

**Wilfried-Guth-
Stiftungsprofessur für
Ordnungs- und
Wettbewerbspolitik**



**Diskussionsbeiträge /
Discussion Paper Series**

No. 2013-04

The Rise of Market-Capitalism and the Roots of Anti-American Terrorism

Tim Krieger, Daniel Meierrieks

November 2013

The Rise of Market-Capitalism and the Roots of Anti-American Terrorism

Tim Krieger* and Daniel Meierrieks†

Abstract

We examine the role of market-capitalism in anti-American terrorism, differentiating between level- and rate-of-change-effects associated with market-capitalist development and their respective relationship with anti-U.S. violence. Using panel data for 149 countries between 1970 and 2007, we find that higher levels of capitalist development—consistent with the capitalist-peace literature—coincide with less anti-American terrorism, while the marketization process has inflammatory effects on anti-American terrorism. These findings are further corroborated by system-level time-series evidence. We argue that a higher level of market-capitalism is associated with less anti-American terrorism by creating economic interdependencies and a convergence of pro-peace values and institutions, while the destabilizing effects of the marketization process may stem from the violent opposition of various anti-market interest groups to economic, politico-institutional and cultural change initiated by a transition towards a market economy. These interest groups deliberately target the U.S. as the main proponent of modern capitalism, globalization and modernity, where anti-American terrorism serves the purpose of consolidating their respective societal position. Our findings that the U.S. may ultimately become a less likely target of transnational terrorism through the establishment of market economies, but should not disregard the disruptive political, economic and cultural effects of the marketization process in non-capitalist societies.

Keywords: terrorism; anti-Americanism; capitalism; market economy; globalization

Word Count: 9,540

* University of Freiburg, Department of Economics, Wilhelmsstraße 1b, 79098 Freiburg, and CESifo, Munich, Germany. Phone: +49-(0)761-203-67651. Fax: +49-(0)761-203-67649. E-mail: tim.krieger@vwl.uni-freiburg.de.

† Corresponding Author. University of Freiburg, Department of Economics, Wilhelmsstraße 1b, 79098 Freiburg, Germany. Phone: +49-(0)761-203-67653. Fax: +49-(0)761-203-67649. E-mail: daniel.meierrieks@vwl.uni-freiburg.de.

1. Introduction

Anti-American terrorism is an important subset of transnational terrorist activity.¹ As shown in Figure 1, terrorism directed against U.S. interests was a constant threat between 1970 and 2007.² During this time period the U.S. was the target of terrorist groups with various ideological profiles hailing from both Western countries and the developing world. For instance, U.S. interests were attacked by the left-wing Greek *November 17 Revolutionary Organization*, the Philippine *Moro Islamic Liberation Front* and the nationalist-separatist *Popular Front for the Liberation of Palestine* (LaFree et al., 2009).

–Figure 1 here–

Shortly after the 9/11 attacks, U.S. President George W. Bush (2001) asked: "Why do they [i.e., the terrorists] hate us?" This question is also at the heart of several academic contributions examining the roots of anti-American terrorism. These studies link its genesis to the *dominance of the U.S. in the international political system* (e.g., Volgy et al., 1997; Sobek and Braithwaite, 2005), the *involvement of the U.S. in domestic conflicts*, be it through military aid or interventions (e.g., Pape, 2003; Neumayer and Plümper, 2011), and the ill economic-cultural effects of globalization projected onto the world by the U.S. (e.g., Cronin, 2003).

In this contribution we relate the emergence of anti-American terrorism to a largely overlooked aspect of globalization, the *rise of market-capitalism*.³ While we acknowledge the *pacifying*

¹ Transnational terrorism involves more than one country. Transnational anti-U.S. terrorism is activity by foreign individuals and groups against U.S. interests (U.S. diplomatic personnel, business, embassies, tourists etc.).

² The data used to construct this graph are described in Section 3.

³ Throughout this contribution, market-capitalism refers to an economic system characterized by a high level of contract-intensity, "where most citizens regularly obtain goods and services contracting with strangers located in a market" (Mousseau, 2012:475) rather than from, e.g., relatives, friends or patrons. Note that most economies are mixed-economies in that individuals rely on both markets and social networks to carry out transactions. However, the relative importance of markets and networks may substantially differ. Here, economic systems in which the role of markets is highly emphasized are characterized as market-capitalist. Finally, note that

effects of higher levels of market-capitalist development in the sense of the “peace-through-capitalism thesis” (Schneider and Gleditsch, 2010:108), we also consider the potentially *destabilizing effects of a transition towards market-capitalism*, where these effects may be felt in the political, economic and cultural sphere of non-market economies undergoing such a transition. This latter idea has been voiced earlier by Mousseau (2002-2003:6) in his—hitherto untested—theory of the anti-market roots of anti-U.S. terrorism:

“[The] social origins of terror are rooted less in poverty—or growing discontent with U.S. foreign policy—and more in [...] intense antimarket resentment directed primarily against the epitome of market civilization: the United States.”

Linking capitalist development to anti-U.S. terrorism is furthermore motivated by the decidedly anti-capitalist symbolism associated with the 9/11 attacks on the New York World Trade Center which was always considered an icon of U.S. economic strength. What is more, many anti-American terrorist groups—be they left-wing or Islamist—have spread anti-capitalist rhetoric. For instance, Osama bin Laden explained his fight against the United States in an *al-Jazeera* broadcast on February 11, 2003 (BBC, 2003) as follows:

“They [i.e., the American soldiers] only fight for capitalists, usury takers and the merchants of arms and oil, including the gang of crime at the White House.”

Motivated by this discussion, we examine the relationship between capitalist development and anti-American terrorism. We hypothesize that higher levels of capitalist development—consistent with the idea of a capitalist peace between market economies—coincide with less anti-American terrorism (due to increased economic interdependencies and a convergence of values and institutions that favor peace), while the process of marketization leads to more anti-American terrorism. We argue that the latter effect is due to the opposition of various interest groups (the old elite, their clientele, politico-economic modernization losers and traditionalists and the religious) to the marketization process, which stems from the negative distributional effects (due to the decline of clientalism, increased economic vulnerability and insecurity and the inflow of American values and ideas) that arise for them due to the rise of capitalism.

we use the terms “capitalism” and “market-capitalism” synonymously throughout this contribution, following the definition mentioned above.

Consequently, anti-market groups may resort to anti-U.S. terrorism to voice dissent, rollback pro-capitalist reforms and limit the Americanization of local communities (i.e., to preserve local traditions, values and religions). These groups deliberately target the U.S. as the main proponent of modern capitalism, globalization, modernity and the Western way of life.

An empirical examination using panel data for 149 countries between 1970 and 2007 and further (system-level) time-series data indeed provides robust evidence that the U.S. is less likely to be targeted by citizens and terrorist groups originating from market economies (beneficial level-effect), but that the transition towards a market economy incites anti-American resentment (destabilizing rate-of-change-effect). Policywise, this suggests that while the United States may ultimately benefit from (peacefully) subsidizing and propagating the establishment of market-capitalist economies, the disruptive political, economic and cultural effects of marketization in non-capitalist societies should not be disregarded.

The remainder of this contribution is organized as follows. In Section 2 we discuss the nexus between market-capitalist development and anti-American terrorism. In Section 3 we describe the variables and empirical method used to statistically examine this nexus using (country-level) panel data. Section 4 presents and discusses our findings. In Section 5 we provide further time-series evidence, where we analyze the relationship between market-capitalism and anti-American terrorism on the system-level. Section 6 concludes.

2. Market-Capitalism and the Origins of Anti-American Terrorism

2.1 The Level of Market-Capitalism and Anti-American Terrorism

Recent empirical contributions find that capitalist countries are less likely to experience interstate and intrastate conflict (Gartzke, 2007; De Soysa and Fjelde, 2010; Mousseau, 2012). Analogous to this idea of a capitalist peace, we argue that market-capitalist economies (i.e., countries with high levels of market-capitalist development) are also less likely to produce anti-American terrorism.

The capitalist peace literature offers several pathways through which capitalism may be conducive to peace.⁴ First, capitalism creates economic interdependencies, e.g., through trade or the international division of labor (Schneider, 2013). Such linkages make it less attractive to attack because the negative economic consequences of an attack are likely to backfire on the attacker. What is more, the beneficial effects of economic interdependence increase with the level of economic development (e.g., due to a higher trade volume and lower transaction costs), making it even less attractive for highly developed to attack each other (Hegre, 2000). Second, the ways of capitalist exchange are closely associated with the creation of values and institutions that are conducive to peace. For instance, Mousseau (2002-2003) and Mousseau and Mousseau, (2008) argue that impersonal contractual exchange—a main feature of market economies—leads to the emergence of a strong rule of law, sound property rights protection and acceptance for values such as cooperation, tolerance and equity. Such developments make violence less attractive, be it by offering non-violent means of conflict resolution or lowering the overall acceptance of the use of violence.

In line with this discussion, it seems reasonable to expect that countries are also less likely to engage in terrorist conflict when they are both capitalist.⁵ In particular, it ought to be less likely that citizens or sub-national (terrorist) groups from countries with similarly high levels of market-capitalist development attack interests of the United States, the main proponent of modern market-capitalism. We also expect foreign governments to be more reluctant to permit or even sponsor anti-American terrorism when their own economies are capitalistically organized. First, there tends to be a close economic interdependence between the U.S. and other capitalist countries. What is more, the benefits associated with such interdependencies tend to be particularly large (cf. Hegre, 2000). That is, anti-American terrorism ought to be a particularly expensive venture when it originates from developed market-capitalist societies. Second,

⁴ Note that we only discuss aspects of the capitalist-peace literature that are relevant to our research question. For reviews of the literature see Schneider and Gleditsch (2010) and Schneider (2013).

⁵ While we focus in this study on the issue of anti-American terrorism, an interesting area of future research would be to assess whether capitalist convergence negatively affects the international flow of terrorism for any country dyad.

violence against American interests may also be less attractive in capitalist societies due to the pro-peace values and institutions the United States and other capitalist countries share. For one, this means that violence is not likely to be socially accepted as a means of voicing dissent and fostering change. For another, shared values create fewer opportunities to rally support for terrorism by exploiting identity or cultural differences. Rather, the U.S. may be perceived as a cultural-economic role model by large population parts of other capitalist societies. Ultimately, anti-American terrorism may therefore hurt the terrorists' cause, e.g., by negatively affecting terrorist mobilization. For instance, this may explain the very limited popular support for anti-American terrorist groups in Western Europe (cf. Shughart, 2006).

2.2 The Rise of Market-Capitalism and Anti-American Terrorism

The previous discussion suggests that market-capitalist development may have pacifying effects, so that it also ought to coincide with less anti-American terrorism. However, as recognized by Schneider (2013:5), beneficial level-effects of economic modernization need to be contrasted with potentially inflammatory rate-of-change-effects. The latter effects may stem from the changing distribution of wealth and socio-political influence that accompanies the transition towards a market-capitalist economy, which may antagonize various segments of society. Importantly, the losers of marketization may ultimately also resort to anti-American terrorist activity to counter the negative distributional effects of the transition process.

First, anti-American resentment may stem from the *decline of clientalism*, as extensively discussed in Mousseau (2002-2003). In short, he argues that a transition towards a market-economy threatens the clout of the *traditional elite*, i.e., the "patrons and their lieutenants who hold privileged positions in the old clientalist hierarchies" (Mousseau, 2002-2003:19). In clientalist economies economic exchange to obtain goods, services and income strongly relies on personal interactions controlled by the traditional elite (e.g., village elders and urban patrons), which provides them with politico-economic rents (e.g., from controlling artificial monopolies, see Kirk, 1983). The advent of market-capitalism allows for more efficient economic transactions that rely on (impersonal) contracting, which endangers the politico-economic power of the traditional elite. The elite may consequently turn to terrorism for two reasons. For one, they may use terrorism as a means to voice dissent with existing developments—the decline of clientalism—so as to curtail domestic marketization. Here, the U.S., the “epitome of market

civilization” (Mousseau, 2002-2003:6), is a natural target to promote such policy change. For another, terrorism may create new politico-economic rents which may offset losses of the traditional elite due to the rise of market-capitalism and thus consolidate their societal position. As shown by Kirk (1983), such rents are routinely obtained by terrorist groups through the use and threat of violence, making terrorism a rational action for (parts of) the elite to change the distribution of resources in their favor (Mousseau, 2011). As such, anti-American resentment organized by the traditional elite can be understood as a rational response to the negative distributional consequences (i.e., the loss of politico-economic influence) of marketization for this population group.

Second, the rise of market-capitalism may create anti-American resentment due to increased *economic vulnerability* and further substantial distributional effects accompanying the transition process. For instance, marketization may reduce labor demand (and possibly, wages) in the agricultural sector in favor of the modern industrial sector, thereby also driving more sweeping socio-economic change in the form of rural-urban migration. Ultimately, some segments of society are likely to experience negative economic effects due to the rise of market-capitalism, e.g., in the form poverty, socioeconomic insecurity and unemployment (Stiglitz, 2005). Similar to the traditional elite, these modernization losers may consequently resort to terrorism.⁶ Especially when it is directed against the United States, terrorism signals discontent with the economic transition process and may initiate an anti-market rollback. What is more, the modernization losers may also indirectly benefit from the rents terrorism can create. They may pledge loyalty to rent-capturing terrorist groups which provide them—as another form of clientalism—with mental and material rewards (e.g., identity, employment) in return (Mousseau, 2011). Evidence for this idea is provided by Mousseau (2011) who finds that support for Islamist terrorism is indeed particularly strong among the urban poor—a population group that has obviously not benefited from the marketization process—in developing countries.

⁶ It seems reasonable to assume that the elite provides the terrorist leaders, while the modernization losers (i.e., the poor and otherwise economically vulnerable) provide the foot soldiers and supporters (e.g., Mousseau, 2011).

Finally, the rise of market-capitalism may also antagonize traditionalist and religious segments of society. This is due to the *influx of American/Western ideas and values* into non-Western societies. Again, this may cause anti-American resentment. As summarized by Cronin (2003:45):

“[The] United States is projecting uncoordinated economic, social, and political power even more sweepingly than it is in military terms. Globalization, in forms including Westernization, secularization, democratization, consumerism, and the growth of market capitalism, represents an onslaught to [...] conservative cultures repelled by the fundamental changes that these forces are bringing [...]”.

Indeed, market-capitalism is closely associated with specific ideas and values such as equity, tolerance and religious freedom (Mousseau, 2002-2003; Mousseau and Mousseau, 2008). What is more, through the process of globalization these liberal values (e.g., women’s and human rights) spread to the non-Western world (Neumayer and De Soysa, 2007; Dreher et al., 2012). In consequence, this “import” of Western ideas may have distributional consequences for traditionalist/religious population segments, given that the propagation of an attractive alternative way of life is likely to undermine their politico-economic influence. As before, anti-American terrorism may be a rational choice for the traditionalist/religious, so as to limit the cultural modernization that accompanies the economic transition towards a market economy. Here, any terrorist attack against the United States can be seen as a symbolic attack against modernity and the Western way of life.

2.3 Hypotheses

Our literature discussion has shown that it is important to differentiate between level- and rate-of-change-effects of market-capitalist development on anti-American terrorism. With respect to the former, we expect anti-American terrorism to be less likely with higher levels of capitalist development. This relationship is due to the close economic interdependence between capitalist societies and the pro-peace values and institutions these societies share. The United States ought to particularly benefit from these effects in the form of reduced terrorist activity against its interests due to its role as the epitome of modern capitalism. This leads to our first hypothesis:

Hypothesis (H1): A higher level of market-capitalist development is associated with less anti-American terrorism.

At the same time, the U.S. may be particularly vulnerable to terrorism emerging from countries undergoing economic transformation towards market-capitalism precisely due to being the role model of capitalism and actively spreading it internationally through globalization. We argue that a number of societal groups (the old elite, traditionalists and the religious and economically vulnerable) lose during the economic transition, e.g., in terms of reduced political influence, income, economic security and cultural-religious control. These groups may resort to terrorism to voice dissent, rollback pro-market developments and capture politico-economic rents, so as to stabilize their own societal position. Here, they are expected to deliberately target the U.S. due to the actual possibility of constraining U.S. influence (e.g., by making U.S. foreign direct investment less attractive) and—probably more important—due to the highly symbolic value attached to an attack against U.S. interests epitomizing globalization, market-capitalism and modernity. In conclusion, this discussion leads to our second hypothesis:

Hypothesis (H2): The marketization process is associated with more anti-American terrorism.

3. Data and Methodology

To empirically test our hypotheses, we compile data on terrorism, market development and further controls for a panel of 149 countries for the period between 1970 and 2007.⁷ The summary statistics are reported in Table 1. A list of countries is given in the appendix.

–Table 1 here–

3.1 Dependent Variable

We indicate anti-American terrorism by the *number of terrorist attacks by citizens of another country against U.S. targets*. Here, we use the *source definition* of anti-U.S. terrorism, where an attack is assigned to the country of origin of the perpetrator, irrespective of the actual location of the attack. For instance, the 1988 bombing of a U.S. military recreational club in Naples (Italy) by the *Japanese Red Army* is then assigned to Japan.

The data come from the *International Terrorism: Attributes of Terrorist Events (ITERATE)* dataset (Mickolus et al., 2008). *ITERATE* is the most widely used dataset covering transnational

⁷ The data for our main explanatory variable (market-capitalism) is only available up to 2007.

terrorism due to its consistent coding of terrorist events, where coding is done according to information gathered from the world's newsprint and electronic media (Enders et al., 2011).⁸ *ITERATE* defines terrorism as the use (or threat of use) of anxiety-inducing, extra-normal violence for political purposes by non-state individuals or groups, where the intention of such action is to influence a target group wider than the immediate victims (Mickolus et al., 2008). *ITERATE* excludes terrorist attacks against combatants associated with declared wars, military interventions or guerilla warfare against military targets (Mickolus et al., 2008).

3.2 Main Explanatory Variable

To indicate market-capitalist development, we follow Mousseau (2012) who considers economies to be market-capitalist when most citizens regularly obtain goods and services by contracting with strangers in a market. As in earlier studies (e.g., Mousseau and Mousseau, 2008; Mousseau, 2012), we operationalize the level of market-capitalism by using *annually aggregated data on per capita life insurance contracts in force* in (logged) constant U.S. dollars. The data on life insurance are drawn from the *Contract Intensity of National Economies Dataset* (Mousseau, 2012). Mousseau (2012:6-8) argues that life insurance data reasonably reflects the overall intensity of market institutionalization because life insurance contracts are purely impersonal and credibility in commitments therefore rests only on third party enforcement. That is, a large volume of per capita life insurance contracts in force tends to signal that a society largely relies on (impersonal) means of contracting and contract enforcement and less on social relationships (e.g., between the patron and his clientele). In line with *H1*, we expect a higher level of market-capitalism to be negatively related to anti-American terrorism. The transition towards market-capitalism is operationalized by the *annual change in per capita life insurance contracts*. In line with *H2*, a transition towards market-capitalism ought to coincide with more anti-U.S. terrorism.

As shown in Table 2, market-capitalist development (as measured by the life insurance data) strongly correlates with a number of important development outcomes.⁹ Both with respect to its

⁸ Enders et al. (2011) show that the other dataset nominally suitable for our purpose, the *Global Terrorism Database*, suffers from coding inconsistencies, making *ITERATE* our dataset of choice.

⁹ Due to data limitations we only present findings for the year 2000. However, we have no reason to believe that our findings would differ had we used data for other time periods.

level and change, market institutionalization coincides with higher regulatory quality (linked to sound policies that permit and promote private sector development), a stronger rule of law, lower levels of corruption, reduced economic significance of the agricultural sector, higher levels of urbanization and lower fertility rates.

–Table 2 here–

In line with our theoretical discussion in the previous section, this suggests that market-capitalist development indeed contributes to favorable socio-economic and institutional outcomes (as indicated by, e.g., a strong rule of law, inclusive economic institutions, declining fertility and urbanization) which ultimately ought to make anti-American terrorism less attractive (cf. *H1*). At the same time, however, the strong correlation between changes in market-capitalist development and development outcomes hints at the adjustment costs that accompany the transition towards a market-capitalist economy, which may very well fuel anti-American resentment (cf. *H2*). As argued above, first, such resentment may emanate from the decline of clientalism. Clientalism thrives when governments and institutions are weak (Roniger, 2004), while market-capitalist development creates stronger state institutions (as indicated by, e.g., its positive correlation with the rule of law or corruption control). Second, the economic losers of marketization and globalization may resort to anti-American terrorism. As indicated by our correlation analysis, marketization may indeed create losers in, e.g., the agricultural sector or rural-urban migration. Finally, anti-American terrorism may also be a consequence of socio-cultural modernization accompanying marketization and globalization. Here, the negative association between market-capitalist development and fertility and the positive association between it and the rule of law can be seen as an indication of changing values and traditions (e.g., with respect to the role of women in society and the ways of settling disputes).

As previously suggested by Mousseau (2002-2003) and Cronin (2003), we hypothesize that the U.S. is deliberately targeted due to its important role in globalization and the rise of market-capitalism. As shown in Figure 2, the level of market institutionalization in the U.S. in 1970 was indeed markedly above the global average. Considering the change in market-capitalism over time, both the United States and the rest of the world saw a rather steady movement towards higher levels of market institutionalization. Yet, in 2007 the level of market-capitalist

development in the U.S. was still substantially higher than the global average. Overall, these stylized facts suggest that the U.S. could indeed be considered a pioneer of marketization.

–Figure 2 here–

Further support for this idea is given in Table 3. Here, we examine the statistical relationship between U.S. and global average market-capitalist development with methods of time-series analysis.¹⁰ In particular, we are interested in whether the time series are causally related in the Granger sense (Granger, 1969). Formally, this means testing whether the inclusion of lagged values of an independent variable improves the forecasting performance of a model that also includes lagged values of the dependent variable (Enders 2010:318). Beforehand, we need to study whether the variables are stationary and cointegrated so as to specify the model correctly (Enders 2010:321). Here, unit root and cointegration tests suggest that both time series are first-difference stationary (Panel A) but not cointegrated at their level (Panel B). We thus estimate a vector autoregressive model in first differences and test for causality (Panel C). The Granger causality tests indicate that while changes in U.S. market-capitalism have a Granger-causal effect on changes in global average market-capitalism, causation does not run in the other direction. This indicates that the U.S. has indeed been instrumental in spreading capitalism globally, consequently making it plausible—in line with our hypotheses—to link this interaction to the emergence of anti-American terrorism.

–Table 3 here–

3.3 Control Variables

To avoid detecting spurious effects of market-capitalist development on anti-U.S. terrorism, we largely follow the model specification of Neumayer and Plümper (2011) by including in our baseline model control variables for population size, geographical distance to the U.S., per capita income, democracy and military dependence from the United States. This speaks to the idea—hinted at in the introduction—that the origins of anti-American terrorism may also lie in factors other than market-capitalist development.

¹⁰ Due to space constraints, we cannot describe these methods in detail. Enders (2010) offers an exhaustive discussion.

Data for (logged) *population size* are drawn from the *PENN World Table* (Heston et al., 2009). More populous countries ought to experience more anti-U.S. attacks due to the existence of a larger pool of (potential) terrorists, terrorist supporters and American victims. Indeed, previous research has found population size to be a robust predictor of terrorism (Gassebner and Luechinger, 2011; Krieger and Meierrieks, 2011).

Data for *geographical distance to the United States* come from the *CEPII GEODist Database* (Mayer and Zignago, 2011). Distance is indicated by the (logged) distance between Washington, D.C., and the respective foreign country's capital. As argued by Neumayer and Plümper (2011), the likelihood of an anti-U.S. attack ought to decrease with distance, given that it increases the material costs of attacking.

The *PENN World Table* provides data on (logged) *real per capita income*. Possibly, richer countries generate less terrorism, as it becomes less attractive to participate in terrorism when opportunities for non-violent economic participation abound. Yet, richer countries are also militarily stronger and therefore more likely to prevent insurgents with anti-market and anti-American agendas from capturing territory (Sanchez-Cuenca and De La Calle, 2012). Consequently, insurgents in more developed countries may resort to terrorism as their main strategy (as an open rebellion with territorial control becomes prohibitively costly). This may result in a positive relationship between terrorism and economic development (Sanchez-Cuenca and De La Calle, 2012). Given these different lines of reasoning, we remain agnostic about the possible relationship of economic development and anti-U.S. terrorism.

The *Democracy and Dictatorship Revisited Dataset* of Cheibub et al. (2010) provides a dichotomous measure of *democracy* (taking into account the presence of opposition parties, free elections etc.). Gassebner and Luechinger (2011) argues that, for one, respect for civil liberties may make democracies more vulnerable to terrorism because this respect may restrain curtail counter-terrorism efforts. However, they also suggest that the possibility to peacefully voice and achieve change—e.g., in terms of curtailing U.S. influence and the spread of market-capitalism—in democracies may reduce the need for terrorism, thus making democracies actually less vulnerable to terrorism. Given these conflictive ideas, we also remain agnostic about the expected effect of democracy on anti-U.S. terrorism.

Finally, we also consider the effect of *military dependence from the U.S.* on anti-American terrorism. It is measured by the (logged+1) *ratio of domestic military spending to U.S. military assistance*. This variable is constructed using raw data on U.S. military aid from USAID (2013) and a recent update of the *National Material Capabilities Dataset* of Singer (1988). Neumayer and Plümper (2011) find that countries that receive high amounts of military aid relative to their own military capacity are more likely to generate anti-American terrorism. They argue that terrorist groups, even if they ultimately have domestic ambitions (e.g., a local regime change), nevertheless attack the foreign sponsor of a domestic government (e.g., the U.S.) to stir up domestic popular support for their cause and to raise the costs of foreign military support. Ultimately, this may improve terrorist mobilization, while at the same time weakening the local government that is militarily dependent from the U.S. as foreign support is likely to decrease with terrorism directed against the foreign sponsor.

As a robustness check, we take into account further economic and political factors which are also suggested as potential terrorism determinants in previous studies (e.g., Piazza, 2008; Gassebner and Luechinger, 2011; Krieger and Meierrieks, 2011). In detail, we consider a country's level of *trade openness*, its experience with *state failure*, its *government size* and dependence on *fuel exports*.¹¹ Data on state failure come from the *Political Instability Taskforce*¹², while data on the other controls are drawn from the *PENN World Table* and *World Development Indicators*.

3.4 Empirical Methodology

To test our hypotheses, we run a series of *negative binomial regressions*, given that our dependent variables are overdispersed (i.e., their variances are larger than their means) count

¹¹ Note that introducing further controls to our estimation model (measuring political proximity to the U.S., economic growth, population growth, domestic military capacity, primary goods exports, ethnic fractionalization, Muslim population share and regime age) does not affect our main findings. These additional robustness checks are available upon request.

¹² See <http://globalpolicy.gmu.edu/political-instability-task-force-home/pitf-problem-set-annual-data>.

data, as shown in Table 1.¹³ Negative binomial regressions are commonly used in studies assessing the determinants of terrorism (Gassebner and Luechinger, 2011; Krieger and Meierrieks, 2011; Neumayer and Plümper, 2011). All time-variant explanatory variables enter the model in lagged form to minimize endogeneity. Time dummies are included in all estimations to address unit effects and the trending of transnational terrorism over time.

4. Negative Binomial Regression Results

The negative binomial regression results are reported in Table 4. With respect to the main explanatory variables of interest, we find that a higher level of market-capitalist development is associated with less anti-American terrorism, while the process of marketization is associated with more anti-American terrorism. These findings are in line with *H1* and *H2*.

For one, the pacifying effect of higher levels of market-capitalist development is consistent with the idea that anti-U.S. terrorism is less likely to originate in countries that are as capitalistically developed as the United States. Possibly, this is due to the close and highly beneficial economic interdependence between market-capitalist societies, where these societies also share similar values and institutions (e.g., tolerance, cooperation, a strong rule of law) that are conducive to peaceful conflict resolution and further reduce the likelihood of anti-market resentment. This suggests that the idea of a capitalist peace that impedes internal and external conflict (e.g., Gartzke, 2007; De Soysa and Fjelde, 2010) may also matter to the patterns of anti-American transnational terrorism.

For another, the process of marketization is found to increase the likelihood of anti-American terrorism developing. As argued before, the resistance of certain population segments (the old elite, traditionalists and the religious and economically vulnerable) to the transition towards market-capitalism, which unfavorably affects their economic and politico-cultural influence, may

¹³ As another robustness check, we run zero-inflated negative binomial (*ZINB*) regressions for all specifications reported below. *ZINB* regressions can be appropriate to accommodate for the fact that there is a large number of zero values (i.e., no anti-U.S. terrorism) in country-cases and the possibility of a reporting bias associated with it (Neumayer and Plümper, 2011:13). Our *ZINB* regression results are consistent with the estimates from conventional negative binomial regressions reported in the main text. These results are available upon request.

explain this relationship (e.g., Mousseau, 2002-2003). Here, the losers of modernization may intentionally target the United States to effectively voice dissent and rollback pro-market developments by punishing the U.S. for its role in capitalism, globalization and the Americanization of their societies (e.g., in the form of women empowerment, secularization and consumerism). In so doing, the losers of economic transition may be able to consolidate their societal position.

Notably, the pacifying and inflammatory effects of market-capitalist development (as indicated by the incidence-rate-ratios (IRR) reported in Model 6 in Table 4) are both substantive. According to the IRR, a one-unit increase in the level of market-capitalism (change in market-capitalism) is associated with a 28 percent decrease (56 percent increase) in anti-U.S. terrorism. This suggests that both the beneficial level-effects and the destabilizing rate-of-change-effects of market-capitalist development need to be taken into account. As argued earlier by Mousseau (2002-2003) and Schneider (2013), this suggests that capitalism does not need to be a purely peaceful force, especially during times of rapid socio-economic, institutional and cultural change that may accompany the marketization process.

–Table 4 here–

The results for the baseline controls are robust across different specifications. First, we find that anti-American terrorism is positively associated with population size. Presumably, this is due to a scale effect, e.g., as a larger population coincides with a larger pool of terrorists, terrorist supporters and American victims. Second, military dependence from the United States results in more anti-American terrorism. Possibly, terrorist groups with domestic political goals deliberately attack the U.S. not only to counter the marketization of their societies but also to raise the costs of American military support for a foreign government, which in turn is likely to weaken this government and raise the possibility of terrorist success at home (Neumayer and Plümper, 2011). Third, our results suggest that per capita income is a positive predictor of terrorism. This is in line with Sanchez-Cuenca and De La Calle (2012). Potentially, anti-American dissidents resort to terrorism as their main strategy in richer countries due to their inability to capture territory. By contrast, in poor countries it is more attractive for an insurgent group to seize territory and wage an open rebellion to implement an anti-market and anti-American agenda. Fourth, distance to the U.S. and democratic institutions share no statistically

significant association with anti-American terrorism. Finally, with respect to the additional control variables, we find that the prevalence of domestic political instability (state failure) is robustly associated with more anti-U.S. terrorism. This speaks to Piazza (2008) who finds that instability creates a political vacuum that facilitates terrorist activity. Government size is positively related to anti-American terrorism, possibly due to rent-seeking behavior by terrorist groups (Kirk, 1983). Trade openness and oil exports, by contrast, share no substantial connection with anti-American violence.

As a robustness check, we consider whether the end of the Cold War as a major structural change in the international system affects our findings. As noted by Shughart (2006), the end of the Cold War saw the decline of left-wing terrorism and the rise of Islamist terrorism. This development coincided to some extent with a transfer of terrorism to less developed countries, also with respect to anti-American terrorism (Enders and Sandler, 2005). Potentially, these changes may have also affected the role of market-capitalist development in explaining anti-American terrorism.

Our empirical findings are reported in Table 5. In line with Enders and Sandler (2005), we find evidence that anti-American terrorism transferred to less developed countries after the end of the Cold War. Our results, however, do not indicate that the end of the Cold War mattered to the role of capitalism in explaining anti-U.S. terrorism. We still find evidence of significant and substantive positive (negative) level- (rate-of-change-)effects for the Cold War and post-Cold War era. According to the IRR (Models 3 and 4 in Table 5), a one-unit increase in the level of market-capitalism (change in market-capitalism) is associated with a 36 percent decrease (68 percent increase) in anti-U.S. terrorism during the Cold War; after the end of the Cold War, a one-unit increase in the level of market-capitalism (change in market-capitalism) yields a 21 percent reduction (81 percent increase) in terrorism. This suggests that both left-wing extremism and the rise of religious fundamentalism following the “Islamic revival”—both anti-market and anti-American ideologies spawning anti-American terrorism—can be (at least partly) understood as reactions to globalization and the economic transition towards market-capitalism.

–Table 5 here–

5. Further Time-Series Evidence at the System Level

5.1 Motivation

The evidence presented in the previous section suggests that higher levels of market-capitalism lead to less anti-American terrorism, whereas the marketization process results in more anti-U.S. attacks. These effects were identified at the *country-level*, which is the standard approach to study the origins of anti-American terrorism. However, some researchers (e.g., Volgy et al., 1997) suggest that an analysis at the *system-level* may also prove helpful by conceptualizing anti-American terrorism as a “systemic disturbance [...] to disrupt the global order” (Volgy et al., 1997:208-209).¹⁴ With respect to the capitalism-terrorism nexus, following this view we can hypothesize that anti-American terrorism can be understood as a violent systemic response to the existing global politico-economic order characterized by U.S.-led globalization and marketization.

Why may a systemic perspective add to our analysis? Consider anti-American terrorism originating in Western Europe. In this part of the world anti-U.S. terrorism was particularly prominent in the 1970s and 1980s, being carried out primarily by left-wing groups (e.g., the German *Red Army Faction* or the French *Action Directe*). Clearly, left-wing terrorism was oftentimes motivated by an anti-American ideology (Communism) and “bitter opposition to market (liberal) values” (Mousseau, 2002-2003:19). However, Western Europe was—at least during our observation period—characterized by already high levels of market-capitalist development, making it unlikely that terrorist groups in Western Europe attacked the U.S. to prevent the further marketization of their own societies. Yet, the rise of market-capitalism may have motivated their activities after all, albeit from a systemic rather than domestic perspective. Left-wing terrorist groups in the Western world saw their anti-American activities as part of a

¹⁴ System-level studies of terrorism argue that variation at the system-level (i.e., structural determinants) rather than country-level (in, e.g., democratic or economic development) explains the patterns of terrorism. Examples of system-level analyses of terrorism are O’Brien (1996), Volgy et al. (1997) and Sobek and Braithwaite (2005). Among the factors contributing to the emergence of terrorism considered in these studies are the involvement of countries (especially the U.S. and its main rivals) in foreign policy crises, the global strength of the U.S. and its competitors and the global support for U.S. leadership.

global struggle against U.S. imperialism and capitalism (Shughart, 2006). Similarly, terrorism by Islamist groups—the other important terrorism wave producing anti-American terrorism—can be conceptualized as a response to globalization and marketization transcending national borders (Mousseau, 2002-2003). Indeed, many Islamist insurgencies (e.g., in Afghanistan, Pakistan and the Northern Caucasus) have attracted foreign fighters who were motivated by transnational factors—the defense of the Islamic World from American/Western intrusion—rather than idiosyncratic politico-economic conditions prevailing in their home countries (Williams, 2011).

Given these considerations, it seems fruitful to also examine the relationship between market-capitalism and anti-American terrorism from a systemic perspective. This ought to complement the panel evidence reported beforehand. In line with our previously outlined hypotheses, we expect a higher global level of market-capitalism to correspond with less anti-American terrorism, while a global economic transition towards market institutionalization ought to result in more anti-American terrorism.

5.2 Data and Methodology

In order to examine these hypotheses, we collect system-aggregated data for the period between 1970 and 2007. The summary statistics are reported in Table 6.

–Table 6 here–

As before, data on anti-American terrorism and market-capitalist development come from *ITERATE* and the *Contract Intensity of National Economies Dataset*. Here, anti-American terrorism is measured by the annual global count of transnational terrorist attacks against U.S. interests. The (logged) global average of annually aggregated per capita life insurance contracts in force corresponds to the systemic level of market-capitalist development in a given year, while the change in this variable between two years indicates the global speed of marketization.

To account for other systemic factors potentially influencing the patterns of anti-American terrorism, we follow Sobek and Braithwaite (2005) by controlling for *American dominance*, the *power differential* between the U.S. and the rest of the world, the *diplomatic standing* of the United States and the *Cold War era*. The operationalization of these variables follows Sobek and Braithwaite (2005) and is documented in Table 6.

As in O'Brien (1996) and Sobek and Braithwaite (2005), we estimate a series of ARMA models to examine the systemic influence of market-capitalist development on anti-American terrorism (net of the impact of the controls). ARMA models are especially suited to modelling time dependence which is likely to matter for our analysis, given that the annual terrorism observations are unlikely to be independent from each other. In ARMA models the disturbances are allowed to follow a linear autoregressive (AR) moving-average (MA) specification.¹⁵ By accounting for time dependence, we minimize the potential for underestimating standard errors which would otherwise affect hypothesis testing. Also, Sobek and Braithwaite (2005:144) argue that ARMA models have good small sample properties, so that the small number of observations ($T=37$) is less likely to affect inferences. Finally, we use robust standard errors because the use of a count variable as a regressand may violate (e.g., in the form of heteroskedasticity) the ARMA assumption of normally distributed disturbances.

5.3 Empirical Findings

The ARMA regression results are reported in Table 7. With respect to the main variables of interest, we find that a higher global level of market-capitalism is associated with fewer anti-American incidents, suggesting that economic interdependencies and similarities in institutions and values are ultimately a disincentive for anti-American terrorism. At the same time, however, a transition towards market-capitalism results in more anti-U.S. terrorism, indicating that socio-economic modernization strain (i.e., the decline of clientalism, the ill effects of economic transformation and the associated threats to local religion and culture) motivates anti-U.S. resentment. Overall, the system-level evidence is thus very much in line with our panel analysis findings at the country-level.

–Table 7 here–

With respect to control variables, our findings resemble those reported by Sobek and Braithwaite (2005). First, we find that anti-American terrorism increases with American dominance. This suggests that dominance makes it more difficult for revisionist actors to change the status quo through conventional means, making terrorism a more attractive option. Second, higher difference in military capacity between the U.S. and the rest of the world leads to more anti-

¹⁵ ARMA models are discussed in more detail in Enders (2010).

American terrorism. Presumably, such a power differential invites anti-American terrorism because it creates greater levels of dissatisfaction among weaker actors in the system, while also limiting the possibilities of changing the status quo conventionally. Third, a convergence of preferences towards the United States (i.e., a more favorable diplomatic standing of the U.S.) leads to a decrease in attacks. Presumably, such preference convergence coincides with less conflict and thus less need to resort to terrorism to foster political change. Finally, we do not find that anti-American attacks were more common during the Cold War era.

6. Conclusion

U.S. President George W. Bush (2001) shortly after the 9/11 attacks asked: “Why do they hate us?” Our panel and time-series analyses using data for a 149 countries for the period between 1970 and 2007 suggests that—in addition to the “usual suspects” such as military dependence from the U.S. and U.S. foreign policy—the transition towards a market economy may explain anti-American resentment. This speaks to the observation that many anti-American terrorist groups—be they left-wing or Islamist—have spread anti-capitalist rhetoric and attacked targets closely associated with capitalism.

Our findings suggest that, ultimately, the establishment of market economies that resemble the American economic system ought to make the U.S. more secure by creating economic interdependencies and resulting in a convergence of pro-peace values and institutions. Such beneficial level-effects, however, have to be seen alongside the destabilizing rate-of-change-effects that materialize during the transition towards a market economy. Various interest groups may attack the U.S.—the leading force of capitalism and globalization and thus the main proponent of unwelcome socio-economic, politico-institutional and cultural change—to voice dissent, rollback pro-market reforms and developments, limit U.S. influence and the associated Americanization of their societies, so as to consolidate their own societal position that is threatened by the marketization process.

Policywise, our findings suggest that the U.S. may become a less likely target of transnational terrorism by (peacefully) subsidizing and propagating the establishment of market-capitalist economies. For instance, pro-market interest groups in non-market economies may be strengthened through U.S. support for domestic programs that foster the creation of independent

judicial institutions (to allow markets to function properly) and counter corruption (to diminish the influence of the old clientalist elite). Crucially, however, the disruptive political, economic and cultural effects of the marketization process cannot be disregarded, as they may incite anti-American resentment. Here, the U.S. may help to make the transition process as bearable as possible for anti-market groups in foreign societies. For instance, the U.S. may help to insulate the economically vulnerable from the most adverse consequences of globalization and marketization by means of sound trade policy and directed development assistance that increases economic opportunities.

References

- BBC News, 2003. Bin Laden tape: Text. February 12, 2003. URL: http://news.bbc.co.uk/2/hi/middle_east/2751019.stm.
- Bush, G. W., 2001. Address to a Joint Session of Congress. Washington, DC, September 20, 2001
- Cheibub, J.A., Gandhi, J., Vreeland, J.R., 2010. Democracy and dictatorship revisited. *Public Choice* 143(1-2), 67-101.
- Cronin, A. K., 2003. Behind the curve: Globalization and international terrorism. *International Security* 27(3), 30-58.
- De Soysa, I., Fjelde, H., 2010. Is the hidden hand an iron fist? Capitalism and civil peace, 1970-2005. *Journal of Peace Research* 47(3) 287-298.
- Dreher, A., Gassebner, M., Siemers, L.-H. R., 2012. Globalization, economic freedom and human rights. *Journal of Conflict Resolution* 56(3), 516-546.
- Enders, W., 2010. *Applied Econometric Time Series*. Hoboken, NJ: John Wiley & Sons.
- Enders, W., Sandler, T., 2005. Distribution of transnational terrorism among countries by income class and geography after 9/11. *International Studies Quarterly* 50(2), 367-393.
- Enders, W., Sandler, T., Gaibulloev, K., 2011. Domestic versus transnational terrorism: Data, decomposition, and dynamics. *Journal of Peace Research* 48(3), 319-337.
- Gartzke, E., 2007. The capitalist peace. *American Journal of Political Science* 51(1), 166-191.
- Gassebner, M., Luechinger, S., 2011. Lock, stock, and barrel: A comprehensive assessment of the determinants of terror. *Public Choice* 149(3), 235-261.
- Granger, C. W. J., 1969. Investigating causal relations by econometric models and cross-spectral methods. *Econometrica* 37(3), 424-438.

- Hegre, H., 2000. Development and the liberal peace: What does it take to be a trading state? *Journal of Peace Research* 37(1), 5-30.
- Heston, A., Summers, R., Aten, B., 2009. Penn World Table 6.3. Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania.
- Kirk, R. M., 1983. Political terrorism and the size of government: A positive institutional analysis of violent political activity. *Public Choice* 40(1), 41-52.
- Krieger, T., Meierrieks, D., 2011. What causes terrorism? *Public Choice* 147(1-2), 3-27.
- LaFree, G., Yang, S.-M., Crenshaw, M., 2009. Trajectories of terrorism: Attack patterns of foreign groups that have targeted the United States, 1970-2004. *Criminology & Public Policy* 8(3), 445-473.
- Mayer, T., Zignago, S., 2011. Notes on CEPII's distances measures: The GeoDist Database. CEPII Working Paper 2011-25.
- Mickolus, E. F., Sandler, T., Murdock, J. M., Flemming, P., 2008. *International Terrorism: Attributes of Terrorist Events, 1968-2007*. Dunn Loring, VA: Vinyard Software.
- Mousseau, M., 2002-2003. Market civilization and its clash with terror. *International Security* 27(3), 5-29.
- Mousseau, M., 2011. Urban poverty and support for Islamist terror: Survey results of Muslims in fourteen countries. *Journal of Peace Research* 48(1), 35-47.
- Mousseau, M., 2012. Capitalist development and civil war. *International Studies Quarterly* 56(3), 470-483.
- Mousseau, M., Mousseau, D. Y., 2008. The contracting roots of human rights. *Journal of Peace Research* 45(3), 327-344.
- Neumayer, E., De Soysa, I., 2007. Globalisation, women's economic rights and forced labour. *World Economy* 30(10), 1510-1535.
- Neumayer, E., Plümper, T., 2011. Foreign terror on Americans. *Journal of Peace Research* 48(1), 3-17.
- O'Brien, S. P., 1996. Foreign policy crises and the resort to terrorism: A time-series analysis of conflict linkages. *Journal of Conflict Resolution* 40(2), 320-335.
- Pape, R. A., 2001. The strategic logic of suicide terrorism. *American Political Science Review* 97(3), 343-361.
- Piazza, J. A., 2008. Incubators of terror: Do failed and failing states promote transnational terrorism? *International Studies Quarterly* 52(3): 469-488.

- Roniger, L., 2004. Political clientelism, democracy, and market economy. *Comparative Politics* 36(3), 353-375.
- Sanchez-Cuenca, I., De La Calle, L., 2012. Rebels without a territory: An analysis of nonterritorial conflict in the world, 1970-1997. *Journal of Conflict Resolution* 56(4), 580-603.
- Schneider, G., Gleditsch, N. P., 2010. The capitalist peace: The origins and prospects of a liberal idea. *International Interactions* 36(2), 107-114.
- Schneider, G., 2013. Peace through globalization and capitalism? Prospects of two liberal propositions. *Journal of Peace Research* (in print).
- Shughart, W. F., 2006. An analytical history of terrorism, 1945-2000. *Public Choice* 128(1-2), 7-39.
- Singer, J. D., 1988. Reconstructing the Correlates of War Dataset on material capabilities of states, 1816–1985. *International Interactions* 14(2), 115-132.
- Sobek, D., Braithwaite, A., 2005. Victims of success: American dominance and terrorism. *Conflict Management and Peace Science* 22(2), 135-148.
- Stiglitz, J. E., 2005. The overselling of globalization. In: Weinstein, M. M. (Ed.), *Globalization: What's New*, Columbia University Press: New York, pp. 228-261.
- USAID, 2013. U.S. Overseas Loans and Grants Online. <http://gbk.eads.usaidallnet.gov/data/detailed.html>.
- Volgy, T. J., Imwalle, L. E, Corntassel, J. J., 1997. Structural determinants of international terrorism: The effects of hegemony and polarity on terrorist activity. *International Interactions* 23(2), 207-231.
- Williams, B. G., 2011. On the trail of the ‘Lions of Islam’: Foreign fighters in Afghanistan and Pakistan, 1980-2010. *Orbis* 55(2), 216-239.

Figures and Tables

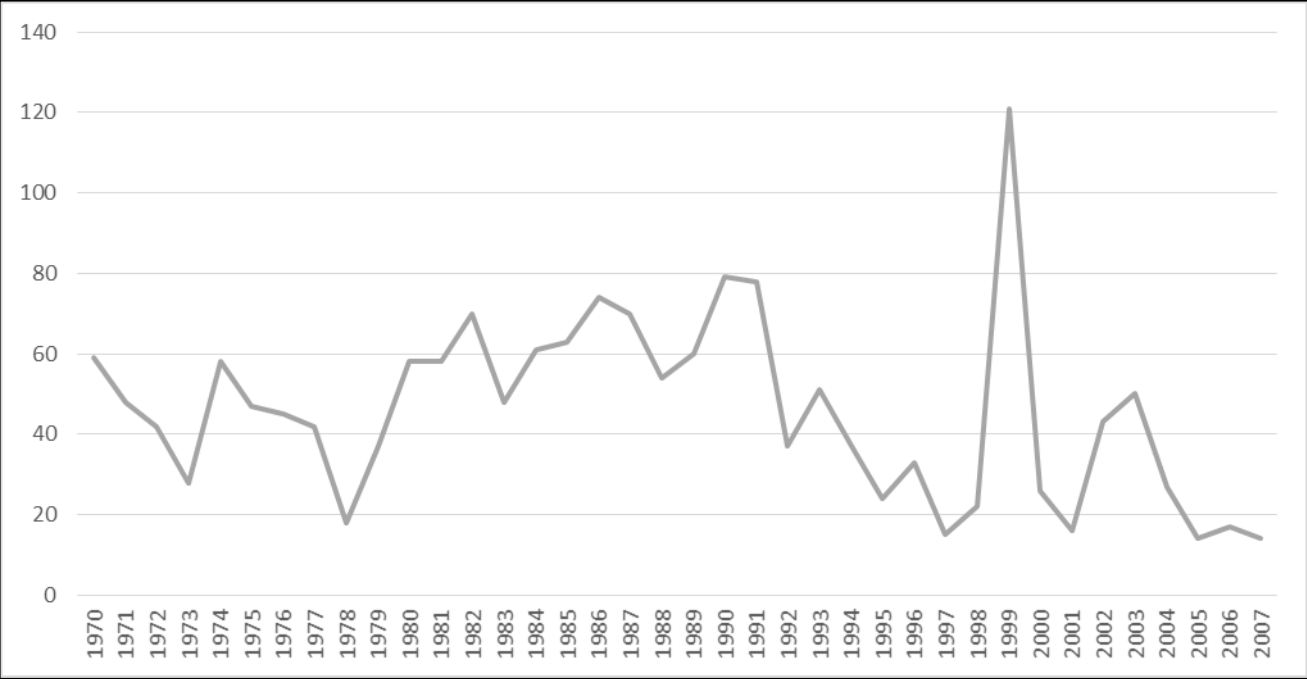


Figure 1: Global Number of Anti-American Terrorist Attacks, 1970-2007



Figure 2: Global and U.S. Change in Market Institutionalization, 1970-2007

Variable	N*T	Mean	SD	Min.	Max.
Anti-U.S. Terrorist Attacks	5105	0.342	1.884	0	88
Market-Capitalist Development (Level)	5043	3.017	1.714	0.131	9.021
Market-Capitalist Development (Change)	4894	0.028	0.190	-2.704	2.723
Population Size (log)	5105	9.062	1.500	4.824	14.095
Distance to U.S. (log)	5104	8.396	1.120	0	9.155
GDP p.c. (log)	5104	8.455	1.162	5.032	11.491
Democracy	5105	0.416	0.493	0	1
Military Dependence from U.S. (log+1)	4909	1.365	1.786	0	10.142
Trade Openness	5104	71.214	46.676	1.086	456.562
Government Size	5104	18.269	9.866	1.438	83.350
State Failure	5100	0.632	1.707	0	13.5
Fuel Exporting Country	5105	0.102	0.303	0	1

Table 1: Summary Statistics (Panel Data)

	Level of Market-Capitalist Development		Change in Market-Capitalism (1996-2000 Average)	
Regulatory Quality	0.78***		0.38***	
Rule of Law	0.84***		0.38***	
Control of Corruption	0.84***		0.37***	
Value Added in Agriculture	-0.59***		-0.35***	
Urbanization	0.63***		0.23***	
Fertility Rate	-0.61***		-0.41***	

Notes: Pearson's correlation coefficients reported. (***) indicates statistical significance at 0.01 level from two-tailed significance tests. Institutional data obtained from the Worldwide Governance Indicators of the World Bank (http://info.worldbank.org/governance/wgi/sc_country.asp). Other variables drawn from the *WDI*. All data for the year 2000.

Table 2: Pairwise Correlation between Market-Capitalist Development and Assorted Development Outcomes

Panel A: Augmented Dickey-Fuller Unit Root Test

<u>Variables</u>	<u>Level</u>	<u>First-Difference (Δ)</u>
Level of Market-Capitalist Development (World)	2.498	-4.347***
Level of Market-Capitalist Development (US)	-1.829	-3.976**

Notes: ADF-test statistics reported associated with rejection of null hypothesis of non-stationarity. Trend included in underlying regressions. ** $p < 0.05$, *** $p < 0.01$.

Panel B: Johansen Test for Cointegration

<u>Bivariate Model</u>	<u>Trace Statistic</u>	
Level of Market-Capitalist Development (World) and Level of Market-Capitalist Development (US)	R=0	13.615
	R=1	1.008

Notes: Trace statistic associated with hypothesis of at most R=0/1 cointegration vectors. Critical values for 5% level of significance are 15.41 (for R=0) and 3.76 (for R=1). Lag length of underlying VAR determined via the Akaike Information Criterion (AIC).

Panel C: Granger Causality Test

<u>Causal Relationship</u>	<u>Wald χ^2</u>	<u>Prob. > χ^2</u>
Δ Market-Capitalist Development (World) \rightarrow Δ Market-Capitalist Development (US)	6.157	0.188
Δ Market-Capitalist Development (US) \rightarrow Δ Market-Capitalist Development (World)	39.368	0.000***

Notes: Wald χ^2 and p -values associated with rejection of null hypothesis of Granger non-causality. Lag length of underlying VAR determined via the AIC. *** $p < 0.01$.

Table 3: Time-Series Analysis of the Relationship between Global and U.S. Market-Capitalist Development

	(1)	(2)	(3)	(4)	(5)	(6)
Market-Capitalist Development (Level-Effect) $t-1$	-0.329 (0.112)***	-0.344 (0.114)***	-0.346 (0.115)***	-0.273 (0.110)**	-0.322 (0.120)***	0.720 (0.081)***
Market-Capitalist Development (Rate-of-Change-Effect) $t-1$	0.446 (0.206)**	0.452 (0.210)**	0.472 (0.207)**	0.414 (0.205)**	0.445 (0.206)**	1.562 (0.322)**
Population Size $t-1$	0.643 (0.093)***	0.590 (0.102)***	0.672 (0.099)***	0.613 (0.091)***	0.642 (0.093)***	1.902 (0.176)***
Distance to the U.S.	-0.123 (0.197)	-0.103 (0.179)	-0.119 (0.184)	-0.126 (0.182)	-0.125 (0.199)	0.885 (0.174)
GDP p.c. $t-1$	0.751 (0.190)***	0.791 (0.194)***	0.794 (0.196)***	0.800 (0.189)***	0.740 (0.205)***	2.119 (0.403)***
Democracy $t-1$	-0.040 (0.235)	-0.074 (0.237)	0.043 (0.222)	-0.042 (0.224)	-0.032 (0.243)	0.961 (0.226)
Military Dependence from the U.S. $t-1$	0.257 (0.054)***	0.254 (0.054)***	0.247 (0.052)***	0.253 (0.058)***	0.259 (0.054)***	1.292 (0.070)***
Trade Openness $t-1$		-0.003 (0.003)				
Government Size $t-1$			0.021 (0.012)*			
State Failure $t-1$				0.273 (0.056)***		
Fuel Exporting Country					0.066 (0.361)	
No. of Observations	4576	4576	4576	4571	4576	4576
Mean VIF	1.71	1.72	1.65	1.65	1.76	1.71
Wald χ^2 (Prob. > χ^2)	371.99 (0.00)***	382.97 (0.00)***	369.80 (0.00)***	464.89 (0.00)***	405.26 (0.00)***	371.99 (0.00)***
Log-Pseudolikelihood	-2374.38	-2371.91	-2368.61	-2336.21	-2374.34	-2374.38

Notes: Dependent variable is the number of anti-U.S. terrorist attacks. Constant not reported. All models include year dummies (not reported). Robust standard errors clustered over countries in parentheses. Model (6) reports the incidence-rate ratios for Model (1). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Market-Capitalist Development and Anti-American Terrorism

	(1)	(2)	(3)	(4)
Market-Capitalist Development (Level-Effect) $t-1$	-0.453 (0.167)***	-0.232 (0.123)*	0.636 (0.106)***	0.793 (0.097)*
Market-Capitalist Development (Rate-of-Change-Effect) $t-1$	0.520 (0.239)**	0.597 (0.324)*	1.682 (0.403)**	1.817 (0.588)*
Population Size $t-1$	0.610 (0.126)***	0.685 (0.117)***	1.841 (0.232)***	1.984 (0.232)***
Distance to the U.S.	-0.388 (0.554)	0.088 (0.110)	0.678 (0.376)	1.092 (0.120)
GDP p.c. $t-1$	1.396 (0.227)***	0.353 (0.244)	4.039 (0.916)***	1.423 (0.347)
Democracy $t-1$	0.029 (0.348)	-0.190 (0.296)	1.029 (0.358)	0.827 (0.245)
Military Dependence from the U.S. $t-1$	0.274 (0.062)***	0.237 (0.080)***	1.315 (0.081)***	1.267 (0.101)***
Sample	Cold War	Post-Cold War	Cold War	Post-Cold War
No. of Countries	126	149	126	149
No. of Observations	2083	2373	2083	2373
Mean VIF	1.74	1.73	1.74	1.73
Wald χ^2	217.48	161.08	217.48	161.08
(Prob. > χ^2)	(0.00)***	(0.00)***	(0.00)***	(0.00)***
Log-Pseudolikelihood	-1230.92	-1012.03	-1230.92	-1012.03

Notes: Dependent variable is the number of anti-U.S. terrorist attacks. Constant not reported. All models include year dummies (not reported). Robust standard errors clustered over countries in parentheses. 1970-1989=Cold War era; 1990-2007=post-Cold War era. Models (3) and (4) report the incidence-rate ratios for Models (1) and (2), respectively. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Market-Capitalist Development and Anti-American Terrorism during and after the Cold War

Variable	N*T	Mean	SD	Min.	Max.	Operationalization
Global Anti-U.S. Terrorist Attacks	38	45.895	22.799	14	121	
Global Level of Market-Capitalist Development	38	2.991	0.281	2.603	3.582	
Global Change in Market-Capitalist Development	37	0.026	0.024	-0.026	0.100	
Power Differential	38	-0.010	0.029	-0.056	0.051	<i>CINC</i> score for the U.S. minus the <i>CINC</i> score of the chief revisionist power (see notes for details)
Preference Congruence with U.S.	38	-0.186	0.243	-0.551	0.294	Mean affinity score between the United States and the other members of the United Nations (see notes for details)
Dominance	38	-0.067	0.033	-0.144	0	Product of the <i>CINC</i> score and affinity score of the chief revisionist power of the United States (see notes for details)
Cold War	38	0.526	0.506	0	1	Dummy variable for the 1970-1989 period.

Notes: *CINC* (*Composite Index of National Capability*) score drawn from an update of Singer (1987). The *CINC* score is a composite index indicating a country's demographic, economic and military strength (e.g., in terms of population size, energy consumption and military personnel). Chief revisionist power is the country with the combination of the highest *CINC* score and lowest affinity with the United States at a given year (USSR/Russia in 1970-1971 and 1977-1990; China in 1972-1976 and from 1991-2007). Affinity reflects the similarity of state preferences based on their voting positions in the U.N. General Assembly. The affinity data is taken from the *Affinity of Nations Dataset* (<http://dss.ucsd.edu/~egartzke/htmlpages/data.html>).

Table 6: Summary Statistics (Time-Series Data)

	(1)	(2)	(3)	(4)
Global Level of Market-Capitalist Development	-57.701 (14.869)***	-54.654 (4.605)***	-73.356 (20.740)***	-49.772 (23.879)**
Global Change in Market-Capitalist Development	219.475 (106.972)**	233.157 (77.520)***	246.032 (114.465)**	221.901 (100.546)**
Power Differential	122.310 (73.597)*	105.826 (46.384)**	99.921 (72.579)	111.554 (41.166)***
Preference Congruence with U.S	-116.847 (18.964)***	-115.989 (11.599)***	-115.832 (18.274)***	-116.934 (11.366)***
U.S. Dominance	479.203 (196.082)**	470.383 (129.250)***	439.184 (194.431)**	486.835 (143.367)***
Cold War			-7.026 (7.113)	2.048 (9.538)
AR(1)	-0.170 (0.159)	0.321 (0.384)	-0.164 (0.162)	0.312 (0.374)
MA(1)		-0.999 (0.001)***		-1.000 (0.001)***
No. of Observations	37	37	37	37
Log-Pseudolikelihood	-158.32	-152.76	-158.21	-152.74
AIC	332.63	323.52	334.43	325.49

Notes: Dependent variable is the number of anti-U.S. terrorist attacks. Constant not reported. Standard errors robust to symmetric non-normality (including heteroskedasticity) in parentheses. *p<0.10, **p<0.05, ***p<0.01.

Table 7: ARMA Regression Results

List of Countries

Afghanistan	Congo (DR)	Haiti	Mexico	Slovak Republic
Albania	Costa Rica	Honduras	Moldova	Slovenia
Algeria	Cote d'Ivoire	Hungary	Mongolia	Somalia
Angola	Croatia	India	Morocco	South Africa
Argentina	Cuba	Indonesia	Mozambique	South Korea
Armenia	Cyprus	Iran	Namibia	Spain
Australia	Czech Republic	Iraq	Nepal	Sri Lanka
Austria	Denmark	Ireland	Netherlands	Sudan
Azerbaijan	Djibouti	Israel	New Zealand	Swaziland
Bahrain	Dominican Republic	Italy	Nicaragua	Sweden
Bangladesh	Ecuador	Jamaica	Niger	Switzerland
Belarus	Egypt	Japan	Nigeria	Syria
Belgium	El Salvador	Jordan	Norway	Tajikistan
Benin	Equatorial Guinea	Kazakhstan	Oman	Tanzania
Bolivia	Eritrea	Kenya	Pakistan	Thailand
Bosnia & Herzegovina	Estonia	Kuwait	Panama	Togo
Botswana	Ethiopia	Kyrgyzstan	Papua New Guinea	Trinidad & Tobago
Brazil	Fiji	Laos	Paraguay	Tunisia
Bulgaria	Finland	Latvia	Peru	Turkey
Burkina Faso	France	Lebanon	Philippines	Uganda
Burundi	Gabon	Lesotho	Poland	Ukraine
Cambodia	Gambia	Liberia	Portugal	United Arab Emirates
Cameroon	Georgia	Lithuania	Qatar	United Kingdom
Canada	Germany	Macedonia	Romania	Uruguay
Central African Republic	Ghana	Madagascar	Russia	Uzbekistan
Chad	Greece	Malawi	Rwanda	Venezuela
Chile	Guatemala	Malaysia	Saudi Arabia	Yemen
China	Guinea	Mali	Senegal	Zambia
Colombia	Guinea-Bissau	Mauritania	Sierra Leone	Zimbabwe
Congo	Guyana	Mauritius	Singapore	

Aktuelle Diskussionsbeiträge / Recent discussion papers

2013-04	Tim Krieger, Daniel Meierrieks	The Rise of Market-Capitalism and the Roots of Anti-American Terrorism
2013-03	Eugen Dimant, Tim Krieger, Margarete Redlin	A Crook is a Crook ... But is He Still a Crook Abroad? On the Effect of Immigration on Destination-Country Corruption
2013-02	Alexander Haupt, Tim Krieger	The Role of Mobility in Tax and Subsidy Competition
2013-01	Tim Krieger	Die Finanzkrise und Europas Rolle in der globalen Wirtschaftsordnung