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## **On the mobilization of domestic resources in oil countries**

The role of historical factors

Luc Désiré Omgba\*

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**Abstract:** This paper investigates the sources of variability in the mobilization of domestic tax revenue in oil-producing countries. It argues that the type of natural resources exploited during colonial rule can affect the contemporary levels of domestic tax revenue in oil countries. We test this conjecture by regressing non-oil tax revenue on a proxy of extractive capacity, which is the distance between the date of the beginning of oil production and the date of a country's political independence. The results show that this proxy of extractive capacity positively affects the non-oil tax revenue of oil-producing countries, and these results are robust to various sensitivity checks. The persistence of the pre-existing extractive institutions as well as their subsequent privileged position explain why the elites have no interest in changing this scenario.

**Keywords:** tax revenues, oil resources, economic history

**JEL classification:** H20, Q32, N5

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\* EconomiX-CNRS, University of Paris Ouest, France, [lucdesire.omgba@u-paris10.fr](mailto:lucdesire.omgba@u-paris10.fr).

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Katajanokanlaituri 6 B, 00160 Helsinki, Finland

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## 1 Introduction

It is often demonstrated that oil countries mobilize less domestic tax revenue (i.e. revenue that is not related to the oil industry) than non-oil-producing countries (see Bornhorst et al. 2009). One argument for this negative association between oil and non-oil tax revenues is grounded in the theory of the rentier state, which suggests that oil revenue tends to reduce dependence on taxes not related to oil and may also replace the pre-existing tax system. Thus, governments of oil-producing countries are less inclined to comply with their obligations of accountability and transparency toward their citizens, which are the usual counterparts of governments' right to tax their population (Beblawi and Luciani 1987; Moore 2007; Ross 2001).

While acknowledging the interest in studying the aforementioned relationship between oil and non-oil tax revenues, it seems to us that the key factor is not the average performance of a group of oil-exporting states per se, but rather the question of why particular countries succeed in mobilizing more domestic tax revenue while others fail. More specifically, why does a country such as Cameroon mobilize non-oil/domestic tax revenue equivalent to 12 per cent of GDP (in 2010), while a country such as Angola mobilizes domestic/non-oil tax revenue equivalent to only 7 per cent of GDP (Prichard et al. (2014)? Clear and precise investigations on this issue are needed to improve our understanding of the variety of situations of extractive capacities in oil countries, and to ultimately select adequate policy options for those countries. This paper attempts to tackle these issues.

We propose an alternative approach built upon the work of Omgba (2014), which suggests that some oil-exporting countries have failed in the mobilization of domestic tax revenue partly because they present poor records of state building. In particular, the extractive capacity of the government tends to be weak when oil was produced during colonial rule. The type of natural resources exploited in the colonial period influences the nature of governmental institutions created by the settlers, which were maintained after independence because they benefited the national political elites in these countries.

Indeed, given the relatively easy access to oil revenue from the oil-exporting sector and their important flow, the postcolonial leaders of former oil colonies may choose to avoid unpopular domestic decisions that would involve taxing their citizens, as is the case in the former plantation colonies (Karl 1997). In combination with the lack of development of other sectors during colonial rule, and the lack of a sufficiently large class of entrepreneurs, this reluctance has dissuaded leaders from steering oil resources into other significant investments that will diversify the economy while at the same time enlarging the tax base. Consequently, it may be argued that oil-exporting countries that began producing oil under colonial rule will, on average, mobilize less domestic tax revenue than oil-exporting countries that began to exploit those resources long after achieving political independence.

The remainder of the paper is organized as follows. Section 2 reviews the literature on the mobilization of non-oil tax revenue in oil-producing countries and provides theoretical arguments that help to interpret the empirical results presented in Section 3. Section 4 concludes and draws policy implications from the results.

## 2 Literature review and theoretical arguments

A focal point of the resource curse literature, which links wealth of natural resources with weak development outcomes, is the rentier state theory (see Ross 2001).<sup>1</sup> Rentier state theory asserts that oil revenue tends to reduce dependence on taxes not related to oil and may also replace the pre-existing tax system. Thus, governments of oil-producing countries are less inclined to comply with their obligations of accountability and transparency toward their citizens, which are the usual counterparts of governments' right to tax their population. Therefore, oil countries tend to mobilize less domestic tax revenue than other countries. This situation is well documented in the literature, which usually finds a negative association between oil resources and non-oil tax revenues (see, for example, Bornhorst et al. 2009).

Our approach herein follows the arguments of rentier theory on the weak performance of oil-exporting countries in mobilizing domestic tax revenue. However, the main contribution of this paper with respect to the previous studies is that it does not treat oil-exporting countries as a homogeneous group, since certain countries mobilize more domestic tax revenue than others. Moreover, the history of extractive capacity and its expected result typically differ among oil countries. This paper argues that the type of natural resources exploited during colonial rule can be a source of variability in the modern institutional and economic performance of oil countries. In particular, the capacity to extract domestic tax revenue tends to be weak when oil was produced during colonial rule.

Stated in this way, our argument can be linked to two major contributions to the neo-institutional literature. The first contribution is that of Engerman and Sokoloff (1997), who consider factor endowments to have had a great influence on shaping the institutions that accounted for the take-off of North America throughout the 19th century relative to the decline of Latin America. Indeed, according to the authors, in Latin America the historical exploitation of tropical cash crops in large areas owned by small groups of people resulted in the formation of groups that were more prone to rent-seeking behaviour. In contrast, grain harvesting in North America, in a system of small family farms, led to the emergence of a large middle class that promoted progress and the development of inclusive institutions. The second major contribution is that of Acemoglu et al. (2001), who analyse the impact of European settlements on former colonies' development path. These authors distinguish between two types of colony—settlement and extractive colonies—linked to the disparate nature of colonies. Settlement colonies are states where many Europeans settled and were thus more prone to replicate European institutions, with a strong emphasis on private property. In contrast, extractive colonies are states that were not suitable for heavy settlement, in which Europeans were content with exploitation and transferred extractive institutions in order to better capture rents from natural resources.

In this paper, however, we amend these two analyses by developing the following argument: economic and institutional disparities may arise under colonial rule as a result of the type of resource exploited, regardless the nature of the colony. Within this framework, institutions and economic structure are weakest when resources were extracted during colonial rule. More specifically, among modern oil countries, we argue that those that began the exploitation of oil during colonial rule will present, on average, low performance in the mobilization of non-oil revenue in comparison with those that started to exploit oil long after gaining political independence.

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<sup>1</sup> See Van der Ploeg (2011) for an extensive review.

The first argument that could support this proposition is that oil countries that began the exploitation of oil long after independence present a more diversified economic structure than oil countries that began oil exploitation during the colonial period (Omgba 2014). Indeed, the oil sector is an enclave industry that is capital-intensive. This makes it difficult to find specific elements of the oil industry that can be redeployed in the production of other goods in order to extend the product space of the country (Hausmann et al. 2010; Hidalgo et al. 2007), and thus to have a broader tax base non-related to oil activities.

Lack of diversification might also influence the orientation of oil revenue and might create a vicious circle that hinders the development of other activities and the enlargement of the tax base. Indeed, Dunning (2005) points out that lack of diversification illustrates a lack of development of the non-resource sector prior the advent of the oil industry. This lack of development of the non-resource sector implies a dearth of entrepreneurs able to influence political elites in the orientation of oil revenue towards industrial development. If political elites have no incentive for a diversification policy that can extend this production base, and thus enlarge the tax base, they might instead use oil revenue for political patronage, which may bring them political dividends.

Another argument supporting this paper's proposition relates to the fact that the type of natural resources exploited during colonial rule can differently affect the development of administrative capacity in extracting domestic revenue. Indeed, Karl (1997) supports that the contention that the source of a country's revenues—i.e. petroleum activities rather than agricultural production—has an impact on the development of state capacity. The collection of taxes is one of the administrative functions of the state, which requires developing capabilities in order to cover all territories and even the most remote corners of the country (Prichard and Leonard 2010). Such deployments were necessary in plantation colonies, unlike colonies that produced oil. As Kuété (2008) explains, plantations were set up over vast areas, and they required regional planning and the expansion of the administrative functions of the colonial states.<sup>2</sup> Such an expansion of administrative capacity, which prevented the development of a rentier state, was absent in oil colonies (Karl 1997), which presented poor records of state building. Consequently, it may be predicted that oil countries that began the production of oil under colonial rule will, on average, extract less domestic (non-oil) revenue than oil countries that began to exploit those resources a long time after gaining political independence.

### **3 Empirical analysis**

#### **3.1 Data and methodology**

The purpose of this study is to compare the performance of oil countries with regard to domestic revenue mobilization; therefore, the sample covers only oil countries. This sample includes 31 oil countries, including 28 emerging and developing countries that export oil,<sup>3</sup> over the period 2001–2010. It is comparable to the samples used in similar studies in the literature (see, for example, Bornhorst et al. 2009), and its composition is dictated not only by the availability of data but also by the fact that oil wealth is concentrated among a limited set of countries in the world (see BP 2014).

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<sup>2</sup> Ironically, because these developments in plantation colonies did not protect farmers, they gave farmers a reason for organizing into unions, from which more democratic institutions emerged than in oil colonies (Omgba 2015).

<sup>3</sup> See Appendix for the list of countries.

We investigate the hypothesis that the extraction of domestic (non-oil) revenue in oil countries is positively associated with the distance separating the date of the beginning of oil production and the date of a country's independence, which is our measure of the extractive capacity of the state. To test this hypothesis, we consider the following econometric model:

$$NOR_{it} = \alpha_i + \beta_1 Cap_i + X'_{it}\gamma + \mu_t + \varepsilon_{it}, \quad (1)$$

where  $NOR$  is domestic (non-oil) tax revenue as a percentage of GDP. This variable is drawn from the recent database of government revenues, namely the ICTD Government Revenue Database (Prichard et al. 2014).  $Cap_i$  (hereafter *capacity*) is a measure of the extractive capacity of the oil state. This variable is defined as:

$$Cap = Toil - Ti, \quad (2)$$

where  $Toil$  is the date of the beginning of oil production, and  $Ti$  is the date of the country's independence. The dates of the beginning of resource production are drawn from the International Peace Research Institute of Oslo (PRIO). This institution provides a unique database listing the dates of the start of oil production for countries around the world. The dates of independence are drawn from the World Factbook (2014).

As mentioned above, we expect a positive effect of the variable of interest, capacity, on the mobilization of domestic (non-oil) revenue in oil countries. In other words, whether the exploitation of oil began before or after independence affects the process of developing extractive capacity.

$X_{it}$  is a vector of  $K$  variables of traditional covariates associated with domestic revenue mobilization, including economic, geographical, historical, and institutional variables. Our estimates should also account for common shocks ( $\mu_t$ );  $\varepsilon_{it}$  is a disturbance term. We will use the pooled OLS method on equation (1) in order to exploit cross-section and time series dimension. To address a potential concern over redundant correlated observations, standard errors will be clustered at the country level in all regressions.

## 3.2 Results

### *Basic evidence*

Column 1 of Table 1 exhibits a first regression of the effect of the variable of interest, capacity, on the mobilization of non-oil revenue in oil countries. In columns 2 and 3 we control for GDP per capita (WDI 2014) and the resource revenue variable from the ICTD GRD (Prichard et al. 2014). As mentioned above, standard errors are clustered at the country level in all regressions. The coefficient on the variable of interest remains significant and positive, regardless of the regression. This result suggests that the start of oil exploitation being before or after independence affects the mobilization of domestic (non-oil) revenue in oil countries.

Table 1: Basic evidence

	1	2	3
Variables	Non-oil revenue	Non-oil revenue	Non-oil revenue
Capacity	0.0107*** (3.473)	0.00953*** (3.088)	0.00820*** (3.485)
Resource revenue		-13.19 (-1.450)	-14.37** (-2.350)
Ln GDP per capita			-1.353 (-1.329)
Time dummy	yes	yes	yes
Constant	9.821*** (9.460)	10.24*** (8.201)	23.13** (2.482)
Observations	261	245	236
R-squared	0.090	0.131	0.197

Notes: Robust t-statistics in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: Author's estimates.

### *Geographical and historical factors*

We have mentioned that a poor history of state building might explain why the variable of interest, capacity, affects the mobilization of non-oil revenue in oil countries. However, one can reasonably argue that several other factors, including historical and geographical variables, may also contribute to a poor history of state building. Therefore, if those historical and geographical factors are accounted for, this could amend the previous conclusions. In Table 2, we take into account this potential concern by controlling for geographical and historical variables that could affect the development of the states in question. Thus, we control for *legal origin*, a dummy drawn from La Porta et al. (2008), which takes the value 1 when the legal origin is of French origin, and 0 otherwise. We also control for *latitude*, as in Rodrik et al. (2004), and European settlers in 1900, from Acemoglu et al. (2001).

Like the previous estimations (Table 1), the results of Table 2 confirm those previously obtained, namely that the variable of interest, capacity, as measured by the difference between the date of the beginning of oil production and the date of independence, positively affects the mobilization of non-oil revenue in oil-producing countries.

Table 2: Geographical and historical factors

Variables	1 Non-oil revenue	2 Non-oil revenue	3 Non-oil revenue	4 Non-oil revenue
Capacity	0.0107*** (3.473)	0.00871* (2.048)	0.0103*** (3.023)	0.00907*** (2.856)
Latitude		0.479 (0.101)	-7.422 (-1.066)	-3.901 (-0.446)
Legal origin		-1.297 (-0.370)	1.172 (0.491)	-0.107 (-0.0509)
European settlers 1900			0.126*** (3.150)	0.134*** (3.333)
Ln GDP per capita				-1.668 (-1.649)
Time dummy	yes	yes	yes	yes
Constant	9.821*** (9.460)	10.93*** (2.935)	8.540*** (3.117)	24.38** (2.545)
Observations	261	242	238	222
R-squared	0.090	0.092	0.403	0.501

Notes: Robust t-statistics in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: Author's estimates.

### *Before versus after independence*

This paper argues that the extractive capacity of the government tends to be weak when oil has been produced during colonial rule. To test this potential mechanism, we compare oil countries that started oil production before independence with those that started to produce oil after independence. In doing so, we create a dummy variable, *Before*, which takes the value 1 if the country began producing oil before independence and 0 otherwise. In column 1 of Table 3, as expected, the coefficient associated with the dummy is negative and significant, suggesting that having started to produce oil before or after independence could affect performance in terms of the mobilization of non-oil revenue. However, when all the usual controls are added to the regression (column 3), the significance of the coefficient associated with the dummy *Before* decreases. In contrast, the coefficient associated with the variable of interest, capacity, remains highly significant after adding the same control variables (column 4), suggesting that the time space between the date of the start of oil production and the date of independence is important for the relationship between a poor history of state building and performance in terms of non-oil revenue mobilization in oil countries. In particular, we can argue that the longer the period of oil production during colonial rule, the more likely the development of extractive institutions and the political elite's opposition to any reform that would go against its interests as resource holders. It can also be argued that a country that began oil production long after independence has spent more time developing other economic sectors and focusing its efforts on setting up a more efficient administrative system in order to extract the domestic revenue necessary to state functioning.

Table 3: Before/after independence



Variables	1 Non-oil revenue	2 Non-oil revenue	3 Non-oil revenue	4 Non-oil revenue
Before	-4.478** (-2.435)	-4.463** (-2.218)	-3.842* (-1.799)	
Resource revenue		-9.125 (-1.018)	-10.90* (-1.747)	-14.37** (-2.350)
Ln GDP per capita			-0.998 (-0.936)	-1.353 (-1.329)
Capacity				0.00820*** (3.485)
Time dummy	yes	yes	yes	yes
Constant	12.48*** (9.008)	12.73*** (8.715)	21.99** (2.291)	23.13** (2.482)
Observations	261	245	236	236
R-squared	0.178	0.216	0.248	0.197

Notes: Robust t-statistics in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: Author's estimates.

#### *Independence versus time spent producing oil*

The idea behind the previous results is the assumption that the time space between the date of the beginning of oil production and the date of political independence plays an important role in the development of extractive capacity in oil countries. However, it can reasonably be argued that what has the greatest effect on these results may be the date of the beginning of oil production. In other words, the number of years that the country has been producing oil since the first year of production might be the most relevant element. Countries that started producing oil a long time before others may have had more opportunity to enlarge their product basket and to set up administrative tools that would allow them to mobilize more non-oil revenue.

To account for this alternative explanation of our results we create a variable, *Duree*, which accounts for the time space between the date of the beginning of production and the date of the beginning of the estimations. Table 4 shows that this variable does not appear significant in most regressions, particularly when the control variables are added, suggesting that the effect of this variable on the mobilization of non-oil resources is not robust. Instead, the variable of interest, capacity, appears significant and positive in all regressions in which it is associated with the variable *Duree*, suggesting that the position of the date of the beginning of oil production in relation to date of the independence matters more among both variables. In particular, whether the exploitation of oil started before or after independence affects the mobilization of domestic (non-oil) revenue in oil countries.

Table 4: Time space versus independence

Variables	1 Non-oil revenue	2 Non-oil revenue	3 Non-oil revenue	4 Non-oil revenue
Duree	0.0430* (1.796)	0.0542* (1.740)	-0.00315 (-0.0977)	0.00773 (0.241)
Capacity	0.0118*** (4.187)	0.0106** (2.728)	0.0102*** (2.859)	0.00924*** (2.874)
Latitude		-1.572 (-0.284)	-7.434 (-1.077)	-3.881 (-0.438)
Legal origin		-0.400 (-0.125)	1.161 (0.482)	-0.114 (-0.0553)
European settlers 1900			0.128*** (2.982)	0.129*** (2.982)
Ln GDP per capita				-1.692* (-1.746)
Time dummy	yes	yes	yes	yes
Constant	6.694*** (3.063)	6.903* (1.718)	8.734** (2.673)	24.15** (2.490)
Observations	261	242	238	222
R-squared	0.159	0.176	0.403	0.502

Notes: Robust t-statistics in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: Author's estimates.

#### *Sample definition and alternative controls*

So far, the sample has included developed, emerging, and developing countries that produce oil. However, the most developed countries are the ones that have already achieved tremendous economic and institutional advances. Therefore, these countries (USA, Canada, and Australia) might appear as outliers in terms of the objective of the study, which is to contribute to explaining differences in outcomes among similar cases. To assess whether the presence of major industrialized, oil-producing countries can influence the results, we remove these countries (USA, Canada, and Australia) from the sample.

We also take advantage of the cross-section and the time series dimension of the data to evaluate whether alternative covariates might lead us to amend the conclusions of the study. Thus, we include the control *corruption* drawn from WGI (2014). The control corruption varies between -2.5 (corresponding to high corruption) and 2.5 (corresponding to low corruption). We also include another geographical variable, *tropics*, drawn from Rodrik et al. (2004). The results, shown in Table 5, do not invalidate those obtained in the preceding estimations. They are robust even when the major industrialized countries are removed from the estimates. The variable of interest,

capacity, positively affects the level of non-oil revenue in oil countries. In other words, having started the exploitation of oil before or after independence affects the mobilization of domestic (non-oil) revenue in oil countries.

Table 5: Excluding developed countries, controlling for alternative covariates

Variables	1 Non-oil revenue	2 Non-oil revenue	3 Non-oil revenue
Capacity	0.0114*** (3.627)	0.00918** (2.612)	0.0106** (2.790)
Latitude		1.630 (0.146)	
Legal origin		-0.167 (-0.0674)	1.759 (0.664)
European settlers 1900		0.128*** (2.819)	
Ln GDP per capita		-1.972 (-1.701)	-3.485 (-1.538)
Resource revenue	-8.771 (-1.027)		-3.219 (-0.733)
Tropics			1.925 (0.483)
Corruption			3.886** (2.141)
Time dummy	yes	yes	yes
Constant	9.212*** (7.959)	26.27** (2.419)	39.61 (1.540)
Observations	216	203	163
R-squared	0.180	0.404	0.416

Notes: Robust t-statistics in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Source: Author's estimates.

## 4 Conclusion

While it is well known that oil countries mobilize less domestic (non-oil) revenue, it is less well known that there is substantial variance among oil countries in terms of the outcome of domestic revenue mobilization. This paper argues that a poor history of state building may be a reason for this variance. We have shown why oil countries that began the production of oil under colonial rule might exhibit the poorest record of state building. We tested this conjecture by regressing the level of non-oil revenue on the variable *capacity*, which measures the number of years between the beginning of oil production and the attainment of political independence in oil countries. We found that the greater the number of years, the higher the level of non-oil revenue in oil countries *ceteris paribus*.

This result helps to explain the factors behind tax performance in oil countries. In particular, countries that started the exploitation of oil in the pre-independence period inherited a more

resource-oriented economy, resulting in the formation of elites more prone to defend the rentier state. This picture has not fundamentally changed since political independence: indeed, political elites have not been inclined to develop institutions likely to stimulate economic diversification and enlarge the tax base, and they have an interest in avoiding unpopular domestic decisions that would involve taxing their citizens, since this could foster the emergence of a powerful opposition.

## References

- Acemoglu, D., S. Johnson, and J. Robinson (2001). 'The Colonial Origins of Comparative Development: An Empirical Investigation'. *American Economic Review*, 91(5): 1369–401.
- Beblawi, H., and G. Luciani (1987). *The Rentier State*. New York: Croom Helm.
- Bornhorst, F., S. Gupta, and J. Thornton (2009). 'Natural Resource Endowments and the Domestic Revenue Effort'. *European Journal of Political Economy*, 25(4): 439–46.
- BP (2014). 'Statistical Review of World Energy 2014'. Available at: <http://www.bp.com/statisticalreview> (accessed 8 December 2016).
- Dunning, T. (2005). 'Resource Dependence, Economic Performance, and Political Stability'. *Journal of Conflict Resolution*, 49(4): 451–82.
- Engerman, S., and K. Sokoloff (1997). 'Factor Endowments, Institutions, and Differential Paths of Growth Among New World Economies: A View from Economic Historians of the United States'. In S. Haber (ed.), *How Latin America Fell Behind*. Stanford University Press, pp. 260–304.
- Hausmann, R., Klinger, B., and J. Lopez-Calix (2010). 'Export Diversification in Algeria'. In J. Lopez-Calix, P. Walkenhorst, and N. Diop (eds), *Trade Competitiveness of the Middle East and North Africa*. Washington, DC: World Bank, pp. 63–102.
- Hidalgo, C.A., Klinger B., Barabasi, A.L., and R. Hausmann (2007). 'The Product Space Conditions the Development of Nations'. *Science*, 317(5837): 482–87.
- Karl, T. (1997). *The Paradox of Plenty: Oil Booms and Petro-States*. Berkeley: University of California Press.
- Kuété, M. (2008). 'Café, caféiculteurs et vie politique dans les hautes terres de l'Ouest-Cameroun'. *Les Cahiers d'Outre-Mer*, 243: 285–302.
- La Porta, R., F. Lopez-de-Silanes, and A. Shleifer (2008). 'The Economic Consequences of Legal Origins'. *Journal of Economic Literature*, 46(2): 285–332.
- Moore, M. (2007). 'How Does Taxation Affect the Quality of Governance'. IDS Working Paper 280. Brighton, UK.
- Ongba, L.D. (2014). 'Institutional Foundations of Export Diversification Patterns in Oil-producing Countries'. *Journal of Comparative Economics*, 42: 1052–64.
- Ongba, L.D. (2015). 'Why do Some Oil-producing Countries Succeed in Democracy while Others Fail?' *World Development*, 76: 180–89.
- Prichard, W., and D. Leonard (2010). 'Does Reliance on Tax Revenue Build State Capacity in Sub-Saharan Africa?' *International Review of Administrative Sciences*, 76(4): 653–75.
- Prichard, W., A. Cobham, and A. Goodall (2014). *The ICTD Government Revenue Dataset*. ICTD Working Paper 19. Brighton: International Centre for Tax and Development.

- Rodrik, D., A. Subramanian, and F. Trebbi (2004). 'Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development'. *Journal of Economic Growth*, 9(2): 131–65.
- Ross, M. (2001). 'Does Oil Hinder Democracy?' *World Politics*, 53: 325–61.
- Van der Ploeg, F. (2011). 'Natural Resources: Curse or Blessing?' *Journal of Economic Literature*, 49(2): 366–420.
- WDI (2014). *World Development Indicators*. Washington, DC: The World Bank.
- WGI (2014). *World Governance Indicators*. Washington, DC: The World Bank.
- World Factbook (2014). 'Information about the countries in the world'. CIA.

**Appendix: List of countries**

Algeria; Angola; Argentina; Australia; Brazil; Brunei; Cameroon; Canada; Chad; Colombia; Congo; Ecuador; Egypt; Gabon; Indonesia; Iran; Kazakhstan; Kuwait; Malaysia; Mexico; Peru; Qatar; Saudi Arabia; Syria; Thailand; Trinidad & Tobago; Tunisia; UAE; USA; Venezuela; Yemen.