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

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

16th November 2024

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

Abstract

The growing emphasis on nation-states and their pivotal role in economic development has emerged as a central theme in contemporary economic discourse. This review examines the concept of state capacity as discussed in the economic literature., focusing on its practical implications. While the definition of state capacity remains multifaceted, this analysis delves into its economic implications. We focus primarily on the literature surrounding fiscal capacity, exploring how a state's ability to raise and manage revenue impacts economic development and other critical economic outcomes. This review aims to shed light on the crucial role of fiscal capacity in shaping economic performance, inspiring further research and policy development in this area.

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

---

* **Acknowledgements, Funding and Notes**: We are grateful to the editor, the anonymous referees, M. Almunia, B. Blumenthal and B. Zoller-Rydzek for their comments and suggestions. Piolatto and Zerbini gratefully acknowledge support from grants CNS2022-135749 and PID2022-137707NB-I00 funded by MICIU/AEI/10.13039/501100011033 and FEDER, UE; 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 and grant 2021SGR00194 funded by the Generalitat de Catalunya.

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

† Departament d'Economia and ECO-SOS, Universitat Rovira i Virgili, Avinguda de la Universitat 1, 43204 Reus, Spain.

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

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

¶ WU Vienna University of Economics and Business.

1 Introduction

The increasing attention on national states and their critical role in economic development has become a focal point in contemporary economic discourse. This renewed interest underscores the importance of tailored economic strategies that reflect the unique socio-political and cultural contexts of individual nations. While a multitude of policy lessons can be drawn from various developmental experiences, these lessons are often highly case-specific. The heterogeneity among states necessitates customised approaches, as policies that yield positive outcomes in one national context may not be directly transferable to another.

While the literature on state capacity originated from the broad field of social sciences, we are interested in the development of the economics literature as it addresses more directly issues related to policy intervention. Occasionally, we discuss 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. Through the paper, we highlight work with relevant policy implications and, when needed, room for further research. We review the literature on the consequences and origins of state capacity and a government's ability to achieve its goals effectively. We put a particular emphasis on fiscal capacity, i.e. the state's efficiency in designing and collecting resources.

Our analysis organises as follows: Section 2 lays the groundwork by defining state capacity and acknowledging the challenges associated with its measurement. Section 3 delves into the implications of state capacity, beginning with its association with economic development. Subsequently, we examine the potential differential impacts of state capacity across various demographic segments.

The extent of the implications of state capacity is intricately linked to the configuration of the state: Section 4 explores the interplay between state capacity and governmental structure. Section 5 shifts the focus to the origins of state capacity and mechanisms for its expansion. Initially, we analyse the evolution of capacity from geographical and historical standpoints. Subsequently, we consider how conflict can nurture state capacity and examine the distinct case of fiscal capacity and tax compliance. Lastly, we conclude by exploring methods to enhance state capacity. In Section 6, we reflect on policy implications and propose directions for further research.

2 Conceptualising and Measuring State Capacity

In this section, we first discuss the foundational definition and conceptualisation of state capacity in the social sciences before discussing the measurement issues inherent to the study of states.

2.1 Conceptualisation

In Weber's minimalist definition, the state is an organisation 'that (successfully) claims the monopoly of the legitimate use of physical force within a given territory' (Weber, 1919). With such a minimalist definition, little can be said about the origins of state formation, how states form, possible gains and why states formed in the first place.

The literature has identified two distinct and complementary conceptualisations of the state: a 'cooperative' one and an 'extractive' one. Cooperative theories of the state are rooted in (a variant of) a social contract argument (Hobbes, 1651; Locke, 1689; Rousseau, 1762; Rawls, 1971). There, individuals within a community voluntarily entrust a subset of their peers with some authority to govern, e.g. they grant them a monopoly over the use of violence. Economists conceptualised the state as an organisation with a comparative advantage in providing public goods (Samuelson, 1954). Hence, they proposed to resolve fundamental problems such as externalities (Pigou, 1924) or free-riding (Olson, 1965) by expanding the sets of tasks over which the state intervention is desirable.

Extractive theories of the state instead conceptualise the state as an instrument used by the ruling elite to extract rents from the rest of the population. In the words of Marx and Engels in the *Communist Manifesto*, 'the executive of the modern state is but a committee for managing the common affairs of the whole bourgeoisie' (Marx et al., 1975). More recently, Olson (1993) conceptualised the state as a *stationary bandit* which generates income by controlling a territory and levying taxes from the population's productive activities.

State capacity, broadly defined, refers to a government's ability to achieve its goals effectively (see, for example, Skocpol, 2014, and Fukuyama, 2004). It focuses on the government's ability to implement policies and deliver on its objectives, including protecting citizens, promoting economic growth, providing public goods and services, upholding the rule of law and ensuring justice. State capacity is built on several key pillars, including competent and efficient civil service, effective tax collection, a strong legal system, law enforcement and political stability.

While the concept of state capacity lacks a single, universally agreed-upon definition, its application has flourished across various disciplines. In this analysis, we will primarily examine its economic implications. Therefore, our review focuses on the economic literature, particularly on administrative and fiscal capacity within the realm of state capacity. Readers seeking a more political science-oriented perspective can consult Hanson and Sigman (2021).

In our analysis, we will adopt the following definitions: with 'state capacity', we refer to the overall efficiency of the public sector or its ability to achieve its goals. We will refer to 'fiscal capacity' when we focus on the state's efficiency in designing and collecting resources. The ideal metric would calculate the net tax revenue collected per euro of nominal tax levied. This accounts for leakages (e.g. market distortions) and collection expenses (e.g. tax administration, audits, enforcement). Finally, we use 'administrative capacity' to refer to the efficiency of achieving a specific outcome, such as delivering a public good. The ideal measure would compare the actual total cost of providing a good to the theoretical minimum cost (excluding the cost of securing resources, which is already captured by fiscal capacity).

2.2 Measurement

State capacity is multifaceted. Capturing all its elements in a single, easily quantifiable metric is problematic. Several scholars have attempted to provide more specific definitions and identify elements related to state capacity. Savoia and Sen (2015) offer a comprehensive review of the literature on state capacity, focusing on measurement.[1] They identify five exhaustive categories: bureaucratic-administrative, fiscal, infrastructural, legal and military.

Crucially, when measuring state capacity, the (implicit) adoption of an extractive or cooperative conceptualisation may matter, for it influences the underlying objectives of the state and, therefore, the definition of efficiency may change. For instance, a cooperative state tends to provide more services: the presence of a large public sector could signal an efficient, generous and cooperative state, or it may signal an inefficient and extractive one. Typically, scholars that put the cooperative approach forward tend to measure the state's ability to provide goods or to redistribute resources and to reduce inequality. Instead, when the extractive conceptualisation prevails, the analysis often focuses on the tax burden, corruption or inequality.

Measuring state capacity may prove challenging. To begin with, state capacity is usually unobservable, so scholars must rely on some proxy of the agents' equilibrium behaviour related to state capacity. For instance, while tax proceeds and nominal tax rates are usually observable, we observe neither real income nor the taxpayers' strategic tax avoidance decisions that jointly map into tax revenues. Teasing out the underlying (fiscal) capacity from strategic behaviour is often complex or even impossible.[2] Furthermore, historical data are scarce and only sometimes reliable. Finding the right measure or a good proxy for past state capacity is not straightforward.

To proxy for state capacity, Scott (1999) defines 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) argue that 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, for instance, higher levels of tax compliance. Then, they 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. Additionally, the authors provide access to a rich database through https://statecapacityscores.org/.

[1] See also Berwick and Christia (2018) for a detailed discussion of the various measurements issues faced by scholars in this literature.

[2] We refer the readers to Savoia and Sen (2015) and Fukuyama (2013) for a more detailed discussion of these issues.

Scott (2009) suggests that by focusing on historical material from actors who controlled 'legible states', we risk under-estimating the extent of organisation and state capacity in regions where the population strategically made sure not to be legible to avoid conquest. To do so, instead of looking at places where a strong state emerged, Scott (2009) focuses on 'shatter zones', i.e. areas that tend to be geographically inaccessible, both ethnically and linguistically very diverse and where no strong centralised state seems to have emerged. He argues that by obtaining legibility, state-makers imposed a standardisation of measures or language and behaviour (such as in the agricultural domain with the turn to monocropping). Looking at the South Asian massif ('Zomia') he observes that individuals tended to be more nomadic and adaptable in their lifestyle and, he argues, to have less hierarchical societal structures. He then argues that many individuals have strategically been running away from expanding states and into shatter zones throughout history.

Measurement problems can have significant consequences for present-day policy recommendations. 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 amount to up 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. At minima, their results suggest caution when interpreting correlations between some measures of state capacity (e.g. one based on tax revenue to GDP ratio) and economic development, as it is unclear whether low-development areas are indeed low-state-capacity areas.

Once the state has been designed, two aspects become relevant, which we discuss in Section 3. First, we need to understand when investments in state capacity translate into achieving the initial goals. Second, we care about the ultimate beneficiaries of such investments, determining who will reap the rewards.

3 The Consequences of State Capacity

This section delves into the economic literature on state capacity, exploring its multifaceted role in development. Here, we examine two key areas. First, we analyse the link between state capacity and economic performance, investigating how a state's capabilities influence growth. Then, we explore the distributional effects of state capacity, considering who benefits most from a stronger state and who has a vested interest in its expansion.

3.1 State Capacity and Prosperity

Positive consequences Several studies have shown a positive association between higher state capacity and desirable economic and societal outcomes, including reduced incidence of civil wars (Fearon and Laitin, 2003), increased economic growth and public good provision (Acemoglu et al., 2001; Dell et al., 2018), enhanced innovation (Acemoglu et al., 2016) and improved educational attainment and reduced malnutrition (Ganimian et al., 2024).

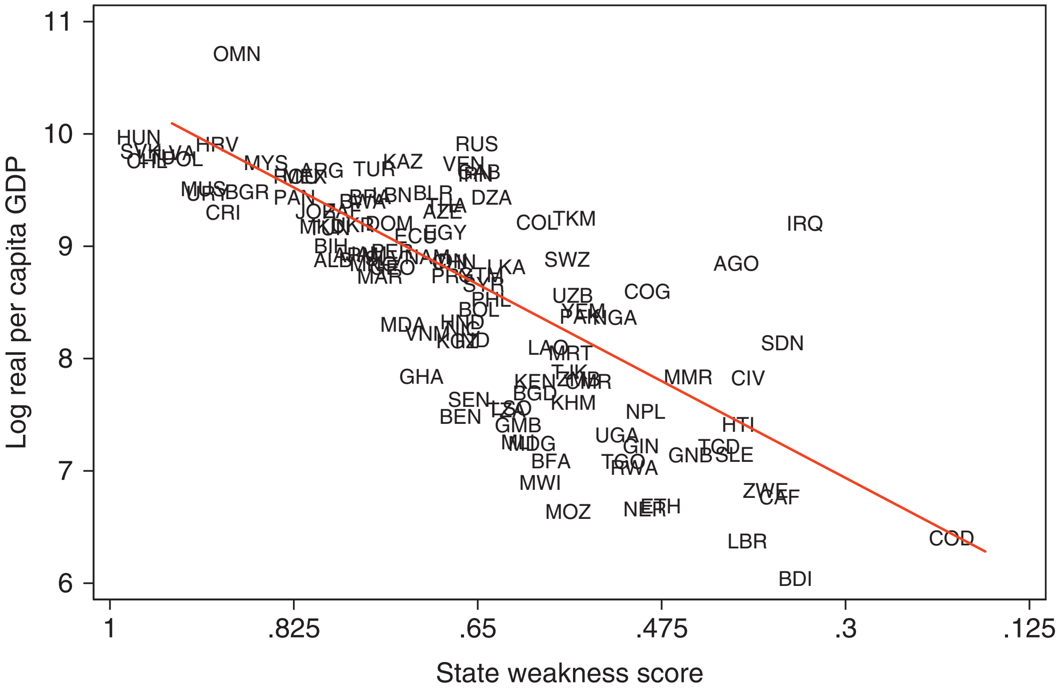
Examples of positive association The increase in legibility (one element of state capacity) following the adoption of a cadastral reform induces a boost in fiscal capacity and economic growth (D'Arcy et al., 2024). Cadastral reforms allow countries to create public records documenting land ownership. They are associated with a 51 per cent increase in GDP levels in the long run, compared to the 21 per cent increase in GDP from introducing democracy. The authors argue that this relationship between property rights and economic growth comes from two main channels: lower transaction costs and greater state capacity. First, cadastres provide authoritative and publicly available information about the assignment of property rights to land and real estate. This additional information reduces transaction costs and enables efficient economic exchanges on a larger scale. Second, they provide authoritative information on taxable assets and their owners, improving the state's capacity to collect taxes. This increased fiscal capacity can support the provision of public goods and the enforcement of economic institutions, contributing to economic growth. Interestingly, the strength of cadastral institutions does not affect property or direct taxes but has a significant immediate impact on indirect taxation within countries. A likely explanation is that cadastral reforms increase households' effective wealth, boost consumption and contribute to the formalisation of businesses, therefore enhancing indirect tax revenues.

Nistotskaya and D'Arcy (2018) analyse another successful case: infrastructural power. Their study suggests that democracy can positively influence the provision of public goods only when well-established within a state. The authors provide a new measure of accumulated infrastructural power, which includes the age, extent and quality of cadastral records spanning over 1,000 years for 155 countries. They find that democracy positively impacts infant and child mortality rates only when a certain level of infrastructural power is present, suggesting that countries benefit from the positive effects of democratic institutions only when they reach a minimum level of state capacity.

A striking macro-empirical pattern At a macro-level, the idea that strong state capacity is necessary for (broadly defined) development is rooted in a recurring empirical pattern: the positive association between high state capacity levels and economic growth and stability, illustrated in Figs. 1 and 2. Dincecco (2017) argues that when state capacity is lacking, it becomes difficult for the state to guarantee its minimum functions, such as internal security or contract enforcement. To illustrate this point, he provides contemporary examples from Latin America, Asia and Africa. Also, he 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. Johnson and Koyama (2017) reviews the seminal literature on the link between state capacity and economic growth.

Why we need more research. Whether state capacity is the cause or the result of this relationship is unclear: likely, the two elements self-reinforce each other. Asmus and Franck (2022) find that state capacity alone has no consequence on growth; however, growth-enhancing investments are more effective in regions with higher state capacity.

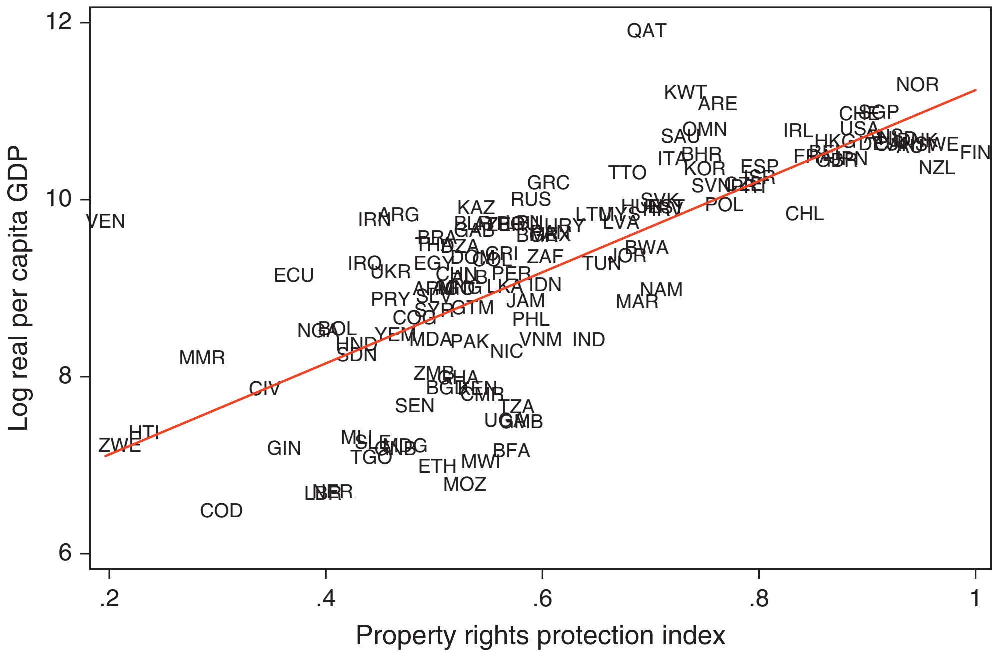
Figure 1: Correlation between GDP and State Weakness



NOTES: Log real per capita GDP in 2006 is in constant 2011 national prices, in millions of 2011 US dollars (Feenstra et al., 2015). State weakness refers to overall state weakness on a normalised 0–1 scale in 2006, whereby a 0 score is the most weak and a 1 score is the least weak. Rice and Patrick (2008) measure overall state weakness in terms of the state's ability to accomplish the following four tasks: 'fostering an environment conducive to sustainable and equitable economic growth; establishing and maintaining legitimate, transparent and accountable political institutions; securing their populations from violent conflict and controlling their territory; and meeting the basic human needs of their population.' Nations with populations of less than one million in 2006 are excluded.

SOURCE: Dincecco (2017, Fig.3).

Figure 2: Correlation between GDP and Property Rights.



NOTES: Log real per capita GDP in 2010 is in constant 2011 national prices, in millions of 2011 US dollars (Feenstra et al., 2015). Property rights protection refers to the extent of government anti-diversion efforts on a normalised 0–1 scale in 2010, whereby 0 is the weakest such effort and 1 is the strongest such effort. Drawing on Besley and Persson (2011b, codebook 6), the author computed government anti-diversion efforts as the average over four components from the International Country Risk Guide: law and order, bureaucratic quality, corruption and investment risk. Nations with populations of less than one million in 2010 are excluded.

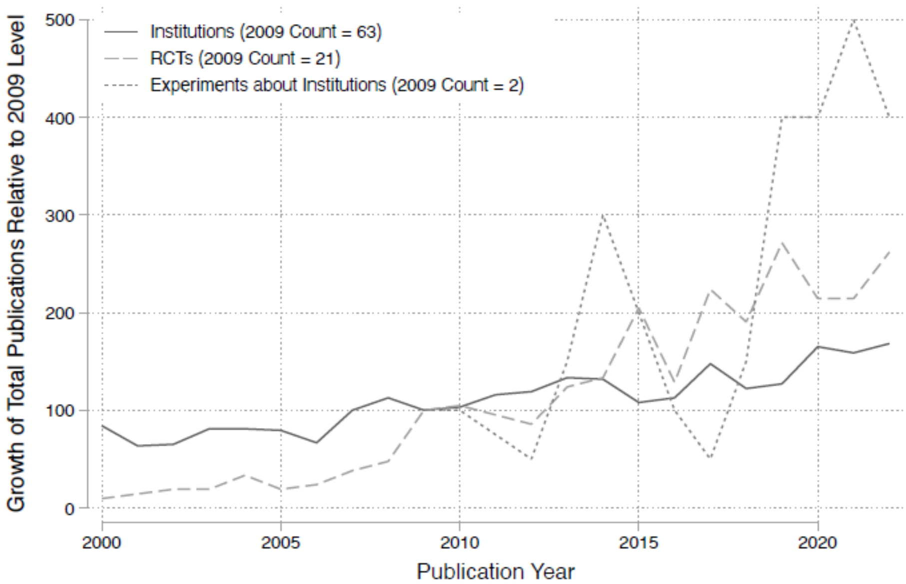
SOURCE: Dincecco (2017, Fig. 4).

Callen, Weigel and Yuchtman (2023) highlight how the type of successful investment depends on the strength of institutions. For example, reforms increase tax compliance when they implement more transparent tax collection rules. However, in weak states with a strong local community presence, a winning strategy is to decentralise such a process to local authorities.[3] Callen et al. (2023) analyse the growing literature that utilises field experiments to investigate how institutions adapt in environments characterised by ongoing institutional change. We can see the burgeoning nature of this field through Fig. 3, which tracks the recent rise in relevant publications.

The impact of state capacity may embed a temporal component: the empirical literature

[3]This is found by Balán et al. (2022), which we discuss with more depth in Section 5.3.

Figure 3: Publication trends.



NOTES: Year 2009 = 100. Data have been collected by Callen et al. (2023).
SOURCE: Callen et al. (2023, Fig.1).

on institutions has investigated 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 the historically accumulated state capacity is a strong predictor of success in maintaining a good level of public goods provision.

The relationship between state capacity and development varies significantly across space. Extensive research has uncovered various aspects of state design that impact this association. This underscores the need for further investigation. The literature highlights the importance of state design and its influence on the strength of this association.

3.2 Distributional Consequences of State Capacity

Even when state capacity is associated with better development outcomes broadly defined, in the presence of power imbalances across groups of interests or ruling elites, the highly contentious nature of investments in state capacity raises broader questions, including who benefits from a stronger state, who has an interest in strengthening state capacity and whether some distributions of power work better than others for development.

A double-edged sword. 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 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 behaviours long after their introduction. Investments in state capacity in the colonial era help explain the level of violence in the Rwanda genocide (Heldring, 2021).

State capacity for whom? 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. Compliance is ensured even without a contract within the non-favoured group. 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' 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 explain why some (groups of) citizens actively seek to weaken the state to avoid implementing policies not aligned with their interests (Suryanarayan and White, 2021).

When interests are not aligned. Existing literature argues that designing political institutions with numerous veto points is one approach to curtail redistribution in democracies. However, another effective strategy may be to weaken state capacity to prevent revenue collection. Economic elites can disrupt the political process by hindering the state's ability to generate revenue. Theoretical models suggest that in non-democracies with high-income inequality, there is typically less investment in state capacity (Besley and Persson, 2011b).

Theoretical work by Acemoglu and Robinson (2008) poses that the potential for changes in formal political institutions motivates economic elites to undermine the state, aiming to 'capture democracy' and influence policy decisions. An inefficient state, plagued by corrupt or 'captured' bureaucrats, may serve as a useful strategy for economic elites to protect themselves from the political power of the masses.

Realigning interests. Besley and Mueller (2021) argue that cohesive institutional arrangements increase the likelihood of the state being used for common purposes, reducing the incentive for political control struggles. Cross-country data supports this, but changes don't need to occur at the federal level. Studies by Mueller and Rohner (2018) and Fetzer and Kyburz (2024) find that local power-sharing and democratic selection significantly reduced violence and weakened the link between rents and conflict in Northern Ireland and Nigeria, respectively. While national-level cohesive institutions may be impractical, implementing them locally can help mitigate institutional fragility associated with local revenue distribution.

Development versus democracy? 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. (2024) 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.

Why we need more research. Institutional structures may interact with the potential economic benefits derived from democratic institutions. Knutsen (2013) use the Bureaucratic Quality Index from the ICRG dataset to show that the effect of democracy on growth is relatively stronger when state capacity is lower, making democracy particularly beneficial for growth in regions such as Sub-Saharan Africa.[4] Additionally, state capacity has no clear positive effect on growth in relatively democratic countries. However, state capacity does enhance growth in dictatorships.

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. Furthermore, 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.

4 The Organisation of the State

The complementarity and co-dependence among different components of state capacity make clear that the design of the state institutions determines the extent to which state capacity investments map into development.

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) 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, redistributive 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.

Effective state capacity hinges on aligned incentives between (i) the state and its bureaucracy and (ii) the different levels of government (international, national, regional and local). We now explore these aspects in turn.

4.1 Bureaucracy

Policymakers must be able to ensure that the bureaucracy implements their policy decisions. A well-documented fact is the positive correlation between the quality of bureaucracy and economic growth (Besley, Burgess, Khan and Xu, 2022). Best, Hjort and Szakonyi (2023) provide an example of inefficiency created by low quality bureaucrats. The author use data on 16 million public purchases in Russia to show that 39 per cent of the price variation is explained by which bureaucrats and organisations manage the procurement.

[4]These results contrast with the findings by Nistotskaya and D'Arcy (2018) discussed in Section 3.1. These differences may reflect how, in the long run, state capacity may be endogenous to economic growth and regime type.

Analogous inefficiencies have also been documented in the context of procurement. Liscow et al. (2023) conducted a survey to create a new dataset of procurement rules and practices across the U.S., offering insights into what factors drive costs according to those involved in the process. Two key inputs in the procurement process significantly impact costs: the capacity of the Department of Transportation (DOT) that procures the project and the lack of competition in the market for government construction contracts. Evidence shows that states with higher-quality DOT employees have lower costs, with states having a neutral rating experiencing nearly 30 per cent higher costs per mile compared to those rated as having 'moderately high quality' employees, all else being equal.

A second well-documented fact about the quality of bureaucracy is its persistence over time. Fig. 4 plots a bureaucracy score (as the normalised average of the meritocracy and the rigorous and impartial administration indices) consistently flat for all the different geographic areas. Furthermore, the richest areas of the world noticeably score higher. Hence, research has been trying to identify potential threats to bureaucracy efficiency.

In their literature review, Besley et al. (2022) present the classical principal-agent 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 performance 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.

Some inefficiency might emerge also in the interaction of bureaucracy with other groups of interests. Importantly, Cingolani et al. (2015) classify bureaucratic autonomy as a separate institutional characteristic independent of state capacity and find that it improves policy indicators, such as a lower child mortality rate.

A potential threat to bureaucratic efficiency is the relationships with politicians. 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 et al. (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 et al. (2021) 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

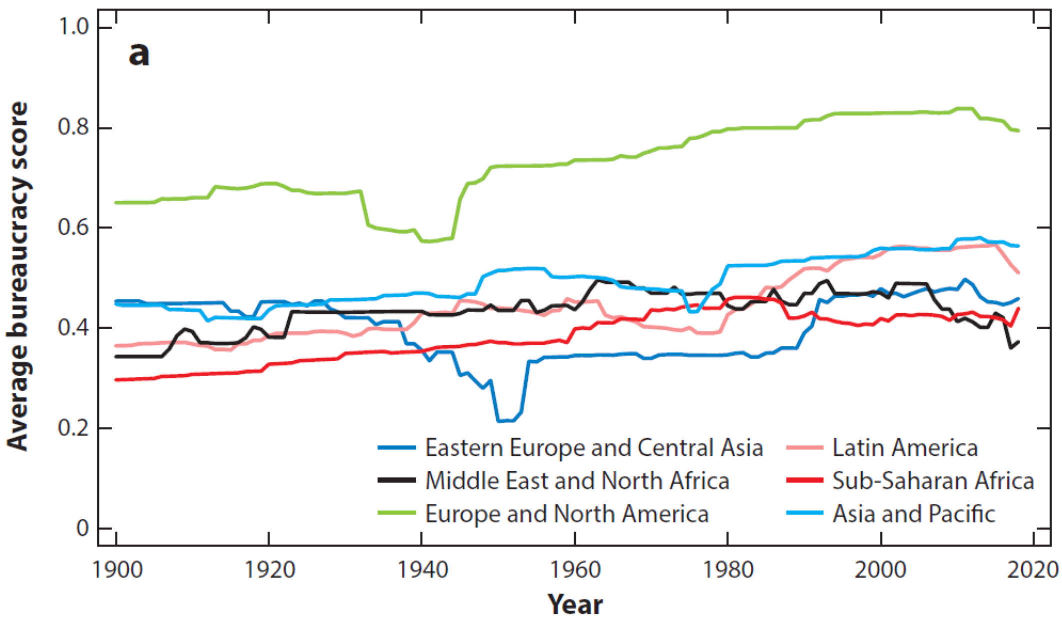


Figure 4: Quality of Bureaucracy over time.

NOTES: Panel a shows the bureaucracy score (as the normalised average of the meritocracy and the rigorous and impartial administration indices) for a balanced panel of countries observed throughout the entire time period.

SOURCE: Besley, Burgess, Khan and Xu (2022, Fig. 2a).

decline in bureaucratic efficiency, aligning with the theoretical framework proposed by the authors.

A common objective to attain higher state capacity is to create an impartial civil service. Aneja and Xu (2024) exploited newly digitised Post Office records to examine the impact of enhanced state capacity in more than 2,300 cities in the United States from 1875 to 1905. By analysing the phased implementation of the Pendleton Act, which aimed to protect bureaucrats from political influence, the research found that civil service reforms led to fewer postal delivery errors and increased efficiency. These positive changes were especially notable during election years due to reduced bureaucratic turnover. Further evidence suggests that cities undergoing reforms saw a decline in local partisan newspapers. Consequently, the separation of politics from administrative functions boosted state performance and diminished local political dynamics' role.

Finally, Egorov and Sonin (2024) 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.

4.2 Levels of Governance and Authority Allocation

The mapping from state capacity to development also crucially depends on the state's hierarchical structure. In particular, how the different layers (local, regional, national or international) interact and who is in charge of enacting policies - and thus using the state's capacity - are essential. Next, we review recent work on the optimal division of capacity at different levels.

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 maximised 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 5.2 for a discussion on violence and conflict.

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,[5] and find that full decentralisation may be the optimal fiscal regime only in states with low levels of administrative capacity. However, the equilibrium level of decentralisation crucially depends on the across-regions degree of heterogeneity in state capacity (Besfamille et al., 2024).

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).

[5] 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.

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.

Decentralisation Overall, the empirical literature suggests that decentralisation increases economic growth. However, Baskaran, Feld and Schnellenbach (2016) highlight 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 faces 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 and benefits 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 typically assumes 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.[6] 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 the government's random assignment of GPS-enabled mobile phones to some AEAs. Before the policy implementation, the authors asked local supervisors to which AEAs the supervisor would give the device to increase productivity. The authors compare the variation in performances, distinguishing AEAs that their supervisors had named. 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.[7] 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.

[6]Along these lines, we discussed the outsourcing of tax collection at Page 32.

[7]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.

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, Forthcoming).

Periods of elections are particularly delicate as politicians running for reelection may use the public budget to pursue their personal interests at the expense 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, 2024) 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.

5 The Origins and Expansion of State Capacity

Given the potential distributional conflict that investments in state capacity can spur, it should come as no surprise that ensuring such investments is no trivial task. North et al. (2009) argue that because state formation is a continuous non-linear process, there is no 'given' state that can be assumed to exist. Put differently, one cannot study state capacity and its intended positive consequences by assuming its existence, for such an approach prevents an understanding of when, how and why states form in the first place. To that end, in this section, we first review the geographical and historical explanations for the origins of state capacity. Subsequently, we consider how external and internal conflicts may nurture state capacity. We then examine the distinct case of fiscal capacity and tax compliance before considering how states can increase effective state capacity.

5.1 Geographic and Economic Origins

We first explore the historical emergence of state capacity based on geographical and economic aspects. Rethinking state formation, Dincecco (2017) offers a fresh perspective by tracing the evolution of state structures from city-states to nation-states and welfare states. He argues against the notion of a pre-existing central state with a variable degree of decentralisation (Oates, 1999; Boffa, Piolatto and Ponzetto, 2016). Instead, he posits that the core question was whether and how to build a sufficiently strong state to internalise externalities and achieve economies of scale, which aligns with Alesina and Spolaore (2005b).

Both cooperative and extractive theories of state formation acknowledge the link between food surpluses and the rise of hierarchical societies and states. However, their interpretations diverge. The cooperative theory views surpluses as resources for essential public goods, while the extractive theory sees them as appropriated by elites. Allen, Bertazzini and Heldring (2023) utilise a novel archaeological dataset to examine state formation through the lens of a natural experiment: river shifts in southern Iraq. Their research assesses the applicability of both cooperative and extractive theories. They find that a shift in the river course has created a need for public infrastructures like canals and has incentivised state formation and tribute collection. Their results align with the cooperative theory, suggesting *early* states facilitated public good provision by coordinating extended households.

Mayshar, Moav and Pascali (2022) argue that surplus is necessary but insufficient for state formation. They highlight the crucial roles of appropriability and transferability. Societies cultivating storable crops like grains offered readily expropriated goods suitable for tribute systems. Additionally, these societies faced a higher risk of banditry, necessitating state protection. Conversely, societies relying on perishable goods lacked these incentives for state formation. The perishable nature of their produce made them unattractive for expropriation and less vulnerable to banditry. This distinction underscores the influence of food production systems on societal trajectories.

Extending Mayshar et al.'s (2022) work, market structures likely influence contemporary state formation. The nature and scale of dominant businesses might be relevant. Effective governance may require different institutional frameworks depending on whether the state primarily interacts with individuals, small and medium-sized enterprises or large corporations. Such complexity highlights the multifaceted nature of state formation, where both surplus production and the characteristics of economic activity shape necessary institutional designs.

5.2 Conflict-Based Explanations for State Capacity

Conflict, both internal and external, shapes the trajectory of state-building. External threats can align the interests of domestic actors, fostering investments in state capacity as a 'public good' for collective security. Tilly (1990) famously captured this dynamic with the phrase 'states made war and war made states.'

Conflicts in theory Canonical theories of conflict and state-building focused on armed conflict. Building on this premise, Besley and Persson (2009) present a multi-period model of state capacity investments in a society with two groups. In their path-dependent model, past investments in fiscal capacity constrain current decisions (e.g. the ability to collect taxes and enforce property rights). They consider the threat of external war as a public good commonly enjoyed by both groups. When this threat is prominent, such that common interest trumps divide across groups, investments in state capacity follow.

Gennaioli and Voth (2015) nuance the argument of Besley and Persson (2009) 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's 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 harmful 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 harmful indoctrination.

Empirical findings 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. As briefly mentioned in Section 3.2, Bosshart and Weigand (2024) use fine-grain data on battles and troop movement during the Thirty Years' War and 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. Relatedly, Cantoni et al. (2024) document that territories that centralised fiscal capacity in the Holy Roman Empire became more politically consolidated: over time, they became more likely to survive and grow. They suggest that these stability gains came from increases in tax revenues, lower short-term borrowing, heightened investments in military capacity and more success in marrying daughters to powerful princes.

Domestic conflicts in the theoretical literature While external threats can unify domestic actors and can be interpreted as public goods, internal conflicts may lead to diverse state-building trajectories. Recent research by economists and political scientists delves deeper into the micro-foundations of state-building and the domestic conflicts it generates between regimes and local elites. These studies highlight that investments in fiscal capacity may only benefit some of the population. Elites who control pre-investment taxation or fear post-investment expropriation may oppose such investments.

To understand the dynamics influencing state-building (or fragility) and violence, Besley and Persson (2011a) have built upon their canonical framework. They allow each group to engage in violence to increase their chances of being in office. When both groups value a common public good or if institutions prevent excessive taxation-based transfers, investments in state capacity and peace follow. Otherwise, a strong state may arise, but not necessarily peacefully, to extract rents from the other group.

Building on Besley and Persson (2009), Besley and Persson (2013) examines income inequality. If the incumbent belongs to the wealthy class, they invest in fiscal capacity only if confident about remaining in power. Conversely, fearing expropriation by future governments, they may not invest. In contrast, incumbents from lower income brackets always have an incentive to over-invest in fiscal capacity.[8] Similar predictions emerge from Fergusson, Larreguy and Riaño (2022), albeit with a different mechanism. They also divide society into two groups, but the incumbent party favours one, while the challenger remains neutral. The incumbent can provide public goods and transfer resources between groups. Additionally, they may invest in state capacity, increasing future resource availability. This mechanism creates a re-election trade-off. The favoured group understands that future resources become more contestable, making the biased party less attractive. Simultaneously, the opposition becomes more efficient, decreasing the relative benefits of the biased party. Overall, increased state capacity weakens the biased party's comparative advantage, the sole guarantor of sufficient resources for their favoured group with low capacity. Consequently, fierce political competition reduces the incentive to provide public goods and invest in state capacity. Empirical data from Mexico supports their theoretical predictions.

Empirical findings from domestic conflicts Gulzar and Pasquale (2017) explore political appropriability. When politicians benefit from high-quality bureaucratic work, they provide the right incentives, fostering state capacity growth. They study the impact of political interference on Indian bureaucrats' performance, comparing situations where they report to one or several politicians. Electoral pressure exacerbates this effect.

In the context of post-revolutionary Mexico, Garfias (2018) explores how a regime can exploit intra-elite competition to facilitate capacity investments. Alternatively, the regime might constrain itself by promoting elite coordination through institutions like medieval European parliaments or the late colonial Mexican Mining Tribunal (Garfias, 2019). Chen et al. (Forthcoming) documents an alternative state-building strategy used in the Wei

[8] 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.

Dynasty. The regime co-opted elites from recently defeated local strongholds by granting them important bureaucratic positions. These elites then invested in state capacity and extracted more taxes from the local population.

State-building is a lengthy process. After securing a monopoly on violence, a regime must choose between direct rule with its own administration or indirect rule using existing local elites. Henn et al. (2023) shows that, in present-day Congo, the indirect rule is more prevalent in localities with strong local leaders and it's generally a temporary measure. As the regime strengthens its grip, it sends representatives and implements direct rule.

Crucially, investments in state capacity don't always determine a regime's power consolidation. Often, regimes work with elites within the state apparatus. If state capacity investments shift the balance of power in favour of the regime, it can discourage elites from supporting it. For example, Garfias and Sellars (2022) shows that in early 19th-century Mexico, elites decreased their repressive efforts after state capacity investments, leading to more popular rebellions from citizens expecting less resistance.

In another study, Lopez-Peceño (2024) examines the impact of introducing primary schooling in large towns during the July Monarchy in France. Contrary to traditional views (Paglayan, 2021, 2022), the introduction of education led to more resistance against Louis-Napoleon in 1851 and less support for the pro-regime plebiscite, possibly due to the influence of elites controlling education.

These domestic conflict dynamics offer insights into state capacity development and its value in violent contexts. Castillo-Quintana (2024) proposes a model of war attrition between Organised Crime Groups (OCGs) and a representative voter who elects a politician capable of weakening the incumbent OCG through state intervention. State intervention results in violence, which citizens are exposed to; higher state capacity leads to less citizen exposure to state violence. Voters only favour an intervention if state capacity is high enough to weaken the incumbent OCG without fighting. On the other hand, under low state capacity, the intervention incentivises challenger OCGs to fight, while they would not have fought without intervention. Voters prefer a weak state *not* to intervene.

Democracy and state capacity As seen in Section 3.2 (paragraph *State capacity for whom?*), the aggregation of preferences and distribution of political power within political institutions critically influence state capacity investments. This feature is indeed present in the theoretical workhorse model by Besley and Persson (2011b). They highlight the policy cleavage concerning how state revenue is divided between broadly and narrowly targeted programs. Institutional constraints, such as electoral systems, legislative rules, independent judiciaries and media transparency, can limit such behaviour by fostering wider appeal and broad agreements, thus promoting common-interest public goods. Cohesive political institutions encourage investments in effective state functions, such as broad property rights and public goods, whereas less cohesive institutions cater to narrow interests, weakening core state functions. However, even special-interest states may invest in state capacities if a stronger state aligns with the ruling group's ambitions.

Similarly, they argue that the length of political horizons significantly impacts state capacity investments, especially in states lacking cohesive political institutions. Investments in state capacity are more valuable to an incumbent group expecting to maintain power, as greater control rights over policy benefit a ruling group that can control their use. This creates a positive link between political stability and state capacity investments. However, when political turnover is high and institutions are non-cohesive, state capacity investments are likely to suffer as policies chosen by incumbents are less likely to reflect common interests. On the other hand, cohesive institutions can mitigate the negative impact of political turnover by limiting incumbents' control rights and maintaining investment incentives.

In their book, De Mesquita et al. (2005) argue that victorious large-coalition states often engage in nation-building that results in autocratic regimes with small coalitions and large electorates. This institutional configuration, while undemocratic, effectively ensures that a defeated state commits to sustaining the postwar settlement. The evidence and logic behind post-conflict nation-building suggest that victorious democracies are unlikely to help vanquished states transition to democracy unless their policy interests align. Historical examples include Germany and Japan, which did not experience democratic rule for at least seven years post-World War II. Initially, these countries were governed by Allied-imposed administrations and leaders chosen under constitutions designed by the victors, reflecting the interests of the winning coalition.

Together, these theoretical contributions indicate that democratic rule may hinder the effectiveness of state capacity investment in weak states. We believe that empirical evidence for these mechanisms presents a promising avenue for future research.

5.3 Effective State Capacity and Tax Compliance

In Sections 5.1 and 5.2, we explored the factors that influence the establishment of states and the development of an effective bureaucracy in terms of state capacity. Building on that discussion, we will now examine revenue collection and fiscal capacity in established states.

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.

State capacity develops incrementally, with existing capacity influencing the policy options available to the current government. For instance, the ability to impose a tax depends on the existing administrative capabilities and the institutions necessary for facilitating tax collection. Costs associated with building fiscal capacity, such as fines and detection mechanisms, are recognised since the classical tax enforcement model of Allingham and Sandmo (1972).[9] Additionally, cultural norms surrounding compliance play a significant role (Halla, 2012; Luttmer and Singhal, 2014). Countries with a strong culture of compliance often find it more cost-effective to invest in fiscal capacity than those lacking such norms. Both

[9]For a comprehensive review of the literature on tax evasion, see Slemrod (2019).

economists and political scientists have been exploring this aspect, 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.

The distinction in fiscal capacity between developed and developing countries is stark and well-established, with developed nations typically exhibiting higher fiscal capacity levels than their developing counterparts.

Fiscal capacity in developed and developing countries 'Low-income countries typically collect taxes of between 10 to 20 per cent of GDP, while the average for high-income countries is more like 40 per cent' (Besley and Persson, 2014). 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. Fig. 5 illustrates the positive correlation between development and state capacity.

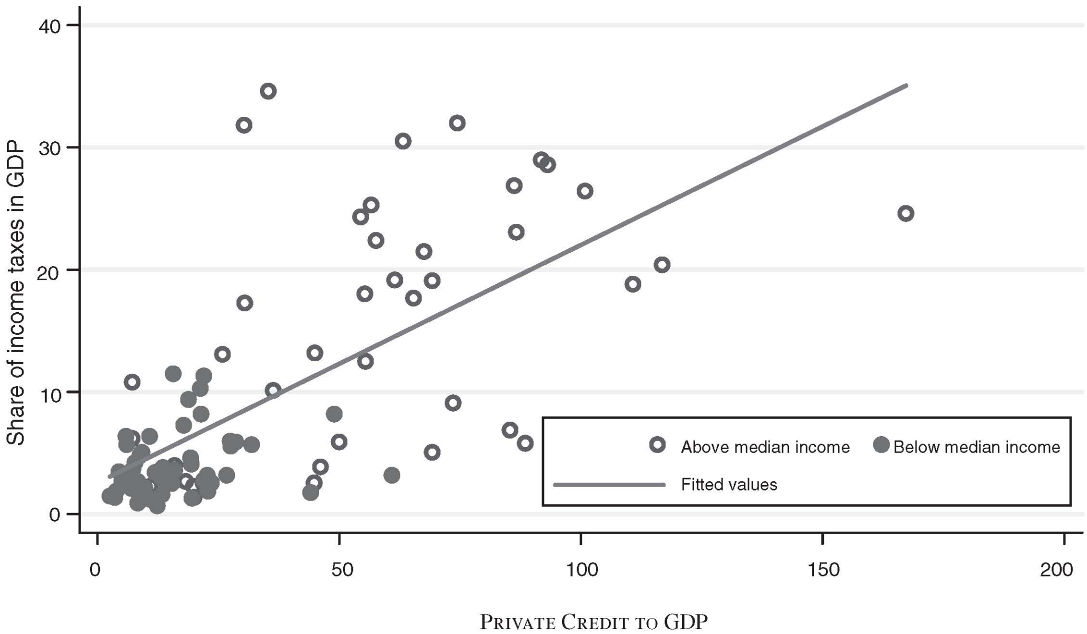
As discussed in Section 3, the relationship between taxation and development in this context is complex, with potential bidirectional causality: countries proficient in tax collection may provide better services, fostering stability and economic growth. At the same time, the need for resources to fund essential endeavours like infrastructure and defence can incentivise the development of fiscal capacity.

The developing countries' inability or unwillingness to tax citizens is likely a cause of their weakness in raising tax revenue. For instance, weak checks and balances reduce economic development and simultaneously increase corruption and bribes by wealthier individuals seeking to reduce their tax liability.[10] Hollenbach and Silva (2019) show that wealthy elites in democracies can reduce taxes by limiting the state's fiscal capacity, corrupting officials and undermining tax collection. High-income earners can lower their tax liabilities, especially in areas with high inequality. Exploiting data from 5,500 Brazilian municipalities, they show that areas with greater inequality generate less revenue from local property taxes and are less likely to seek federal grants to enhance tax collection capacity.

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

[10] 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.

Figure 5: Correlation between financial development and state capacity.



NOTES: Share of government revenue raised from income taxes as a share of GDP against the average private credit to GDP ratio (both measured as a percentage in 1995).

SOURCE: Besley and Persson (2009, Fig.1).

esting 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.

Okunogbe and Tourek (2024) review the literature on how to improve tax collection and compliance. Their work suggests that various methods can lead to a larger increase in tax compliance and revenues, ranging from increasing the detection of taxpayers – e.g. through investments in technology – to incentivising efforts from tax collectors' technology, depending on the context. Hence, there should generally be an appropriate lever to improve tax collection, though, as they highlight, no one-fits-all recipe exists (see Fig. 6). 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 economics literature sheds light on how to guarantee enough resources to the state when fiscal capacity, intended as the degree of effectiveness in tax collection, is low.

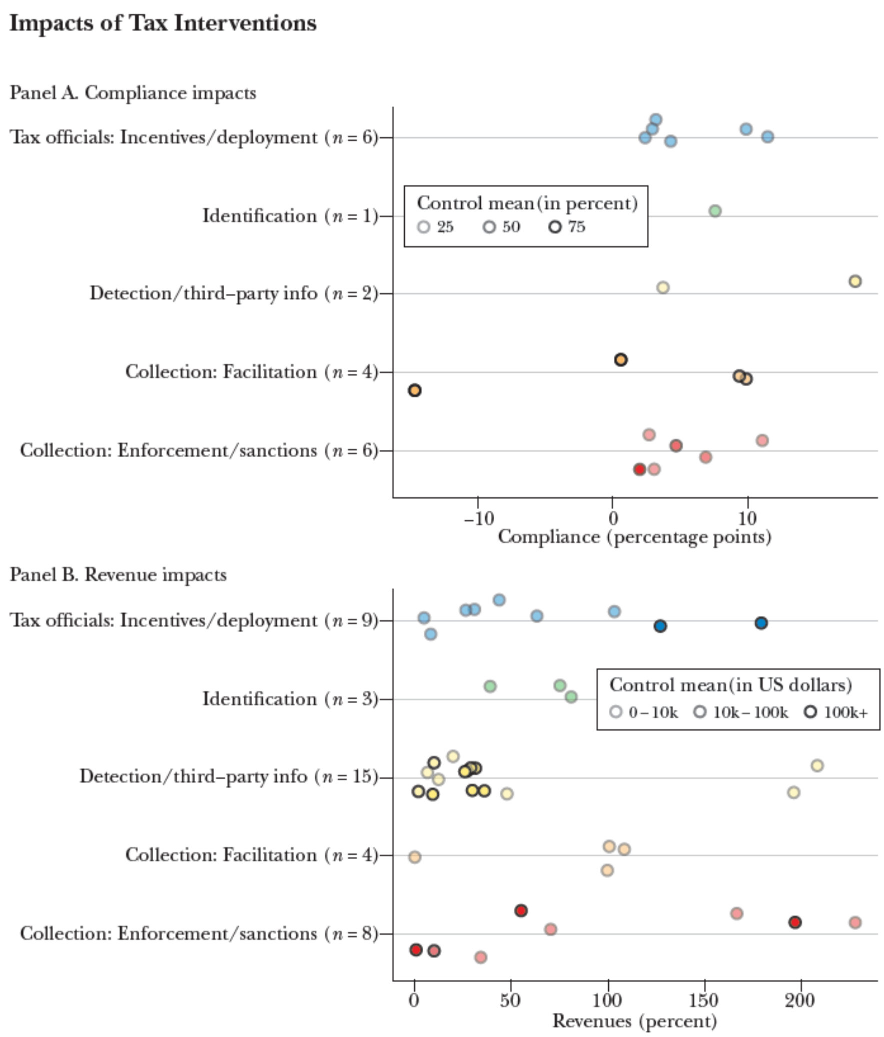
Taxation collection and enforcement may backfire There is an upper limit to the taxes a state can collect, which is determined by the Laffer curve. Interestingly, the tax rate that maximises tax proceeds depends on the level of state capacity (Bergeron, Tourek and Weigel, 2024).

Bergeron et al. (2024) 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 tax payment. Not too surprisingly, Bergeron et al. (2024) 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.[11]

Despite the consensus on the importance of minimising tax evasion, Cowell (1985); Davidson et al. (2007) and Doligalski and Rojas (2024) discuss cases in which some tolerance towards tax evasion may be welfare-improving. While the specific mechanisms are quite

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

Figure 6: Impacts of Tax Interventions



NOTES: This figure displays the effect sizes of tax interventions from existing studies as presented. The vertical axis includes the types of interventions considered, followed by effect sizes per type. In panel A, the horizontal axis presents the change in compliance in percentage terms, while in panel B, it presents changes in revenue percentages.

SOURCE: Okunogbe and Tourek (2024, Fig.5).

different, the intuition behind such results relates to the idea that taxes are distortionary, especially when the tax rate is not set optimally, and that enforcement policies add further distortion. When agents are heterogeneous, allowing a subset of the population to evade taxes may relax constraints on the others and be overall beneficial.

5.4 Expanding State Capacity

5.4.1 Checks and Balances

Section 3.2 illustrates how an inequitable distribution of state capacity benefits can render capacity investments politically infeasible. A proper system of checks and balances can limit the ruling group's discretion (Dziuda and Loeper, 2018) and facilitate a political compromise that leads to investments in capacity.

Indeed, for state capacity to have a positive impact, citizens must comply with the state (e.g. taxes), and for that, they must trust that those in control of the state do not use their position of power to extract resources. Dincecco (2017) 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.[12]

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. For a discussion of impartiality as the quality of governance, we refer to Rothstein and Teorell (2008).

Acemoglu (2005) explores the theoretical connection between politics and economics in weak and strong states. His model depicts a self-interested ruler deciding about 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 levels of taxation, whenever anticipated, discourage private investment, while meagre tax rates disincentivise the ruler from investing in public goods due to insufficient 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. Therefore, states lead to poor economic outcomes when either too weak or too strong, highlighting the importance of a balanced power structure to encourage investment from all stakeholders.

In earlier work, Besley and Coate (1998) investigate 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

[12] 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.

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 that is disadvantageous to the incumbent.

5.4.2 Increasing Tax Compliance

The stick 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). Then, the tax authority's response is to audit taxpayers and fine 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 the auditing of 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 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 (2021) 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 (2024) 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.

Ebrahim et al. (2024) estimate a lower bound Value Added Tax (VAT) gap of about 48% in Tanzania (on the 2014-19 period). Results are also provided by sector, with the Agricultural sector showing the highest VAT gap. Their analysis suggests that small and large firms evade most and hints at one evasion mechanism: firms over-declare VAT purchases to produce lower VAT declarations and mimic small firms.

The paper concludes with a cost-benefit analysis suggesting the cost-effectiveness of reallocating resources towards auditing sectors with higher levels of evasion and lower audit probabilities.

Tomasi and Parmigiani (2021) 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.

The carrot The alternative to the 'stick', i.e. how to increase compliance through auditing of taxpayers and the punishment of non-compliers, is the 'carrot', implying the use of a social contract to induce taxpayers to comply in the first place.

In the early 2000s, the 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.[13]

Besley (2020) presents a theoretical model to study the dynamics of state capacity when citizens have preferences for reciprocity with their ruling elite. 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.[14] 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.

Muñoz-Sobrado (2024) proposes semi-Kantian moral preferences as an alternative preference-based microfoundation to citizens' reciprocity. Citizens ask themselves about the hypothetical public good provision and transfers that would arise if other members of the society made the same compliance decision as them. This modelling approach has the advantage

[13]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.

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

of linking high equilibrium fiscal capacity with the emergence of strong civic cultures to individual moral considerations, offering insights into the relationship between fiscal policies and intrinsic individual moral values.

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 also increase tax compliance without threats and punishments. Third-party reporting is a powerful instrument in governments' hands, 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 increase 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 (In press), 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 payments, primarily driven by enhanced audits of the firms that adopted the system. Bellon et al. (2022) shows a significant impact of e-invoicing on small firms' compliance in Peru. Tuyishimire and Murorunkwere (2024) suggests the use of machine learning to improve monitoring, based on an analysis of the VAT system in Rwanda.

The widespread adoption of ICTs and digitised data management systems has significantly improved tax compliance in African tax administrations. In their study from Ethiopia, Mascagni, Mengistu and Woldeyes (2021) focus on the taxpayers' response. Adopting electronic sales registration machines positively impacted tax revenue, increasing income taxes by at least 12 per cent and VAT by 48 per cent. The machines improved compliance and accuracy of taxpayer records, reducing discrepancies and inspiring optimism for the future of tax administration in Africa.

Investing in state capacity Can weak states avoid a 'fiscal capacity trap'? Finding the resources to invest in state capacity may be politically challenging in a weak state.

Johnson and Koyama (2014) study the problem of investments in state-capacity and taxing-power allocation in early modern (1500-1800) France and England. They connect the ruler's taxation allocation problem – competitively or not – and borrowing problem – outside or inside the regime, from tax collectors – to that of investments in state capacity. When the regime does not need to borrow or can do so outside, they allocate tax collection competitively. In turn, no investments in state capacity are needed since market mechanisms already bring down the cost of collection. When the regime must borrow and cannot do so outside, they borrow from the future payments of tax collectors and, to solve this commitment problem, allocate tax collection non-competitively. In turn, the regime has a heightened incentive to invest in fiscal capacity to reduce the cost of tax collection. Johnson and Koyama (2014) thus suggest a strategic linkage between borrowing, market mechanism and incentives to invest in fiscal capacity. Ferraz et al. (2024) identify a similar mechanism in present-day Brazil. They document that municipalities increase spending and do not cut taxes when experiencing revenue gains, whereas those facing a reduction in transfers react by investing in fiscal capacity.

Improving state capacity may be politically challenging. Meanwhile, 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. 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.

5.4.3 Externalising State Capacity

The public sector may also increase the effectiveness of its actions through the externalisation of some of its power. 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.

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). There could be several possible reasons for that, 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. Balán, Bergeron, Tourek and Weigel (2022) suggest that the prevalent mechanism is the latter: the elites seem to know better who in their village can pay. The results are striking. They 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) find 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.

Criminal organisations sometimes replace the state by 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.

6 Concluding Remarks

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. We briefly mention potential policy implications and avenues that could advance future research in state capacity.

Policy implications In line with how we have structured this review, we distinguish between policy implications that result from increased fiscal capacity and those that allow the identification of areas in which governments have room to increase state capacity. Meaningful work also shows that we should be cautious when evaluating investments in state capacity, as groups favoured by ruling elites may appropriate the economic benefits from increased capacity.

The first group stems from the evidence discussed on Section 3. As mentioned, states that adopt reforms to hold public records of land with fiscal purpose may attain higher levels of fiscal capacity and, in turn, support higher provision of public goods. Moreover, while there is mixed evidence of how state capacity interacts with democracy, infrastructural power may be a requirement for countries that seek to increase economic growth through democratic reforms.

The second group, included in Section 5, is mainly composed of ways in which governments may increase fiscal capacity. With respect to auditing, the bomb-crater effect may appear, implying that audited agents may also update their beliefs downwards about the risk of being audited again soon. In particular, superficial (narrow) audits are more likely to produce a bomb-crater effect. As empirical evidence and recent theoretical models suggest, policymakers may also increase tax compliance by reinforcing the social contract between taxpayers and the state. Moreover, the widespread adoption of ICTs and digitised data management systems has significantly improved tax compliance in African tax administrations. Although more research is needed to have a clearer understanding of the contexts in which this result holds, when state capacity is low, it may be beneficial to temporarily rely on external sources to collect taxes, mainly to rely on local elites.

Avenues for future research We have identified a handful of avenues for future research that could help inform and advance research on state capacity.

First, the literature still needs a clear answer about the causal link between state capacity and growth. Promising recent works argue for the importance of studying the role of persistence. Future studies should focus on the robustness and caveats of persistence in state capacity, identifying obstacles to positive changes. For example, power groups might determine who benefits from investments in state capacity in the developing world. These biases may hinder the transition to a better equilibrium through endogenous sabotage of disfavoured groups.

Second, despite recent efforts, the relationship between state capacity and democracy is poorly understood. Future research may explore when state capacity is a prerequisite for countries to enjoy the benefits of democracy fully and when democratic reforms may lead to better outcomes even for weak states. The recent understanding of the different levels of state capacity in the developing world may help inform the origins of these nuances.

Third, recent work has shown how the nature and scale of local businesses influence state formation. This conclusion begs the question of whether changes in the nature of work may hinder state capacity. For example, the recent COVID-19 crisis has posed several challenges to our communities at different levels. In particular, the working-from-home setup is likely to stay and reshape the labour market, with non-negligible consequences on state capacity. Among others, and possibly relevant for this discussion, it increased the share of so-called *digital nomads* and remote workers.[15]

The COVID-19 pandemic has highlighted the critical role of state capacity in handling unexpected crises effectively. Previous studies by Kahn (2005); Persson and Povitkina (2017); Balzhan Serikbayeva and Oskenbayev (2021) and Cronert (2022) suggest a link between state capacity and effective responses to natural disasters and other shocks, however, more robust causal evidence is needed. Additionally, the literature could shift focus to explore the reverse causality: how unexpected shocks like pandemics influence investments in state capacity. Rees-Jones et al. (2022) offer a valuable starting point, demonstrating a positive association between the COVID-19 pandemic and the demand for expanded social safety nets, potentially leading to increased state capacity.

Finally, empirical work on how democratic rule may affect the incentive to invest in state capacity promises to fill a much-needed gap that has been mainly addressed by theory. On the theoretical side, while the recent work in Besley (2020) presents a successful way to incorporate the joint evolution of citizens' values and state capacity, a more nuanced model would also explore its joint evolution with democratic values, as in Besley and Persson (2019). Future research could explore the intertwined development of citizens' values, democracy and state capacity, acknowledging the bidirectional causality between values and institutions.

[15]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.

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, 1369–1501.

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

Acemoglu, D., Robinson, J.A., 2008. Persistence of power, elites, and institutions. American Economic Review 98, 267–93.

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.

Aneja, A., Xu, G., 2024. Strengthening State Capacity: Civil Service Reform and Public Sector Performance during the Gilded Age. American Economic Review 114, 2352–87.

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.

Asmus, G., Franck, R., 2022. State Capacity, National Economic Policies and Local Development: The Russian State in the Southern Urals. CESifo Working Papers No. 9616.

Balzhan Serikbayeva, K.A., Oskenbayev, Y., 2021. State capacity in responding to covid-19. International Journal of Public Administration 44, 920–930.

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.

Bellon, M., Dabla-Norris, E., Khalid, S., Lima, F., 2022. Digitalization to improve tax compliance: Evidence from VAT e-Invoicing in Peru. Journal of Public Economics 210, 104661.

Bergeron, A., Tourek, G., Weigel, J.L., 2024. The State Capacity Ceiling on Tax Rates: Evidence from Randomized Tax Abatements in the DRC. Econometrica 92, 1163–1193.

Berwick, E., Christia, F., 2018. State capacity redux: Integrating classical and experimental contributions to an enduring debate. Annual Review of Political Science 21, 71–91.

Besfamille, M., Piolatto, A., Vannutelli, S., 2024. Unions and Heterogeneous State Capacity. 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 88, 139–156.

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

Besley, T., Mueller, H., 2021. Fiscal Capacity and State Fragility, in: Macroeconomic Policy in Fragile States. Oxford University Press, pp. 235–270.

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? Journal of Economic Perspectives 28, 99–120.

Besley, T., Persson, T., 2019. Democratic values and institutions. American Economic Review: Insights 1, 59–76.

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., 2021. 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., 2024. Drought-Reliefs and Partisanship. Oxford Bulletin of Economics and Statistics 86, 187–208.

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. Mimeo.

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.

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.

Callen, M., Weigel, J.L., Yuchtman, N., 2023. Experiments about institutions. Annual Review of Economics 16.

Cantoni, D., Mohr, C., Weigand, M., 2024. The Rise of Fiscal Capacity: Administration and State Consolidation in the Holy Roman Empire . Econometrica 92, 1439–1472.

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

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., Forthcoming. From Powerholders to Stakeholders: State-building with Elite Compensation in Early Medieval China. American Journal of Political Science .

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.

Cowell, F.A., 1985. The Economic Analysis of Tax Evasion. Bulletin of Economic Research 37, 163–93.

Cronert, A., 2022. Precaution and proportionality in pandemic politics: democracy, state capacity, and covid-19-related school closures around the world. Journal of Public Policy 42, 705–729.

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.

D'Arcy, M., Nistotskaya, M., Olsson, O., 2024. Cadasters and Economic Growth: A Long-Run Cross-Country Panel. Journal of Political Economy 132, 3785–3826.

Davidson, C., Martin, L., Wilson, J.D., 2007. Efficient black markets? Journal of Public Economics 91, 1575–1590.

De Mesquita, B.B., Smith, A., Siverson, R.M., Morrow, J.D., 2005. The logic of political survival. MIT press.

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

Doligalski, P., Rojas, L., 2024. Optimal Taxation, Informality and Welfare: Redistribution Costs and Efficiency Gains. CESIfo Economic Studies .

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 .

Dziuda, W., Loeper, A., 2018. Dynamic pivotal politics. American Political Science Review 112, 580–601.

Ebrahim, A., Castillo, S., Leyaro, V., Swema, E., Haule, O., 2024. Estimating the Value-Added Tax Gap for SMMEs in Tanzania. Mimeo .

Egorov, G., Sonin, K., 2024. The political economics of non-democracy. Journal of Economic Literature 62, 594–636.

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

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

Feenstra, R.C., Inklaar, R., Timmer, M.P., 2015. The next generation of the penn world table. American economic review 105, 3150–3182.

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.

Ferraz, C., Foremny, D., Santini, J.F., 2024. Revenue slumps and fiscal capacity: Evidence from brazil. NBER Working Paper No. w32440.

Fetzer, T., Kyburz, S., 2024. Cohesive institutions and political violence. Review of Economics and Statistics 106, 133–150.

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.

Fukuyama, F., 2004. The imperative of state-building. J. Democracy 15, 17.

Fukuyama, F., 2013. What is governance? Governance 26, 347–368.

Ganimian, A.J., Muralidharan, K., Walters, C.R., 2024. Augmenting state capacity for child development: Experimental evidence from india. Journal of Political Economy 132, 1565–1602.

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. Formalization, tax appeals, and social intermediaries: evidence from a field experiment in Lagos, Nigeria. Mimeo .

Gratton, G., Guiso, L., Michelacci, C., Morelli, M., 2021. From Weber to Kafka: Political instability and the overproduction of laws. American Economic Review 111, 2964–3003.

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.

Halla, M., 2012. Tax morale and compliance behavior: First evidence on a causal link. B.E. Journal of Economic Analysis & Policy 12.

Hanson, J.K., Sigman, R., 2021. Leviathan's Latent Dimensions: Measuring State Capacity for Comparative Political Research. Journal of Politics 83, 1495 –1510.

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 Germany. Mimeo.

Henn, S.J., Marchais, G., Mugaruka, C.M., de la Sierra, R.S., 2023. Wartime Indirect Rule: Armed Groups and Customary Chiefs in Eastern Democratic Republic of the Congo. Mimeo .

Henn, S.J., Mugaruka, C.M., Ortiz, M., Sánchez de la Sierra, R., Wu, D.Q., 2024. Monopoly of Taxation Without a Monopoly of Violence: The Weak State's Trade-Offs From Taxation. The Review of Economic Studies doi:10.1093/restud/rdae036.

Hobbes, T., 1651. Leviathan.

Hollenbach, F.M., Silva, T.N., 2019. Fiscal capacity and inequality: evidence from Brazilian municipalities. The Journal of Politics 81, 1434–1445.

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. Fighting Tax Evasion by Discouraging the Use of Cash? Fiscal Studies 39, 343–364.

Johnson, N.D., Koyama, M., 2014. Tax farming and the origins of state capacity in England and France. Explorations in Economic History 51, 1–20.

Johnson, N.D., Koyama, M., 2017. States and economic growth: Capacity and constraints. Explorations in Economic History 64, 1–20.

Kahn, M.E., 2005. The death toll from natural disasters: The role of income, geography, and institutions. The Review of Economics and Statistics 87, 271–284.

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.

Knutsen, C.H., 2013. Democracy, state capacity, and economic growth. World development 43, 1–18.

Kotsogiannis, C., Salvadori, L., Karangwa, J., Mukamana, T., 2024. Do tax audits have a dynamic impact? Evidence from corporate income tax administrative data. Journal of Development Economics 170, 103292.

Kotsogiannis, C., Salvadori, L., Karangwa, J., Murasi, I., In press. E-invoicing, Tax Audits and VAT Compliance. Journal of Development Economics , 103403.

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.

Liscow, Z., Nober, W., Slattery, C., 2023. Procurement and Infrastructure Costs. NBER WP 31705.

Locke, J., 1689. Second treatise of government: An essay concerning the true original, extent and end of civil government. John Wiley & Sons.

Lopez-Peceño, A., 2024. Does Indoctrination Work? The Consequences of Primary Education Expansion in 19th Century France. Mimeo.

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.

Marx, K., Engels, F., et al., 1975. Karl Marx, Friedrich Engels Gesamtausgabe (MEGA).

Mascagni, G., Mengistu, A.T., Woldeyes, F.B., 2021. Can ICTs increase tax compliance? Evidence on taxpayer responses to technological innovation in Ethiopia. Journal of Economic Behavior & Organization 189, 172–193.

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 .

Mueller, H., Rohner, D., 2018. Can power-sharing foster peace? Evidence from Northern Ireland. Economic Policy 33, 447–484.

Muñoz-Sobrado, E., 2024. Moral preferences as determinants of fiscal capacity. Mimeo.

Nistotskaya, M., D'Arcy, M., 2018. State Capacity, Democracy and Public Goods Production: the case of maternal mortality. WP 2018:14.

North, D.C., Wallis, J.J., Weingast, B.R., 2009. Violence and social orders: A conceptual framework for interpreting recorded human history. Cambridge University Press.

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.

Okunogbe, O., Tourek, G., 2024. How Can Lower-Income Countries Collect More Taxes? The Role of Technology, Tax Agents, and Politics. Journal of Economic Perspectives 38, 81–106.

Olson, M., 1965. The Logic of Collective Action: Publics Goods and the Theory of Groups. Harvard University Press.

Olson, M., 1993. Dictatorship, democracy, and development. American political science review 87, 567–576.

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.

Persson, T., Povitkina, M., 2017. "Gimme Shelter": The Role of Democracy and Institutional Quality in Disaster Preparedness. Political Research Quarterly 70, 833 – 847.

Pigou, A.C., 1924. The Economics of Welfare. Macmillan.

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

Rawls, J., 1971. A Theory of Justice. Harvard University Press.

Rees-Jones, A., D'attoma, J., Piolatto, A., Salvadori, L., 2022. Experience of the covid-19 pandemic and support for safety-net expansion. Journal of Economic Behavior & Organization 200, 1090–1104.

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.

Rice, S.E., Patrick, S., 2008. Index of state weakness in the developing world. Brookings Institution Washington, DC.

Riker, W.H., 1964. Federalism: Origin, operation, significance. Boston: Little, Brown.

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.

Rothstein, B.O., Teorell, J.A., 2008. What is quality of government? A theory of impartial government institutions. Governance 21, 165–190.

Rousseau, J.J., 1762. Le contrat social, ou, Principes du droit politique. Marc-Michel Rey.

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.

Samuelson, P.A., 1954. The pure theory of public expenditure. The Review of Economics and Statistics 117, 387–389.

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.

Scott, J., 1999. The Institution for Social and Policy Studies. Yale University Press.

Scott, J.C., 2009. The art of not being governed: An anarchist history of upland Southeast Asia. Yale University Press.

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 WP 30258.

Skocpol, T., 2014. Bringing the state back in, in: Policy Process. Routledge, pp. 126–138.

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. Mimeo.

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., 2021. Brains or Muscles? A Political Economy of Tax Evasion. SSRN 3861982.

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

Tulli, A., Forthcoming. Sweeping the dirt under the rug: Measuring spillovers of an anti-corruption measure. Journal of Law, Economics, and Organization doi:https://doi.org/10.1093/jleo/ewae009.

Tuyishimire, O., Murorunkwere, B.F., 2024. Applications of Big data analytics in tax compliance monitoring: A case study of Rwanda's Value Added Tax . Mimeo .

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

Weber, M., 1919. Politik als beruf. Munich: Duncker & Humblot.

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.