Dear CPW Participants,

Thank you for taking the time to read this draft! This paper originated as a seminar paper for my civil conflict class last semester, but I have adapted it to try to reflect my larger research interests (which I am so bold to refer to as a research "agenda" in the first heading). I hope you find it interesting, and I look forward to any and all feedback as I continue to circle around (with seemingly constant radius) a compelling and focused prospectus puzzle.

Best,
Diana

P.S. A few sentences in the brief literature review were actually taken from my comparative prelim exam, so my apologies if you find that the tone suddenly becomes more frenetic and sleep-deprived.

Taxation, Compliance, and Resistance in New and Aspiring States

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1   Introduction: The Larger Research Agenda

The power to tax is usually understood to be a privilege of sovereign states and their local and regional subunits. However, to become a state – and especially one whose sovereignty is recognized by other states in the international system – political leaders must often develop extractive routines to finance the quest for statehood itself. This paper will seek to clarify how the process of extraction is negotiated between leaders and their domestic populations in new and aspiring state settings. I will use a basic model to generate hypotheses about how a governing power can encourage the population to comply with a particular tax policy. The model shows that context matters when determining when populations might pursue strategies other than compliance, such as protest, lobbying, or evasion. While the model is quite simple, it allows us to isolate key parameters – i.e. the costs incurred by the population for engaging in "institutionalized" resistance (i.e. lobbying) versus what might be gained through public protest; the costs to the government of engaging in repression; and the probability that tax evasion is penalized – that are consequential in predicting outcomes of these interactions. While these results are general enough to apply across a variety of stages of state development, I will focus my discussion in the final section on the implications for new and aspiring states.

There is a robust body of existing work that seeks to understand the role of extractive capacity in the development of the modern state and how to explain variation in types of tax systems and the ability of states to compel tax payment. Levi (1988) addresses the question: what determines variation in revenue-generating institutions across states and over time? She argues that rulers are constrained by three factors when deciding on a system of revenue generation: 1) the relative bargaining power of the ruler vis--vis their constituents; 2) the transaction costs associated with negotiating and implementing tax policies; and 3) the rulers discount rate. The success of the extractive regime relies on "quasi-voluntary com-

pliance" by the population.[1] For North (1981), the ability of rulers to continue to extract resources from society depends on the types of rules and protections that the state sets up to govern property rights. These, in turn, are shaped by the property rights regime that rival rulers are offering to their (current and prospective) constituents. North implies that the process of extraction itself becomes more costly the more that the state must discriminate and implement distinct property rights rules for distinct groups of constituents. Thus, inherent in North's argument is that state capacity for extraction – defined, essentially, as the costliness of ensuring compliance – depends to some degree on underlying social heterogeneity or complexity.

Perhaps one of the most widely cited theories of state formation, Tilly (1990) argues that the process of state development is marked by two critical processes: the accumulation and concentration of capital, and the accumulation and concentration of coercive means. Extractive institutions initially set up to finance war and the control of territory become important for administering and providing services to local populations. For Tilly, bargaining with capital-holders and local populations over extraction was embedded in the process of state formation from the beginning. Finally, Olson (1993) argues that regularized taxation forms the basis of political order: in contrast to roving warlords, the autocrat, or "stationary bandit," emerged because it was in both his and the population's greater interest for there to be a "monopolization of theft." Olson describes: "the rational, self-interested leader of a band of roving bandits is led, as though by an invisible hand, to settle down, wear a crown, and replace anarchy with government," (568). Leaders are self-interested and seek to maximize extraction – either for their own consumption or to further their own political goals – but are constrained by their desire to avoid revolt and to provide a base for continued production.

I hope to answer a slightly different question than the studies cited above, namely: how do extractive routines evolve over the process of state formation and, consequently, affect the likelihood and modes of resistance used by the local population? Much of the empirical analysis in existing literature is focused on early cases in Western Europe, and does not take into account the role of non-tax revenue such as foreign aid and natural resource rents, both of which contribute substantially to public budgets in many of today's newer states. Conventional wisdom suggested in the "resource curse" literature and elsewhere implies that such sources of non-tax revenue will reduce incentives for policymakers to develop strong systems of taxation and enforcement. However, because resources are depletable and aid is often volatile, policymakers in new states may be forced to increase their capacity to extract revenues from domestic sources at some point in time. Does the timing of new tax policies or enforcement measures within the larger process of state formation affect the likelihood or modes of resistance used by the population? Are resource- or foreign aid-rich governments destined to face more resistance to their extractive policies, or might they head off

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[1] The empirical portion of Levi's study consists of several detailed case studies: the rise and decline of tax farming in Republican Rome; tax policies in France and England from 1200-1700; the introduction of the income tax in 18th century Britain; and compliance with the uniform income tax in Australia.

public resistance by increasing tax monitoring and enforcement capacity earlier than they would otherwise need to, thus conditioning the population to tax compliance? Resource-dependent new states that could be analyzed in future empirical work include South Sudan, post-Qaddafi Libya, and Timor-Leste.

With or without such non-tax resources, how does achieving "statehood" affect extractive and compliance routines that might have been in place during early stages prior to recognized independence or secession? To answer this question empirically will require data on the forms of extraction and levels of compliance/resistance over the various stages of state development. Possible empirical applications for the future include states and aspiring states at various stages of international recognition such as the Palestinian Territories, Somaliland, and Kosovo and/or other former Yugoslav republics.

To understand the effect of international recognition on tax policies in a new state, one must first attempt to understand the effect of recognition on the economy as a whole. Intuitively, it seems that international recognition would improve economic growth prospects but allowing the new state to fully participate in international trade, provide a relatively more stable institutional environment with which to attract foreign investment, the ability to float bonds on international markets, and perhaps more easily receive foreign aid directly (as a government) instead of aid being delivered to non-state actors. These additional sources of financing may reduce the need for tax-based revenue. On the other hand, with recognition, expectations of the role of the new state may increase, causing the state itself to grow in terms of the range of services (regulatory or distributive) and therefore also its administrative apparatus. This may increase the need for tax-based revenue. Further, one can imagine that international recognition of a state will contribute to the legitimacy of political institutions and therefore of the extractive policies used to sustain them. This legitimacy may contribute to governments confidence that its own tax policies will elicit compliance from the population. Finally, international recognition may encourage certain segments of the informal economy to move into formal markets to take advantage of new investment inflows, thus broadening the tax base. Combined with the overall observed trend that states, and therefore taxes as a share of GDP, tend to grow over time, it seems for the above reasons that taxes may be more inclined to grow once a state is recognized, even if alternative sources of revenue such as foreign aid, taxation of foreign investments, and debt-based financing become available. Thus, we might expect large variation in extractive practices and levels of compliance in early states to converge upon a relatively high, but stable rate of extraction after a state being formally recognized.

In addition to the bargaining climate between ruler and ruled, it is important to consider that states and leaders operate in a competitive environment with other states and leaders, all trying to attract producers of capital to their own jurisdictions. This competitive environment appears in Hirschman (1970)'s framework – the population will choose exit, voice or loyalty in part based on what alternative options are available to them. For new and

aspiring states, the availability of alternatives is especially important. If a new state is forming from the ruins of a failed or deteriorating existing state, then the new or aspiring rulers may not need to provide a very attractive tax-and-benefits package, since the population's opportunities for exit are limited. In addition, if it is costly for the population to exercise either exit *or* voice, then the government has much more leverage in maximizing extraction. However, usually governments are constrained, even in new and aspiring state settings where we might not even consider such rulers to yet form a cohesive "government." Usually, the population has some outside options, albeit sometimes they are quite costly.

2 Government Extraction and Popular Response: A Simple Model

I set up a one-stage asymmetric information game between two players, the government ($\mathbf{G}$) and the population ($\mathbf{P}$). Of course, this framework neglects the complexities of collective action and popular organization. Treating the population as a unitary actor is thus a simplification that can be relaxed in future extensions. It may be more realistic to think of $\mathbf{P}$ as a specific group of producers whose compliance is critical to ensuring future production and political stability.

Nature determines the government's overall budget at the beginning of the game (B) and the population's initial (pre-tax) endowment of income (ω). $\mathbf{G}$ moves first and selects the tax rate τ_1, the amount of the budget to be invested in monitoring for tax evasion ($\mu : \mu \in [\mu_L, \mu_H]$), and the level of goods and services provided to the population (g), which is a residual item. The budget constraint is simply:

$$B = g + \mu$$

Note that there is no distinction between public goods and private transfers in the government's expenditures: g is simply some form of spending to encourage future production. Further, the budget is exogenously determined, but the game could be extended to a multistage setting in which the budget will depend on tax revenue ($\tau_1\omega$) from the last period.

$\mathbf{P}$ moves next, only knowing that, if they engage in tax evasion, they will succeed with probability p and they will be caught with probability $1 - p$. The probability p is a function of the government's initial investment in monitoring capacity (μ) such that:

$$p = F(\mu)$$

I assume that the government has perfect information about the mapping of μ to p, but the population observes neither μ nor p. Thus, a perfect Bayesian equilibrium must include the population's beliefs about the value of p. $\mathbf{P}$ does observe τ_1, the government's proposed tax rate, and g, the level of transfers, and then can decide how to respond to $\mathbf{G}$'s policy. They choose from among the following options:

1. comply

2. lobby

3. evade, or

4. protest.

If they choose to comply, they receive post-tax income, taxed at the government's preferred rate (τ_1) plus their transfer g from the government. If they lobby, it is assumed that they engage in successful lobbying with the government resulting in a reduced tax rate of τ_M, such that $\tau_M < \tau_1$. The population faces a fixed cost to lobby (c_L). If they evade taxation, they remove e, a share of ω, from taxable property. As noted, they are caught with probability $1 - p$ (the probability that the government invested in high monitoring capacity) and forced to pay a penalty equal in size to the value of the income that they attempted to shelter (e). The population succeeds in evasion with probability p. Finally, the population may choose protest, in which case the government faces a second decision node: whether to repress or not repress the protest. It is assumed that, if the government chooses to repress, they do so successfully, however there is a cost of repression (c_R) to the government. Alternatively, if the government does not repress, the population "wins" and gets to implement their preferred tax rate, $\underline{\tau}$ such that $\underline{\tau} < \tau_M < \tau_1$. In either case, the population pays a cost to protest (c_P). For simplicity, it is assumed that protesting is more costly to the population than lobbying ($c_P > c_L$), and all cost terms are expressed as a share of income, thus: $c_P, c_L, c_R \in [0, \omega]$.

All payoffs are listed in the attached game tree (see Figure 1). Below, I begin by characterizing on-the-path outcomes.

2.1 Government: Repress or Not Repress?

Beginning with the government's second move, in the event of popular protest, the government will repress when:

$$\tau_1\omega - c_R \geq \underline{\tau}\omega$$
$$c_R \leq \tau_1\omega - \underline{\tau}\omega$$
$$c_R \leq (\tau_1 - \underline{\tau})\omega$$

Thus, the costs of repression must be less than the marginal tax revenue the government can earn from taxing at their preferred rate (τ_1) instead of the population's preferred rate ($\underline{\tau}$). This is a straightforward result of the model, however it is worth exploring a bit. Based on the very strong assumptions that *repression works when used* and *unrepressed protests are successful*, the larger the gap between the preferred policies of the ruler and ruled, the more likely is the government to repress. As we know, these assumptions are too strong: namely, sometimes repression does not work and merely enflames popular protests, leading to escalation or long cycles of repression and protest. Lichbach (1987) resolves seemingly

contradictory findings about whether deterrence works or not. According to his work, aggregate (violent and nonviolent) protest activity will only be reduced if the government accommodates opposition to some degree; repression not accompanied by accommodative policies by the government can increase overall dissent.[2] This static model obviously does not capture these important action-reaction dynamics.

2.2 Population: Conditions for Compliance Over Protest or Lobbying

The government's least preferred sequence is a protest by the population that is not repressed. Thus they will set τ_1 to satisfy the above condition to convince the population that, if they protest, it will be repressed. Thus, rearranging yields:

$$\tau_1 \geq \underline{\tau} + \frac{c_R}{\omega} \tag{1}$$

This condition is sufficient for the population to strictly prefer compliance over protest on the equilibrium path, since it assures the population that the government has enough incentives to repress any potential protest.

One can see fairly easily in the model that the government strictly prefers the population to comply over lobbying, too. Under lobbying, the government must compromise with the population on a tax rate that is lower than their optimal rate ($\tau_M < \tau_1$). When will the population prefer compliance to lobbying? When the following is true:

$$(1 - \tau_1)\omega + g \geq (1 - \tau_M)\omega + g - c_L$$

This simplifies to:

$$c_L \geq (\tau_1 - \tau_M)\omega$$

The population will comply when the costs of lobbying are greater than the marginal benefits they can expect from implementing the compromise (lobbied) tax rate as opposed to the government's ideal rate. Rearranging the condition above, the government will set τ_1 such that:

$$\tau_1 \leq \tau_M + \frac{c_L}{\omega} \tag{2}$$

When possible, the government will set the tax rate, τ_1, to satisfy conditions (1) and (2) above:

$$\underline{\tau} + \frac{c_R}{\omega} \leq \tau_1 \leq \tau_M + \frac{c_L}{\omega} \tag{3}$$

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[2]More recent advances have looked at the conditions under which escalation of civil and/or ethnic conflict occurs (see Eck, 2009; Lyall, 2009; Davenport and Armstrong, 2012). With the exception of Davenport and Armstrong, it is assumed in most of this literature that the government possesses a more-or-less *constant capacity to repress*, and what changes is their willingness or incentive to do so. Capacity to repress may be a particularly important factor in determining the costs of repression (c_R) in new and aspiring state settings.

This requires that the following is true:

$$\underline{\tau} + \frac{c_R}{\omega} \leq \tau_M + \frac{c_L}{\omega}$$

which, rearranged, is:

$$c_R - c_L \leq (\tau_M - \underline{\tau})\omega \tag{4}$$

If condition (4) is true, then there exists a tax rate that the government can select to induce compliance (assuming they also make the requisite investment in monitoring capacity). There are several ways in which condition (4) might be violated and, in equilibrium, the government will be unable to guarantee popular compliance. First, if the cost of repression to the government is very high, the government will find it hard to credibly commit to repressing a protest, thus encouraging the population to risk going to the streets. If the cost of lobbying to the population is very low *or* if the level of extraction they can achieve through lobbying is very favorable, then it will be difficult for the government to deter the population from lobbying. Finally, as the level of extraction to be obtained through successful protest approaches the level that can be obtained through lobbying, the population will also be more likely to engage in lobbying.

2.3   Population: Condition for Compliance over Evasion

Will the population ever fully comply with the government's policies, when they have the option of evading? They know that there is some probability they will successfully evade, and some probability they will be caught. Here, we can simplify the expected utility of evading for the population. Recalling that $p = \Pr(\mu = \mu_L)$ and $1 - p = \Pr(\mu = \mu_H)$, the expected utility of evasion can be characterized as:

$$EU_P(Evade) = p[\omega - \tau_1(\omega - e) + g + e] + (1 - p)[(1 - \tau_1)\omega + g - e]$$

This simplifies to:

$$EU_P(Evade) = pe(\tau_1 + 2) + (1 - \tau_1)\omega + g - e$$

Thus, the population will evade taxation by hiding a share of their assets instead of complying when they have the following beliefs about p:

$$pe(\tau_1 + 2) + (1 - \tau_1)\omega + g - e \geq (1 - \tau_1)\omega + g$$
$$pe(\tau_1 + 2) - e \geq 0$$
$$p \geq \frac{1}{\tau_1 + 2} \tag{5}$$

Thus, the likelihood of evasion is increasing in (1) p, the perceived likelihood that the government has low monitoring capacity, (2) τ_1, the government's rate of extraction. This could be

a particularly tricky dilemma for new states that find themselves increasingly dependent on tax revenues but do not necessarily have the resources to increase monitoring in the current period.

Since the government is ultimately indifferent between the population complying and evading (if they have invested enough such that evasion can be caught with a probability close to 1) we will assume that the government would prefer to ensure full compliance. Because investments in monitoring capacity come at the expense of goods provision, we assume that the government will mix between μ_L and μ_H such that:

$$p = F(\mu) = \frac{1}{\tau_1 + 2} \tag{6}$$

Note that the government's strategy will need to lend a higher probability to *high* monitoring capacity when they choose a higher tax rate τ_1, since this will increase incentives for the population to evade. This supports the intuition that highly extractive states will require more costly monitoring systems to enforce compliance.

3   Implications for New States

I have illustrated a simple model of government extraction and popular compliance. I have characterized one set of on-the-path outcomes but have noted how sustaining popular compliance with government policies depends on the costs of repression, the costs of "institutionalized" resistance (lobbying), the potential benefits the population might achieve through such lobbying, and the potential benefits of protesting on the streets instead.

This model can inform our understanding of extractive policy in new and aspiring states in several ways. First, it is instructive to think about the initial conditions under which the new state has been formed – these conditions will affect the costs of repression. For example, the new government of South Sudan has emerged from a long history of Southern resistance movements, the largest and most consolidated being the Sudan People's Liberation Movement (SPLM), which is now the ruling political party in the new state, and the linked Sudan People's Liberation Army (SPLA), the military wing which has transitioned into the new state's military. Similarly, the Palestinian National Authority (PA) was established on the foundations of the Palestinian resistance movement, dominated by Fatah and other militarized PLO parties. While both the South Sudanese and Palestinian national movements likely suffered some costs for engaging in repression of the population while they were still "pre-state" movements, one can imagine that the audience costs of repression have increased after both the SPLA/M and Fatah evolved into recognized governing parties. Similar to the "inclusion-moderation" hypothesis that has been applied to Islamist parties entering formal government, one might ask whether statehood – whether fully or partially recognized – has moderated such inclinations toward repression and, perhaps, created an environment more conducive to popular protest.

Finally, it is worth considering what "lobbying" means in an early state setting: pressure through formalized institutional channels is not an option when such channels don't yet exist. However, the model above only assumes it is a lower cost (and lower potential reward) form of pressure than public protest. This may mean that it is less public, but just as "informal," i.e. a visit to express grievances to a local commander or village head. In some ways, it is imaginable that lobbying becomes *more* costly once formal legislative institutions are erected and extractive policies become more centralized. (Although, lobbying with a pre-state militia seems like it could be a potentially costly endeavor, too.) If one ascribes to the general view that states are meant to reduce transaction costs and make clear a set of rules for state-society interactions, then the costs of lobbying should at least be better known by the population in a consolidated state setting.

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Figure 1. Extraction and Popular Response Game.

$(\tau_1\omega - C_R, (1-\tau_1)\omega +g - C_P)$

Repress

$(\underline{\tau}\omega, (1-\underline{\tau})\omega +g - C_P)$

-Repress

G

P

E

$(\tau_1(\omega-e), \omega - \tau_1(\omega-e)+g+e)$

C

$(\tau_1\omega, (1-\tau_1)\omega +g)$

L

$(\tau_M\omega, (1-\tau_M)\omega +g - C_L)$

P

G sets the following:
- tax rate: τ_1
- monitoring capacity: $[\mu_L, \mu_H]$
- protection/services (residual): $g = B - \mu$

μ_L

p

P observes ω, τ_1, g, chooses the following:
- C: Comply
- L: Lobby
- E: Evasion (hides e, share of ω)
- P: Protest

$(\tau_1\omega - C_R, (1-\tau_1)\omega +g - C_P)$

Repress

$(\underline{\tau}\omega, (1-\underline{\tau})\omega +g - C_P)$

-Repress

G

N

B, ω

G

$1-p$

μ_H

P

P

E

$(\tau_1\omega, (1-\tau_1)\omega+g-e)$

C

$(\tau_1\omega, (1-\tau_1)\omega +g)$

L

$(\tau_M\omega, (1-\tau_M)\omega +g - C_L)$