it is political constraints on the democratic government, rather than civil liberties, which produce a strong positive effect on terrorism. These effects still hold after we correct for possible reporting bias due to press freedom or censorship. Indeed, press freedom is associated with more terrorist incidents.

These findings suggest important policy implications. It is important to note that democracy does not just have a one-sided positive effect on terrorism as often believed. By improving electoral participation and political efficacy, democratic governments are able to reduce political grievance and the number of terrorist attacks. At the same time, it is important to note that limiting civil liberties does not lead to the expected decline in terrorist attacks, as is sometimes argued. More likely, it is the political constraints on the democratic government that cause political deadlock and induce grievance and terrorist activities. While civil liberties and constraints on the government are related, there are subtle differences that policy makers should take care to distinguish. Otherwise, anti-terrorist measures can run the danger of hurting democratic governance without producing any real effect in cracking down terrorist attacks. Finally, one just has to acknowledge and accept the fact that aspects of democratic polity are associated with more terrorist incidents. Press freedom and the constraints over the government come at a price the democratic citizen must be willing to pay in an uncertainty world of potential terror.
REFERENCES


### Table 1
Effects of Democracy on Transnational Terrorist Incidents within Countries, 1975-1995

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Press Freedom</td>
<td>0.55***</td>
<td>0.30**</td>
<td>0.56***</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.15)</td>
<td>(0.16)</td>
</tr>
<tr>
<td>Civil Liberty</td>
<td>0.01</td>
<td>-0.064*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.046)</td>
<td></td>
</tr>
<tr>
<td>Govt Constraint</td>
<td>0.09***</td>
<td>0.09***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
<td></td>
</tr>
<tr>
<td>Dem_Vote</td>
<td>-0.007**</td>
<td>-0.0062*</td>
<td>-0.008**</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.0045)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Aut_Vote</td>
<td>-0.008**</td>
<td>-0.005</td>
<td>-0.008**</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>RGDPPC</td>
<td>-0.19*</td>
<td>-0.20*</td>
<td>-0.19*</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(0.11)</td>
<td>(0.10)</td>
</tr>
<tr>
<td>GINI</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Regime Durability</td>
<td>-0.11**</td>
<td>-0.14***</td>
<td>-0.11**</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Size</td>
<td>0.14***</td>
<td>0.14***</td>
<td>0.14***</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.04)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Government Capability</td>
<td>0.55***</td>
<td>0.59***</td>
<td>0.55***</td>
</tr>
<tr>
<td></td>
<td>(0.09)</td>
<td>(0.09)</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Past Incidents</td>
<td>0.87***</td>
<td>0.87***</td>
<td>0.87***</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.09)</td>
<td>(0.10)</td>
</tr>
<tr>
<td>Post Cold War</td>
<td>-0.47***</td>
<td>-0.39***</td>
<td>-0.46***</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.09)</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Conflict</td>
<td>-0.24**</td>
<td>-0.20*</td>
<td>-0.24**</td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(0.12)</td>
<td>(0.12)</td>
</tr>
<tr>
<td>Europe</td>
<td>0.20</td>
<td>0.22</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>(0.18)</td>
<td>(0.18)</td>
<td>(0.18)</td>
</tr>
<tr>
<td>Asia</td>
<td>-0.44*</td>
<td>-0.31</td>
<td>-0.44*</td>
</tr>
<tr>
<td></td>
<td>(0.26)</td>
<td>(0.26)</td>
<td>(0.26)</td>
</tr>
<tr>
<td>America</td>
<td>-0.29*</td>
<td>-0.28</td>
<td>-0.30**</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.17)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>Africa</td>
<td>-1.03***</td>
<td>-0.94***</td>
<td>-1.04***</td>
</tr>
<tr>
<td></td>
<td>(0.21)</td>
<td>(0.22)</td>
<td>(0.20)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.79</td>
<td>-0.72</td>
<td>-0.77</td>
</tr>
<tr>
<td></td>
<td>(1.59)</td>
<td>(1.66)</td>
<td>(1.61)</td>
</tr>
<tr>
<td>Observations</td>
<td>1962</td>
<td>2026</td>
<td>1962</td>
</tr>
<tr>
<td>Dispersion=1</td>
<td>4.31</td>
<td>4.53</td>
<td>4.31</td>
</tr>
<tr>
<td>Wald test ($\chi^2$)</td>
<td>904</td>
<td>828</td>
<td>899</td>
</tr>
</tbody>
</table>

Robust standard errors, adjusted over countries, in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%