Barcelona School of Economics

WORKING PAPERS

The Taxing Challenges of the State: Unveiling the Role of Fiscal & Administrative Capacity in Development

BSE Working Paper 1432| March 2024

Esteban Muñoz-Sobrado ⓡ, Amedeo Piolatto ⓡ, Antoine Zerbini ⓡ, Federica Braccioli ⓡ[1]

[1] ⓡ The order of authors was randomised using the AEA Author Randomization Tool (confirmation code: f3s4iWXEWbFL)

The Taxing Challenges of the State: Unveiling the Role of Fiscal & Administrative Capacity in Development*

Esteban Muñoz-Sobrado ⓡ † Amedeo Piolatto ⓡ ‡ Antoine Zerbini ⓡ § Federica Braccioli ⓡ ¶

6th March 2024

ⓡ The order of authors was randomised using the AEA *Author Randomization Tool* (confirmation code: f3s4iWXEWbFL).

Abstract

During the past two decades, several factors have challenged the stability of national states, adding tensions to the connection between the state and the individual. This paper reviews the literature on state capacity. First, it introduces the origin of the literature and presents the well-established positive correlation between state capacity and economic development. Second, it touches upon fiscal and administrative capacity and conflict. It concludes with a provocative reflection on *digital nomads* to push the research frontier in analysing the connection between the state and the individual.

JEL Classification: H11, H20, E62, H77, D73, H83, D72, D74
Keywords: Administrative Capacity, Fiscal Capacity, State Capacity, Conflict.

*Acknowledgements, Funding and Notes**: Piolatto and Zerbini gratefully acknowledge support from the Spanish Ministry of Science and Innovation (grants CNS2022-135749 and PID2022-137707NB-I00). Piolatto also gratefully acknowledges support from the Generalitat de Catalunya (grant 2021SGR00194) and the Spanish Agencia Estatal de Investigación (AEI), through the Severo Ochoa Programme for Centres of Excellence in R&D (Barcelona School of Economics CEX2019-000915-S), funded by MCIN/AEI/10.13039/501100011033.

Corresponding author: Amedeo Piolatto, e-mail: `amedeo.piolatto@uab.es`

†Toulouse School of Economics, University of Toulouse Capitole, Toulouse, France.

‡Autonomous University of Barcelona (UAB), Barcelona School of Economics (BSE) and Barcelona Institute of Economics (IEB).

§London School of Economics.

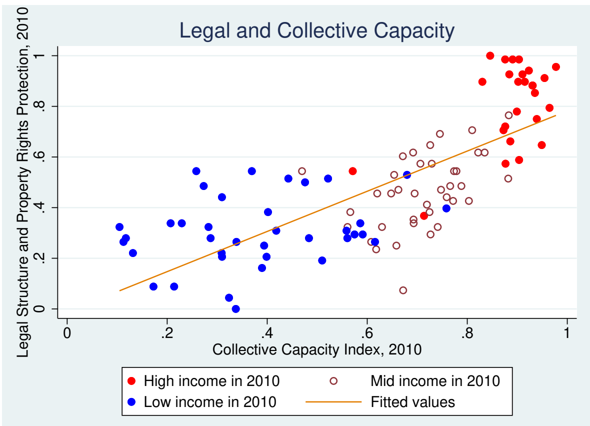
¶IAE-CSIC and Barcelona School of Economics (BSE).

1 Introduction

During the past two decades, several factors have challenged the stability of national states, including the rise in political polarisation, the 2008 financial crisis, the growing concerns regarding climate change, the internet revolution, and the more recent COVID-19 global pandemic, to name a few. National states are under pressure to meet the needs of local communities and coordinate with international ones. Social cohesion has become a top priority (Rohner and Zhuravskaya, 2023). Moreover, internal pressure from independent movements in developed countries (for example, Spain and Italy) and internal violent conflict in developing ones (for example, the Democratic Republic of Congo) have further questioned the connection between the state and the individual.

In the same years, a growing body of literature opened the 'black box' of institutions. It has reached a consensus on the importance of state capacity for well-functioning national states. In their seminal work, Besley and Persson (2011b) identify three *pillars of prosperity*: peace (monopoly over legitimate violence), taxation (fiscal capacity) and justice (legal capacity). Besley, Persson and Dann (2021) introduce collective capacity as an additional pillar. While they distinguish between legal and collective capacity, they are closely intertwined and form the foundation of what we term administrative capacity. Fig. 1 emphasises this interconnection.

Figure 1: Correlation between Collective and Legal Capacity (from Besley et al., 2021, Fig. 4)



We review the literature on state capacity, paying particular attention to fiscal capacity. In our narrative, we reference the main historical work behind the topic presented in each chapter and mention relevant literature reviews that are needed. Occasionally, we connect closely related literature to suggest further in-depth analysis for the researcher interested in a particular topic. However, we refrain from a systematic connection with additional topics for ease of reading.

In Section 2, we present the big picture by discussing the literature on the formation of states and state capacity, tracing it back to the philosophical tradition that inspired the economic literature. Then, we discuss the main well-established patterns between state capacity and economic development. This approach helps us understand how past events have impacted states' evolution and capacity, which, in turn, may have affected development trajectories. Section 3 focuses on the literature on fiscal capacity. We take particular care in highlighting the differences between developed and developing countries; we discuss tools that support tax compliance and tax collection solutions, such as outsourcing, for when the state capacity is too low to guarantee it. Then, we highlight the importance of administrative capacity in contributing to nations' wealth in Section 4. We will notice that the theoretical literature takes a rather normative perspective, highlighting the optimal division of public good provision between the public and private sectors, the optimal size of nations, and the optimal level of decentralisation. The empirical literature has a more positive approach and typically focuses on performance evaluation. Overall, decentralisation increases economic growth, with several exceptions that we address in the section. We also briefly discuss the role of bureaucracy. In Section 5, we review the role of conflict in nation-making and domestic conflicts as a tool for the ruling elites. Next, we briefly discuss the possible challenges in measuring state capacity (Section 6). Finally, we conclude with some reflections on the direction for future research, with a provocative discussion of the role of *digital nomads* and how they possibly challenge the connection between the state and the individual in Section 7.

2 State Capacity

We start by looking at the motivations that lead to build states in the first place, also tracing it back to the work of philosophers who inspired it.

The origins of states and state capacity: Hobbes versus Olson Scholars have proposed two contrasting theories on the origins of states. The first theory, which emphasises cooperation, is rooted in the idea of a 'social contract'. According to this theory, individuals within a community voluntarily entrust a subset of their peers with the authority to govern. This governing body is then responsible for providing essential public services. The second theory, 'extractive theories of government', acknowledges the inherent power imbalances between individuals. This theory posits that a dominant 'elite' group establishes the state primarily to facilitate resource extraction through taxation and other means. The provision of public goods within this framework often arises from negotiations between various social groups rather than being the primary impetus for state formation.

The concept of government as a cooperative entity providing public goods and services originates from the social contract theories proposed by philosophers like Hobbes, Locke and Rousseau. According to Hobbes, the primary public good is peace, achieved through the social contract, which relinquishes individual authority to the government in exchange for peace and stability. Locke similarly suggests that individuals join political society by consent, with the government's role limited to tasks outlined in the social contract, such as dispute resolution. Economists view government intervention as necessary due to its comparative advantage in providing public goods and addressing issues of underprovision stemming from externalities and cooperation problems.

Alternatively, some theories suggest that government emerges from imbalances in power between individuals or groups. Elite groups establish governments to manage economic conflicts, protect their interests, and maintain social stratification. This perspective, notably associated with Marx, Engels, and more recently, Mancur Olson, posits the state as an instrument of repression used by the ruling elite to enforce control over the exploited class. Cooperative theories assert that individuals willingly form governments, while extractive theories emphasise government formation as a product of power imbalances leading to extraction.

Allen, Bertazzini and Heldring (2023) exploit the natural experiment of river shifts in southern Iraq to shed light on government origins, drawing on a novel archaeological panel dataset. This study examines the applicability of both cooperative and extractive theories in explaining state formation. The research analyses how a change in the river's course created a local need for government intervention in coordinating the transition from private river irrigation to public canals. As this shift rendered land unproductive without irrigation, opportunities for local extraction diminished. Consistent with the cooperative theory, the study finds that a river shift away from settlements incentivised the formation of a state, the construction of public canals and the implementation of tribute payments. The authors argue that these initial governments likely functioned by coordinating between extended households to facilitate the provision of public goods.

The emergence of hierarchical societies and states has been linked to the creation of food surpluses by supporters of cooperative and extractive theories. However, the role of such surplus diverges between these perspectives. The cooperative theory argues that the surplus fuels the provision of essential goods, while the extractive one posits its appropriation by an elite class.

While Mayshar, Moav and Pascali (2022) acknowledge the necessity of a surplus for state formation, they emphasise that it is not a sufficient condition. They posit that two additional factors play crucial roles: appropriability and transferability. Their analysis highlights the contrasting trajectories of societies cultivating crops versus those relying on perishable goods. Due to their storability, crops can be readily expropriated or act as a form of tribute to the state. Additionally, farmers cultivating crops face a heightened risk of theft by bandits, necessitating protection that the state could provide. The extended shelf life of crops also facilitates their use as payment or expropriation, a fact reflected in the historical emergence of hierarchical societies and states solely in regions where crop cultivation flourished.

Conversely, despite generating surpluses, societies focusing on cultivating perishable food did not experience similar societal development. The authors argue that the transient nature of perishable goods rendered them unattractive targets for banditry, thereby negating the need for a state from a 'social contract' perspective. Furthermore, the perishability of these goods hindered their expropriation by an elite class, precluding the rise of such a power structure. This distinction, therefore, sheds light on the divergent pathways societies take based on the nature of their food production systems.

Interpreting the work of Mayshar et al. (2022) more broadly, market structures and their organisation play a role in state formation. For instance, the nature and scale of dominant business entities within a society may matter in contemporary contexts. The type of institutions required for effective governance may vary depending on whether the administration primarily interacts with self-employed individuals, small and medium-sized enterprises (SMEs), or large corporations, including multinational firms. The importance of market structures highlights the multifaceted nature of state formation, where not only surplus production but also the organisational characteristics of economic activity play a critical role in shaping the necessary institutional frameworks.

By adopting a long-term approach, Dincecco (2017) offers a fresh perspective on the origin of states. He traces city-states' formation during the Middle Ages and follows their evolution through the rise of nation-states and the emergence of welfare states. He challenges the idea that a central state exists *per se* and that agents only choose the degree of decentralisation according to some trade-off between local heterogeneity and economies of scale or scope (Oates, 1999; Boffa, Piolatto and Ponzetto, 2016). Instead, he posits that, in the first place, the objective has been to build a sufficiently strong state to internalise externalities and exploit some economies of scale (as in Alesina and Spolaore, 2005b).

State capacity and economic development High state capacity levels are associated with increased economic growth and stability, as suggested in Figs. 2 and 3.

Dincecco (2017) discusses the correlation between state capacity and economic development. He argues that states must be able to control themselves, necessitating a system of checks and balances. Distributive politics and a tight budget constraint incentivise the parliament to raise taxes and build fiscal capacity. In contrast, the parliament's strict control of the executive power may overcome taxpayers' reluctance towards new taxes.[1]

When state capacity is highly deficient, it becomes difficult for the state to guarantee its minimum functions, such as internal security or contract enforcement. To illustrate this point, Dincecco (2017) provides instructive contemporary examples from Latin America, Asia and Africa. He also notes that not long ago, OECD countries had limited state capacity, resulting in various internal trade barriers in many European countries in the 18th and 19th centuries.

However, whether state capacity is the cause or the result of this relationship is unclear: likely, the two elements self-reinforce each other. Besley and Persson (2013) provide cross-country contextual information regarding the varying levels and distributions of taxes. They conclude that 'rich, high-tax, and executive-constrained states have made considerably larger investments in fiscal capacity than have poorer, low-tax, and non-executive-constrained states'.

Besley et al. (2021) leverages the above-mentioned key indicators (i.e. peace, fiscal,

[1]Dincecco (2017) also contemplates the possibility that, under specific conditions, an autocratic state or stateless society may achieve similar results, at least for some time.

Figure 2: Correlation between GDP and State Weakness (from Dincecco (2017), Fig.3)

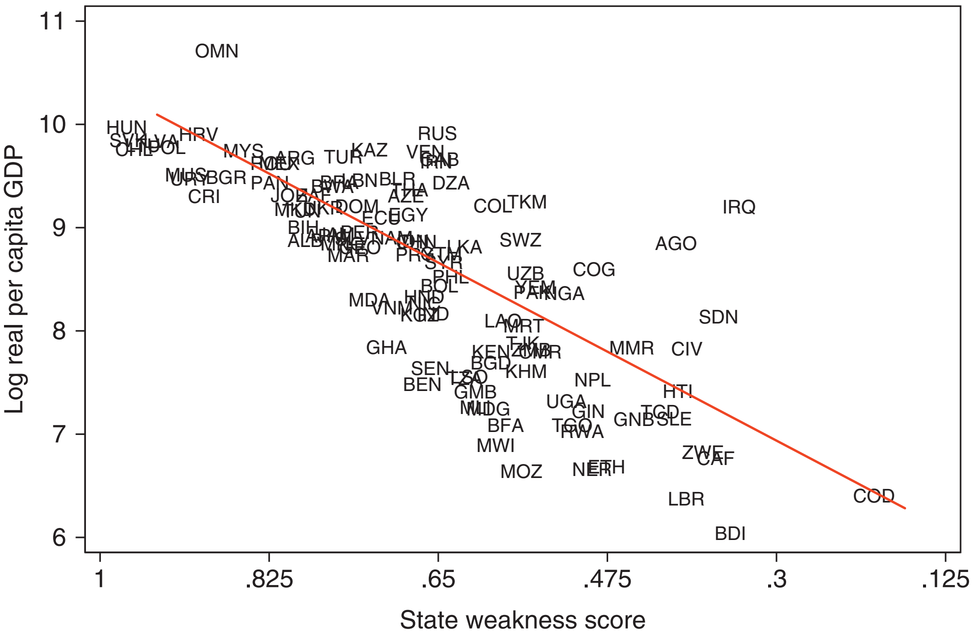
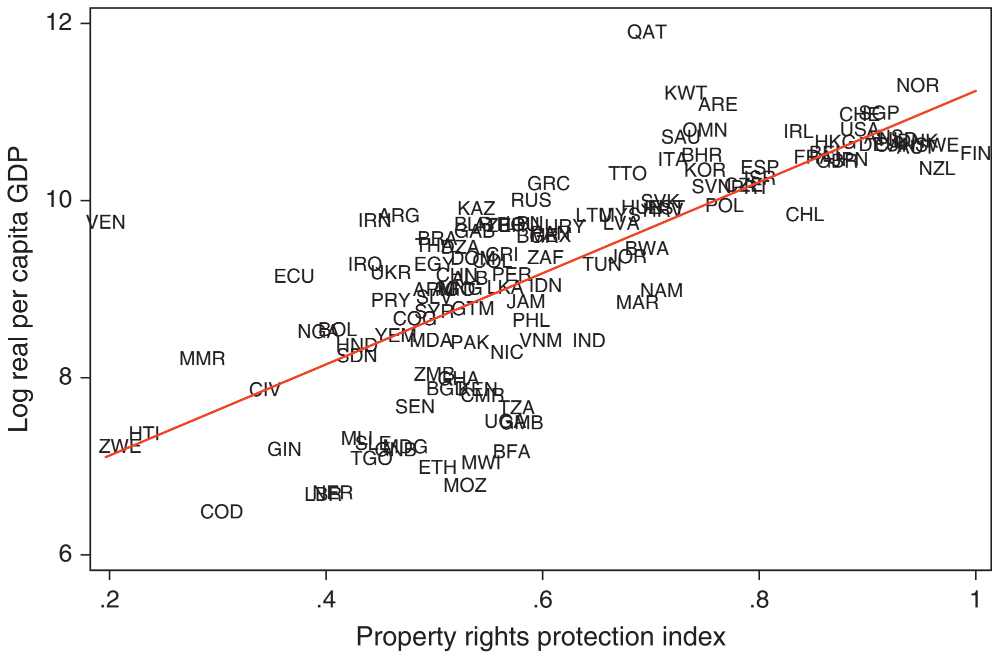


Figure 3: Correlation between GDP and Property Rights (from Dincecco (2017), Fig.4)



legal and collective capacity) and data from 2016, to predict states' economic performances. They identified countries underperforming or overperforming expectations by comparing actual performance against their predictions. The authors further strengthened the analysis by comparing it with the related 2006 study (Besley and Persson, 2011b).

Furthermore, the authors employed a separate classification scheme based on the strength of executive constraints and the level of common interest within each state, resulting in three distinct categories: weak states, redistributive states and common interest states.

Their findings have revealed remarkable stability over time, suggesting that these identified components have a lasting impact on a society's long-term economic and social development. Notably, the study emphasises the co-dependence of these determinants, implying that focusing solely on improving one aspect of state effectiveness in isolation may not lead to desired outcomes. A multi-pronged strategy that addresses these various elements simultaneously is likely to yield more sustainable and successful outcomes.

3 Fiscal Capacity

Within state capacity, we can distinguish several components; fiscal capacity, the ability of a state to acquire resources necessary for its functions, is the most prominent of them in the economics literature. It hinges on two key factors: tax pressure (the level of taxation imposed) and tax collection efficiency. Different combinations of these factors can lead to the same disposable proceeds.

Traditionally, the public finance literature primarily focused on normative and positive theories of taxation, assuming governments inherently possess the capability to raise taxes. The standard economic view identifies low revenue and narrow tax bases as constraints on tax collection. However, it largely disregards the role of government behaviour in influencing tax policy (Besley and Persson, 2013). This oversight persists even in studies acknowledging the importance of administrative efficiency and compliance.

In contrast, the fiscal capacity literature delves into the limitations on governments' ability to raise taxes, specifically focusing on the constraints of administrative infrastructure and its shortcomings. Bräutigam, Fjeldstad and Moore (2008) and Dincecco (2011) emphasise the intentional choices and motivations behind government tax collection, highlighting the need to study intentional efforts to build and improve a state's capacity for effective tax collection.

Strong and weak states While often used interchangeably, state strength and state capacity are distinct concepts. High state capacity refers to a state's ability to execute its core functions effectively, but crucially, this capacity must coexist with a robust system of checks and balances. This system ensures that citizens are protected from arbitrary actions and abuses of power by the state.

A significant conceptual challenge arises when modelling self-interested government behaviour and differentiating between taxation and expropriation. Unlike taxation's typically formalised and predictable nature, expropriation is arbitrary and unpredictable. While the distinction has practical significance, both methods employed by self-interested rulers can distort resource allocation, ultimately impacting economic development.

Contexts of weak state authority lead rulers to anticipate limited opportunities for future resource extraction, incentivising them to underinvest in public goods due to the perceived lack of long-term return. This lack of investment, in turn, restricts access to essential infrastructure and services, hindering economic growth and development.

Conversely, when states wield excessive power, rulers may impose excessively high taxes to maximise personal gain. However, such strategies distort the economy and stifle economic activity. The burden of high taxation discourages individuals and businesses from engaging in productive endeavours, ultimately leading to reduced economic output and slower overall growth.

Acemoglu (2005) explores the theoretical connection between politics and economics in weak and strong states. His model depicts a self-interested ruler making decisions regarding taxation, public good investment, and private consumption. The model emphasises the state's economic influence, measured by its capacity to impact citizen choices, particularly regarding taxation.

The model demonstrates that high anticipated taxation discourages private investment, while meagre tax rates disincentivise the ruler from investing in public goods due to in-sufficient future revenue prospects. Optimal economic outcomes necessitate finding an intermediate tax level that balances citizen investment incentives with generating a sufficient surplus for the ruler to invest in public goods. Both extremely weak and excessively strong states lead to poor economic outcomes, highlighting the importance of a balanced power structure to encourage investment from all stakeholders.

Earlier work by Besley and Coate (1998) investigated the emergence of 'political failures'. They study the efficiency of policy choices by incorporating a two-period economic model that includes redistribution and public investment. They show that while the political equilibrium satisfies a particular efficiency property, it does not imply that policies are efficient according to standard economic criteria. In their setting, Pareto-improving public investments may not be undertaken in the political equilibrium. The reasons include the non-payment of future compensation, the potential change in the preferences of future policymakers, and the possibility of altering the identity of future policymakers in a way disadvantageous to the incumbent.

Governments' long-term perspective. From a broader perspective, governments aim to minimise the gap between nominal and net tax proceeds. This involves minimising leaks such as tax evasion, collection costs and corruption. Investments in fiscal capacity, including compliance structures and tax enforcement infrastructure, are crucial for achieving this goal.

The literature on fiscal capacity recognises a crucial distinction between policymaking and institution-building. State capacity develops incrementally, with existing capacity influencing the policy options available to the current government. For instance, the ability to impose an income tax depends on the existing administrative capabilities and the institutions necessary for facilitating income tax withholding by businesses.

Furthermore, this framework views state development as a result of deliberate and forward-thinking choices made by successive governments. It conceptualises decisions regarding future state capacity as an investment dilemma, balancing immediate costs with anticipated yet uncertain future benefits. Besley and Persson (2013) propose a model with a Pigouvian planner to analyse optimal policy and investment strategies in this context.

Costs associated with building fiscal capacity, such as fines and detection mechanisms, are recognised in classical tax enforcement models (e.g. Allingham and Sandmo, 1972). Additionally, cultural norms surrounding compliance play a significant role. Countries with a strong culture of compliance often find it more cost-effective to invest in fiscal capacity than those lacking such norms. This aspect is explored by both economists and political scientists, highlighting the broader socio-political context influencing fiscal policy and governance.

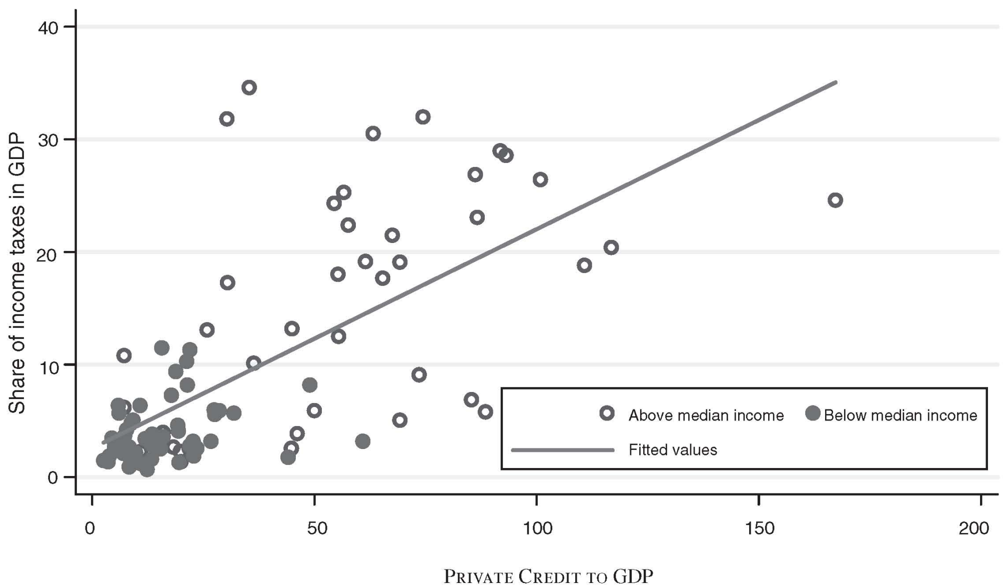
The ability of citizens to 'exit' the system, such as through informal economic activities, income concealment, or outright disregard for tax regulations, can further complicate matters. Especially developing nations face significant challenges in generating sufficient tax revenue and enforcing compliance (Migdal, 1988). This often leads governments to resort to inefficient alternatives like tariffs for revenue generation.

3.1 Fiscal Capacity in Developed and Developing Countries

The distinction between fiscal capacity in developed and developing countries is well-established, with developed nations typically exhibiting higher fiscal capacity levels than their developing counterparts. 'Low-income countries typically collect taxes of between 10 to 20 percent of GDP, while the average for high-income countries is more like 40 percent' (Besley and Persson, 2014). The relationship between taxation and development may depend on many factors, and, likely, their inability or unwillingness to tax citizens also partially causes their weakness in raising tax revenue. For instance, weak checks and balances reduce economic development and, simultaneously, increase corruption and bribes by wealthier individuals aiming at reducing their tax liability.[2]

The relationship between taxation and development in this context is complex, with potential bidirectional causality: countries proficient in tax collection may provide better services, fostering stability and economic growth. At the same time, the need for resources to fund essential endeavours like infrastructure and defence can incentivise the development of fiscal capacity.

Figure 4: Correlation between financial development and state capacity (from Besley and Persson (2009), Fig.1)



Different historical paths led countries to exhibit different average levels of both ca-

[2]According to Besley and Persson (2014), ranking countries by per capita GDP, in the lowest tertile only 7% of the countries obtained the highest score in the Polity IV database for the extent to which political institutions imposed executive constraints in 2000, compared to around 40% amongst the remaining countries.

pacity and development. Instead, differences in social capital, organised crime, agents' mobility, inequality and many other economic factors explain substantial within-country heterogeneity in administrative and fiscal capacity. Rodrik (2008) puts forward an interesting point about the importance of focusing on second-best solutions when state capacity is far from optimal. In his words, 'a focus on best-practice institutions not only creates blind spots, leading us to overlook reforms that might achieve the desired ends at lower cost, but can also backfire'. Hence, there is a need to study developed and developing countries separately.

The quality of institutions is closely related to the level of tax compliance (Aidt, 2009; Dreher, Kotsogiannis and McCorriston, 2009; Dreher and Schneider, 2010). A large informal sector and dependence on foreign aid or natural resources are common characteristics of developing countries that may explain their weak fiscal capacity.

Some studies shed light on how to guarantee enough resources to the state when fiscal capacity, intended as the degree of effectiveness in tax collection, is low. However, there is an upper limit to the taxes a state can collect, which is determined by the Laffer curve. Interestingly, the tax rate that maximises tax proceeds depends on the level of state capacity, as shown in Bergeron, Tourek and Weigel (2020).

Bergeron et al. (2020) demonstrate that increasing the nominal tax rate is unlikely to solve the problem. In their experiment in the Democratic Republic of Congo (DRC) they observe that the current tax rate is already on the decreasing side of the Laffer curve and a decrease by 34% in the nominal tax rate could lead to an increase in collected taxes by up to 77%. The experiment consisted of a randomly assigned discount on the property tax. Tax-payers in the treated group were unaware that a discount (17%, 33% or 50%) had been applied. The control group didn't enjoy a discount. Tax compliance increased substantially with the discount, going from 5.6% for the control group to about 13% among taxpayers that enjoyed the largest tax rebate. Based on these results, the authors estimate that the Laffer curve would be maximised if DRC reduced by 34% their tax rate. A further increase in tax proceeds would be achievable by optimally enforcing the payment of the tax. Not too surprisingly, Bergeron et al. (2020) find some heterogeneity in the effectiveness of tax collectors. The authors examined the interaction between enforcement and the Laffer curve. Interestingly, they observe that - in addition to fostering compliance - sending enforcement messages (tax letters) increases the tax rate that maximises tax proceeds. Finally, it is useful to notice that the decrease in tax rates had no substantial impact on bribes.[3]

Increasing tax compliance: the carrot Sufficient tax compliance is crucial to collecting the resources required to ensure the minimum degree of stability and legality that is key to attracting investments and fostering economic growth. The initial approach in economics has considered tax compliance as a standard problem of comparing the benefits and costs of evading taxes, in line with Becker (1968). However, in the early 2000s, the

[3]If anything, the bribing rate seems to decrease slightly among treated taxpayers that received the 50% rebate.

concept of tax morale emerged in the literature and suggested that taxpayers factor in non-pecuniary elements. This very general concept included social pressure and the idea of a social contract under which taxpayers contribute in exchange for some services; therefore, their obligation to contribute increases in the quality of the provided services.[4]

Besley (2020) delves into the intricate dynamics among state capacity, reciprocity, and the social contract. The paper explores how variations in state capacity influence reciprocity within society (i.e. the social contract). In the model, every generation lives one period, and agents belong to one of three groups: the elite, materialist consumers and civic-motivated agents. The relative size of each group is stochastic. The elite chooses the income tax rate the rest of the population pays. Tax proceeds have three uses: to finance a pure public good, to redistribute among the elite and to redistribute among the non-elite.[5] The non-elite pays the tax, but they can try to hide part of their income. Civic-motivated citizens are more likely to pay taxes if the redistribution to the elite is sufficiently moderate, that is if the elite is 'fair'. In a sort of coordination game, the elite finds it optimal not to appropriate the resources as long as the collected taxes are 'large enough', which depends on the fiscal capacity (the degree of tax enforcement), the degree of compliance and the share of civic-motivated agents. However, the degree of compliance depends on whether the elite appropriates the resources. Ultimately, the equilibrium crucially depends on fiscal capacity and strong civic cultures: the two mutually reinforce.

Initially, the empirical literature on tax morale has focused on developed countries, with the notable exception of Torgler (2005) that studies it in Latin America and comes to the conclusion that tax morale is significantly lower in South America and in Mexico than in the Central American/Caribbean area. Tax morale seems highly correlated with trust in institutions. Higher levels of tax morale have positive side effects. For instance, Weigel (2020) studies the effects of a tax campaign conducted in the DRC that was meant to increase tax compliance and shows that the same campaign also increased the level of political participation and, altogether, improved the public provision of goods. Luttmer and Singhal (2014) thoroughly describe the seminal literature on tax morale.

Montenbruck (2024) proposes a different approach to increase tax compliance by reinforcing the social contract between taxpayers and the state. In her field experiment conducted in Sierra Leone, property owners receive information about how the public sector spends its budget to provide valuable goods and services nearby. Obtaining such information strengthens the social contract between taxpayers and the state; in her estimates, tax proceeds increase on average by 20%.

Alternative methods exist that can increase tax compliance without threats and punishments. A powerful instrument in governments' hands is third-party reporting, as demonstrated in the well-known study in Kleven, Knudsen, Kreiner, Pedersen and Saez (2011). However, third-party reporting may be complex to implement in developing countries. Modern technologies may help: introducing electronic payments, for instance, may in-

[4]See Alm (2019) for a broader perspective on what may motivate taxpayers. The analysis includes a review of the theoretical and empirical literature, plus a discussion of how governments use these insights to improve compliance.

[5]Some exogenous constraints limit how much the elite can redistribute to themselves.

crease compliance (Immordino and Russo, 2018a,b), especially if compliance is rewarded (Piolatto, 2015; Dunning et al., 2017). The use of electronic payments in developing countries is the object of Kotsogiannis, Salvadori, Karangwa and Murasi (2024), where they analyse the impact of adopting the compulsory e-invoicing system in Rwanda. The immediate result of the policy change was an increase in VAT and corporate tax payments.

Increasing tax compliance: the stick The alternative to the 'carrot', i.e. how to increase compliance through a social contract, is the 'stick', implying the auditing of taxpayers and the punishment of non-compliers. Audits can be very powerful: they grant the state an additional source of income by recovering unpaid taxes and the corresponding fines. They may also have a deterrence effect that will increase future tax compliance (Advani, Elming and Shaw, 2023; Beer, Kasper, Kirchler and Erard, 2020). However, a 'bomb-crater' effect may appear, implying that audited agents may also update their beliefs downwards about the risk of being audited again soon, based on the idea that the authority will not strike twice within a short period. Mittone (2006) is possibly the first to document such an effect through a laboratory experiment. Kasper and Rablen (2023) use a laboratory experiment to disentangle the learning component (Bayesian updating after an audit), the bomb-crater effect and the ceiling component (that implies that auditing compliant taxpayers cannot lead to an increase in compliance). In particular, they show that the apparent divergence between laboratory and field experiments in the previous literature is likely explained by the fact that the literature did not account for the ceiling component.

Until recently, the empirical literature that studied the effects of audit on future compliance (see Slemrod, 2019, for a pretty comprehensive review) has been focusing primarily on individual taxpayers in developed countries. A few notable exceptions look at the corporate tax in developed countries: Li, Pittman and Wang (2019) find a deterrence effect in China while DeBacker, Heim, Tran and Yuskavage (2018) find a bomb-crater effect in the US. Very recent studies look at developing countries, Best, Shah and Waseem find no evidence in Pakistan that audits affect future compliance, Lediga, Riedel and Strohmaier (2023) find spillover effects with a 1.5% increase in the compliance of firms that are located near an audited firm, finally, Kotsogiannis, Salvadori, Karangwa and Mukamana (2022) find that in-depth audits increase future compliance (in line with the preliminary results in Lediga et al., 2023). In contrast, more superficial (narrow) audits are more likely to produce a bomb-crater effect.

Tomasi and Parmigiani (2022) provide a model of tax evasion and enforcement. An elite can invest in tax avoidance – 'brains' – and in the ability to threaten a tax auditor – 'muscles'. They show that investments in brains and muscles are positively correlated below some threshold of state (fiscal and legal) capacity, and negatively correlated otherwise. Further, their model predicts that the estimated level of tax evasion should be an inverse U-shaped function of the level of state capacity. Using data on offshore wealth, they provide empirical evidence of this U-shaped pattern.

Investing in state capacity Improving state capacity is challenging, but sufficient levels of capacity guarantee political stability. Li, Roland and Xie (2021) study the connection between local corruption and state power. In their model, the central government delegates to a local official, who receives a wage and may accept citizens' bribes. The central government chooses the wage and the level of tolerance of bribes that, together, define the payoff of the local bureaucrat. The central government needs sufficient state capacity to pay the official's wage. Crises of random severity occur; when this happens, the local official may decide to defy the central power. Sufficient fiscal capacity guarantees the resources to keep local officials under control. Corruption, they show, erodes state power in times of crisis by giving leeway to local elites/bureaucrats. Weaker state capacity induces the central government to over-tolerate corruption at the risk of losing power conditional on a decisive crisis.

Is it possible for weak states to avoid a 'fiscal capacity trap'? Finding the resources to invest in state capacity may be politically very challenging in a weak state. Let us see what the literature has said about that.

Li et al. (2021) conclude that we should expect investments in fiscal capacity only when current capacity is intermediate: investments are unnecessary if it is already high. They are also useless when capacity is so low that corruption must be over-tolerated, and losing power is inevitable in a crisis.

Besley and Persson (2009) present a multi-period theoretical model in which limited fiscal capacity restricts policymakers' ability to enforce laws (i.e. to collect taxes) and, hence, to provide publicly financed goods and services. In their path-dependent model, past investments in fiscal capacity constrain current decisions. They compare the behaviour of a benevolent and a selfish planner and look at the implications for economic growth. All agents belong to either of two groups.The two groups differ from each other in some observable characteristics. Within each group, agents are homogeneous in all dimensions except productivity, which can take two levels and is unobservable by the tax authority. Agents can borrow money, and the legal system cannot protect property rights. The authority endogenously chooses property rights enforcement, but past investments in legal capacity constrain the choice. Therefore, in Besley and Persson (2009) the authority invests in state capacity, taxes (and redistributes resources) and produces a good. The authority maximises a weighted utilitarian welfare function: when the weight is the same for the two groups, the government is neutral; in all other cases, it is biased in favour of either group. The probability of the government being biased is exogenously determined. The model predicts that the government always uses all the existing capacity. Secure property rights encourage investment and growth, generating tax revenue, which allows the state to invest in its capacity to protect those rights further. However, if the government is biased, the resources may be used inefficiently in terms of both redistribution and provision of goods. Another crucial difference between unbiased and biased governments is that the former is investing in expanding fiscal capacity in all possible scenarios. In contrast, biased governments may find it optimal to under-invest in fiscal capacity, the intuition being that the current government anticipates the risk of being expropriated by a future government of opposite bias and, therefore, they insure against the risk by limiting the future governments' ability to collect taxes. Besley and Persson (2013) extends the previous results by looking at the case of income inequality. If the incumbent belongs to the wealthy class, the government invests in fiscal capacity as long as they are confident they will remain in power. However, they do not if they fear expropriation by future governments. Instead, when the incumbent comes from the bottom of the income distribution, they always have an incentive to over-invest in fiscal capacity.

Besley and Persson (2009) is reminiscent of Cukierman, Edwards and Tabellini (1992), where the authors show that politically stable governments have incentives to increase state capacity and collect resources through taxes. In contrast, in politically unstable countries, the incumbent has incentives to collect resources through seigniorage and keep the tax system inefficient, reducing future governments' taxing power. Acemoglu (2010) provides a counter-argument: higher fiscal capacity increases the government's rents, leading to more political instability.

Whenever benefits extend beyond individual groups and concern public goods like defence against external threats, investments in state capacity are more likely. Political factors like external threats (war) or internal demands for collective action can incentivise rulers to increase their capacity to extract resources and enforce order. On the contrary, the presence of natural resources will likely reduce the incentives to build fiscal capacity, as suggested by the formal model in Besley and Persson (2013) and by the estimations in Jensen (2011). Common interests have historically played a significant role in motivating the development of fiscal capacity, particularly about defence as a primary collective good provided by the state. The likelihood of conflict with external powers has influenced spending decisions, with a greater propensity for investment in defence by common-interest states or social planners. The desire to build military power has been cited as a driving force behind the rise of the fiscal state, as reflected in the model's parameters. This understanding aligns with the classic war-making incentives discussed by various scholars (Tilly, 1990; Dincecco, 2011).

The predictions in Fergusson, Larreguy and Riaño (2022) are similar in spirit to Besley and Persson (2009). However, the mechanism behind the results is different. In particular, Fergusson et al. (2022) also partition society into two groups, but the incumbent party is always biased in favour of one of them, while the challenger is neutral. The incumbent party produces a public good and may transfer resources from one group to another. The incumbent may invest in state capacity, which implies that more resources will be available in the future. This produces a trade-off in terms of the chances of being re-elected: the group that the incumbent favours understands that more future resources will become contestable, which makes the biased party more attractive to them, but at the same time also, the opposition will be more efficient, hence, the relative benefits of electing the biased party decrease. Overall, an increase in state capacity undermines the comparative advantage of the biased party, which is the only one that can guarantee sufficient resources to its favoured group of citizens if capacity is low. Consequently, fiercer political competition reduces the incentive to provide the public good and to invest in state capacity. The empirical analysis, based on historical data from Mexico, convincingly supports the model predictions.

Gulzar and Pasquale (2017) look at political appropriability: when politicians benefit from a high-quality activity of the bureaucrats, they provide the right incentives, and state capacity is more likely to increase. They study the impact of political interference in the bureaucracy using data from India and compare the performances of bureaucrats when they report to only one politician versus several of them. Electoral pressure exacerbates this effect.

Outsourcing tax collection When state capacity is low, it may be beneficial to temporarily rely on external sources to collect taxes, particularly to rely on local elites (e.g. the elders in the village). At least, this is what Balán, Bergeron, Tourek and Weigel (2022) suggest. There could be several possible explanations, the most prominent ones being that local elites are more persuasive, that it is cheaper for them to audit the agents in their village or, finally, that the elites know better where to find the resources. In both cases, the prevalent mechanism seems to be the latter: the elites seem to know better who in their village can pay. The results are striking. Balán et al. (2022) run an experiment in which the collection of the property tax in different neighbourhoods in Kananga (Congo) is done by public officers (control group) or by local elites (treated group). Tax compliance increased by more than 50% and state tax proceeds by 44%, although local elites were 1.8 p.p. more likely to collect bribes.

Gottlieb, LeBas and Magat (2021) reach opposite results: in their experiments, carried out in Nigeria, local elites do not perform better than state agents. However, the different settings may explain the difference in the observed outcome. Indeed, in this case, the local elites were asked to persuade vendors to register for an electronic tax clearance card. This result is consistent with Balán et al. (2022), where local elites are not better at persuading agents, but they seem to have better information on the agents' ability to pay.

A possible concern with outsourcing tax collection to elites is that those elites may take advantage of their position. Indeed, in Balán et al. (2022), they find that the elite is more corrupted. In the short run, the benefit in terms of tax collection seems to outweigh the cost, and Balán et al. (2022) finds that citizens do not lose trust in government. However, there is no evidence of the long-term effects. It is possible that, with time, the elite will become more powerful, and the state will look weaker and weaker. Citizens lose trust in the institutions, and, at the same time, the elites become so powerful that they feel untouchable. Perhaps if a low-capacity state decides to seek the help of the elites, it would be advisable to delegate to different groups over time to avoid having a subgroup in the population that becomes too powerful. Nonetheless, similarities appear between the current local elites on one side and, on the other, the medieval elites that contributed to the consolidation of nation-states, as described by Dincecco (2017). Maybe the delegation to local elites is part of the process of nation-building.

In some cases, criminal organisations replace the state in providing essential services such as resolving conflict, homeland security, protection and more. We can observe this phenomenon in countries with different levels of development, including Italy (see Braccioli, 2024, for the case of mafia), Spain (see Salvadori, 2020, for the case of ETA) and Congo (see Sánchez de la Sierra, 2020, for the case of bandits). Once more, when this happens in countries with deficient state capacity, where the alternative to organised crime may be unorganised violence, it may be possible, as suggested by Sánchez de la Sierra (2020), that organised bandits will ensure more welfare and development than the alternative. However, even in those cases, the long-term consequences of tolerating such equilibria still need to be understood.

4 Administrative Capacity

Administrative Capacity is broadly defined as the ability of the local government to provide public goods (Bellofatto and Besfamille, 2018). This section presents the recent literature related to it. We start with the normative perspective in Section 4.1 and present the theoretical work addressing research questions on the optimal way to organise the state's administrative structure. In Section 4.2, we change to a more positive perspective and focus on the consequences of the administrative structure. Finally, Section 4.3 reviews the literature on the selection of bureaucrats.

4.1 Optimal Division of Capacity

We first discuss the optimal division between the public and private sectors in the administration of public goods. Next, we review recent work related to the optimal division of capacity at different levels of administration, namely international and national.

Public and private sector Motivated by an increasing shift of public good administration from public to the private and non-profit sector, Besley and Ghatak (2001) provide a formal framework to understand the role of the private sector in public good provision. They leverage the main results from the seminal work of Hart and Moore (1990) and Grossman and Hart (1986) about incomplete contracts to show that when an investment generates public good, the party with the highest values should own it. Relevant for the discussion in this literature review, this dynamic can also explain interactions between regional and central governments.

International administrative capacity The topic of international administrative capacity deals with the optimal size of the nation and its determinants. Alesina and Spolaore (2005a) provide a comprehensive framework highlighting all the interests at play (see Alvarez-Cuadrado, 2006, for a short review of their work). In particular, they discuss the trade-off between the benefits of a large population and, hence, a larger country enjoying economies of scale versus a smaller one that deals better with the heterogeneity of preferences (Alesina et al., 2003). First, they take the perspective of a benevolent central planner and show that 'total welfare is maximized when the world is divided into an optimal number of identical states'. However, democratic elections introduce the trade-off determined by the 'uneven distribution of the net benefits of size'. Incentives for certain (border) regions to ask for a redesign of the borders might arise. Hence, under democratic rule, the optimal size of the country can be maintained only with transfers. In non-democratic regimes, we expect the jurisdiction sizes to be larger than the optimal to meet the dictator's incentive to maximise total rents. Two other forces that shape the size of a nation are market integration, which decreases the benefit of large size, and violence, which, on the contrary, increases it. See Section 5 for a discussion on violence and conflict.

While the rest of the section will focus on the internal organisation of the state, it is worth briefly mentioning the macro-history literature that analyses driving forces that shape globalisation and deglobalisation, such as O'Rourke and Williamson (2001).

A more recent historical and non-technical perspective offered by Zahra (2023) focuses on the point of view of politicians as well as ordinary people (see O'Rourke, 2024, for a short review of the book).

National administrative capacity Bellofatto and Besfamille (2018) focus on exploring the relationship between state capacity and the optimal level of fiscal decentralisation in a federal system. In their model, the government is characterised by its ability to deliver public goods (administrative capacity) and to raise taxes (fiscal capacity). They consider two regimes: partial and full decentralisation,[6] and find that full decentralisation may be the optimal fiscal regime only in states with low levels of administrative capacity.

In democratic states, intergovernmental transfers support administrative division close to the optimal. Von Hagen (2007) highlights another essential function of transfers that can serve as insurance against idiosyncratic or aggregated shocks. Moral hazard can arise; for example, regional social transfers in Europe make the local labour market disparities after a shock more persistent than in the US because, in Europe, individuals have a lower incentive to adjust, for example, with internal migration (Obstfeld and Peri, 1998).

An interesting related literature, recently reviewed by Rohner and Zhuravskaya (2023), focuses on democratisation. Social cohesion (polarisation and segregation) affects nation-building by generating heterogeneous preferences and the possibility of secession. Another pillar of nation-building is education - which, interestingly, is also an outcome of administrative capacity - that can increase trust and communication or be used to repress minorities.

4.2 Performance of the Administrative Capacity

The positive approach takes the state administrative structure as given and analyses the effect of such a structure on different outcomes.

Decentralisation Overall, the empirical literature suggests that decentralisation increases economic growth. However, Baskaran, Feld and Schnellenbach (2016) highlight

[6] Full decentralisation refers to the case in which regions are fiscally and administratively independent. Instead, under partial decentralisation, the central government may intervene and redistribute resources across regions.

how the outcome depends on the estimation method while Burret, Feld and Schaltegger (2022) highlight how the outcome depends on the dimension of decentralisation taken into account - i.e. expenditure versus revenue. A common trend in the survey proposed by Burret et al. (2022) is that transfers are associated with less growth, while tax autonomy has a positive effect. These results reconcile with the hypothesis that competitive jurisdictions increase the total aggregated outcome.

Building on the theoretical framework in Riker (1964), Enikolopov and Zhuravskaya (2007) test whether stronger national parties and lower levels of administrative subordination are associated with better economic performance under decentralisation. They explore the trade-off local politicians face to satisfy the needs of the local population and the ones of the national party. When national parties are strong enough, local politicians face balanced incentive schemes that allow them to support decentralisation. This is true because when national parties are stronger, they can better support the careers of the local politicians.

The current empirical literature struggles with two main obstacles: measuring the phenomena of interest and establishing causality (Martínez-Vázquez et al., 2017). The literature has mainly measured decentralisation through 'expenditure' and 'revenues'; the number and size of local units are also common indicators. Efforts to provide a comprehensive index have resulted in the *Regional Authority Index* (RAI) developed by Hooghe, Marks and Schakel (2010) (refer to their work for an extensive summary of different measures). To address endogeneity concerns and be able to make causal claims, scholars have used various instrumental variables, such as legal origins (La Porta et al., 1999; Fisman and Gatti, 2002), geographical characteristics (Enikolopov and Zhuravskaya, 2007) or lagged values (Gemmell et al., 2013).

The legal and institutional architecture supporting tax transfers is relatively overlooked in evaluating administrative performances (Choudhry and Perrin, 2007; Shah, 2007). For instance, little has been said about whether the transfers are conditional or unconditional or how separate administrative units solve their disputes in case of disagreement. The latter is fascinating as it relates to another crucial dimension of state capacity, namely the legal one.

Local governments While much of the empirical literature concentrates on decentralisation, Blesse and Baskaran (2016) study the costs associated with reducing the number of municipalities. This change does not alter the ultimate hierarchical administrative structure but reduces the number of local units. Central governments often propose and apply this change, claiming it will reduce administrative costs, but the empirical findings are mixed. Blesse and Baskaran (2016) exploit a large reform in the state of Brandenburg in Germany, where 1319 municipalities were merged into 266 larger units. While aggregate administrative expenditures did decrease, they document large heterogeneity across units.

The principal-agent literature clearly indicates that the agent can access more precise information than the principal. For the case of a multi-layered public sector, the idea directly translates into that local agents are better at monitoring: they know more and understand things better than the central government or any distant authority.[7] This is particularly true in the presence of low state capacity when information does not properly circulate within the public sector. Basurto, Dupas and Robinson (2020) study delegating public goods provision to local elites in rural Malawi: state officers could target households to implement anti-poverty programmes, but local elites are better at identifying the agents that will benefit from the programme. However, centralisation can still be preferred if technology compensates for information asymmetry. For example, Dal Bó, Finan, Li and Schechter (2021) study the impact of introducing GPS to track the activity (i.e. to measure the effort) of the *Agricultural Extension Agents* (AEA) (public employees hired to visit farmers and provide them with useful information.). AEAs work under the direction of local supervisors (the 'agents' in our setting) reporting to the government (the 'principal'). Dal Bó, Finan, Li and Schechter (2021) exploit that the government has randomly assigned GPS-enabled mobile phones to some AEAs. Before they did it, the authors asked supervisors which AEAs they would give the device to increase their productivity. Then, the authors compare the variation in performances, distinguishing AEAs that were or were not named by their supervisors. The experiment shows that supervisors do much better than the random assignment, but also that technology can decrease the information advantage (and informational rent) of the agent.[8] As such, technological advance increases administrative capacity and, simultaneously, makes decentralisation less needed.

Local budget capture Decentralisation might expose the local budget to predatory behaviour from different agents. Testing whether such predatory behaviour materialises is essential yet challenging when assessing the success of different administrative structures.

Concerning corruption, there is no unanimous agreement from a theoretical perspective, as inter-jurisdictional competition and direct monitoring of bureaucrats favour decentralisation, while the coordination of rent-seeking and quality of bureaucrats do not. Fisman and Gatti (2002) find a negative correlation between corruption and decentralisation using a sample between 50 and 60 countries. Their results are robust to several specifications, including an instrumental variable approach using legal origin.

In countries with high infiltration of criminal organisations, distortions might arise when criminal organisations infiltrate local councils. Fenizia and Saggio (2020) study the case of Italy and show the positive effect on employment and firm activities in treated municipalities where the local government is dissolved due to Mafia infiltration. They test several channels and conclude that a reduction of Mafia power drives results. While no research establishes a clear causal connection between the degree of decentralisation of the administrations and the exposure to infiltrations by criminal organisations, we can identify ways to reduce the risk, which has positive effects on the local authorities. Understanding the consequences of infiltrations acquires further importance in light of the empirical results showing distortion of public funding in the presence of criminal organisations (Tulli, 2019).

[7]Along these lines, we discussed the outsourcing of tax collection at Page 15.

[8]Nominated AEAs increased their productivity 15.4pp compared to the control group (non-treated AEAs). Not-nominated AEAs, instead, decreased their productivity by 3.6pp compared to control.

Periods of elections are particularly delicate as politicians running for reelection may use the public budget to pursue their personal interest at the expenses of the interest of the community they serve. A large literature on political budget cycles (Khemani, 2007; Arulampalam, Dasgupta, Dhillon and Dutta, 2009; Brollo and Nannicini, 2012; Bracco, Lockwood, Porcelli and Redoano, 2015; Curto-Grau, Solé-Ollé and Sorribas-Navarro, 2018; Corvalan, Cox and Osorio, 2018; Boffa, Cavalcanti, Fons-Rosen and Piolatto, In press) study different aspects of the political budget cycles, exploiting the fact that elections at different levels of governance are staggered. There is consensus in the literature that the higher level of governance seeks to increase its support from local constituencies and, therefore, disproportionally allocates funds to aligned local officers. Corvalan et al. (2018) find that transfers from the central government to aligned municipalities increase local spending and, therefore, the probability of the incumbent being reelected. Transfers become a tool for politicians to remain in power. Assessing the quality of the public goods provided in those circumstances would be interesting.

Persistence Finally, the empirical literature on institutions often investigates the role of persistence. Foa (2022) uses Russian data from the post-soviet time to document growing inequality in public service provision. Via a series of spatial regressions, he shows that administrative capacity is no exception, and the historically accumulated level of state capacity was a strong predictor of success in maintaining a good level of public goods provision.

4.3 Bureaucracy

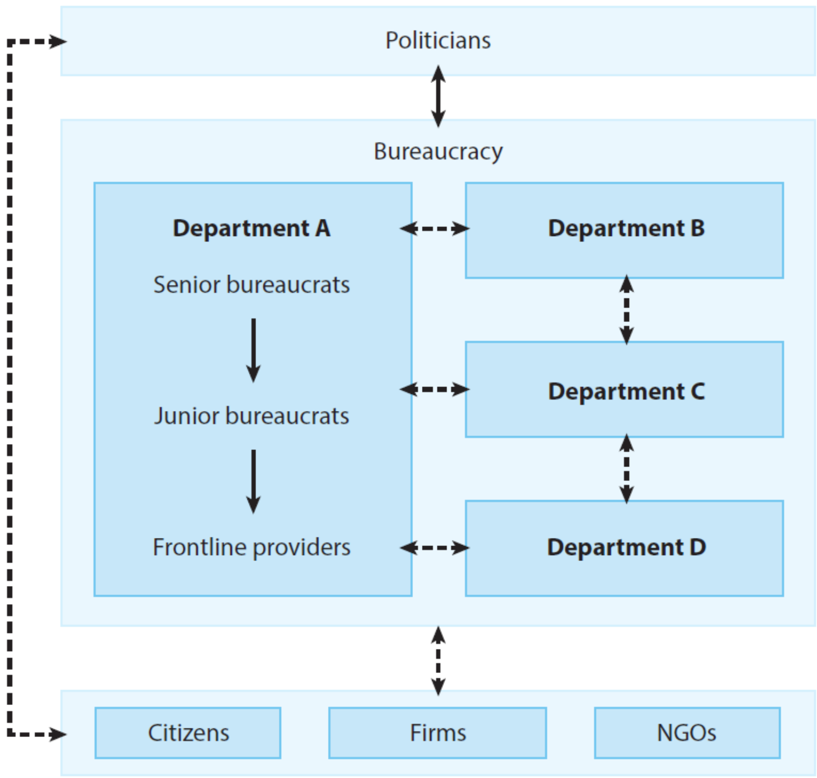
This section reviews research on bureaucracy, which, despite its importance, has been relatively overlooked. Both bureaucrats' selection and performance and key administrative capacity elements.

A recent and comprehensive review of the economic literature about the role of bureaucracy for economic development has been recently published by Besley, Burgess, Khan and Xu (2022). The concept of bureaucratic effectiveness was first introduced by Weber (1922). Following his intuitions, Besley et al. (2022) establish three facts that motivated the growing research around the topic: i. quality of bureaucracy is persistent and clustered; ii. development and bureaucratic quality are positively correlated; iii. improvements in bureaucratic quality are positively correlated with growth.

Bureaucrats Recent work by Best, Hjort and Szakonyi (2023) quantifies the importance of bureaucrats for the state's productivity. They use data on 16 million public purchases in Russia and show that 39 percent of the price variation is explained by which bureaucrats and organisations manage the procurement.

Besley et al. (2022) also present the classical principal-agents model applied to bureaucrats and then discuss the obstacles to the carrots (promotions) and sticks (firing) being applied to this particular case. For example, firing is uncommon, and measuring perform-

Figure 5: Bureacratic System



NOTE: The figure shows a stylised bureaucracy with multiple departments and levels of hierarchy. Solid arrows show traditional principal-agent relations studied in personnel economics. Dashed arrows show relations between systems (between different departments within the bureaucracy or between politics, the bureaucracy, and civil society). Abbreviation: NGO, nongovernmental organisation (Besley et al., 2022).

ance is challenging. Further, screening the right type requires balancing different skills. The literature has explored the trade-off between motivation and remuneration and the ruled-based versus discretion selection process.

The system Bureaucrats and bureaucracy operate in a complex system that Besley et al. (2022) exemplifies in Section 4.3. Relationships with politicians can often distort the outcome from its maximum potential. For example, Snowberg and Ting (2019) define state capacity as 'the ability to handle administrative problems of varying complexity'. They model the state as an *information-processing institution* organised in layers of different expertise. Problems go through the system bottom-up until they meet the required expertise. The authors show how politicians may idle layers according to their preferences, thus reducing the final output.

Gratton and Weber (2021) utilise microdata on Italian MPs during the Second Republic to contribute to understanding the intricate relationship between bureaucracy and political institutions. Their research emphasises the critical role of adequate bureaucratic systems in assessing the effectiveness of legislation. They argue that weak bureaucracies make it difficult to evaluate the true impact of new laws, potentially leading incompetent politicians to enact legislation primarily for self-serving purposes, such as bolstering their image as reformists. Moreover, Gratton and Weber warn that excessive legislation can hinder bureaucratic efficiency, potentially creating a "Kafkaesque" state characterised by overwhelming and complex regulations. Furthermore, they propose that periods of heightened political instability exacerbate this phenomenon, further incentivising the proliferation of laws and potentially pushing the economy towards a state of bureaucratic paralysis. Italy's experience serves as a case study supporting this theory. Following the political turmoil of the early 1990s, the country witnessed a surge in poorly designed legislation alongside a decline in bureaucratic efficiency, aligning with the theoretical framework proposed by the authors.

Finally, Egorov and Sonin (2020) survey the recent theoretical and empirical literature on the political economics of non-democracies. They argue that the key to a successful regime is to control the flow of information. When needed, this might come at the cost of sacrificing bureaucratic efficiency.

5 State Capacity and Conflict

Tax systems in nations like the United States, the United Kingdom or Sweden have undergone reforms and expansions due to actual or potential external conflicts. Governments in developing countries often face internal (political and physical) conflict, which, on the other hand, weakens the state, which often already lacks the strength and ability to generate revenue and govern effectively. Herbst (1990) has ventured the hypothesis that some countries in Africa might have been able to strengthen their weak states if external wars on the continent had been more frequent. We first review the literature linking violent conflict to state-building before considering how various forms of domestic conflicts are associated with state-building. We conclude this section by summarising the recent literature which questions the long-held idea that a stronger state necessarily leads to development for all.

Violent Conflict: Wars Made States Canonical theories of conflict and state-building focused on armed conflict. In the words of Tilly (1990), 'states made war, and war made states'. Building on this premise, Besley and Persson (2009) present a model of state capacity investments in a society with two groups. The threat of external war is conceptualised as a public good commonly enjoyed by both groups. When this threat is prominent, investments in state capacity follow.

Gennaioli and Voth (2015) nuance this argument by showing that the relative importance of financial funds in military success determines whether the threat of external war leads to investments in fiscal capacity. By centralising fiscal capacity, rulers become more attractive preys; thus, if the chances of one party winning the conflict are relatively independent of finances, the risk of war reduces investments in state capacity (relative to a world without any external threat). Beyond investments in fiscal capacity, the possibility of war may also have fuelled investments in nationalist education. Alesina et al. (2021) consider a regime problem of motivating its army through transfers, public good provision or investments in a shared national identity through education. They show that public good provision and nationalist homogenisation are complements, while public good provision and negative indoctrination (meaning xenophobia) are substitutes. In turn, they relate fiscal capacity to investments in education and development. When the state is fiscally weak, it cannot efficiently motivate the war effort through public good provision and instead resorts to negative indoctrination.

Violent conflict can also lead to state-building through mechanisms distinct from the need to finance the war through taxes. Tracking violence by armed groups in Congo, Sánchez de la Sierra (2020) shows that rebel groups that turned into *stationary bandits* (Olson, 1993) invest in state capacity post-conflict to gather revenue by imposing taxes. The state is not built to finance the war but rather to extract rents post-war. Exploiting fine-grain data on battles and troop movement during the Thirty Years' War, Bosshart and Weigand (2024) show that exposure to war leads to state building and can lead to a redistribution of power – in their case from elites represented in Parliaments to military elites – which, by itself, leads to more state capacity building post-conflict.

Domestic Conflicts While external threats can align the interests of domestic actors and thus be conceptualised as 'public goods', other forms of domestic conflicts are associated with various trajectories of state building. To jointly explain the dynamics of state building (or fragility) and violence, Besley and Persson (2011a) build on their canonical framework and allow each group to engage in violence to increase its chances of being in office. When both groups commonly value some public good or if institutions prevent excessive transfers from one group to the other through taxation, then investments in state capacity and peace ensue. Otherwise, a strong state may be built, but not necessarily in peace, only to extract rents from the other group.

Recently, economists and political scientists have started to micro-found the state-building process and the domestic conflicts it generates between the regime and local elites. In so doing, they highlight that investments in fiscal capacity need not benefit the whole citizenry. Elites who control taxation pre-investments or may risk post-investment expropriation may oppose such investments. In the context of post-revolutionary Mexico, Garfias (2018) shows that the regime can exploit intra-elite competition to roll out such investments. Otherwise, the regime might tie its hand by facilitating coordination amongst elites through institutions such as medieval European parliaments or the Mining Tribunal in late colonial Mexico (Garfias, 2019). Chen et al. (2023) documents an alternative strategy of state building employed in the Wei Dynasty. The regime co-opts the elite from recently defeated local strongholds by providing them with important bureaucratic positions to invest in state capacity and extract more taxes from the local population. As state building is an inherently dynamic and lengthy process, after securing a monopoly of violence, a regime faces the problem of ruling and administering its territory, either with its own administration – direct rule – or with the current (local) elite – indirect rule. Henn et al. (2023a) show (in present-day Congo) that indirect rule is more prevalent in localities with strong local leaders and is generally a temporary measure. As the regime strengthens its grip on the locality, it sends its representative and implements direct rule.

Crucially, investments in state capacity need not have a deterministic effect on the regime's ability to consolidate power. Often, the regime rules with elites that are part of the state apparatus. In turn, investments in state capacity that tilt the balance of power in the regime's favour diminish the elite's incentives to defend the regime. In early 19th century Mexico, Garfias and Sellars (2022) show that the elite reduced its repressive effort post investments in state capacity, which led to more popular rebellions by citizens expecting to face less resistance. Looking at the July Monarchy in France, Lopez-Peceño (2024) studies the impact of introducing primary schooling (in towns above a population cutoff). Contra the conventional results that education is primarily introduced in authoritarian settings (Paglayan, 2021) and is a lever of social order (Paglayan, 2022), he documents that the introduction of primary schooling backfired – it led to more insurrection against Louis-Napoleon of 1851 and less support in the pro-regime plebiscite – possibly because of the identity of the elites effectively in charge of the teaching.

These domestic conflict dynamics provide insight into the development of state capacity and shed light on the value of state capacity in violent contexts. Castillo-Quintana (2024) provides a model of war attrition between two Organised Crime Groups (OCGs) and a representative voter who chooses to elect a politician who can intervene by weakening the incumbent OCG through state intervention. State intervention generates violence – through fighting with the OCG – that citizens are exposed to; the higher state capacity, the less state-violence citizens are exposed to. An intervention is only desirable for voters if state capacity is high, such that the incumbent OCG is so weakened that it does not even fight. In contrast, the incumbent OCG is not sufficiently weakened under low state capacity to avoid all fighting. However, it is still sufficiently weakened that the intervention incentivises challenger OCGs into fighting, while they would not have fought absent an intervention. Voters prefer a weak state *not* to intervene.

State Capacity and Development for Whom? State capacity is associated with better development outcomes broadly defined (Fearon and Laitin, 2003; Acemoglu et al., 2016; Dell et al., 2018). Nevertheless, the previous discussion points to the highly contentious nature of investments in state capacity and raises the broader question of who benefits from a stronger state.

By providing the incumbent regime with more levers to affect its citizens' lives, state capacity investments are a double-edged sword. When the regime has the interests of a subgroup of citizens at heart, a stronger state can serve as a bulwark against discrimination against that group. In contrast, when the central ruler instead wishes to discriminate against the group or even to pursue genocide, higher state capacity leads to more 'efficient' violence (Heldring, 2023). Crucially, as state capacity investments are sticky, they may impact behaviour long after their introduction. Investments in state capacity in the colonial era help explain the level of violence in the Rwanda genocide (Heldring, 2021). Yet the persistence of *some* institutions from the colonial era may have long-lasting positive consequences for development, as argued by Acemoglu, Johnson and Robinson (2001). They suggest that in areas where settlers could easily survive, they reproduced their European institutional setting which lead to better development in the long run.

Further, the very process of state-building entails trade-offs in terms of democratic institutions and development. Bosshart and Weigand (2024) show that state-building induced by exposure to conflict can affect the balance of power between various elites and the regime and lead to authoritarian consolidation. In present-day Congo, Henn et al. (2023b) study the dynamics of state capacity building and its impact on development. When the regime asserts its monopoly of violence against armed rebels through armed conflict, rebels can no longer extract rents as stationary bandits providing essential state functions and instead resort to violent plundering.

The impact of state capacity investments on development outcomes can be highly asymmetric across citizens. By creating a market in an informal economy (Bukavu, Congo), Sánchez de la Sierra (2021) shows that even institutions of state capacity that *de jure* should benefit all – such as the enforcement of property rights or contracts – can be 'owned' by a state-favoured group. He documents a state-bias in the enforcement of contracts: buyers worry about prosecution (when not complying with a contract) only when sellers belong to the state-favoured group. Within the non-favoured group, compliance is ensured even without a contract. More generally, state capacity and observable characteristics can be used jointly to discriminate against minorities, as documented in the extensive literature on discrimination (Charles and Guryan, 2011; Goncalves and Mello, 2021). Chiovelli, Fergusson, Martinez, Torres and Valencia Caicedo (2023) leverage a reform that took place in the Spanish colonies at the end of the 18th century. The reform, which was implemented staggered, positively impacted 'legibility' (a feature of state capacity that we will discuss further in Section 6) and the selection of local bureaucrats who became less corruptible. Although the reform increased state capacity and tax collection, the additional proceeds mostly financed the Spanish Kingdom's wars and not the provision of additional public goods, resulting in no benefits for the colonies. These findings explains why some (groups of) citizens actively seek to weaken the state to avoid implementing policies not aligned with their interests (Suryanarayan and White, 2021).

More generally, this discussion calls for more research into these asymmetries to better understand how, why and when a stronger state is associated with better development outcomes. Sánchez de la Sierra et al. (2024) questions the 'real' size of the state within apparently weak states by estimating the level of corruption in the Kinshasa police. They show that bribes total up to four to five times the fines collected by the police. Revenues from extortion effectively fund the police force; that is, the actual size of the state is considerably larger than what can be officially estimated by looking at declared expenses. First, this implies that caution should be applied when interpreting correlations between state capacity and development outcomes. Second, these empirical results exemplify a situation in which extortion and transfers from citizens to civil servants fund the state; in such settings, understanding what kind of state capacity investments can lead to better development outcomes requires further research.

6 Defining and Measuring State Capacity

Defining and measuring state capacity can be complex, as the concept is multifaceted. Several scholars have attempted to provide more specific definitions and identify elements related to state capacity. Savoia and Sen (2015) offers a comprehensive review of the literature on state capacity, focusing on measurement.

In their study of political institutions, Ricciuti et al. (2019) differentiate impartiality from efficiency. They argue that accountability and transparency in developing countries can lead to impartiality and fairness of the fiscal authority, but there is no guarantee that tax collection will be efficient. While constraints on government activity can enhance impartiality, they may also hinder the effectiveness of tax collectors. On the other hand, Cingolani et al. (2015) classify bureaucratic autonomy as a separate institutional characteristic independent of state capacity.

Lee and Zhang (2017) highlights the importance of the state's ability to gather and process information about its citizens and their activities. Hence, they define 'legibility' as the state's ability to record information that can be easily shared and used within the administration (e.g. using standardised formats like birth certificates).

Lee and Zhang (2017) emphasise the significance of a state's ability to collect and process information about its citizens and their activities. They introduce the concept of 'legibility', which refers to the state's capacity to record information in standardised formats, such as birth certificates, that can be easily shared and used within the administration. Legibility is crucial in promoting an efficient social order, especially in addressing free-riding in collective action situations. By monitoring private behaviour and enforcing regulations, the state can ensure that everyone contributes to two essential components of state capacity: public goods provision and tax collection. To proxy for state capacity, the authors introduce a novel measure called Myers Scores, based on national population census data focusing on the accuracy of reported age data. Myers Scores show a positive correlation between stronger tax collection and improved public goods provision in areas with higher legibility. The scores can be computed very granularly, making them highly useful. Additionally, the authors provide access to a rich database through https://statecapacityscores.org/.

Finally, O'Reilly and Murphy (2022) take a long-term perspective and aggregate six variables from the Varieties of Democracy (V-Dem) dataset to measure state capacity over a broad timeframe (1789-2018). The authors create three versions of a state capacity index, with the most comprehensive one using principal component analysis to combine indicators of the rule of law, authority, impartiality, commitment to maximising the public welfare and the degree of modernity of resource collection.

7 Future Avenues for Research

We have discussed different dimensions of state capacity and how they support or hinder development, focusing on fiscal capacity and its interaction with administrative capacity and conflicts. While the literature on state capacity is constantly expanding, many aspects remain unexplored. We provide here a few ideas and possible directions for future analysis.

One first interesting area concerns the increase in agents' mobility and how state capacity could or should adapt to the evolution of society. Apart from the family, institutions were born and boosted by the human-kind transition from nomadic to sedentary. The recent COVID-19 crisis has posed several challenges to our communities at different levels. Among others, and possibly relevant for this discussion, it increased the share of so-called *digital nomads* and remote workers.[9] There are good reasons to envision increasing the share of jobs and workers in such two categories. On the one hand, the appearance of new types of jobs, such as content creators and travel bloggers, that workers can execute remotely. On the other hand, many traditional jobs are becoming hybrid, with a substantial share of tasks that workers can execute online. For instance, there has been a surge in the number of professionals, such as consultants, psychologists, tutors, coaches, and personal trainers, who have adopted a hybrid mode of service delivery, with a substantial share of tasks they execute online.

By living (potentially) in a different jurisdiction from their centre of economic interest, they potentially break the incentive-compatible relationship between the state and the citizens in several dimensions. The issue is particularly relevant for digital nomads. The apparent lack of overlap between their geographical location and that of their core business, coupled with the frequent changes in both, generates needs that differ from those of more traditional sedentary citizens.

Back to the historical perspective, an implicit assumption behind a well-functioning institution and the existence of an institution in the first place is that the population is sedentary. What happens if we challenge this assumption? What changes would the taxation system, decentralisation, administrative capacity, public good provision, and defence resemble? Even if this category remains a minority, formalising how their incentives to participate and sustain institutions differ from those of the rest of the population can unfold the distortions digital nomads could provoke in the system. Is there an institutional structure that can better optimise the different preferences arising from their different lifestyles to keep supporting the development of a country? We remain curious to see where further research continues the exploration of those topics.

Another exciting aspect relates to the incentives to innovate. Notice that one recurrent element in the literature is that the state has a monopoly on violence. Such monopoly power can be used in very different ways, depending on the level of democracy and checks and balances. Even in democratic contexts, an elite tends to form and tries to control the power for as long as possible. While the elite (or the monopolist of violence) is in

[9] Digital nomads and remote workers have in common that their work allows them to live in a place other than their business location. They work remotely and the main difference is that digital nomads have a non-sedentary life, i.e. they frequently travel.

control of the state, they have an incentive to maximise the rent that they can extract, which - at least to some extent - is positively correlated with maximising 'the size of the pie' (i.e. economic prosperity). Therefore, a violence-monopolist may want to promote innovation and trade to extract more rents from society. However, doing so may lead to the emergence of resource-rich actors who might then challenge the regime's monopoly of violence. Studying these tensions and how they connect to various patterns of state capacity investments is needed to further our understanding of the relationship between conflict, development and state building.

Finally, the recent literature also suggests that the joint evolution of civic culture and the emergence or consolidation of the state is an exciting avenue to explore. One exciting path could involve looking into more aspects of state capacity, like laws and regulations. It is also essential to consider how 'due process' directly influences people's compliance with laws and overall civic culture. The legislative process and, more generally, how governments agree on policies are equally important. We should also consider the increasing diversity and polarisation in society, as this also plays a significant role. Such extensions could be carried in the light of the recent for by Enke (2020) on moral values and voting behaviour.

References

Acemoglu, D., 2005. Politics and economics in weak and strong states. Journal of monetary Economics 52, 1199–1226.

Acemoglu, D., 2010. Institutions, factor prices, and taxation: Virtues of strong states? American Economic Review 100, 115–19.

Acemoglu, D., Johnson, S., Robinson, J.A., 2001. The Colonial Origins of Comparative Development: An Empirical Investigation. American Economic Review 91, 1369–1401.

Acemoglu, D., Moscona, J., Robinson, J.A., 2016. State capacity and American technology: evidence from the nineteenth century. American Economic Review 106, 61–67.

Advani, A., Elming, W., Shaw, J., 2023. The Dynamic Effects of Tax Audits. The Review of Economics and Statistics 105, 545–561.

Aidt, T.S., 2009. Corruption, institutions, and economic development. Oxford Review of Economic Policy 25, 271–291.

Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., Wacziarg, R., 2003. Fractionalization. Journal of Economic growth 8, 155–194.

Alesina, A., Giuliano, P., Reich, B., 2021. Nation-building and education. The Economic Journal 131, 2273–2303.

Alesina, A., Spolaore, E., 2005a. The size of nations. Mit Press.

Alesina, A., Spolaore, E., 2005b. War, peace, and the size of countries. Journal of Public Economics 89, 1333–1354.

Allen, R.C., Bertazzini, M.C., Heldring, L., 2023. The economic origins of government. American Economic Review 113, 2507–2545.

Allingham, M.G., Sandmo, A., 1972. Income Tax Evasion: A Theoretical Analysis. Journal of Public Economics 1, 323–328.

Alm, J., 2019. What motivates tax compliance? Journal of Economic Surveys 33, 353–388.

Alvarez-Cuadrado, F., 2006. The size of nations. Economic Record 82, 225–226.

Arulampalam, W., Dasgupta, S., Dhillon, A., Dutta, B., 2009. Electoral goals and center-state transfers: A theoretical model and empirical evidence from India. Journal of Development Economics 88, 103–119.

Balán, P., Bergeron, A., Tourek, G., Weigel, J.L., 2022. Local Elites as State Capacity: How City Chiefs Use Local Information to Increase Tax Compliance in the Democratic Republic of the Congo. American Economic Review 112, 762–97.

Baskaran, T., Feld, L.P., Schnellenbach, J., 2016. Fiscal federalism, decentralization, and economic growth: a meta-analysis. Economic Inquiry 54, 1445–1463.

Basurto, M.P., Dupas, P., Robinson, J., 2020. Decentralization and efficiency of subsidy targeting: Evidence from chiefs in rural Malawi. Journal of Public Economics 185, 104047.

Becker, G.S., 1968. Crime and punishment: An economic approach. Journal of Political Economy 76, 169–217.

Beer, S., Kasper, M., Kirchler, E., Erard, B., 2020. Do Audits Deter or Provoke Future Tax Noncompliance? Evidence on Self-Employed Taxpayers. CESifo Economic Studies 66, 248–264.

Bellofatto, A.A., Besfamille, M., 2018. Regional state capacity and the optimal degree of fiscal decentralization. Journal of Public Economics 159, 225–243.

Bergeron, A., Tourek, G., Weigel, J.L., 2020. The State Capacity Ceiling on Tax Rates: Evidence from Randomized Tax Abatements in the DRC. Mimeo .

Besley, T., 2020. State capacity, reciprocity, and the social contract. Econometrica 88, 1307–1335.

Besley, T., Burgess, R., Khan, A., Xu, G., 2022. Bureaucracy and development. Annual Review of Economics 14, 397–424.

Besley, T., Coate, S., 1998. Sources of inefficiency in a representative democracy: a dynamic analysis. American Economic Review , 139–156.

Besley, T., Ghatak, M., 2001. Government versus private ownership of public goods. The Quarterly journal of economics 116, 1343–1372.

Besley, T., Persson, T., 2009. The origins of state capacity: Property rights, taxation, and politics. The American Economic Review 99, 1218–1244.

Besley, T., Persson, T., 2011a. Fragile states and development policy. Journal of the European Economic Association 9, 371–398.

Besley, T., Persson, T., 2011b. Pillars of prosperity: The political economics of development clusters. Princeton University Press.

Besley, T., Persson, T., 2013. Chapter 2 - taxation and development, in: Auerbach, A.J., Chetty, R., Feldstein, M., Saez, E. (Eds.), handbook of public economics, vol. 5. Elsevier. volume 5 of *Handbook of Public Economics*, pp. 51–110.

Besley, T., Persson, T., 2014. Why Do Developing Countries Tax So Little? ournal of Economic Perspectives 28, 99–120.

Besley, T.J., Persson, T., Dann, C., 2021. Pillars of prosperity: A ten-year update. CEPR Discussion Paper No. DP16256 .

Best, M., Shah, J., Waseem, M., . Detection Without Deterrence: Long-Run Effects of Tax Audit on Firm Behavior. Mimeo .

Best, M.C., Hjort, J., Szakonyi, D., 2023. Individuals and organizations as sources of state effectiveness. American Economic Review 113, 2121–2167.

Blesse, S., Baskaran, T., 2016. Do municipal mergers reduce costs? evidence from a german federal state. Regional Science and Urban Economics 59, 54–74.

Boffa, F., Cavalcanti, F., Fons-Rosen, C., Piolatto, A., In press. Drought-Reliefs and Partisanship. Oxford Bulletin of Economics and Statistics doi:10.1111/obes.12560.

Boffa, F., Piolatto, A., Ponzetto, G., 2016. Political centralization and government accountability. Quarterly Journal of Economics 131, 381–422.

Bosshart, L., Weigand, M., 2024. How autocracies form: State capacity, absolutism, and the thirty years' war. Working paper.

Braccioli, F., 2024. The Institutional Role of the Italian Mafia: Enforcing Contracts When the State Does Not. Mimeo .

Bracco, E., Lockwood, B., Porcelli, F., Redoano, M., 2015. Intergovernmental grants as signals and the alignment effect: Theory and evidence. Journal of Public Economics 123, 78–91.

Brollo, F., Nannicini, T., 2012. Tying your enemy's hands in close races: The politics of federal transfers in Brazil. The American Political Science Review 106, 742–761.

Bräutigam, D., Fjeldstad, O.H., Moore, M., 2008. Taxation and State-Building in Developing Countries. Cambridge University Press.

Burret, H.T., Feld, L.P., Schaltegger, C.A., 2022. Fiscal federalism and economic performance new evidence from Switzerland. European Journal of Political Economy 74, 102159.

Castillo-Quintana, M., 2024. Criminal wars, reputation, enforcement policies and electoral accountability.

Charles, K.K., Guryan, J., 2011. Studying discrimination: Fundamental challenges and recent progress. Annu. Rev. Econ. 3, 479–511.

Chen, J., Wang, E.H., Zhang, X., 2023. From powerholders to stakeholders: State-building with elite compensation in early medieval china. Available at SSRN 3893130 .

Chiovelli, G., Fergusson, L., Martinez, L., Torres, J.D., Valencia Caicedo, F., 2023. Bourbon Reforms and State Capacity in the Spanish Empire. SSRN 4545407 .

Choudhry, S., Perrin, B., 2007. The legal architecture of intergovernmental transfers: A comparative examination. Intergovernmental Fiscal Transfers: Principles and Practice, R. Boadway & A. Shah, eds , 259–292.

Cingolani, L., Thomsson, K., de Crombrugghe, D., 2015. Minding Weber More Than Ever? The Impacts of State Capacity and Bureaucratic Autonomy on Development Goals. World Development 72, 191–207.

Corvalan, A., Cox, P., Osorio, R., 2018. Indirect political budget cycles: Evidence from Chilean municipalities. Journal of Development Economics 133, 1–14.

Cukierman, A., Edwards, S., Tabellini, G., 1992. Seigniorage and political instability. The American Economic Review 82, 537–555.

Curto-Grau, M., Solé-Ollé, A., Sorribas-Navarro, P., 2018. Does electoral competition curb party favoritism? American Economic Journal: Applied Economics 10, 378–407.

Dal Bó, E., Finan, F., Li, N.Y., Schechter, L., 2021. Information technology and government decentralization: Experimental evidence from Paraguay. Econometrica 89, 677–701.

DeBacker, J., Heim, B.T., Tran, A., Yuskavage, A., 2018. The effects of IRS audits on EITC claimants. National Tax Journal 71, 451–484.

Dell, M., Lane, N., Querubin, P., 2018. The historical state, local collective action, and economic development in Vietnam. Econometrica 86, 2083–2121.

Dincecco, M., 2011. Political Transformations and Public Finances: Europe, 1650-1913. Cambridge University Press.

Dincecco, M., 2017. State Capacity and Economic Development. Present and Past. Cambridge University Press.

Dreher, A., Kotsogiannis, C., McCorriston, S., 2009. How do institutions affect corruption and the shadow economy? International Tax and Public Finance 16, 773 – 796.

Dreher, A., Schneider, F., 2010. Corruption and the shadow economy: an empirical analysis. Public Choice 144, 215–238.

Dunning, T., Monestier, F., Piñeiro, R., Rosenblatt, F., Tuñón, G., 2017. Is Paying Taxes Habit Forming? Theory and Evidence from Uruguay. Mimeo .

Egorov, G., Sonin, K., 2020. The political economics of non-democracy. Technical Report. National Bureau of Economic Research.

Enikolopov, R., Zhuravskaya, E., 2007. Decentralization and political institutions. Journal of public economics 91, 2261–2290.

Enke, B., 2020. Moral values and voting. Journal of Political Economy 128, 3679–3729.

Fearon, J.D., Laitin, D.D., 2003. Ethnicity, insurgency, and civil war. American political science review 97, 75–90.

Fenizia, A., Saggio, R., 2020. Can the piovra's tentacles be severed? the economic effects of the removal of city councils infiltrated by the mafia. Institute for International Economic Policy WP 2020-22.

Fergusson, L., Larreguy, H., Riaño, J.F., 2022. Political Competition and State Capacity: Evidence from a Land Allocation Program in Mexico. The Economic Journal 132, 2815–2834.

Fisman, R., Gatti, R., 2002. Decentralization and corruption: evidence across countries. Journal of public economics 83, 325–345.

Foa, R.S., 2022. Decentralization, historical state capacity and public goods provision in post-soviet russia. World Development 152, 105807.

Garfias, F., 2018. Elite competition and state capacity development: Theory and evidence from post-revolutionary mexico. American Political Science Review 112, 339–357.

Garfias, F., 2019. Elite coalitions, limited government, and fiscal capacity development: Evidence from Bourbon Mexico. The Journal of Politics 81, 94–111.

Garfias, F., Sellars, E.A., 2022. When state building backfires: elite coordination and popular grievance in rebellion. American Journal of Political Science 66, 977–992.

Gemmell, N., Kneller, R., Sanz, I., 2013. Fiscal decentralization and economic growth: spending versus revenue decentralization. Economic Inquiry 51, 1915–1931.

Gennaioli, N., Voth, H.J., 2015. State capacity and military conflict. The Review of Economic Studies 82, 1409–1448.

Goncalves, F., Mello, S., 2021. A few bad apples? racial bias in policing. American Economic Review 111, 1406–1441.

Gottlieb, J., LeBas, A., Magat, J., 2021. Can Social Intermediaries Build the State? Evidence from an Experiment in Lagos, Nigeria. Mimeo .

Grossman, S.J., Hart, O.D., 1986. The costs and benefits of ownership: A theory of vertical and lateral integration. Journal of political economy 94, 691–719.

Gulzar, S., Pasquale, B.J., 2017. Politicians, Bureaucrats, and Development: Evidence from India. American Political Science Review 111, 162–183.

Hart, O., Moore, J., 1990. Property rights and the nature of the firm. Journal of political economy 98, 1119–1158.

Heldring, L., 2021. The origins of violence in rwanda. The Review of economic studies 88, 730–763.

Heldring, L., 2023. Bureaucracy as a tool for politicians: Evidence from weimar and nazi germany.

Henn, S.J., Marchais, G., Mugaruka, C.M., de la Sierra, R.S., 2023a. Wartime indirect rule: Armed groups and customary chiefs in eastern democratic republic of the congo. Mimeo .

Henn, S.J., Mugaruka, C.M., Ortiz, M., de la Sierra, R.S., Wu, D.Q., 2023b. Monopoly of taxation without a monopoly of violence: The weak state's trade-off between taxation and safety. Review of Economic Studies (Forthcoming) .

Herbst, J., 1990. War and the state in africa. International Security 14, 117–139.

Hooghe, L., Marks, G., Schakel, A., 2010. The rise of regional authority: A comparative study of 42 democracies. Routledge.

Immordino, G., Russo, F.F., 2018a. Cashless payments and tax evasion. European Journal of Political Economy 55, 36–43.

Immordino, G., Russo, F.F., 2018b. Tax evasion and the tax on cash. Fiscal Studies 39, 343–364.

Jensen, A.D., 2011. State-Building in Resource-Rich Economies. Atlantic Economic Journal 39, 171–193.

Kasper, M., Rablen, M.D., 2023. Tax compliance after an audit: Higher or lower? Journal of Economic Behavior & Organization 207, 157–171.

Khemani, S., 2007. Does delegation of fiscal policy to an independent agency make a difference? Evidence from intergovernmental transfers in India. Journal of Development Economics 82, 464–484.

Kleven, H.J., Knudsen, M.B., Kreiner, C.T., Pedersen, S., Saez, E., 2011. Unwilling or unable to cheat? Evidence from a tax audit experiment in Denmark. Econometrica 79, 651–692.

Kotsogiannis, C., Salvadori, L., Karangwa, J., Mukamana, T., 2022. Do tax audits have a dynamic impact? Evidence from corporate income tax administrative data. TARC Discussion Paper 035-21 .

Kotsogiannis, C., Salvadori, L., Karangwa, J., Murasi, I., 2024. E-invoicing, Tax Audits and Tax Compliance. Mimeo .

La Porta, R., Lopez-de Silanes, F., Shleifer, A., Vishny, R., 1999. The quality of government. Journal of Law, Economics, and organization 15, 222–279.

Lediga, C., Riedel, N., Strohmaier, K., 2023. Tax Enforcement Spillovers – Evidence from South Africa. Mimeo .

Lee, M.M., Zhang, N., 2017. Legibility and the Informational Foundations of State Capacity. The Journal of Politics 79, 118–132.

Li, W., Pittman, J.A., Wang, Z.T., 2019. The Determinants and Consequences of Tax Audits: Some Evidence from China. Journal of the American Taxation Association 41, 91–122.

Li, W., Roland, G., Xie, Y., 2021. Erosion of State Power, Corruption Control and Fiscal Capacity. The Economic Journal 132, 1542–1565.

Lopez-Peceño, A., 2024. Does indoctrination work? the consequences of primary education expansion in 19th century france. Working paper.

Luttmer, E.F.P., Singhal, M., 2014. Tax morale. Journal of Economic Perspectives 28, 149–68.

Martínez-Vázquez, J., Lago-Peñas, S., Sacchi, A., 2017. The impact of fiscal decentralization: A survey. Journal of Economic Surveys 31, 1095–1129.

Mayshar, J., Moav, O., Pascali, L., 2022. The origin of the state: Land productivity or appropriability? Journal of Political Economy 130, 1091–1144.

Migdal, J.S., 1988. Strong societies and weak states: state-society relations and state capabilities in the Third World. Princeton University Press.

Mittone, L., 2006. Dynamic behaviour in tax evasion: An experimental approach. The Journal of Socio-Economics 35, 813–835.

Montenbruck, L., 2024. Fiscal Exchange and Tax Compliance: Strengthening the Social Contract Under Low State Capacity. Mimeo .

Oates, W.E., 1999. An essay on fiscal federalism. Journal of Economic Literature 37, 1120–1149.

Obstfeld, M., Peri, G., 1998. Regional non-adjustment and fiscal policy. Economic Policy 13, 206–259.

Olson, M., 1993. Dictatorship, democracy, and development. American Political Science Review 87, 567–76.

O'Reilly, C., Murphy, R.H., 2022. An Index Measuring State Capacity, 1789–2018. Economica 89, 713–745.

O'Rourke, K., 2024. Against the world: Anti-globalism and mass politics between the world wars by tara zahra. Forthcoming JEL .

O'Rourke, K.H., Williamson, J.G., 2001. Globalization and history: the evolution of a nineteenth-century Atlantic economy. MIT press.

Paglayan, A.S., 2021. The non-democratic roots of mass education: evidence from 200 years. American Political Science Review 115, 179–198.

Paglayan, A.S., 2022. Education or indoctrination? the violent origins of public school systems in an era of state-building. American Political Science Review 116, 1242–1257.

Piolatto, A., 2015. Itemised deductions: a device to reduce tax evasion. German Economic Review 16, 422–438.

Ricciuti, R., Savoia, A., Sen, K., 2019. How do political institutions affect fiscal capacity? Explaining taxation in developing economies. Journal of Institutional Economics 15, 351–380.

Riker, W.H., 1964. Federalism: Origin, operation, significance. (No Title) .

Rodrik, D., 2008. Second-best institutions. American Economic Review 98, 100–104.

Rohner, D., Zhuravskaya, E., 2023. Nation building: Big lessons from successes and failures. CEPR Press.

Salvadori, L., 2020. The Impact of Terrorism on Tax Enforcement Effectiveness: A Case Study of the Basque Country and Navarre. Regional Studies 54, 1425–1441.

Savoia, A., Sen, K., 2015. Measurement, Evolution, Determinants, And Consequences Of State Capacity: A Review Of Recent Research. Journal of Economic Surveys 29, 441–458.

Shah, A., 2007. Institutional arrangements for intergovernmental fiscal transfers and a framework for evaluation. Intergovernmental Fiscal Transfers: Principles and Practice, R. Boadway & A. Shah, eds , 293–318.

Sánchez de la Sierra, R., 2020. On the Origins of the State: Stationary Bandits and Taxation in Eastern Congo. Journal of Political Economy 128, 32–74.

Sánchez de la Sierra, R., 2021. Whither formal contracts? Econometrica 89, 2341–2373.

Sánchez de la Sierra, R., Titeca, K., Xie, H.S., Malukisa Nkuku, A., Lameke, A.A., 2024. The real state: Inside the congo's traffic police agency. NBER Working Paper .

Slemrod, J., 2019. Tax compliance and enforcement. Journal of Economic Literature 57, 904–54.

Snowberg, E., Ting, M., 2019. An organizational theory of state capacity. NBER Working Paper .

Suryanarayan, P., White, S., 2021. Slavery, reconstruction, and bureaucratic capacity in the American south. American Political Science Review 115, 568–584.

Tilly, C., 1990. Coercion, capital, and european states, ad 990-1990 (studies in social discontinuity).

Tomasi, A., Parmigiani, A., 2022. Brains or muscles? a political economy of tax evasion.

Torgler, B., 2005. Tax Morale in Latin America. Public Choice 122, 133–157.

Tulli, A., 2019. Sweeping the dirt under the rug: Measuring spillovers of an anti-corruption measure. Available at SSRN 4081058 .

Von Hagen, J., 2007. Achieving economic stabilization by sharing risk within countries. Intergovernmental Fiscal Transfers, Banco Mundial, Washington DC , 107–132.

Weber, M., 1922. Wirtschaft und gesellschaft, tubingen, mohr (trans. 1978. economy and society: An outline of interpretive sociology).

Weigel, J.L., 2020. The Participation Dividend of Taxation: How Citizens in Congo Engage More with the State When it Tries to Tax Them. The Quarterly Journal of Economics 135, 1849–1903.

Zahra, T., 2023. Against the world: anti-globalism and mass politics between the world wars. WW Norton & Company.