The Causes and Consequences of Development Clusters: State Capacity, Peace, and Income*

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Keywords

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Abstract

Three important aspects of development—per capita income, state capabilities, and (the absence of) political violence—are correlated with each other at the country level. This article discusses the causes of such development clusters and highlights two explanations: common economic, political, and social drivers and complementarities (two-way positive feedbacks). It also draws out preliminary policy implications of these patterns of development and proposes topics for further research.

1. INTRODUCTION

Most studies of economic development deal with the causes and consequences of the vast differences in average material living standards across countries. Despite years of academic and policy focus, the raw income differences make salutary reading. In 2011, for example, the ratio of Luxemburg's GDP per capita to Liberia's exceeded 160, according to the Penn World Tables (PWT 8.0, series CGDP^{e}). The question why some countries are rich while others are poor remains a central question not only in economics, but also in other social sciences, every bit as much as when Adam Smith wrote the *Wealth of Nations* about a quarter of a millennium ago.

Here, we emphasize the correlation of income and two other important development outcomes. First, poor countries are often plagued by violence, including government repression and civil war, in the wake of internal conflicts of interest. Second, poor countries tend to have limited state capacities, which make them ineffective in raising revenues, supporting markets, and providing public goods that lie behind advances in human development. At the other end of the spectrum, we see countries that have not only high income but also working institutions, policies in good order, and peaceful resolution of conflicts. The focus on a multidimensional concept allies us with influential commentators on the nature of development, such as Myrdal (1974) and Sen (1988), who have long cautioned against taking an excessively one-dimensional perspective.

The close correlation of development outcomes is clearly illustrated in **Figure 1**, which plots an index[1] of the three dimensions of state capacity (explained in Section 2) against an index of peace (i.e., the absence of violence) defined over the prevalence of repression and civil war between 1975 and 2006. The observations are differentiated by income, which we represent by terciles of GDP per capita.

Why do we see this clustering among income levels, state capacities, and violence? A priori, it is plausible that (*a*) income is both a cause and a consequence of violence and state capacities, (*b*) violence and state capacity cause each other, and (*c*) the correlations reflect common background variables. Therefore, isolating a specific unidirectional channel of causation—by a well-designed theory or empirical strategy—can shed only partial light on the complete picture. To explain the clustering of good or bad outcomes, we need an approach that ties the three dimensions of development together. In this article, we discuss such an approach, building on our recent and ongoing research (the former is summarized in Besley & Persson 2011b). This approach emphasizes the need to study common factors that shape a range of development outcomes and to understand complementarities (positive two-way feedbacks) between different performance dimensions. To get at both these elements, we put the incentives to invest in state capacity and violence—and how these are shaped by existing economic, political, and social conditions—at center stage. The approach we describe provides an analytical window on the common concept of a fragile state, a graphic illustration of multidimensional cases of ill-being, and a target for many specialized programs of development assistance.

To situate our approach in the literature, we now briefly relate it to existing approaches that aim at understanding income levels, state capacities, and violence.

1.1. Approaches to Income Differences

Solow (1956) started the modern work on economic growth, with many subsequent additions (see, e.g., Aghion & Howitt 1998). This approach attributes persistent income differences to

[1]The measure is an equally weighted sum of the three dimensions of state capacity.

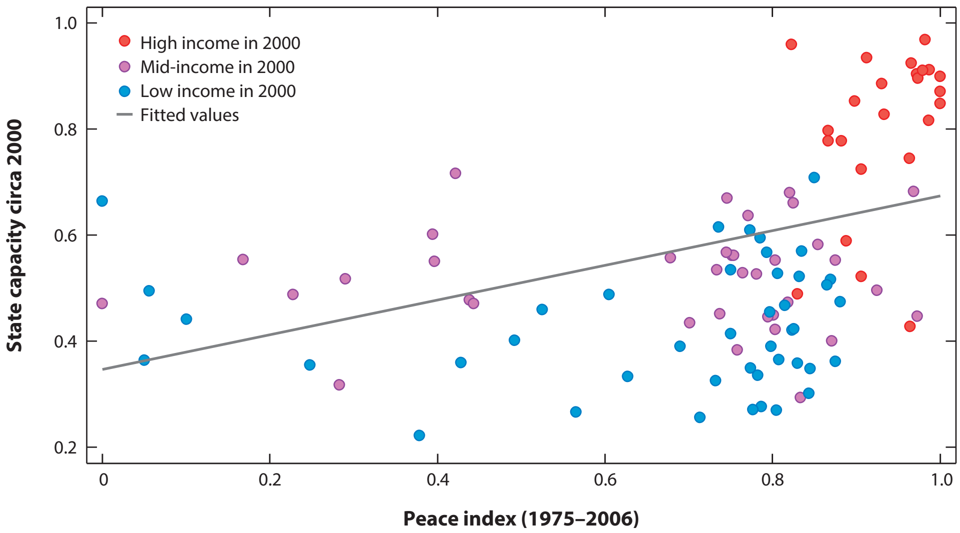

Figure 1

State capacity, peace, and income. State capacity is measured as an equally weighted sum of fiscal capacity, legal capacity, and collective capacity. Fiscal capacity is measured as the share of income taxes in total revenue in 1999 as measured by Baunsgaard & Keen (2010); legal capacity is measured as an index of contract enforcement as measured by the World Bank's *Doing Business* in 2006; and collective capacity is measured as an index based on school attainment and life expectancy as measured by Barro & Lee (2013) and the *World Development Indicators*, respectively. Repression is measured using the Political Terror Scale based on reporting by Amnesty International (**http://www.politicalterrorscale.org**). We measure terror on the five-point scale given there. Civil war is measured as in the UCDP/PRIO Armed Conflict Dataset version 4-2007, 1946–2006, as a discrete variable for each country-year observation. The peace index in country i is then $1 - (0.5)\times\text{repress}_i - \text{civilwar}_i$, where repress_i is the average terror-scale score (normalized to lie in [0, 1]) measured as the average for the country in noncivil war years; civilwar_i is the average number of years in civil war; both indexes are computed over the period 1975–2006. This way, a completely peaceful country receives a score of 1, a completely repressed country has a score of 0.5, and a country in full-time civil war has a score of 0. Countries are divided into three equal-sized groups based on their GDP per capita in 2000 according to the Penn World Tables.

technology. In particular, endogenous growth models show how technology reflects incentives for R&D or adoption, which depend on the policy environment. Lewis (1954) framed economic development in terms of misallocation, stressing the reallocation of resources toward more productive uses. Many successors emphasize how various transaction costs may inhibit this process and how policy could overcome these obstacles (see, e.g., Stiglitz 1988). Thus, both the Solow and Lewis traditions suggest that failures to achieve growth and development are ultimately a result of policy failures. For example, these could reflect failures to protect property rights or invest in productivity-enhancing infrastructure or propensities to subsidize vested special interests.

One possible reason for poor policies is that policy makers do not have the relevant knowledge. Observers of the East Asian miracle, such as Amsden (1992) and Wade (1990), suggested that more should be learned about the policy successes in developmental states. But it may be difficult to import precise policy knowledge from policy trajectories in another country. This is reflected in a new branch of development economics, which seeks more reliable knowledge through microlevel program evaluation by randomized control trials (see Banerjee & Duflo 2011). Such knowledge might serve as a catalyst for a better policy environment. Yet, little is known about how to scale up successful programs and consider the consequences of externalities and general equilibrium effects.

Another possible reason for poor policies is that the state has the relevant knowledge but lacks the will to choose good policies. Bauer (1972) was an early critic of development policy along these lines. His criticism dovetails with approaches that relate poor policy to institutional failures. North & Thomas (1973) and North & Weingast (1989) started this discussion with analyses of historical experiences, Bates (1981) applied a similar logic to postcolonial Africa, and Acemoglu et al. (2005) and Acemoglu & Robinson (2012) provide a more recent approach in this tradition. A common idea in this approach is that weak investment incentives in the private economy reflect bad institutions, especially to limit the extractive power of the state. The recent literature on institutions and development goes further by looking at the two-way interplay of economic outcomes with economic and political institutions. It also tries to explain the dynamic evolution of institutions and to provide evidence on the importance of institutions over and above other long-run factors that shape income, such as geography and human capital.

In our approach, governments may have enough knowledge about good policies and the will to implement them, but they still lack the ability—i.e., the state capacity—to carry them out. Political institutions still play a key role as a driver of state-capacity investments. A willing government can pursue better policies to reduce resource misallocation and spur technological change, provided it has invested enough in the state's capacity to support and augment markets. With knowledge about which policies best deliver public goods, a willing government can implement them if it has invested enough in the capacity to raise revenue.

1.2. Approaches to State Capacity

Many debates in development have touched upon state capacity, but it is only recently that economists have focused on it. For example, traditional normative public finance hardly ever touches upon the lack of administrative infrastructure as an important constraint on the taxes that governments can raise or the public goods they can deliver.[2]

The lack of attention to the role of state capacity by economists contrasts with other social scientists. Many political and economic historians see the state's capacity to raise revenue as an important phenomenon in itself. Moreover, they link this capacity to a thirst for military success and regard it as a key determinant of the successful development of nation states (see, e.g., Hintze 1970 [1906]; Tilly 1975, 1985, 1990; Brewer 1989). Dincecco (2011) presents a more recent account of the fiscal history of early modern Europe that emphasizes the same themes as in this article. However, on the whole, historians have not systematically explored how the state's capacity to raise taxes relates to its capacity to support markets by the legal system or its capacity to augment markets via a public goods delivery system.[3]

Political scientists such as Levi (1988) and Migdal (1988) have also emphasized that many developing countries have weak states that lack the capacity to raise revenue and govern effectively. The creation of effective states that contain violence is a key theme of Bates (2001) and North et al. (2009). Development scholars, such as Herbst (2000), hypothesize that some African countries would have stronger states if external wars had been more frequent on the continent.

[2]Readers are referred to, however, early theoretical and empirical work by Cukierman et al. (1992) on how the use of seigniorage depends on the efficiency of the tax system and how the strategic choice of the latter depends on factors such as political stability and polarization.

[3]However, Strayer (1970) stresses the building of fiscal and judicial institutions in the early development of European states.

Our approach underlines how military needs could provide a motive to build the power to tax. However, what we offer is more than a formalization of old ideas. Our concept of state capacity, similar to the view of development that we are suggesting, has multiple dimensions. In addition, we emphasize the complementarities among these dimensions, as well as the complementarity between state capacity and income. Thus, a government willing to invest in market support is also willing to invest in revenue-raising capacity, and as better market support raises income, this further strengthens the motives to invest in the state.

1.3. Approaches to Political Violence

By now, both political scientists and economists have worked extensively on the causes of civil war. An empirical literature has progressed from mainly cross-sectional inference to studies that exploit within-country variation [see the survey by Blattman & Miguel (2009)]. A largely independent literature, surveyed in Davenport (2007), has explored the determinants of government repression and violations of human rights. The main focus in both strands is to explore empirical regularities, in some cases searching for credibly exogenous variation. But the links between theory and evidence on violence are limited. In fact, the two surveys both lament that so few studies forge links between theory and data.[4]

A clear pattern in the data is the strong correlation between civil war and low income levels. This is commonly seen as running from income to civil war, with two leading interpretations: Collier & Hoeffler (2004) argue that it reflects a low opportunity cost of fighting at low income, whereas Fearon & Laitin (2003) argue that it reflects low-income countries having poorer state capacity. Most of the empirical work takes income as given. In a broad perspective, this is problematic, however, as violence and income may well have common determinants. For example, one view on the so-called resource curse is that resource dependence may cause low income and growth; another is that resource dependence may cause civil war. On top of this, realized civil wars are likely to exert a negative impact on income.[5]

Our approach to three-dimensional development clusters embeds the analysis of political violence in a wider setting. First, it sees government repression and civil war as alternative outcomes with common underlying determinants. Second, it allows for two-way feedbacks between income and political violence. Finally, it probes for an equilibrium correlation by considering the effect of the same economic, political, and social forces on investments in state capacity and political violence and by allowing the political instability generated by political violence to affect investments in state capacity.

1.4. Roadmap

The remainder of the article is organized as follows. Section 2 discusses the scope of state capacity and the logic of state-capacity investment. We discuss how common factors shape investments in different functions of the state. We also highlight complementarities among different state capacities, and positive feedbacks between state capacity and income. Section 3 discusses the forces that shape political violence. Following our emphasis on common factors, we relate the

[4]There are certainly exceptions, however, such as Dal Bó & Dal Bó (2011) and Fearon (2008).

[5]Readers are referred to Collier (1999) for a discussion of the effects of civil war on income and Skaperdas (2011) for a more general overview of the various losses due to civil war. Recent work, starting with Miguel et al. (2004), addresses the reverse-causality problem by isolating exogenous variation in income (e.g., instrumenting income growth with weather shocks).

factors that shape violence to those that shape state-capacity investment, and following our emphasis on complementarities, we discuss the two-way feedbacks between income and (the absence of) violence. Section 4 puts these pieces together to illustrate two forces behind development clusters: (*a*) Some drivers of state capacity and (the absence of) violence are common, and (*b*) there are two-way positive feedbacks between each pair among income, state capacity, and peacefulness. Section 5 discusses some policy implications, and Section 6 suggests topics for further research.

2. STATE CAPACITY

We use the concept of state capacity to stand for a range of capabilities that are needed for the state to function effectively. State capacity can be accumulated over time, sometimes through one-off reforms with long-lived consequences. However, it may also share features with physical capital stocks and depreciate without periodic replacement investments. In this section, we discuss the scope of state capacity, as well as the factors that shape investments in it.

2.1. The Scope of State Capacity

State capacities sit somewhere between policies and political institutions. Institutions in the sense of North (1990)—namely rules of the game that (formally and informally) shape social interactions—help shape the incentives to build state capacity. But the same institutions may independently shape the other central outcomes of development clusters: political violence and income. In fact, this is a central part of our argument. As the phrase suggests, state capacity constrains the set of policies a government can implement (e.g., a working income tax requires investment in infrastructure for monitoring and compliance). The term was coined by the historical sociologist Charles Tilly to describe the power to tax (see, e.g., Tilly 1990). But one can think about state capacity in wider domains.

We are interested in investments in three key dimensions of state capacity.

The first is to support markets in various dimensions. One dimension of this is to secure private property rights to the ownership of physical and human assets. The abolition of slavery was primarily enforced by government actions to establish free labor supply. The creation of secure titles to land and other assets is another important dimension of market support. Similarly, the introduction of antidiscrimination policies widens trading opportunities. In all these cases, policies of effective market support require a series of costly and durable investments. For example, public land and property registries have to be built, and functioning court systems require trained officials and a number of courts on top of written statutes. We use the term legal capacity as a catchall for this dimension of state capacity.

The second function is to augment markets, mostly by supplying public goods. But policies to limit inequality also belong in this category, as do paternalistic policies to counter imperfect individual decisions. Stretching the concept further still, the regulation of externalities also augments markets. As with market support, effective market augmentation requires investments. For example, running an effective public health system requires significant investments in delivery, trained personnel, structures, and equipment. Thus, as argued in Besley et al. (2013b), the state's ability to turn resources into public goods and services depends on its stock of collective capacity.

The third function is to raise revenue. Most government activities require revenues from a tax system with the power to enforce payment of statutory taxes. This must be underpinned by the recruiting and training of tax inspectors and investing in systems of monitoring and compliance. As incomes go up—in a country over time, or in a cross section of countries—governments use more broad-based taxes on labor, capital, and value added (see Besley & Persson 2013),

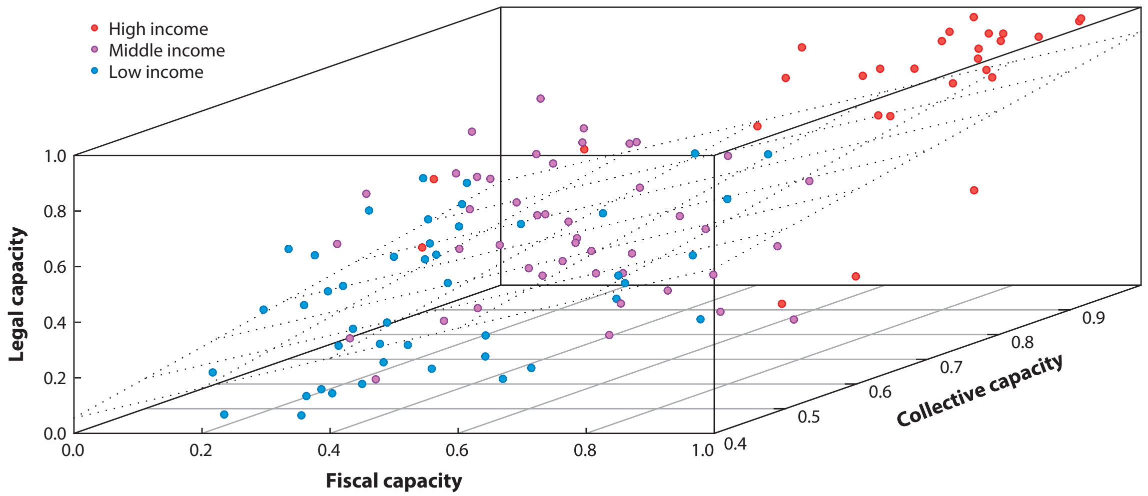

Figure 2

Legal, collective, and fiscal capacity. Fiscal capacity is measured as the share of income taxes in total revenue in 1999 as measured by Baunsgaard & Keen (2010); legal capacity is measured as an index of contract enforcement as measured by the World Bank's *Doing Business* in 2006; and collective capacity is measured as an index based on school attainment and life expectancy as measured by Barro & Lee (2013) and the *World Development Indicators*, respectively. Countries are divided into three equal-sized groups based on their GDP per capita in 2000 according to the Penn World Tables.

displacing more easily collected border taxes and seigniorage. We use the term fiscal capacity for those investments that support the collection of taxes, especially broad-based taxes.

Figure 2 shows measures of fiscal capacity [the share of income taxes in total revenue in 1999 as measured by Baunsgaard & Keen (2010)], legal capacity (an index of contract enforcement as measured by the World Bank's *Doing Business* in 2006), and collective capacity (an index based on school attainment and life expectancy as measured in 1999).[6] The figure illustrates clearly that the three dimensions of state capacity are positively correlated with each other, although not perfectly so. This covariation suggests that these state capacities are likely determined by similar factors. The figure also illustrates a clear correlation with income per capita in the year 2000.

2.2. The Logic of State-Capacity Investments

Building state capacities can be thought of as an investment problem. We first examine some abstract features of this problem, recognizing that we risk losing contact with specific examples.

Preliminaries. Assume, as a starting point, that a state exists with an established monopoly over market support, market augmentation, and revenue collection, even though it took time for most states to exert this monopoly. We focus on state-capacity investments by a unitary state but argue in Section 6 that the study of state-capacity investments in decentralized states is an important issue for future research. Think about a standard capital investment problem, in which costs today

[6]This is essentially the UN's Human Development Index without income per capita. For each indicator and country i sample of countries $\mathcal{C}$, we measure $(x_i - \min\{x_j\}_{j\in\mathcal{C}})/(\max\{x_j\}_{j\in\mathcal{C}} - \min\{x_j\}_{j\in\mathcal{C}})$. We weight the two measures equally to create a single index on [0, 1]. The school attainment data are from Barro & Lee's (2013) data, and the life expectancy data are from the *World Development Indicators*.

must be weighed against benefits tomorrow by the relevant decision makers. However, as state capacities are properties of the state, modeling state-capacity investment means modeling collective choice. This raises two questions: (*a*) How are choices made at a point in time in a polity with different interest groups, and (*b*) how does the prospective replacement of the present decision maker affect intertemporal choice?

Before getting to the problems of collective choice, we discuss how state-capacity investments might be chosen by a single benevolent dictator. Although this is unrealistic, it highlights a number of drivers. It also gives a clear benchmark, which makes us see more clearly which additional drivers stem from collective decisions.

A normative benchmark. The standard benevolent dictator model of public investment follows the classic account of Arrow & Kurz (1970). As the dictator is benevolent, his or her objective aggregates the payoffs of all groups in society. This can be done in many ways, beyond the utilitarian objective used in many applications. What is needed is an intertemporally consistent method of preference aggregation—a social welfare function used to value investments.

State capacities affect individual payoffs only indirectly. To have a return, an investment in state capacity must expand the set of feasible policies, so as to permit higher consumption of private or public goods. If properly measured, these benefits are reflected in national income.[7] Optimal state-capacity investments for a social planner equate the future expected marginal benefits (spread over a number of time periods) with the present marginal cost of foregone consumption as measured by the shadow price of public funds. The optimality condition therefore resembles a standard Euler equation. State-capacity investments thus have a standard cost-benefit interpretation (see, e.g., Dreze & Stern 1987). In this sense, state-capacity investments are similar to other public investments: They should be targeted toward the highest social return.

Complementarities. This benchmark approach generates two sources of complementarity, which are central to understanding the link between state-capacity building and economic development.

Two-way feedbacks between state capacity and income. The social planner problem sheds light on the link between economic growth and state capacity. The typical growth process involves higher incomes as well as structural change (e.g., by extending the domain of markets). Higher income will provide a natural boost to investments in some kinds of state capacity. Citizens may more intensively demand goods best produced by the state, creating higher returns to investing in collective capacity and fiscal capacity. Larger prospective tax bases also mean that a given investment in fiscal capacity generates larger revenues. Thus, the marginal return to such investment may increase. Higher returns to fiscal-capacity investment also arise with greater formal sector employment and a higher proportion of employment in large and easier-to-tax firms, particularly when investments in third-party reporting are made (see Kleven et al. 2009). Moreover, the greater use of financial markets provides a more transparent basis on which to tax corporate income and to monitor the firm for tax purposes (see Gordon & Li 2009). Higher educational attainment, a cause and consequence of growth, means that specialized training may raise state capacity in all its forms. Structural change expanding markets will increase not only the ability to tax, but also the demand for legal capacity. This is particularly true in more

[7]We ignore the well-known fact that this is not always the case, particularly for public goods and services (see, e.g., Atkinson 2005).

contract-intensive sectors such as financial intermediation. In sum, there are multiple sources of two-way positive feedbacks between income and state capacity.

This logic flies in the face of the idea that a minimal state would serve as an engine of economic development. That is not to argue that problems with state performance should not be acknowledged, identified, and remedied. But the two-way feedback that we identify suggests a logical complementarity between state and market development. Moreover, this is also a feature of the broad development patterns we have seen in history.

Feedbacks between forms of state capacity. The planner problem also illustrates the complementarities between different forms of state capacity. Besley & Persson (2009) make the argument for legal and fiscal capacity. Suppose a government contemplates an investment to encourage participation in the formal labor market. In a low-income country, this may, for example, be a legal framework supporting the formal sector. Such legal-capacity investment is more attractive after a fiscal-capacity investment raising the effective tax rate on labor—it now yields additional tax revenues, which can be used for lower tax rates or more collective consumption. But the complementarity runs both ways. The legal-capacity investment supporting formal sector employment encourages a fiscal-capacity investment that improves labor income tax compliance, as the broader tax base implies more revenues. Such complementarities can explain why governments make simultaneous investments in different state functions. But they also suggest that project-by-project, cost-benefit appraisal of individual state-capacity investments could seriously understate their benefits.

Natural resources and aid. The normative benchmark also illustrates a first common determinant of state capacity. Governments often have access to revenue from sources other than taxation. The ownership of natural resources is an important case in point, as is international aid. Such public revenues are likely to substitute for fiscal capacity, which diminishes fiscal-capacity investments and spills over to other aspects of state building owing to complementarities between fiscal capacity and collective or legal capacity. Resource and aid dependence may also have a direct effect on legal-capacity building, as such income sources typically do not require the development of an effective market economy. So we would expect highly resource-intensive economies to have lower levels of state capacity, all else equal.

Legal origins. The importance of legal origins in influencing a range of outcomes has been emphasized by La Porta et al. (2008). An approach emphasizing investments in state capacity can make sense of these findings. Legal origins may have a direct impact on costs for building capacity, with some kinds of underlying legal codes being more supportive of certain kinds of legal capacity. The presence of complementarities with other state capacities would lead to spillovers into other spheres of state action. Moreover, any direct effects on activity and development (e.g., through the development of financial markets) will indirectly boost the incentives to invest in state capacity. Thus, legal origins may be a second common determinant of state capacity.

Collective decision making. How policies are chosen by multiple decision makers with competing interests is the bread-and-butter issue in political economics. Some models in the literature effectively reduce the aggregation of diverse preferences to a problem for a single decision maker (e.g., a median voter, whose identity does not change over time). However, such models of politics are limited in scope: In general, the map from interests to policy decisions depends on the structure of the political institutions in place. For example, there are systematic differences in policy outcomes across proportional representation and majoritarian electoral systems, as well as across parliamentary and presidential forms of government (Persson & Tabellini 2003). This suggests that institutions do matter for preference aggregation and policy making. We now explore the consequences of this for state-capacity building.

Cohesive political institutions. The way political institutions aggregate preferences and distribute political power is an important determinant of state-capacity investments. Besley & Persson (2009, 2011b) and Besley et al. (2013a) develop a particular view of the mechanics. They consider a specific, but important, policy cleavage: how state revenue is split between broad-based and narrowly targeted programs.[8] In their stylized model of politics, this decision is made without commitment by policy makers who simply maximize the interests of their group. Absent any institutionalized constraints on executive behavior, this favors overspending on narrow programs targeted to the special interests of the ruling group. Classic examples include spending on tertiary education by a wealthy and well-educated ruling elite or public programs targeted to the home region of the ruling group. However, executive power could be constrained by institutional forces: an electoral system inducing the ruling group to gain wider appeal to be (re)elected, rules for legislative decision making inducing executives to seek broad agreements, or an independent judiciary enforcing rules for minority protection. Transparent decision making, supported by free media, might also make it harder to get away with narrowly focused uses of political power.

Besley & Persson (2011b) call political institutions that induce greater spending on common-interest public goods "cohesive." Such institutions may also support common interests in other ways. For example, they may ensure that property rights are extended broadly to all citizens, without discrimination against groups not directly represented in the ruling group. More cohesive institutions create a stronger general interest to invest in an effective state. Less cohesive institutions allow the state to be run more in the interest of a narrow segment of the population, which weakens the motive to improve the core functions of revenue collection, market augmentation, and market support. Nevertheless, governing groups in such states may decide to invest in state capacities to the extent that these support the ruling group's specific ambitions.

Cohesive political institutions are an important common driver of different state capacities as they encourage all three forms of state capacity. Moreover, legal capacity will also support economic development and hence higher income through improving investment incentives, specialization, and the scope of the market.

Common interests. A similar logic explains why underlying political cleavages can shape the incentives to invest in state capacity. For any level of institutional cohesiveness, it will be harder to agree on common-interest use of the state when society's cleavages run deeper. Thus, the approach predicts that polities with stronger common interests invest more in the state, all else equal.

A leading historical example is the presence of external threats, which promote a common demand for a strong defense. For example, Britain's state-capacity developments have been closely linked to the need to prepare for war and to pursue naval hegemony, given its empire-building ambitions. Even though Britain was ruled by an elite at the time, it helped to create a sense of common purpose among them. Common interests are also likely to be stronger in the absence of ethnic or religious polarization. Because these cleavages are often the result of geography and/or history, they become indirect determinants of state-building motives.

[8]This is also the focus of Bueno de Mesquita et al. (2003).

Political stability. Another important feature of political systems is that a ruling group might have a more or less secure hold on power. Historically, hereditary authority often allocated political power, especially in monarchies, whereas elections often allocate political power in modern political systems. Thus, expected political turnover reflects the political institutions in place.

How does expected political turnover affect state-capacity investment? One first-order effect comes via the way that incumbent politicians discount the returns to such investments. Investments will tend to be more valuable to an incumbent group that expects to hold on to power rather one that expects to be ousted. As incumbency brings greater control rights over policy, a wider set of policies is most valuable when a group can control their use. This suggest a positive link between political stability and state-capacity investments, as emphasized in Besley & Persson (2010). However, there is also an important interaction with the cohesiveness of institutions. An incumbent government constrained by cohesive institutions has more circumscribed control rights and can therefore tolerate higher expected political turnover without compromising the incentive to invest. High political instability is therefore likely to damage state-capacity investment the most when political institutions are noncohesive. This is because policies chosen under any incumbent will be less reflective of common interests.

2.3. The Bottom Line

We now pull together the elements described above to draw implications for the kinds of states that will form based on their incentives to invest in state capacities.

Typology: three types of states. Drawing on the arguments in this section, Besley & Persson (2011b) suggest that three stylized forms of state can emerge based on incentives to invest in state capacity. Even though no actual state fits perfectly with any of these forms, the typology provides a useful way of summarizing the logic of state-capacity investment.

Common-interest states. Revenue is spent for the benefit of all groups in society (e.g., on public goods, on broad-based transfer programs, and as defense against external threats). Political institutions are sufficiently cohesive, with strong constraints on the executive to drive outcomes closer to the normative benchmark. These institutions constrain the political power of incumbents, which gives them strong incentives to invest in state capacity with long-term benefits, knowing that future rulers will continue to govern in the collective interest. Common-interest states tend to have effective systems of revenue collection with broad-based taxation and strong collective provision using universal programs for health, education, and retirement. They also have legal and regulatory systems that provide the foundations for a strong market economy. Although common-interest states are heterogeneous, they are concentrated in Western Europe and North America.

Special-interest states. Special-interest (or redistributive) states are run to favor a ruling group that is weakly constrained by political institutions. However, its rule is entrenched with high political stability. Investments in state structures primarily serve the interests of the ruling group, albeit with a possible motive to pacify its citizens. But this limits the domain of the state and makes the motives to invest in state capacity weaker than in common-interest states, all else equal. Special-interest states are also heterogeneous and include oil-rich states, such as Kuwait and Saudi Arabia, but also some one-party autocracies, such as China. In these cases, the ruling elite is well entrenched and able to take a long-term view. In special-interest states, rulers use the state as the key vehicle for promoting their own power base. Thus, special-interest states can have a focus on raising income levels, when this suits the interests of the ruling elite.

Weak states. Similar to special-interest states, weak states have weak constraints on the ruling group. But unlike special-interest states, they have political instability. This gives very weak incentives for incumbent groups to invest in state capacity. Thus, the abilities to raise revenue and serve the collective needs of the citizens remain subdued. Weak states also suffer from legal institutions with poorly developed property rights and a lack of market support. Some rulers may choose to bypass the state entirely and build predatory institutions outside of state structures. This further weakens incentives to invest in state capacity. Weak states are found in places such as Afghanistan, Haiti, and the Democratic Republic of Congo. There is a geographical cluster of such states, with varying degrees of weakness, in sub-Saharan Africa.

Graphical summary. **Figure 3** graphically summarizes the argument in this section in a simple flowchart, which focuses on investments in fiscal and legal capacity. The chart illustrates the two-way positive feedbacks between state capacity and income. Moreover, it shows that the two forms of state capacity have a set of common determinants owing to the complementarities between them. One is economic structure, for example, the importance of nontax incomes in the form of natural resource rents or international development assistance. Another is social structure, for example, the cleavages in society over ethnicity or religion, as forged by geography and history. Yet another is political structure, for example, the cohesiveness of political institutions, political stability, and—importantly—the interactions between the two.

3. POLITICAL VIOLENCE

Whether in offensive or defensive mode, violence is close to the heart of the state. But—setting aside the historical work on state capacity—it is only recently that violence has been integrated into our understanding of state behavior, institutions, and development.

A free-standing literature on civil conflict has emerged in political science and economics. This has identified some important empirical regularities: Civil war is more prevalent in areas where there is greater poverty and less cohesive political institutions. The correlation with poverty is one aspect of development clusters. But establishing the direction of causality remains a difficult

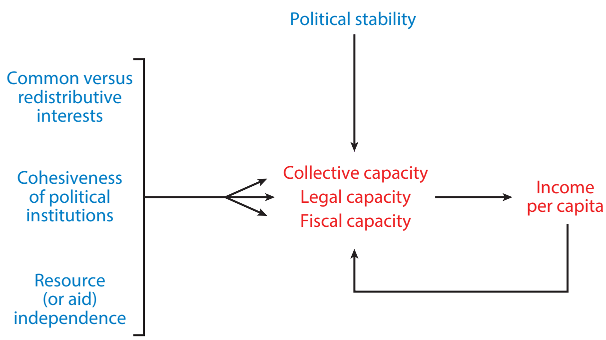

Figure 3

Determinants of state capacity.

problem, even though some progress has been made on it. In common with our approach to state capacity, we find it useful to think of a two-way feedback loop between income and violence.

Civil war is only one manifestation of political violence. Many states achieve apparent peace only by engaging in one-sided violence against their citizens, for example, by locking up opposition groups and stamping out protest. In such cases, we see repression rather than civil war.

The literatures on civil war and repression run largely in parallel, but as we argue in this section, the two forms of violence may really be viewed as two sides of the same coin. Over the postwar period, repression has generally declined when civil war has been on the rise. Looking across countries, repression without civil war generally occurs in a higher range of the world income distribution of nations compared to civil war. These empirical regularities are illustrated in **Figure 4**.[9]

3.1. The Logic of Political Violence

We now discuss a framework that can be used to organize existing work on political violence and to think of investments in political violence as investments in holding or acquiring political power.

Violence and the state. The vast literatures on civil war and repression are surveyed by Blattman & Miguel (2009) and Davenport (2007), respectively. In line with our overall goal of understanding the forces behind development clusters, we do not discuss the detailed findings here. Instead, we focus on the prospective common drivers of political violence and weak state institutions and on the two-way relationship with income. This approach suggests important parallels between the state's capacity for violence and its other capacities. We remark above that external warfare and national defense may be key drivers of fiscal capacity. But the use of violence may also be important in securing power internally. Historically, coercion and repression, rather than victory via the ballot box, were the main methods for incumbents to sustain their political power. Violence may not be monopolized by the state, however. Civil wars clearly illustrate how some groups may be motivated enough to capture the state, or achieve autonomy, that they make their own investments in violence.

Investments in violence. Investments in violence can usefully be thought of as forward looking and strategic. The simplest way to model them is as the Nash equilibrium outcome of a simultaneous-move game, in which investments affect the probability of holding political power (see Besley & Persson 2011c). The outcome from fighting can be modeled by a conflict function, which has been widely used in rent-seeking and conflict models (see, e.g., Garfinkel & Skaperdas 2007). This function maps the resources invested in fighting into the probability of victory for one party, so the expected benefit from investing derives from the higher probability of capturing the state. Each group chooses its equilibrium investment in violence at a point in time—given how much the other group is investing—by optimally trading off the cost of investment against its effect on the probability of holding political power times the expected benefit of holding political power.

3.2. The Bottom Line

We now put the elements together to discuss the kinds of outcomes that can emerge.

[9]The civil war indicator comes from the PRIO/Uppsala database. Here, we measure repression as equal to one if there is a positive value for a given country-year of the purges variable in Banks (2005). This variable is available for much longer than the political terror scale used in **Figure 1**.

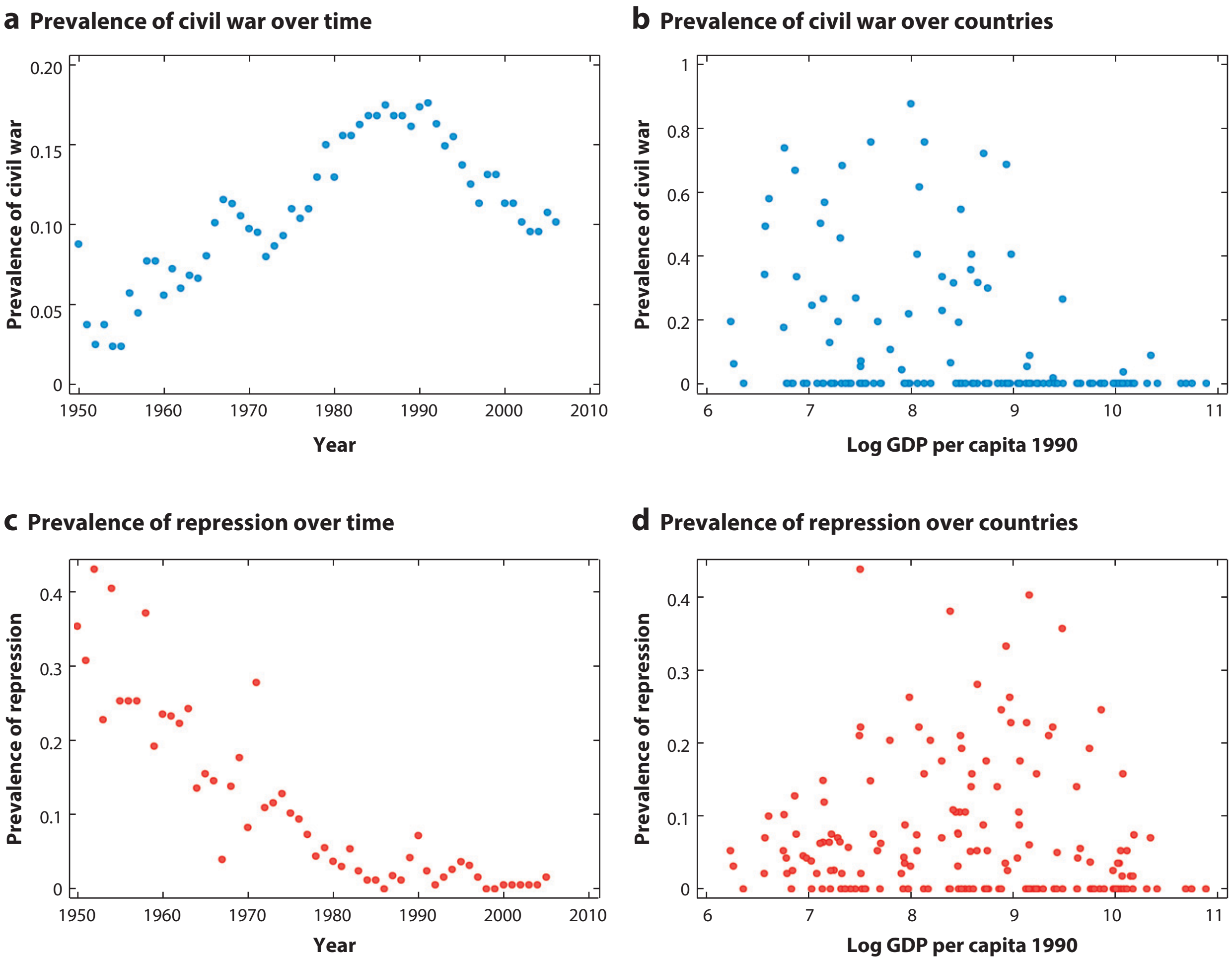

Figure 4

The prevalence of civil war (*a*) over time and (*b*) over countries and the prevalence of repression (*c*) over time and (*d*) over countries. Civil war is measured as in the UCDP/PRIO Armed Conflict Dataset version 4-2007, 1946–2006, and repression is measured using a dummy variable that is equal to 1 in a given country-year if there is a positive level of purges listed in the data set in Banks (2005).

Three states of violence. This simple approach based on the logic of costs and benefits is useful for articulating the forces that shape the use of violence. It seems natural to suppose that the state has some kind of innate advantage in fighting owing to its access to resources and/or the machinery of government. If this is the case, three outcomes are possible.

Peace. Peace is an equilibrium in which neither the government nor any opposition group chooses to invest in violence. It is the outcome when the benefits to capturing the state are small relative to the cost of fighting. It is more likely when political institutions are cohesive, as this reduces the policy bias across incumbents and opposition and hence the benefits to fighting. It may also reflect the absence of important cross-cutting cleavages along religious or ethnic lines. Moreover, higher average income increases the opportunity cost of fighting by raising wages. This is consistent with the observation that rich countries with cohesive political institutions seem to have little political violence.

Repression. Repression is an equilibrium when the state chooses to use its comparative advantage in violence to establish and maintain its hold on power. This will tend to occur in countries with noncohesive political institutions but with an effective military or an opposition that is relatively fragmented or poorly organized. When institutions are noncohesive, a bigger prize in the form of more valuable natural resources or a large flow of (cash) aid can also increase the likelihood of repression.

Civil war. When more than one group, including the government, takes to violence, we get an equilibrium with civil war. This may be because the benefits of capturing the state are even higher than in the repressive state. It may also reflect an opposition that is better organized or that has access to income from natural resources or outside military assistance.

This discussion suggests two very different flavors of domestically established peace. Countries with latent conflict are at peace only because the incumbent regime is dominant and represses any nascent opposition. This is far from the alternative system with peaceful transitions of power, in which the state does not use its apparatus to influence political outcomes. Citizens in many Arab countries lived under repressive regimes before the Arab Spring. The question now is whether the alternative to repression is peace or civil war. In Syria, repression has given way to a bloody civil war. In Egypt, however, there was a brief promise of peace, which has retreated back into repression, in all likelihood a result of the powerful military being intent on preventing civil conflict. Neither military rule nor the elected government of the Muslim Brotherhood pursued common-interest policies that would have encouraged a truly peaceful outcome.

Graphical summary. The determinants of violence emphasized in our discussion of possible equilibria coincide with the drivers of state-capacity investments in Section 2. Of course, this is not a coincidence but a reflection of viewing both phenomena through a single lens. Making the comparison explicitly, we see a systematic result. The economic, political, and social variables that positively affect the motives for building state capacity tend to negatively affect the motives to engage in repression or civil war. This parallel is highlighted in **Figure 5**, which shows a similar flowchart to **Figure 3**, except that the outcomes at the center are the two forms of political violence rather than state capacity.

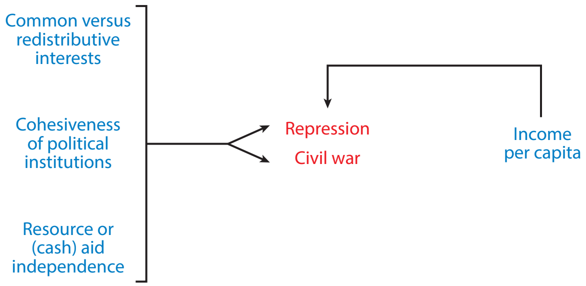

Figure 5

Determinants of political violence.

Thus, forces that create cleavages in society not only are less conducive to state building, but also are more conducive to the use of violence because they make the benefits of capturing the state greater, ceteris paribus. These include noncohesive political institutions and ethnic or religious social cleavages. States in which large natural resource rents or aid flows are under the control of the incumbent group also have higher expected returns to fighting to capture the state.

In terms of feedbacks between violence and income, civil conflict is likely to have the most negative consequences for income, as such violence is uncoordinated and often involves multiple parties. This leads to more widespread economic disruption and more significant destruction of physical and human capital. In the other direction, a lower income level makes it cheaper to invest in violence via the opportunity-cost channel.

Recalling **Figure 3**, we can also think about feedbacks between violence and state building. Because of its effect on political instability, prospective civil war feeds into one of the drivers of state-capacity investment. This, together with the fact that such violence occurs mostly in places where political institutions are noncohesive, implies that a greater risk of civil war weakens the motives to invest in state capacity. So states prone to civil war are more likely to be weak states. The link to repression is more equivocal. One-sided political violence by a group, which raises its own probability of maintaining power, can increase political stability and hence provide an incentive to invest in state capacity, even when institutions are noncohesive. Thus, repressive outcomes tie naturally to the case in which a special-interest state emerges.

4. TYPES OF STATE

4.1. Assembling the Components

Combining the approaches in the previous two sections, we can see why state capacity, violence, and income may naturally cluster as in **Figure 1**. **Figure 6** illustrates the two channels that we highlight throughout: common drivers and two-way feedbacks.

The common drivers of state capacity and political violence include underlying economic factors, such as resource or aid dependence, and social factors that shape demands on government policy, such as the homogeneity of preferences and the commonality of interests. Also crucial are political institutions, in particular how cohesive they are and how they regulate political turnover. The two-way feedbacks concern the linkages among income and violence, income and state capacity, and different forms of state capacity. Such feedbacks have particular resonance with

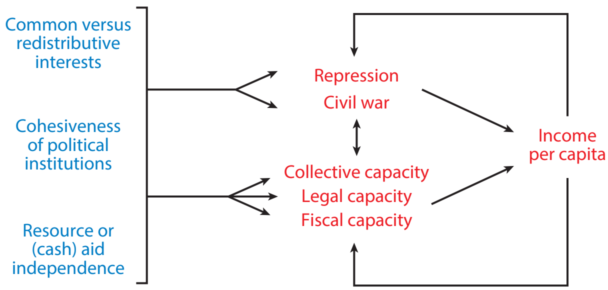

Figure 6

Why development clusters.

	Weak	Special interest	Common interest
Peace	Weak common interests Noncohesive institutions High military effectiveness Poorly organized opposition	Strong common interests Noncohesive institutions Low natural turnover	Strong common interests Cohesive institutions
Repression	Weak common interests Noncohesive institutions Low military effectiveness Poorly organized opposition	Weak common interests Noncohesive institutions High military effectiveness Poorly organized opposition	N/A
Civil war	Weak common interests Noncohesive institutions Low military effectiveness Well-organized opposition	Weak common interests Noncohesive institutions High military effectiveness Well-organized opposition	N/A

Figure 7

The Anna Karenina matrix.

Myrdal's view of development, which emphasizes the need for a broad approach, as well as one that appreciates feedback loops.[10]

4.2. Changing Development Paths

Changes in exogenous conditions can be important triggers that put a state on a different dynamic trajectory. These could be reforms toward cohesive institutions at particular points in time that Acemoglu & Robinson (2012) refer to as "critical junctures." Besley et al. (2013c) show theoretically and empirically how such reforms can come about after the death of an entrenched leader, as this can change the incentives to create cohesive institutions by creating greater political instability. Changes in geopolitical conditions that alter the nature of military threats could also have far-reaching consequences. The experiences of South Korea, Taiwan, and Finland would be hard to explain without reference to the specific threats they faced from the 1950s onward. They parallel the forces unleashed by military rivalries between European states in an earlier period, which created an existential threat to many polities. Such threats and rivalries can contain domestic conflicts, and this in turn can spur growth, which feeds back onto state building and peace.

4.3. The Anna Karenina Matrix

The underlying nature of the state shapes how violence is contained or manifested, as well as incentives to create and maintain specific state capacities. Besley & Persson (2011b) suggest a matrix of possible outcomes, based on the three-way classifications of states in Section 2 and those of political violence in Section 3. The outcomes are summarized in **Figure 7**, which we call the Anna Karenina matrix in honor of the first sentence in that particular Tolstoy novel: "All happy

[10]"By *development* I mean the *movement upward of the entire social system*, and I believe this is the only logically tenable definition. This social system encloses, besides the so-called economic factors, . . . the distribution of power in society; and more generally economic, social, and political stratification; . . . The dynamics of the system are determined by the fact that among all the endogenous conditions there is *circular causation*, implying that if one changes, others will change in response, and those secondary changes in their turn cause new changes all around, and so forth" (Myrdal 1974, pp. 729–30, emphasis added).

families resemble each other; each unhappy family is unhappy in its own way." Our approach emphasizes the common features of successful economies and the states that have evolved to support them. The upper-right corner of this matrix highlights a key development cluster, which encompasses important aspects of what we mean by development: an absence of political violence, high public and universal provision of key goods and services, a strong legal framework for markets, and a broad-based tax system. According to the approach we discuss, it may be caused by strong common interests and/or cohesive political institutions.

Underdevelopment is a departure from these conditions, and the heterogeneity reflects the unhappy families in Tolstoy's apposite quotation. Some apparent departures may be inconsequential. For example, the United States is hardly an underdeveloped state; even though it does not have a VAT or universal health care provision, it has all other characteristics of a favorable development cluster, including one of the highest living standards in the world. Among poorer countries, various different outcomes are possible. The propensity for violence, a lack of conditions for market development, poor institutions for collective provision, and a lower tax take in GDP cluster with income and each other in various ways. It is important to recognize the different factors that lead to a multiplicity of low-end development clusters when assessing how the international community might provide development assistance. Failure to take the multidimensionality into account could easily lead to only a partial diagnosis of what matters, with a low return to a particular kind of assistance. Thus, steps toward improving education may yield lower returns in places where labor markets are poorly regulated and/or ineffective infrastructure investment remains in place.

States that have failed to create even the most basic centralization of power typically fail in all dimensions. Some of the most intractable problems arise in countries such as Somalia and Afghanistan, where basic law and order are still limited, and private capacities for taxation, law, and collective provision are arguably more important than other aspects of state capacity. In such cases, the first step to build an effective state may be a decision to create a central state. However, given the cleavages and fragmentation that underpin the status quo, this is not straightforward. To different degrees, these issues pervade African states, which were created out a pattern of colonial rule in which nationality was superimposed on a cultural and ethnic map. This is far from an ideal starting point for building state capacities.

5. POLICY IMPLICATIONS

All contemporary approaches to development recognize the crucial role that effective policy can play. The approach in this article provides a distinctive perspective. In this section, we sketch some general and abstract policy implications. Specific studies are needed to put flesh on these bones and get into concrete country circumstances.

5.1. Institutional Reform

Our approach is consistent with the maxim of "getting the institutional framework right." But it suggests that proponents of political reform should carefully distinguish between executive constraints and open access to power. We argue above that institutional cohesiveness is primarily achieved via executive constraints. These may be multidimensional, strengthening both judicial and parliamentary oversight, and perhaps increasing transparency in policy making. Increases in openness, allowing a wider range of citizens to participate as candidates and voters, play quite a different role in our framework. In the absence of executive constraints, more openness could lead to greater political instability and hence weaker incentives to invest in state capacities and stronger motives for an incumbent to use repression.

This perspective on the role of institutions shares the basic message of Acemoglu & Robinson (2012) that governments need to be constrained from using the state to further private interests at the cost of the public interest. However, we place less emphasis on the effects on private investment, choosing instead to focus on the dynamic consequences of institutions for investments in state capacity and political violence.

5.2. Outside Policy Interventions and State Capacity

Our approach suggests that stronger state capacities can be viewed as a direct objective of policy. This has become the focus of many initiatives regarding capacity building in poor economies. But our approach points to a distinct difference between finding more effective ways of delivering public services outside the state, and doing so by changing how state structures work. The former may give better outcomes, which are certainly valuable but do not contribute to the process of state building. This bears on the appropriate use of knowledge created in the randomized control trials championed by Banerjee & Duflo (2011). Without enough collective capacity, there is no guarantee that knowledge is turned into effective government policy, and without enough fiscal capacity, the resources to scale up programs may not be available through taxation. Reaping long-run benefits may thus require complementary investments in state capacity. But in environments that lack cohesive institutions, getting this started is not straightforward. The complementarities at the heart of our approach suggest that it is difficult to view outside interventions as a set of unconnected strategies.

5.3. Outside Policy Interventions and Political Violence

Our approach also gives some insight into possible consequences of outside interventions when political violence is a possibility. Aid in the form of generous direct budgetary support can encourage governments to step up their repression to hang on to the prize of staying in office. Of course, this may not be the intention of aid policy. But the dilemma faced by donors who confront countries where violence is prevalent is real, as illustrated by the recent history of assistance to Afghanistan and Egypt. That aid policy is influencing an equilibrium process for investments in violence and state capacity must be considered, however difficult it may be to assess the empirical magnitudes associated with such margins. Our approach certainly does not simplify the analysis of external intervention, and we do not have much empirical knowledge about such responses to aid (see, however, Nunn & Qian 2014 on the effect of US food aid on civil conflict). This may explain the temptation to focus on incremental interventions that are small enough to have little impact on the state or the political equilibrium. But it is important to debate how much progress can be made without attention to the wider macro picture.

5.4. Contingencies in Development Assistance

It is also important to recognize that low-end development clusters are likely to have multiple causes. Some drivers will be hard to correct, such as underlying social cleavages that reflect history and/or geography. Although the legacy of colonialism may have led to an arbitrary endowment of political geography, redrawing this to encourage state building and peacefulness seems like a very remote possibility. But sometimes opportunities arise, such as the split between the Slovak and Czech Republics, to engineer a more propitious starting point. The recent creation of an independent South Sudan comes with huge challenges, but the next step is to consider how one might create preconditions for an effective state.

Furthermore, international assistance comes in many flavors and needs to be tailored to the specific circumstances, as discussed at length in Besley & Persson (2011a). A key point is that the approach discussed in this article allows us to think about how policy making, as well as investments in state capacity and violence, might respond to different types of assistance. Also, whether budget support, technical assistance, military aid, postconflict support, or capacity building is the most effective form of intervention depends on the type of state, as the preconditions are very different in the different cells of the Anna Karenina matrix. Although we remain far from settled knowledge, this may still be a promising approach to think about the macro aspects of development assistance.

6. FURTHER RESEARCH

This article focuses on an approach to better understand the clustering of income, state capacity, and the absence of political violence, in which purposeful investments in state building and violence are at center stage. The research agenda on state capacity and effective states is at a preliminary stage, having not been central to economic approaches to development or public policy. Even free market–oriented economists have failed to discuss how it is that a minimal state will be created to protect private property rights and establish competitive entry. And those who support wider public intervention have spent insufficient time articulating how effective state provision, regulation, and tax collection are to be organized and implemented. It is not surprising therefore that the knowledge base for studying these issues remains limited.

In some cases, the conceptual framework needs developing. For example, in some contexts, whether by design or circumstance, there are multiple investors in state capacity rather than the single government monopoly, which we assume throughout this discussion. Historically, centralized states emerged gradually from diffused local power structures, which (in some cases) more closely resembled protection rackets with private tribute, in which legal capacity was inherent in customary law and practice, and collective capacity had little organized provision of public goods. Such conditions still prevail in some low-end development clusters.

Multiple investors in state capacity can also be inherent in government design. One important topic is the study of state-capacity investment in federal states where different functions constrained by state capacity are decentralized, perhaps to different degrees, such that pervasive complementarities are not necessarily present. Negative spillovers across boundaries (e.g., when building fiscal capacity) can also be an issue.[11]

Another issue concerns the role of nongovermental organizations (NGOs). Some NGOs directly provide public services, sometimes relying on the collective capacity of outside governments or international organizations. This could act as a substitute for indigenous state capacity, which may weaken the host country's incentives for building it. It is important to analyze the longer-run incentives created by frequent, albeit well-intentioned, external intervention based on sound humanitarian logic. Some forms of NGO activity can be geared toward a better functioning state. Providing better knowledge and/or technical expertise is a case in point, which can raise common interests in society. Some NGOs also try to monitor government behavior, for example, in the resource sector. This can potentially complement efforts to build cohesive institutions. The role

[11]Such work is now starting (see Acemoglu et al. 2013).

of external organizations in improving state capacity is thus an important area for further investigation.

The approach also poses new challenges for measurement and empirical work. For example, little is known about how far specific forms of investment in state capacities have measurable returns, and how the investments themselves can best be measured. Better measurement is also necessary for an empirical understanding of what drives state capacities. Although we can learn a certain amount from differences in institutions, it is not straightforward to turn this into causal evidence on drivers of state capacity, violence, or income. Institutions affect the economy in different ways, making it hard to isolate specific mechanisms. Finally, we stress some concrete policy margins on which interventions may have an impact. But it is more difficult to come to grips with the empirical magnitudes of complementarities, feedback loops, and the equilibrium responses of investments in violence and state capacity, especially when observed reforms are small scale and specific. Most likely this will best be done by a mixture of estimation and calibration. Such an approach would also have the potential to provide a better connection between micro and macro research on development.

DISCLOSURE STATEMENT

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