GIGA Working Papers

German Institute of Global and Area Studies
Leibniz-Institut für Globale und Regionale Studien

GIGA Research Program:
Dynamics of Violence and Security Cooperation

A Paradox of Plenty?
Rent Distribution and Political Stability in Oil States

Matthias Basedau and Wolfram Lacher

N° 21 April 2006

GIGA-WP-21/2006

GIGA Working Papers

Edited by GIGA German Institute of Global and Area Studies / Leibniz-Institut für Globale und Regionale Studien.

GIGA research unit responsible for this issue: Research Program "Dynamics of Violence and Security Cooperation".

Editor of the GIGA Working Paper Series: Bert Hoffmann <hoffmann@giga-hamburg.de>

Editorial assistant and production: Verena Kohler

All GIGA Working Papers are available online and free of charge at the website: www.giga-hamburg.de/workingpapers. Working Papers can also be ordered in print. For production and mailing a cover fee of € 5 is charged. For orders or any requests please contact:
e-mail: workingpapers@giga-hamburg.de
phone: ++49 – 40 – 42 82 55 48

GIGA German Institute of Global and Area Studies /
Leibniz-Institut für Globale und Regionale Studien
Neuer Jungfernstieg 21
20354 Hamburg
Germany

E-mail: info@giga-hamburg.de
Website: www.giga-hamburg.de

GIGA-WP-21/2006

A Paradox of Plenty?
Rent Distribution and Political Stability in Oil States

Abstract

Resource curse theory claims that resource abundance encourages violent conflict. A study of 37 oil-producing developing countries, however, reveals that oil states with very high levels of oil revenue are remarkably stable. An analysis of the ways in which governments spend oil revenues identifies two distinct types of rentier systems – the large-scale distributive state and the patronage-based system – which are strongly linked to instability or its absence. However, some deviant cases, such as Equatorial Guinea and Gabon, illustrate the need for further research. Apparently, the notion of a "paradox of plenty" has neglected rentier mechanisms that avoid conflict.

Key words: Resource Curse, Paradox of Plenty, Oil, Rentier State, Violent Conflict, Political Stability, Developing World

JEL Classification: N5, N 50, O 13

Dr. Matthias Basedau,
Ph.D. in Political Science, is Research Fellow at GIGA Institute of African Affairs (Hamburg) since 2002 and since 2005 Head of Research Program 2 "Dynamics of Violence and Security Cooperation" at GIGA.
Contact: basedau@giga-hamburg.de · Website: www.giga-hamburg.de/iak/basedau

Wolfram Lacher,
Grad.Dip. in Political Science (American University in Cairo, 2005), is MSc Candidate at The School of Oriental and African Studies (SOAS), University of London (2005/06).
Contact: wolframlacher@web.de

Zusammenfassung

Ein "Paradox of Plenty"?
Verwendung von Ölrenten und politische Stabilität in Ölstaaten

Die Theorie des Ressourcenfluchs behauptet, dass Ressourcenreichtum gewaltsame Konflikte begünstigt. Eine Untersuchung von 37 ölproduzierenden Entwicklungsländern zeigt hingegen, dass Länder mit sehr hohen Ölerlösen bemerkenswert stabil sind. Die Analyse der Art und Weise wie Ölstaaten Ressourcenerlöse verwenden, führt zur Bildung zweier distinkter Typen von Rentierstaaten – dem Distributionstyp gegenüber dem Patronage-Typ –, die eine starke Korrelation mit politischer Instabilität oder deren Abwesenheit aufweisen. Einige abweichende Fälle, wie anhand der Fallstudien Äquatorial-Guinea und Gabun gezeigt werden kann, weisen aber auf die Notwendigkeit zukünftiger Forschung hin. Offenbar hat die Forschung zum „Paradox of Plenty“ und „Ressourcenfluch“ Rentiermechanismen vernachlässigt, die gewaltsame Konflikte verhindern können.

Article Outline

1. Introduction

2. Methodology

3. A Paradox of Plenty? Oil Income Per Capita and Political Stability

4. Revenue Allocation and Political Stability: Testing Transmission Channels

5. Two Ideal Types of Oil-Producing Countries

6. Equatorial Guinea and Gabon: Contradictions of Rentierism

7. Conclusion

1. Introduction

It seems to be conventional wisdom that natural resources in general, and oil in particular, are a 'curse' rather than a 'blessing'. The growing literature on the 'resource curse' and the 'paradox of plenty' (Karl 1997) has established important causal claims linking resource abundance and dependence to corruption, authoritarianism, economic decline and violent conflict. Oil-dependent countries in particular, it has been frequently argued, "are among the most economically troubled, the most authoritarian, and the most conflict-ridden states in the world today" (Karl & Gary 2003: 18). As regards violent conflict, resource curse theory claims that resource abundance provides both finance and motive for armed conflict ('greed and grievance'); adverse effects on the economy and institutions create further, indirect causes of violence (Ross 2003). Empirically, both quantitative and country case studies have established evidence that resource dependent and abundant countries are indeed more

likely to lapse into domestic violence (e.g. Collier & Hoeffler 2001, de Soysa 2002), and the debate is already moving towards practical recommendations in terms of 'actions and options' for conflict prevention and resolution (Bannon & Collier 2003, Gary & Karl 2003).

However, the relationship between abundance in natural resources and violence might be trickier than assumed by the public eye and in the scientific mainstream. The paradigm has come 'under distress' (Ron 2005). According to Michael L. Ross (2004) the positive knowledge on the relationship between natural resources and violence is confined to an adverse effect of oil and 'lootable' resources[1]. In any case, violence in resource abundant or dependent countries is a mere probability. For one country affected, two are spared from violence (Ross 2003). We do not believe these countries are just lucky. In fact, this suggests that whether or not the resource curse strikes, and the manner in which it does so, will depend on a complex set of context conditions in a given country (Collier et al. 2003, Ross 2003, Humphreys 2005).

Context conditions differ in terms of a) pre- and non-resource, country specific conditions, and b) resource specific conditions (Basedau 2005). The latter include the type of resource, the degree of abundance and dependence, and the revenue management system. Once resource production has started or becomes a realistic option in the minds of actors, these conditions interact with non-resource, country-specific conditions such as the level of socio-economic development, inter-communal relations, the functioning of institutions, and the strategies of political leaders (as well as the degree and duration of violent conflict). Only recently have *all* these surrounding conditions become part of the research agenda (Collier & Hoeffler 2005: 627).

It is the purpose of this paper to engage in a preliminary inquiry of these context conditions and transmission channels as regards their effect on the prevalence of domestic violence. We decided to concentrate on oil because it has been of particular notoriety in the literature (Ross 2004, Fearon 2005), even though this notoriety has been questioned in recent studies (Smith 2004). The central research problem thus is: Why are some oil-producing countries prone to violence and instability while others are not? Are certain resource-specific and non-resource conditions in oil and gas-producing countries systematically and plausibly linked to violence or stability?

In particular, this paper seeks to show that two distinct mechanisms of oil revenue distribution – large-scale distribution as opposed to distribution through patronage networks – are

---

[1] Ross' (2004: 337) four major findings are: Oil increases the likelihood of civil war, particularly secessionist conflict. 'Lootable' commodities (gemstones, drugs) do not make a conflict more likely to begin, but they tend to lengthen existing conflict (see also Lujala et al. 2005); there is no apparent link between legal agricultural commodities and civil war; the association between primary commodities and the onset of civil war is statistically not robust.

significantly connected with the occurrence and absence of violent conflict respectively. While revenue distribution has hitherto been assumed to be largely determined by resource-specific factors, the evidence presented in this article suggests that country-specific context conditions play an important role in the way revenues are distributed. Thus, the monolithic category traditionally associated with authoritarianism and political instability – the Petro-state – is differentiated into two largely exclusive systems of oil rent distribution, which in turn can help explain the remarkable political stability, and hence conflict-riddenness, of oil-dependent states.

After having outlined the methodology, the first analytic section of this paper deals with the relative degree of oil income. Subsequently, two ideal types of oil-producing states are established on the basis of theoretical discussion and quantitative evidence linking transmission channels of oil revenue to conflict, and hence stability. Two apparent exceptions to these types, Equatorial Guinea and Gabon, are discussed in more depth. Finally, both theoretical and methodological conclusions are drawn.

2. Methodology

There has been a vocal debate on the possible consequences of different resource types as regards the likelihood of resource-related violence, and we acknowledge its relevance (Le Billon 2001, Ross 2003). However, an exhaustive test of all context conditions is clearly beyond the scope of this paper and we therefore concentrate on one particular resource type – oil and gas – in order to avoid the serious methodological implications of including different resource types in the analysis.

The sample comprises 37 oil-producing countries in the developing world. We excluded industrial countries such as Norway, given their sharply divergent socio-economic and political situation. We set thresholds for oil and gas-producing countries in terms of their dependence on these resources. In order to exclude insignificant producers in terms of domestic relevance, we set a ratio of at least 10% of the export earnings.

We employed several measures for the dependent variable (see Appendices 1 and 2). We opted for a broader understanding of political stability that does not focus exclusively on large-scale conflicts but tries to capture problems below this threshold as well. Armed conflict and political stability will be measured by World Bank conflict data and the World Bank Governance Indicator "political stability and absence of violence".

For the independent variables we tried to capture relevant phenomena rather than using readily available data. These variables include alternative measures for dependence on and

abundance in oil as well as indicators for the use of revenues, such as government expenditure (e.g. health/military) and the quality of institutions and the political system (see Appendices 1 and 2).

The period of investigation refers to a maximum time period from 1990 to 2002 as regards the prevalence of violence and is confined to the year 2002 in terms of most of the other variables. The latter owes mainly to the fact that some of the newly introduced pertinent data was not readily available for longer periods of time and had to be collected for this study.

We use a combination of methodologies in order to capture the multi-faceted nature of the relationship between natural resources and political stability/violence. Quantitative measures will be applied as well as macro-qualitative and 'medium N' comparisons. A more in-depth and qualitative study of two country cases will attempt to determine why these are deviating from general findings.

3. A Paradox of Plenty? Oil Income Per Capita and Political Stability

Almost all quantitatively-oriented scholars who study the link between natural resources and conflict control for population size. However, the question as to *why* so many small resource-rich countries are spared from violence has received little attention. The answer may be found in a more narrow methodological question: Abundance in natural resources is commonly measured by the degree of dependence in terms of percentages of exports and GDP (see Ross 2004: table 1). Obviously, this measure does not take into account the relative wealth of countries. A country can rely heavily on oil for exports without enjoying oil wealth. Oil constituted over 95% of Nigeria's exports in 2002, but if we keep in mind that Nigeria's population by far exceeds 100 million inhabitants, then – statistically – one Nigerian would have earned a miserable 30 cents a day from the US$ 13.7 bn Nigerian oil export sales in 2002. In contrast, the earnings per capita in Equatorial Guinea would have been 50 times higher (US$ 14.87). In this case it can hardly be argued that dependence is a 'proxy' for abundance. Oil abundance in Nigeria and Equatorial Guinea is a remarkably different phenomenon.

Table 1: Political stability and income from oil and gas p.c.

	Political stability above average (2002)		Political stability below average (2002)	
Income above US$ 1,000 p.c./p.a. (2002)	Bahrain (0) Brunei (0) Equatorial Guinea (0) Gabon (0) Kuwait (0)	Oman (0) Qatar (0) Trinidad & Tobago (1) UAE (0)	Libya (0) Saudi-Arabia (0)	
Income below US$ 1,000 p.c./p.a. (2002)	Kazakhstan (0) Mexico (1) Vietnam (0)		Algeria (28) Angola (30) Argentina (0) Azerbaijan (9) Cameroon (1) Chad (12) Colombia (31) Congo, DR (15) Congo, Republic (9) Cote d'Ivoire (0)	Ecuador (1) Egypt (7) Indonesia (17) Iran (14) Nigeria (0) Russia (14) Sudan (34) Syria (0) Turkmenistan (0) Venezuela (1)

No data for Iraq and Uzbekistan, in brackets summed N of years of civil conflict x intensity (1-3), 1990-2002, for sources and coding see Appendix 1.

We thus calculated the potential *per capita* income (2002) through oil and gas exports for all countries in order to capture what countries can really earn from their natural resources.[2] Similar to findings by Myers (2005) on human development, our results suggest that abundance in oil and gas is not conducive to instability and violence – quite the contrary: There is strong empirical support for the hypothesis that higher per capita incomes prevent a country from violent conflict and instability (Pearson's r for 'political stability and absence of violence' .623, significant at the .01 level). An alternative measure for the independent variable does not produce such high correlations, but only five countries deviate when we set a threshold of US$ 1,000 p.c. p.a. (2002) and contrasted against above/below average 'political stability' (see Table 1). It is particularly remarkable that none of the countries over the US$ 1,000 cut-off point has experienced serious civil conflict between 1990-2002. As expected, higher incomes per capita are closely related to population size, especially when using a threshold of three million inhabitants (-.76, significant at the .01 level).[3]

This finding has important theoretical and methodological implications. First, dependence on natural resources is not a good 'proxy variable' for abundance, as already suggested by

[2] Of course, the actual amount of revenues for both the government and the private sector differ from these figures. However, they clearly reflect the potential wealth for a country more adequately than dependence.

[3] Apparently, ethnic fragmentation (according to Alesina et al. 2003) does not play a major role. The modest correlation (see Appendix 3) may reflect secessionist problems in some of the countries (such as Angola, Indonesia, and Nigeria).

our comparison of Nigeria and Equatorial Guinea. This is not to say that dependence has no impact on political instability. There is a strong relationship/correlation between dependence and abundance (.54% of GDP, significant at the 0.01 level), and the independent link between dependence and political stability is significant at the 0.05 level, albeit less strong (.337). In fact, dependence seems to play a major role when income p.c. from exports is relatively low. Most conflict-prone countries below the US$ 1,000 cut-off point are highly dependent on oil and gas exports. On the other hand, rather stable countries with low oil revenue, such as Mexico and Vietnam, are dependent on oil only to a limited extent: In 2002, oil accounted for 11.3% and 20.8% of total exports and 2.9% and 9.2% of GDP respectively. There are also trouble-ridden countries with low dependence on oil such as Indonesia and Côte d'Ivoire. However, one can easily think of other reasons for violence than oil in these countries.

Related to that but more importantly, our findings imply an significant modification of the resource curse theory. Oil producing countries might be more likely to lapse into conflict than non oil states but in our period of investigation and for our sample of oil and gas-producing countries, there is little evidence that points to a 'paradox of plenty' as regards the likelihood of political instability or violence. The resource curse is confined, if anything, to countries that depend on oil and gas but are not really wealthy in terms of potential income per capita.

4. Revenue Allocation and Political Stability: Testing Transmission Channels

We are not suggesting that political stability is a simple function of relative abundance in oil. Income of oil exports per capita might not reflect what countries or governments really earn, and how revenues are actually spent is a completely different story. But how can high oil revenue translate into political stability? Respective transmission channels can be drawn from the theory of the rentier state. According to Ross (2001), who studies possible reasons why oil hinders democracy, two transmission channels or government strategies can be adapted to our research problem.

The *repression effect* has two possibly interrelated dimensions. Firstly, governments might spend resource revenue on a huge state security apparatus, thus providing security as a public good. Secondly, they may use that very same security apparatus to suppress any possible opposition (that might take up arms). If the latter feature applies to our sample we should expect that the more stable countries share both high levels of expenditure on the security apparatus and a lack of political freedoms and civil liberties.

Table 2: Government strategies to maintain political stability through oil revenues

Strategy	Repression		Cooptation	
Target	Effective monopoly on the use of force	Suppressing voice and accountability	Buying off popular demands	Co-opting (potential) opposition leaders
Means	High expenditure on the security apparatus	Non-participatory and illiberal political system	Large-scale distribution of public goods	Selective distribution (Patronage)

Elites may not only use sticks to impede armed opposition, but carrots as well. The *rentier effect* cuts into a number of aspects, some of which are of lesser importance for our research problem at this stage. Although the 'taxation effect' suggests that income from natural resources reduces the accountability of the state elite (Yates 1996: 35), revenues can be used in a pro-active manner to buy off demands and opposition. This cooptation-effect has hitherto been largely observed by scholars studying the Middle East oil monarchies, and consequently been adapted rather uncritically by resource curse literature (see Ross 2001). However, it can come in two shapes: First, governments may engage in *large-scale* distributive policies and generous expenditure on public goods such as health and education. Thus, large-scale distribution, in many cases, permits access to oil wealth on the mere grounds of citizenship. Alternatively, elites may distribute selectively and create clientelist networks from which only leaders of politically important groups benefit. Through this distribution mechanism, oil revenues are distributed among a comparatively small part of the population, and access is granted through personal ties. In what follows, this latter mechanism will be referred to as *patronage*.

If distributive cooptation is an effective transmission channel to stability, it can be expected that government expenditure on health and other services as well as actual outcomes in human development will be higher in stable countries. [4] The operationalization of selective cooptation or patronage proves to be more difficult. There is certainly no readily available indicator for patronage or clientelism. However, clientelism and patronage tends to be associated with both low government effectiveness and high levels of corruption (Reno 2000, Chabal & Deloz 1999) and we can use the World Bank Governance Indicators 'control of corruption' and 'government effectiveness' as tentative proxy variables. Thus, when a country scores low in terms of distributive policies and human development but ranks high in corruption and ineffective institutions, we can assume that we are dealing with the 'patronage type'.

[4] (Low) Tax rates as another indicator for large-scale distribution are not available in a desirable quantity for our sample.

What are the results? First of all, coercive repression does not seem to be a promising strategy to avoid conflict and maintain stability (see also Smith 2004: 232). None of the conflict and stability indicators are significantly linked to the Freedom House ratings in 2002 as a pertinent measure for general repression levels. In fact, the sample scores poorly on average (5.3 and close to 'not free') and it is only Mexico that is rated 'free' in 2002. This may suggest that oil hinders democracy (Ross 2001) – albeit a lack of democracy may be attributable to regional traits (Herb 2003) –, but it contradicts the notion that repression or freedom make the difference as regards violence. Moreover, no relationship can be established between the extent to which a country is resource abundant or dependent, on the one hand, and the repressive character of the regime, on the other hand – which further challenges the resource-curse thesis (see Appendix 3).

The picture changes when we probe for military expenditure per capita (2002). Higher military expenditure is strongly correlated with 'political stability' (.62, significant at the .01 level). Moreover, freedom indicators do not correspond at all to military expenditure, implying that the defense budget cannot be used as a proxy variable for repression of political rights and civil liberties in an authoritarian regime, but rather indicates an effective strategy to exercise the state's monopoly on the use of force (Max Weber's *Gewaltmonopol*). Certainly, data on military expenditure may not be very reliable and do not capture other important parts of the security sector. Nevertheless, empirical evidence suggests, maybe counter-intuitively, that the Romans were right when stating *si vis pacem para bellum*: armament may be a successful way to maintain peace and stability.

Similar clear-cut results are returned when we test measures for cooptation. Both government expenditure on health and total government expenditure p.c. as well as the level of human development return statistically strong and significant results for political stability, ranging from .60 to .69, all significant at the .01 level.

Whereas large-scale distribution is positively related to the organization of stability, our tentative measures for selective distribution, i.e. patronage and clientelism, are not: Higher government effectiveness and control of corruption tend to be strongly associated with stability. These indicators produce the most significant and robust results thus far (.72 and .75 respectively, both being highly significant).

The findings imply that it is rather governance quality than revenue quantity that makes the difference (Boschini et al. 2004). However, oil income p.c. and governance effectiveness and control of corruption are closely related (see Table 4), and it is not very plausible that governance quality has a greater effect on income per capita than the other way around: We have operationalized oil income p.c. by the population size and the actual output in oil-production, and both indicators depend largely on structural and natural conditions rather

than governance[5]. Nevertheless, governance quality may be partly independent from income levels given that the link with political stability is higher than for income levels.

More importantly, most of the independent variables are not only good predictors for low or higher political stability but are closely interrelated as well. Table 3 reveals high and highly significant correlations between the variables that have proven to be fruitful for political stability alone. None of the relationships is below .418, and if we would exclude the level of human development, are consistently close to or over .60.

Table 3: Political stability and independent variables

	Political stability	Population size	Oil income p.c.	Military exp. p.c.	Health exp. p.c.	Governm. exp. p.c.	HDI 2002	Governm. effectiveness	Control of corruption
Political stability	1								
Population size	-.687	1							
Oil income p.c.	.623	-.775	1						
Military expenditure p.c.	.622	-.701	.798	1					
Health exp. p.c.	.598	-.678	.857	.885	1				
Government exp. p.c.	.637	-.660	.889	.681	.850	1			
Human Development	.693	-.418	.457	.482	.580	.499	1		
Government effectiveness	.720	-.666	.680	.724	.732	.731	.590	1	
Control of corruption	.752	-.708	.693	.833	.842	.742	.624	.915	1

All correlations are at least significant at the 0.01 level.

5. Two Ideal Types of Oil-Producing Countries

The multicollinearity of the variables precludes a linear regression. Thus, we opted for a qualitative methodology which also keeps individual cases identifiable. We can measure our cases against two ideal types of oil-producing countries:

[5] It is conceded that more effective and transparent institutions might increase production. However, the overall absolute potential of production clearly depends on natural conditions.

- Oil-producing countries with an income from oil exports over US$ 1,000 per capita per annum enjoy peace and political stability. Typically, these polities have rather small populations, but more importantly, they spend their oil revenues on a large security apparatus as well as on large-scale distributive policies, with the latter strategy being mirrored in a higher level of human development. Higher oil incomes do not fuel corruption and poor institutional quality but affect government effectiveness and transparency positively.
- Oil-producing countries that earn less than US$ 1,000 per head a year from oil wealth are highly prone to instability and differ substantially in all other respects: They are commonly more populous, and lower revenues result in low military expenditures and non-distributive policies as well as lower levels of human development. Typically, these countries are characterized by high levels of corruption and poor institutional quality, suggesting that oil revenues are distributed through patronage networks. While the degree of dependence does not make a difference as regards the wealthier oil-producing countries, in low oil income countries high degrees of dependence seem to be a risk factor.

These *Idealtypen* come very close to *Realtypen* (Max Weber): If we set pertinent thresholds for all characteristics and indicators, and control for high levels of dependence – which reduces the sample to 23 cases (see Table 5, Appendix) – almost two thirds of all highly dependent oil-producers display the two ideal types. Ten countries show a perfect match and five countries deviate in one out of seven features only.[6] Five countries show two to three deviant characteristics but roughly remain within the range of expectation. It is particularly remarkable that it is only Libya, Kazakhstan and Saudi Arabia that deviate in terms of the crucial income level from our typology.

Thus, while the evidence provided in this study thus far suggests a virtually deterministic relationship between the per capita amount of oil revenue in a given society on the one hand and the occurrence or absence of violent conflict on the other – mainly via the channeling of oil revenue into the security apparatus and large-scale distribution systems – these few exceptional cases seem to contest this relationship. First, conflict-ridden countries such as Algeria, Iran and Venezuela have unusually high government expenditures for this group of countries. Second, Kazakhstan challenges the observation that low-income oil-dependent countries are likely to experience conflict, whilst Libya and Saudi Arabia question the find-

[6] The match for all 37 countries is hardly worse: Two thirds to three quarters of all countries fall under the two ideal types. 16 countries show a perfect match and eight cases deviate in one respect only. Three countries display two deviant characteristics. Five countries show three unexpected features and five countries have four or more deviating characteristics.

ing that high-income oil countries generally enjoy higher political stability. Third, the more complex cases of Gabon and Equatorial Guinea question the categorization of rich oil states engaging in large-scale revenue distribution, and consequently enjoying considerable political stability, as opposed to poor, conflict-prone petro-states relying on networks of patronage.

Table 4: Two ideal types of highly dependent oil-producing countries*

Features	Political stability above average	Political stability below average	% of all cases
No or one deviant feature	Bahrain Brunei Kuwait Oman Qatar Trinidad & Tobago[b] UAE	Angola[e] Azerbaijan[a] Congo, Republic Iraq Nigeria Syria Turkmenistan[a] Yemen[e]	65.2
Two or three deviant features	Equatorial Guinea[a],[b],[c] Gabon[a],[b],[c]	Algeria[e],[f],[g] Iran[e],[f],[g] Venezuela[a],[f]	21.7
Four and more deviant features	Kazakhstan[d]	Libya[h] Saudi Arabia[i]	13.0

Note: * Thresholds for dependence: 40% oil exports to total exports; 20% oil exports to GDP. Political stable ideal type features include above threshold in (1) income from oil exports; (2) military expenditure; (3) health; (4) total government expenditure; (5) HDI; (6) government effectiveness; (7) control of corruption (see Appendices 1 and 2). Instable ideal types opposite values.
Deviation in (a) HDI; (b) control of corruption; (c) government effectiveness; (d) all but HDI; (e) military expenditure; (f) health expenditure; (g) total government expenditure; (h) all but government effectiveness and control of corruption; (i) all but government effectiveness.

One answer is that these countries represent 'in-between' cases , i.e. they frequently feature indicators which are close to cut-off points in the independent as well as the dependent variables. This applies particularly to Algeria, Iran and Venezuela, but also to Libya and Saudi Arabia and possibly Kazakhstan (see Appendices 1 and 2). Nevertheless, Kazakhstan, Libya and Saudi Arabia are exceptions that should be taken more seriously. Kazakhstan is characterized by relatively low per capita oil income, high oil-dependence, scores badly on the control of corruption as well as on government effectiveness, and should therefore be expected to experience conflict – which it does not. In contrast, Libya and Saudi-Arabia are high-income oil countries that show relatively unfavorable political stability values, but display other features typical of stable countries. For Libya and Saudi Arabia one should keep in mind that neither witnessed large-scale civil conflict between 1990 and 2002; Libya has even experienced a constant rise in political stability since 1996. In turn, the dynamics of political stability in Kazakhstan are negative between 2002 and 2004. In Saudi Arabia, the

downward trend in stability – despite enduring oil wealth – may be a result of a poorly managed rapid population growth.

All this points to the pertinence of additional context variables, especially non- or pre-oil conditions. Therefore, some countries deserve a more in-depth study at this point. We selected Equatorial Guinea and Gabon for a number of reasons. They are small countries that earn considerable amounts of revenues from oil – well above the US$ 1,000 p.c. threshold. Although relatively stable, they are both characterized by a high level of patronage and clientelism (see Table 5), which we have identified as being an obstacle to stability in general. Contrary to the classification undertaken in this study on the grounds of statistical data, Gabon exhibits pronounced mechanisms of both patronage as well as features of large-scale distribution, and thus defies a clear distinction of both types. Equatorial Guinea, whose per capita oil revenues are among the highest in the sample, shows no convincing evidence for large-scale distribution, but on the contrary is an extreme case of a patronage-based power structure engaging in predation of the country's oil wealth (see Table 5). However, despite the centrality of patronage networks and high inequality in the distribution of oil rents in both Gabon and Equatorial Guinea, statistical data accords considerable political stability and virtual absence of violent conflict to both polities. The question remains: How do these countries succeed in organizing stability?

Table 5: Profile of Equatorial Guinea and Gabon, 2002

	Political stability/ violent conflicts since 1990	Oil as % of exports/ GDP	Oil income p.c. (US$)	Military exp. p.c. (US$)	Government exp. p.c. (US$)	HDI	Government effectiveness/ Control of corruption
Equatorial Guinea	0.24/0	96.3/93.3	5,608	60	611	0.703	-1.22/-1.42
Gabon	0.25/0	80.3/41.5	1,644	63	1,189	0.648	-0.26/-0.42
Sample threshold	0/1	-	1,000	58.5	479.5	0.739	0/0

Sources: see Appendix 1 and 2.

6. Equatorial Guinea and Gabon: Contradictions of Rentierism

Both Gabon and Equatorial Guinea are heavily dependent on oil – since the early 1970s in the former case, fairly recently in the latter. Unquestionably, oil revenues play a crucial role in both polities. Yet, as we will seek to show in the following brief analysis of rentierism in

both states, the effects oil revenues have had on rent distribution as a means of governance and control cannot be reduced to resource-specific properties, and have depended to a considerable degree on factors such as pre-oil power relations and political practices, as well as the integration of the polity into the international system – factors that have thus far largely been neglected in quantitative research on the 'resource curse'. Furthermore, the apparent paradox these two states represent with regard to a relatively 'durable inequality' (Cramer 2003), in which patronage and governmental predation are accompanied by political stability, permit more general conclusions about the consequences of patronage and large-scale distribution for social change, and their implications for the conflict-proneness of rentier societies. In both cases, it becomes evident that the distribution of oil revenues through patronage networks does indeed foster political instability, as such a distribution will inevitably lead to a struggle over access to rents. However, as rents – which represent the only significant income in these countries – are monopolized by the ruling class, and access to rents is severely restricted, no contesting force outside the ruling class can emerge. The cases of Gabon and Equatorial Guinea show that, while the classical rentier effect of large-scale distribution is certainly only made possible by enormous amounts of oil revenue, rentier mechanisms do not simply depend on the level of rents. Finally, they highlight some of the important methodological problems involved in research on resource politics.

Equatorial Guinea: Persisting Inequality

The case of Equatorial Guinea, which since the mid-1990s has risen to a major African oil-producer with per capita oil revenues similar to those of the Gulf monarchies, poses a problem to the evidence gathered in this article. Contrary to all other countries that wield comparable levels of oil revenue, the Equatoguinean government does not engage in large-scale distribution of its oil wealth, but has been pursuing the privatization and predation of state assets, with significant parts of oil revenue being channeled past the government budget and distributed through patronage networks among a tiny ruling elite, principally consisting of President Obiang Nguema's clan (Wood 2004, Roitman & Roso 2001, Global Witness 2004). Contrary to most other countries in which oil revenue is distributed on such unequal basis and through personified ties – such as Angola, Congo or Nigeria – Equatorial Guinea has enjoyed considerable political stability, with large-scale violent conflict being virtually absent.

The case of Equatorial Guinea indeed shows that the otherwise widespread tendency towards large-scale distribution of oil revenue is not the natural consequence of high export

earnings, as rentier state theory seems to suggest.[7] A decade after oil-production has risen to significant levels and has subsequently endowed Equatorial Guinea with the highest per capita income in sub-Saharan Africa, there are no signs of significant change in governmental policies and expenditures on health or education. Instead, oil revenue continues to be a 'state secret' – in the words of President Obiang – a considerable part of which is kept in foreign bank accounts held by members of the ruling family (Africa Confidential 2003, United States Senate 2004). Moreover, government policies do not reveal any attempts towards sustainable management of oil revenue, let alone prepare for the post-oil era. The government has pursued a policy of maximal production, additionally increasing its immediate revenues through advance loans on future oil-production (EIU 2005: 33, Frynas 2004). In short, the rapid influx of oil wealth to Equatorial Guinea has not led to any tendencies to enlarge the government's power base by distributing oil revenues more widely. Consequently, the living conditions of most Equatoguineans have failed to improve with increasing oil exports, and even deteriorated as a result of 'dutch disease', exacerbating the inequality of the country's distribution of wealth (Frynas 2004).

One reason for the absence, in Equatorial Guinea, of the rentier mechanisms so typical for the Gulf monarchies might be that oil-production is estimated to last another 10-15 years (EIU 2005). Thus, the prospects of a rapidly approaching post-oil era might encourage predatory policies aiming to secure as big a share of the cake as possible, instead of building more wider political support that would be as short-lived as oil reserves anyhow.

Yet, maximizing oil-production at the cost of shortening its life was by no means an inevitable answer to the newly found oil wealth. More importantly, the reasons for the predatory policies of the Equatoguinean ruling class have to be sought in practices deeply entrenched in the political pre-oil structures. Long before the advent of oil wealth, Equatorial Guinea had been run like a private estate by President Obiang and his clan. By the time oil-production started, rent-seeking activities by the ruling class included the granting of concessions for unsustainable logging, the sale of state territory for large-scale dumping of toxic waste, the transformation of the country into a center for arms and drugs trafficking, and the collection of protection money from entrepreneurs operating in the country (Wood 2004, Roitman & Roso 2001). Revenues gathered from such illicit practices has enabled the President to strengthen his grip on power by distributing them through patronage networks, almost exclusively among the President's Esangui clan. Another crucial basis of the regime's power lies in the army and security apparatus, both recruiting their members to an overwhelming majority from the President's hometown (Africa Confidential 2003). Repression

[7] See the classic theorisation of rentier politics by Beblawi & Luciani (1987), based on the Middle Eastern oil states, as well as its adaptation by Ross (2001).

has therefore played a central role in regime stability; but this role has been constant since independence (Wood 2004).

Thus, oil wealth has not significantly changed the power structures in Equatorial Guinea. The ruling clan has so far successfully managed to restrict access to economic opportunities made possible by the thriving oil business, monopolizing the construction and hotel businesses, controlling access to employment in the oil sector by setting up obligatory 'job agencies', thereby removing political dissidents as well as seizing a large part of workers' salaries (United States Senate 2004: 99, Africa Confidential 2003). Far from demonstrating the 'head-spinning changes that accompany new oil wealth' and thereby confirming the resource-curse thesis, as Karl and Gary (2003) hold, Equatorial Guinean rentier politics have been marked by continuity since the pre-oil era. However, the function of the security apparatus has acquired a new quality under the impact of oil wealth as the expansion of security expenditure through oil money – both private and public – has not led to stronger recruitment among the President's clan, but has been used by the regime to buy the services of foreign security firms (EIU 2005, Frynas 2004). This important development has several implications: First, it illustrates the methodological problems associated with quantitative research on opaque polities such as Equatorial Guinea; payments to private security firms do not figure on the – hardly trustworthy – government budget. Second, and more importantly, it demonstrates the further privatization of the Equatoguinean state, with the extension of the security apparatus obviously not intended to strengthen the state's monopoly on the use of force, but exclusively reserved for the protection of the ruling clique and the rentier sector. Third, it points to the intensifying competition for access to rents among the ruling elite, as the loyalty of the President's kin is no longer taken for granted.

This latter point is linked to the second part of the puzzle which we are confronted with in the case of Equatorial Guinea; namely, the intriguing absence of violent conflict despite the increasing economic inequality produced by the management of oil wealth. Indeed, whereas social unrest has been practically absent in Equatorial Guinea, several failed coups d'etat[8] linked to members of the President's family indicate that tensions over oil rents are rising *amongst* the ruling elite (Wood 2004, Africa Confidential 2004). Oil wealth, in this context, has both strengthened the regime by permitting the expansion of the security apparatus, as well as increased the probability of political instability in the form of a takeover by a member of the ruling class. The latter scenario, however, is unlikely to lead to changes in the Equatoguinean power structure, or cause violent conflict on a larger scale. Ironically, wider distribution of oil wealth could have intensified and widened rent-seeking competition,

[8] The most recent coup attempt in March 2004 also involved British businessmen – including Sir Mark Thatcher – and South African mercenaries who were subsequently arrested in Zimbabwe.

thereby empowering opponents of the regime and heightening the probability of armed conflict. Hence, the case of Equatorial Guinea highlights both the significance of the pre-oil political structure for resource politics, as well as the durability of inequality in rentier states which – rather than containing political dissent through large-scale distribution of oil revenue – restrict access to rents in order to prevent the empowerment of potential rivals, thereby suppressing violent conflict.

Gabon: Rentierism and its External Allies

Contrary to Equatorial Guinea, oil rentierism has dominated the Gabonese political economy for the most part of its sovereign existence – representing the main share of export earnings and government revenue since the early 1970s – and oil-production is projected to decline during the next decade (EIU 2004). As would be expected for a country displaying, over a period of over thirty years, exceptionally high levels of oil revenue per capita, Gabon shows some features of large-scale distribution, reflected in its considerable public expenditure, an extensive public sector, as well as education and health expenditures which are substantially above the sub-Saharan African average (World Bank 1997). However, a closer look raises questions about the nature of Gabonese rentierism in terms of the categories this article proposes. Thus, the unequal distribution of wealth is comparable to that of neighboring Equatorial Guinea, and poverty remains widespread despite long-lasting oil wealth. High expenditures on education and wealth have not yielded significant results, and Gabon's health record is still comparable to that of poor sub-Saharan countries (World Bank 1997). Moreover – and contrary to what corruption indicators seem to suggest – predation of oil revenue persists at the highest state level. Investigations have estimated that, over the last decades, a fourth of state oil revenue has never reached the government budget (Gardinier 2003). Oil money fuels networks of patronage, providing political support for President Omar Bongo, who has ruled the country since 1967 (EIU 2004). We are thus confronted with an apparent co-existence of relatively large-scale distributive policies with patronage through personal networks, which raises the question as to which of both mechanisms played the major role in providing the basis for the Bongo regime's longevity. Furthermore, the combination of large-scale distributive policies with patronage networks does not explain the political stability Gabon has witnessed, but on the contrary can be understood to increase the probability of violent conflict, as both competition over oil revenues and social unrest caused by oil price volatility and diminishing production are likely to destabilize the power basis of President Bongo. How, then, can the virtual absence of violent conflict in Gabon be explained?

Government policies – particularly during the oil boom of the 1970s and early 1980s – clearly opted for large-scale distribution through the expansion of the public sector. While Gabon's population doubled in the first three decades of independence, "public employment multiplied nearly twelve times" (Gardinier 2003: 252). However, low oil prices since the mid-1980s led to long-term recession and increasing unemployment, and growing indebtedness due to mismanagement and inefficient infrastructure investment projects forced the regime to freeze wages and reduce employment in the public sector (Yates 1996: 123-136). The supposed power basis of the regime, the public employees, turned out to be a source of political instability, as pressures towards political reform – resulting in a superficial reinstallation of multi-party politics – as well as civil unrest and rioting originated from these groups (Yates 1996, Gardinier 2003).

In a context of macroeconomic vulnerability, two other factors proved more efficient in providing support for the regime than the cooptation of the middle class by large-scale distribution. First, the gross corruption of high officials permitted the establishment of patronage networks centered on President Bongo. Comprising a limited number of important families, linked together by intermarriage, this network also owes its stability to the careful ethnic balancing by which it is characterized, as well as the integration of powerful political opponents (Barnes 2003). Second, external political, economic and military support was and is crucial to the preservation of political stability. Indeed, the role played by foreign oil companies and governments, above all France, can hardly be overemphasized. For example, there can be little doubt that the regime would have been overthrown by civil unrest in 1990 were it not for French military intervention that restored order and supported the Bongo government in the crisis (Yates 2005). The corruption which since long characterized the Gabonese oil business was only possible with the compliance of foreign oil firms, mainly the Gabon branches of Elf and Shell, and "the knowledge and tacit approval of the French government" (Barnes 2003: 323). Paris also played an effective role in supplying the regime with loans – permitting Bongo to curb unpopular austerity measures – and demonstrated complicity with the widespread fraud regularly witnessed in Gabonese elections (Gardinier 2003, Barnes 2003). Again, the special relationship the Gabonese regime enjoys with France has considerable tradition – the French military intervention of 1990 was reminiscent of an earlier one in 1964, when France restored Bongo's predecessor to power after a coup d'etat – and can hardly be termed anything but neo-colonial. Only recently have growing US interests in African oil directed Bongo's attention towards the United States for support.

Thus, any discussion of the links between rentierism, power structures and conflict in Gabon has to consider the crucial role played by external actors. As the regime came under domestic pressure demanding the control of corruption, political reform and the preservation of

large-scale distribution of oil revenue, external support modified the social relations of rentierism to the advantage of the government. Both the outbreak of conflict and political reform were prevented by the assistance of foreign businesses and governments, and political stability prevailed – as did the Bongo regime's networks of patronage.

While the predominantly quantitative research on the link between resource wealth and violent conflict has till now focused on power struggles and the material feasibility of rebellion, the cases of Equatorial Guinea and Gabon imply that such research has neglected the important non-resource factors that shape rentier systems and determine their stability (see also Humphreys 2005). As the case of Equatorial Guinea shows, the pre-oil political structure has a decisive impact on the pattern of rent distribution. While the case of Gabon highlights the significance of international ties linking the rentier state with the global political economy. Moreover, the political dynamics evident in Gabon shed light on the causal mechanisms underlying the remarkable correlation of large-scale distribution systems with political stability. Obviously, the 'rentier effect' held responsible for authoritarianism and conflict in oil states – due to the independence of the ruling class from societal claims and rent-seeking competition (Ross 2001, 2003) – has been overestimated.[9] Gabon as well as the Gulf monarchies show that different forms of regime accountability do exist in rentier states with large-scale distribution systems, which open the way for societal pressure on the ruling class. Social change generated by such distribution, in particular through economic empowerment and higher education, contributes to the processes of political reform currently underway – to a varying degree – in the Gulf monarchies, which can be the source of political stability as well as conflict (Ehteshami 2003). However, as witnessed in Gabon and Equatorial Guinea, patronage networks, privatized security and foreign intervention can inhibit the formation or the force of societal pressures, while providing a relatively stable power base for the ruling class.

7. Conclusion

Resource curse theory claims that natural resource wealth is conducive to instability and violent conflict. In contrast, the evidence presented in this article suggests that, in fact, there is no 'paradox of plenty' with regard to the likelihood of instability and violence in oil-producing countries. High-income oil states are largely spared by violence, while countries with lower revenues per capita are more likely to suffer from considerable political instabil-

[9] The claim that oil wealth is significantly associated with authoritarianism has also been challenged in quantitative research by Herb (2003).

ity. States controlling large amounts of oil wealth increase regime stability by spending revenues on large-scale distributive policies and an effective security apparatus, thus reinforcing the state's monopoly on the use of force. On the other hand, oil money in low-income Petro-states is often distributed through patronage networks – as indicators for corruption and government effectiveness suggest – which appears to increase rent-seeking competition and, consequently, the probability of violent conflict. Contrary to what has been assumed in resource curse theory, repression of civil liberties in these countries is neither linked to oil abundance nor to conflict-proneness. Macro-qualitative and statistical relationships are strong and highly significant; however, as a few notable exceptions suggest, they do not apply to every case. This highlights the importance of context conditions not accounted for in the quantitative analysis.

Future research on resource politics has to take more into account the pre-oil context as well as international ties for understanding the dynamics of rentierism and conflict; factors that – given their difficult operationalization for quantitative research – might be best examined in carefully selected case studies.

Moreover, several other questions remain unanswered. Whether the results can be upheld for longer periods of investigation must be subjected to quantitative longitudinal studies. Both quantitative and qualitative studies can determine whether our results also apply for other resources such as diamonds (see Lujala et al. 2005, Snyder & Bhavnani 2005) – the case of Botswana points in this direction –, rare metals and others.

The misleading use of measures of dependence as proxy variables for abundance revealed in this study points to more narrow methodological issues: The selection of indicators should not be limited to readily available but less valid measures. Efforts to carefully select and collect valid indicators and compile a comprehensive data base for context conditions are still urgently needed. Income p.c. from oil exports is certainly a better indicator for abundance than dependence is, however, accurate data on what governments really earn and how precisely they use revenues will possibly paint a different picture. Data on the entire resource revenue management system should be a priority as regards the collection of data. Furthermore, military expenditure cannot stand as a proxy variable for repression of political freedoms and civil liberties. Instead – and combined with other figures for security expenditure – it can be understood as a measure for the state's monopoly on the use of force. However, such figures are rarely reliable, and the importance of private security firms paid for by privatized state assets in Equatorial Guinea demonstrates the methodological and conceptual difficulties involved.

Patronage networks are by nature difficult to quantify and operationalize – as the case study of Gabon has shown, corruption indicators are an imperfect measure. Estimates of bribes

and oil money channeled away from the government budget, as well as income inequality measures, would provide more reliable indicators – of course, such data is only available to a very limited extent.

Finally, the evidence presented raises questions about the relationship between large-scale distribution, the processes of social change it causes, and the resulting re-negotiations of rentier social relations. Despite macro-economic vulnerability, most oil-rich states appear to have managed these processes without resorting to violent conflict. In addition, the strong correlation of revenue quantity with governance quality implies that high oil revenues, over time, have the power to transform governance for the better; the question is whether the abovementioned rentier mechanisms cause such a development. On the other hand, one needs to analyze under which circumstances rent-seeking competition within the context of patronage networks leads to either violent conflict or durable relations of inequality. Thus, the analysis of resource wealth's more ambivalent consequences promises fruitful insights extending beyond admonitions of the resource curse.

Appendix 1: Conflict and resource specific indicators

	Oil exports to total exports	Oil exports to GDP	Oil exports p.c.	Violent conflict	Political stability
	(percent)	(percent)	(US$)	(World Bank)	(-2.5 to +2.5)
Algeria	96.8	32.4	579	28	-1.62
Angola	91.8	70.9	579	30	-1.54
Argentina (1)	17	4.3	116	0	-0.64
Azerbaijan	88.8	33.6	250	9	-1.13
Bahrain (2)	68.3	46.8	5,640	0	0.42
Brunei (3)	88	76.3	9,777	0	1.05
Cameroon	51.4	7.96	57	1	-0.46
Chad (4)	47.4	8.5	26	12	-1.54
Colombia	27.4	4	275	31	-1.95
Congo, Dem. Rep (5)	22.8	2.7	4	15	-2.35
Congo, Republic	87.6	63.8	587	9	-1.63
Côte d'Ivoire	11	3.8	27	0	-2
Ecuador	41	8.4	158	1	-0.68
Egypt (6)	37.2	1.7	22	7	-0.49
Equatorial Guinea	96.3	93.3	5,608	0	0.24
Gabon	80.3	41.5	1,644	0	0.25
Indonesia (7)	24	8	64	17	-1.45
Iran	81.3	21.2	337	14	-0.67
Iraq	...	...	...	24	-1.76
Kazakhstan	55.2	21	332	0	0.38
Kuwait (8)	91.6	40	6,481	0	0.25
Libya	96.7	60	2,625	0	-0.34
Mexico (9)	11.3	2.9	181	1	0.25
Nigeria	95.8	38.9	140	0	-1.56
Oman (10)	77	42.4	3,071	0	1.05
Qatar (11)	83.2	46.3	1,4790	0	0.82
Russia	53.5	15.6	374	14	-0.52
Saudi Arabia (12)	88.1	38.5	2,715	0	-0.12
Sudan	77.5	11.2	46	34	-2.08
Syria (13)	72	21.6	258	0	-0.2
Trinidad & Tobago	59.6	24.2	1,785	1	0.01
Turkmenistan (14)	81	26.4	423	0	-0.19
U.A.E. (15)	43.9	30.6	7,506	0	0.93
Uzbekistan	...	...	...	1	-1.02
Venezuela	85.5	21.9	831	1	-1.17
Vietnam	20.8	9.2	39	0	0.48
Yemen	87.4	31.3	178	3	-1.4
Thresholds for macro-qualitative comparison*	40.0	20.0	1,000	1	0

* Authors' cut-off points, except "political stability" (source median); Economic indicators: 2002 data unless marked otherwise. Conflict data comprises the period between 1990 and 2002.

Note: (1) UNCTAD handbook of statistics; (2) Bahrain Monetary Agency, Economic Indicators December 2004; (3) HSBC Business Profile Brunei, 4th quarter 2004; (4) 2003 data; (5) 2001 data; (6) Egyptian ministry of foreign trade and industry, Monthly Economic Digest May 2005; (7) UNCTAD handbook of statistics; (8) OPEC Annual Statistical Bulletin 2003, Central Bank of Kuwait Quarterly Statistical Bulletin, March 2005; (9) Banco de Mexico

Foreign Trade Report, January 2005; (10) Central Bank of Oman Quarterly Statistical Bulletin, December 2004; (11) Qatar Central Bank Quarterly Statistical Bulletin, March 2005; (12) OPEC Annual Statistical Bulletin 2003; (13) UNCTAD handbook of statistics; (14) UNCTAD handbook of statistics; (15): Central Bank of the U.A.E. Statistical Bulletin, July-September 2004.
Sources: Economic data: IMF Country Reports unless marked otherwise; Conflict Data: World Bank Armed Conflict Dataset 1946-2001, www.worldbank.org; Intensity of conflict (1 to 3) multiplied with number of conflict years for each conflict in a country between 1990 and 2002; Political Stability: World Bank Governance Indicators 2002, www.worldbank.org.

Appendix 2: Non-resource specific context conditions indicators

		Repression		Security	Large-Scale Distribution			Patronage	
	Pop.	**Freedom House Index**	**Voice & Account-ability**	**Military exp.**	**Health exp.**	**Total exp.**	**HDI**	**Cont. of Corr.**	**Govt. eff.**
	(mill.)	(1 to 7)	(-2.5 to +2.5)	(US$ p.c.)	(US$ p.c.)	(US$ p.c.)		(-2.5 to +2.5)	(-2.5 to +2.5)
Algeria	31.3	5.5	-0.96	66	55	638	0.704	-0.62	-0.6
Angola	13.2	5.5	-1.4	91	20	407	0.381	-1.53	-1.2
Argentina (1)	38	3	0.23	113	...	475	0.853	-0.78	-0.47
Azerbaijan	8.3	5.5	-0.87	15	...	239	0.746	-0.84	-0.9
Bahrain (2)	0.3	5	-0.74	1,560	353	1143	0.843	0.9	0.81
Brunei (3)	0.3	5.5	-0.82	1,099	302	6720	0.867	0.61	0.9
Cameroon	15.7	6	-1.1	8	7	116	0.501	-1.19	-0.59
Chad (4)	8.3	5.5	-0.95	8	4	48	0.379	-0.82	-0.68
Colombia	43.5	4	-0.55	76	69	398	0.773	-0.82	-0.4
Congo, Dem. Rep. (5)	51.2	6	-1.89	5	...	11	0.365	-1.81	-1.59
Congo, Republic	3.6	5	-1.1	23	12	385	0.494	-1.23	-1.33
Côte d'Ivoire	16.4	6	-1.25	8	29	119	0.399	-1.24	-0.89
Ecuador	12.8	3	-0.06	56	32	362	0.753	-0.65	-0.94
Egypt (6)	70.5	6	-0.88	57	29	345	0.653	0.05	-0.29
Equatorial Guinea	0.5	6.5	-1.44	60	47	611	0.703	-1.22	-1.42
Gabon	1.3	4.5	-0.42	63	58	1189	0.648	-0.26	-0.42
Indonesia (7)	217.1	3.5	-0.49	5	4	...	0.692	-0.89	-0.55
Iran	68.1	6	-1.04	64	48	484	0.732	-0.57	-0.46
Iraq	24.5	7	-2.12	53	...	...	...	-1.65	-1.69
Kazakhstan	15.5	5.5	-1.14	16	29	339	0.766	-0.92	-0.82
Kuwait	2.4	4.5	-0.29	1,638	562	2692	0.838	1.01	0.15
Libya	5.4	7	-1.7	464	103	1436	0.794	-0.79	-0.9
Mexico	102	2	0.36	39	168	1473	0.802	-0.21	0.21
Nigeria	120.9	4.5	-0.7	3	3	160	0.466	-1.11	-1.11
Oman	2.8	5.5	-0.55	892	197	2741	0.77	1	0.67
Qatar	0.6	6	-0.52	1,205	619	8408	0.833	0.92	0.75
Russia	144.1	5	-0.44	96	79	890	0.795	-0.72	-0.4
Saudi-Arabia	23.5	6.5	-1.4	784	296	2252	0.768	0.51	-0.08
Syria	17.4	7	-1.56	53	28	...	0.71	-0.28	-0.58
Trinidad & Tobago	1.3	3	0.56	69	115	1778	0.801	-0.04	0.5
Turkmenistan	4.8	7	-1.85	19	33	...	0.752	-1.21	-1.5
U.A.E.	2.9	5.5	-0.47	907	541	8134	0.824	1.17	0.83
Uzbekistan	25.7	6.5	-1.58	8	12	...	0.709	-1.03	-1.04
Venezuela	25.2	3.5	-0.41	37	188	...	0.778	-0.94	-1.13
Vietnam	80.3	6.5	-1.36	…	6	106	0.691	-0.67	-0.29
Yemen	19.3	5.5	-0.88	178	8	152	0.482	-0.7	-0.84
Thresholds*	3	-	0	58.5	47	479.5	0.739	0	0

Note: 2002 data unless marked otherwise; * Sample median except population size (authors' cut-off point) and "Voice and Accountability", "Control of Corruption" and "Government Effectiveness" (source median).
(1) UNCTAD handbook of statistics; (2) Bahrain Monetary Agency, Economic Indicators December 2004; (3) HSBC Business Profile Brunei, 4th quarter 2004; (4) 2003 data; (5) 2001 data; (6) Egyptian ministry of foreign trade

and industry, Monthly Economic Digest May 2005; (7) UNCTAD handbook of statistics; (8) OPEC Annual Statistical Bulletin 2003, Central Bank of Kuwait Quarterly Statistical Bulletin, March 2005; (9) Banco de Mexico Foreign Trade Report, January 2005; (10) Central Bank of Oman Quarterly Statistical Bulletin, December 2004; (11) Qatar Central Bank Quarterly Statistical Bulletin, March 2005; (12) OPEC Annual Statistical Bulletin 2003; (13) UNCTAD handbook of statistics; (14) UNCTAD handbook of statistics; (15) Central Bank of the U.A.E. Statistical Bulletin, July-September 2004.
Sources: Economic data: IMF Country Reports unless marked otherwise; "Voice and Accountability", "Control of Corruption" and "Government Effectiveness": World Bank Governance Indicators 2002, www.worldbank.org; Population, Health Expenditure and HDI: IMF Country Reports and UNDP Human Development Report 2004, www.undp.org; Military Expenditure: CIA World Factbook 2003 and Human Development Report 2004; Freedom House Index: www.freedomhouse.org.

Appendix 3: Matrix of correlations

	Dependent Variables		Independent Variables												
	Pol. Stab.	Conflict World Bank	Pop. Size	Pop. Size (tr)	Oil income p.c.	Oil % GDP	Oil % exp.	V & A	FH 02	Mil. exp. p.c.	Health exp. p.c.	Govt. exp. p.c.	HDI 2002	Govt. eff.	Cont. corr..
Pol. stability	1														
Conflicts (WB)	-.66***	1													
Conflict (WB/tr)	-.68***	-.74**													
Pop. size	-.25	.24	1												
Pop. size (threshold)	-.69***	.37**	.40**	1											
Oil income p.c.	.62***	-.32*	-.36**	-.76***	1										
Oil as % of GDP	.33**	-.15	-.42**	-.52**	.54***	1									
Oil as % of exports	.13	-.01	-.41**	-.26	.32*	.76***	1								
Voice & accountability	.32*	-.27	.17	-.35**	.13	-.20	-.27	1							
Freedom House	-.02	.09	-.29*	.10	.13	.27	.37**	-.89***	1						
Mil. exp. p.c.	.62***	-.33*	-32*	-.70***	.80***	.40**	.27	.18	.06	1					
Health exp. p.c.	.60***	-.31*	-.29	-.68***	.86***	.27	.17	.34*	-.07	.89***	1				
Government exp. p.c.	.64***	-.31*	-.30	-.66***	.89***	.39*	.17	.24	.05	.68***	.85***	1			
Human Development	.69***	-.36**	-.05	-.42***	.46***	.12	.07	.45**	-.24	.48***	.58***	.50***	1		
Govt. eff.	.72***	-.34**	-.08	-.67***	.68***	.07	-.09	.58***	-.26	.72***	.73***	.73***	.59***	1	
Cont. corr.	.75***	-.41**	-.21	-.71***	.69***	.19	.14	.46***	-.12	.83***	.84***	.74***	.62***	.92***	
Ethnic fragm.	-.27*	-.20	-.07	-.05	.03	.00	.03	-.00	-.13	-.05	-.05	-.02	-.55***	-.11	-.18

* Significant at the 0.1 level; ** significant at the 0.05 level; *** significant at the 0.01 level; rounded.

Bibliography

Africa Confidential (2003): Equatorial Guinea: Oiling the Palm Trees, in: Africa Confidential, Vol. 44, No. 3, pp. 6-7.

----- (2004): Equatorial Guinea: All in the Family, in: Africa Confidential, Vol. 45, No. 3, pp. 1-3.

Alesina, Alberto; Devleeschauwer, Arnaud; Easterly, William; Kurlat, Sergio; Wacziarg, Romain (2003): Fractionalization, in: Journal of Economic Growth, Vol. 8, No. 2, pp. 155-194.

Bannon, Ian; Collier, Paul (eds.) (2003): Natural Resources and Violent Conflict. Options and Actions. Washington, DC: World Bank.

Barnes, James F. (2003): The Bongo Phenomenon: Power in Gabon, in: Reed, Michael C.; Barnes, James F. (eds.), Culture, Ecology, and Politics in Gabon's Rainforest, Lewiston, NY: Edwin Mellen Press.

Basedau, Matthias (2005): Resource Politics in sub-Saharan Africa beyond the Resource Curse: Towards a Future Research Agenda, in: Basedau, Matthias; Mehler, Andreas (eds.), Resource Politics in sub-Saharan Africa, Hamburg African Studies Vol. 14, Hamburg: Institute of African Affairs, pp. 325-348.

Beblawi, Hazem; Luciani, Giacomo (1987): The Rentier State in the Arab World, in: Beblawi, Hazem; Luciani, Giacomo (eds.), The Rentier State, London: Croom Helm.

Boschini, Anne D.; Petterson, Jan; Roine, Jesper (2004): Resource Curse or not. A Question of Appropriability. Stockholm: Stockholm University, Department of Economy, mimeo.

Chabal, Patrick; Daloz, Jean-Pascal (1999): Africa Works: Disorder as Political Instrument. Oxford: James Currey.

Collier, Paul; Hoeffler, Anke (2001): Greed and Grievance in Civil War. Washington, DC: World Bank.

----- (2005): Resource Rents, Governance, and Conflict, in: Journal of Conflict Resolution, 49 (4), pp. 625-633.

Collier, Paul; Elliott, V. L.; Hegre, Håvard; Hoeffler, Anke; Reynal-Querol, Marta; Sambanis, Nicholas (2003): Breaking the Conflict Trap. Civil War and Development Policy. World Bank Policy Research Report, London and Washington: Oxford University Press and World Bank.

Cramer, Christopher (2003): Does Inequality Cause Conflict?, in: Journal of International Development, 15 (4), pp. 397-412.

De Soysa, Indra (2002): Paradise is a Bazaar? Greed, Creed and Grievance in Civil War 1989-1999, in: Journal of Peace Research, 39 (4), pp. 395-416.

Economist Intelligence Unit (2004): Country Profile Gabon and Equatorial Guinea 2004. London: EIU.

----- (2005): Country Report Equatorial Guinea February 2005. London: EIU.

Ehteshami, Anoushiravan (2003): The Politics of Participation in the Oil Monarchies, in: Najem, Tom Pierre; Hetherington, Martin (eds.), Good Governance in the Middle East Oil Monarchies, London: RoutledgeCurzon, pp. 60-84.

Fearon, James D. (2005): Primary Commodities and Civil War, in: Journal of Conflict Resolution, 49 (4), pp. 483-507.

Frynas, Jedrzej George (2004): The Oil Boom in Equatorial Guinea, in: African Affairs, 103 (413), pp. 527-546.

Gardinier, David E. (2003): The Petroleum-Dominated Economy, in: Reed, Michael C.; Barnes, James F. (eds.), Culture, Ecology, and Politics in Gabon`s Rainforest, Lewiston, NY: Edwin Mellen Press.

Global Witness (2004): Time For Transparency: Coming Clean on Oil, Mining and Gas Revenues, in: www.globalwitness.org/reports/download.php/00102.pdf (March 2004).

Herb, Michael (2003): No Representation without Taxation? Rents, Development and Democracy, in: http://www2.gsu.edu/~polmfh/herb_rentier_state.pdf (December 2003).

Humphreys, Macartan (2005): Natural Resources, Conflict and Conflict Resolution, in: Journal of Conflict Resolution, 49 (4), pp. 508-537.

Karl, Terry Lynn (1997): The Paradox of Plenty. Oil Booms and Petro-States. Berkeley: University of California Press.

Karl, Terry Lynn; Gary, Ian (2003): Bottom of the Barrel: Africa's Oil Boom and the Poor. Catholic Relief Services, in: www.crs.org/get_involved/advocacy/policy_and_strategic_issues/oil_report.cfm.

Le Billon, Philippe (2001): The Political Ecology of War. Natural Resources and Armed Conflict, in: Political Geography, 20 (5), pp. 561-584.

Lujala, Päivi; Gleditsch, Nils Setter; Gilmore, Elisabeth (2005): A Diamond Curse? Civil War and a Lootable Resource, in: Journal of Conflict Resolution, 49 (4), pp. 538-562.

Myers, Keith (2005): Petroleum, Poverty and Security, in: Africa Programme, AFP BP 05/01 (June 2005).

Reno, William (2000): Shadow states and the political economy of civil wars, in: Berdal, Mats; Malone, David M. (eds.), Greed and Grievance: Economic Agendas in Civil Wars, Boulder: Lynne Rienner, pp. 43-47.

Roitman, Janet; Roso, Gérard (2001): Guinée-Équatoriale: Être "Off-Shore" Pour Rester "National", in: Politique Africaine, 81 (March), pp. 121-142.

Ron, James (2005): Paradigm in Distress? Primary Commodities and Civil War, in: Journal of Conflict Resolution, 49 (4), pp. 443-450.

Ross, Michael L. (2001): Does Oil Hinder Democracy?, in: World Politics, 53 (April), pp. 325-361.

----- (2003): The Natural Resource Curse: How Wealth Can Make You Poor, in: Bannon, Ian; Collier, Paul (eds.), Natural Resources and Violent Conflict. Options and Actions, Washington, DC: World Bank, pp. 17-42.

----- (2004): What Do We Know about Natural Resources and Civil War?, in: Journal of Peace Research, 41 (3), pp. 337-356.

Smith, Benjamin (2004): Oil Wealth and Regime Survival in the Developing World, 1960-1999, in: American Journal of Political Science, 48 (2), pp. 232-246.

Snyder, Richard; Bhavnani, Ravi (2005): Diamonds, Blood, and Taxes. A Revenue-Centered Framework for Explaining Political Order, in: Journal of Conflict Resolution, 49 (4), pp. 563-597.

United States Senate (2004): Money Laundering and Foreign Corruption: Enforcement and Effectiveness of the Patriot Act. Case Study Involving Riggs Bank, Permanent Subcommittee on Investigations, Committee on Governmental Affairs, in: http://hsgac.senate.gov/_files/ACF5F8.pdf (July 15, 2004).

Wood, Geoffrey (2004): Business and Politics in a Criminal State: The Case of Equatorial Guinea, in: African Affairs, 103 (413), pp. 547-567.

World Bank (1997): Republic of Gabon: Poverty in a Rent-Based Economy. Volume I (1997), Washington, DC: World Bank.

Yates, Douglas A. (1996): The Rentier State in Africa. Oil Rent Dependency and Neocolonialism in the Republic of Gabon. Asmara: Africa World Press.

----- (2005): Neo-"Petro-monialism" and the Rentier State in Gabon, in: Basedau, Matthias; Mehler, Andreas (eds.), Resource Politics in sub-Saharan Africa. Hamburg African Studies Vol. 14, Hamburg: Institute of African Affairs.

GIGA Working Papers
German Institute of Global and Area Studies
Leibniz-Institut für Globale und Regionale Studien

Recent issues:

No 20 Esther K. Ishengoma and Robert Kappel: Economic Growth and Poverty: Does Formalisation of Informal Enterprises Matter?; April 2006

No 19 Anika Oettler: Guatemala in the 1980s: A Genocide Turned into Ethnocide?; March 2006

No 18 Heike Holbig: Ideological Reform and Political Legitimacy in China: Challenges in the Post-Jiang Era; March 2006

No 17 Howard Loewen: Towards a Dynamic Model of the Interplay Between International Institutions; February 2006

No 16 Gero Erdmann and Ulf Engel: Neopatrimonialism Revisited – Beyond a Catch-All Concept; February 2006

No 15 Thomas Kern: Modernisierung und Demokratisierung: Das Erklärungspotenzial neuer differenzierungstheoretischer Ansätze am Fallbeispiel Südkoreas [*Modernization and Democratization: The Explanatory Potential of New Differentiation Theoretical Approaches on the Case of South Korea*]; January 2006

No 14 Karsten Giese: Challenging Party Hegemony: Identity Work in China's Emerging *Virreal* Places; January 2006

No 13 Daniel Flemes: Creating a Regional Security Community in Southern Latin America: The Institutionalisation of the Regional Defence and Security Policies; December 2005

No 12 Patrick Köllner and Matthias Basedau: Factionalism in Political Parties: An Analytical Framework for Comparative Studies; December 2005

No 11 Detlef Nolte and Francisco Sánchez: Representing Different Constituencies: Electoral Rules in Bicameral Systems in Latin America and Their Impact on Political Representation; November 2005

No 10 Joachim Betz: Die Institutionalisierung von Parteien und die Konsolidierung des Parteiensystems in Indien. Kriterien, Befund und Ursachen dauerhafter Defizite [*The Institutionalisation of Parties and the Consolidation of the Party System in India. Criteria, State and Causes of Persistent Defects*]; October 2005

No 9 Dirk Nabers: Culture and Collective Action – Japan, Germany and the United States after September 11, 2001; September 2005

No 8 Patrick Köllner: The LDP at 50: The Rise, Power Resources, and Perspectives of Japan's Dominant Party; September 2005

No 7 Wolfgang Hein and Lars Kohlmorgen: Global Health Governance: Conflicts on Global Social Rights; August 2005

No 6 Patrick Köllner: Formale und informelle Politik aus institutioneller Perspektive: Ein Analyseansatz für die vergleichenden Area Studies [*Formal and Informal Politics from an Institutional Perspective: An Analytical Approach for Comparative Area Studies*]; August 2005

All GIGA Working Papers are available as pdf files free of charge at www.giga-hamburg.de/workingpapers. For any requests please contact: workingpapers@giga-hamburg.de.
Editor of the Working Paper Series: Bert Hoffmann.

GIGA German Institute of Global and Area Studies / Leibniz-Institut für Globale und Regionale Studien
Neuer Jungfernstieg 21 • 20354 Hamburg • Germany
e-mail: info@giga-hamburg.de • website: www.giga-hamburg.de