

Mercenaries in Civil Wars, 1950-2000*

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Abstract

This paper investigates the determinants of mercenary participation in intra-state and sub-state wars during the second half of the 20th century. Using a new dataset, we find that higher GDP and diamonds increase the probability that mercenaries are fighting in an internal war. Military interventions also increase the risk of mercenary involvement, with the exception of UN interventions.

In a third of all wars in the second half of the 20th century one or the other warring faction hired mercenaries - foreigners who actively fought for money and who were not integrated in the regular armed forces. Mercenaries are thus still frequently engaged, even though, compared with previous centuries, the use of mercenaries got discredited in the 20th century, and in spite of several initiatives to ban mercenaries.¹ Mercenaries raise security concerns, since they are not embedded in the control and accountability mechanisms of regular troops. Indeed, mercenaries are often accused of human rights violations. On the other hand, privatizing the military seems to some an

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¹See Thomson (1994) for an historical account, and Singer (2004) for a summary of UN and OAU attempts to ban mercenarism.

attractive option, with some commentators even advocating to "send in the mercenaries" or their modern incarnation, private military companies, where the UN is unwilling or unable to intervene. All sides of the debate seem to agree, however, that a regulation of the trade is necessary. Any attempt to regulate mercenary activities and / or private military companies, however, needs to be informed about the driving forces in the market for violence. While there is a large literature on these issues, including case studies and historical accounts, quantitative studies are missing. We provide a quantitative analysis of the determinants of mercenary activities in intra-state and sub-state wars during the second half of the 20th century. Using a new dataset, we study what contributes to a higher risk of mercenary involvement. Which characteristics of a country experiencing war, or of the conflict itself, increase the likelihood that mercenaries are participating?

We think about mercenaries in terms of demand and supply: mercenaries will be fighting in a war if and only if some party to the conflict is willing and able to pay a price for their service, and there are some potential mercenaries who, for this price, are willing to fight. Thus, we conjecture that factors that may increase demand, such as high GDP or natural resources, will increase the probability of mercenary involvement. Similarly, the presence of a military intervention might raise the demand for mercenaries. Turning to the supply side, we consider the effect of changes in global troop sizes in the years preceding the conflict.

Using a newly constructed data set, we find that mercenaries are more likely to participate in wars in richer countries, and in particular in countries with diamond mines. Moreover, external interventions increase the incidence of mercenaries, with the exception of UN interventions. We can not confirm any effect of changes in global troop size, however. Our findings imply that attempts to regulate mercenary activities should pay special attention to regions with diamonds and to interventions.

Our paper is related to three strands of the literature. First, there is an extensive literature on the market for violence in general, and on mercenaries and private military companies in particular. See, for example, Thompson (1994) for a historical view, Musah and Fayemi (2000) on Africa, and Singer (2003) and Avant (2006) on recent transformations and private military companies. While this literature includes many case studies and theoretical considerations, our contribution is to give a quantitative analysis.

Second, the paper is related to the literature on the role of natural re-

sources in conflicts, which was started by Collier and Hoeffler (1998).² This literature considers natural resources as determinants of conflict onset and duration. Guidolin and La Ferrara (2007) consider the effects of the civil war in Angola on diamond trading firms. Our research is silent on these issues and focuses on how natural resources impact on one aspect of the *conduct* of the warring factions: whether or not they hire mercenaries.

Third, there is a strand of the literature studying outside interventions into conflict. Several papers argue that interventions are associated with a longer duration (Regan 2000, 2002; Elbadawi and Sambanis 2000; Balch-Lindsay and Enterline 2000; however, Collier, Hoeffler, and Söderbom 2004 find that interventions on the side of the rebels tend to shorten conflicts). Other papers have studied the relation between intervention and civil war outcomes (Regan 1996, Mason and Fett 1996, Mason, Weingarten, and Fett 1999, Walter 1997, 2002) or addressed both duration and outcome simultaneously (Balch-Lindsay, Enterline, and Joyce 2008). We add to this literature by pointing out the correlation between mercenaries and outside military interventions. This also sheds new light on possible causal mechanisms that might be driving the positive correlation between interventions and conflict duration reported in the literature.

The remainder of the paper is organized as follows. The next section discusses the definition of "mercenaries". Section 2 specifies our hypotheses, Section 3 the empirical model. Section 4 discusses the data. Section 5 presents our main results. Here we also take a closer look at interventions, distinguishing between UN interventions and others. Moreover, we investigate whether US interventions are special. Several robustness checks are reported in Section 6. We conclude with a discussion of the limitations of this study and avenues for future research in Section 7.

1 Mercenaries

The exact definition of "mercenaries" is a matter of debate. The word carries a negative connotation, and as many such implicitly normative concepts it will be essentially contested. In this section, we briefly discuss the most common definition and explain our usage.

According to the definition of the Protocol Additional GC 1977 (APGC77) to the Geneva Conventions,

²Recent overviews are Ross (2006) and Collier and Hoeffler (2007).

a mercenary is any person who: (a) is specially recruited locally or abroad in order to fight in an armed conflict; (b) does, in fact, take a direct part in the hostilities; (c) is motivated to take part in the hostilities essentially by the desire for private gain and, in fact, is promised, by or on behalf of a Party to the conflict, material compensation substantially in excess of that promised or paid to combatants of similar ranks and functions in the armed forces of that Party; (d) is neither a national of a Party to the conflict nor a resident of territory controlled by a Party to the conflict; (e) is not a member of the armed forces of a Party to the conflict; and (f) has not been sent by a State which is not a Party to the conflict on official duty as a member of its armed forces.

While this definition is widely accepted, its reference to individual motivations and excess compensation (part c) is problematic since these factors are notoriously hard to observe (Singer 2004). Mercenaries should not be specified by reference to why they fight, but by reference to what they do (Burmester 1978: 72). We therefore define mercenaries as individual soldiers or groups of fighters who receive rewards to actively fight in combat fulfilling conditions (a), (b), and (d)-(f). We focus on the active participation in fighting, and exclude logistical service, training, and other non-combat services. The issues of accountability, control, and regulation seem to us particularly relevant for these activities at the tip of the spear (to use Singer's 2003 metaphor).

Permanent members of the armed forces of the parties to the conflict are not mercenaries, whatever their nationality may be. Moreover, mercenaries are recruited only for particular wars. For these reasons, the Gurkhas regiments enlisted in the British Army do not fall under our definition of mercenaries. Similarly, the French Foreign Legion is organized in units of professional troops integrated into the command structures of the French Army; these troops are not mercenaries according to our definition. They differ in particular with respect to the accountability and control issues central to the debate.

Our definition includes employees of private military companies. This is not to deny that there may be differences between more traditional free-lancing mercenaries and today's private military companies, in particular due to the fact that the latter are corporations. The implications of these differences, however, are debated (Musah 2002, Singer 2003, Avant 2006).

For example, private military companies themselves argue that they have a reputation to protect, and thereby incentives to make sure their employees abide by international norms. While some commentators believe this is a crucial difference, others points out that having a reputation for *not* always playing by the rules may actually help a private military companies to acquire contracts.³ The matter is ultimately an empirical question, and our data may be used in future studies to shed light on them. For the present paper, however, we stress that it does not matter how one resolves the issue whether or not employees of private military companies should be considered mercenaries, because deciding the question either way leads to identical results (see Section 4 below).

2 Hypotheses

Our hypotheses are based on simple demand versus supply considerations: mercenaries will be active if and only if there is some party to the conflict that is both willing and able to pay a price for support of mercenaries, and there are potential mercenaries willing to offer their services for this price.

The financial capability (and thus ability to pay) of a party to the conflict depends on GDP. Moreover, the willingness to pay may be increasing in income, too. This leads to our first hypotheses:

H1: A higher (pre-war) GDP leads to a higher probability of mercenary involvement.

Natural resources may also increase both the ability and willingness to pay for mercenaries. Natural resources makes mercenaries more valuable, if they help winning the war and establish control over these resources; thus the willingness to pay may be higher. Moreover, natural resources increase the ability of parties to the conflict to pay for mercenaries. In times or war, revenue from taxation may be small and uncertain; in contrast, natural resources may be a way to generate dependable revenue for parties to the conflict. In some cases, mercenaries have been paid for by what Ross terms "booty futures" - rights to exploit mineral resources that are not currently under control of the seller (Ross 2004). We focus on the impact of diamonds

³The award of a \$293 million contract to Aegis Defense Services in Iraq war in 2004 may be a case in point (see Avant 2006, p. 226-228).

and oil. This focus is motivated by three reasons. First, there are indications from case studies that diamonds and oil have been involved in the remuneration of mercenaries (Musah and Fayemi, 2000, p. 23). Naturally, one would like to know whether this is a general pattern. Second, there is sufficient variation in these variables to get a decent estimate of their impact. Neither oil nor diamonds are geographically concentrated in a few countries; moreover, diamonds and oil have been valuable during all the decades we study. Third, good data on oil and diamonds are available.

H2: Diamonds increases the probability of mercenary involvement.

H3: Oil increases the probability of mercenary involvement.

In many civil wars outside forces intervene militarily. Military interventions should be distinguished from mercenary activities, because they are interventions by regular troops. The presence of an outside intervention may increase the probability of mercenary involvement, both because it itself may hire mercenaries, or because it may increase the ability to pay of the party it supports.

H4: Interventions increase the probability of mercenary involvement.

Another line of thought stressed in the literature is a supply side effect. In times when many trained military professionals lack good other opportunities, they may offer their services on the market (Singer 2003). This line of reasoning suggests the following hypotheses:

H5: A downward change in troop levels in the years preceding a conflict increases the probability of mercenary involvement.

The market for mercenaries seems to be quite international in the sense that often individuals from one continent fight on another. This suggests to look at the effect of a change of global troop sizes. On the other hand, changes in troop size levels in the countries in geographic proximity may have a stronger effect. Therefore, we also consider a measure of changes of regional troop sizes.

3 Empirical specification

The considerations above suggest that the willingness to pay for mercenaries is a function of GDP, natural resources, and interventions.

$$p_D = \alpha_D + \beta_1 GDP + \beta_2 Dia + \beta_3 Oil + \beta_4 Interv + \varepsilon_D$$

Here, p_D is the maximum willingness to pay for mercenary services by any party to the conflict. The term ε_D is an error term. We expect β_1 to β_4 to be positive.

Moreover, the supply of mercenaries is related to the change in global troop size.

$$p_S = \alpha_S + \beta_5 TroopDecr + \varepsilon_S$$

The minimum price at which some potential mercenaries are willing to offer their services is lower if global troop size have decreased, thus we expect $\beta_5 < 0$.

Mercenaries will be active if and only if $p_D > p_S$. Thus, the probability that mercenaries are involved in a given war is

$$\begin{aligned} \Pr(Merc = 1) &= \Pr(p_D > p_S) = \\ &= \Pr(\alpha + \beta_1 GDP + \beta_2 Dia + \beta_3 Oil + \beta_4 Interv + \beta_5 TroopIncr > \varepsilon) \quad (1) \end{aligned}$$

where $\alpha = \alpha_D - \alpha_S$, $\varepsilon = \varepsilon_S - \varepsilon_D$, and $TroopIncr = -TroopDecr$. Assuming that the error terms follow an extreme value type I distribution (or, alternatively, a normal distribution), one can estimate the equation by logit (probit). Equation (1) is the main equation that we estimate. While our hypotheses were developed by thinking about demand and supply, given the nature of our data we do not attempt to identify demand and supply separately.

4 Data sources and descriptive statistics

Unit of observation The unit of observation is an internal war. We use the New List of Wars by Chojnacki (2006), which builds on the COW and the Uppsala data but includes additional information. Most internal wars are intra-state wars, i.e. armed hostilities between the government of a recognized state and armed opposition groups within that state's boundaries. In addition, the New List of Wars (Chojnacki 2006) takes into account violence by non-state actors in sub-state wars. Sub-state war occurs between

non-state or unrecognized quasi-state groups, whether within or across formal state boundaries. In such cases, a functioning monopoly of violence in the affected state(s) either does not exist, is restricted to the capital or narrowly confined territories, or is not enforced in the conflict region. The sub-state type of war reflects the debate about the changing patterns of conflict in the post-Second World War period (cf. Kaldor 1999) and follows the underlying rule that a classification of war is best arranged according to the political status of the protagonists (Vasquez 1993). In our data, there are 15 sub-state wars, in 6 of which mercenaries are active. This high proportion indicates that it might be important to take sub-state wars into account for our analysis. We refer to intra-state and sub-state wars as internal wars.

Dependent variable Our dependent variable is a binary indicator which takes the value one if mercenaries are involved in combat, and zero otherwise. Our data are based on a systematic analysis of all the articles published in five major US newspapers (New York Times, Washington Post, Los Angeles Times, Christian Science Monitor, and Wall Street Journal) containing the words "mercenary/ies", "private military firm/s" and "private military company/ies" between January 1st, 1946, and December 31st, 2003. Selection criteria were the reputation of the international news coverage and electronic access making easy replication and validation of the data set possible. The search resulted in nearly 25.000 articles of which about 500 were integrated in the data set. In about one third of all cases of mercenary involvement our sources also included some estimates on how many mercenaries were involved. In the remaining cases this information is not available. Due to these limitation we use a binary variable as our dependent variable.

Our data set comprises 126 observations internal wars in 1946-2003. Mercenaries were involved in 43 cases. Due to missing observations on independent variables, the sample used for estimation includes 104 cases in the years 1950-2000. Out of these 104 observations, mercenaries were active in 37 cases.

Dependent variable: discussion One might worry whether the use of the word "mercenary" has changed during the over 50 years we cover. Studying the definition of "mercenary" in various editions of Webster's dictionary, however, gives no support for such a change in meaning.

As mentioned above, our definition of mercenaries is meant to include

several cases of employees of private military companies. In light of the discussion in the literature concerning the differences between private military companies and "traditional" mercenaries, we collected information from our sources whether the persons in question were employees of private military companies. In our data, it turns out that in every conflict where private military companies were actively involved in combat, there have also been reports of traditional free-lancing mercenaries. Thus the results of our study would not change if we excluded employees of private military companies.

To shed some light on the reliability of our data, we compare them with the list of cases of mercenary activity found in Musah and Fayemi (2000). This list is based on a number of case studies on mercenaries and builds on a larger set of sources than our data, including local newspapers and historical accounts. It is to our knowledge the only published list of mercenary activities so far, and has been influential in the debate.⁴ The focus of Musah and Fayemi's list is on Africa from 1950 to 1998, and thus more limited in scope than our data. On the other hand, they collected information not only on combat activities, but also on other military services involving logistical support or military advice. In our data there are more cases of mercenaries fighting in Africa during 1950-1998, and only very few cases are reported in Musah and Fayemi that are not in our data. The comparison shows that, while our data are certainly not measured perfectly, we miss only reassuringly few cases by basing our analysis on US newspaper reports.

Independent variables *GDP* is real GDP per capita in the year preceding the start of the war. Data on GDP and population are from Gleditsch (2002). These data are based on the PWT (Summers and Heston 1991) and include additional information from the CIA World Factbook 1998 to reduce the problem of missing data. On GDP we have 109 observations. On the sample used for estimation, GDP ranges from 67.27 (China in 1956⁵) to 8504.06 (Russia 1994), with an average of 1326.069, median of 731.69, and a standard deviation of 1435.314. In our data, India in 1990 is close to the average GDP per capita (1443.95); Liberia in 1990 is close to the median (753.16). A few comments are in order. First, all countries in our sample are

⁴For example, this list is reprinted in the green paper of the UK government "Private Military Companies: Options for Regulation".

⁵This year refers to the first year of the war. Keep in mind that GDP is lagged, so the number for China refers to GDP in 1955.

comparatively poor, which is in line with the literature linking GDP and civil war (Hegre and Sambanis 2006). Still, among the countries there is variation in GDP, and we conjecture that parties to the conflict in richer countries are more likely to hire mercenaries. Second, one might worry about endogeneity. We focus on pre-war GDP to ameliorate this concern. Moreover, our dependent variable is mercenary activity, and it seems less an issue that mercenary activity may have an impact on pre-war GDP, than that civil war by itself has an impact on GDP (see Miguel, Satyanath, and Sergenti 2004).

Diamonds is the number of lootable and non-lootable diamond mines per country, taken from the DIADATA data set (Gilmore et al 2005). In more than half of all observations there are no diamond mines. The average number of mines is 6.46 (for example, China has 8), and the standard deviation 13.39. The highest number of mines has South Africa (88), which is somewhat of an outlier: the second highest number of mines is 48 in Angola (and Guinea, but this is not in the estimation sample), followed by 33 in Congo. In order to avoid results being driven only by a single data point, we have also run regressions excluding South Africa. Results are surprisingly stable, even if we also exclude other countries with many diamond mines, such as Angola.

Oil is the number of on-shore and off-shore oil sites taken from PETRO-DATA (Lujala, Rod, and Thime 2007). Oil ranges from 0 to 114 (Russia), with an average of 13.59 (Iraq has 13) and a median of 4 (e.g., Bolivia) and a standard deviation of 24.12.

Intervention data are from Regan (2002). We use a binary indicator for military interventions by troops and naval troops. On the estimation sample, we have 47 interventions in 104 cases.

Troop increase is computed using the Correlates of War National Capability Data. The variable is the increase of world-wide troop size during the four years preceding the conflict, measured in units of 1000 soldiers. It ranges from -5252 (in 1994) to +5341 (in 1953), with a mean of 174.41, a median of 584, and a standard deviation of 2061. In the robustness section, we also report results from regional changes of troop size.

5 Results

Table 1 reports results from a logistic regression of equation (1). Since different wars in the same country may well be related, we cluster standard errors on the country level. Column 1 is our basic specification, without further

controls. Column 2 adds a dummy for Africa. Mercenary activity is often thought to be especially pronounced in Africa. Thus it seems important to control for Africa, in order to see whether the effects could be driven by some unobserved factor pertaining to Africa.⁶ Column 3 adds dummies for decades, where the reference category are the 1990s. Controlling for time effects seems important because GDP is, on average, growing over time. The GDP variable may simply pick up a pure time trend, if this is not otherwise controlled for. Column 4 controls for both Africa and decades.

⁶In the robustness section, we also report results with dummies for further continents.

Table 1: Main model

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000644* (0.013)	0.000667* (0.012)	0.000911** (0.002)	0.00100** (0.001)
Diamonds	0.0898** (0.002)	0.0841** (0.004)	0.101** (0.002)	0.0919** (0.006)
Oil	-0.0407* (0.021)	-0.0382* (0.041)	-0.0513** (0.005)	-0.0484* (0.013)
Interventions	1.509** (0.004)	1.525** (0.003)	1.534** (0.003)	1.626** (0.003)
Troop increase	0.000205 (0.133)	0.000213 (0.133)	0.000145 (0.405)	0.000144 (0.430)
Africa		0.328 (0.566)		0.697 (0.281)
1950s			1.166 (0.363)	1.621 (0.252)
1960s			1.889* (0.036)	2.100* (0.023)
1970s			0.740 (0.423)	0.887 (0.345)
1980s			0.163 (0.859)	0.242 (0.796)
Constant	-2.334** (0.000)	-2.495** (0.000)	-3.279** (0.001)	-3.822** (0.001)
Observations	104	104	104	104
Pseudo R^2	0.202	0.204	0.241	0.251

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 2: Main model with dummies for Africa and decades: marginal effects

	(1)	
	Mercenaries	
	b	p
GDP per capita	.0002159	.0013344
Diamonds	.0197763	.0051261
Oil	-.0104077	.0112466
Interventions (d)	.3469709	.0014924
Troop increase	.0000309	.4366311
Africa (d)	.1541872	.2865389
1950s (d)	.3822188	.2229936
1960s (d)	.4814634	.0070794
1970s (d)	.2020579	.3546991
1980s (d)	.0534608	.7997014
Observations	104	

Marginal effects

(d) for discrete change of dummy variable from 0 to 1

Overall fit and quality of the model To get an impression of the overall fit of the model, we crosstabulate correctly and incorrectly classified observations according to model 4 in Table 1. An observation is classified as M (for *Mercenaries*) if the predicted probability of mercenaries is greater than $1/2$. The model classifies 75% of the observations correctly.

		Observed		
		M	$No M$	Total
Classified	M	18	7	25
	$No M$	19	60	79
	Total	37	67	104

Size and significance of the effects GDP per capita, diamonds, and interventions have a significant positive effect. Oil, however, has an unexpected negative coefficient. Its statistical significance varies depending on the specification. *Troop Increase* has an unexpected positive sign but is never statistically significant.

To illustrate the size of the effects of GDP and interventions, the next table illustrates the predicted probabilities for some interesting values of GDP, holding the remaining values constant at their mean.

GDP	No intervention	With intervention
67.27 (China 1956, the min)	0.058	0.239
753.16 (Liberia 1990, close to the median)	0.110	0.385
1443.95 (India 1990, close to the mean)	0.198	0.556
4451.76 (Algeria 1992)	0.834	0.962
8504.06 (Russia 1994, the max)	0.997	0.999

Similarly, the following table illustrates the size of the effects of interventions with clashes and of diamonds, holding all other variables constant at the mean.

Diamonds	No intervention	With intervention
0 (the min and the median)	0.108	0.380
8 (China, close to the mean)	0.201	0.562
14 (Indonesia)	0.304	0.670
26 (Sierra Leone)	0.569	0.870
33 (Sudan)	0.715	0.927
48 (Angola)	0.908	0.981
88 (South Africa)	0.998	0.999

The Africa dummy is positive but not statistically significant. Except the 1960s the decades do not differ significantly from the 1990s, and in the sign is positive. Given the literature on the transformation of the market for force, this finding is somewhat surprising. Many commentators have argued that the post cold war era has been marked by a privatization of military affairs; one would thus expect the incidence of mercenaries to be higher in the 1990s. In our data, this is not the case: the proportion of wars with mercenaries is not higher in the 1990s than in previous decades. For interpreting this finding, it is however important to keep in mind that our dependent variable is only a binary indicator; it may still be true that the total number of mercenaries involved in these wars have increased.

More on interventions The strong effect of interventions suggests to have a closer look. We study whether or not the mercenaries support the same side as an intervention. Moreover, we look at interventions from different actors such as the UN and the US separately.

Our data sources include information on which party to the conflict has been supported by the mercenaries. In most (but not all) cases of wars with an intervention and with mercenaries, the latter have fought on the side supported by the intervening power. We have only very few observations where the mercenaries are reported to be directly hired by the intervening force.

We distinguish between UN interventions and other interventions and run the regression including UN and non-UN interventions as separate regressors. Out of the 47 interventions on our 104 observations used in the estimations, there were 40 non-UN interventions and 7 UN interventions (Cyprus 1964, Cambodia 1979, Rwanda 1990, Iraq 1991 (Shiites), Iraq 1991 (Kurds), Somalia 1992, Serbia and Montenegro 1998). In these seven cases with UN interventions, only in Serbia and Montenegro mercenaries were active, ac-

ording to our data.⁷ In the estimations, UN interventions are insignificant, and their sign is negative - if anything, they are associated with fewer mercenaries. Thus it seems that the non-UN interventions drive our result.

Moreover, we investigate whether US interventions differ, splitting interventions into US vs. non-US interventions. We also experiment with taking only non-US interventions. On the estimation sample, we have 37 non-US and 10 US interventions. There is some overlap between UN and US interventions (3 cases: Iraq 1991, Iraq 1991, Somalia 1992), in none of these cases we observe mercenaries. We have 4 cases of mercenaries in wars with an US intervention: China 1946 (which is not in the estimation sample), Vietnam 1960, Colombia 1965, Cambodia 1970. Results are quite similar if we exclude US interventions; apparently our finding is not mainly driven by US interventions.

6 Robustness checks

In this section we report several robustness checks. All regression tables are in the appendix.

Substate wars. Since our data on wars comprise a class of substate wars, we run a logit regression with a dummy on substate wars. The dummy is not statistically significant at conventional levels, and its sign varies depending on the specification. The other parameter estimates do not change a lot, which is reassuring.

Continent dummies. We redo our main regression adding further controls for continents; results do not change a lot.

Diamond outliers. We exclude the diamond outliers South Africa and Angola. Results are stable.

Change of troop size. We replace the "Change of troop size" variable with a similar variable that measures the global change of troop size in a

⁷In the full sample, we have one additional UN intervention, Bosnia and Herzegovina 1992, and in this case mercenaries were active as well.

longer (10 years) and a shorter (2 years) time period. The variable is not statistically significant, and the sign depends on the specification.

Moreover, we built a new variable for the change of troop size in the region where the war took place, distinguishing between America, Africa, Asia, Europe, and the Mid-East. Again we use three different time windows: 10 years, 5 years, and 2 years. The sign is consistently negative, which is in line with our expectations, however only in one specification (10 years) it is statistically significant.

Estimation technique. We redid our main regression without clustering standard errors on the country. Moreover, we estimated with probit, and with a linear probability model. Results do not change drastically.

7 Conclusion

This paper studies the participation of mercenaries in internal wars in the second half of the 20th century. Using a new dataset, we find that mercenaries are more likely to be involved in wars in richer countries, in countries that have diamonds, and when there is an military intervention other than by the UN.

Our study has several limitations. We only have a dummy variable on the involvement of mercenaries. More precise quantitative information would clearly be desirable. Second, while our research design brings out interesting patterns in the data, the underlying causal mechanisms are difficult to trace out. Why exactly do some resources correlate with mercenaries, and others not? What are the driving forces? Third, issues of endogeneity and omitted variables. The correlations we report could be driven by underlying causes that (say) drive both mercenaries and interventions. Finally, there are clearly many important questions on mercenaries that we do not even attempt to address in the present paper, in particular concerning the *consequences* of mercenary involvement in civil wars.

References

- [1] Avant D 2005. The market for force. Cambridge University Press.

- [2] Balch-Lindsay D, Enterline A J 2000, Killing time: the world politics of civil war duration, 1820-1992, *International Studies Quarterly* 44, 615-642.
- [3] Balch-Lindsay D, Enterline A J, Joyce K A 2008, Third-party intervention and the civil war process. *Journal of Peace Research* 45(3), 345-363.
- [4] Burmester H 1978, The Recruitment and Use of Mercenaries in Armed Conflict, *American Journal of International Law* 72, 56-70.
- [5] Chojnacki S 2006, Anything new or more of the same? Wars and military interventions in the international system, 1946–2003, *Global Society*, 20 (1), 25-46.
- [6] Collier P, Hoeffler A 1998, On the economic causes of civil war, *Oxford Economic Papers*, 50, 563–73.
- [7] Collier P, Hoeffler A 2007, Civil War, Chapter 23 in *Handbook of Defense Economics* T. Sandler and K. Hartley (eds), Volume 2, Elsevier 711-739.
- [8] Collier P, Hoeffler A, Söderbom M 2004, On the duration of civil war, *Journal of Peace Research* 41 (3), 253-273.
- [9] Elbadawi I A, Sambanis N 2000, External intervensiotn and the duration of civil wars. Mimeo.
- [10] Gilmore E, Gleditsch N P, Lujala P, and Roslash J K 2005, Conflict Diamonds: A New Dataset. *Conflict Management and Peace Science* 22 (3), 257 - 272.
- [11] Gleditsch K S 2002, Expanded Trade and GDP Data. *Journal of Conflict Resolution* 46, 712-24.
- [12] Guidolin M, La Ferrara E, 2007, Diamonds are forever, wars are not: is conflict bad for private firms? *American Economic Review* 97 (5), 1978-1993.
- [13] Hegre H, Sambanis N 2006, Sensitivity Analysis of Empirical Results on Civil War Onset. *Journal of Conflict Resolution* 50 (4), 508-535.
- [14] Kaldor M 1999. *New and Old Wars: Organised Violence in a Global Era*. Polity Press/Stanford University Press.

- [15] Lujala P, Rod J K, Thieme N 2007, Fighting over Oil: Introducing a New Dataset, *Conflict Management and Peace Science*, 24:3, 239 - 256.
- [16] Mason T D, Fett P J 1996, How civil wars end. *Journal of Conflict Resolution* 40(4), 546-568.
- [17] Mason T D, Weingarten J P Jr, Fett P J 1999, Win, lose, or draw: predicting the outcome of civil wars. *Political Research Quarterly* 52 (2), 239-268.
- [18] Miguel E, Satyanath S, Sergenti E 2004, Economic Shocks and Civil Conflict: An Instrumental Variables Approach, *Journal of Political Economy*, 112(4), 725-753.
- [19] Musah A-F, Fayemi J 'K (eds.) 2000. *Mercenaries. An African security dilemma*. Pluto Press, London Sterling, Virginia.
- [20] Musah A F 2002, Privatization of security, arms proliferation and the process of state collapse in Africa. *Development and Change* 33 (5), 911-933.
- [21] Regan P M 2002, Third-party interventions and the duration of intrastate conflicts, *Journal of Conflict Resolution* 46(1), 55-73.
- [22] Ross M L 2006, A closer look at oil, diamonds, and civil war. *Annu. Rev. Polit. Sci.* 9 : 265–300.
- [23] Ross M L 2004, How do natural resources influence civil war? Evidence from thirteen cases, *International Organization* 58, 35-67.
- [24] Singer P W 2004, War, profits, and the vacuum of law: privatized military firms and international law. *Columbia Journal of Transnational Law* 42, 521-549.
- [25] Singer P W 2003. *Corporate warriors. The rise of the privatized military industry*. Cornell University Press.
- [26] Summers R, Heston A 1991, The Penn World Table (Mark 5): An Expanded Set of International Comparisons, 1950-1988, *Quarterly Journal of Economics* 106 (2), 327-368.

- [27] Thomson J E 1994. Mercenaries, pirates, and sovereigns. Princeton University Press.
- [28] Vasquez J A 1993, The war puzzle. Cambridge University Press.
- [29] Walter B F 1997, The critical barrier to civil war settlement. International Organization 51 (3), 335-364.
- [30] Walter B F 2002, Committing to Peace: The Successful Settlement of Civil Wars. Princeton University Press.
- [31] Webster's dictionary. Various editions.

A Appendix

A.1 Tables

Table 3: All military interventions: UN versus Non-UN

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000688* (0.011)	0.000704* (0.010)	0.000939** (0.002)	0.00101** (0.001)
Diamonds	0.0862** (0.003)	0.0811** (0.006)	0.0917** (0.005)	0.0844* (0.011)
Oil	-0.0436* (0.019)	-0.0413* (0.039)	-0.0535** (0.005)	-0.0506* (0.012)
UN Interventions	-0.222 (0.824)	-0.190 (0.848)	-0.308 (0.782)	-0.142 (0.899)
Non-UN Interventions	1.750** (0.003)	1.761** (0.002)	1.794** (0.002)	1.860** (0.002)
Troop increase	0.000184 (0.174)	0.000189 (0.171)	0.000196 (0.274)	0.000195 (0.288)
Africa		0.290 (0.608)		0.592 (0.367)
1950s			0.682 (0.632)	1.070 (0.488)
1960s			1.499 (0.132)	1.681 (0.093)
1970s			0.199 (0.851)	0.327 (0.755)
1980s			-0.433 (0.687)	-0.353 (0.742)
Constant	-2.332** (0.000)	-2.468** (0.000)	-2.902** (0.004)	-3.360** (0.005)
Observations	104	104	104	104
Pseudo R^2	0.231	0.233	0.269	0.276

 p -values in parentheses* $p < 0.05$, ** $p < 0.01$

Table 4: All military interventions: Non-UN

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000689* (0.011)	0.000706** (0.010)	0.000943** (0.002)	0.00101** (0.001)
Diamonds	0.0872** (0.002)	0.0819** (0.004)	0.0935** (0.003)	0.0851** (0.008)
Oil	-0.0435* (0.021)	-0.0411* (0.041)	-0.0535** (0.005)	-0.0506* (0.013)
Non-UN Interventions	1.780** (0.002)	1.787** (0.001)	1.834** (0.001)	1.879** (0.001)
Troop increase	0.000187 (0.170)	0.000193 (0.169)	0.000194 (0.281)	0.000194 (0.292)
Africa		0.295 (0.603)		0.603 (0.355)
1950s			0.749 (0.584)	1.108 (0.451)
1960s			1.527 (0.116)	1.698 (0.081)
1970s			0.249 (0.811)	0.352 (0.734)
1980s			-0.386 (0.712)	-0.330 (0.752)
Constant	-2.367** (0.000)	-2.501** (0.000)	-2.987** (0.001)	-3.407** (0.002)
Observations	104	104	104	104
Pseudo R^2	0.231	0.233	0.269	0.276

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 5: All military interventions: US versus Non-US

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000632* (0.014)	0.000651* (0.013)	0.000926** (0.002)	0.00100** (0.001)
Diamonds	0.0870** (0.002)	0.0830** (0.004)	0.0971** (0.003)	0.0901** (0.007)
Oil	-0.0398* (0.023)	-0.0380* (0.041)	-0.0512** (0.005)	-0.0486* (0.012)
US Interventions	1.013 (0.277)	1.079 (0.256)	0.787 (0.376)	0.960 (0.312)
Non-US Interventions	1.617** (0.003)	1.616** (0.003)	1.755** (0.001)	1.807** (0.001)
Troop increase	0.000196 (0.162)	0.000203 (0.161)	0.000138 (0.442)	0.000137 (0.463)
Africa		0.251 (0.661)		0.600 (0.355)
1950s			1.419 (0.265)	1.783 (0.202)
1960s			2.011* (0.035)	2.178* (0.024)
1970s			0.679 (0.472)	0.813 (0.395)
1980s			0.112 (0.903)	0.187 (0.841)
Constant	-2.303** (0.000)	-2.428** (0.000)	-3.308** (0.001)	-3.770** (0.002)
Observations	104	104	104	104
Pseudo R^2	0.206	0.208	0.252	0.258

 p -values in parentheses* $p < 0.05$, ** $p < 0.01$

Table 6: All military interventions: Non-US

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000600* (0.021)	0.000609* (0.022)	0.000898** (0.002)	0.000952** (0.002)
Diamonds	0.0793** (0.003)	0.0770** (0.004)	0.0908** (0.002)	0.0843** (0.005)
Oil	-0.0388* (0.024)	-0.0378* (0.036)	-0.0502** (0.005)	-0.0480** (0.009)
Non-US Interventions	1.404** (0.006)	1.397** (0.006)	1.582** (0.003)	1.592** (0.003)
Troop increase	0.000175 (0.218)	0.000179 (0.221)	0.000122 (0.497)	0.000117 (0.527)
Africa		0.131 (0.819)		0.464 (0.463)
1950s			1.420 (0.262)	1.711 (0.214)
1960s			2.096* (0.038)	2.236* (0.027)
1970s			0.648 (0.493)	0.752 (0.429)
1980s			0.118 (0.899)	0.183 (0.847)
Constant	-2.031** (0.000)	-2.088** (0.001)	-3.091** (0.001)	-3.414** (0.002)
Observations	104	104	104	104
Pseudo R^2	0.196	0.196	0.246	0.250

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 7: Main model with substate dummy

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000637* (0.014)	0.000659* (0.013)	0.000911** (0.002)	0.001000** (0.001)
Diamonds	0.0910** (0.002)	0.0854** (0.003)	0.101** (0.004)	0.0927** (0.008)
Oil	-0.0412* (0.019)	-0.0388* (0.037)	-0.0513** (0.006)	-0.0486* (0.013)
Interventions	1.502** (0.004)	1.518** (0.004)	1.535** (0.002)	1.624** (0.003)
Troop increase	0.000199 (0.155)	0.000205 (0.155)	0.000145 (0.417)	0.000143 (0.439)
Substate war	-0.181 (0.878)	-0.249 (0.836)	0.00818 (0.995)	-0.102 (0.937)
Africa		0.354 (0.549)		0.706 (0.303)
1950s			1.168 (0.336)	1.604 (0.234)
1960s			1.891* (0.032)	2.086* (0.018)
1970s			0.740 (0.419)	0.886 (0.344)
1980s			0.164 (0.850)	0.226 (0.798)
Constant	-2.298** (0.000)	-2.459** (0.000)	-3.281** (0.000)	-3.801** (0.001)
Observations	104	104	104	104
Pseudo R^2	0.202	0.205	0.241	0.251

 p -values in parentheses* $p < 0.05$, ** $p < 0.01$

Table 8: Main model excluding South Africa

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000644* (0.013)	0.000667* (0.012)	0.000911** (0.002)	0.00100** (0.001)
Diamonds	0.0898** (0.002)	0.0841** (0.004)	0.101** (0.002)	0.0919** (0.006)
Oil	-0.0407* (0.021)	-0.0382* (0.042)	-0.0513** (0.005)	-0.0484* (0.013)
Interventions	1.509** (0.004)	1.525** (0.003)	1.534** (0.003)	1.626** (0.003)
Troop increase	0.000205 (0.133)	0.000213 (0.133)	0.000145 (0.405)	0.000144 (0.430)
Africa		0.328 (0.566)		0.697 (0.281)
1950s			1.166 (0.363)	1.621 (0.252)
1960s			1.889* (0.036)	2.100* (0.023)
1970s			0.740 (0.423)	0.887 (0.345)
1980s			0.163 (0.859)	0.242 (0.796)
Constant	-2.333** (0.000)	-2.495** (0.000)	-3.279** (0.001)	-3.822** (0.001)
Observations	103	103	103	103
Pseudo R^2	0.189	0.192	0.230	0.239

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 9: Main model excluding South Africa and Angola

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000636* (0.015)	0.000659* (0.014)	0.000901** (0.003)	0.000993** (0.002)
Diamonds	0.0868** (0.005)	0.0809** (0.009)	0.0972** (0.005)	0.0880* (0.014)
Oil	-0.0397* (0.026)	-0.0372 (0.052)	-0.0502** (0.007)	-0.0471* (0.018)
Interventions	1.508** (0.004)	1.524** (0.003)	1.532** (0.003)	1.623** (0.003)
Troop increase	0.000202 (0.137)	0.000211 (0.137)	0.000142 (0.415)	0.000140 (0.442)
Africa		0.334 (0.559)		0.701 (0.277)
1950s			1.154 (0.367)	1.610 (0.254)
1960s			1.883* (0.035)	2.094* (0.022)
1970s			0.736 (0.423)	0.884 (0.345)
1980s			0.164 (0.858)	0.243 (0.794)
Constant	-2.322** (0.000)	-2.485** (0.000)	-3.261** (0.001)	-3.805** (0.001)
Observations	102	102	102	102
Pseudo R^2	0.178	0.180	0.219	0.228

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 10: Main model, 2 years window for troop size change

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000586* (0.028)	0.000614* (0.026)	0.000859** (0.004)	0.000959** (0.003)
Diamonds	0.0780** (0.001)	0.0717** (0.003)	0.0979** (0.001)	0.0885** (0.002)
Oil	-0.0388* (0.026)	-0.0363 (0.051)	-0.0494** (0.006)	-0.0466* (0.015)
Interventions	1.433** (0.006)	1.454** (0.006)	1.481** (0.003)	1.572** (0.003)
Troop inc (2y)	0.000322 (0.354)	0.000353 (0.330)	-0.0000752 (0.863)	-0.0000341 (0.939)
Africa		0.348 (0.556)		0.699 (0.287)
1950s			1.453 (0.315)	1.882 (0.225)
1960s			2.229* (0.015)	2.389** (0.008)
1970s			1.252 (0.176)	1.346 (0.135)
1980s			0.586 (0.534)	0.618 (0.507)
Constant	-2.118** (0.000)	-2.289** (0.000)	-3.467** (0.001)	-3.980** (0.001)
Observations	104	104	104	104
Pseudo R^2	0.192	0.195	0.237	0.246

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 11: Main model, 10 years window for troop size change

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000483* (0.039)	0.000495* (0.035)	0.000870** (0.004)	0.000974** (0.003)
Diamonds	0.0748** (0.001)	0.0699** (0.003)	0.0985** (0.000)	0.0893** (0.001)
Oil	-0.0360* (0.036)	-0.0338 (0.072)	-0.0523** (0.005)	-0.0496* (0.015)
Interventions	1.471** (0.006)	1.489** (0.005)	1.623** (0.002)	1.721** (0.002)
Troop inc (10y)	-0.0000339 (0.489)	-0.0000347 (0.494)	-0.0000950 (0.167)	-0.0000963 (0.179)
Africa		0.256 (0.653)		0.726 (0.260)
1950s			1.139 (0.437)	1.605 (0.307)
1960s			2.439** (0.004)	2.662** (0.003)
1970s			1.908* (0.035)	2.061* (0.031)
1980s			1.127 (0.189)	1.216 (0.169)
Constant	-2.053** (0.000)	-2.174** (0.000)	-3.855** (0.000)	-4.440** (0.001)
Observations	104	104	104	104
Pseudo R^2	0.188	0.190	0.253	0.263

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 12: Main model, troop size change on continent

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000451 (0.099)	0.000475 (0.076)	0.000800* (0.014)	0.000922** (0.008)
Diamonds	0.0744** (0.001)	0.0711** (0.003)	0.0944** (0.001)	0.0871** (0.002)
Oil	-0.0345* (0.047)	-0.0330 (0.077)	-0.0480** (0.007)	-0.0459* (0.015)
Interventions	1.404** (0.006)	1.420** (0.005)	1.471** (0.003)	1.561** (0.003)
Troop inc (cont, 5y)	-0.000138 (0.759)	-0.0000983 (0.826)	-0.000226 (0.646)	-0.000132 (0.794)
Africa		0.217 (0.693)		0.670 (0.299)
1950s			1.492 (0.280)	1.901 (0.212)
1960s			2.150* (0.010)	2.350** (0.006)
1970s			1.272 (0.106)	1.363 (0.088)
1980s			0.594 (0.476)	0.630 (0.456)
Constant	-1.946** (0.000)	-2.076** (0.000)	-3.324** (0.001)	-3.887** (0.001)
Observations	104	104	104	104
Pseudo R^2	0.185	0.186	0.238	0.246

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 13: Main model, troop size change on continent, 2 years window

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000331 (0.193)	0.000340 (0.179)	0.000692* (0.023)	0.000787* (0.017)
Diamonds	0.0724** (0.001)	0.0706** (0.002)	0.0956** (0.001)	0.0890** (0.002)
Oil	-0.0317 (0.064)	-0.0309 (0.092)	-0.0468** (0.008)	-0.0450* (0.015)
Interventions	1.447** (0.006)	1.453** (0.006)	1.539** (0.003)	1.608** (0.004)
Troop inc (cont, 2y)	-0.00168 (0.161)	-0.00164 (0.183)	-0.00226 (0.105)	-0.00211 (0.140)
Africa		0.103 (0.861)		0.559 (0.398)
1950s			1.636 (0.238)	2.005 (0.192)
1960s			2.332** (0.004)	2.500** (0.003)
1970s			1.490 (0.054)	1.582* (0.043)
1980s			0.733 (0.376)	0.781 (0.342)
Constant	-1.794** (0.000)	-1.849** (0.002)	-3.331** (0.001)	-3.792** (0.002)
Observations	104	104	104	104
Pseudo R^2	0.200	0.200	0.261	0.266

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 14: Main model, troop size change on continent, 10 years window

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000407 (0.076)	0.000422 (0.067)	0.000635* (0.028)	0.000733* (0.014)
Diamonds	0.0767** (0.001)	0.0706** (0.002)	0.0967** (0.001)	0.0893** (0.001)
Oil	-0.0374* (0.025)	-0.0347 (0.057)	-0.0467** (0.007)	-0.0447* (0.016)
Interventions	1.600** (0.003)	1.622** (0.003)	1.599** (0.002)	1.669** (0.002)
Troop inc (cont, 10y)	-0.000282* (0.035)	-0.000290* (0.035)	-0.000417* (0.037)	-0.000403* (0.039)
Africa		0.340 (0.558)		0.596 (0.358)
1950s			0.131 (0.941)	0.575 (0.753)
1960s			2.119* (0.018)	2.300* (0.011)
1970s			1.753* (0.028)	1.833* (0.023)
1980s			0.953 (0.249)	0.989 (0.230)
Constant	-2.037** (0.000)	-2.201** (0.000)	-3.359** (0.001)	-3.832** (0.001)
Observations	104	104	104	104
Pseudo R^2	0.220	0.223	0.284	0.290

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 15: Main model, s.e. not clustered

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000644* (0.010)	0.000667** (0.009)	0.000911** (0.002)	0.00100** (0.001)
Diamonds	0.0898** (0.002)	0.0841** (0.005)	0.101** (0.002)	0.0919** (0.006)
Oil	-0.0407* (0.021)	-0.0382* (0.036)	-0.0513* (0.011)	-0.0484* (0.020)
Interventions	1.509** (0.004)	1.525** (0.003)	1.534** (0.005)	1.626** (0.004)
Troop increase	0.000205 (0.137)	0.000213 (0.128)	0.000145 (0.405)	0.000144 (0.418)
Africa		0.328 (0.563)		0.697 (0.268)
1950s			1.166 (0.314)	1.621 (0.192)
1960s			1.889* (0.044)	2.100* (0.029)
1970s			0.740 (0.412)	0.887 (0.334)
1980s			0.163 (0.852)	0.242 (0.783)
Constant	-2.334** (0.000)	-2.495** (0.000)	-3.279** (0.000)	-3.822** (0.000)
Observations	104	104	104	104
Pseudo R^2	0.202	0.204	0.241	0.251

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 16: Main model, probit estimation, s.e. not clustered

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.000374* (0.011)	0.000383** (0.009)	0.000529** (0.002)	0.000585** (0.001)
Diamonds	0.0512** (0.001)	0.0483** (0.003)	0.0576** (0.001)	0.0522** (0.003)
Oil	-0.0236* (0.021)	-0.0222* (0.036)	-0.0299* (0.011)	-0.0281* (0.020)
Interventions	0.878** (0.003)	0.882** (0.003)	0.870** (0.005)	0.908** (0.004)
Troop increase	0.000112 (0.155)	0.000115 (0.146)	0.0000760 (0.450)	0.0000753 (0.457)
Africa		0.159 (0.639)		0.405 (0.278)
1950s			0.679 (0.305)	0.946 (0.183)
1960s			1.100* (0.045)	1.229* (0.029)
1970s			0.410 (0.438)	0.500 (0.352)
1980s			0.0827 (0.872)	0.112 (0.829)
Constant	-1.369** (0.000)	-1.440** (0.000)	-1.888** (0.000)	-2.193** (0.000)
Observations	104	104	104	104
Pseudo R^2	0.201	0.203	0.240	0.249

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$

Table 17: Main model, linear probability model

	(1)	(2)	(3)	(4)
	Mercenaries	Mercenaries	Mercenaries	Mercenaries
GDP per capita	0.0000734* (0.046)	0.0000795* (0.036)	0.000107* (0.011)	0.000125** (0.005)
Diamonds	0.0115** (0.001)	0.0103** (0.008)	0.0116** (0.001)	0.00977* (0.012)
Oil	-0.00401 (0.058)	-0.00341 (0.133)	-0.00487* (0.029)	-0.00411 (0.075)
Interventions	0.279** (0.003)	0.282** (0.003)	0.270** (0.005)	0.281** (0.003)
Troop increase	0.0000228 (0.317)	0.0000250 (0.279)	0.0000185 (0.526)	0.0000182 (0.533)
Africa		0.0812 (0.454)		0.136 (0.242)
1950s			0.109 (0.543)	0.191 (0.319)
1960s			0.283 (0.086)	0.322 (0.056)
1970s			0.0683 (0.656)	0.106 (0.498)
1980s			-0.0571 (0.709)	-0.0407 (0.791)
Constant	0.108 (0.182)	0.0694 (0.472)	0.0181 (0.886)	-0.0845 (0.582)
Observations	104	104	104	104
Pseudo R^2				

p -values in parentheses

* $p < 0.05$, ** $p < 0.01$