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We examine whether ethnic and other diversity affects militarization of society. Recent scholarship in economics finds that high diversity leads to lower provision of public goods. At the same time, many conflict studies find that highly diverse societies face a lower risk of civil war. We explore whether diversity prompts governments to militarize heavily in order to prevent armed conflict, which would then crowd out spending on other public goods in a 'guns versus butter' trade off. Yet we find the opposite: higher levels of ethnic diversity predict *lower* levels of militarization. If high diversity lowers the hazard of civil war, as many find, then it does not happen via preventive militarization. If diverse societies spend less on public goods, then this is not because they are crowded out by security concerns. Our results support those who suggest that diversity may in fact pose a lower security threat to states.

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There are two important strands of theoretical and empirical scholarship on the effects of ethnic, linguistic and religious diversity on state behavior. First, scholars interested in governance and public spending find that heterogeneity leads to lower provision of public goods, such as education, health, and infrastructure. Since diversity apparently poses problems for arriving at a consensus for co-operative solutions (a question of governance under diverse preferences), the greater the diversity the worse the policy outcomes (Alesina et al. 1999; Alesina et al. 2003; Easterly 2001). Secondly, cultural heterogeneity takes a prominent place in debates over the causes of violent conflict (Cederman and Girardin 2007; Fearon et al. 2007; Fox 2004; Gilley 2004; Gurr 1993; Horowitz 1998; Reynal-Querol 2002; Varshney 2001).[1] The focus on religion in particular intensified following the 9/11 terrorist attacks in the US, although the tradition of explaining violent conflict in developing countries in the years after World War II as ethno-nationalist rebellion has deep roots (Drake 1957; Gurr 1970; Huntington 1968). The popular wisdom is that ethnic and, if less so, religious conflict is 'endemic' and 'everywhere on the rise'.[2] The vast majority of empirical evidence suggests, however, that ethnic and religious fractionalization does not predict a higher risk of civil war (Fearon and Laitin 2003; Mueller 2000). If anything, high diversity makes countries safer (Wimmer and Min 2006), or in other words, ethnic dominance (Collier and Hoeffler 2004a) or ethnic polarization (Montalvo and Reynal-Querol 2005) is what matters for the hazard of civil war, not ethnic fractionalization. Nonetheless, theories built around such

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[1] It is reported that one English-language scholarly journal database records 249 articles published since 1990 containing 'ethnic conflict' in the title as opposed to just 23 with 'class conflict' (Gilley 2004: 1155). Some argue that 'ethnic conflict' is a myth and that the role of ethnicity in conflict is highly exaggerated, leading to flawed policy prescriptions with dangerous consequences (Gagnon 2004).

[2] See Kaplan (1994) for a recent explication of the primordialist argument that suggests ethnic and, more broadly, cultural conflict to be endemic. Huntington's (1993, 1996) hypothesis of a *Clash of Civilizations* provides a related argument. Others report that the incidence of ethnic conflict and inter-communal violence is declining (Gurr 2000).

concepts as ethnic hatred and ethnic security dilemmas are prominent in the literature (Kaufmann 1996; Petersen 2001; Posen 1993; Snyder and Jervis 1999; Walter and Snyder 1999). Ethnic and religious conflict occurs because groups are unable to coordinate mutual security fears (Woodward 1995), manage underlying social frictions, and accommodate nationalist demands (Cederman and Girardin 2005; Wimmer 1997; Wolff 2006).[3] Clearly, the issue of ethnic diversity's effect on state behaviour is not just interesting for theory building. Much international and local policy is currently focused on achieving viable peace and development strategies in heterogeneous populations, most notably in Iraq and Afghanistan, where issues of cultural representation dominate political discourse.

We explore whether there is a link between the two strands of literature. Specifically, ethnic diversity could lead to security concerns to which governments respond with higher 'preventive militarization'. Since high fractionalization might pose a readily-observable security threat, perhaps governments over-compensate the security risks, neglecting other public goods? This may account for why some countries have high diversity and no conflict, while simultaneously having lower public goods. In other words, does ethnic diversity lead to higher militarization, thus crowding out the provision of non-security public goods in a special kind of guns-versus-butter trade-off? We test this issue empirically, employing several measures of ethnic and cultural diversity and polarization on three indicators of state militarization, namely military expenditures, the share of military personnel in the labor force, and arms imports. Additionally, we employ a measure of ethnic exclusion, currently only available for a limited group of countries (Cederman and Girardin 2007).

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[3] Some find a monotonic positive effect between ethnic diversity and conflict in some estimations (Ellingsen 2000; Sambanis 2001, 2004). We are in no position to evaluate the reasons for the discrepant findings, but note that the vast majority of evidence points in the direction that ethnic diversity lowers the hazard of civil war. The debate between those who see ethnicity as crucial for understanding conflict and those who see it as epiphenomenal further justifies why one needs to test the effect of ethnic diversity on militarization.

Our results are easily summarized. We find that heterogeneity predicts lower, rather than higher, levels of military spending to GDP between 1988 and 2002, controlling for several salient factors, such as country size, income, regime type, security risks, armed conflict etc. If states fear ethnic diversity, or if heterogeneity drives dangerous social frictions, it does not show in terms of how states prepare to deal with this. The results are robust to sample size and several different specifications and testing procedures. Ethnic heterogeneity is also negatively related to the share of military personnel in the total labor force. Since most poor countries are likely to follow more labor-intensive security strategies, this result too is instructive. Ethnic diversity also reduces the share of arms imports in total imports. Religious heterogeneity has no statistically significant effect in any of the tests, which confirms existing studies that fail to find an effect of religious heterogeneity on either growth or institutional quality. In one set of estimations, it seems to be linguistic rather than ethnic heterogeneity that diminishes militarization, but Alesina et al.'s (2003) measure of linguistic fractionalization is highly correlated with ethnic fractionalization. In the case of militarization, we find that it is heterogeneity that matters, and not polarization, as some have argued (e.g., Montalvo and Reynal-Querol 2005).

The results taken together do not suggest that governments 'run scared' because of ethnic and other diversity – quite the opposite. They throw into doubt the notion that minority ethnic groups in ethnically diverse societies need to fear high state militarization when they rebel for autonomy. Neither do the results support a conjecture that heterogeneous societies remain peaceful because states militarize to prevent violent conflict. Realist theories in particular argue that ethnic conflict in Eastern and Central Europe was kept in check by Soviet military might, only to erupt with the withdrawal of Soviet power (Huntington 1993; Mearsheimer 1990). If in fact diversity is a source of potential violent conflict, it does not seem likely that peace prevails because of a 'garrison state' effect. We find exactly the opposite of this expectation regarding state behavior under conditions of ethnic and other

diversity. Our results therefore do not suggest that militarization crowds out public goods under conditions of diversity either. Similar to the problems diverse societies encounter for the provision of public goods, it seems that they may have difficulties collecting the taxes, forging political support, or reaching the social consensus required for militarization. This does not mean we would advocate militarization as a solution, but rather that governments do not seem to act the way we think would be a rational response to real and/or perceived threats emanating from ethnic diversity.

Ethnic Diversity, Public Goods, and Armed Conflict

Ethnic and other forms of diversity are not only interesting because of their supposed links to violent conflict. Research suggests that it adversely affects economic development and public policy outcomes as well. Ethnic heterogeneity (and polarization) is seen as the underlying cause of the failure of collective action, particularly as it generates incentives for rent-seeking (Alesina 1994; Alesina and Drazen 1991; Alesina and Rodrik 1994; Garcia-Montalvo and Reynal-Querol 2005; Posner 2004). Political economy models suggest that heterogeneity is "prone to competitive rent-seeking by the different groups that have difficulty agreeing on public goods like infrastructure, education, and good policies" (Easterly and Levine 1997: 2). This phenomenon has been demonstrated at various levels of aggregation – see, for example, Alesina, Baqir and Easterly's (1999) study of the negative impact of ethnic fractionalization on public good spending in U.S. cities and Easterly and Levine's (1997) cross-national study explaining Africa's growth tragedy.[4] Africa's economic woes are seen as being directly related to the bad public policies as a result of ethnic heterogeneity, where political conflicts driven by ethnic frictions impede good governance and sound public goods provision (Easterly and Levine 1997; Kimenyi 1997). Cross-national studies show that ethnic

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[4] Posner (2004) corrects Easterly and Levine's (1997) measure for ethnic groups that are politically relevant and comes to the same conclusion.

polarization lowers investment, whereas religious polarization increases government consumption relative to GDP (Garcia-Montalvo and Reynal-Querol 2005). Alesina et al (2003), however, find that it is diversity that matters more than polarization on the question of poor economic policy and public goods provision, due largely to coordination failure arising from social frictions. Possibly, the negative effects of fractionalization are mitigated in democracies (Collier 2001) or rather, as Easterly (2001) argues, where institutional quality is high, which is only weakly correlated with democracy. However, some find that institutional quality is itself negatively affected by ethnic fractionalization (Alesina et al. 2003; Keefer and Knack 2002; Ritzen and Woolcock 2000).

Recent studies of civil war onset show that, contrary to conventional wisdom, ethnic diversity's role in violent conflict is not straightforward. Ethnicity is important of course for organization and mobilization of support, but conflict occurs when the opportunity for using large-scale violence is maximized (Collier et al. 2003; Collier and Hoeffler 2004a). In highly homogeneous societies there is little ethnic strife, whereas a high degree of fractionalization prevents effective mobilization. Collier (2001) argues that highly fractionalized societies will pose difficulties for large enough minimum winning coalitions to form that can effectively challenge a state's monopoly on force. Many empirical studies suggest that there is 'more murder in the middle,' with moderately fractionalized societies facing the greatest danger (Collier and Hoeffler 2004a; de Soysa 2002; Reynal-Querol 2002). Others call this polarization, where two equally sized groups are the most dangerous, or in other words, where moderate fractionalization prevails, since measures of polarization are at a maximum when society is made up of two groups containing 50% of the population each (Alesina et al. 2003; Garcia-Montalvo and Reynal-Querol 2002). Moreover, if the largest minority is large enough, it is a more attractive target for expropriation by a majority, leading to polarized conflict and violence (Caselli and Coleman 2006).

Yet, there is a mechanism other than Collier's (2001) minimum winning coalition argument by which ethnically diverse societies might achieve civil peace. If states anticipate a high probability of violence or ethnic challenges under conditions of heterogeneity (social frictions), they might be prone to deter large-scale violence through preventive militarization.[5] It is this aspect of the debate we test on militarization, only discussing the question of violent conflict as a backdrop for why militarization should matter. If diverse societies in fact engage in preventive militarization, then this could also provide one of the reasons why these societies under-provide public goods, thus providing a possible causal link between the two strands of literature regarding the effects of diversity on state behaviour.

Our study is motivated by mainly two interrelated concerns. The first is theoretical from the perspective of conflict studies. If ethnic diversity is inherently dangerous, then do states prepare to meet it via militarization? If ethnic heterogeneity does not seem to matter in terms of the outbreak of civil war, is this because states suppress conflict effectively by increasing military capacity? Secondly, is the strong empirical association relating ethnic divisions to lower levels of public good provision related to higher militarization? Do states respond to the ethnic diversity 'threat' via militarization, thus crowding out other public goods? In fact, several scholars treat military spending as a public good both regionally and within countries because if it in fact buys security, then others benefit from having to spend less given the regional nature of the consequences (Collier and Hoeffler 2002; Olson 1982). Our analysis is designed to answer these questions.

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[5] Collier and Hoeffler (2004c) do not find that higher military spending deters civil conflict, whilst Collier and Hoeffler (2004b) even show that higher spending might increase rather than reduce the risk of renewed conflict in post-conflict societies. Yet, many policy makers all over the world seem to think that militarization is needed for conflict prevention.

Research Design

We employ a pooled time-series, cross-section (TSCS) data set. Our main dependent variable consists of military expenditures over GDP (*Military expenditures*). We keep this variable in its level form, but our main results are hardly affected if it is logged instead. Others also report this finding (Collier and Hoeffler 2004c). The data are taken from the World Development Indicators CD-Rom (World Bank 2004), which is also the source for the other variables unless noted otherwise. They are available annually from 1988 up to 2002, a total of 15 years. Combining various sources one could in principle construct a panel that reaches further back in time. However, given measurement and international and inter-temporal comparability problems with military expenditure data, particularly during the period of the Cold War (Brzoska 1995), we prefer to use one single data source that largely covers only the post-Cold War period. The recent data are also much more reliable given improved standards for collecting data and higher levels of transparency due to democratization and international pressure (Omitoogun 2003). The World Bank data are almost identical to data supplied to us directly by SIPRI (r = 0.98).

In addition, we use two other variables capturing aspects of militarization to build robustness. The second dependent variable is military personnel as a share of the total labor force (*Military personnel*). The advantage of using the share of military personnel is that poor countries may simply use labor-intensive (rather than capital-intensive) forms of militarization. Finally, we use arms imports relative to total imports (*Arms imports*). This variable is only available up to 1999, and in principle arms import expenditures should be included in total military expenditures. However, for some countries arms imports are not

accounted for in military expenditures (Brzoska 1995) and a high arms to total imports ratio

provides yet another feature of militarization. These data are from (World Bank 2003).[6]

Our primary independent variable is ethnic heterogeneity (Alesina et al. 2003; Fearon

2003). This measure is defined as the probability that two randomly selected individuals from

the same country belong to different ethnic or linguistic groups, computed as

$ELF \equiv 1 - \sum_{i=1}^{n} p_i^2$, where p_i is the population share of ethnic or linguistic group i and n is the

number of existing groups. These data are based on more current, updated sources, and do not

conflate ethnic, religious and linguistic characteristics in a single measure as blatantly as the

old ELF measure based on Soviet ethnographic studies during the 1960s (Fearon 2003). They

also rely on survey-based studies that have examined several African countries, where

distinction of groups is not always straightforward. Fearon (2003: 196) claims that his

measure is 'broadly similar' to Alesina et al's (2003) measure. Both these measures are

highly similar to Montalvo and Reynal-Querol's (2005). In addition to these three sources,

Roeder (2001) has developed an ethnolinguistic fractionalization index, which is mainly

based on the original Soviet sources from the 1960s together with other Soviet ethnographic

studies from the 1980s.

Additionally, Montalvo and Reynal-Querol (2005) argue that it is polarization rather

than fractionalization that matters. Polarization measures "the normalized distance of a

particular distribution of ethnic and religious groups from a bimodal distribution" (see

Montalvo and Reynal-Querol 2005: 301 for details). It is computed as

$P \equiv 1 - \sum_{i=1}^{n} \left(\frac{.5 - p_i}{.5} \right) p_i$, where p_i is again the population share of group i and n is the number

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[6] There is one data point of more than 100 per cent (Ethiopia 1989), which can happen if there are inconsistencies

in the reporting and measurement of arms as well as total imports. Dropping this observation from the sample had

little impact on the results.

of existing groups. Polarization approaches unity when the population is made up of two equally sized groups and then declines as the number of groups increases further, whereas fractionalization increases monotonically with the number of groups. Empirically, across countries ethnic polarization is related to ethnic fractionalization in a non-linear way: Ethnic polarization first rises with increasing fractionalization, but then falls at an intermediate level of fractionalization. Religious polarization is somewhat different. It first increases as fractionalization increases and then at higher levels of fractionalization there is no relationship to polarization. See Montalvo and Reynal-Querol (2005) for a detailed discussion. Table 1 provides a correlation matrix for the various measures of fractionalization and polarization used. There is clearly often strong correlation among the various measures, but they are far from identical. We use the conservative strategy of testing all these measures to ensure robustness of our results, a strategy advocated by both Fearon (2003) and Alesina et al. (2003).

In a recent debate on the importance of ethnicity for predicting conflict, Cederman and Girardin (2007) argued that fractionalization measures are not a good way of capturing why ethnic grievances matter for conflict (see also Fearon et al. 2007). They propose that what matters is not ethnic diversity as such, but the exclusion of ethnic groups from state power. They construct a measure of ethnic exclusion based on the size of the ethnic groups that do not share in government, which they call N-star. The smaller the size of the ethnic group in power, the greater the chances of violence. We use their measure of N-star to test also this aspect of ethnicity on state militarization in sensitivity analysis. Do ethnic minorities in power use their access to state resources to insure their predominance through militarisation?

There is an enormous theoretical and empirical literature that has accumulated on the causes and consequences of military spending (Gleditsch et al. 2000; Hartley and Hooper 1990). Most of these studies have focused on arms races between the superpowers, or are

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case studies of single countries over time. We rely primarily on two recent empirical studies addressing the determinants of military spending, namely Collier and Hoeffler's (2004b) study of military expenditures in five-year averaged periods from 1960-1999 and Goldsmith's (2003) study of military spending over the period 1886 to 1989, neither of which addresses ethnic and other diversity.

We control for the level of per capita income in purchasing power parity (*Gross National Income p.c.*) as well as its growth rate (*Economic growth per capita*), which are commonly used variables (Davoodi et al. 2001; Goldsmith 2003; Gupta et al. 2001). We log Gross National Income per capita to reduce skewness. Most find that income is positively related to higher expenditures, arguing that wealth allows governments the greater luxury of stronger defense (Collier and Hoeffler 2004c). In economic terms, military spending is likely to be a normal good, that is a good with a positive income elasticity (Sandler and Hartley 1995). High economic growth rates might make it easier for governments to impose a greater defense burden on society. We use total population (logged) to control for country size because this influences both ethnic heterogeneity and militarization (*Population size*). Collier and Hoeffler (2004b) report a negative effect of country size as measured by population on military budgets, arguing that large countries deter external threats. We control for regime type (*Democracy*) using the POLITY IV dataset's polity2 indicator, which uses a weighting scheme to treat periods of transition (www.cidcm.umd.edu/inscr/polity/). We expect autocracies to have higher military spending than democracies (Collier and Hoeffler 2002; Goldsmith 2003). Many have argued that autocracies are dependent on military force to sustain their rule, whereas democracies command a greater degree of legitimacy and are less in need of a strong military (Kimenyi and Mbaku 1995; Maizels and Nissanke 1986). We additionally control for overall government spending per GDP (*Government expenditures*), since high government consumption generally will have the same causes as high military spending.

Next, we control for internal and external security threats, which should impact militarization (Collier and Hoeffler 2004c). We enter a term for *Civil war*, which is a dummy variable for years in which a country experiences armed conflict with over 25 battle-related deaths (Gleditsch et al. 2002). Following Goldsmith (2003), the international war variable is a dummy for years in which a country engages in conflict between states with at least 1000 deaths (*International war*). These data are taken from (Gleditsch et al. 2002). We also compute a count of civil and international peace years (*Peace years (civil war)* and *Peace years (int. war)*), or the simple count of the number of years since the last civil and international war since 1946 (Collier and Hoeffler 2004c). It is well established that, for civil wars at least, there is a high risk of revival, which suggests that militarization after the end of civil war is likely to diminish only slowly over time (Collier and Hoeffler 2004b). Civil wars could also be endogenous to militarization. High military expenditures can deter international conflicts, but can also provoke them due to fears among neighbors (Fordham and Walker 2005). High military expenditures can signal to rebels that the initiation of a civil war is likely to end in defeat, but particularly in fragile post-conflict societies high expenditures can also increase the risk of renewed conflict if the former rebels take such expenditures as a signal of the bad faith of a government (Collier and Hoeffler 2004c). For these reasons, we run tests with and without the civil war variables (incidence and peace years) included.

Similar to Collier and Hoeffler (2004b) we take a weighted average level of militarization of countries that are "contiguous" (*Neighborhood militarization*). The weight is GDP and contiguity is defined as either land contiguity or water contiguity up to 400 miles of water. Data are from the Correlates of War (COW) project and were taken from Bennett and Stam (Bennet and Stam 2003). In a context of rivalry, the level of militarization of contiguous countries can capture local arms race phenomena. In a context of non-rivalry, it can capture emulation, imitation and coordination effects. The contiguous militarization variable is not without problems, however. In effect, it introduces a spatial lag into the model

(Anselin 1998) and often captures variables omitted from the model (Simmons and Elkins 2004). We believe our model is relatively comprehensive, but it would be difficult to say with confidence that there are no omitted variables. For this reason, we run tests with and without the contiguous militarization variables.

Contrary to Collier and Hoeffler (2004b), we do not include a measure of predicted civil war. Such a variable creates all kinds of statistical problems. Instead, we control for the risk of civil war directly by our range of explanatory variables, which will capture the risk of civil war under the assumption that the factors triggering such war are time-persistent. Finally, we include year-specific dummies to capture any trends over time and year-specific international tension that influence defense spending globally, such as the end of the Cold War, the Persian Gulf War, and NATO action in the Balkans. Table 2 provides descriptive statistics of the variables.

The estimation of TSCS data presents some special problems, particularly because of complex correlation patterns between and across panels (Beck and Katz 1995a, 1995b). Since our data is unbalanced to an extent that no time periods are common to all countries in the sample, the standard version of the Panel Corrected Standard Errors (PCSE) method of Beck and Katz cannot be used. As an alternative, we use a random-effects estimator with robust standard errors, assuming that observations are independent across countries, but not necessarily within countries over time, i.e. observations are clustered by units. The robust-cluster option produces consistent standard errors even in the presence of serial correlation and heteroskedasticity, but it is potentially inefficient in estimation (Wiggins 1999). To ensure that results are not specific to our estimation technique, we additionally use the Generalized Estimation Equation method (GEE) (Zorn 2001), also under the assumption of clustered observations.

Results

Table 3 presents the results for militarization with Fearon and Laitin's (2003) measures of ethnic and religious heterogeneity. Note that year-specific time dummies are included in the estimations, but their coefficients are not reported. Column 1 reports results with random-effects (cluster option) and column 2 reports results using the GEE method.[7] As seen there, ethnic heterogeneity is negatively related to militarization across all three measures of militarization. Religious heterogeneity is not statistically significantly different from zero in any of the estimations. Substantively, holding all other variables at their mean values, raising ethnic heterogeneity by one standard deviation would reduce the share of military expenditures in GDP by almost three-quarter's of a percent (0.71), which is quite large given that the global average military burden is only 2.9% of GDP.

What about our control variables? Contrary to Goldsmith (2003) who tests a longer time period, we do not find that higher per capita income predicts higher defense spending, but a higher economic growth rate allows countries to engage in higher military spending. This difference in results might suggest some influence from the Cold War period that dominates other tests. Developed and Eastern European countries have on average reduced their military spending after the end of the Cold War, whereas developing countries have not, or if they have, by smaller degrees. Democracy has a negative and statistically significant impact on military spending, supporting Goldsmith's (2003) and Collier and Hoeffler's (2004b) findings. Democratic governments are able, independently of the level of fractionalization, wealth, and other controls, to focus a larger share of resources to other priorities than security. This result is not likely to be driven mainly by the fact that democracies thrive in peaceful neighborhoods and autocrats thrive in violent ones, which can

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[7] Collinearity among the variables does not seem to be a problem. The average Variance Inflation Factor (VIF) score is around 2 in column 1.

be deduced from the fact that we control for violent conflict.[8] Larger government consumption is also positively related to higher military expenditure. Military spending by contiguous countries and the incidence of civil war show the expected positive sign and are statistically significant, results that are also consistent with other studies (Goldsmith 2003; Gupta et al. 2001). Military expenditures decrease with a longer history of civil peace. Perhaps surprisingly, neither the incidence nor the history of international conflict seems to matter for military spending.

With respect to military personnel as a share of the labor force, neither per capita income nor the economic growth rate has a statistically significant impact. Democracy shows a statistically significant negative effect on the share of labor devoted to security. Not surprisingly, population size is negatively related to military personnel as a share of the labor force, since countries with a large population need to allocate a smaller share of the labor force to military duties, but still retaining a large military in absolute numbers. Higher militarization by contiguous neighbors leads to higher militarization within the country. A longer history of civil peace leads to lower military personnel, whereas the opposite is true for the incidence of international war. This result is reasonable, as it is the rich countries that largely fight international wars (as in Kosovo and the Persian Gulf) and simultaneously maintain more capital intensive defense postures.

Finally, regarding arms imports as a share of total imports, we find that higher arms imports by contiguous neighbors as well as the incidence and history of civil and international war have the predicted effect on a country's arms imports. Democracies import fewer arms than autocracies, but the effect is marginally insignificant in random-effects estimation. Surprisingly, arms imports are lower in countries with a higher per capita income.

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[8] There is a large literature on the democratic peace (Russett and Oneal 2001) and questions relating to spatial effects of neighborhoods and democracy (Gleditsch and Ward 2004; O'Loughlin et al. 1998).

An explanation could be that richer countries are able to produce a larger share of their armaments domestically. Government expenditure is positively associated with arms imports, whereas population size and the economic growth rate do not matter.

In tables 4 to 6, we repeat the tests conducted above, but this time using alternative measures of heterogeneity. Estimations using Montalvo and Reynal-Querol's (2005) measures of ethnic and religious fractionalization are reported in table 4. They mirror the results using Fearon's (2003) and Fearon and Laitin's (2003) measures: More ethnically fractionalized societies have lower military spending and lower arms imports, whereas religious fractionalization does not matter. The substantive effect of a standard deviation increase in fractionalization reduces the defense burden by almost one-half of a percent. The main difference to results in table 3 is that ethnic fractionalization, while being negatively signed, has no statistically significant effect on military personnel as a share of the labor force. Results from the main estimations reported in table 3 uphold if Roeder's (2001) ethnolinguistic fractionalization index is used instead, with results reported in table 5. Alesina et al.'s (2003) measures of ethnic, linguistic and religious fractionalization are tested in table 6. As seen there, it is linguistic fractionalization that has the strongest negative and statistically significant effect on military expenditures and arms imports, although it is not statistically significant for military personnel. Religious fractionalization exerts a negative and statistically significant impact on military personnel, however. Ethnic fractionalization remains insignificant across the dimensions. We re-ran all tests by dropping linguistic fractionalization because it is highly correlated with ethnic fractionalization, but the results do not change much. This result is plausible because it is Alesina et al.'s (2003) linguistic rather than ethnic fractionalization which is most highly correlated with Fearon and Laitin's ethnic fractionalization measure (r = 0.88 as opposed to r = 0.76).

Linguistic issues are potentially most explosive because questions concerning national language and school curricula determine the economic chances of people (Horowitz 2000),

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but the fact that states do not militarize under linguistic diversity suggests that the consensus necessary for such spending is difficult under these conditions. To test whether the linguistic difference between the two largest groups matter, we now test Fearon's (2003) measure of cultural fractionalization that adjusts his measure of ethnic fractionalization for the cultural distance between the ethnic groups using linguistic classifications of distance between major language families. For example, if ethnic groups belong to two distinct language families, such as Greek and Turkish, then the cultural distance is greater compared to two groups speaking Slavic East branch and Slavic West branch. Indeed, Fearon (2003: 215) argues that "if a researcher's theory is that ethnic fractionalization matters because it makes for diverse preferences and consequent difficulties cooperating, then the measure of cultural fractionalization (...) may be more appropriate." Alesina et al (2003) concur. Table 7 repeats the estimations from table 3, but replacing ethnic with cultural fractionalization (*Cultural fraction)*. This variable is negatively signed, but only statistically significant for military personnel, and then only in GEE estimation. It is only marginally insignificant in columns 1 to 3, however. These results, too, however, do not suggest that cultural distance based on language similarity matters for predicting the degree of state militarization.

Sensitivity analysis

We ran our models with several alternative conceptualizations of ethnicity followed by a number of robustness checks on our basic results.[9] We test ethnic and religious polarization and a measure of ethnic exclusion from state power. First, we replaced the fractionalization with Montalvo and Reynal-Querol's (2005) polarization measures. Neither ethnic nor religious polarization has any impact on militarization, regardless of the dependent variable used. These results do not support the proposition that it is polarization rather than

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[9] These results will be made available as a web appendix upon publication.

fractionalization that really matters for predicting militarization. Next, we entered Cederman and Girardin's (2007) measure of ethnic exclusion (N-star). If ethnic groups excluded from state power are most likely to rebel as Cederman and Girardin (2007) argue, then do ethnic minority governments respond to this threat via increased militarization? The coefficients of this variable switched between positive and negative in the models tested, but none of them at any time came close to being statistically significant. We thus find no association between ethnic exclusion from state power and militarization. Others have shown that this measure is not a robust predictor of civil war either (Fearon et al. 2007). However, it is too early to come to a definite conclusion on this measure as the N-star variable is currently only available for Eurasia and North Africa and does not yet account for changes in the ethnic composition of state power over time. We intend to revisit this important question when an updated measure that is spatially and temporally more comprehensive.[10]

We dropped the contiguous militarization and conflict variables to assess the effects of ethnic heterogeneity without them in the model, since these variables might suffer from endogeneity bias. When these variables are dropped, the basic results on most of the heterogeneity variables change little, but the heterogeneity variables from Montalvo and Reynal-Querol (2003) and the linguistic fractionalization variable from Alesina et al. (2003) become statistically insignificant, while maintaining their negative coefficient sign. The government expenditure variable suffers from partial identity bias since current military expenditures form part of general government expenditure. Unfortunately, current military expenditures cannot be netted out from general government expenditure since the available military expenditure data include both capital formation and current expenditures for military purposes. If we drop government expenditures from the model, then our results are hardly affected. To see whether ethnic and religious heterogeneity exerts a non-linear influence on

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[10] Cederman and Girardin are currently working on such an update (personal communication).

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military spending, we repeated the estimations with squared and, in separate estimations, even cubic heterogeneity terms included. However, we found no evidence for non-linear relationships.

We followed Goldsmith (2003) and controlled for the previous year's value of the dependent variable. One can argue that military budget decisions are subject to bureaucratic inertia (Goldsmith 2003; Gupta et al. 2001). Results on our main variables of interest are little affected in terms of the sign of the coefficient and statistical significance when entering a lagged dependent variable. We tried to capture some crude cross-regional heterogeneity by employing regional dummies. We use the regional classification provided in the World Development Indicators CD-rom version (World Bank 2004). With the exception of North Africa and Middle East, which often showed a higher level of militarization, there was little evidence for systematic regional differences. Our main results were hardly affected with the exception of the heterogeneity variables derived from Montalvo and Reynal-Querol (2003) and Alesina et al. (2003), which sometimes became (marginally) insignificant, while maintaining their negative coefficient sign.

Next, we added further control variables. Contrary to others, the share of the population urbanized had little effect on the results (Davoodi et al. 2001). The same is true for the level of aid to gross national income, which might ease the budget constraint. One might wonder whether oil wealth might allow governments to achieve greater levels of militarization. Adding a dummy variable taking the value of one if oil exports reach one third of total GDP (Fearon and Laitin 2003), suggests no impact on military expenditures or military personnel, but oil has a positive and statistically significant effect on arms imports. This result is reasonable because major oil exporters, such as the Persian Gulf countries, have been major arms importers during the study period. The results on the remaining variables were hardly affected, however. The same is true if we add a dummy variable for the 20 largest arms-producing countries based on information from SIPRI to the arms imports

regressions (SIPRI 2002). Major arms producers import fewer arms, as expected. Our main results remain valid. Finally, we limited our analyses to a sub-sample of only developing countries. The results on diversity remain very similar. In sum, there is no indication from any of the tests that fractionalization increases militarization. The same is true for polarization.

Conclusions

Several disciplines use ethnic diversity as an explanation for societal outcomes, ranging from democratization and governance to violent political conflict and economic performance. Recent empirical studies show that ethnic diversity hampers public goods provision because consensus and coordination are difficult under conditions of competing preferences. In addition, explanations of violent conflict see ethnic diversity as problematic because it can lead to mutual hatred stemming from historic legacies and the fear of domination by cultural others. Recent cross-national quantitative studies show, however, that ethnic diversity makes countries safer. The question our study was concerned with is: do states in ethnically diverse societies engage in preventive militarization? If they did, then this could both provide a mechanism through which diverse societies achieve civil peace and an explanation for why diversity leads to under-provision of such public goods as education and infrastructure (crowding out).

Our results simply do not support this view. Militarization is actually lower under conditions of greater diversity measured by several different indicators. Ethno-linguistic diversity in particular seems to be what matters rather than polarization. If in fact, as some find, ethnicized armed violence is most likely when two groups are of similar size, then it is not likely that militarization is the link as to why heterogeneous societies are better able to maintain peace. In fact, empirical studies that have tested the direct effect of ethnic and other

diversity on state repression have found ethnicity to have no effect, or even to lower repression (de Soysa 2007; Lee et al. 2004; Walker and Poe 2002).

If preventive militarisation cannot explain why ethnically diverse societies are surprisingly peaceful, what can? Fearon and Laitin (1996) developed theories of interethnic cooperation built on in-group policing and fear of spirals of conflict. Our estimations of government behavior in the security sector under conditions of diversity support those views that suggest ways in which diversity may in fact promote peaceful conflict resolution (Collier 2001; Fearon and Laitin 1996; Gagnon 2004; Varshney 2001). Most importantly, our results suggest that if greater diversity is in fact a constraint on organizing violence, then this is not a result of higher state militarization. These results support those who advocate promoting democracy and diversity, not secession, as the antidote to the so-called development tragedy in Africa (Collier 2001).

Table 1. Correlation matrix of fractionalization and polarization measures.

	1	2	3	4	5	6	7	9	9	10
1: Ethnic fraction (Fearon & Laitin)	1.00									
2: Religious fraction (Fearon & Laitin)	0.39	1.00								
3: Cultural fraction (Fearon)	0.82	0.33	1.00							
4: Ethnic fraction (Alesina et al.)	0.76	0.31	0.74	1.00						
5: Religious fraction (Alesina et al.)	0.31	0.89	0.20	0.23	1.00					
6: Linguistic fraction (Alesina et al.)	0.88	0.40	0.74	0.68	0.31	1.00				
7: Ethnolinguistic fraction (Roeder)	0.85	0.43	0.70	0.83	0.36	0.76	1.00			
8: Ethnic fraction (Montalvo & R-Q)	0.84	0.36	0.68	0.81	0.29	0.73	0.86	1.00		
9: Religious fraction (Montalvo & R-Q)	0.51	0.50	0.50	0.53	0.51	0.48	0.52	0.54	1.00	
10: Ethnic polarization (Montalvo & R-Q)	0.42	0.12	0.39	0.55	0.11	0.28	0.51	0.58	0.32	1.00
11: Religious polarization (Montalvo & R-Q)	0.54	0.46	0.51	0.59	0.47	0.50	0.58	0.57	0.96	0.40

Table 2. Summary statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Military expenditures per GDP	1589	2.90	2.82	0	29.00
Military personnel per labor force	1393	1.39	1.72	0	23.68
Arms imports to total imports	1406	2.85	5.32	0	36.86
Ethfrac (Fearon & Laitin)	1587	0.40	0.27	0	0.93
Relfrac (Fearon & Laitin)	1587	0.36	0.21	0	0.78
Cultfrac (Fearon)	1561	0.30	0.20	0	0.73
Ethfrac (Alesina et al.)	1589	0.44	0.25	0	0.93
Relfrac (Alesina et al.)	1589	0.42	0.23	0	0.86
Linfrac (Alesina et al.)	1560	0.39	0.28	0	0.92
Ethlinfrac (Roeder)	1589	0.46	0.27	0	0.98
Ethfrac (Montalvo & Reynal-Querol)	1307	0.44	0.28	0.01	0.96
Relfrac (Montalvo & Reynal-Querol)	1321	0.28	0.23	0.00	0.78
Ethpol (Montalvo & Reynal-Querol)	1307	0.51	0.24	0.02	0.98
Relpol (Montalvo & Reynal-Querol)	1321	0.46	0.34	0	1.00
Gross National Income p.c. (ln)	1589	8.34	1.15	5.94	10.49
Economic growth p. c.	1589	0.04	0.06	-0.51	0.33
Democracy (Polity IV)	1589	2.92	6.97	-10.00	10.00
Government expenditures	1589	16.24	6.64	2.98	56.51
Population size (ln)	1589	16.30	1.46	12.87	20.97
Neighborhood military expenditures	1589	2.97	2.28	0	24.46
Neighborhood military personnnel	1393	1.21	1.14	0	9.43
Neighborhood arms imports	1406	2.85	5.32	0	36.86
Peace years (civil war)	1589	20.14	18.95	0	56.00
Peace years (international conflict)	1589	26.77	17.31	0.00	56.00
Civil war	1589	0.19	0.39	0.00	1.00
International war	1589	0.02	0.13	0.00	1.00

Table 3. Militarization and Fearon and Laitin's measures of fractionalization, 1988–2002

	(1)	(2)	(3)	(4)	(5)	(6)
	XTREG	XTGEE	XTREG	XTGEE	XTREG	XTGEE
	Mil.Expenditure.	Mil.Expenditure	Mil.Personnel	Mil.Personnel	Arms Imports	Arms Imports
Ethnic.fraction (Fearon & Laitin)	-2.523***	-2.545***	-0.903**	-0.940**	-3.307**	-3.311**
	(4.15)	(4.15)	(2.46)	(2.46)	(2.41)	(2.46)
Religious. fraction (Fearon & Laitin)	0.877	0.880	-0.541	-0.559	0.611	0.647
	(1.20)	(1.21)	(1.31)	(1.34)	(0.40)	(0.43)
Gross National Income per capita (ln)	-0.328	-0.338	0.050	0.035	-0.690*	-0.647*
	(1.39)	(1.43)	(0.46)	(0.31)	(1.93)	(1.86)
Economic growth per capita	1.293**	1.281**	0.093	0.064	-0.208	-0.097
	(2.08)	(2.09)	(0.14)	(0.10)	(0.08)	(0.04)
Democracy (Polity IV)	-0.040**	-0.039**	-0.012*	-0.012*	-0.105	-0.112*
	(2.28)	(2.25)	(1.89)	(1.79)	(1.62)	(1.72)
Government expenditures	0.158***	0.157***	0.028**	0.028**	0.161**	0.164***
	(4.52)	(4.56)	(2.17)	(2.15)	(2.52)	(2.69)
Population Size (ln)	-0.034	-0.044	-0.150**	-0.164**	0.375	0.390
	(0.30)	(0.38)	(2.35)	(2.30)	(1.49)	(1.57)
Neighborhood militarization	0.130**	0.126**	0.568**	0.557**	0.110	0.118*
	(2.52)	(2.48)	(2.23)	(2.17)	(1.55)	(1.72)
Peace years (civil war)	-0.020***	-0.020***	-0.004*	-0.004**	-0.024*	-0.024*
	(3.74)	(3.74)	(1.81)	(2.02)	(1.84)	(1.89)
Peace years (intern. conflict)	0.006	0.007	-0.009	-0.009	-0.035**	-0.031**
	(0.72)	(0.74)	(1.56)	(1.53)	(2.30)	(2.20)
Civil war	0.639***	0.639***	0.055	0.053	2.375**	2.391***
	(3.24)	(3.26)	(0.77)	(0.76)	(2.55)	(2.60)
International war	0.763	0.761	0.608*	0.612*	3.232**	3.160**
	(1.24)	(1.25)	(1.79)	(1.80)	(2.19)	(2.18)
Observations	1587	1587	1383	1383	1396	1396
Countries	131	131	138	138	139	139

Notes: Absolute values of t- and z-statistics in brackets. Constant and year-specific time-dummies included, but coefficients not reported.
*, **, *** significant at .1, .05 and .01 level, respectively.

Table 4. Militarization and Montalvo and Reynal-Queirol's measures of fractionalization, 1988–2002

	(1) XTREG Mil.Expenditure.	(2) XTGEE Mil.Expenditure	(3) XTREG Mil.Personnel	(4) XTGEE Mil.Personnel	(5) XTREG Arms Imports	(6) XTGEE Arms Imports
Ethnic fraction (Montalvo & R-Q.)	-1.580**	-1.688**	-0.771	-0.777	-2.985*	-2.979*
	(2.02)	(2.03)	(1.22)	(1.21)	(1.68)	(1.68)
Religious fraction (Montalvo & R-Q.)	1.173	1.002	0.786	0.769	0.670	0.684
	(1.40)	(1.11)	(1.37)	(1.35)	(0.37)	(0.38)
Gross National Income per capita (ln)	0.062	-0.026	0.218*	0.213*	-0.406	-0.407
	(0.25)	(0.08)	(1.76)	(1.69)	(1.09)	(1.10)
Economic growth per capita	0.848	0.855	-0.967	-0.968	-4.458	-4.354
	(1.21)	(1.22)	(0.86)	(0.87)	(1.14)	(1.12)
Democracy (Polity IV)	-0.036**	-0.032*	-0.005	-0.005	-0.160**	-0.160**
	(1.98)	(1.80)	(0.76)	(0.74)	(2.09)	(2.12)
Government expenditures	0.135***	0.128***	0.016**	0.016**	0.208***	0.205***
	(5.01)	(4.84)	(2.01)	(2.00)	(2.60)	(2.58)
Population size (ln)	-0.121	-0.204	-0.223**	-0.231**	0.370	0.361
	(0.84)	(1.21)	(2.49)	(2.49)	(1.31)	(1.28)
Neighborhood militarization	0.104**	0.090*	0.579**	0.574**	0.115	0.113
	(1.99)	(1.80)	(2.13)	(2.12)	(1.37)	(1.35)
Peace years (civil war)	-0.023***	-0.023***	-0.006***	-0.006***	-0.039**	-0.039***
	(4.07)	(3.95)	(2.94)	(2.97)	(2.56)	(2.60)
Peace years (intern. conflict)	0.010	0.011	-0.007	-0.007	-0.036**	-0.036**
	(1.19)	(1.36)	(1.23)	(1.21)	(2.33)	(2.36)
Civil war	0.598***	0.603***	0.068	0.068	2.185**	2.191**
	(2.92)	(2.96)	(0.93)	(0.94)	(2.16)	(2.18)
International war	0.254	0.233	0.300*	0.298*	1.886**	1.903**
	(0.87)	(0.81)	(1.76)	(1.76)	(2.16)	(2.21)
Observations	1307	1307	1161	1161	1164	1164
Countries	102	102	109	109	109	109

Notes: Absolute values of t- and z-statistics in brackets. Constant and year-specific time-dummies included, but coefficients not reported.
*, **, *** significant at .1, .05 and .01 level, respectively.
Table 5. Militarization and Roeder's measure of fractionalization, 1988–2002

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	(1)	(2)	(3)	(4)	(5)	(6)
	XTREG	XTGEE	XTREG	XTGEE	XTREG	XTGEE
	Mil.Expenditure.	Mil.Expenditure	Mil.Personnel	Mil.Personnel	Arms Imports	Arms Imports
Ethnolinguistic fraction (Roeder)	-1.612**	-1.634**	-0.940**	-0.978**	-2.300*	-2.306*
	(2.20)	(2.21)	(2.05)	(2.05)	(1.71)	(1.78)
Gross National Income per capita (ln)	-0.241	-0.252	0.086	0.074	-0.541	-0.509
	(0.98)	(1.02)	(0.87)	(0.72)	(1.35)	(1.28)
Economic growth per capita	1.282**	1.271**	0.137	0.112	-0.457	-0.379
	(2.07)	(2.07)	(0.22)	(0.18)	(0.19)	(0.16)
Democracy (Polity IV)	-0.038**	-0.037**	-0.012*	-0.011*	-0.097	-0.102
	(2.18)	(2.16)	(1.83)	(1.74)	(1.51)	(1.58)
Government expenditures	0.158***	0.157***	0.025**	0.025**	0.150**	0.153***
	(4.51)	(4.55)	(2.06)	(2.03)	(2.46)	(2.61)
Population size (ln)	-0.024	-0.033	-0.140**	-0.154**	0.367	0.383
	(0.21)	(0.29)	(2.18)	(2.13)	(1.52)	(1.61)
Contiguous militarization	0.130**	0.126**	0.574**	0.562**	0.120	0.129*
	(2.54)	(2.50)	(2.22)	(2.15)	(1.63)	(1.81)
Peace years (civil war)	-0.020***	-0.020***	-0.004*	-0.004**	-0.022*	-0.022*
	(3.60)	(3.60)	(1.75)	(2.00)	(1.72)	(1.74)
Peace years (intern. conflict)	0.007	0.007	-0.009	-0.009	-0.034**	-0.030**
	(0.74)	(0.75)	(1.50)	(1.48)	(2.26)	(2.17)
Civil war	0.642***	0.642***	0.062	0.060	2.389**	2.403***
	(3.24)	(3.27)	(0.88)	(0.87)	(2.57)	(2.62)
International war	0.753	0.753	0.607*	0.612*	3.249**	3.176**
	(1.23)	(1.24)	(1.76)	(1.77)	(2.17)	(2.16)
Observations	1589	1589	1393	1393	1406	1406
Countries	132	132	139	139	140	140

Notes: Absolute values of t- and z-statistics in brackets. Constant and year-specific time-dummies included, but coefficients not reported.
*, **, *** significant at .1, .05 and .01 level, respectively.

Table 6. Militarization and Alesina et al.'s measures of fractionalization, 1988–2002

	(1) XTREG Mil.Expenditure.	(2) XTGEE Mil.Expenditure	(3) XTREG Mil.Personnel	(4) XTGEE Mil.Personnel	(5) XTREG Arms Imports	(6) XTGEE Arms Imports
Ethnic fraction (Alesina et al.)	0.517	0.486	0.901	0.867	1.590	1.470
	(0.51)	(0.48)	(1.12)	(1.06)	(1.01)	(0.95)
Religious fraction (Alesina et al.)	-0.321	-0.314	-0.794*	-0.801*	-0.498	-0.428
	(0.47)	(0.46)	(1.88)	(1.89)	(0.34)	(0.30)
Linguistic fraction (Alesina et al.)	-1.464*	-1.473*	-0.943	-0.961	-2.688*	-2.698**
	(1.77)	(1.78)	(1.53)	(1.57)	(1.96)	(1.99)
Gross National Income per capita (ln)	-0.187	-0.203	0.155	0.140	-0.437	-0.414
	(0.73)	(0.78)	(1.40)	(1.24)	(1.13)	(1.11)
Economic growth per capita	1.197*	1.182*	0.028	0.006	0.330	0.414
	(1.83)	(1.83)	(0.04)	(0.01)	(0.14)	(0.18)
Democracy (Polity IV)	-0.037**	-0.037**	-0.012*	-0.011*	-0.108	-0.115*
	(2.15)	(2.11)	(1.77)	(1.69)	(1.63)	(1.72)
Government expenditures	0.159***	0.158***	0.025**	0.025**	0.154**	0.157***
	(4.50)	(4.54)	(2.11)	(2.08)	(2.49)	(2.65)
Population size (ln)	-0.022	-0.033	-0.129**	-0.141**	0.393	0.405*
	(0.19)	(0.28)	(2.08)	(2.05)	(1.63)	(1.70)
Neighborhood militarization	0.129**	0.124**	0.569**	0.558**	0.114	0.123*
	(2.49)	(2.44)	(2.24)	(2.17)	(1.51)	(1.69)
Peace years (civil war)	-0.018***	-0.018***	-0.003	-0.004*	-0.016	-0.016
	(3.33)	(3.32)	(1.51)	(1.71)	(1.16)	(1.21)
Peace years (intern. conflict)	0.006	0.006	-0.009	-0.009	-0.039**	-0.035**
	(0.64)	(0.67)	(1.51)	(1.49)	(2.47)	(2.40)
Civil war	0.629***	0.629***	0.034	0.032	2.482**	2.501**
	(2.95)	(2.98)	(0.51)	(0.49)	(2.44)	(2.49)
International war	0.797	0.794	0.629*	0.632*	3.284**	3.208**
	(1.30)	(1.30)	(1.81)	(1.82)	(2.17)	(2.16)
Observations	1560	1560	1360	1360	1373	1373
Countries	130	130	136	136	137	137

Notes: Absolute values of t- and z-statistics in brackets. Constant and year-specific time-dummies included, but coefficients not reported.
*, **, *** significant at .1, .05 and .01 level, respectively.

Table 7. Militarization and Fearon and Laitin's measures of ethnic fractionalization adjusted for cultural/linguistic distance.

	(1) XTREG Mil.Expenditure.	(2) XTGEE Mil.Expenditure	(3) XTREG Mil.Personnel	(4) XTGEE Mil.Personnel	(5) XTREG Arms Imports	(6) XTGEE Arms Imports
Cultural fraction (Fearon)	-1.447	-1.488	-0.906	-0.939*	-1.703	-1.731
	(1.54)	(1.55)	(1.62)	(1.68)	(0.95)	(1.00)
Religious fraction (Fearon & Laitin)	0.473	0.469	-0.620	-0.651*	0.012	0.046
	(0.61)	(0.60)	(1.62)	(1.70)	(0.01)	(0.02)
Gross National Income per capita (ln)	-0.169	-0.196	0.081	0.062	-0.432	-0.393
	(0.67)	(0.77)	(0.70)	(0.54)	(1.10)	(1.00)
Economic growth per capita	1.394**	1.369**	0.097	0.066	-0.311	-0.211
	(2.24)	(2.22)	(0.15)	(0.10)	(0.12)	(0.08)
Democracy (Polity IV)	-0.037**	-0.036**	-0.012*	-0.011*	-0.098	-0.104*
	(2.16)	(2.08)	(1.81)	(1.70)	(1.55)	(1.65)
Government expenditures	0.160***	0.158***	0.029**	0.029**	0.160**	0.162***
	(4.52)	(4.56)	(2.24)	(2.22)	(2.44)	(2.61)
Population size (ln)	-0.064	-0.086	-0.166***	-0.185**	0.323	0.338
	(0.54)	(0.70)	(2.62)	(2.55)	(1.35)	(1.44)
Neighborhood militarization	0.131**	0.122**	0.579**	0.565**	0.117	0.126*
	(2.55)	(2.44)	(2.29)	(2.21)	(1.56)	(1.73)
Peace years (civil war)	-0.019***	-0.019***	-0.004	-0.004*	-0.021	-0.020
	(3.51)	(3.48)	(1.55)	(1.77)	(1.55)	(1.58)
Peace years (intern. confl.)	0.006	0.006	-0.011*	-0.011*	-0.035**	-0.031**
	(0.65)	(0.68)	(1.82)	(1.79)	(2.21)	(2.12)
Civil war	0.676***	0.675***	0.066	0.064	2.472**	2.487***
	(3.35)	(3.37)	(0.90)	(0.89)	(2.55)	(2.59)
International war	0.778	0.776	0.623*	0.630*	3.299**	3.234**
	(1.24)	(1.25)	(1.80)	(1.81)	(2.17)	(2.16)
Observations	1561	1561	1362	1362	1374	1374
Countries	129	129	136	136	137	137

Notes: Absolute t-statistics in brackets. Constant and year-specific time-dummies included, but coefficients not reported. *, **, *** significant at .1, .05 and .01 level, respectively.

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