Clash of Civilizations: Impact of Culture on Militarized Interstate Dispute

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Abstract

Huntington (1993a, 1993b, 1998, 2000) argued that the fundamental source of conflict in the post-Cold War world will not be primarily ideological or primarily economic, but the great divisions among humankind and the dominating source of conflict will be cultural and religious; as such, the primary axis of conflict in the future will be along civilizational lines. To that end, in addition to confronting several of Huntington's hypotheses we scrutinize the impact of culture on militarized interstate disputes and test whether countries that belong to different civilizations tend to be more involved in conflict than countries that belong to the same civilization. We show that over the period of 1816-2001 civilizational dissimilarity in a dyad increases the probability of conflict calculated at the means of the variables by up to 62.8 percentage points. More strikingly, even after controlling for geographic, political, military and economic factors, being part of different civilizations in the post-Cold War period brings about 71.2 percentage points higher conflict probability than belonging to the same civilization while it reduces the probability of conflict by 25.7 percentage points during the Cold War.

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In class and ideological conflicts, the key question was "Which side are you on?" and people could and did choose sides and change sides. In conflicts between civilizations, the question is "What are you?" That is a given that cannot be changed. And as we know, from Bosnia to the Caucasus to the Sudan, the wrong answer to that question can mean a bullet in the head. (Samuel P. Huntington, 1993)

1 Introduction

In the summer of 1993 Foreign Affairs published an article entitled "The Clash of Civilizations?" by Samuel Huntington, which generated a myriad of discussion, controversy, sympathy and antipathy. The article posed the question whether conflicts between civilizations would dominate the future of world politics. Defining a civilization as the broadest cultural entity and identity under which people form the highest cultural grouping Huntington (1993a, 1993b, 1998, 2000) claims that in the post-Cold War era the most fundamental source of conflict will be civilizational; therefore, the primary axis of conflict in today's post-Cold War world will be along cultural and religious lines. Consequently, he concludes that the greatest threat to world peace are the conflicts between civilizations.

The objective of this study is to scrutinize the impact of culture at large on militarized interstate disputes and to confront several of Huntington's hypotheses from different aspects. To that end, we conduct analyses to understand whether countries that belong to different civilizations tend to be more involved in conflict than countries that belong to the same civilization. We run such tests both on cross-sectional level and over a panel of years between 1816 and 2001. We also distinguish between countries involved in conflict of any level and those escalated to a war and question the validity of indicator of war as a dependent variable. Moreover, we break down our investigation into Cold War and post-Cold War periods and take a closer look into Huntington's hypothesis by making comparisons between these two time periods. Our findings suggest that civilizational differences do in fact matter. Over the entire sample of 1816-2001 we show that civilizational dissimilarity in a dyad increases the probability of conflict calculated at the means of the variables by up to 62.8 percentage points. More strikingly, once the economic factors are taken into account, being part of different civilizations in the post-Cold War period brings about 71.2 percentage points higher conflict probability than belonging to the same civilization while it reduces the probability of conflict by 25.7 percentage points during the Cold War.

Impact of ethnicity, language, history, tradition, social norms, culture and religion at large on institutions and the economy have long been studied.¹ In particular, in the context of conflict occurrence, there are studies on both intrastate and interstate conflict.² Fearon and Laitin (2003), for example, suggest that after controlling for per capita income, more ethnically or religiously diverse countries have been no more likely to experience significant civil violence in post-Cold War period. Instead, they propose poverty, political instability, rough terrain and large populations as the factors that explain which countries have been at risk for civil war.³ On the other hand, Spolaore and Wacziarg (2010) and Martin et al. (2008), among others, study interstate conflicts. Spolaore and Wacziarg (2010) examine the theoretical and empirical relationship between the occurrence of interstate conflicts and the degree of relatedness between countries. Using genetic proximity as a measure of cultural traits they show that genetically closer populations are more prone to go to war with each other as these populations share closer ideal points and a bigger lot of common problematic issues. Martin et al. (2008), instead, emphasize the role trade links play in interstate dispute and show that while strong bilateral trade relations reduce the probability of conflict, good multilateral trade relations with third parties increase it.

More specific to the Huntington's hypothesis, there are as well several studies in the literature that try to tackle Huntington's thesis from different angles. Using data from 1820 to 1989 Henderson (1997, 1998) analyze the impact of cultural factors on the relationship between joint democracy and war involvement and finds that both ethnic and linguistic

¹See, for instance, Mauro (1995), La Porta et al. (1999) and Treisman (2000) on institutions. Furthermore, Easterly and Levine (1997) and Alesina et al. (2003) are seminal examples illustrating the effects of ethnic, linguistic and religious fragmentation on the economy through their impact on public policies, infrastructure and productive public goods. In the latter study, it is also important to note that Alesina et al. (2003) construct a commonly referred to data set on ethnic, linguistic and religious fractionalization. As a side note, another index of ethnic and cultural fractionalization commonly used by economists and political scientists alike is by Fearon (2003).

²For a review of the recent theoretical literature on conflict and appropriation from an economic perspective; specifically, by applying conventional optimization techniques and game-theoretic tools to study the allocation of resources among competing activities— productive and otherwise appropriative, such as grabbing the product and wealth of others as well as defending one's own product and wealth see Garfinkel and Skaperdas (2006).

³Another example of intrastate conflict is Garcia-Montalvo and Reynal-Querol (2002). They argue that index of ethnic polarization predicts civil wars better than the index of fractionalization and suggest that different measures of heterogeneity might be needed depending on the question under scrutiny.

similarity have direct association with war, whereas religious similarity within dyads decreases the likelihood of a war; he also finds that where a pair of states share a common democratic political culture it exerts a conflict dampening impact that overrides ethnic, linguistic, or religious factors. Russett et al. (2000) and Henderson and Tucker (2001) assess the incidents of militarized interstate disputes between countries during the periods 1950-92 and 1816-1992, respectively. They find that such traditional realist influences as contiguity, alliances, and relative power, and liberal influences of joint democracy and interdependence, provide a much better account of interstate conflict and intercivilizational dyads are less, and not more, conflict prone. Chiozza (2002) runs an empirical test of Huntington's thesis using Kosimo data between 1946-1997 that include nonviolent conflict and shows that state interactions across the civilizational divide are not more conflict prone.⁴

Though all of them are valuable in their own respect, one should acknowledge the limitations of the studies described above. First of all, coverage of the post-Cold War period is extremely limited. And Huntington exactly puts his argument forward and makes predictions about the post-Cold War world. Secondly, a direct test of Huntington's hypothesis based on the classification of civilizations by Huntington is not the central theme of all of the above studies, but rather an index of ethnic, cultural or religious similarity is used in some of the studies. Thirdly, survey data are also put under scrutiny. Though survey data might give useful insights, they rather reflect values and beliefs than actual conflict itself. Given the amount of limitations suffered by these studies we see it necessary to confront Huntington's hypothesis with more recent and more detailed data taking the basis of civilizations mapped out by him.

The remainder of the paper proceeds as follows. In Section 2 we take a look at what the clash of civilizations hypothesis is and give a brief description. In Section 3 we describe the data set used and the methodology applied for the analyses. Section 4 presents our results. Finally, Section 5 gives some concluding remarks.

2 What is the Clash of Civilizations Hypothesis?

In 1993 Samuel Huntington published his article entitled "The Clash of Civilizations?" in Foreign Affairs, in response to Francis Fukuyama's 1992 book, The End of History and the Last Man. His article immediately provoked a lot of controversy and heated debate, and subsequently became one of the most off-cited articles in the field of international re-

⁴Other related studies are Norris and Inglehart (2002), Mungiu-Pippidi and Mindruta (2002), Bolks and Stoll (2003), Gartzke and Gleditsch (2006) and Jakobsen and Jakobsen (2010).

lations. Put briefly, Huntington (1993a, 1993b, 1998, 2000) argued that the fundamental source of conflict in the new world (in the post-Cold War world) will not be primarily ideological or primarily economic, but the great divisions among humankind and the dominating source of conflict will be cultural; as such, the primary axis of conflict in the future will be along cultural and religious lines.

Huntington takes civilizations as the main unit of his analyses. A civilization is defined as "a cultural entity, the highest cultural grouping of people and the broadest level of cultural identity people have short of what distinguishes humans from other species. It is defined both by common objective elements, such as language, history, religion, customs, institutions, and by the subjective self-identification of people."⁵ Huntington takes the central defining characteristic of a civilization as its religion; hence, the major civilizations in human history have been closely identified with the world's great religions. These civilizations outlined include the Sinic, Japanese, Hindu, Islamic, Orthodox, Western, Latin American, Buddhist and possibly African civilizations plus "lone" countries that do not belong to one of the major civilizations.

According to Huntington, inter-civilizational differences stand out in the fashion individuals comprehend the relations between God and man, the individual and the group, the citizen and the state, parents and children, husband and wife and also in the weight of importance they put in matters of responsibility and rights, freedom and authority, and equality and hierarchy. He further claims that these differences are largely irresolvable; they are the product of centuries and far more fundamental than differences among political ideologies and political regimes as they concern the very self-identification of man. People's identifying themselves with a civilization inevitably implies that they think of themselves separately from other civilizations and differentiate themselves from the members of other civilizations. To highlight this point, Huntington argues that identity at any level -personal, tribal, racial, civilizational - can only be defined in relation to an "other", a different person, tribe, race, or civilization. This brings about a group identity in the simple form of "us" and "them" which nurtures clashes with those that are different.

Huntington (1993, 1998), viewing culture more as a "cause," suggests that civilizations tend to violence with other civilizations that do not share their culture, worldview, and values. Such violent tendencies, he argues, long held in check by the Cold War, have been unleashed and form the dominant pattern of global conflict today and in the future. One theorem that logically devolves from Huntington's "cultural realist" rendering of "clashing civilizations" is that the degree of cultural

⁵Huntington (1993a), p.23-24.

dissimilarity between states should predict to the likelihood of conflict between them. In this view, culturally dissimilar dyads, ceteris paribus, should be more inclined to conflict than culturally similar dyads. As such, Huntington claims that clashes of civilizations are the greatest threat to world peace, and that in the post-Cold War world the most important distinctions among peoples are not ideological, political, or economic. They are cultural. Although, nation states will remain the most powerful actors in world affairs, world politics at the macro level are likely to involve conflicts and shifting power balances of states from different civilizations, and at the micro level the most violent, prolonged and dangerous conflicts are likely to be between states and groups from different civilizations. The clash of civilizations will dominate global politics and the fault lines between civilizations will be the battle lines of the future.

As for why civilizations will clash Huntington presents several factors. First, differences between civilizations are basic and fundamental. Civilizations differ from one another by history, language, culture, tradition, and, most importantly, religion. These differences are the product of centuries and cannot be easily overcome. Second, the increased interaction among peoples of different civilizations makes the world a smaller place and raises the consciousness and awareness of differences between civilizations and commonalities within civilizations. Third, as economic modernization and social change throughout the world separate people from local identities, a resurgence of religious identity is replacing diminishing local and state-based identities. Fourth, increased civilizationconsciousness sparks a return-to-the-roots phenomenon in non-Western states. The elites of non-Western societies are going through a de-Westernization and indigenization process. Fifth, cultural differences and characteristics are less mutable and less easily compromised than political or economic ones. An example highlights this point. A person can be half-French and half-Arab and a citizen of two countries, but it is more difficult to be half-Catholic and half-Muslim. Finally, increased economic regionalization heightens civilization consciousness and, in turn, common civilization facilitates the expansion of economic relations. The interaction of these factors has resulted in the increased salience of civilization membership in global politics. Since civilizational characteristics are basic and essential, civilizational differences are increasingly likely to generate conflict.

To support his thesis Huntington depicts several real world incidents. For instance, wars such as those following the break up of Yugoslavia, in Chechnya, and between India and Pakistan were cited as evidence of inter-civilizational conflict. To draw attention to the fact that states treat other states differently depending on whether they belong to a similar civilization or a dissimilar civilization, Huntington exemplifies the failure of the West to provide meaningful support to the Bosnian Muslims in the Yugoslavian War or to denounce Croat atrocities in the same way Serb atrocities were denounced. To highlight civilizations running up in support of similar civilizations, he points out Russia's unwillingness to join other U.N. Security Council members in getting the Serbs in Croatia to make peace with the Croatian government, and the offer of Iran and other Muslim nations to provide 18,000 troops to protect Bosnian Muslims during the Yugoslavian War. Another example comes from the period of the intensification of the war between Armenians and Azeris: Turkish and Iranian demands that the Armenians surrender their conquests, the deployment of Turkish troops to the border and Iranian troops across the Azerbaijan border, and Russia's warning that the Iranian action contributes to "escalation of the conflict" and "pushes it to dangerous limits of internationalization." Lastly, Huntington makes an example of the U.S. bombings of Baghdad, its virtually unanimous support by Western governments, and its condemnation by almost all Muslim governments as another example of the West's "double standard."

3 Data and Methodology

3.1 Measurement of Conflict

Our data on conflict run between 1816 and 2001.⁶ The indicator of conflict takes on a value from 0 for no militarized dispute to 5 for high intensity conflict that is defined as an inter-state war with more than 1000 total battle deaths. The levels of intensity are classified as follows: 1 = No militarized action, 2 = Threat to use force, 3 = Display of force, 4 = Use of force, and 5 = War. In accordance with the literature, we define an indicator variable taking a value of 1 if the intensity of militarized conflict is equal to or greater than 3, zero otherwise.⁷ We treat both indicator of conflict and indicator of war (corresponding to a conflict intensity of 5) as dependent variables and run analyses accordingly.

Between 1816-2001 there has been an upward trend in the number of militarized conflict per year with spikes of World War I and World War II. We also observe a relative increase starting with early 90's compared

⁶Our conflict data come from the Correlates of War Project. Data for conflict are Correlates of War Project, Militarized Interstate Disputes, Version 3.10; which is described in Ghosn et al. (2004) and Ghosn and Bennett (2003). A data set on war is also available as Correlates of War Project, 2011 COW Wars, 1816-2007, Version 4.0 (for details see also Sarkees and Wayman (2010)).

⁷For an example, see Spolaore and Wacziarg (2010).

to rather high but stable levels of conflict during Cold War.⁸ On the other hand, when we look at what part of the militarized disputes is within the same civilization and what part is between different civilizations, we see that 36 percent of all conflict between 1816 and 2001 took place between countries that are part of the same civilization; whereas 64 percent of the conflictual relationships were among different civilizational memberships.⁹ When we break this analysis down to Cold War and post-Cold War periods, we observe that there is a bigger percentage of inter-civilizational militarized conflict during Cold War than during post-Cold War, 65 percent compared to 60 percent; which leads us to a hint contrary to Huntington's thesis.¹⁰

3.2 Measurement of Civilizations

179 countries are classified as members of various civilizations. As described in Section 2 and in Huntington (1998), these civilizations are Western, Sinic, Islamic, Hindu, Orthodox, Latin American, African, Buddhist and "Lone" States. Construction of civilization membership is based on Huntington (1998). Accordingly, each country is assigned to a civilization.¹¹

Furthermore, country dyads are formed by pairing each country with one another; which resulted in 15931 dyads. To indicate civilizational heterogeneity within a dyad we construct a variable labeled as "Different Civilizations", DC_{ij} , denoting whether a pair of countries belong to different civilizations. This variable is coded as 1 if in a dyad the two countries belong to different civilizations and as 0 if both countries belong to the same civilization. Out of 15931 country-pairs there are 2875 pairs for which both countries belong to the same civilization and 13056 pairs for which countries belong to different civilizations.

3.3 Other Variables

Geographic Factors Geographical proximity is considered to be one of the strongest determinants of war. As one of the measures of geographical proximity territorial contiguity is shown to be a strong predictor of conflict (Bremer, 1992). The proximity of interactions is likely to offer both the opportunity and the willingness to engage in conflict. Therefore, we take contiguity as one of our independent variables. Our contiguity variable takes value one if there is any sort of land or water

⁸Interested reader can consult Figure 1A in the Appendix.

⁹See Figure 2A in the Appendix.

¹⁰See figures 3A and 4A in the Appendix.

 $^{^{11}\}mathrm{See}$ Table 1A in the Appendix for the details of country specific civilizational memberships.

contiguity between two countries in a pair, zero otherwise.¹²

As in Spolaore and Wacziarg (2010), we also control for additional geographic distance metrics such as the measure of the great circle (geodesic) distance between the major cities of the countries¹³, latitudinal distance, longitudinal distance and indicators of geographic isolation and geographic barriers such as number of landlocked countries in a dyad and the land area of the countries.¹⁴

Political Factors Factors which might have contributed to the current state of the institutions and the state of the matters between two countries go back in history. To control for such historical, political and institutional links we include a dummy variable for whether a dyad ever had a colonial relationship, i.e. whether one was a colony of the other at some point in time. In addition, we have a dummy variable for whether a pair of countries have had a common colonizer after 1945, i.e. whether the two countries have been colonized by the same third country. Furthermore, governing bodies leave their legacy on cultural, historical, political and institutional ties, and this requires inclusion of a dummy variable to control for whether two countries have been part of the same polity.¹⁵

Democratic peace argument suggests that democratic countries are less prone to violence and democracy promotes peace (Levy and Razin, 2004). We measure the extent of democracy using the 21-point institutionalized democracy scale in a modified version of the Polity IV data where -10 means a hereditary monarchy and +10 a consolidated democracy.¹⁶ As in Martin et al. (2008), we use the sum of the democracy indexes of the two countries in a pair.

Different legal origins have been shown to have strong implications for institutional outcomes (La Porta et al., 1999). These institutional outcomes may, in turn, shape the conflict pattern between two countries. Therefore, we create a dummy variable for whether two countries in a

 $^{^{12}}$ For contiguity data we use Correlates of War Project, Direct Contiguity Data, 1816-2006, Version 3.1 (Stinnett et al., 2002). See also Gochman (1991) for additional details.

 $^{^{13}}$ See Head and Mayer (2002) for details.

¹⁴These data are compiled by the researchers at the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII). The data are available at http://www.cepii.fr/anglaisgraph/bdd/distances.htm.

 $^{^{15}{\}rm These}$ data come as well from CEPII. The data are available at http://www.cepii.fr/anglaisgraph/bdd/distances.htm.

¹⁶The suggested way of categorization and interpretation of these scores by the project authors is as follows. Scores from -10 to -6 correspond to "autocracies", from -5 to +5 to "anocracies" and from +6 to +10 to "democracies". The data are available at http://www.systemicpeace.org/polity/polity4.htm.

pair have different legal origins. This variable takes value one if the two countries in a dyad have different legal origins, zero otherwise 17

Military Factors The idea that an equal-balance of military capabilities deters conflict in a contest of arms forces us to control for relative military capabilities of countries (Russet et al., 2000). Therefore, to assess the effect of states' military capabilities on the likelihood of conflict, we use National Material Capabilities data set. The widely-used Composite Index of National Capability (CINC) index is based on six variables in the data set: total population, urban population, iron and steel production, energy consumption, military personnel, and military expenditure of all state members.¹⁸

Major military actors are expected to be positively associated with dispute involvement (Chiozza, 2002). Hence, we control for the number of countries with major power status in a dyad as designated by the authors of the Correlates of War Project.¹⁹

Widespread expectations about allies are that they fight each other less as they are already in agreement regarding their concerns of security and also allied states often have other political and economic interests in common (Russet et al., 2000). To control for the influence of alliances on conflict, we include a dummy variable for whether a pair of countries are in some form alliance.²⁰

Furthermore, to control for the continuity of conflictual relationships and the contagion from other disputes we construct two variables. One accounts for the number of peaceful years between two countries since the last conflict has occurred and the other one takes into account the number of other wars in the world in year t.

Economic Factors To control for whether income differences have an effect on the likelihood of conflict, as in Spolaore and Wacziarg (2010), we take into account the absolute value of the log income differences

¹⁷Legal origin indicators (common law, French civil law, German civil law, Scandinavian law, and Socialist law) are from La Porta et al. (1999).

¹⁸We use National Material Capabilites data set Version 4.0 from Correlates of War Project. For details see also Singer (1987) and Singer et al. (1972).

¹⁹Our data come from State System Membership List Version 2008.1 of Correlates of War Project. The designation of major powers also follows COW criteria and includes Austria-Hungary (1816–1918), Prussia/Germany (1816–1918, 1925– 1945), Russia/USSR (1816–1917, 1922–), France (1816–1940, 1945–), United Kingdom (1816–), Italy (1860–1943), Japan (1895–1945), United States (1898–), and China (1949–). China, France, the USA, the UK, and the USSR are classified as major powers since 1945, as are the German Federal Republic and Japan after 1991.

²⁰Alliances data are Version 3.03 from Correlates of War Project (Gibler, 2009; Gibler and Sarkees, 2004). These data originally date back to Singer and Small (1966) and Small and Singer (1969).

between two countries in a dyad from 1950 on.^{21}

One would also need to control for trade relations as economic dependence makes countries less daring when it comes to conflict involvement. For instance, Russet et al. 2000 divide the sum of a country's exports and imports with its dyadic partner by its GDP to see how much this bilateral trade relation is economically important. They claim that, as with the influence of democratic institutions, one expects the likelihood of a dispute to be primarily influenced by the freedom of action available to the state less constrained from using force. This is the state with the lower bilateral trade-to-GDP ratio, because it is less dependent economically on trade with the other member of the dyad. On the other hand, Martin et al. (2008) and Spolaore and Wacziarg (2010) take into account bilateral openness between a pair of countries and their multilateral openness with third parties. Following this stream we use bilateral and multilateral openness together with their interaction with distance. Bilateral openness is constructed by dividing the trade volume between a pair of countries by the GDP of each country and then taking the average. Multilateral openness, on the other hand, is constructed by dividing the trade volume with third parties of each country in a pair by its GDP and then taking the average.²²

3.4 Descriptive Statistics

We observe in Table 1 the number of conflicts across and within civilizations and their share in total number of conflicts between 1816 and 2001. On-diagonal entries correspond to the conflicts which have happened between countries that are members of the same civilization; whereas off-diagonal elements are the conflicts between countries that belong to different civilizations. This table gives us a better understanding of what part of the conflicts are inter-civilizational and what part intracivilizational; moreover, we get a sense of what civilizations have more conflictual relationships than the others.

We observe many on-diagonal elements; which tell us that there is a myriad of intra-civilizational disputes, though the numbers are much smaller than off-diagonal entries. By looking at intra-civilizational disputes the most combat prone civilizations seem to be Western and Islamic civilizations followed by a high degree of conflict among Latin American countries with 9.5, 7.9 and 6.8 percents of all conflict, respectively.

 $^{^{21}{\}rm For}$ income data we use Penn World Tables Version 6.2 available at http://pwt.econ.upenn.edu/php_site/pwt_index.php.

²²Trade data come from Correlates of War Project, Trade Data Set, Version 2.0. See also Barbieri et al. (2008, 2009).

TABLE 1. Number of Conflicts within and across Civilizations between 1816-2001.

Civilizations	Western	Sinic	Islamic	Hindu	Orthodox	Latin American	African	Buddhist	Lone States
Western	419 (9.5%)								
Sinic	265 (6%)	127 (2.8%)							
Islamic	581 (13.1%)	15 (.34%)	351 (7.9%)						
Hindu	5 (.11%)	33 (.74%)	65 (1.4%)	3 (.06%)					
Orthodox	530 (12%)	90 (2.04%)	247 (5.6%)	0	105 (2.3%)				
Latin American	326 (7.4%)	7 (.15%)	8 (.18%)	11 (.24%)	13 (.29%)	302 (6.8%)			
African	39 (.88%)	0	53 (1.2%)	5 (.11%)	6 (.13%)	21 (.47%)	193 (4.3%)		
Buddhist	25 (.56%)	81 (1.8%)	3 (.06%)	6 (.13%)	5 (.11%)	0	0	78 (1.7%)	
Lone States	106 (2.4%)	86 (1.9%)	44 (.99%)	0	82 (1.8%)	41 (.93%)	7 (.15%)	16 (.36%)	4 (.09%)

Source: Author's own construction

One striking observation from Table 1 is that when we look into highly conflictual inter-civilizational linkages we notice that one side usually involves a Western country. For instance, the first four highest number of inter-civilizational conflicts are Western versus Islamic with 13.1 percent, Western versus Orthodox with 12 percent, Western versus Latin American with 7.4 percent and Western versus Sinic civilizations with 6 percent, respectively. This pattern of high Western conflict proneness is followed by the conflicts between Islamic and Orthodox civilizations.

For Cold War and post-Cold War break down of Table 1, see tables 2A and 3A in the Appendix. Important to notice in tables 2A and 3A is that while the highest number of conflict during Cold War period is between Western and Islamic civilizations, it is between Western and Orthodox civilizations in the post-Cold War period.

For additional insights at a first glance see also Table 4A in the Appendix which provides summary statistics of all variables.

3.5 Empirical Specification

As a starting point, we follow the existing literature²³ by running regressions of a binary indicator of conflict on several determinants and collapse the panel into a cross-section (as in Spolaore and Wacziarg, 2010), in which case our dependent variable becomes a binary indicator of whether there has ever been a conflict between a pair of countries over the period of 1816 to 2001. Given our main explanatory variable, civilizational dissimilarity, is time invariant this specification seems appropriate. Therefore the baseline cross-sectional regression is the following:

$$C_{ij} = \beta_0 + \beta_1 D C_{ij} + \beta_2 X_{ij} + \varepsilon_{ij} \tag{1}$$

 $^{^{23}}$ For example, Bremer (1992) and Martin et al. (2008).

where C_{ij} is an indicator of conflict between a pair of countries and takes the value 1 if the pair of countries were ever involved in a militarized dispute, DC_{ij} is an indicator of civilizational heterogeneity that takes value 1 when a pair of countries belong to different civilizations and 0 otherwise and X_{ij} is a vector of control variables such as geographic factors and colonial and legal indicators.

Moreover, we apply a second methodology to exploit the full panel dimension. This way we can make use of time varying dimensions of our explanatory variables. Accordingly, the baseline panel regression would be as follows:

$$C_{ijt} = \gamma_0 + \gamma_1 D C_{ij} + \gamma_2 X_{ijt} + \eta_{ijt} \tag{2}$$

where X_{ijt} contains all of the aforementioned time-invariant variables plus time varying variables such as democracy, differences in military capabilities, how many other wars there are in a certain year, how many years countries have been at peace with each other for, whether they are part of an alliance, income differences and trade relations.

Equations (1) and (2) are estimated using probit. Throughout the paper we report marginal effects of the probit regressions evaluated at the means of the independent variables and for the sake of readibility we multiply all of the marginal effects by one hundred in all tables. In addition, we report standardized magnitude of the effect of civilizational dissimilarity, which largely eases interpretation. Standardized magnitude is the effect of a discrete change from zero to one in different civilizations dummy as a percentage of the probability of conflict calculated at the means of the variables.

4 Results

4.1 Cross Sectional Analyses

In this section we present our results concerning militarized clash between states and the role culture plays in conflict involvement. We first run cross-sectional analyses. We collapse our panel data of conflict into one cross-sectional variable that takes on value one if a country pair has ever been involved in militarized dispute from 1816 to 2001, zero otherwise. We use probit models and marginal effects in a probit model evaluated at the means are presented. There are 178 countries in the cross-section analyses from which country dyads are constructed.

4.1.1 Entire Sample

In Table 2 we present the regression results covering the entire sample; whereas in Table 3 we break down our analysis and make Cold War and post-Cold War comparisons.

In Table 2 column (1) we start off with a univariate specification. Although the effect of being in different civilizations on conflict is negative at first, it immediately changes sign in the following columns and becomes positive when we account for other determinants of conflict such as contiguity which is one of the most established determinants of conflict (Gleditsch and Singer, 1975; Henderson, 1997). We add geographic control variables to the regression equation in column (2) and notice that the coefficient on different civilizational membership is positive. Moreover, contiguity has a positive effect on conflict probability. Contiguity is always highly significant and the biggest in magnitude among all other determinants of conflict in all of the following regression specifications and reappears as one of the biggest determinants of inter-state conflict. We also control for other geographic measures to account for the distance between countries and the physical barriers within and across countries. These include the distance between countries, differences in longitudes and latitudes, whether there are landlocked countries in a dyad and the physical size of the countries. As expected, the physical distance and barriers between countries act as a significant deterrent to clashes, and hence, it reduces the probability of conflict.

In column (3) of Table 2 we take into account political factors that might affect conflict likelihood such as colonial links, whether the countries have been part of the same polity and their legal origins. Our results suggest that colonial and governmental history play a significant role and they instigate conflict involvement. Moreover, when a pair of countries have different legal origins it is less likely that they can find a peaceful solution to their problems.

In column (4) of Table 2, instead, we run a similar regression to that of column (3) using an indicator of war (conflicts of level 5 with more than 1000 battle deaths) as dependent variable rather than conflict of level 3 and above. We observe the positive effect of different civilizational membership on war involvement and all conclusions regarding other explanatory variables carry on.

To put the importance of belonging to different civilizations in perspective we take a look at the standardized magnitudes. In columns (2) and (3) we observe that being part of different civilizations increases the probability of conflict by 4.2 to 8.2 percentage points; whereas it increases the probability of war by 34 percentage points as shown in column (4).

TABLE 2. Cross-Sectional Regressions, probit.

(Dependent variable: dichotomous indicator for whether a country pair was ever involved in a conflict, 1816-2001).

	(1)	(2)	(3)	(4)
		add	add	war
	univariate	geographic	polical	(dependent
	specification	factors	factors	variable)
Different Civilizations	-5.8***	.163	.081	.075
	(0.000)	(0.5)	(0.73)	(0.18)
Contiguity		10.84***	9.79***	.781***
		(0.00)	(0.00)	(0.00)
Log Geodesic Distance		-1.95***	-1.80***	203***
		(0.00)	(0.00)	(0.00)
Log Absolute Difference		41***	435***	104***
in Latitudes		(0.00)	(0.00)	(0.00)
Log Absolute Difference		064	078	021
in Longitudes		(0.56)	(0.4)	(0.4)
Number of Landlocked		-2.3***	-2.30***	265***
Countries in the Pair		(0.00)	(0.00)	(0.00)
Log Product of Land		.74***	.728***	.124***
Areas in sq km		(0.00)	(0.00)	(0.00)
Ever in Colonial Relationship			7.56***	.403*
			(0.00)	(0.06)
Countries were or are			4.02***	.54**
the Same Country			(0.00)	(0.02)
Different Legal Origins			.725***	.00193***
			(0.009)	(0.00)
# Obs.	15753	15309	15309	15309
Standardized Magnitude(%)	-132.306	8.297	4.231	34.011

p-values in parentheses; *** significant at 1%; ** significant at 5%; * significant at 10%. Probit marginal effects are reported in all columns. For dummy variables, marginal effects are for discrete changes.from 0 to 1. The standardized magnitude is the effect of a discrete change from 0 to 1 in *different civilizations dummy* as a percentage of the probability of conflict at the means of the variables. All marginal effects are multiplied by 100 for the sake of readability.

4.1.2 Cold War and post-Cold War Comparisons

Although we had, by and large, a first pass at investigating the impact of culture on conflict involvement in Table 2, it is far from satisfactory and does not directly test Huntington's hypothesis. Next, we present a break-down analysis of Cold War and post-Cold War periods, which are to be followed by more detailed panel analysis.

Columns (1) and (2) of Table 3 provide us with a comparison of Cold War and post-Cold War periods, respectively, using geographic controls while columns (3) and (4) serve the same purpose using additional political control variables. In columns (1) and (3) the dependent variable is an indicator of whether a pair of countries have ever been involved in conflict between 1946 and 1991 which is the period that corresponds to the Cold War; whereas in columns (2) and (4) the dependent variable is an indicator of whether a pair of countries have ever been involved in conflict between 1946 and 2001.²⁴

In both specifications with geographic and political factors, countries that belong to different civilizations are more likely to be involved in militarized dispute in the post-Cold War era than in the Cold War era. During the Cold War the coefficient is both insignificant and small in magnitude. This result delivers support for Huntington's hypothesis, that is civilizational differences are more emphasized since the end of the Cold War and countries that are part of the same civilization conflict with one another less than the ones that belong to different civilizations. Being part of different civilizations boosts the likelihood of conflict by about 70 percentage points during the post-Cold War compared to a 6.9 to 12.3 percentage-point increase during the Cold War.

In addition, importance of distance and physical barriers in conflict involvement is lesser in the post-Cold War period than in the Cold War period. This might be due to the differences in the advancement of military technology between two time periods, i.e. because countries have better, more sophisticated military capabilities in more recent times. Advanced military technology might render more distant wars easy so that proximity of countries do not play as big of a role as it used to when it comes to raiding a target.

Furthermore, notice in columns (3) and (4) that dissimilar legal origins lose their consequence in the post-Cold War era. This might be the case because when communism collapsed more countries adopted

²⁴See Table 5A in the Appendix for a reproduction of Table 3 using the indicator of war as dependent variable. In Table 5A, though positive, coefficients on different civilizations are not significant in the post-Cold War period. This might be due to the very small number of wars in the post-Cold War period. There are only 20 wars in the post-Cold War period.

TABLE 3. Cross-Sectional Regressions, probit.

(Dependent variable: dichotomous indicator for whether a country pair							
was ever involved in a conflict, Cold War and post-Cold War Comparison).							
	(4)	(0)	(0)	(4)			

	(1)	(2)	(3)	(4)
	Cold War	post-Cold War	Cold War	post-Cold War
	period	period	period	period
Different Civilizations	.104	.173***	.057	.166***
	(0.46)	(0.001)	(0.69)	(0.001)
Contiguity	6.001***	1.167***	5.33***	1.08***
	(0.00)	(0.00)	(0.00)	(0.00)
Log Geodesic Distance	585***	306***	51***	289***
	(0.00)	(0.00)	(0.00)	(0.00)
Log Absolute Difference	178***	17***	185***	165***
in Latitudes	(0.002)	(0.00)	(0.001)	(0.00)
Log Absolute Difference	237***	098***	239***	096***
in Longitudes	(0.00)	(0.00)	(0.00)	(0.00)
Number of Landlocked	-1.2203***	131***	-1.21***	111**
Countries in the Pair	(0.00)	(0.005)	(0.00)	(0.013)
Log Product of Land	.335***	.126***	.324***	.119***
Areas in sq km	(0.00)	(0.00)	(0.00)	(0.00)
Ever in Colonial Relationship			1.99***	.302
			(0.00)	(0.12)
Common Colonizer			225	203***
			(0.27)	(0.002)
Countries were or are			2.69***	.209
the Same Country			(0.00)	(0.2)
Different Legal Origins			.291**	0086
			(0.019)	(0.8)
# Obs.	15309	15309	15309	15309
Standardized Magnitude(%)	12.323	69.626	6.974	70.152

p-values in parentheses; *** significant at 1%; ** significant at 5%; * significant at 10%. Probit marginal effects are reported in all columns. For dummy variables, marginal effects are for discrete changes from 0 to 1. The standardized magnitude is the effect of a discrete change from 0 to 1 in *different civilizations dummy* as a percentage of the probability of conflict at the means of the variables. All marginal effects are multiplied by 100 for readability.

democracy and this fact was hes out the legal differences between countries when both are democratic. 25

4.2 Panel Analyses

4.2.1 Entire Sample

Now, we turn to our panel regressions. We have an indicator of conflict for the years 1816 to 2001; hence this gives us a good coverage of the post-Cold War period as well as a high number of observations. Table 4 reports the results covering 1816 to 2001. Our findings from crosssectional regressions are also confirmed in a panel setting.

In columns (2) and (3) of Table 4 we have the same set of regressors as in columns (2) and (3) of Table 2, namely geographic and political determinants of conflict, but this time we make use of panel dimension. In columns (2) and (3) we show that if a pair of countries belong to different civilizations they have 55.2 to 62.8 percentage points higher chances of conflict than if they were to be part of the same civilization.

In column (4) we bring the democratic peace argument into the picture and control for the sum of democracy indexes of the two countries as in Martin et al. (2008).²⁶ As expected, democracy promotes peace. Our variable on civilizational dissimilarity is still positively significant and differential civilizational membership in a dyad brings about 41.5 percentage points higher likelihood of conflict.

Now we turn to Table 5. Table 5 includes all of the previously discussed geographic and political factors including democracy, but they are not reported due to space constraints. Instead, we report the additional variables of military and economic factors. Different civilizational membership still appears positive and significant and increases the probability of conflict by 7.7 to 24.4 percentage points.

In column (1) of Table 5 we add military factors such as number of major military powers in a dyad, log of absolute differences in military capabilities of the two countries, whether the pair of countries are part of an alliance, number of other wars fought in the same year and the number of years the two countries spent at peace with each other to the previously present geographic and political factors. Civilizational dissimilarity is positive and significant. Moreover, notice that big players in the world scene are more conflict prone. If a pair of countries are part of an alliance they fight less, but they are negatively affected by the other wars in the world. It is important to highlight that peace

 $^{^{25}{\}rm The}$ correlation between different legal origins dummy and the sum of democracy indexes variable is about .10.

 $^{^{26}\}mathrm{For}$ a discussion on democratic peace argument see Henderson (1997) and Levy and Razin (2004).

	(1)	(2)	(3)	(4)
	univariate	geographic	political	control
	specification	factors	factors	democracy
Different Civilizations	8043***	.131***	.1106***	.096***
	(0.00)	(0.00)	(0.00)	(0.00)
Contiguity		1.115***	1.065***	1.31***
		(0.00)	(0.00)	(0.00)
Log Geodesic Distance		149***	144***	117***
		(0.00)	(0.00)	(0.00)
Log Absolute Difference		078***	074***	089***
in Latitudes		(0.00)	(0.00)	(0.00)
Log Absolute Difference		0485***	048***	065***
in Longitudes		(0.00)	(0.00)	(0.00)
Number of Landlocked		214***	19***	223***
Countries in the Pair		(0.00)	(0.00)	(0.00)
Log Product of Land		.0874***	.084***	.09***
Areasin sqkm		(0.00)	(0.00)	(0.00)
Ever in Colonial Relationship			.221***	.344***
			(0.00)	(0.00)
Common Colonizer			063***	093***
			(0.00)	(0.00)
Countries were or are			.131***	.086***
the Same Country			(0.00)	(0.004)
Different Legal Origins			.121***	.1406***
			(0.00)	(0.00)
Sum of Democracy Indexes				0026***
				(0.00)
# of Obs.	590337	583546	583546	488085
Standardized Magnitude(%)	-114.749	62.889	55.201	41.555

Robust p-values in parentheses; *** significant at 1%; ** significant at 5%; * significant at 10%. Probit marginal effects are reported in all columns. For dummy variables, marginal effects are for discrete changes from 0 to 1. The standardized magnitude is the effect of a discrete change from 0 to 1 in different civilizations dummy as a percentage of the probability of conflict at the means of the variables. All marginal effects are multiplied by 100 for readability.

-				
	(1)	(2)	(3)	(4)
	military factors	income difference	trade relations	add post-Cold War Dummy
Different Civilizations	.0171***	.00931**	.00307	00593
	(0.00)	(0.04)	(0.55)	(0.33)
Number of Major	.1134***	.0607***	.0457***	.04348***
Pow ers in the Pair	(0.00)	(0.00)	(0.00)	(0.00)
Log Absolute Difference	.0155***	.0082***	.0052***	.00538***
in Military Capabilities	(0.00)	(0.00)	(0.009)	(0.006)
Alliance Dummy	0179***	.000723	00333	00315
	(0.00)	(0.9)	(0.59)	(0.6)
Number of Other	.00158***	.000199**	.000277**	.000252**
Wars in Year t	(0.00)	(0.05)	(0.014)	(0.032)
Number of	00588***	00344***	00352***	00354***
Peaceful Years	(0.00)	(0.00)	(0.00)	(0.00)
Absolute Difference		0065***	00397**	00427***
in Log per capita Income		(0.00)	(0.013)	(0.006)
Log Bilateral			0449***	04385***
Openness, t-4			(0.00)	(0.00)
Log Multilateral			.04142	.04777*
Openness, t-4			(0.15)	(0.10)
Log Distance×Log			.00574***	.00567***
Bilateral Openness			(0.00)	(0.00)
Log Distance×Log			00665*	00755**
Multilateral Openness			(0.07)	(0.04)
Post-Cold War Dummy				01657**
				(0.03)
Different Civilizations \times				.03994***
Post-Cold War Dummy				(0.001)
# of Obs.	487276	217188	149646	149646
Standardized Magnitude(%)	24.47	22.785	7.736	-14.99 — 86.014

TABLE 5. Panel Regressions, probit. (Dependent variable: dichotomous indicator of conflict between 1816-2001)

Robust p-values in parentheses; *** significant at 1%; ** significant at 5%; * significant at 10%. Probit marginal effects are reported in all columns. For dummy variables, marginal effects are for discrete changes from 0 to 1. The standardized magnitude is the effect of a discrete change from 0 to 1 in different civilizations dummy as a percentage of the probability of conflict at the means of the variables. All marginal effects are multiplied by 100 for readability. In addition to the variables displayed all columns include Contiguity, Log Geodesic Distance, Log Absolute Difference in Latitudes, Log Absolute Difference in Longitudes, Number of Landlocked Countries in the Pair, Log Product of Land Areas in sq km, Ever in Colonial Relationship, Common Colonizer, Countries were or are the Same Country, Different Legal Origins and Sum of Democracy Indexes. promotes peace, i.e. the longer the countries have peaceful relations with one another the less likely it is for them to be caught up in a fight.

In columns (2) and (3) of Table 5 we account for the economic factors. As such, we include the absolute difference in log per capita income and bilateral and multilateral trade relations to our regression. Observe that the bigger the income differences between countries the smaller are the odds for a conflict. This might be due to the weaker country acknowledging the fact of not being able to cope with a richer country and looking for peaceful ways to settle the issues. To avoid reverse causality between conflict and trade relations we lag the trade variables by 4 periods. As in Martin et al. (2008) we establish the negative effect of bilateral interdependence and the positive effect of trading with third parties on conflict probability. In both cases distance operates in the opposite direction and lessens the effect of trade links.

4.2.2 Cold War and post-Cold War Comparisons

To carry Cold War and post-Cold War comparisons we start with looking at Table 5 again. In column (4) of Table 5 we augment the specification in column (3) by adding a post-Cold War dummy and its interaction with different civilizations variable. This way we will have an idea about the differential effects of civilizational dissimilarity in two different time periods. Notice that the sign of post-Cold War dummy is negative which tells us that in general the probability of conflict is smaller in the post-Cold War period. When we look at the interaction of post-Cold War dummy and different civilizations variable we observe a positive and significant coefficient which means that civilizational differences matter more in the post-Cold War world. Therefore, our results suggest that while being part of different civilizations reduces the probability of conflict by 14.9 percentage points in the Cold War era, it increases the likelihood of conflict by 86 percentage points in the post-Cold War era.

To further our analysis we split the sample into Cold War and post-Cold War periods. Results reporting the specifications with military and economic factors in two different epochs are in Table 6.²⁷ By looking at Table 6, although we observe that civilizational differences are less important in the post-Cold War period when we fail to account for eco-

²⁷A similar table to Table 6 for making Cold War and post-Cold War comparisons controlling for geographic and political factors is reproduced in Table 6A in the Appendix. Important to notice in Table 6A is that while the impact of different legal origins weakens once we pass from Cold War to post-Cold War the effect democracy has increases. A possible explanation is that the effect of different legal origins is washed out in the post-Cold War period once more countries are democratic, hence democracy has a larger impact and underlying different legal origins do not play such a big role any more.

	(1)	(2)	(3)	(4)
	military	military	economic	economic
	factors,	factors,	factors,	factors,
	Cold War	post-Cold War	Cold War	post-Cold War
Different Civilizations	.0065**	.000378	00986	.0175***
	(0.04)	(0.9)	(0.12)	(0.001)
Number of Major	.0578***	.0392***	.039***	.038***
Powers in the Pair	(0.00)	(0.00)	(0.00)	(0.00)
Log Absolute Difference	.0041***	.0019	.0083***	00108
in Military Capabilities	(0.00)	(0.17)	(0.00)	(0.63)
Alliance Dummy	0133***	.0191**	002	004
	(0.001)	(0.02)	(0.77)	(0.59)
Number of Other	.00024***	.000152*	.00038**	.000083
Wars in Year t	(0.003)	(0.08)	(0.013)	(0.47)
Number of	0033***	00199***	0038***	0017***
Peaceful Years	(0.00)	(0.00)	(0.00)	(0.00)
Absolute Difference			0101***	.00488**
in Log per capita Income			(0.00)	(0.01)
Log Bilateral			0518***	02206**
Openness, t-4			(0.00)	(0.022)
Log Multilateral			.0136	.0838*
Openness, t-4			(0.65)	(0.07)
Log Distance×Log			.0071***	.00211*
Bilateral Openness			(0.00)	(0.071)
Log Distance×Log			0027	0127**
Multilateral Openness			(0.46)	(0.043)
# of Obs.	282061	118609	101463	48183
Standardized Magnitude(%)	21.972	1.536	-25.771	71.335

TABLE 6. Panel Regressions, probit. (Dependent variable: dichotomous indicator of conflict between 1946-1991 and 1992-2001; Cold War and post-Cold War Comparisons).

Robust p-values in parentheses; *** significant at 1%; ** significant at 5%; * significant at 10%. Probit marginal effects are reported in all columns. For dummy variables,marginal effects are for discrete changes from 0 to 1. All marginal effects are multiplied by 100 for readability. In addition to the variables displayed all columns include Contiguity, Log Geodesic Distance, Log Absolute Difference in Latitudes, Log Absolute Difference in Longitudes, Number of Landlocked Countries in the Pair, Log Product of Land Areas in sq km, Ever in Colonial Relationship, Common Colonizer, Countries were or are the Same Country, Different Legal Origins and Sum of Democracy Indexes.

nomic factors, this conclusion gives way to another one when we control for all of our variables on geographic, political, military and economic factors. In columns (3)and (4) of Table 6 we show that when a pair of countries in the post-Cold War era belong to different civilizations they have 71.3 percentage points higher probability of being involved in conflict than the countries that belong to the same civilization. During the Cold War, on the other hand, more similar countries are prone to militarized dispute and if two countries in a dyad are members of different civilizations their chances of conflict is reduced by 25.7 percentage points. These results in columns (3) and (4) of Table 6 leads us to a conclusion that is supportive of Huntington's thesis. Namely, civilizational differences are more nuanced in the post-Cold War era than in the Cold War era.

5 Conclusion

As Huntington (1993b) said, faith and family, blood and belief, are what people identify with and what they will fight and die for. And that is why the clash of civilizations is replacing the Cold War as the central phenomenon of global politics, and why a civilizational paradigm provides, better than any alternative, a useful starting point for understanding and coping with the changes going on in the world.

Though the above claim by Huntington might neglect several aspects that feed into conflictual fault lines, there is an element of truth in it as this study shows. By and large, our findings are supportive of Huntington's hypothesis. We find that civilizational differences do matter in conflictual relations as they increase the likelihood of conflict by up to 62.8 percentage points over the period 1816-2011. More importantly, civilizational differences matter even more in the post-Cold War world and country pairs that belong to different civilizations are associated with 71.3 percentage points higher conflict probability than the ones that belong to the same civilization.

A Appendix



Figure 1A. Number of Conflict, 1816-2001

Source: Author's Own Construction





Source: Author's Own Construction

Figure 3A. Number of Conflict, 1946-1991 (Same Civilization and Different Civilizations Breakdown)



Source: Author's Own Construction

Figure 4A. Number of Conflict, 1991-2001 (Same Civilization and Different Civilizations Breakdown)



Source: Author's Own Construction

Civilization Country Western Andorra, Australia, Austria, Barbados, Belgium, Canada, Croatia, Czech Rep., Denmark, Dominica, Estonia, Finland, France, French Guiana, Germany, Greenland, Grenada, Hungary, Iceland, Ireland, Israel, Italy, Jamaica, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, New Zealand, Norway, Papua New Guinea, Philippines, Poland, Portugal, San Marino, Slovakia, Slovenia, Solomon Islands, Spain, Sweden, Switzerland, Trinidad and Tobago, United Kingdom, United States, Vanuatu. Sinic China, Hong Kong, North Korea, South Korea, Taiwan, Vietnam. Islamic Afghanistan, Albania, Algeria, Azerbaijan, Bahrain, Bangladesh, Bosnia and Herzegovina, Brunei, Burkina Faso, Chad, Djibouti,

TABLE 1A. Civilization Membership

Civilization	Country
Islamic	Egypt, Eritrea,
	Gambia, Guinea,
	Guinea-Bissau,
	Indonesia, Iran,
	Iraq, Jordan,
	Kyrgyzstan, Kuwait,
	Lebanon, Libya,
	Malaysia, Mali,
	Mauritania, Morocco,
	Niger, Oman,
	Pakistan, Qatar,
	Saudi Arabia, Senegal,
	Somalia, Sudan, Syria,
	Tajikistan, Tunisia,
	Turkey, Turkmenistan,
	United Arab Emirates,
	Uzbekistan, Yemen.
Hindu	Guyana, India,
	Nepal.
Ortheday	America Delemie
Orthodox	Armenia, Belarus,
	Bulgaria, Cyprus,
	Georgia, Greece,
	Kazakhstan, Macedonia,
	Noldova, Romania,
	Russia, Serbia, Okraine.
Latin American	Antigua and Barbuda,
	Argentina, Bahamas,
	Belize, Bolivia,
	Brazil, Chile,
	Colombia, Costa Rica,
	Cuba, Dominican Rep.,
	Ecuador, El Salvador
	Guatemala, Honduras,
	Guatemala, Honduras, Mexico, Nicaragua,

TABLE 1A. Continued.

TABLE 1A. Continued.					
Civilization	Country				
Latin American	Peru, Puerto Rico,				
	Saint Lucia,				
	St.Vincent & Grenadines,				
	Uruguay, Venezuela.				
African	Angola, Benin,				
	Botswana, Burundi,				
	Cameroon, Cape Verde,				
	Central African Republic,				
	Comoros, Congo,				
	Congo, Dem. Rep. (Zaire),				
	Equatorial Guinea,				
	Gabon, Ghana,				
	lvory Coast, Kenya,				
	Lesotho, Liberia,				
	Madagascar, Malawi,				
	Mauritius, Mozambique,				
	Namibia, Nigeria, Rwanda,				
	Sao Tome and Principe,				
	Sierra Leone,				
	South Africa, Suriname,				
	Swaziland, Tanzania,				
	Togo, Uganda,				
	Zambia, Zimbabwe.				
Buddhist	Bhutan, Cambodia,				
	Lao People's Dem. Rep.,				
	Mongolia, Myanmar,				
	Singapore, Sri Lanka,				
	Thailand.				
"Lone" States	Ethiopia, Haiti, Japan.				

Source: Author's own construction based on Huntington (1998).

Civilizations	Western	Sinic	Islamic	Hindu	Orthodox	Latin American	African	Buddhist	Lone States
Western	35 (1.7%)								
Sinic	200 (10%)	97 (4.9%)							
Islamic	387 (19.5)	14 (.7%)	241 (12.1%)						
Hindu	4 (.2%)	33 (1.6%)	52 (2.6%)	3 (.15%)					
Orthodox	130 (6.5%)	41 (2.0%)	56 (2.8%)	0	14 (.7%)				
Latin American	67 (3.3%)	7 (.35%)	8 (.4%)	10 (.5%)	5 (.25%)	90 (4.5%)			
African	29 (1.4%)	0	32 (1.6%)	3 (.15%)	2 (.1%)	21 (1%)	127 (6.4%)		
Buddhist	11 (.55%)	77 (3.8%)	2 (.1%)	5 (.25)	5 (.25%)	0	0	68 (3.4)	
Lone States	5 (.25%)	28 (1.4%)	33 (1.6%)	0	27 (1.3%)	7 (.35%)	0	0	0

TABLE 2A. Number of Conflicts within and across Civilizations between 1946-1991.

Source: Author's own construction

TABLE 3A. Number of Conflicts within and across Civilizations between 1991-2001.

Civilizations	Western	Sinic	Islamic	Hindu	Orthodox	Latin American	African	Buddhist	Lone States
Western	10 (1.4%)								
Sinic	30 (4.3%)	30 (4.3%)							
Islamic	65 (9.4%)	1 (.14%)	98 (14.2%)						
Hindu	1 (.14%)	0	13 (1.8%)	0					
Orthodox	138 (20%)	2 (.29%)	87 (12.6%)	0	31 (4.5%)				
Latin American	7 (1%)	0	0	1 (.14%)	2 (.29%)	28 (4%)			
African	2 (.29%)	0	21 (3%)	2 (.29%)	0	0	66 (9.5%)		
Buddhist	0	3 (.43%)	1 (.14%)	1 (.14%)	0	0	0	10 (1.4%)	
Lone States	10 (1.4%)	13 (1.8%)	5 (.72%)	0	6 (.87%)	3 (.43%)	1 (.14%)	0	0

Source: Author's own construction

Variable	# Obs.	Mean	Std. Dev.	Min	Max
Conflict (%)	590337	.744	8.596	0	100
Different Civilizations	590337	.807	.394	0	1
Contiguity Dummy	590337	.046	.210	0	1
Log Distance	589696	8.714	.8009	4.29	9.89
Log Absolute Latitude Difference	586598	2.903	1.135	-4.09	4.64
Log Absolute Longitude Difference	586818	3.735	1.21	-4.60	5.61
# Landlocked Countries in a Dyad	586845	.347	.535	0	2
Log Product of Land Area	586845	24.30	3.077	9.86	32.76
Colonial Relationship Dummy	599328	.0159	.125	0	1
Common Colonizer Dummy	501041	.094	.291	0	1
Part of Same Polity Dummy	593424	.0107	.103	0	1
Different Legal Origins Dummy	613318	.632	.482	0	1
Sum of Democracy Indexes	490839	3869	10.6	-20	20
# Major Powers in a Dyad	608431	.108	.323	0	2
Log Absolute CINC Difference	589315	-5.944	2.02	-18.42	957
Alliance Dummy	613297	.057	.232	0	1
# Other Wars in Year t	607076	22.57	19.05	0	107
# Peaceful Years	590337	27.89	27.32	0	186
Absolute Log Income Difference	278897	2.812	2.039	.0000095	12.26
Log Bilateral Openness	225272	-6.887	2.27	-16.78	2.13
Log Multilateral Openness	225448	-1.387	.848	-10.41	8.95

TABLE 4A. Summary Statistics

TABLE 5A. Cross-Sectional Regressions, probit.

(Dependent variable: dichotomous indicator for whether a country pair was ever involved in a war, Cold War and post-Cold War Comparison).

	(1)	(2)	(3)	(4)
	Cold War	post-Cold War	Cold War	post-Cold War
	period	period	period	period
Different Civilizations	.096***	.0046	.076***	.0042
	(0.002)	(0.78)	(0.004)	(0.79)
Contiguity	.3509***	.0094	.313***	.0066
	(0.002)	(0.74)	(0.002)	(0.8)
Log Geodesic Distance	0213	0142	0202	012
	(0.42)	(0.26)	(0.37)	(0.3)
Log Absolute Difference	055***	0103*	048***	009
in Latitudes	(0.00)	(0.09)	(0.00)	(0.11)
Log Absolute Difference	0187	0084	015	008
in Longitudes	(0.23)	(0.17)	(0.23)	(0.17)
Number of Landlocked	216***	.0356***	181***	.034***
Countries in the Pair	(0.00)	(0.001)	(0.00)	(0.001)
Log Product of Land	.042***	.0125***	.035***	.0122***
Areas in sq km	(0.00)	(0.00)	(0.00)	(0.00)
Ever in Colonial Relationship			045	
			(0.48)	
Common Colonizer			0627	0092
			(0.15)	(0.64)
Countries were or are			.398*	.0408
the Same Country			(0.07)	(0.45)
Different Legal Origins			.077***	011
			(0.004)	(0.46)
# Obs.	15309	15309	15309	15136
Standardized magnitude(%)	111.219	19.554	107.496	18.821

p-values in parentheses; *** significant at 1%; ** significant at 5%; * significant at 10%. Probit marginal effects are reported in all columns. For dummy variables, marginal effects are for discrete changes.from 0 to 1. The standardized magnitude is the effect of a discrete change from 0 to 1 in *different civilizations dummy* as a percentage of the probability of war at the means of the variables. All marginal effects are multiplied by 100 for the sake of readability.

	(1)	(2)	(3)	(4)
	geographic	geographic	political	political
	factors,	factors,	factors,	factors,
	Cold War	post-Cold War	Cold War	post-Cold War
Different Civilizations	.0842***	.0522***	.0692***	.0163
	(0.00)	(0.00)	(0.00)	(0.14)
Contiguity	1.286***	.333***	1.177***	.802***
	(0.00)	(0.00)	(0.00)	(0.00)
Log Geodesic Distance	05***	0626***	0436***	0046
	(0.00)	(0.00)	(0.00)	(0.6)
Log Absolute Difference	061***	0528***	0724***	0508***
in Latitudes	(0.00)	(0.00)	(0.00)	(0.00)
Log Absolute Difference	0487***	038***	0638***	0408***
in Longitudes	(0.00)	(0.00)	(0.00)	(0.00)
Number of Landlocked	144***	0615***	1486***	046***
Countries in the Pair	(0.00)	(0.00)	(0.00)	(0.00)
Log Product of Land	.0548***	.0318***	.0554***	.0288***
Areas in sq km	(0.00)	(0.00)	(0.00)	(0.00)
Ever in Colonial Relationship			.0545*	.2439***
			(0.08)	(0.00)
Common Colonizer			0372**	0423***
			(0.02)	(0.001)
Countries were or are			.013	.1968***
the Same Country			(0.58)	(0.00)
Different Legal Origins			.106***	.0182*
			(0.00)	(0.06)
Sum of Democracy Indexes			00058*	0034***
			(0.10)	(0.00)
# of Obs.	333033	152312	282067	118614
Standardized Magnitude(%)	72.181	70.046	55.513	23.542

TABLE 6A. Panel Regressions, probit. (Dependent variable: dichotomous indicator of
conflict between1946-1991 and 1992-2001; Cold War and post-Cold War Comparisons)

Robust p-values in parentheses; *** significant at 1%; ** significant at 5%; * significant at 10%.

Probit marginal effects are reported in all columns. For dummy variables, marginal effects are for

discrete changes from 0 to 1. The standardized magnitude is the effect of a discrete

change from 0 to 1 in different civilizations dummy as a percentage of the probability of conflict

at the means of the variables. All marginal effects are multiplied by 100 for readability.

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