TAXATION AND GOVERNMENT QUALITY:

The Size, the Shape, or just Europe 300 Years Ago?

RASMUS BROMS
ABSTRACT

Based on historical research, focusing mainly on early-modern Europe, it is assumed that taxation functions as a booster of state capacity and Quality of Government (QoG). The presence of this relationship for modern-day developing states is however heavily contested. This paper analyzes the relationship in a sub-Saharan context. By using new taxation data, which disaggregates resource income from other types of taxation (drawn from African Economic Outlook [2010]) we can with greater specificity dissect the different effects of different types of taxation. Through a multivariate regression analysis the paper shows that taxation, and in particular direct and indirect taxation, as a share of GDP seems to be associated with higher levels of QoG, although this relationship is at times weak. Furthermore, the relative dependence on direct and, to an extent indirect, taxation, measured as its share of the total tax base is shown to be more consistently coupled with better QoG. Thus, the paper concludes, more research on the importance of both size and shape of the tax base is warranted and needed.

Rasmus Broms
The Quality of Government Institute
Department of Political Science
University of Gothenburg
rasmus.broms@gu.se
Introduction

“I like to pay taxes, with them I buy civilization,” once said Oliver Wendell Holmes, Jr., a U.S Supreme Court judge who served during the first decades of the last century. While this certainly makes sense, finding such a quotation praising the phenomenon of taxation is not the simplest of tasks; not that there is a shortage of taxation-related sayings and bon mots, but the line above certainly sticks out in that it doesn’t describe it as oppressive, diabolical or just tedious. This, of course, has its natural reasons, both ideological and emotional. Still, whatever one thinks about this practice, the fact of the matter is that taxation has been a key element in our history, both as a driver of development, and a cause for conflict. Such ideas have been widely employed at least as partial explanations in accounting for the ‘Rise of the West’ in early-modern Europe, while such effects on today’s developing world are more unclear. This paper thus aims to test the applicability of the ideas regarding taxation in early-modern Europe in a modern-day developmental setting.

This inquiry will focus on the effects of taxation on Good Governance, or Quality of Government (QoG), and more precisely how different types of taxation might matter differently. The underlying assumption is twofold: a larger tax base will not only strengthen the state, but also make it more in touch with its citizenry; furthermore, taxes derived from a broad base, through direct (e.g. income taxes) and indirect (e.g. VAT) taxation is more technically demanding, and also more visible, forcing the state to extend both its administrative and its physical reach into all corners of its social and geographical territory, thus bolstering administrative capacity and legitimacy with regards to the citizenry. Thus, in terms of governance, who gets taxed and how revenue is collected may well be just as important as how much money a state can gather. In brief, the shape of taxation might matter as much as the size.

Through quantitative analysis, this paper will show that there is much that points to the fact that the bulk of the mechanisms present in the Europe-focused, historical research also applies to modern-day sub-Saharan Africa (henceforth ‘SSA’), the empirical basis of this paper. Size but also to a, perhaps surprisingly, large degree, shape of taxation revenue appears to matter greatly for the quality of African government.

Taxation and Governance: Outlining the Basic Mechanisms

Prominent economists, such as Nobel-laureate Gary Becker, and policy pundits (Mitchell 2009) have argued against high levels of taxation, and big government in general (cf. Persson and Rothstein 2010:2). This was a central part of the so-called ‘Washington Consensus’ of the 80s and early 90s. Lately, however, an increasing body of research and policy advice argues for the contrary, that big government and higher government revenue is good for state development,
findings and recommendations particularly directed at the developing world (NEPAD-OECD 2009). Taxation, it is argued, has several positive external effects beside the revenue itself. In the field of development economics, taxation reform, mainly the transition from trade taxes to consumption- and income taxes, has been a hot topic for many years (cf. OECDa 2008, NEPAD-OECD 2009, World Bank Group 2008, Di John 2009), and the link between ‘taxation and representation’ is a central tenet in the discourse on democratization (cf. Ross 2004). For the developing world, however, much of the governance- and democracy-related research on government revenue has been put in largely negative terms, through the focus on the ‘rentier-state-theory’, wherein natural resources (and foreign aid) are assumed to be a source of revenue which is detrimental for state capacity and popular representation.

Lieberman (2003, see also Mkandawire 2010) identifies three aspects of taxation with special relevance to the social sciences: state capacity, collective action, and distributive justice, of which this paper mainly will focus on the first two.\footnote{The use of taxation in order to obtain a measure of redistributive justice appears to have been successfully achieved essentially only in the developed world thus far, through cash transfers and generally in the form of a social security system (see Cobham 2005).}

State capacity is the perhaps most direct aspect, as it deals with how a government uses revenue in order to build a potent and efficient state apparatus. Prichard and Leonard (2010:655-66) survey existing findings regarding the effects of taxation on state capacity, and locates four, quite direct and hands-on, areas of improvement: administrative innovations; pressure for improvements in related agencies; enhanced government presence in remote areas; and improved gathering of data and information.

From a larger perspective, an efficient state is a state capable of developing a hegemonic and ‘thick’ social contract vertically with its citizens by upholding order and providing public goods. Tilly (2007:16) frames his definition of state capacity as

the extent to which interventions of state agents in existing non-state resources, activities, and interpersonal connections alter existing distribution of those resources, activities, and interpersonal connections as well as relationships among those distributions.

Such a holistic and citizen-focused definition helps us link state capacity to Lieberman’s second aspect of taxation, collective action, which can be interpreted as a corresponding, horizontal, social contract, emanating from the first, between people in a well-structured society. This often occurs through organization in interest groups. With rules of the game clear and enforceable (offered by the legal system and law enforcement), as well as popular representation (through functioning
democratic institutions), the chances of fair play, both vertically between subjects and state, and horizontally, between groups and citizens, will increase (Di John 2009:3).

Mick Moore (2007:17) presents a model, which closely relates to the twin issues of state capacity/collective action, for how broad taxation can be argued to have immediate and intermediate effects on governance, and governance outcomes. Moore proposes a chain of three immediate taxation-effects, where (a) the state focuses on taxing its citizens, which (b) makes citizens more politically engaged, and thus (c) creates bargaining over revenues, alongside compliance in return for some influence over the level of taxes raised, as well as its subsequent use on the public expenditure side. Through this process, four types of governance outcomes ensue: more (1) responsiveness and (2) accountability, as well as increased (3) bureaucratic and (4) political capability.

Although often described in bright colors, the process of bargaining does not have to be amicable in order to be beneficial. Hårsmar (2010:2) hails the ‘angry tax-payer’ as an “invaluable force for increased efficiency in the provision of public services and for better governance in general.” The very fact that taxation has a tendency to aggravate the citizenry can thus be perceived in a positive light. In a lecture on taxation systems, Braithwaite (2007) makes an important distinction between resistant and dismissive defiance, where the first means that while citizens might indeed be dissatisfied with the decisions made by those in power and protest, they do not “oppose the power of the authority as such.” Displays of dismissive defiance, on the other hand, equal challenging the very foundation of state power and is much more problematic from a governance standpoint. Charles Tilly (2009) makes a similar distinction between a healthy form of grudging consent, and uncompromising resistance, which is akin to Braithwaite’s dismissive defiance. Furthermore, Tilly introduces the opposite of uncompromising resistance, passive acceptance, which might be just as detrimental.

Theoretically, there thus appears to be reason to expect a positive relationship between taxation and QoG. Bräutigam (2008) sums up the general argument as follows:

the political importance of taxation extends beyond the raising of revenue. Taxation can stimulate calls for more representative and accountable governments, while the need to increase revenues can stimulate institution-building.

In theory, gains from taxation on QoG thus seem abundant. Theory is, nevertheless, only as good as its connection to reality. Taxation is a broad instrument, which in real life can take many different shapes. Sometimes it is broad-based and other times it is directed at a small segment of
society; its collection can be technically and administratively very complicated, or it can rely on draconian and primitive practices. We thus need to take both its quantitative (how much taxation is collected?) and qualitative (what kind of taxation is collected? How is it collected?) features under consideration. Furthermore, as the tax-QoG theory is based upon the Western historical experience, we also need to be aware that in today’s developing states, the ground conditions may give rise to alterations, or even a refutation of the original ideas. As Moore speculates: “One possible conclusion […] is that fiscal contract theories derived from European history score more highly on inherent appeal and plausibility than they do on rigorous specification or testing” (2004:304).

The Bigger, the Better? How the Size of Taxation Matters

The theoretical foundation for the idea of taxation as a prerequisite for state building and developing government quality can be traced back to well-cited and empirically often rigorous historical research on state formation in early-modern Europe. Already a century ago, Joseph Schumpeter (1991 [1919]:100) put the relationship thusly: ”the fiscal history of a people is above all an essential part of its general history,” whereas Margaret Levi’s seminal Of Rule and Revenue opens with the following, equally grand, statement: “The history of state revenue production is the history of the evolution of the state.” (1988:1) The basic logic is, as we have seen, twofold: a bargaining over revenue extraction, which is considered to have been a significant contribution to popular mobilization, accountability and democratization, alongside which a strong state bureaucracy is said to have grown out of the need to administrate first the increased demands of maintaining a standing army, then a wider range of public services. This process, Mann calls the metamorphosis from the “massive military state” of the eighteenth century to the “dimorphous civil-military state” of the nineteenth (Mann 1993:378), and where regular taxation is identified as a major source of the ‘rise of the West’. Charles Tilly in particular is noted for highlighting the role of war in the construction of the modern state, and his quotation “states made war and war made states” (Tilly 1993:ch. 3) is commonly used within and outside academia.

One example of the importance of modernized tax collection we find in Ertman (1997), who describes the gradual victory of English parliament’s efforts to rid the country of proprietary officeholding and privatized tax collection, tax-farming, as a key factor to drive “its rival, ancien régime France, inexorably towards bankruptcy and revolution over the course of the 18th century.” (Ertman 1997:158). Levi notes that, in terms of the capacity-focused view, more revenue meant that early modern states gained from increased revenue economies of scale (1988:1), and were able to extend the reach and scope of power (ibid.:2)

It is not only early modern Europe that has experienced as similar trajectory of taxation-based development. After going through Asian and Latin American ‘success stories’, such as, Costa
Rica, South Korea and Taiwan, which all developed a large and broad tax base early on, Samuel (2009:24) places taxation as a central factor in a state’s successful development process:

Tax is not the sole determinant of rapid development, but it is one pillar of an effective state, and may also provide the basis for accountable and responsive systems.

Japan, colonizer of both Korea and Taiwan, is another example of a state using taxation to modernize its state, as it managed to switch its feudal system for an extensive and monetized system of land taxation during the 19th century (World Bank 2008:13). We thus have some reason to believe that the taxation-state capacity argument is able to travel outside of Europe.

If we look at current conditions, Ross (2004), and Mahon (2005), use a cross-country dataset covering 113 countries worldwide, going back some thirty years, in order to detect the relationship between level of taxation and several governance-related variables. Ross is interested in, and refutes, the hypothesis that ‘taxation leads to representation’, i.e. democracy. Mahon focuses more on characteristics of the liberal state, but reaches the conclusions that increased taxation might have effects on good government, at least in the case of direct taxes.

On the one hand, Ross’s and Mahon’s studies, using either fairly aggregate levels of taxes (in Ross 2004, and to a slightly lesser extent, 2001), or just specification regarding direct taxes, offer a relatively reliable and simple measurement of what Moore and Bräutigam, and their likes, allude to in their discussion of governance and taxes. On the other hand, it risks being too simplistic, missing important points regarding who gets taxed, as well as how revenue is collected, which subsequently carries a strong relationship to how visible taxes are in a given society. Even though it would be hard to dispute that ‘bad’ money is better than no money, as without it there would be no state, certain taxes might just be better than others.

**Are All Taxes Equal? The Shape of Taxation Argument**

The development literature places heavy emphasis upon developing a broad tax base, which in turn works “as a means of enhancing the bargaining process between citizens and governments,” according to the OECD’s Development Assistance Committee (DAC) (2008a:3, cf. Moore 2007, as well as Tilly’s definition of state capacity above). For example, Fjeldstad and Moore (2007:15) note that in Tanzania, over 70% of the tax base comes from less than 300 large taxpayers. As many developing countries collect a large share of their tax base from the natural resource sector

---

2 although this diverges somewhat from his findings in 2001(:349), where an aggregation of indirect and direct taxes seems to be beneficial for democracy, although only short-term.  
3 Mahon does discuss the merits of both indirect and direct taxes, but unfortunately does not compare them statistically as indirect taxes is left out of his quantitative analysis.  
4 case in point: the United Arab Emirates is doing better than Somalia by just about any standard, even though native UAE citizens pay virtually no taxes, as oil revenues are in abundance here.
(see a longer discussion below), by definition a non-broad-based revenue stream, aggregate tax numbers will risk clouding governance-relevant mechanisms (see also appendix I).

The opposite, it can be argued, is the direct tax, especially the personal income taxes that aggravates (and engages) so many citizens, which according to the above mentioned theoretical framework ought to kick-start a bargaining process. Recently the DAC and others (see Fjeldstad and Moore\(^5\)) have argued for a taxation strategy based on a switch from trade taxes, which are relatively ‘invisible’, as well as run a risk of diminishing exports, to indirect taxes, such as VAT (Value Added Tax), which the DAC claims,

has made tax more visible and transparent in a number of countries. This represents an important first step towards making the tax relationship a focus for constructive bargaining between taxpayers and the state. While VAT is not an ideal instrument, it works to some degree like a direct tax applicable to most consumers and may in some cases provide a practical way forward in widening the tax base in economies with large smallholder and informal sectors. (OECD 2008a:10)

Furthermore, Prichard and Leonard (2010:660) argue that VAT might require a just as sophisticated tax administration as income taxes, and that in developing countries, such sales taxes are often a more important stream of revenue than direct taxes in developing countries. Di John, however, notes that among underdeveloped countries that have replaced trade taxes, those who managed to retain their level of tax income managed to do this through both income tax and VAT (Di John 2009:12).

Thus, direct and/or indirect taxes might be especially governance-boosting. Not only do they raise revenue, just like any type of tax, but furthermore they stand in contrast to trade taxes, as the payers of such taxes actually are citizens of the country where the revenue lands which, according to the theoretical framework discussed above ought to generate a bargaining process. Furthermore, the fact that the collection process of such taxes tends to be more demanding ought to spur a need for rationalization of the bureaucracy, and thus a step towards increasing state capacity. Both of the mechanisms outlined above thus seem to be in place.

As a point of comparison, the ‘shape’-aspect still appears to matter in the developed world. A quick glance at the relationship between income taxes levied upon individuals as a share of GDP and government effectiveness in the OECD states shows that the correlation is positive and strong, stronger compared to total taxes as a percentage of GDP; clearly a tentative result, but

\(^5\) although the authors note that the reforms at time shave been both hastily and suboptimally carried out
one that is in line with the theoretical assumptions employed in this paper. Interestingly, indirect taxation (here defined as taxes on goods and services) hold no significant relationship to government effectiveness.\(^6\) Taxation, at least in the developed world, still seems to have an effect on state capacity, three centuries after the era when Tilly and his peers claimed it had such an important formative impact. Furthermore, the shape does appear to matter.

Much of the taxation – governance literature assumes that there really is some sort of bargaining over the payment of taxes, and not just heavy coercion on the part of the tax collecting state. While Mahon’s results point toward the fact that taxation (at least in its direct form) inherently works as a democratizing force, we must also be open to the idea that in many autocratic states, the bargaining process, itself a fairly characteristic trait of democracy, might not be in place. Historic and current autocracies have indeed succeeded in forcing its citizenry to relinquish considerable assets without much dialogue and deliberation (cf. Rothstein and Broms 2010). Thus, the tax – bargaining process may well be contingent upon at least a modicum of democracy to start with (see p. 18 for a more detailed discussion).

As already alluded to, another major caveat to the government revenue – QoG-theory is the well-known ‘resource curse’ problem, wherein it is argued that windfall revenue from, and heavy dependence upon, a natural resource will not only inhibit diversification in the marketplace (known as the ‘Dutch disease’), but it will also stand in the way of developing an efficient bureaucracy, which in other case would be a necessary condition in order to fruitfully collect ‘regular’ taxes. Shafer (1994, in Bräutigam 2008:18) argues that “a country’s leading sector shapes the boundaries of states’ authority to tax and its tax bureaucracy and related state institutions.” As it is often considered easier to tax natural resources than citizens, arrangements based upon this leading sector thus sets the bar low for the rest of the institutional framework. Furthermore it makes the leadership less dependent upon its ‘employers’, i.e. taxpaying citizenry. Potentially, the bargaining process can essentially be bypassed, as the state does not need its citizens’ money, while almost automatically making the citizens ‘freeriders’, with a smaller stake in the government’s dealings.

This could not stand in a starker contrast to the proposed effects of broad based revenue collection. Taxation measurements do not always take this under consideration (for example, the oft-used World Bank measurements of government revenue do not appear to have been ‘cleaned’ of such revenue [see appendix I]), which, at least in theory, should lead to very different results in terms of QoG.

\(^6\) The following indicate the strengths of bivariate correlations to the World Bank’s measure of Government Effectiveness (World Bank 2002, in Samanni et al. 2010): Income, profits and capital gains tax on individuals: r=,61 (sig ,000); Total tax revenue: r=.47 (sig ,029), and Taxes on goods and services: r= -.04 (not significant). (tax data: OECD 2006 [data from 2002], in Samanni et al. 2010)
This is not necessarily a new problem. One historical point of comparison is what happened to the Spanish state in the 16th century after establishing itself as a major colonial power. Following the discovery of the Americas, Spain quickly became an imperial state with a revenue base relying upon rents gathered in the colonies, accompanied by agriculture and sheep herding at home. When the former revenue proved an unreliable source of income, the state began to borrow great amounts of money in order to uphold the empire’s status. With rising rents, and a still quite primitive bureaucracy, the state declared bankruptcy six times during a century-long period of general stagnation between the middle of the 16th century and the middle of the 17th. As a contrast, England meanwhile was in the process of developing an efficient tax bureaucracy, and a, for the time, (proto-)democratic system of governance. (Bräutigam 2002; North and Weingast 1989).

A similarly constructed argument has been made in the case of another form of ‘uneared income’, foreign aid (Moore 2004:304). Instead of relying on its citizenry, poor countries grow accustomed to receiving Official Development Aid (ODA) from wealthy countries and IGOs. According to a number of studies, there are potentially harmful effects of aid on governance (cf. Bräutigam and Knack 2004; Rajan and Subramanian 2007; Busse and Gröning 2009; to an extent Walker and Maxwell 2009, and Economides et al. 2008:464; for an opposing point of view, see Tavares 2003). Djankov et al. (2008:170) even contend that ‘the curse of aid’ is even more harmful than the oil curse. Studies have also shown that the mere process of receiving aid puts a large strain on recipient governments (Moss et al. 2006:8). The same authors note that:

Aid flows themselves, separate from particular inefficiencies of the aid system, can affect the evolution of state-society relations. If donors are providing the majority of public finance and governments are primarily accountable to those external agencies, then it may simply not be possible to also expect a credible social contract to develop between the state and its citizens (Moss et al. 2006, p.14)

Hence, we can conclude not only that not all kinds of government revenue appear to be equal in terms of the development of institutional quality, but that some might even be directly harmful.

**The Case: sub-Saharan Africa**

Sub-Saharan Africa is an interesting testing ground for dissecting the taxation-governance relationship. First, the group of states within the region displays great variation, both in levels and types of taxation, and government performance. Second, it is an ideal site to look at the possible effects of the ‘curses’ of both natural resources and aid, as one will find plenty of both here.
Third, the great majority of these states became decolonized at around the same time (hovering around 1960), so their respective journeys as independent nations are roughly the same duration, and still very much in transition.

Fourth, and perhaps most interesting, many of the theoretical arguments pertaining to the societal role of taxation, as we have seen, are mainly rooted in European, and North American (“No Taxation without Representation!”) history; contemporary SSA will offer a welcome test of generalizability to these ideas. Taxation, some experts claim, in less developed countries should not be treated as a different beast from the OECD region (NEPAD-OECD 2009:16, although people like Moore (2004) express some doubts), and as we in the West have now learnt much from looking back in history and made fruitful comparisons between the institutional setting and bargaining over state revenue in an early modern and pre-industrial revolution setting and the situation today, why could not the rest of the world be subject to such a process?

The role of (particularly interstate) war is especially interesting. Herbst (1990), who draws on much of the above cited historical literature, makes a pessimistic comparison to modern-day Africa, on the somewhat counter-intuitive grounds that the Tillyan state-building effects of interstate war have been absent here, and while war of course is nothing to aim for, the cold hard facts are that consolidation today might be more difficult. This is due to the fact that in Europe, weaker states perished or became engulfed by mightier ones, a faith more improbable in the post WWII-political reality, where the political boundaries are more fixed, and failing states are more prone to receive ‘CPR’, through for example loans and aid. While such observations are indeed important, they are a bit sweeping: loans were a necessary prerequisite in early-modern Europe too, especially for quickly raising armies, and natural resource rents did indeed exist and cause ruckus already in the 16th century. Meanwhile, the geopolitical climate and economic globalization could be said to be unique for the modern era. Still, at a first glance many of these differences seem to be of degree rather than kind, and not enough to deterministically dismiss the power of taxation, but rather fruitfully challenge the original theory’s relevance.

Rakner and Gloppen (2003) look at tax reform in three SSA states and notice that, while the general situation might be different from historic Western Europe, and that it is too early to see whether the success there can be replicated elsewhere, some signs do point towards a possible governance dividend: Tax reforms in order to gather more revenue from corporations have indeed caused much protest from business, but “the fact that these issues are being treated through formal, public organizations, rather than through bribery and public deals may indicate the beginning of a link between economic elites and government in issues of revenue generation” (2003:15). This can be understood in terms of Braithwaite’s notion of resistant defiance, and
could thus be a sign that the taxation – governance model can be extended to the underdeveloped world.

Finally, while the theoretical outline has been fairly developed, and plenty of case studies in modern sub-Saharan Africa have been conducted (see Prichard 2010; Fjeldstad and Semboja 2001; Fjeldstad and Therkildsen; Di John 2009), quantitative cross-country results are more scarce, and the ones that exist are generally dealing with the resource and aid curses (Moore 2001). Prichard and Leonard 2010) are a welcome exception. Through a fairly rigorous quantitative test of the taxation – government quality connection in SSA, using time-series cross-sectional data ranging between 1983 and 2005, they find that prior to the mid-90s there indeed was a significant and positive effect of taxation, but that it since has vanished.

**Time and Causality**

Albeit I find both the suggested theoretical ideas and empirical findings above to be both reasonable in their intellectual underpinnings and well-crafted in their analyses, I believe that the issue of causality must be addressed in brief; as one links together broad societal phenomena, wherein we certainly can include taxation and governance, one needs to recognize that the causal mechanism is not simply a one-way street; to deny the possibility that a more efficient government will be able to raise more revenue than a broken-down one is not only dubious, it is highly unlikely. Even if the titular Somali government wanted to raise as much taxes as Botswana, it does not have the ability to do so. Instead, I work under the assumption that this type of process is one characterized by feed-back mechanisms and perhaps best can be understood in terms of virtuous or vicious circles: phenomenon A leads to phenomenon B, which leads to more of A, etc.. In this case, I follow what I found to be the most convincing arguments of the theoretical debate, and consider ‘A’, the independent variable, to be the taxation factor, affecting ‘B’ Government Quality as

Another important question is how fast taxation can be expected to affect the institutional setting; as we have seen above, ‘historical institutionalism’ often digs deep, centuries and even millennia, back in time in order to find a causal ‘seed’ for explaining current conditions (cf. North and Weingast 1989; Putnam 1993; Ertman 1997). In these cases, the institutional variable is generally (although not for Putnam) treated as the explanatory. When it comes to the effects of taxation, where institutional quality is treated as dependent, there may be good cause to look into more simultaneous conditions too. First, taxation is generally very directly ‘felt’ by the taxpayer, both when it comes to the assumed negative effects of excessive tariffs or a hike in the personal

---

7 Although it falls outside of the quantitative analysis below, it is not unlikely that one could conceptualize taxation as falling in between Moore’s aspects of good government, i.e. as a consequence of higher government capability (as a more capable government ought to be able to gather more taxes), but as a cause for higher accountability (as the theoretical considerations above point to).
income tax, and is thus subject to a constant reevaluation of legitimacy among the citizenry. Ross (2001:349) claims that “people tend to respond to tax hikes right away or not at all.” Tax revolts are a historically frequent example of such a direct consequence of tax policy (Levi 1988:93). Second, equally directly, the revenue stream affects state capacity in the sense that it forms the basis of the government’s budget (although the systematic deficit-running seen in many states of today might out this into question). In their quantitative analysis of tax-QoG, Prichard and Leonard (2010) find that a lag of five years rendered the highest level of significance.

**Oversight of Data and Methods**

In a cross-country analysis, with uni-, bi- and multivariate elements, the following analysis will attempt to test the relationship between, on the one hand, the size and shape of taxation, and governance variables on the other. Indeed, to really get to the bottom of these questions, a quantitative cross-country analysis might not be the ideal instrument, especially the ‘snapshot’ look employed here, but using a bit more specified data over different types of taxation, we can at least approximate a bit closer to the issue, and complement both the burgeoning body of case-study research, and the more wide-ranging quantitative studies.

**Quality of Government Measured**

The delicate matter of measurement is one that habitually haunts the social scientist, and governance research is in no way an exception. Over the last few decades, the development and research community has developed a number of indexes of QoG-related issues. Amongst the most used measurements we find Transparency International’s Corruption Perception Index (CPI), and the World Bank’s measure of Government Effectiveness (GE). Although nominally and theoretically measuring different things, they tend to correlate very strongly; the correlation between the two is at .90 globally (and .77 in SSA). A third governance measurement, specific to Africa, is the World Peace Foundation’s Index of African Governance (IAG), which exhibits a similarly strong relationship (.71 and .83) with the two other indexes. The fact that they are so closely related encourages us, to the extent one can ensure such things, that the indexes do tap into what we want to measure, and the slight differences they do have will provide a good robustness test. Below, we see the top and bottom performers on these measurements:
**TABLE 1. QoG IN SSA – HIGH AND LOW PERFORMERS**

<table>
<thead>
<tr>
<th>Top Five</th>
<th>Bottom Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>GE</td>
</tr>
<tr>
<td>BOT 6.4</td>
<td>RSA .71</td>
</tr>
<tr>
<td>NAM 5.7</td>
<td>BOT .68</td>
</tr>
<tr>
<td>CAV 4.9</td>
<td>MAS .39</td>
</tr>
<tr>
<td>RSA 4.8</td>
<td>NAM .10</td>
</tr>
<tr>
<td>MAS 4.5</td>
<td>SEN .03</td>
</tr>
</tbody>
</table>

Note: CPI Ranges 0-10; GE -2.5-2.5, IAG 0-100. For a list of the countries in the study, and their corresponding abbreviation, see appendix II

Botswana, Namibia, Mauritius and Cap Verde are among the top performers in all three measures, and South Africa appears twice. In the bottom bracket, there is less uniformity, yet Angola, Somalia, Democratic Republic of Congo and Burundi all appear twice.

**Taxation Measured**

Moore (2004:16, see also Prichard and Leonard 2010) laments the troubles in statistically analyzing the taxation–governance connection, partly because of a general dearth of reliable and valid taxation data, especially for governments dependent upon aid and natural resource rents. Available taxation indexes and measurements all carry weaknesses. One, utmost pragmatic, solution is to employ different measures, not unlike the tactic we employ when capturing QoG. Furthermore, the very nature of the research problem at hand demands we look at different kinds of taxation. Therefore, this paper will use several different measurements of taxation, including checks for revenue from natural resource (although this is not the focus of the paper), to make sure that we measure what we want to measure. This should, naturally, not be seen as a guarantee for obtaining the perfect data, but a modest and initial bird’s eye look into the problem. The fact that our sample of countries is limited (SSA equals an N of 48 cases, of which a few fall out in the final analysis due to data gaps; see appendix II), the goal for the subsequent statistical analysis will be to keep things clear and simple.

For the question of the **size**-question, relating to the aggregate level of taxation, we use a measurement of tax revenue as % of GDP,

These variables, which will henceforth be called Direct Tax and Indirect Tax (n=36), are measured as a percentage of the total tax base.

In order to complement these quite straight-forward variables of tax extraction, we use a third type of measurement from the AEO: tax effort. This type of measurement is by many experts (Pritchard and Leonard 2010; Bird et al. 2004) considered a superior way of getting to how much tax revenue a state raises, compared to how much can be expected. Interestingly, the AEO has one measure where natural resource-revenue is included (Tax-Effort [n=38]), and another where it is left out (Resource-Free Tax-Effort [n=38]). The former is to be considered a pure ‘size’-variable, while the latter has a slight ‘shape’ aspect to it, at least by means of taking out natural resource dependence.

In order to further relate to the ‘shape’ argument, we also measure the ratio between Tax-Effort and Resource-Free Tax-Effort, which thus measures the relative effort in collecting resource-based versus resource-free taxes, the Tax Effort Resource-Rent Index, (TERRI) (n=38). While it does not explicitly deal with direct or indirect taxation, it relates to the weight which states place importance of ‘easy’ and ‘demanding’ sources of taxation. If the measure for a state equals 1, natural resources makes no impact on how well taxes are collected; anything under 1 means that non-natural resource taxes are less extensively collected than resource taxes, while any value over 1 indicates that non-natural resource taxes are collected to a greater extent than resource-related revenue. This index, as with the measures of direct and indirect tax, leaves absolute measurements of taxation, and captures the composition of the tax base, i.e. ‘shape’.

Finally, we include a variable where Total-, Direct- and Indirect Tax all are taken into account, Direct+Indirect Tax/GDP (n=45). One partial reason for this is the fact that the ‘shape’-related variables Direct Tax, Indirect Tax and TERRI all are plagued with quite significant data gaps. Another is that it captures both ‘size’ and ‘shape’ in one variable. The variable measures whether Direct- and Indirect tax together make up more than 10 % of total GDP (yes: n=18, no: n=30), and is thus constructed as a dummy variable.

---

9 In practical terms, the variable is calculated as tax as a percentage of GDP, under control for relevant structural variables such as share of population working in agriculture, and openness to trade (ratio trade:GDP). The tax effort calculation can use slight variations of control variables, but the end result tends to be very similar.
Botswana ranks consistently high (thrice, although it appears in the bottom-five on tax-effort), and two-timers include South Africa, Uganda, as well as Senegal. In the bottom, there is more homogeneity; Equatorial Guinea ranks at the very bottom on all accounts save for tax-effort, and also Angola and Congo appear on the list across the board (except for, again, tax-effort, where they are both top five). Chad and Nigeria ranks bottom-five in three out of six instances. As will be shown more clearly below (table 3), the tax variables, except for Tax Effort, generally do demonstrate a good measure of internal consistency.

Prior to presenting these findings we will take a brief look into an issue that fall outside the scope of the central inquiry, but nevertheless contain findings pertinent to the larger issue of taxation and governance.

**Bargaining?**

Following Mahon (2005, though see also Tilly 2007 who contends that all revenue extraction originating from the citizenry entails some measure of bargaining), we look at the proposal that the beneficial state-society effects from taxation is conditional upon the fact that the fiscal social contract really is a *bargaining* process between the government and its citizens, rather than just an increased measure of *coercion*. An, admittedly crude (and admittedly subject to issues of endogeneity) measure of the level of bargaining/coercion present within a country’s social contract is quite simply to see whether there is a minimum of democracy to start with. Rakner and Gloppen (2003:17) offer an account of how tax evasion, through semi-military operations carried out by military personnel, quite literally is being combated in (non-democratic) Uganda, with the result that “the long term process of building a tax-culture based on quasi-voluntary compliance is undermined by the short term goal of meeting tax demands set by the international finance institutions.” By dividing the cases in our study into two subsets, one with a Freedom House score below 5 (n=19, on a ten-point scale, where ten is most democratic), and another above it (n=25), we note that the correlation between taxation as a percentage of GDP and QoG

**TABLE 2. TAXATION MEASURES IN SSA – HIGH AND LOW PERFORMERS**

<table>
<thead>
<tr>
<th></th>
<th>Total tax</th>
<th>Direct tax</th>
<th>Indirect Tax</th>
<th>TERRI</th>
<th>Tax-Effort</th>
<th>Resource-Free Tax-Effort</th>
<th>Total tax</th>
<th>Direct tax</th>
<th>Indirect tax</th>
<th>TERRI</th>
<th>Tax-Effort</th>
<th>Resource-Free Tax-Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>LES</td>
<td>57.9</td>
<td>RSA 55.1</td>
<td>MAS 66.7</td>
<td>RSA 1.56</td>
<td>LES 2.1</td>
<td>LES 2.7</td>
<td>EQG 1.4</td>
<td>EQG 2.1</td>
<td>EQG 1.7</td>
<td>EQG .07</td>
<td>MAD .64</td>
<td>EQG .08</td>
</tr>
<tr>
<td>SWA</td>
<td>37.7</td>
<td>ZAM 46.4</td>
<td>UGA 59.8</td>
<td>BOT 1.51</td>
<td>ANG 2.0</td>
<td>SWA 2.2</td>
<td>NIG 5.4</td>
<td>SUD 5.3</td>
<td>ANG 4.5</td>
<td>ANG .19</td>
<td>GUI .67</td>
<td>CHA .28</td>
</tr>
<tr>
<td>SAP</td>
<td>36.4</td>
<td>BOT 43.4</td>
<td>SEN 55.4</td>
<td>NAM 1.39</td>
<td>LIB 1.9</td>
<td>LIB 1.7</td>
<td>CHA 5.6</td>
<td>CON 5.8</td>
<td>CHA 5.1</td>
<td>CON .23</td>
<td>MAS .69</td>
<td>ANG .39</td>
</tr>
<tr>
<td>BOT</td>
<td>33.5</td>
<td>MAL 41.6</td>
<td>BUF 55.1</td>
<td>SEN 1.39</td>
<td>CON 1.8</td>
<td>COM 1.6</td>
<td>CON 6.0</td>
<td>ANG 5.9</td>
<td>NIG 5.2</td>
<td>NIG .25</td>
<td>MAU .73</td>
<td>CON .42</td>
</tr>
<tr>
<td>LIB</td>
<td>27.7</td>
<td>KEN 41.6</td>
<td>RWA 50.9</td>
<td>UGA 1.37</td>
<td>NIG 1.8</td>
<td>NAM 1.6</td>
<td>ANG 6.4</td>
<td>GAB 9.9</td>
<td>CON 8.1</td>
<td>CHA .30</td>
<td>BOT .80</td>
<td>NIG .44</td>
</tr>
</tbody>
</table>

By dividing the cases in our study into two subsets, one with a Freedom House score below 5 (n=19, on a ten-point scale, where ten is most democratic), and another above it (n=25), we note that the correlation between taxation as a percentage of GDP and QoG
is positive and significant only in the latter group (r = GE .65, CPI .68, IAG .72, all significant at 99 % level).

FIGURE 1. TAX AND QOG IN DEMOCRACIES AND AUTOCRACIES

![Graph showing the relationship between tax revenue as % of GDP and corruption perceptions index]

Note: Correlations measured as Pearson’s r. Tax as % of GDP from OECD 2010.
With a 57.9 % tax intake, and mediocre CPI score, Lesotho (democratic) is here treated as an outlier.

Although this is a very small sample, and the test not subject to any further controls, we can at least conclude that, at face value, the argument carries some merit, and maybe this can be related to Levi’s (1999:116) analysis of tax extraction in early-modern England and France, where the early modern parliament enabled the English monarch to negotiate taxes that were acceptable to key constituents who then helped enforce them. The less constrained French monarchs could impose more taxes in principle but with less certainty and higher costs of collection.

At the very least, characteristics such as state-society cooperation and certainty in implementing government decisions, are components closely related to the concept of QoG.

Analysis

The next step is to take the taxation variables’ relevance for government quality to test by controlling for rival explanations, established as relevant in the existing body of research, through a multivariate regression analysis. The variables used here are:
Among the strongest predictors of government quality is GDP/Capita (GDP). Richer countries are generally less corrupt, and more efficient (La Porta et al. 1998). While the causality certainly is debatable, as persuasive arguments backed by empirical findings have been made that quality of government itself generates wealth (cf. Keefer and Knack 1997), the variable is included due to a) an assumption that this kind of causal relationship generally is circular and, to an extent can be seen to go both ways; and b) a desire to challenge our tax-related variable as much as possible. The measurement is derived from Gleditsch (2002, in Sammanni et al. 2010) and measures logged real GDP/Capita.

Ethnic Fractionalization (EF). This variable too, is an oft-cited indicator of government quality (Alesina et al. 2003). A culturally and socially unified country is expected to be easier to govern, and less corruptible. A number of different measurements exist to capture this, and several of them use ethnolinguistic fractionalization. SSA in particular has been plagued by ethnic strife and civil war. In order to maximize the sample size, the chosen variable is Alesina et al’s Ethnic Fractionalization, a similar measure which was chosen due to its broad data coverage.

Population Size (PS). Similar in many ways to the ethnic fractionalization-argument above, it is noted that smaller countries generally tend to be easier to govern, with smaller regional differences.

Aid Dependency (AD). This factor shares its basic premises with the ‘resource curse’ argument, i.e. a state which generates a considerable portion of its wealth in form of windfall revenue lacks the incentives to develop an efficient bureaucracy, and the leadership grows less dependent upon its citizenry. This is measured as Direct foreign aid as % of GDP.

Colonial Origin (CO). Djankov et al. (2003) have shown that legal origin is a potent explanatory factor for current administrative behavior. Furthermore, this variable also encapsulates respective state’s colonial origin, which might be thought to have a similar, if not broader, effect on modern-day administration. The variable is a dummy variable indicating British colonial rule, and accompanying legal origin.

Early Threats (ET). Persson and Sjöstedt (2010) have constructed a dummy variable indicating whether the political leadership, during the fifteen first years of independence, was subject to threats. This variable has been shown to carry a significant, negative, effect on quality of government in SSA. Furthermore, historical threats could in theory work both ways in terms of tax collection. As seen above, threats caused by interstate conflict is what generated the demand tax state in early

---

10 The value for Ethiopia is imputed from Roeder’s (2001 in Sammanni et al. 2010) measure of Ethnolinguistic fractionalization 1985, the value for Sao Tome and Principe is imputed from Yeoh 2001.
modern Europe; still, the African context has been more dominated by internal conflicts, and could thus yield very different results.11

Within these control variables, it might be useful to conceptually distinguish between historic, structural, and current factors. Within the first category, pertaining to historic factors, we find Early Threats and Colonial Origin. Such variables concerning the institutional, administrative, and legal setting, along with the foundational circumstances of a state is, as we have seen above, just the type of things that are likely to affect both revenue collecting and quality of government in general. Including such variables will not only test the tax – QoG hypothesis, it can also tell us if such historic variables have a direct causal effect on QoG, or if taxation might be seen as an intermediary variable.

The same principle ought to apply for the structural variables, population size and ethnic fractionalization, which are the kind of rival explanations that very unlikely could be considered to be affected by either our taxation measures and the other rival explanations, but might, according to literature have an effect on these, and certainly the taxation measure. Finally the current control variables, such as GDP and Aid Dependency could both influence and be influenced by taxation, which would make any high correlations a problematic issue, subject to further discussion.

Next, we look at the bivariate correlations between the included variables. In table 3 below, we notice that, apart form Tax Effort, which is both positively and negatively correlated to other tax variables, there is a rather high internal positive correlation between the tax related variables, yet only in three instances (TERRI - Direct Tax and Resource-Free Tax Effort, and Resource-Free Tax Effort – Total Tax) the correlation exceeds (Pearson’s r) 0,7. At the other end of the spectrum Indirect Tax holds no significant relation to Total Tax.12

The tax measures generally correlate with the QoG indicators, especially the ‘shape’-variables, but also with some of the control variables, especially the historic variables Early Threats and to a lesser extent Colonial Origin. Among the other control variables, GDP and Ethnic Fractionalization tend to correlate with the governance indicators, respectively positive and negative.

11 Liberia is coded as 1, due to internal conflict both following the foundation of the Republic in 1847, and during the ‘normal’ decolonization period around a century later.
12 In a Principal Component Analysis (Varimax rotation) conducted on the six taxation variables, the results are essentially in line with the theoretical assumptions. The variation is not large, but with an eigenvalue threshold of 1, we get two separate components: one ‘size’-component with Total Tax and Resource-Free Tax-Effort, and one capturing ‘shape’, with Direct Tax, Indirect Tax, and (negatively) Tax-Effort. TERRI scored similarly on both components, but slightly stronger on the second.
TABLE 3, CORRELATION MATRIX

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TERRI</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax-Effort</td>
<td>-.39*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource-Free Tax-Effort</td>
<td>.71**</td>
<td>.31</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Tax</td>
<td>.57**</td>
<td>.32</td>
<td>.85**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Tax</td>
<td>.78**</td>
<td>-.30</td>
<td>.54**</td>
<td>.37*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Tax</td>
<td>.64**</td>
<td>-.51**</td>
<td>.23</td>
<td>.03</td>
<td>.51**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct + Indirect Tax</td>
<td>.61**</td>
<td>.05</td>
<td>.62**</td>
<td>.50**</td>
<td>.61**</td>
<td>.51**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPI</td>
<td>.56**</td>
<td>-.16</td>
<td>.41*</td>
<td>.49**</td>
<td>.48**</td>
<td>.20</td>
<td>.49**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GE</td>
<td>.57**</td>
<td>-.25</td>
<td>.36*</td>
<td>.48**</td>
<td>.43**</td>
<td>.35*</td>
<td>.56**</td>
<td>.77**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAG</td>
<td>.59**</td>
<td>-.28</td>
<td>.34*</td>
<td>.41**</td>
<td>.47**</td>
<td>.43**</td>
<td>.43**</td>
<td>.72**</td>
<td>.83**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Threats</td>
<td>-.47**</td>
<td>.02</td>
<td>-.44**</td>
<td>-.54**</td>
<td>-.54**</td>
<td>-.10</td>
<td>-.45**</td>
<td>-.51**</td>
<td>-.47**</td>
<td>-.50**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colonial Origin</td>
<td>.25</td>
<td>.29</td>
<td>.47**</td>
<td>.39**</td>
<td>.40*</td>
<td>-.13</td>
<td>.38**</td>
<td>14</td>
<td>.14</td>
<td>.04</td>
<td>-.35*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP/Capita</td>
<td>.06</td>
<td>-.02</td>
<td>.04</td>
<td>.28</td>
<td>-.06</td>
<td>-.10</td>
<td>.25</td>
<td>.59**</td>
<td>.60**</td>
<td>.56**</td>
<td>-.30*</td>
<td>.01</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>-.23</td>
<td>-.19</td>
<td>-.44**</td>
<td>-.48**</td>
<td>-.00</td>
<td>.02</td>
<td>-.14</td>
<td>-.34*</td>
<td>-.26</td>
<td>-.30*</td>
<td>18</td>
<td>.07</td>
<td>-.45**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aid</td>
<td>.11</td>
<td>.03</td>
<td>.14</td>
<td>-.03</td>
<td>.25</td>
<td>.19</td>
<td>.03</td>
<td>-.29*</td>
<td>-.47**</td>
<td>-.36*</td>
<td>21</td>
<td>.04</td>
<td>-.58**</td>
<td>.11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>-.21</td>
<td>.12</td>
<td>-.17</td>
<td>-.27</td>
<td>-.04</td>
<td>-.13</td>
<td>-.10</td>
<td>.19</td>
<td>-.10</td>
<td>-.21</td>
<td>11</td>
<td>.23</td>
<td>-.24</td>
<td>.34*</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>45</td>
<td>36</td>
<td>36</td>
<td>45</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>47</td>
<td>48</td>
</tr>
</tbody>
</table>

Note: Correlations measured as Pearson’s r. * Sig. > 95% ** Sig. > 99%
The hypotheses are further tested in a set of three multivariate analyses, one for each dependent variable (DV), CPI, GE, and IAG. In a total of ten models, we first test the control variables’ combined explanatory power in a baseline model (Model 1), followed by a test of each of the seven taxation variables in turn (size: Model 2, 3 and 4; shape: 5 through 7), and finally three models (Model 8, 9 and 10) with the combined effect of taxation’s size and shape.

Results

The results are slightly different depending on the DV used, but some general conclusions can be drawn: First, at between 45 and 50 % explained variation, the explanatory power of the baseline model is fairly strong. Second, as Model 1 shows, GDP and Early Threats are the strongest explanatory variables before taxes are taken into account. With the tax variables included, GDP consistently retains its significance, while Early Threats looses it on many accounts. The models with taxation taken into account all have fairly high r2-values (with an explanatory power of between 50 and 70 %), yet in general no dramatic increase compared to the baseline model. This can, especially with Direct Tax and TERRI, be explained by the loss in Early Threats’ explanatory power, and in the following research it is clear that such a factor is highly relevant and must be taken into account when discussing the taxation – governance relationship, as the conditions under which SSA states formed still seems to matter greatly for how revenue raising is carried out.

In terms of explaining QoG, the ‘size’ variables struggle somewhat, after control variables are included (in model 2, 3 and 4). Total tax is significant only on GE (but fails in two robustness tests, jackknife and bootstrap), although its correlation is positive in all three regressions. As opposed to the findings in the bivariate correlation matrix this casts doubt upon the pure ‘size’- argument. Tax Effort is significantly and robustly negative on IAG and GE (and insignificantly negative on CPI), confirming the findings in the bivariate analysis, that natural resource dependence, in accordance with the resource curse literature, is indeed negative for QoG. It further goes to show how treacherous taxation data might be when it comes to concerns of validity, that such a hailed taxation measure show results so different, compared to the other tax data.

Our ‘shape’ models, 5 through 7, show that Direct Tax and TERRI remain positive and significant in all three regressions. While Indirect Tax has no significant effect on CPI, its Beta value is actually stronger than for Direct Tax when tested on the LAG, and roughly matches it on GE. Hence, it might be preconceived to write off the beneficial effects of the VAT and other such taxation, although it may be an indication that the findings from the OECD states, where direct
taxes had a much stronger relationship to governance than indirect taxes, apply in SSA as well, and it might further suggest that there is a diminishing governance dividend of indirect taxation, up to a certain level of development. In sum, though, the ‘shape’ hypothesis is considerably strengthened.

Finally we look at the combined effects of size and shape, first through the combined measure of Direct and Indirect tax > 10 % of GDP (model 8), and subsequently Total Tax combined with Direct Tax and Indirect Tax, respectively (model 9 and 10). Direct and Indirect tax > 10 % of GDP is significant on DVs CPI and GE, but not IAG. Regarding the combined size/shape-models the results differ quite a bit depending on the DV, but Direct Tax retains its significance on all accounts, while the results for Total-, and Indirect Tax are somewhat weakened. Under control for Direct- and Indirect Tax, Total Tax remains significant only when testing on GE (and robust only together with Indirect Tax, to a 90 % level of significance only when bootstrapping, but not using the jackknife method). Indirect Tax holds its explanatory power in two regressions, GE and IAG, but not CPI. With these combined models the R²-values are also not greatly increased compared to when measuring the strongest tax-variables separately.

### TABLE 4, MULTIVARIATE REGRESSION: DEPENDENT CPI

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD</td>
<td>0.08</td>
<td>0.06</td>
<td>0.17</td>
<td>0.11</td>
<td>-0.02</td>
<td>0.10</td>
<td>0.03</td>
<td>0.02</td>
<td>-0.02</td>
<td>0.09</td>
</tr>
<tr>
<td>GDP</td>
<td>0.50***</td>
<td>0.51***</td>
<td>0.48**</td>
<td>0.60***</td>
<td>0.45**</td>
<td>0.48**</td>
<td>0.55***</td>
<td>0.45**</td>
<td>0.50**</td>
<td>0.53**</td>
</tr>
<tr>
<td>EF</td>
<td>-0.10</td>
<td>-0.01</td>
<td>-0.20</td>
<td>-0.06</td>
<td>-0.16</td>
<td>-0.15</td>
<td>-0.01</td>
<td>-0.08</td>
<td>-0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>CO</td>
<td>-0.06</td>
<td>-0.01</td>
<td>0.12</td>
<td>-0.08</td>
<td>-0.05</td>
<td>0.09</td>
<td>-0.01</td>
<td>-0.04</td>
<td>-0.15</td>
<td>-0.02</td>
</tr>
<tr>
<td>PS</td>
<td>-0.02</td>
<td>0.03</td>
<td>0.04</td>
<td>0.04</td>
<td>0.02</td>
<td>0.03</td>
<td>0.06</td>
<td>0.02</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td>ET</td>
<td>-0.30**</td>
<td>-0.20</td>
<td>-0.31**</td>
<td>-0.24</td>
<td>-0.10</td>
<td>-0.30*</td>
<td>-0.10</td>
<td>-0.23*</td>
<td>-0.03</td>
<td>-0.20</td>
</tr>
<tr>
<td>Total Tax</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Tax-Effort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RF Tax-Effort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Tax</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Tax</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TERRI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DATax &gt;10% GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>47</td>
<td>45</td>
<td>38</td>
<td>38</td>
<td>36</td>
<td>36</td>
<td>38</td>
<td>45</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>R²</td>
<td>0.45</td>
<td>0.49</td>
<td>0.51</td>
<td>0.52</td>
<td>0.60</td>
<td>0.50</td>
<td>0.61</td>
<td>0.52</td>
<td>0.63</td>
<td>0.54</td>
</tr>
<tr>
<td>Adj R²</td>
<td>0.37</td>
<td>0.40</td>
<td>0.39</td>
<td>0.41</td>
<td>0.50</td>
<td>0.38</td>
<td>0.52</td>
<td>0.43</td>
<td>0.52</td>
<td>0.41</td>
</tr>
</tbody>
</table>

Note: The values in the cells indicate Beta-values. * sig. >90 %; ** sig. > 95 %; *** sig. > 99 %
TABLE 5, MULTIVARIATE REGRESSION, DEPENDENT GE

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD</td>
<td>-1.7</td>
<td>-0.2</td>
<td>-1.0</td>
<td>-1.6</td>
<td>-0.27</td>
<td>-0.21</td>
<td>-0.24</td>
<td>-0.26</td>
<td>-0.27</td>
<td>-0.22</td>
</tr>
<tr>
<td>GDP</td>
<td>0.40**</td>
<td>0.41**</td>
<td>0.38**</td>
<td>0.52**</td>
<td>0.36*</td>
<td>0.39**</td>
<td>0.48***</td>
<td>0.31**</td>
<td>0.42**</td>
<td>0.46**</td>
</tr>
<tr>
<td>EF</td>
<td>-0.03</td>
<td>0.08</td>
<td>-0.15</td>
<td>0.17</td>
<td>-0.11</td>
<td>-0.09</td>
<td>-0.11</td>
<td>-0.01</td>
<td>-0.09</td>
<td>-0.12</td>
</tr>
<tr>
<td>CO</td>
<td>0.07</td>
<td>-0.01</td>
<td>0.18</td>
<td>-0.07</td>
<td>-0.02</td>
<td>0.17</td>
<td>0.04</td>
<td>0.08</td>
<td>-0.15</td>
<td>0.02</td>
</tr>
<tr>
<td>PS</td>
<td>0.02</td>
<td>0.08</td>
<td>0.06</td>
<td>0.06</td>
<td>0.04</td>
<td>0.06</td>
<td>0.09</td>
<td>0.07</td>
<td>0.09</td>
<td>0.12</td>
</tr>
<tr>
<td>ET</td>
<td>-0.32**</td>
<td>-0.19</td>
<td>-0.27*</td>
<td>-0.20</td>
<td>-0.09</td>
<td>-0.23*</td>
<td>-0.02</td>
<td>-0.21**</td>
<td>0.37*</td>
<td>0.40**</td>
</tr>
<tr>
<td>Total Tax</td>
<td>-0.32**</td>
<td>-0.30**</td>
<td>.41**</td>
<td>.48***</td>
<td>.45**</td>
<td>.43***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Tax-Indirect Tax</td>
<td>-0.32**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Tax-Direct Tax</td>
<td>.41**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Tax-TERRI</td>
<td>.48***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>47</td>
<td>45</td>
<td>38</td>
<td>36</td>
<td>36</td>
<td>38</td>
<td>36</td>
<td>45</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>R²</td>
<td>0.48</td>
<td>0.56</td>
<td>0.55</td>
<td>0.55</td>
<td>0.60</td>
<td>0.63</td>
<td>0.71</td>
<td>0.64</td>
<td>0.66</td>
<td>0.70</td>
</tr>
<tr>
<td>Adj R²</td>
<td>0.42</td>
<td>0.47</td>
<td>0.45</td>
<td>0.44</td>
<td>0.50</td>
<td>0.54</td>
<td>0.65</td>
<td>0.57</td>
<td>0.55</td>
<td>0.61</td>
</tr>
</tbody>
</table>

Note: The values in the cells indicate Beta-values. * sig. >90 %; ** sig. > 95 %; *** sig. > 99 %

TABLE 6, MULTIVARIATE REGRESSION, DEPENDENT IAG

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD</td>
<td>-0.03</td>
<td>-0.06</td>
<td>0.09</td>
<td>0.06</td>
<td>-0.05</td>
<td>-0.03</td>
<td>-0.02</td>
<td>-0.09</td>
<td>-0.05</td>
<td>-0.03</td>
</tr>
<tr>
<td>GDP</td>
<td>0.43**</td>
<td>0.41**</td>
<td>0.41**</td>
<td>0.52**</td>
<td>0.46**</td>
<td>0.49***</td>
<td>0.50***</td>
<td>0.36**</td>
<td>0.47**</td>
<td>0.51***</td>
</tr>
<tr>
<td>EF</td>
<td>0.01</td>
<td>0.05</td>
<td>-0.09</td>
<td>0.14</td>
<td>0.03</td>
<td>0.05</td>
<td>0.13</td>
<td>0.02</td>
<td>0.06</td>
<td>0.09</td>
</tr>
<tr>
<td>CO</td>
<td>0.02</td>
<td>-0.01</td>
<td>-0.15</td>
<td>-0.04</td>
<td>-0.01</td>
<td>-0.17</td>
<td>-0.02</td>
<td>-0.05</td>
<td>-0.03</td>
<td>-0.14</td>
</tr>
<tr>
<td>PS</td>
<td>-0.11</td>
<td>-0.10</td>
<td>0.07</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.06</td>
<td>-0.10</td>
<td>-0.10</td>
<td>-0.11</td>
<td>-0.04</td>
</tr>
<tr>
<td>ET</td>
<td>-0.37***</td>
<td>-0.31**</td>
<td>-0.36**</td>
<td>-0.34**</td>
<td>-0.21</td>
<td>-0.31**</td>
<td>-0.16</td>
<td>-0.31**</td>
<td>-0.19</td>
<td>-0.28**</td>
</tr>
<tr>
<td>Total Tax</td>
<td>0.14</td>
<td>0.29**</td>
<td>0.25</td>
<td>.40**</td>
<td>.47***</td>
<td>.49***</td>
<td>.47***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Tax-TERRI</td>
<td>.20**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Tax-Direct Tax-TERRI</td>
<td>.47***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>47</td>
<td>45</td>
<td>38</td>
<td>36</td>
<td>38</td>
<td>36</td>
<td>38</td>
<td>45</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>R²</td>
<td>0.49</td>
<td>0.56</td>
<td>0.55</td>
<td>0.51</td>
<td>0.58</td>
<td>0.68</td>
<td>0.63</td>
<td>0.50</td>
<td>0.58</td>
<td>0.68</td>
</tr>
<tr>
<td>Adj R²</td>
<td>0.38</td>
<td>0.38</td>
<td>0.49</td>
<td>0.39</td>
<td>0.47</td>
<td>0.47</td>
<td>0.60</td>
<td>0.55</td>
<td>0.40</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Note: The values in the cells indicate Beta-values. * sig. >90 %; ** sig. > 95 %; *** sig. > 99 %

While these results tend to vindicate the ‘shape’ argument, while ‘size’ is put in some doubt, the reality, as seen in tables 1 and 2, is a bit more complicated. There is good reason to remember that the taxation variables indeed do have a rather high internal correlation, and while statistical multicollinearity in models 9 and 10, did not seem to be an issue for the validity of the regression results, SSA states that raise the most taxes generally tend to do this through either direct or indirect taxes. Rather, what the results tell us is that aggregate taxation measures are in no way enough as an appropriate measurement, and that the relative importance of direct, and to an extent indirect, taxation for a state indeed matter in their own right.

Conclusions

The aim of this paper has been to detect whether taxation still matters for how well a state is run, but has also been driven by the belief that we need to conceptually distinguish between the size
and shape of taxation in order to get a fuller picture of how it might matter for government quality. Such a division, at least at any systemic level, has largely been lacking in the research field. Empirically, the results presented above do show that differences in taxation seem to matter for the level of government quality and that the size/shape division might well be fruitful: states that collect more direct and to an extent indirect taxes also have a higher quality of government, and the size of revenue is often less important than what type of tax a state collects.

This is at least partially new information. Following some researchers and organizations, one would possibly expect the effects in SSA to be stronger regarding the VAT, as direct taxation often have been considered a too technically demanding instrument for the states in the region, but the results in this study show that, while both tax types matter positively, direct taxation is a better predictor of government quality than indirect taxes. Still, compared to the Western world, where indirect taxation does not seem to matter at all, continued reforms from trade taxes to VAT appears prudent, but perhaps more as a complement to direct taxes.

The questions posed in the introduction of this paper, regarding who gets taxed how much, and how this is done cannot however be claimed to have been answered fully, and needs to be researched further. While we have been able to look into the questions of how much, and to an extent how, taxes are raised, the who-question remains relatively unclear, although reliance on direct and indirect taxes at the very least implies a broader tax collection than resource- and trade taxes. Cross-country measures that, to this author's knowledge does not exist, such as some type of measure of which part of the population (along economic, and possibly ethnic/regional lines) gets taxed, as well as the level of coercion involved in the collection process, would be more than welcome in the future.

Still, judging from the results presented in this paper, it seems as we can indeed fruitfully compare modern-day developing countries to the Western historical experience in terms of state-building, if not nearly enough to assume that the trajectory of the latter simply can be emulated. In a time when sub-Saharan Africa's 'uniquely' low level of development, generally portrayed in terms of poverty and misery, are starting to be questioned (Pinkovskiy and Sala-i-Martin 2010), this is encouraging in itself. The figure below, which shows how the relationship between QoG (here measured as GE) and direct taxation is very similar in both the OECD and SSA, might illustrate the situation more intuitively:
FIGURE 2. DIRECT TAX AND QoG IN SSA AND OECD

Note: Correlations measured as Pearson’s r. The Direct Tax measure for SSA is the same OECD measurement as the one used above; for OECD it is derived from OECD Revenue Statistics (2006, in Samanni et al 2010).

One practical implication of these findings, which official organizations such as the OECD itself argues for (2008a, 2008b), is to switch ODA means to taxation-related tasks, as well as government administration, economic policy and public financial management, posts that today only make up a small fraction the total amount, less than a tenth of a percent of current ODA (OECD 2008b:3). We must, however not forget that taxation is but one aspect of the fiscal state, and the effects of aspects such as debt and national savings, need also be included for a fuller picture. To this comes, obviously, the just as crucial aspect of state expenditure, namely how the state spends the money it has raised.

As witnessed in the theoretical as in the empirical section, there is much that speaks for the taxation – QoG idea. Still, we could see an even closer relationship, almost inherent in the definitions of the concepts. Moore (2008:35) describes an ideal type version of what taxation is:

- taxes are involuntary levies on all citizens. All taxation involves the actual or threatened exercise of state power: individual taxpayers are obliged to hand over money, with no firm guarantee of reciprocity, in situations where they are perceived to have little or no choice.

Seen in this way, taxation is almost by definition the opposite of bribes, a paradigmatic example of bad governance: a practice wherein, on the individual level, the agent, formally on a voluntary basis and apart from the official state guidelines (i.e. laws), pays someone in exchange for a
promise of reciprocity. From a collective viewpoint, however, a society with institutionalized and endemic bribery and corruption offers little choice for individuals wanting to break free of this vicious circle (and break free they do want, cf. Persson, Rothstein, and Teorell 2010), and the quid pro quo game of bribes for public goods eventually leaves most players losing. As no democracy has yet decided to abolish taxes, on the collective level we can actually talk of voluntariness as an aspect of taxation, and the reciprocity, as shown in North, Wallis and Weingast (2009), can also in the longer term be expected, as the (fiscally) largest states are also the richest and most developed, and thus better able to take care of its citizens. Africa, as most of the developing world currently has a shortage of this official reciprocity, or social contract, but making an effort in raising the right kind of taxes would be a big step in the right direction.
REFERENCES


State-Building in Developing Countries: Capacity and Consent. Cambridge: Cambridge University Press.


Schumpeter, Joseph. 1991 [1919]


