Fiscal Capacity and State Fragility*

Timothy Besley
LSE and CIFAR

Hannes Mueller
IAE (CSIC), MOVE and Barcelona GSE

November 28, 2019

Abstract

This chapter discusses issues that arise in building an effective fiscal state and relates this to debates about causes and consequences of state fragility. It argues that the lack of capacity to raise revenue is symptomatic of a wider range of issues that lie at the heart of state fragility including a weak private sector, a lack of legitimacy and poorly functioning administrative structures. Building the capacity to mobilize revenues requires building a social contract based on a culture of voluntary compliance in addition to strengthening more tangible aspects of the state. This has far-reaching consequences policies that aim to strengthen fiscal capacity in the context of fragility.

*We thank the participants of the workshop on Macroeconomic Policy in Fragile States in Oxford in December 2018 for useful feedback on this project and on an earlier draft. We also thank Lavinia Piemontese and Sacha Dray for excellent research assistance and comments. All errors are ours.

"It is shortage of resources, and not inadequate incentives, which limits the pace of economic development. Indeed the importance of public revenue from the point of view of accelerated economic development could hardly be exaggerated." Nicholas Kaldor, 'Taxation for Economic Development," Journal of Modern African Studies, 1963.

"[T]he fiscal history of a people is above all an essential part of its general history. An enormous influence on the fate of nations emanates from the economic bleeding which the needs of the state necessitates, and from the use to which the results are put." Schumpeter, The Crisis of the Tax State, 1918.

1 Introduction

While there are many dimensions to state fragility, a weak capacity of the state to raise revenue is a key feature. Technical support is often provided to increase revenue generation as, for example, when a country reforms its VAT system. And international organizations like the IMF as well as donors play a key role in assisting with these more technical aspects of revenue mobilization.

But raising taxes is not only a technical issue but a political and social one. Low tax revenue not only reflects the tax system or a weak economy but also an incompetent and corrupt bureaucracy, lack of cohesiveness in the operation of the state and a weak civic culture in the population. Studying revenue goes well beyond the narrower concerns that, without tax revenues, the state cannot support its citizens. It lies at the heart of the compact between a state and its citizens. The task of raising fiscal capacity in this context therefore needs to pay attention to these dimensions to succeed.

The capacity to mobilize revenues can come from three main sources. First, the economy has to be conducive to levying taxes. Hence having a larger formal economy with large firms will generally make compliance easier. Second, there needs to be investments in monitoring and compliance that makes it feasible to collect taxes owed. Third, citizens have to be willing (at least to some degree) to comply with the demands of the tax system. Relying exclusively on monitoring and compliance is costly. Even though the tax share tends to increase with income, it is well-known that countries raise different levels of revenue per capita even controlling for GDP.

Unlike low levels of revenue mobilization, fragility is hard to define and measure. This is because fragility is essentially a statement about risks, i.e. the risk of failure when put under stress. But failure is not easy to define in the context of the multi-dimensional responsibilities of states and measuring the risk of failure is therefore complicated. Commonly used approaches, including the CPIA used in this volume, harness aggregates (typically weighted sums) of many indicators to capture fragility. This has the advantage of giving the measurement a broad base but the disadvantage of being less transparent and generating the tendency to evaluate fragility ex-post. For example, a country will tend to be labelled as fragile *after* it has experienced the outbreak of armed conflict in its territory or a dramatic decline of its GDP.[1]

Here we follow IGC (2018) which argues that there are six key symptoms of fragility in general: (i) Weak state capacity: a failure to invest in fiscal, legal, regulatory and spending capabilities of government. (ii) A weak private sector: economies are characterized by a large informal sector with few large firms and poor legal structures in place which hampers taxation, (iii) Lack of Security: the state is not able to provide security from disruptive actors (such as organized criminals or militias) throughout its territory. (iv) Weak resilience: the economy often relies on few sectors and is subject to external shocks which threaten political stability. (v) Low levels of state legitimacy: society suffers from low levels of trust and reciprocal compliance; and (vi) Polarized societies: prevalence of oppositional identities whether ideological, ethnic, linguistic or religious. Different polities display these symptoms to differing degrees. Moreover, countries that have functioned effectively for long periods of time may occasionally display some of these symptoms.

The symptoms of state fragility are best thought of as lying on a continuum with multiple dimensions. Underlying causes are more complex still. Many of the dimensions reinforce each other and there is no clear-cut causal structure. While it is important to keep the wider picture in mind, it can be useful to examine a specific aspect of state effectiveness as we will do here. By unpacking issues around revenue mobilization, we will gain wider insights

[1] For a discussion of the CPIA and its relationship with future risks see Celiku and Kraay (2017). In their recent report, the OECD (2018) tried to avoid this problem and instead framed fragility as a combination of risks and coping capacities through a principal component analysis of over 40 variables. However, fragility even in this dataset should be regarded as much an evaluation of realized failures (a fall in the growth rate) as a measure of unrealized risks.

into fragility problems and the specific challenges that need to be addressed to create a more effective state.

Taking this to heart, this chapter looks at the challenge of building fiscal capacity and discusses how it is related to contemporary concerns about state fragility. It will argue that these two lines of thinking have strong commonalities and that by learning about one specific weakness in the way that the state works – poor revenue raising capacity – we learn a lot about how states function effectively in general. Therefore, a key message developed here is that it is essential to move beyond purely technocratic approaches to revenue mobilization and to incorporate an appreciation of the political and social dimensions of fiscal capacity.

The chapter is organized as follows. The next section reviews some important background elements. It discusses some of the relevant ideas in the literature on the role of institutions, civic culture and state capacity. In section three, we look at some evidence drawn mainly from correlations which we use to build a narrative and argue that increasing fiscal capacity is related to the development of the state, society and the economy. Section four discusses some policy conclusions and suggests that a new conceptual approach is needed for international engagement on problems of low fiscal capacity and state fragility. We suggest that much greater attention has to be paid to political economy issues.

2 Institutions, Norms and Culture

Underlining the importance of political institutions has now become an established line of argument in explorations of the factors that are conducive to economic development. Seminal historical work by North (1990) and North and Weingast (1989) envisages building institutions that restrain the state as the *sine qua non* of economic development. A recent literature in political economy such as North et al. (2009), Acemoglu and Robinson (2012) and Besley and Persson (2011) stresses the role of building political institutions which create greater cohesiveness as lying at the heart of state effectiveness. There is now a large body of supporting evidence (see Acemoglu et al. 2005) that institutions affect the path of economic development.

One key issue is how far institutions are codified into rules and formal structures. Mapping these has certainly provided valuable insights into correlates of state performance. Less easy to measure are the more informal aspects of institution building such as how far people choose to *behave* co-operatively within a set of rules which relates to norms and beliefs about how an institution will work. Increasing attention has been paid to this (Acemoglu and Robinson, 2018, and Bisin and Verdier, 2017) and it leads to a greater interest in the role of culture in making states function effectively. This links to an older literature in political science which gives a key role to transformations in civic culture in explaining how governments work (see, for example, Almond and Verba, 1963, and Lipset, 1960).

A good illustration of the importance of civic-culture is the study of diplomatic parking tickets by Fisman and Miguel (2007). Diplomats to the UN in New York come from different countries but face the same institutional environment in New York. Until 2002, diplomatic immunity protected UN diplomats from parking enforcement actions. Fisman and Miguel show that diplomats from countries with high levels of corruption (on the basis of survey-based indicators) accumulated significantly more unpaid parking violations. And the effect is large with diplomats from the most corrupt countries accumulating about 80 percent more parking tickets than diplomats from the least corrupt countries. This is a striking variation in behavior purely driven by the different cultural backgrounds of these diplomats.[2]

In the context of fiscal capacity, Besley (2019) discusses three roles for civic culture (see also Levi, 1988 for historical evidence). First, it has a direct impact on fiscal capacity because tax compliance increases when individuals regard it as their duty to pay taxes. Second, civic culture reacts to the investments of the government. For example, tax compliance increases when public goods are provided and falls when the elite uses the state to extract resources.[3] Third, there is a complementarity between being a civic-minded citizen and the proportion of such citizens in the population as a whole. It is more attractive to be civic-minded when there are more civic-minded citizens around. This leads to a self-reinforcing cultural dynamic which is affected by government policy.

The two approaches, building institutions and building a civic culture,

[2] The article also finds that diplomats of the best-behaving countries were converging towards bad behavior over time but that the enforcement of ticket fines after 2002 reduced false parking dramatically. Both of these results show that the institutional framework matter for behaviour.

[3] From a modeling perspective, civic-minded citizens are like motivated agents in the sense of Besley and Ghatak (2005); they respond positively if their preferences are aligned with the government objectives and negatively otherwise.

are increasingly seen as complementary and here we highlight these complementarities and take policy conclusions from this. Interestingly, this is in line with two old traditions in social science. The first follows Hobbes (1651) who envisaged state building in terms of the expansion of formal state authority and the capacity to project power in the form of a *Leviathan*. This is often contrasted with the contractarian approach of Locke (1690) and Rousseau (1762) which views the state as a nexus of reciprocal obligations and where voluntary compliance is key to state power. Both approaches give a role for institutions in restraining state power.

State capacity has three core dimensions (for a brief summary see Besley and Persson, 2014). Fiscal capacity is the capacity of the state to raise revenue. Most government activities require revenues from a tax system with the power to enforce payment of statutory taxes. This must be underpinned by the recruitment and training of tax inspectors and investing in systems of monitoring and compliance. Fiscal capacity acts in conjunction with legal capacity and collective capacity but is also influenced by civic culture and the level of per capita income.

Legal capacity is the capacity of the state to secure private property rights to the ownership of physical and human assets. Policies of effective market support require a series of costly and durable investments. For example, public land and property registries have to be built, and functioning court systems require trained officials and a number of courts on top of written statutes.

Collective capacity augments markets, mostly by supplying public goods. But policies to limit inequality also belong in this category, as do paternalistic policies to counter imperfect individual decisions. Stretching the concept further, the regulation of externalities also increases the benefits of using markets. As with market support, increasing collective capacity requires investments. For example, running an effective public health system is enhanced by investments in delivery, trained personnel, structures, and equipment.

Here our primary focus is on fiscal capacity. Weak fiscal capacity contributes to state fragility in several ways. First, it encourages government to use sources of tax revenue which can undermine trust in government. For example, resorting to the use of the inflation tax or finding other less transparent and arbitrary ways of acquiring resources. This weakens legitimacy. Using more selective forms of taxation can also enhance polarization between taxpayers and others. This weakens cohesion. Low levels of fiscal capacity make it harder to use government debt as a source of smoothing shocks but also because broad-based taxation is more stable. This reduces resilience. In extreme cases, natural-resource based taxation tends to fluctuate due to price shocks making intertemporal management of public resources much more challenging.

As we explain below, building state capacity is partly a function of making investments in the working of the state. This is facilitated by having a constellation of institutions which is conducive to this. It is also affected by the complexion of society, particularly the extent of oppositional identities and the strength of civic culture. We will now present some evidence that these dimensions of state functioning are associated with fiscal capacity building and relate them to debates about state fragility.

3 Country Experiences

In this section, we discuss some of the evidence of the link between state fragility and fiscal capacity grouped under three headings: state, society and the economy. Fragility affects all of these and we discuss some of the main theoretical ideas as well as the links to evidence based on country experiences. This will serve as a backdrop to the discussion of policy implications.

3.1 The State

Institutions and State Capacity The state operates in a framework of institutions which serve two core functions: allocating access to power and regulating its use. The latter plays a key role in shaping whether the state is used for common purposes or is captured by sectional or private interests. Legitimacy comes both from constraints on power as citizens and from the acquisition of power. Elected leaders often claim legitimacy via having a mandate from the people, a claim which is less compelling for those who rule by force or have inherited power.

Some symptoms of state fragility are a direct consequence of institutional conditions. For example, lack of institutional cohesion can result in low levels of state capacity. This is because the incentive to invest will be greatest when the state is used for common purposes (Besley and Persson, 2009, 2011). Reflecting this, there is a robust correlation between fiscal and legal capacity and weak executive constraints across a range of measures (Besley and Persson, 2009) and this also holds for fiscal capacity for a sample of countries in the 20th century even when country fixed effects are included (Besley et al., 2013).

Lack of institutional cohesion also matters for security. Besley and Persson (2011) present theoretical and empirical evidence that weak executive constraints are associated with a higher risk of conflict. This makes sense from a theoretical point of view as incentives to fight are likely to be strongest when the state can be used for private rather than common interests. So we would expect weak executive constraints to increase political instability further weakening incentives to invest in state capacity (Besley and Persson, 2010). Moreover, those who acquire power after a period of conflict may lack legitimacy.

Table 1 provides a summary of the resulting empirical relationship between cohesive institutions (executive constraints) and state failures like the collapse of GDP or the outbreak of armed conflict and the use of purges. The table shows simple summary statistics for the occurrence failures in country/years with weak and strong executive constraints. On all dimensions, thus form of insecurity is more likely for countries with weak executive constraints.[4] As the last column of Table 1 shows, this holds even when controlling for GDP levels.

Table 1

Two further background factors bear on the incentives to invest in state capacity. The first is the underlying state of polarization, typically rooted in religious and/or ethnic divisions. We return to this in the next section. The second is access to natural resources and aid revenues. Natural resources weaken the demand for tax revenue from other sources and hence blunt the incentive to invest in fiscal capacity. Such resources also make capturing the state more valuable and hence can fuel conflict and political instability.

The state of institutions, availability of natural resources and polarization lie behind all dimensions of state capacity affecting incentives for the state to be more or less cohesive and hence to invest. Many of these are also factors that lie behind fragility and can generate dynamics towards a negative but stable equilibrium - in conflict studies this has been coined the conflict trap (Besley and Persson, 2011 Chapter 5).

[4] Accordingly, Besley and Mueller (2018d) model executive constraints as a fail-safe mechanism of the state.

Different dimensions of state capacity can be complements in the sense that investing in one dimension of state capacity can increase investment returns in another dimension (Besley and Persson, 2009). To see this, consider the following example. Suppose a government contemplates an investment to encourage participation in the formal labor market. In a low-income country, this may, for example, be a legal framework supporting the formal sector. Such legal-capacity investment is more attractive after a fiscal-capacity investment raising the effective tax rate on labor—it now yields additional tax revenues, which can be used for lower tax rates or more collective consumption. But the complementarity runs both ways. The legal-capacity investment supporting formal sector employment encourages a fiscal-capacity investment that improves labor income tax compliance, as the broader tax base implies more revenues.

Such complementarities can explain why governments make simultaneous investments in different state functions. But they also suggest that project-by-project appraisal of individual state capacity investments could seriously understate their benefits. This calls for a holistic look at the economy and state capacity to evaluate the value of state investment. This is important from a modelling perspective; standard models of optimal taxation either abstract from what is done with the revenues or even assume that total transfers need to sum to zero, i.e. there is no public good provision. Such models also rarely look at complementarities between the use to which tax revenues are put and tax policies.

Figure 1 from Besley and Persson (2011) illustrates that development goes hand in hand with an expansion of state capacity over different dimension. On the y-axis the figure displays the share of income tax in the total tax take, a result of investments in fiscal capacity, and on the x-axis it displays an index that captures the ability of the state to enforce contracts, a result of investments in legal capacity.

Figure 1

Clearly, both of these dimensions are correlated with each other and improve as income per capita increases. Most of the high-income countries have managed to invest in both aspects of state capacity. Figure 1 also reveals a distinct group of low income countries with very low legal capacity which all have also low fiscal capacity and collect less than 40 percent of their taxes as income taxes.

An important case study of the complementarities and why this inhibits the development of state capacity comes from Sanchez de la Sierra (2018) who studies the rise of local armed actors in Eastern Congo - a region typically associated with extreme state fragility. The study shows that armed militia groups in this area develop several aspects of state capacity the moment they become stationary. In particular, they start to develop a tax system, security, administration and even provide legal services.

Interestingly, a comparison between the Congolese army and local militias reveals that the militias develop state capacity more vigorously and that this has benefits to the local population. The surveys also reveal that the militias are seen as legitimate (or even more legitimate) compared to the army. One interpretation of these findings is that the Congolese state has not managed to move other aspects of state capacity, like taxation and the provision of legal services, with the army and that this is one reason why it fails to enhance welfare and instill loyalty from the local population, something that we will return to below.

Security and Instability Fiscal capacity is also affected by lack of security particularly when it leads to conflict and political instability. At the same time the outbreak of political violence is a symptom of state failure and fragility. Thus, the causality between the outbreak of violence and fiscal capacity runs in both directions.[5] On the one hand, higher capacity allows the state to provide security and establish its monopoly of violence. In addition, high state capacity typically means that public services are provided which lowers the incentives to engage in violence for the opposition. At the same time challenges to power imply that the incentives to invest in state capacity fall (Besley and Persson, 2010). Political stability encourages governments to use a long planning horizon which can lead to increased investment in state capacity. A government that is at the brink of collapse will not invest in its own capacity but use all available resources to cling to power. At the same time, violence has an impact on economic activity which will tend to discourage invest in state capacity.

We now look at the relationship between security and fiscal capacity using the IMF world revenue longitudinal data (WoRLD) and data from the Uppsala Conflict Data Program (UCDP) Geocoded Event Dataset (GED) which

[5] See Besley and Persson (2011 Table 5.1).

we aggregate to country/year or country/quarter data.[6] We follow Mueller (2016) in defining conflict as violence per capita so that large countries such as India do not appear to be more violent just due to their population size.

Figure 2 shows that the average income tax revenue per GDP in the period 1990-2016 for two groups of countries: those that experienced a great deal of armed conflict throughout this period and those that were mostly peaceful. The average for fragile countries, illustrated by the red line, is considerably lower. In addition, countries with security problems did not develop this capacity over time. There is a clear upward shift in the average of revenues in the peaceful countries which is absent in fragile countries.

Figure 2

Figure 3 exploits both the time series and cross-sectional variation to show outbreaks tend to be higher in countries which also fail to raise tax revenues. In Panel A of Figure 3 we look at the relationship between the risk of conflict and the revenue decile of a country/year. The conflict propensity is almost a 20 percentage points higher in countries low tax revenues. This relationship appears to be non-linear with conflict being most concentrated in the lowest decile of tax-collecting countries.

Figure 3

Panel B of Figure 3 shows that this pattern is not generated by the between-country variation since it is almost identical when we control for country and year fixed effects, i.e. the relationship is identified from within-country variation over time. This is important as it suggests that countries tend to stabilize as their revenues increase and that a necessary condition for developing state capacity above a low level is security. Panel B also suggests that it is not global trends in increasing revenue that matter and that a falling conflict propensity at a country level is driving these results.

Although it is necessary to be circumspect, the patterns in Figures 2 and 3 are consistent with the idea that state capacity and conflict reinforce each other and that that fiscal capacity can only develop once security is established. And this hints at the possibility of a "conflict trap" in which there is a combination of high conflict and low state capacity.

[6] See Sundberg and Melander (2013) and Croicu and Sundberg (2017).

Regardless of the causal interpretation, the importance of these kind of complementarities in data are a strong feature fragile countries. The fact that conflict is so much more likely in the lowest decile of fiscal capacity suggests that low fiscal capacity could be a key element of the conflict trap.[7] Panel A of Figure 3 shows that low fiscal capacity and low security correlate and Panel B shows that this is even the case if we control for country fixed effect which implies that history, geography and ethnic composition are not solely responsible for this link. Instead, countries seem to be least secure when they have they have least fiscal capacity. Moreover, Panel B suggests that conflict risk drops dramatically with rising fiscal capacity within the same country, i.e. that it is possible to escape the conflict trap which confirms the findings in Baer et al (2019) in this volume.

This general picture is further reinforced in Figure 4 which is based on four country case studies of how capacity and risk change over time. To get a contemporaneous risk estimate we use the forecasting framework in Mueller and Rauh (2019) to estimate future conflict risk at the quarterly level. In this way we derive a measure of susceptibility to conflict which is not based on an ex post valuation of a situation but captures future conflict risk.[8]

The case studies reveal dramatic differences in conflict risk and revenues. Whereas conflict risk in Uganda was extremely high, reaching up to 70 percent during the conflict, it has been much lower in Venezuela. However, there are also interesting changes across time in which Uganda and Colombia show clear positive and long lasting trends in revenues and negative trends in risk. Venezuela and Nigera, two countries with significant natural resources, do not seem to develop their fiscal capacity in this time period and also do not seem to show any reduction in conflict risk. And indeed, recent events in both Nigeria and Venezuela suggest that the two countries are failing in their ability to provide security.

Figure 4

[7] The trap is very clear in the data we use. Countries that come out of violent episode have a likelihood of experiencing renewed violence of over 30 percent the first quarter after conflict ended. The likelihood is then falling but remains significantly higher up to ten years after the violence ended. This data implies that many countries are cycling in an out of violence repeatedly.

[8] This sort of framework is also what political risk insurers like the World Bank's Multilateral Investment Guarantee Agency (MIGA) use to calculate political risk insurance rates. To the best of our knowledge MIGA uses a model based on Goldstone et al (2010).

Figure 4 suggests that Uganda and Colombia are making moves towards exiting their conflict traps. Both countries have increased the share of tax revenues over GDP by 4-5 percentage points in the last two decades. This does not mean that both countries do not face formidable challenges in the coming years but, given that both countries were facing extreme levels of fragility not too long ago, their current situation gives some hope that escaping the conflict trap is possible.

This raises the complex question of how countries manage to escape from violence. Although it is not the only factor, lack of security is related to a lack of cohesive institutions. Cohesive institutional arrangements make it more likely that the state is used for common purposes and hence reduce the value of fighting for political control. This is consistent with cross-country patterns in the data. But the institutional changes do not necessarily need to take place at the federal level. Mueller and Rohner (2018), for example, find large falls of violence with local power-sharing agreements in Northern Ireland. Fetzer and Kyburz (2019) exploit variation in revenue disbursements to local governments together with data on local democratic institutions in Nigeria. They find a strong link between rents and conflict. However, having democratically elected local governments significantly weakens the causal link between rents and political violence.

3.2 Society

Oppositional identities - whether these are ideological, ethnic, linguistic or religious - are one of the key contributors to state fragility. Here we argue that they contribute directly and indirectly to weak fiscal capacity. The direct channel operates through its consequences for public resource allocation and its indirect channel through weakening the culture of compliance.

Most studies that invoke the importance of societal cleavages take these as fixed. However, this need not be the case. For example, polarization need to not be fixed and ethnic identities can be activated for political use.[9] Moreover, shared experiences can sometimes bring divided societies together. For example, Depretis-Chauvin et al. (2018) show that shared experiences such as winning a football championship influence the strength of ethnic identities. However, even though it is now widely appreciated that narratives

[9] For an overview see Fearon and Laitin (2000) and Sen (2007) and for recent evidence see Eifert et al (2010).

that create a shared sense of purpose are important, relatively little remains known about the dynamics of identity and strategies to bring about social cohesion.

As we discussed in the previous section, it is important to consider that societal changes which support the emergence of an effective social contract between the state and its citizens is a dynamic feature of state development. Moreover, it has a bearing on building fiscal capacity which depends on norms and values as well as the coercive power of the state. A state in which citizens share a sense of common purpose and trust the government to deliver on it is more likely to elicit tax compliance as we discuss further below.

The discussion of society and its evolution goes beyond traditional boundaries of economic analysis which take preferences and values as fixed.[10] Although norms are discussed in a range of economic applications, they are rarely joined to discussions of state capacity.

Politics and Resource Allocation Polarized societies can affect political instability; there are many studies which have linked ethno-linguistic and religious cleavages to an increase the likelihood of violent conflict,for example, Montalvo and Reynal-Querol (2005), Esteban et al. (2012) and Michalopoulos and Papaioannou (2016). In general more oppositional identities at the core of politics makes it more challenging to organize common interest policies. There is a range of studies that have linked polarization and fractionalization to patterns of public spending, for example Alesina et al. (1999) Hodler and Raschky (2014) and De Luca et al (2018).

As we argued above, cohesion is important to the incentive to build state capacity. Hence fractured societies which result in more conflict over public resources are not conducive to revenue mobilization. As Besley and Persson (2011) show in cross-country data, fractionalization is strongly negatively correlated with measures of state capacity although it is hard to infer causality from such data.

Compliance It has long been recognized in the literature on "tax morale" that non-pecuniary motives are important in tax compliance.[11] Following

[10] That said, many economists have argued for treating these things as endogenous (see, for example, Bowles, 1998).

[11] See, for example, Luttmer and Singhal (2014) and Torgler (2007).

the historical narrative of Levi (1988), Besley (2019) argues that this can be linked to the way in which the state chooses to spend resources. The larger the transfers to favored groups, the less likely it is that a broad culture of tax compliance will emerge. Moreover, this is an issue of trust; citizens must be able to believe that the state will pursue common purposes rather than operating as a private fiefdom of a ruling elite or ethnic group.

Compliance provides a direct link to the idea of legitimacy, i.e. the process by which individuals defer to decisions and rules, following them voluntarily out of obligation rather than out of fear of punishment or anticipation of reward.[12] It is arguable that core aspects of state capacity, especially in legal and fiscal capacity, are directly related to building norms of voluntary compliance. Levi et al (2009), for example, demonstrate a link between the extent of the trustworthiness of government and procedural justice and citizens' willingness to defer to the police, courts, and tax department in a wide range of African societies. More generally, this makes clear that effective states are built on a the back of "civic cultures" which can facilitate the operation of state functions.

Reciprocity can be an important part of this. For example, citizens pay taxes along as the state reciprocates by providing public goods. But if citizens feel that the political elite or the bureaucratic apparatus is stealing money they have no incentive to pay taxes and corruption erodes state capacity through its effect on legitimacy.

Pulling this together, we would expect the willingness to comply with taxes to be stronger where citizens identify more with the revenue raising collective and where there is greater trust in the state to deliver by providing public goods. We now look at some evidence for this idea in attitudinal data. Specifically, we link national identities, trust in government and the willingness to pay taxes from two large databases of survey results, the World Value Surveys and the Afrobarometer.[13] The first of these covers a global population while the Afrobarometer only covers Africa. However, given our focus on state fragility, this is arguably a more relevant population.

Both surveys ask questions that capture the attitude of the respondent towards paying tax and also questions on identities. The surveys are repeated cross sections with the questions being asked over several rounds. We will

[12] Tyler (2006)

[13] Besley (2019) shows evidence based on combining the European Values Survey and World Values Survey.

include country fixed-effects and survey round dummies and hence rely on within-country variation after controlling for any "macro" time effects. We also have access to a range of control variables in the survey such as age, education, gender and income.

The question that we use to gauge whether attitudes are supportive of tax compliance in the World Value Survey is whether the respondent believes that cheating on taxes is ever justified. To make the interpretation of magnitudes easier we reverse the scale such that only respondents that believe cheating is never justified are coded as 10. The mean of the resulting variable in the World Value Survey sample is 8.7, i.e. most people believe taxes should be paid. In the Afrobarometer we use three questions surrounding the necessity to pay taxes: 1) whether they think it is wrong not to pay taxes (coded 1-3), 2) whether they have refused to pay fee or tax to government (coded 1-5) and 3) whether they agree to the claim that people must pay taxes (coded 1-5). Again, we find throughout that, by and large, respondents believe taxes need to be paid.

The results in Tables 2 and 3 show a strong and robust relationship between attitudes towards paying taxes and a stronger sense of national identity, even if one controls for country/round fixed effects. Table 2 shows results for the World Value Survey.[14] Column (1) shows the overall correlation between whether the respondent believes that cheating is not justified and national identity. Columns (2) to (4) add fixed effects and controls. Column (5) shows the result if we code a simple dummy that captures whether respondents think that cheating is completely out of question and therefore receive the top score (10). In all cases the positive relationship with national identity, even when controlling for the strength of local identity, is robust.

Tables 2

Table 3 confirms the same pattern with the different sample and questions from the Afrobarometer. Columns (1) to (3) of Table 3 do not control for country/wave fixed effects, columns (4) to (6) are. Again results indicate a positive relationship between national identity and attitudes towards paying taxes. The only exception is the question regarding whether the respondent has refused to pay taxes or a fee before which tends to be answered positively for individuals with stronger national identities. Although only based on

[14] These develop some of the empirical findings in Besley (2019) who uses combined data from the World Values Survey and European Values Survey.

subjective attitudes, these correlations do suggest a link between national identity and compliance.[15]

Tables 3

In Tables 4 and 5, we consider the link between trust in government and willingness to comply with taxes. The results show some strong patterns in the existing survey data which are consistent with this view. In Table 4 we report on the same World Value survey data question as in Table 2 only that we now try to explain the willingness to pay taxes through the attitude of the respondent to the government. Confidence in government is significantly correlated with the opinion that cheating on taxes in not justified. Confirming what was shown in Besley (2019), this relationship is not simply a proxy for attitudes regarding government or general trust but seems to be specific to the attitude towards the government.

Tables 4 & 5

In Table 5 we look at various measures of the willingness to pay taxes in the Afrobarometer data and two dimensions of attitudes towards the government. The first, shown in Panel A, is measuring whether respondents trust the tax department, i.e. the institution which is directly in charge of collecting taxes. There is a positive, significant relationship between trust in the tax department and the willingness to pay taxes. This positive relationship is also economically relevant. Moving an individual from low to high trust changes attitudes regarding taxes by up to half a standard deviation. This relationship also holds when we control for country fixed effects and individual controls. In Panel B we show similar magnitudes when we look at the corruption of tax officials. Individuals are much less likely to be willing to pay taxes when they think that tax officers are corrupt. This raises an interesting perspective on the role of the tax agency when raising taxes. A population that sees tax officials as corrupt will not be willing to pay taxes and investing in the conduct of these officials is therefore an important part of raising fiscal capacity.

[15] Blimpo et al (2018) use Afrobarometer data to show a strong positive correlation between electrification, national identity and tax compliance attitudes at the subnational level. They instrument electification with the density of power grids at the district level and find strong effects of electrification on the willingness to pay taxes.

These are only correlations. However, the evidence provided in Weigel (2018) supports the ideas behind the mechanism that we are suggesting. He examines the determinants of payment in a citizen property tax campaign that raised average compliance from 0% to 10%. Aside from ability to pay, prior beliefs about the legitimacy of the provincial government were the strongest predictor of tax payment. Legitimacy was itself influenced by tax collectors' identities: minority ethnic citizens were more likely to pay to minority ethnic collectors. In addition, Weigel finds that those paying were more likely to trust the government and believed that more would be submitted to the state and used for public good provision. This lines up with the empirical regularities in Tables 4 and 5.

Weigel also shows that there are knock-on effects of the tax campaign. On average the tax campaign leads individuals to update positively about the legitimacy of the provincial government, indicating a positive feedback loop of state building and citizen tax compliance. Weigel (2019) also finds that the campaign increased political participation by 5 percentage points (28%): citizens in taxed neighborhoods were more likely to attend town hall meetings hosted by the government or to submit evaluations of its performance.

In conclusion, we believe that a focus on factors which affect trust in government and a sense of identity may have a role to play in building fiscal capacity in general. This is particularly important in the shadow of state fragility where weak legitimacy and low levels of trust are endemic. More generally, the kinds of attitudes that we have looked at shape the environment in which tax policy is made and could be an important diagnostic when considering the context for policy reform. And more generally, it reinforces the idea that reforms in policies and institutions which strengthen trust and legitimacy may have important role to play in building fiscal capacity.

3.3 The Economy

Fiscal capacity depends crucially on the structure and development of the economy. For example, structural changes in the economy facilitate the collection of taxes, particularly as formal employment increases. This means that there are multiple feedbacks between state capacity and income. The typical growth process involves higher incomes as well as structural change (e.g., by extending the domain of markets). Higher income will provide a natural boost to investments in some kinds of state capacity. Citizens may more intensively demand goods best produced by the state, creating higher returns to investing in collective capacity and fiscal capacity. Larger prospective tax bases also mean that a given investment in fiscal capacity generates larger revenues. Thus, the marginal return to such investment may increase.

As fiscal capacity expands, it is typically by creating more broad-based taxation. In most advanced economics it is the personal income tax (including social security contributions) and broad-based consumption taxes which does the heavy lifting in funding the state. These taxes tend to displace reliance on trade taxes (see Besley and Persson, 2013). This is important as it emphasizes that fiscal capacity building in part mirrors structural change in the economy.

Having a weak private sector economy with little production at scale, which is a symptom of state fragility therefore creates an impediment to building fiscal capacity. Kleven et al. (2016) argue that cross-reporting is facilitated by having larger firms play a principle role in complying with taxes. And, as shown in Besley and Persson (2013), an increase in income tax withholding by employers is an important aspect of fiscal capacity investment. Firms are also at the heart of compliance with VAT.

Jensen (2019) shows that the structure of employment matters and that this structure causally affects the strength of the state. He argues that a high employee-share is a necessary condition for effective taxation and that increases in employee-shares drive the expansion of the income tax base. However, the causality runs in both directions. Assaf, Engman and Ragoussis (2019) in this volume show that firms in fragile states (based on the FSI definition) are small, low productivity, low growth and report being constrained by a lack of capital and as well as being impeded by volatility in their economic environments.

Some of these issues can be directly traced back to the failure of the state to develop its collective and legal capacity. For example, there is now a large literature that establishes that the weak protection of property rights hinders economic development.[16] Lack of property rights enforcement has the potential to lead to serious distortions of the economy because it can lead to a dramatic misallocation of resources in the private sector towards predation and the defence against predation. There is a direct link to the lack of taxation since predation and weak property rights are more likely when governments lack the kind of broad-based taxation that is needed to redis-

[16] For two theoretically structured overview over the literature see Besley and Ghatak (2010) and Gonzales (2012).

tribute efficiently in line with the famous Diamond and Mirrlees efficiency theorem.

Having a strong private sector also requires other investments in state capacity. Firms rely on contract enforcement and protection of property rights. When the state fails to provide these services, then firms may have to invest in security. Given that weak security is a feature of state fragility, this contributes towards the weakness of the private sector by increasing the cost of doing business. In effect this is a tax on business which yields no public revenues. To compound this, Besley and Mueller (2018a) show that where the state fails to provide law enforcement institutions, then firms invest in security a form of misallocation of resources away from productive ends. This is a particularly serious problem if the most productive firms are affected by crime and Besley and Mueller (2018a) present evidence that this is indeed the case in several countries.

A weak private sector is also tied to a lack of resilience. Looking across countries, Figure 5 shows that fiscal capacity is also correlated with GDP declines.[17] When we control for country and time fixed effects in Panel B of Figure 5 the relationship strengthens, i.e. it is not due to fixed country characteristics or world trends. The decile with the weakest fiscal capacity is 15 percent more likely to experience a collapse of GDP. By now, it should be clear that this is because weak fiscal capacity is also correlated with a plethora of other weaknesses in the state and further underlines a range of interdependent issues that comprise fragility.

The link between GDP shocks and fiscal capacity links to a literature that documents higher volatility for emerging markets. Aguiar and Gopinath (2007), for example, argue that this volatility is best modelled as shocks to trend growth - rather than transitory fluctuations around a stable trend. Koren and Tenreyro (2007) show that as countries develop, their productive structure moves from more volatile to less volatile sectors. Exporters of natural resources are often dependent on these resources, have low fiscal capacity and experience dramatic swings in output.[18]

Figure 5

[17] Note, that falling GDP will lead to higher revenues per GDP so that this is not a mechanic relationship.

[18] Indeed, the relationship we show in Figure 10, Panel B is to some degree driven by these countries. This is interesting because it means that producers of natural resources seem to be able to avoid sudden falls in GDP in periods in which they have a larger revenue base.

But it is important to realize that the link between economy and fragility is mediated by political institutions. Cohesive political institutions, for example, may play a role in reducing volatility caused by policy.[19] Besley and Mueller (2018b) show that countries without strong executive constraints are more volatile and that foreign investors tend to avoid these countries. Political reforms which credibly constrain the government are followed by large increases in foreign investment inflows. There is a link to volatility since foreign firms may be averse to policy risk. There is direct link to the findings in Besley and Mueller (2018c), Burgess et al (2015) and Fetzer and Kyburz (2019) who argue that some political institutions are better able to reduce the toxic politics associated with competition for political rents.

Economic and political resilience will also be important in the coming decades in which volatility due to climate change will, even in the most optimistic scenarios, take a toll on agricultural output of many countries. According to estimates by Costinot et al (2016), who also take into account changing production and trade patterns, the most affected countries will be Malawi, Burma, D.R. Congo, Ghana, Bangladesh, Thailand, Nigeria and Sudan. These are all countries with relatively low state capacity and weak political institutions. Moreover, violence has recently broken out and intensified in Malawi, Sudan and Nigeria. Recent political changes in Thailand suggest that the country is dismantling executive constraints.

The bottom line is that the economic backdrop which generates a weak private sector is also a factor which inhibits fiscal capacity building. Improving the performance and resilience of the economy therefore has a bearing on fiscal capacity building via this channel.

4 Policy Implications

The key take home from the discussion so far is that revenue mobilization is linked to building the state, society and the economy. The thinking that underpins this is allied to a political economy approach which takes the cultural and political context seriously alongside conventional economic thinking. It is therefore essential to move away from viewing creating fiscal capacity as purely technocratic. Advice on tax policy, including methods

[19] In a related argument Rodrik (1999) makes the observation that a combination of social conflict interacts and external economic shocks can throw countries off their growth path.

of auditing and better tax design are valuable, they have to be located in a wider context, especially in the presence of factors that are symptomatic of state fragility. That does not always mean that a radically different approach is needed; this must be assessed case-by-case.

4.1 The Policy Challenge in the Face of State Fragility

At first sight, the analysis above, suggests that engagement with fragile countries is more complex and may require stepping outside of tried and tested frameworks which are deemed to work in standard policy settings.[20] International organizations and donors have mandates which steer them towards giving technical advice in their policy dialogue. But it is more difficult to engage when the issues are as much about societal and political issues as they are about economics. Moreover, on the wider sociopolitical context, international actors have much less legitimacy in policy-making when they can disrupt and change political equilibria. Quite often, mandates restrict international engagement so that recommendations on important aspects of fragility, such as weak legitimacy, can appear to be "off limits". But in the contexts that we have been discussing here, some way has to be found to operationalize an approach based on political economy and which speaks to the wider range of factors that affect state fragility.

This begins with the way in which fragility is conceptualized and measured. Here we have stressed two factors with direct repercussions for policy. Fragility is a statement about the future and it is important to evaluate risks when designing policy. If fragility is to be tackled there needs to be a shift away from managing and responding to crises and towards preventing expensive break-downs.[21] Approaches as they are followed by MIGA, for example, which uses political risk forecasts in its portfolio choices could therefore make sense.[22] Second, because fragility is multi-dimensional it makes little sense to rely on a single measure of fragility but to think about all of the different dimensions. Surveys which capture the willingness to pay taxes, like the

[20] This is also suggested by Baer et al (2019) who propose a two stage approach where the first stage reforms involves 'recuperation' reforms, while the second stage focuses on 'building progress' reforms.

[21] This approach is also proposed by UN and World Bank (2017).

[22] See Sundberg et al (2009) for a discussion. At the time, MIGA investigated forecast models and settled for Goldstone et al (2010). See Mueller and Rauh (2018, 2019) for a recent discussion of forecasting.

ones conducted by the Afrobarometer will, for example, provide important clues about the capacity of the state to raise revenues. Opinion polls can give important clues about the constraints that the government faces when implementing reforms and should be part of the evidence base.[23]

How far the preventive approach can be built into the institutional architecture for revenue mobilization in the face of state fragility has not been explored systematically and needs to be part of on-going engagement. Standard economic models of tax reform take the institutional environment as fixed, with a tendency to focus on revenue implications of varying tax bases and tax rates. This is too narrow for the issues that underpin weak fiscal capacity in the shadow of state fragility.

That said, most fiscal reforms are piecemeal and marginal with opportunities for wholesale change being rare. This is not all bad; with weak bureaucratic capacity, a step-by-step approach is almost certainly to make most sense. This is also not inconsistent with a consideration of a broader range of factors being considered. Drawing on the experience of EBRD following the fall of the Berlin Wall provides some pointers as to how a piecemeal (in their case project-based lending) approach can also serve as a catalyst for sustainable institutional change. In that context, improvements in regulation of markets and greater attention to environmental concerns were included as part of assessing the transition impact of individual projects. Moreover, assessment of standard financial returns was augmented using a transition impact "scorecard". Following this idea, widening the ambitions of tax reform programs to include specific institution building goals could be considered systematically which means factoring benefits in the form of long-term capacity building. We agree with Baer et al (2019) when they attribute the failure of revenue conditionality to have a significant impact on tax revenue outcomes to weaknesses in basic institutions and administrative capacity, which make it difficult for these states to implement major tax revenue reforms. But this means developing approaches which give a role for promoting these capacities. It also means realizing that a collection of interlinked reforms can create a critical mass for institutional change so that

[23] A very stark example here is the early reform history of Russia which faced formidable challenges to its fiscal capacity in the 1990s. Under Gaidar, the government followed considerable fiscal consolidation broadly in line with the technical requirements. However, by 1993, Russians had completely lost faith in the process. According to a poll, only 30.7 percent of respondents supported the free market while 53.2 percent opposed it. The result was a complete reversal of the reforms.

a sequenced reform program can achieve much more than a one-off change.

Many technocratically-minded advisors find it hard to work in second-best environments when it comes to offering advice on building fiscal capacity. Although a caricature, it often appears that a response to the symptoms of state fragility is to advise countries to "behave more like Denmark" through emulating the kinds of fiscal reforms and tax systems that could work in such contexts. Of necessity, this is accompanied by a long list of reforms given that the starting point is so far away from the desired destination. However, as Collier (2019) emphasizes, this is a major policy error. You cannot infer the path to building successful states by studying the desired outcome any more than observing a completed building tells you about the construction process. He argues that we need to focus on the support structures – the scaffolding – that gets a country on a path towards becoming an effective state.

This suggests that realism is important; raising revenues in a context of fragility can be an uphill struggle when other elements that are complements to fiscal capacity are not in place. This is especially true when fragile countries are caught in a vicious cycle in which weak institutions and low provision of public goods reinforce a civic-culture which hinders tax collection. This can exacerbated by a weak economy which is shock prone. It also means being cognizant of political constraints.

Admitting when contexts are not conducive to reform is also essential in some situations. Failing to do so just risks disappointment which can further fuel fragility rather than helping to improve the situation. However when pivotal moments occur, such as when a new government comes to power with a genuine will for change, it is important to engage albeit with sympathy with the limits set by existing state capacities. The risk is to overload already stretched administrative capacity by developing a long list of reforms which cannot possibly be delivered in reasonable time. Those offering fiscal advice need to be mindful of the strains that may already be present in the system. And it is often important to proceed gradually rather than trying to leap too quickly to the ultimate destination; small steps that work can build confidence in weak state institutions.

4.2 Reforming State Institutions

Institutional reform provides a way of trying to improve the capacity for revenue mobilization. But there are many different dimensions to this and we are mindful here of the limitations of what can be done in the context of a focus on fiscal capacity. However, there are a range of policy reform options that merit discussion.

Political Institutions Building institutions that support cohesiveness may be the long-run goal but it cannot be promoted directly within the mandates of most international actors.[24] However, there is little room for manoeuvre when a country is run by an unaccountable elite with little commitment to the long term benefits to their citizens from broad-based economic development. But there is still a strong case for focusing on institutions that strengthen transparency and scrutiny of policy in a fiscal context thereby contributing to building stronger constraints on the executive. Having a clearer role for independent courts in the field of tax policy including in enforcement of tax compliance can also be important not just for tax policy but as key component in establishing the rule of law. It is essential that citizens feel that elites are subject to the same level of scrutiny and compliance requirements as they are. The results on compliance above emphasize that weak attitudes towards compliance are associated with a lack of confidence in the state.

When government is failing to produce a coherent broad-based approach to revenue mobilization, pressure for change needs to come from somewhere. Countries vary enormously in the strength of civil society as a means of promoting change. It often falls therefore to international organizations and aid agencies to serve as engines of change even though they lack any form of legitimacy and are not accountable to citizens locally. But as external actors, there are limits to what can be achieved long-term by external intervention. None of the successful fiscal states in the world continue to rely on support from outside actors even though this can add to the resilience as we saw in Greece and Ireland following the global financial crisis. However, these were inherently temporary measures.

It is problematic for external actors to be overt advocates of political change whatever their concerns about the behavior of governments towards their citizens. Accusations of neocolonial meddling in the affairs of nations can be close to the surface. But actions around the margin which are linked

[24] Even if this not the case and the dialogue can include political reform, it is not helpful to use broad brush categories like "democracy". As argued forcefully in IGC (2018), holding elections in fractured polities with a history of conflict is rarely a recipe for creating better cohesion.

to revenue mobilization should be considered. Chief among these is building a more effective set of fiscal institutions to which we now turn.

Fiscal Institutions Fiscal institutions that emphasize transparency and accountability, such as independent fiscal councils, can play a role in helping to achieve a more cohesive system. For example, giving greater access to fiscal councils by legislators, as in the Netherlands or Australia, can strengthen executive constraints. In many countries budgets and other fiscal measures are handed to independent bodies for scrutiny including over the realism on the economic assumptions used to make fiscal projections.

There is however a paradox; agencies that enhance transparency and accountability are most needed in situations where they are likely to fail. Political cultures that respect independent advice and a distribution of authority more rarely need the oversight that this can bring. Courts also act infrequently to overtly restrain what governments do even though the threat that they will reduces the need for this to happen. And there is evidence of a link between fiscal rules and judicial review. For example, Bohn and Inman (1996) find heterogeneity in the effectiveness of balanced budget requirements in US states is greatest when they are enforced as constitutional constraints by an independently elected state supreme court. This suggests a potential complementarity between fiscal and legal capacity.

The main lesson from international experience with fiscal institutions is that the details matter when designing such institutions in terms of the mandate that it is given, how it is held accountable and the staffing/resources that it is given.[25] Failing to give sufficient prominence and resources to fiscal councils is a sure fire way of limiting their effectiveness. While bringing evidence from international experience can be a useful catalyst for change, it is also important to tailor the institutional framework to the specific needs and context of the country in question. For example, in some settings, such work could be a combined responsibility of a central bank and in others a separate authority.

Independent fiscal bodies that hold the government to account for the conduct of fiscal policy and can assist in designing long-run strategies for management of public resources are inevitably part of the "body politic" and it is impossible to hide behind technical design issues. Hence a careful balance has to be struck between being overtly political and supporting gov-

[25] See Beetsma et al (2018) for discussion of some alternative models.

ernment structures. However, acting as an agency of restraint and trying to create a longer-term more strategic perspective is important as a state builds out of fragility. The fiscal architecture can be particularly important in countries with heavy levels of natural resources. Resource price fluctuations can be a particular challenge and could benefit from independent fiscal management to increase legitimacy. And, as we discussed above, resilience is an even larger issue in resource-dependent countries.

Strengthening the internal capacity of revenue authorities of revenue-raising institutions is important. Some extremely useful insights have, for example, been gained by innovative experiments in weak institutional contexts like from Pakistan in Khan et al. [2016, 2019] or Brazil in Naritomi [2019]. But strengthening capacity has to go beyond technical aspects. Supporting activities which draw attention to non-compliance by elites and multinational business can also create a greater sense of trust in government. However, this has to be done in a way that does not accentuate divisions which is likely when it is a politically-motivated process. There are good reasons why revenue authorities in many countries enjoy a degree of autonomy from the political process.

Natural Resources Quite apart from the challenge of fragility, states with high dependence on natural resources struggle to build fiscal capacity for reasons outlined, for example, in Besley and Persson (2013). Apart from this, countries with natural resources are among the most conflict prone and have struggled to build effective constraints on executive power. This often implies that repression replaces conflict. Evidence from the World Values Survey suggests that natural resource dependent governments have lower levels of confidence in government and weaker attitudes towards tax compliance.

There are some standard prescriptions for managing natural resource revenues which apply in all contexts and not different when there is state fragility. These include trying to achieve macro-stabilization benefits by building reserves and developing well-managed sovereign wealth funds. In countries with weak constraints on executive power, such management is made more difficult since it may be difficult to prevent governments taking a short term approach to spending accumulated revenues. Worse still, competition to control such reserves can increase the potential for political violence.

A first step towards moving out of fragility is to find ways of better controlling such behavior. This can be achieved in part by increasing fiscal accountability and transparency as shown, for example, by Fetzer and Kyburz (2019). But it runs much deeper than this. Easy access to public revenues, whether well-managed or not, prevents the emergence of the kind of social contract that seems the provision of state services as the quid-pro-quo for compliance with taxation. Thus finding ways of building broad-based tax systems such as income taxes and VAT is important even when there are natural resources.

The Role of Decentralization All countries must decide on the balance between taxes raised locally and centrally. In most advanced countries, the lion's share of taxation is raised centrally. This is logical given that there are reasons to avoid a race to the bottom from tax competition between jurisdictions. And a focus on central government tax raising has history in its side, with many strong fiscal states having been built on the back of limiting the fiscal capacity of local jurisdictions (see, for example, Dincecco, 2011, 2015). Some modern states, such as the USA, used a federal model of fiscal capacity building. However, fiscal capacity was gradually transferred to a central state due to national emergencies and it became more and more necessary as the economy and commerce became more integrated.

In spite of this historical trend, decentralized settings are a promising testing ground for building fiscal capacity in the face of state fragility. It affords some possibilities for experimentation. Local leaders may also enjoy legitimacy that national leaders lack and may preside over less polarized polities. That said, they may not have formal bureaucratic structures in place to raise revenues unless they are encouraged to build them.

Whereas it will often be impossible to advocate cohesive institutions at the national level it might be possible to prevent fragility by putting in place such institutions locally. The studies by Mueller and Rohner (2018) and Fetzer and Kyburz (2019) both show, in very different contexts, that power sharing and democratic selection at the local level can help diffuse fragility that comes with the distribution of revenues locally.

Whatever the virtues of decentralization, the value of investing locally should be considered as an option which recognizes the difficulty of building cohesion in a central state. However, the scope for this is country-specific and there is no one-size-fits-all solution. It will depend in particular on the traditions and cultures of local governance in the country in question beyond formal administrative structures. Decentralization is a particularly tricky issue in societies with strong ethnic politics and regional concentration of these ethnicities.

4.3 Strengthening the Social Contract

We have emphasized that a large part of building a fiscally successful state lies in strengthening the social contract between state and citizens emphasizing reciprocity whereby increased expenditures with common benefits are delivered in exchange for voluntary compliance. As emphasized in Besley (2019), the role of increasing the strength of state institutions should not be underestimated in this process. But there are also ways of trying to build compliance through shifting norms and modes of engagement between the state and citizens which are pathways towards building fiscal capacity.

Actions for revenue mobilization could be scored by a set of explicit indicators which assist in making a fiscal transition in countries where reforms are hampered by symptoms of state fragility. So one could score fiscal reforms based on how far they have elements that increase accountability and administrative competence explicitly. We now discuss some further dimensions of this.

Levi et al. (2009) argue that having a competent bureaucracy can increase quasi-voluntary compliance with the state. This emphasizes that the kind of "teachable moments" that occur in tax bureaucracies can spillover to wider perceptions of the operation of government. Our analysis of the Afrobarometer surveys strongly suggests that perceptions of corruption of tax officers are extremely damaging to the willingness to pay tax. This means training workers in revenue agencies to treat citizens with respect and ensure the maximum transparency of the agency.

Crafting a program of fiscal capacity building to suit the context of state fragility means tailoring the narrative of reform to the context. For example, recognizing that lack of legitimacy stemming from poor accountability for use of public resources and corruption by elites needs to become a standard part of understanding the context for reform. This can be supported by evidence and analysis as we discussed above. For example, trying to find ways in survey data of documenting weak compliance cultures based on norms can be a useful diagnostic in setting priorities. A country with low trust in government, weak national identity and low confidence in the state may need a different approach to one where these things are not a feature of the landscape.

Concerns about legitimacy are not typically part of what tax reform programs advocated by economists think about. Providing links to reforms of public services that demonstrate the merits of higher revenue mobilization can also be important since a key element of a social contract is forging a link in the minds of citizens between paying taxes and receiving benefits. It is no coincidence that social security systems where retirement benefits linked to contributions have played a pivotal historical role in fiscal capacity building.

Public services at the micro level need to be designed to move with the tax system. Visible improvements need to happen around people fast after enforced taxes come in. Although there are good reasons for being suspicious of crude efforts at hypothecating revenues to specific ends, there are some issues worth thinking about in the highly second-best world of fragile states. Norms of reciprocity rely on citizens seeing that the state is using revenues for common purposes. There is potential value in programs of reforms to public services rolled out in tandem with revenue raising initiatives with particular focus on those where the gains from public spending are visible and tangible. The presence of strong, local ethnic or regional identities can make this even more important. This can help to improve the mobilization of revenues and may ultimately enhance the legitimacy of government.

These findings are increasingly validated in field work in the face of state fragility. For example, Weigel (2018) emphasizes that tax compliance is a political act and Sanchez de la Sierra (2018) shows that in some regions armed militia are better able to use this insight for themselves than the central government. The government is collecting taxes and providing security but fails to provide other public services. This means that competitors are able to be seen as legitimate or even more legitimate as the central government.[26] This parallels the literature in building policy legitimacy from the ground up, i.e. realizing that each encounter that the citizens have with the police is potentially important in shaping their perception of the state.

An approach which recognizes the need to strengthen the social contract also reinforces the need for organizations such as the IMF to coordinate with other international institutions when it is focusing on tax reforms. Such reforms in the tax system may work better if there is scope to increase security

[26] An extreme version of this insight is provided by Berman et al (2011) who find in the context of Iraq that the provision of public services even seems to be a relatively cost-effective counterinsurgency strategy.

(which means coordinating with security operations) and with projects to improve service delivery.[27] The case of Egypt shows how difficult this is in practice. Reforms on fiscal reforms were accompanied by a World Bank project for social security. However, a government change away from Morsi damaged the project and, according to the national data, poverty has increased. The Egyptian government needs to understand that sharing resources with the population is also a way of building fiscal control.

5 Concluding Comments

This chapter has discussed the specific challenges of building fiscal capacity in the shadow of state fragility. The main message is that weak fiscal capacity building needs to recognize the social, political and economic realities of state fragility. This creates both constraints and opportunities for policy reform.

Constraints come from the need to be sufficiently modest in what is being proposed and being sure that is feasible given the economic and political realities. Where there are weak norms of compliance, it may be much harder to build fiscal capacity. However, opportunities come from being able to see the challenge of fiscal capacity building as a much wider activity than purely technical advice on tax policy. Seeing how taxation plays a role in enhancing the social contract and increases legitimacy is key as is recognizing the importance of tax revenue authorities as one of the key citizen-state relationships.

Well-designed tax policy can help to facilitate both institutional and cultural change, particular when initial steps are sustained and there is prolonged and sustained engagement. But the kind of change needed has to be motivated from within polities rather than externally imposed. Moreover, well-meaning external actors will face serious headwinds when conditions are not right. So that means that a suitably modest expectation of success is needed as well as resilience in the face of setbacks there is engagement with donor agencies and international organizations. State fragility creates an inherently riskier economic and political environment and that holds true also for reform efforts to build fiscal capacity. An appropriate assessment of such risks is therefore essential.

[27] Research on regional favouritism also makes clear that service delivery has a regional perspective. If ethnicities live concentrated in certain areas, then public services need to be spread to areas where the tax take is to increase.

References

[1] Acemoglu, Daron and James Robinson [2012], *Why Nations Fail*, New York, NY: Crown Publishers.

[2] Acemoglu, Daron and James Robinson [2018], "The Emergence of Weak, Despotic and Inclusive States," unpublished typescript.

[3] Acemoglu, Daron, Simon Johnson and James Robinson, [2005],"Institutions as a Fundamental Cause of Long-Run Development" Chapter 6, in Philippe Aghion and Steven Durlauf (eds) *Handbook of Economic Growth,* Oxford, Elsevier.

[4] Aguiar, Mark and Gita Gopinath, [2007], "Emerging Market Business Cycles: The Cycle Is the Trend, *Journal of Political Economy*, 115(1), 69-102.

[5] Alesina, Alberto, Reza Baqir, and William Easterly, [1999],"Public Goods and Ethnic Divisions," *Quarterly Journal of Economics* 114, 1243–84.

[6] Almond, Gabriel and Sidney Verba, [1963], *The Civic Culture: Political Attitudes and Democracy in Five Nations*, New York: Sage Publications.

[7] Baer, Katherine, Sanjeev Gupta, Mario Mansour, and Sailendra Pattanayak, [2019], "Building Fiscal Institutions in Fragile States—A Two-Step Approach," forthcoming in *Macroeconomic Policy in Fragile States* edited by Ralph Chami, Raphael Espinoza, and Peter Montiel, Oxford: Oxford University Press.

[8] Beetsma, Roel , Xavier Debrun, Xiangming Fang, Young Kim, Victor Lledó, Samba Mbaye, Xiaoxiao Zhang, [2018], "Independent Fiscal Councils: Recent Trends and Performance," IMF Working Paper 18/68.

[9] Besley, Timothy, [2019], "State Capacity, Reciprocity and the Social Contract," *Econometrica*, forthcoming.

[10] Besley, Timothy and Maitreesh Ghatak, [2010] Property Rights and Economic Development. In Dani Rodrik and Mark Rosenzweig (eds), *Handbook of Development Economics*, Vol. 5, Oxford: Elsevier.

[11] Besley, Timothy and Hannes Mueller, [2018a], "Predation, Protection and Productivity: A Firm-Level Perspective," *American Economic Journal: Macroeconomics*, 10(2), 184-221.

[12] Besley, Timothy and Hannes Mueller, [2018b],"Volatility, Institutions and Investment", *Journal of the European Economic Association*, 16(3), 604-649.

[13] Besley, Timothy and Hannes Mueller, [2018c] "Cohesive Institutions and the Distribution of Political Rents: Theory and Evidence" in Kaushi Basu and Tito Cordella (eds.), *Institutions, Governance and the Control of Corruption*, International Economic Association Series, Palgrave.

[14] Besley, Timothy and Hannes Mueller, [2018d] "Executive Constraints as Robust Control" Barcelona GSE Working Paper: 1054.

[15] Besley, Timothy and Torsten Persson [2009], "The Origins of State Capacity: Property Rights, Taxation and Politics", *American Economic Review*, 99, 1218-1244.

[16] Besley, Timothy and Torsten Persson [2010], "State Capacity, Conflict and Development," *Econometrica*, 78(1), 1-34.

[17] Besley, Timothy and Torsten Persson [2011], *Pillars of Prosperity: The Political Economics of Development Clusters*, Princeton, NJ: Princeton University Press.

[18] Besley, Timothy and Torsten Persson [2013], "Taxation and Development," in *Handbook of Public Economics*, Volume 5 edited by Alan J. Auerbach, Raj Chetty, Martin Feldstein and Emmanuel Saez, Oxford: Elsevier, 51-110.

[19] Besley, Timothy and Torsten Persson [2014], "The Causes and Consequences of Development Clusters: State Capacity, Peace, and Income," *Annual Review of Economics*, 6, 927–49.

[20] Besley,Timothy, Ethan Ilzetzki, and Torsten Persson, [2013], "Weak states and Steady States: The Dynamics of Fiscal Capacity," *American Economic Journal: Macroeconomics*, 5(4), 205–235.

[21] Berman, Eli , Jacob N. Shapiro, and Joseph H. Felter, [2011], "Can Hearts and Minds Be Bought? The Economics of Counterinsurgency in Iraq," *Journal of Political Economy,* 119(4), 766-819.

[22] Bisin, Alberto and Thierry Verdier, [2017], "On the Joint Evolution of Culture and Institutions," NBER Working Paper No. 23375

[23] Blimpo, Moussa , Justice Tei Mensah, K. Ochieng' Opalo, and Ruifan Shi [2018] "Electricity provision and tax mobilization in Africa," World Bank Policy Working Paper, 8408.

[24] Bohn, Henning and Robert Inman, [1996], "Balanced Budget Rules and Public Deficits: Evidence from the U.S.", NBER Working Paper*,* No. 5533.

[25] Bowles, Samuel, [1998], "Endogenous Preferences: The Cultural Consequences of Markets and Other Economic Institutions," *Journal of Economic Literature*, 36(1), 75-111.

[26] Burgess, R., R Jedwab, E. Miguel, A. Morjaria and G. Padró i Miquel [2015], "The value of democracy: Evidence from road building in Kenya," *American Economic Review* 105, 1817–1851.

[27] Celiku, Bledi, and Aart Kraay, [2017] "Predicting Conflict," World Bank Policy Research Working Paper, 8075.

[28] Collier, Paul, [2019], "Transition Programs: a Theory of the Scaffolding Needed to Build out of Fragility," forthcoming in *Macroeconomic Policy in Fragile States* edited by Ralph Chami, Raphael Espinoza, and Peter Montiel, Oxford: Oxford University Press.

[29] Costinot, Arnaud, Dave Donaldson and Cory Smith, [2016] "Evolving Comparative Advantage and the Impact of Climate Change in Agricultural Markets: Evidence from 1.7 Million Fields around the Earth," *Journal of Political Economy*, 124(1): 205-248.

[30] Croicu, Mihai and Ralph Sundberg, [2017], "UCDP GED Codebook version 18.1", Department of Peace and Conflict Research, Uppsala University.

[31] De Luca, Giacomo, Roland Hodler, Paul A. Raschky and MicheleValsecchi, [2018], “Ethnic Favoritism: An Axiom of Politics?” *Journal of Development Economics*, 132, 115-129.

[32] Depetris-Chauvin, Emilio, Ruben Durante, Filipe R. Campante, [2018], "Building Nations Through Shared Experiences: Evidence from African Football", NBER Working Paper, No. 24666.

[33] Dincecco, Mark [2011], *Political Transformations and Public Finances: Europe, 1650-1913*, Cambridge: Cambridge University Press.

[34] Dincecco, Mark [2015], “The Rise of Effective States in Europe,” *Journal of Economic History*, 75, 901-18.

[35] Eifert, Benn, Edward Miguel, Daniel N. Posner, [2010], “Political Competition and Ethnic Identification in Africa,” *American Journal of Political Science*,54(2), 494–510.

[36] Esteban, Joan, Laura Mayoral, and Debraj Ray, [2012] “Ethnicity and conflict: An empirical study,” *The American Economic Review*, 102(4), 1310–1342.

[37] Fearon, James D. and David D. Laitin, [2000] “Violence and the Social Construction of Ethnic Identity,” *International Organization*, 54(4), 845-877.

[38] Fetzer, Thiemo, and Stephan Kyburz, [2019], "Cohesive Institutions and Political Violence", CGDEV Working Paper 503.

[39] Fisman Raymond, and Edward Miguel, [2007], “Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets,” *Journal of Political Economy*, 115 (6), 1020-1048.

[40] Goldstone, Jack A, Robert H Bates, David L. Epstein, Ted Robert Gurr, Michael B. Lustik, Monty G. Marshall, Jay Ulfelder, and Mark Woodward. [2010], “A global model for forecasting political instability,” *American Journal of Political Science*, 54(1): 190–208.

[41] Gonzalez, Francisco M, [2012], “The Use of Coercion in Society: Insecure Property Rights, Conflict, and Economic Backwardness,” in Michelle R. Garfinkel and Stergios Skaperdas (eds) *Oxford Handbook of the Economics of Peace and Conflict,* Oxford: Oxford University Press.

[42] Hobbes, Thomas, [1651], *Leviathan*, London: Everyman Edition.

[43] Hodler, Roland, and Paul A. Raschky, [2014] "Regional Favoritism," *Quarterly Journal of Economics*, 129(2), 995–1033,

[44] IGC, [2018] *Escaping the Fragility Trap*. Report by the LSE-Oxford Commission on State Fragility, Growth and Development. Published by the International Growth Centre (IGC).

[45] Khan, Adnan Q., Asim Ijaz Khwaja, and Benjamin A. Olken, [2019] "Making Moves Matter: Experimental Evidence on Incentivizing Bureaucrats through Performance-Based Postings." *American Economic Review*, 109 (1): 237-70.

[46] Khan, Adnan Q., Asim I. Khwaja, Benjamin A. Olken, [2016], "Tax Farming Redux: Experimental Evidence on Performance Pay for Tax Collectors." *Quarterly Journal of Economics*, 131(1), 219–271.

[47] Kleven, Henrik, Claus Thustrup Kreiner and Emmanuel Saez, [2016], "Why Can Modern Governments Tax So Much? An Agency Model of Firms as Fiscal Intermediaries," *Economica*, 83, 219-246.

[48] Koren, Miklos, and Silvana Tenreyro, [2007], "Volatility and Development" *Quarterly Journal of Economics*, 122(1), 243-287.

[49] Levi, Margaret, [1988], *Of Rule and Revenue*, Berkeley: University of California Press.

[50] Levi, Margaret, Audrey Sacks, and Tom Tyler, [2009] "Conceptualizing Legitimacy, Measuring Legitimating Beliefs," *American Behavioral Scientist*, 53(3), 354-375.

[51] Lipset, Seymour Martin [1960], *Political Man*, London: Heinemann.

[52] Locke, John [1690], *Two Treatises on Governmen*t, London: Everyman Edition.

[53] Luttmer, Erzo F.P. and Monica Singhal, [2014], "Tax Morale," *Journal of Economic Perspectives*, 28(4), 149-168.

[54] Michalopoulos, Stelios, and Elias Papaioannou, [2016], "The Long-run Effects of the Scramble for Africa", *American Economic Review*, 106(7): 1802–48.

[55] Montalvo, José G. and Marta Reynal-Querol, [2005], "Ethnic Polarization, Potential Conflict, and Civil Wars," *American Economic Review*, 95(3), 796-816.

[56] Mueller, Hannes, [2016], "Growth and Violence: Argument for a Per Capita Measure of Civil War," *Economica*, 83, 473-497.

[57] Mueller, Hannes and Christopher Rauh, [2018], "Reading Between the Lines: The Prediction of Political Violence Using Newspaper Text." *American Political Science Review*, 112(2), 358-375.

[58] Mueller, Hannes and Christopher Rauh, [2019], "The Hard Problem of Prediction for Conflict Prevention", CEPR Discussion Paper, DP13748.

[59] Mueller, Hannes and Dominic Rohner, [2018], "Can power-sharing foster peace? Evidence from Northern Ireland," *Economic Policy*, 33(95), 447–484.

[60] Naritomi, Joana [2019] "Consumers as Tax Auditors." *American Economic Review*, 109(9), 3031-72.

[61] North, Douglass C. [1990], *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.

[62] North, Douglass C. and Barry R. Weingast [1989], "Constitutions and Commitment: The Evolution of Institutional Governing Public Choice in Seventeenth-Century England", *Journal of Economic History*, 44, 803-832.

[63] North, Douglass C., Barry Weingast and John Wallis [2009], *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History*, Cambridge: Cambridge University Press.

[64] OECD [2018], *States of Fragility 2018.* OECD Publishing, Paris.

[65] Rodrik, Dani [1999], "Where did all the growth go? External shocks, social conflict, and growth collapses," *Journal of Economic Growth,* 4 (4), 385-412.

[66] Rousseau, Jean-Jacques, [1762], *The Social Contract*, London: Everyman Edition.

[67] Sanchez de la Sierra, Raul, [2018], "On the Origins of the State: Stationary Bandits and Taxation in Eastern Congo," *Journal of Political Economy* (forthcoming)

[68] Sen, Amartya, [2007], *Identity and Violence: The Illusion of Destiny.* Penguin Books

[69] Sundberg, Ralph, and Erik Melander, [2013], "Introducing the UCDP Georeferenced Event Dataset", *Journal of Peace Research*, 50(4), 523-532.

[70] Sundberg, Mikael, Faisal Quraishi, and Sidhartha Choudhury, [2009] Linking Political Risk Insurance Pricing and Portfolio Management with Economic Capital Modeling: A Multilateral Perspective?, in Kevin W. Lu, Gero Verheyen, Srilal M. Perera (eds) *Investing with Confidence: Understanding Political Risk Management in the 21st Century*. World Bank, Washington.

[71] Törgler, Benno [2007], *Tax Morale and Tax Compliance: A Theoretical and Empirical Analysis*, Cheltenham U.K.: Edward Elgar.

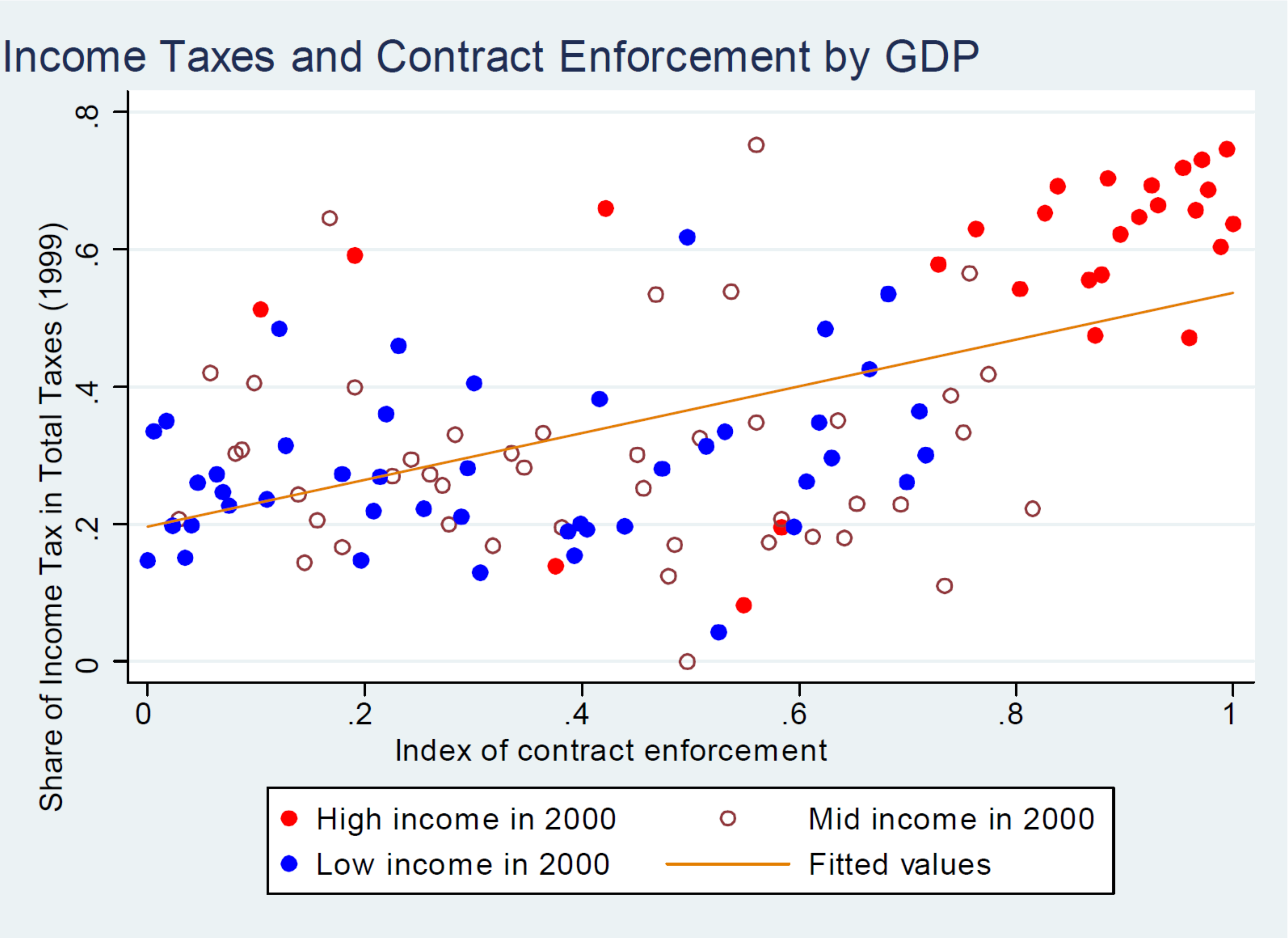
[72] Tyler, Tom R. [2006], "Psychological Perspectives on Legitimacy and Legitimation". Annual Review of Psychology, 57, 375–400.

[73] United Nations and World Bank. [2017] *Pathways to Peace: Inclusive Approaches to Preventing Violent Conflict*. World Bank: Washington.

[74] Weigel, Jonathan, [2018], "The Taxman Cometh: A Virtuous Cycle of Compliance and State Legitimacy in the D.R. Congo." unpublished manuscript.

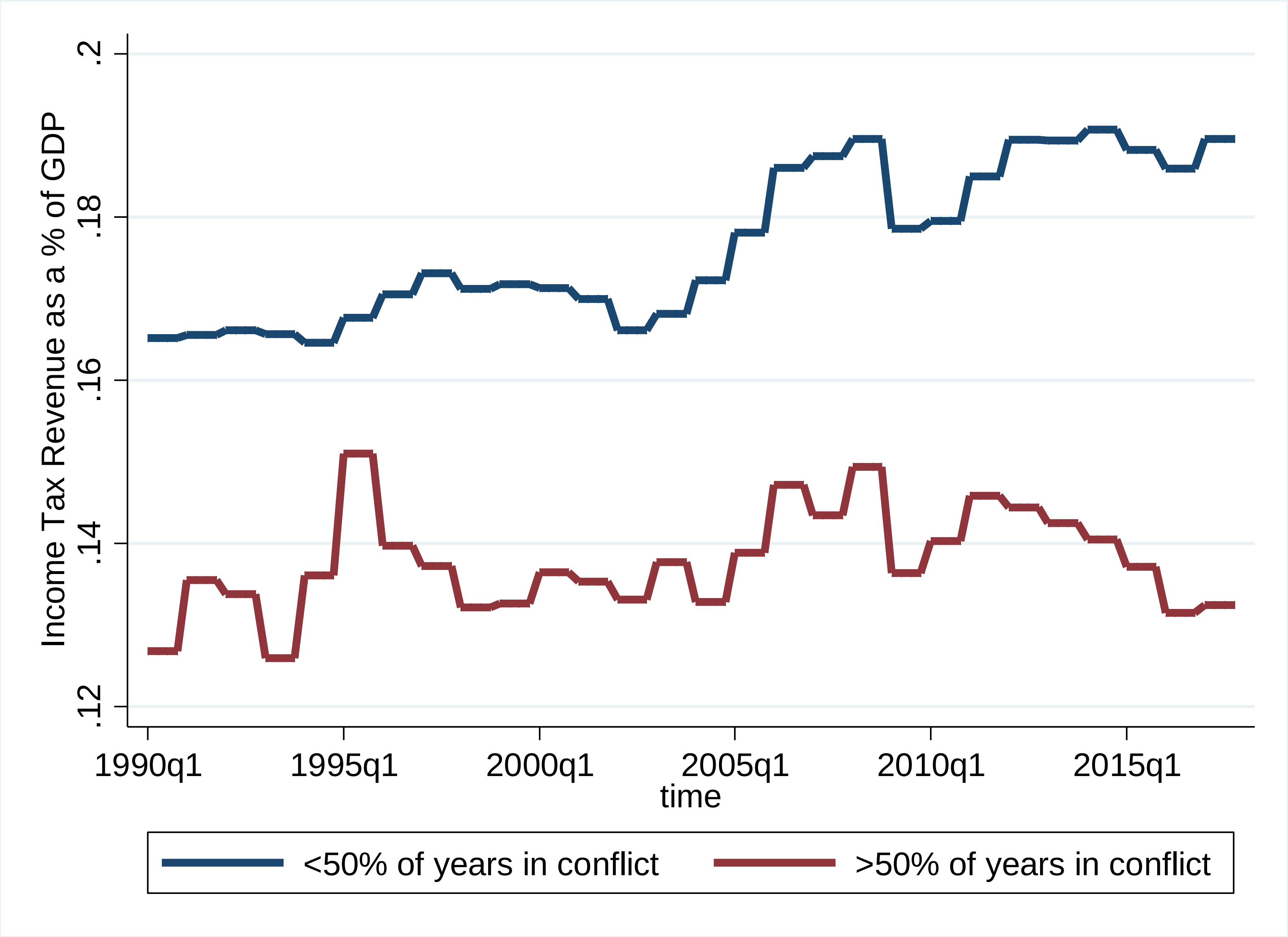
[75] Weigel, Jonathan, [2019], "Building State and Citizen: How Tax Collection in Congo Engenders Citizen Engagement with the State." unpublished manuscript.

Figure 1: Complementarity between Capacities and Income



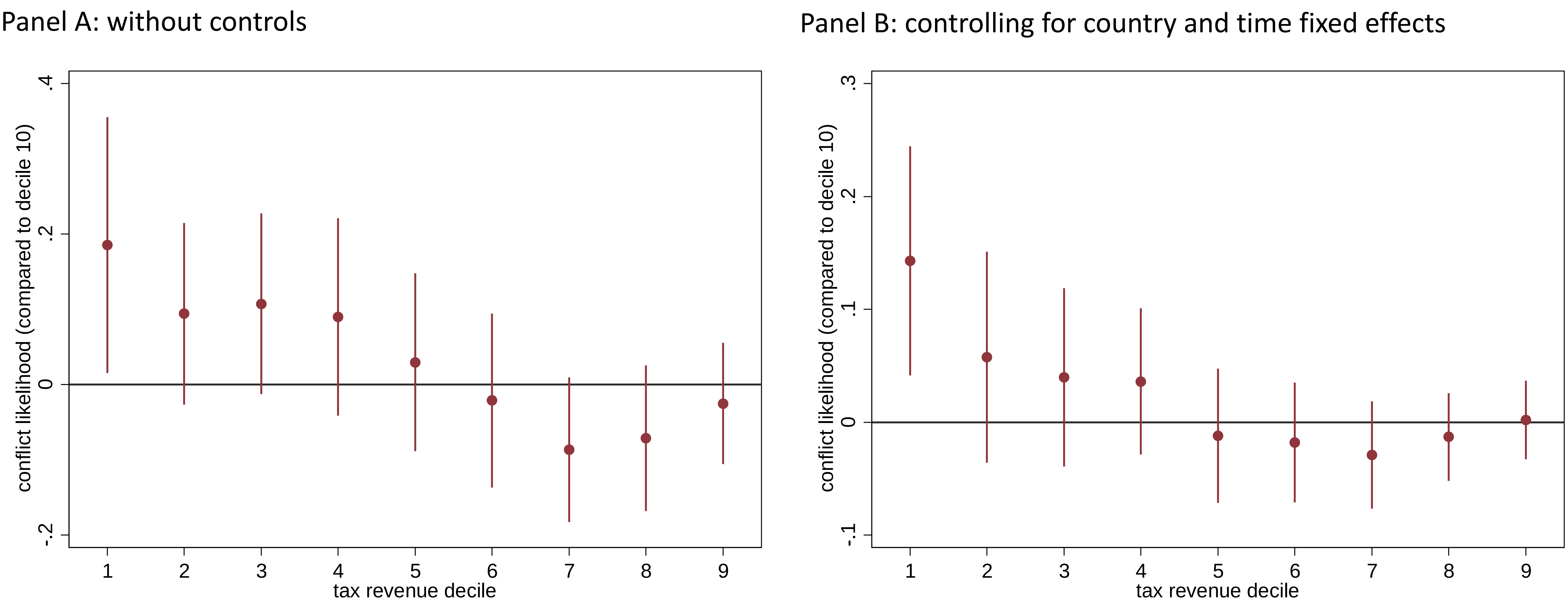
Notes: Figure is from Besley and Persson (2011). Income is real per capita income. The index of contract enforcement is the ICRG measure of property-rights protection

Figure 2: The Violence Trap and Fiscal Capacity



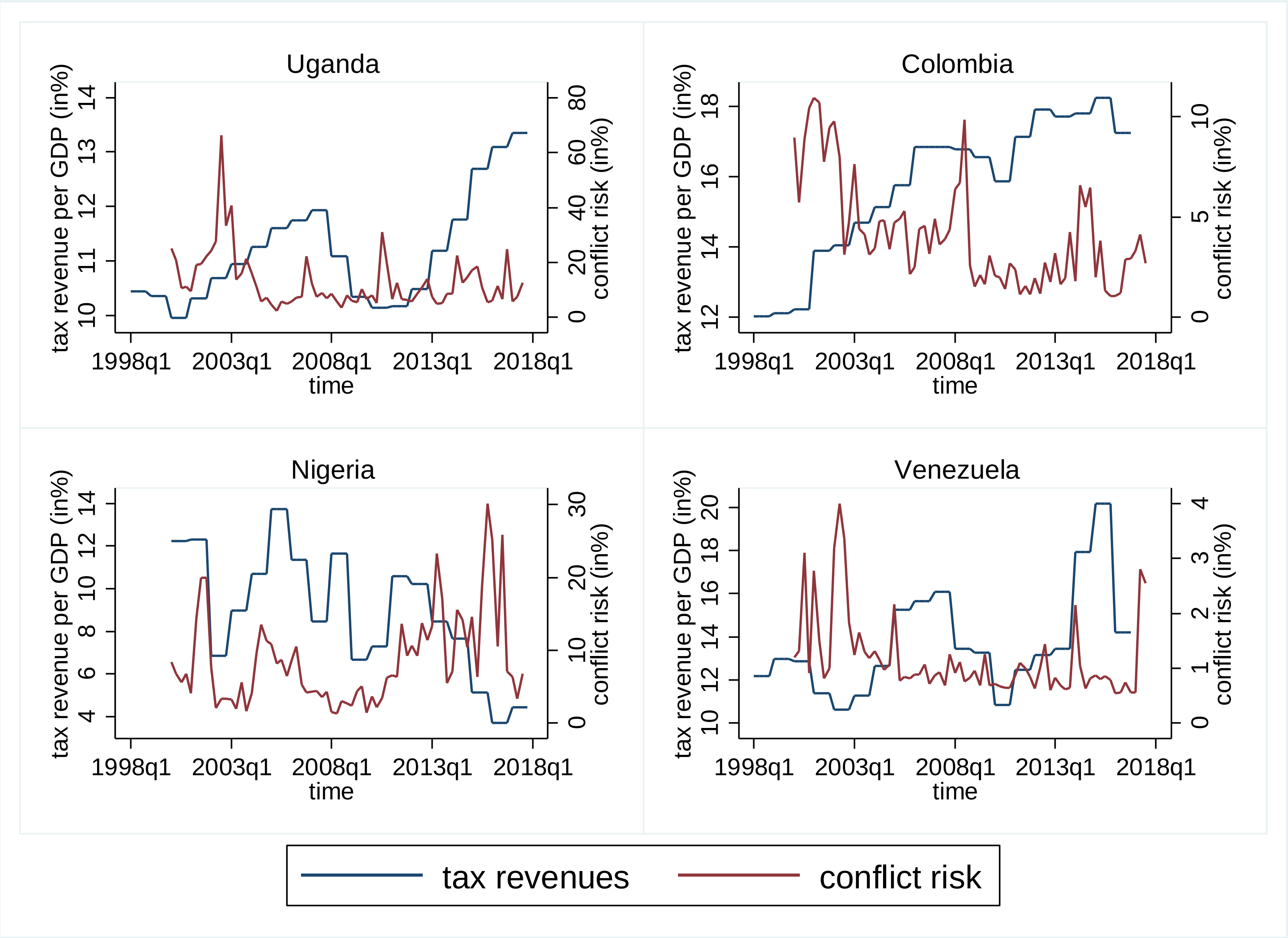
Note: Conflict is defined by more than 8 battle-related deaths in 10 million inhabitants according to the UCDP data. Countries do not change groups over time, i.e. groups are defined using the long-term mean. Revenue data is from the IMF WoRLD dataset.

Figure 3: Fragility and Fiscal Capacity Between and Within Country Evidence



Note: Conflict is defined by more 8 battle-related deaths in 10 million inhabitants according to the UCDP data. Revenue data is from the IMF WoRLD dataset. Every country/year is attributed to one revenue decile according to its revenue per GDP. The left hand side is a dummy indicating whether a country is in conflict according to our definition. Figures then show the regression coefficients and their 95%-confidence intervals of a regression of conflict on revenue decile dummies. The dummy for decile 10 is the omitted category and so confidence intervals should be interpreted as indicating significant differences with regard to the group with highest revenues per GDP.

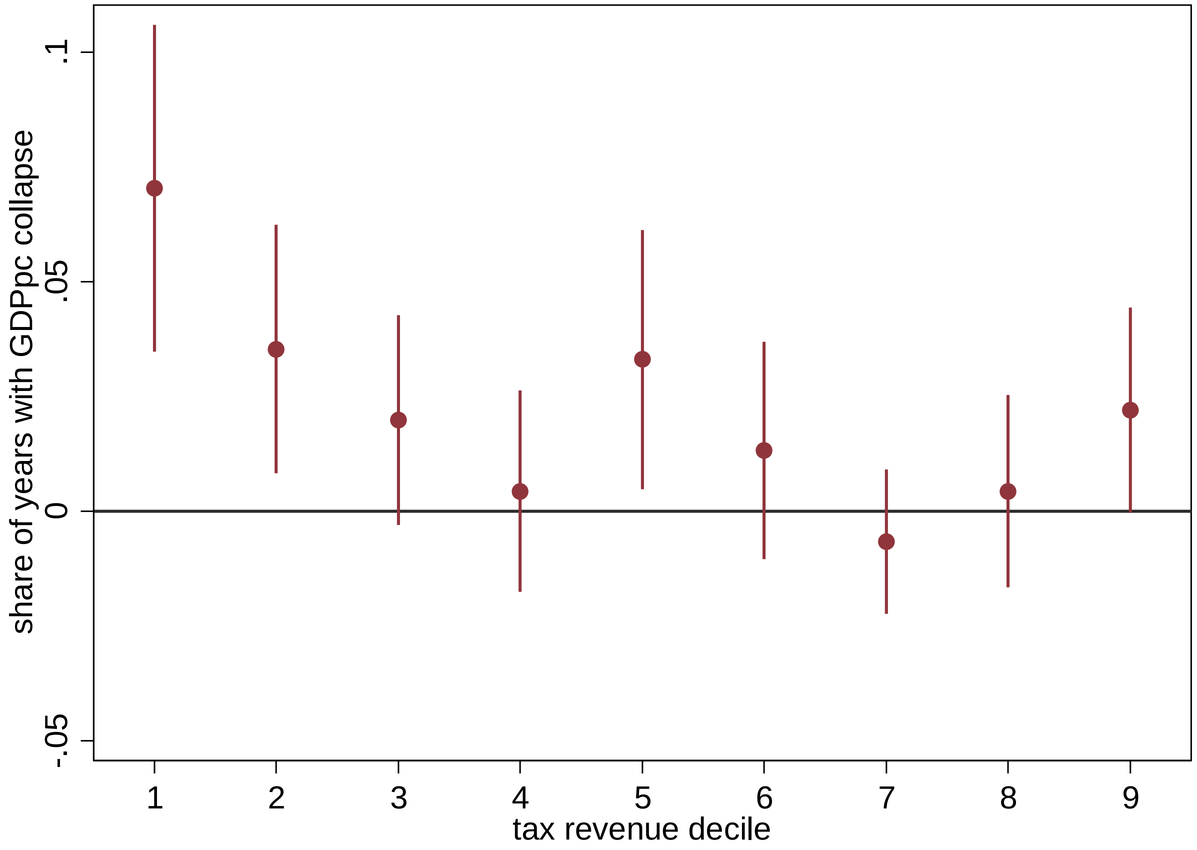
Figure 4: Fragility and Fiscal Capacity – Case Studies



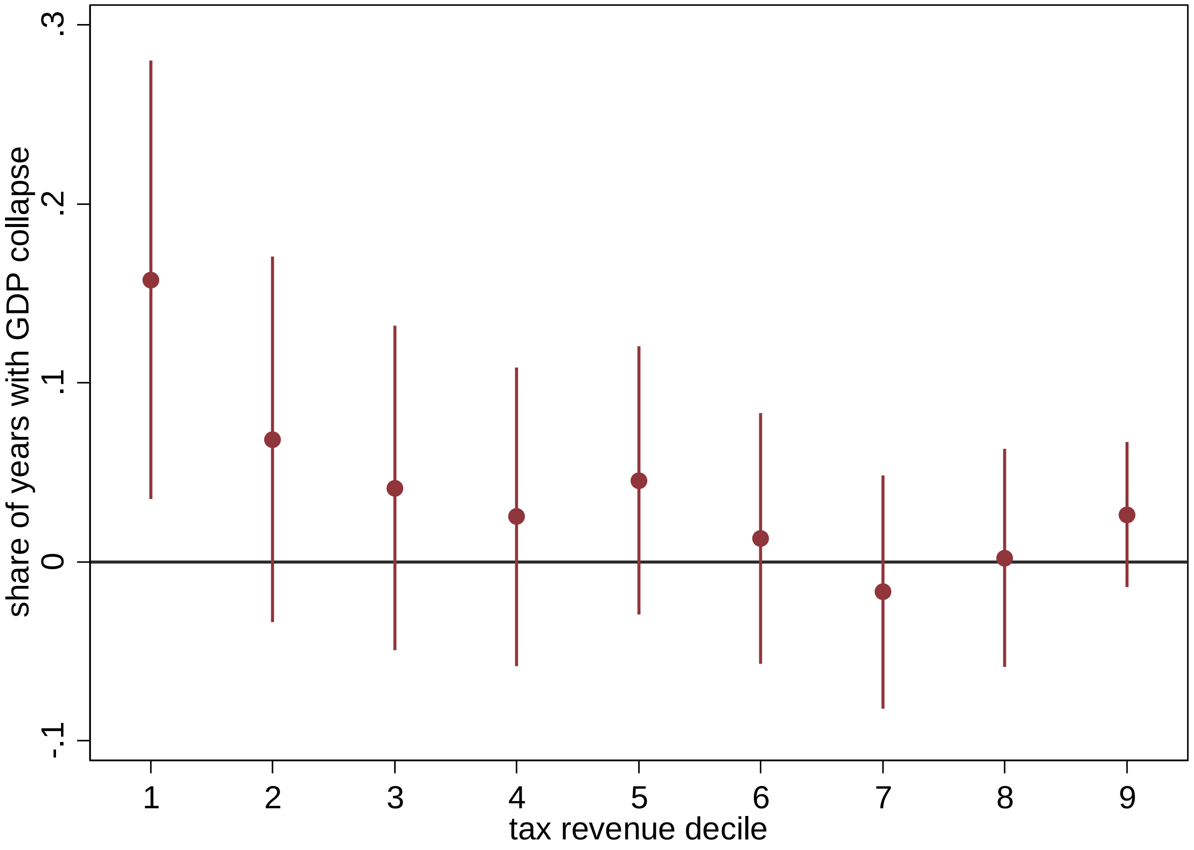
Note: Revenue data is from the IMF WoRLD dataset. Conflict risk is calculated using a forecasting model following Mueller and Rauh (2018, 2019).

Figure 5: Economic Fragility and Fiscal Capacity Between and Within Country Evidence

Panel A: without controls



Panel B: controlling for country and time fixed effects



Note: A collapse is defined by a decline of GDP by more than 5 percent. Revenue data is from the IMF WoRLD dataset. Every country/year is attributed to one revenue decile according to its revenue per GDP. The left hand side is a dummy indicating whether a country is facing a collapse according to our definition. Figures then show the regression coefficients and their 95%-confidence intervals of a regression of collapse on revenue decile dummies. The dummy for decile 10 is the omitted category and so confidence intervals should be interpreted as indicating significant differences with regard to the group with highest revenues per GDP. Author's calculations.

Table 1: Failures and Executive Constraints

	weak executive constraints		strong executive constraints		t-test	t-test*
	obs	mean	obs	mean		
10% drop in GDP per capita	4170	3.86%	1979	1.11%	7.23	4.41
20% drop in GDP per capita	4410	1.52%	2017	0.40%	4.85	2.92
fall in life expectancy	5656	1.45%	2222	0.50%	4.38	1.08
increase in child mortality	5102	1.22%	2145	0.47%	3.52	1.72
start of armed conflict	6095	3.20%	2417	1.03%	7.09	2.62
start of civil war	6627	1.39%	2611	0.27%	6.37	2.93
start of refugee outflow	4976	2.07%	2397	0.42%	6.86	2.54
start of purge	4924	6.15%	2225	1.71%	10.13	4.47

Notes: "t-stat" reports the t-test on a difference in means. "t-test*" reports the t-test on the coefficient of regression of the respective variable on weak executive constraints controlling for ln(GDP per capita). The years after the onset of a failure episode is set to missing to and all independent variables are lagged by one year to prevent the most obvious reverse causality problems. "10% drop in GDP per capita" is a drop in GDP per capita of more than 10 percent in the past 5 years. "20% drop in GDP per capita" is a drop in GDP per capita of more than 20 percent in the past 5 years. "fall in life expectancy" is a fall by more than half a year within a 5-year period. "increase in child mortality" is an increase from one year to the next. "armed conflict" is defined by more than 25 battle related deaths within a year. "civil war" are more than 0.08 battle related deaths per 1000 population in a year. "refugee outflow" is a year in which the country generates refugees. "purge" is an episode with purges. The table categorizes episodes of bad outcomes with the political institution in place in the year before the start of the episode. "strong executive constraints" are years of xconst=7 before the start of the respective episode. "weak executive constraints" are years of xconst<7 before the start of the respective episode. Data on executive constraints is from PolityIV. Data on GDP, population, child mortality and life expectancy is from the World Bank. Data on armed conflict and civil war is generated from UCDP/PRIO data on battle-related deaths presented in Pettersson and Eck (2018). Data on refugees is from the UNHCR. Data on Purges is from the Cross-National Time-Series Data Archive by Banks and Kenneth (2017).

Table 2: Cheating on Taxes and National Identity in the World Value Survey Data

	(1)	(2)	(3)	(4)	(5)
VARIABLES	cheating on taxes is not justifiable (1-10)				cheating on taxes is never justifiable
I see myself as citizen of the [country] nation	0.320***	0.326***	0.229***	0.220***	0.062***
	(0.010)	(0.010)	(0.012)	(0.012)	(0.002)
I see myself as member of my local community			0.188***	0.118***	0.032***
			(0.009)	(0.010)	(0.002)
the government should take more responsability			0.023***	0.025***	0.005***
			(0.002)	(0.002)	(0.000)
Observations	149,863	131,918	128,792	128,792	128,792
R-squared	0.008	0.019	0.023	0.145	0.127
Controls	NO	YES	YES	YES	YES
Country/Wave FE	NO	NO	NO	YES	YES

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Question on cheating on taxes in columns (1) to (4) is coded from 1 to 10 with a standard deviation of 2.18. In column (5) we code a dummy equal to 1 if the answer is 10 (never justified). Question on national identity is coded from 1 to 4 with a standard deviation of 0.62. All data is from the World Values Survey.

Table 3: National Identity and Paying Taxes in the Afrobarometer Data

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Wrong: Not paying taxes	Refused to pay fee or tax to government	People must pay taxes	Wrong: Not paying taxes	Refused to pay fee or tax to government	People must pay taxes
Strength of National Identity Relative to Ethnic Identity	0.009***	0.015***	0.014***	0.004*	0.008***	0.024***
	(0.002)	(0.002)	(0.004)	(0.002)	(0.002)	(0.004)
Observations	82,131	83,638	83,224	82,131	83,638	83,224
R-squared	0.001	0.001	0.001	0.064	0.043	0.047
Controls	YES	YES	YES	YES	YES	YES
Country/Wave FE	NO	NO	NO	YES	YES	YES

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Question on whether it is wrong not to pay taxes is coded from 1 to 3 with a standard deviation of 0.67. Question on not paying taxes or fee is coded from 1 to 5 with a standard deviation of 0.8. Question on people having to pay taxes is coded from 1 to 5 with a standard deviation of 1.17. Question on national identity is coded from 1 to 5 with a standard deviation of 1.17. All data is from the Afrobarometer.

Table 4: Confidence in Government and Tax Compliance in the World Value Surveys

	(1)	(2)	(3)	(4)	(5)
VARIABLES		cheating on taxes is not justifiable			cheating on taxes is never justifiable
Confidence in the government	0.169***	0.161***	0.170***	0.123***	0.021***
	(0.005)	(0.005)	(0.005)	(0.006)	(0.001)
Most people can be trusted			-0.011	0.010	0.019***
			(0.011)	(0.011)	(0.002)
The government should take more responsability			0.008***	0.018***	0.004***
			(0.002)	(0.002)	(0.000)
Observations	271,642	230,591	215,471	215,471	215,471
R-squared	0.005	0.014	0.015	0.127	0.120
Controls	NO	YES	YES	YES	YES
Country/Wave FE	NO	NO	NO	YES	YES

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Question on cheating on taxes in columns (1) to (4) is coded from 1 to 10 with a standard deviation of 2.18. In column (5) we code a dummy equal to 1 if the answer is 10 (never justified). Confidence in government is coded from 1 to 4 with a standard deviation of 0.94. All data is from the World Values Survey.

Table 5: Institutional Trust and Tax Compliance in the Afrobarometer

Panel A: Trust and Tax Department and Willingness to Pay

VARIABLES	(1) Wrong: Not paying taxes	(2) Refused to pay fee or tax to government	(3) People must pay taxes	(4) Wrong: Not paying taxes	(5) Refused to pay fee or tax to government	(6) People must pay taxes
Trust Tax Department	0.0575***	-0.0367***	0.189***	0.0544***	-0.0248***	0.179***
	(0.00218)	(0.00255)	(0.00372)	(0.00230)	(0.00277)	(0.00399)
Age and gender controls	YES	YES	YES	YES	YES	YES
Education and corruption	NO	NO	NO	YES	YES	YES
Region/round fixed effects	NO	NO	NO	YES	YES	YES
Observations	85,719	91,931	92,136	85,531	91,686	91,883
R-squared	0.010	0.003	0.030	0.128	0.100	0.135

Panel B: Corruption of Tax Officials and Willingness to Pay

VARIABLES	(1) Wrong: Not paying taxes	(2) Refused to pay fee or tax to government	(3) People must pay taxes	(4) Wrong: Not paying taxes	(5) Refused to pay fee or tax to government	(6) People must pay taxes
Corruption: tax officials	-0.0415***	0.0516***	-0.135***	-0.0366***	0.0286***	-0.118***
	(0.00277)	(0.00335)	(0.00488)	(0.00325)	(0.00414)	(0.00578)
Age and gender controls	YES	YES	YES	YES	YES	YES
Education and corruption	NO	NO	NO	YES	YES	YES
Region/round fixed effects	NO	NO	NO	YES	YES	YES
Observations	81,843	87,471	87,706	81,668	87,250	87,480
R-squared	0.004	0.004	0.011	0.125	0.102	0.119

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Question on whether it is wrong not to pay taxes is coded from 1 to 3 with a standard deviation of 0.67. Question on not paying taxes or fee is coded from 1 to 5 with a standard deviation of 0.8. Question on people having to pay taxes is coded from 1 to 5 with a standard deviation of 1.17. Question on trust in the tax department is coded from 0 to 3 with a standard deviation of 1.06. Question on corruption of tax officials is coded from 0 to 3 with a standard deviation of 0.86. All data is from the Afrobarometer.