CHAPTER 1

Development Clusters

Little else is required to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice, all the rest being brought about by the natural course of things.

Adam Smith, 1755

Almost all economic analyses presume the existence of an effective state. Specifically, economists invoke the existence of an authority that can tax, enforce contracts, and organize public spending for a wide range of activities. We then study concepts such as market failure and the state's response to it, the provision of public goods, and optimal taxation for the funding of state activities. But many of the major developments in world history have been about creating this starting point. Arguably, the situation presumed by economists is relevant only to the past 100 years of history for a fairly small group of rich countries.

The effective state is not only of historical interest. A tour of the developing world today rapidly confirms that the building of a state capable of taxing, spending effectively, and enforcing contracts remains a huge challenge. Weak and failing states are a fact of life and a source of human misery and global disorder.

These observations are especially poignant because income per head in the world's richest countries is about 200 times higher than in the poorest. This enormous income gap is certainly one of the most pressing issues facing humanity. Why some countries are rich and others poor is indeed a classic research question not only in economics, but in other social sciences such as economic history and political science as well. To better grasp the roots of wealth or poverty of nations is interesting in and of itself. But these roots are also of paramount importance for donors seeking to improve the lot of poor communities through various forms of development assistance.

It has long been understood that economic development is about much more than rising incomes. Indeed, state effectiveness is now given center stage in practical policymaking, with a greater focus on how to deal with countries hobbled by weak, fragile, or failed states. A number of national and international actors—such as the World Bank, the European Union, DFID in the United Kingdom, and SIDA in Sweden—have recently launched initiatives targeted toward such problem states.

Specific Indexes of State Weakness and Fragility Alternative attempts have been made to map the problem empirically, relying on a variety of measurable indicators.[1] Figures 1.1 and 1.2 illustrate two specific indexes of state fragility/weakness, namely the Brookings Institution's *Index of State Weakness* for all but the richest countries in 2008 and the Polity IV project's *State Fragility Index* for all countries in 2009. Both of these maps illustrate the underlying classification on a gray scale. Specifically, the countries in the decile with the weakest or most fragile countries are colored in black, whereas deciles higher up in the classification are marked on a sliding gray scale, with white denoting the decile with the strongest states (missing countries are marked by a hatch pattern).[2]

Although the precise classifications behind the indexes differ, both studies find that some 40–50 states suffer from serious weakness or fragility, with the strongest concentrations in Sub-Saharan Africa and South and Central Asia. Of course, there is no general agreement on exactly what defines a weak or fragile state. The *State Fragility Index,* e.g., is derived by aggregating indicators in eight dimensions, aimed at capturing the effectiveness and legitimacy of the state in the security, political, economic, and social spheres.[3]

A closer look at the underlying indicators raises a number of issues. Economic legitimacy is measured by the export share in manufacturing, but exactly

1. See Rice and Patrick (2008) for an overview of different attempts to empirically measure state weakness or fragility.

2. Since the Brookings index is not defined for 36 of the most developed countries (also marked by a hatch pattern), we do not use the white end of the scale in Figure 1.1.

3. Each country is scored in each of the eight dimensions on its situation from 1994 and onward. Specifically, security effectiveness is gauged by three measures of the frequency of outright conflict, 1994–2007; security legitimacy by a measure of state repression; political effectiveness by three measures of regime and leader durability and the frequency of coups; politcal legitimacy by three measures of factionalism, ethnicity, and fragmentation; economic effectiveness by GDP per capita; economic effectiveness by the share of exports in manufacturing production; social effectiveness by the Human Development Index; and social legitimacy by the infant mortality rate.

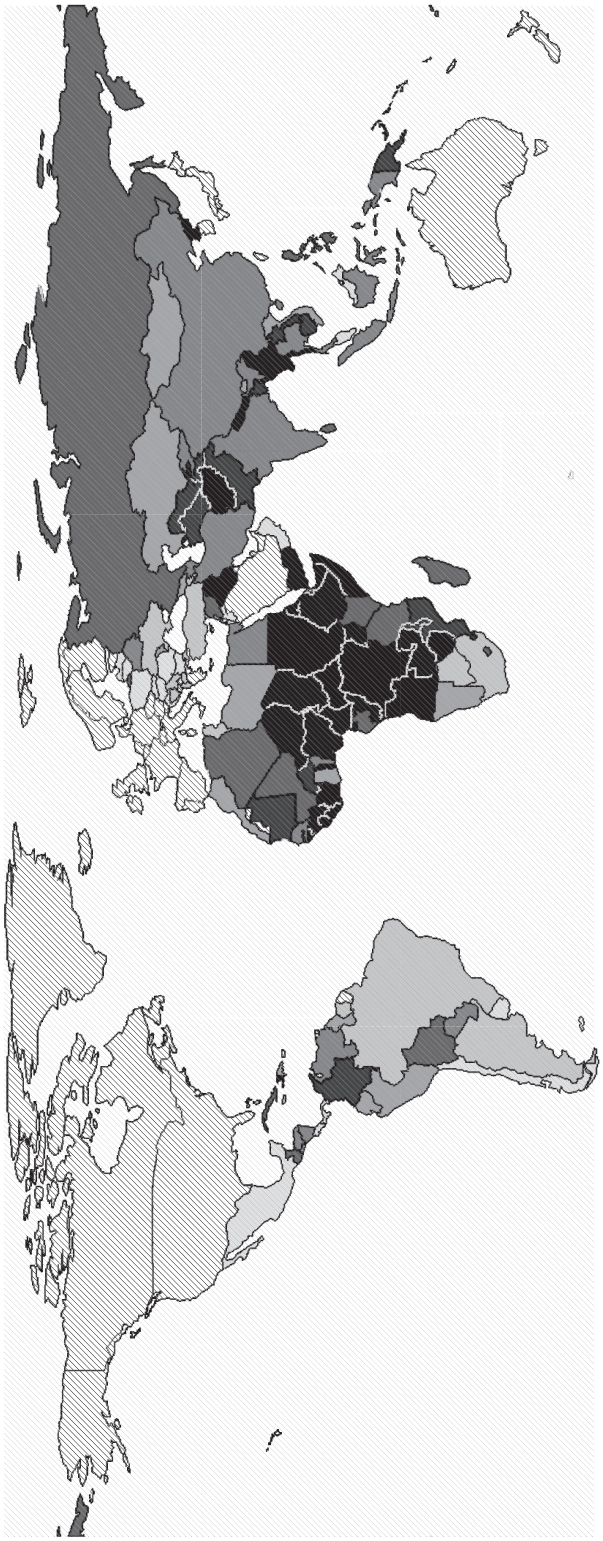

Figure 1.1 Brookings Index of State Weakness, 2008.

Figure 1.2 Polity IV State Fragility Index, 2009.

how to read this indicator is unclear. Leadership duration is the indicator for political effectiveness, where the direction of the relation is also opaque. Although these may seem like minor quibbles, they touch upon a deeper issue in understanding state fragility—the need to distinguish carefully between symptoms and causes. But this is next to impossible absent a properly developed conceptual framework. These questions notwithstanding, the indexes in Figures 1.1 and 1.2 clearly bring home one point on which we certainly can agree: state fragility (or state weakness) is inherently a multidimensional concept.

A Challenging Agenda This book offers an approach to studying weak or fragile states, taking a first step toward bringing them into mainstream economic analyses. It is the hallmark of mature science that existing ideas should be expanded into new domains. We proceed in this spirit by using more-or-less standard ideas and methods to study the basics of state building. A key issue is to understand what creates effective states.

Central to our approach is the idea of complementarities. As shown in what follows, almost all dimensions of state development and effectiveness are positively correlated. Moreover, historical accounts demonstrate vividly that state authority, tax systems, court systems, and democracy coevolve in a complex web of interdependent causality. Simplistic stories that try to paste in unidirectional pathways are thus bound to fail.

However, this complexity does not mean that a quantitative approach of theorizing and looking at data is hopeless. On the contrary, we argue throughout the book that building models as stripped-down representations of reality provides useful windows onto complex processes, which allow us to see particular features more clearly. Furthermore, looking at data and trying to codify empirical regularities does more than simply breathe life into the narrative. The data play a central role in developing our thinking about what is important and what can be observed. Indeed, the modeling we put forward is structured around variables and magnitudes that can be both theoretically defined and, in principle, empirically measured. This disciplines the theory and extends the domain of its applicability.

This introductory chapter lays out many of our main ideas in brief but accessible form. It is also an opportunity to review some of the historical evidence and discuss some narrative accounts of development that shape our thinking. But we do not intend our review to be exhaustive. Our primary aim is to demonstrate a strong link between our work, with its clear roots in mainstream economics, and research within other disciplines and less mainstream approaches.

1.1 Salient Correlations

Several characteristics beyond *income per capita* enter our intuitive perception of the defining qualities of a developed country. One is the institutional capability of the state to carry out various policies that deliver benefits and services to households and firms. We refer to this capability as *state capacity*. Another development characteristic is that conflicting interests can be resolved peacefully, rather than by alternative forms of violence. We refer to (the inverse of) this feature as *political violence*.

Policy failures owing to weak state institutions tend to be found in countries riddled with massive poverty and in societies plagued by violent internal conflicts. In most developed countries, by contrast, nearly everything works: we see strong policies supported by strong state institutions, high incomes, and conflicts of interest resolved peacefully. These correlations create *development clusters,* where the level of state capacity and the propensity for political violence vary systematically with the level of income. Thus, our notion of clusters does not describe a strong correlation for the *same* outcome variable in a set of neighboring countries (even though Figures 1.1 and 1.2 hint at such geographical clustering). Rather, we use the concept to describe strong correlations among *different* outcome variables in the same country. To better understand these clusters as manifestations of the general development problem is one of the major objectives of this book.

Fiscal and Legal Capacity To illustrate the clustering, we need some concrete empirical measures. For state capacity, we can distinguish two broad types of capabilities that allow the state to take action. One concerns the extractive role of the state. We call this capability *fiscal capacity*. Does a government have the necessary infrastructure—in terms of administration, monitoring, and enforcement—to raise revenue from broad tax bases such as income and consumption, revenue that can be spent on income support or services to its citizens? The other type of capacity concerns the productive role of the state. Is it capable of raising private-sector productivity via physical services such as road transport or the provision of power? Or does it have the necessary infrastructure—in terms of courts, educated judges, and registers—to raise private incomes by providing regulation and legal services such as the protection of property rights or the enforcement of contracts? We focus on the latter capability, which we refer to as *legal capacity*.

In later chapters, we consider different measures of both types of state capacity. For now, we illustrate them with two specific measures. The first is total tax revenue as a share of GDP, as measured by the IMF at the end of the 1990s (in 1999). We treat the overall tax take as an indicator of fiscal capacity. The second is an index of government antidiversion policies, as measured by the International Country Risk Guide, also at the end of the 1990s (in 1997), and normalized to lie between 0 and 1. This index is itself an aggregation of different perception indexes, but it has been commonly used in the macro development literature to gauge the protection of property rights.[4] We treat it as an indicator of legal capacity.

As we emphasize later, fiscal and legal capacity are concepts that have not been much studied by economists, so precise measurement is certainly an issue. For example, using the total tax take raises obvious questions about the capacity to tax versus the willingness to tax. The measures we use in this book are at best approximations of different aspects of state capacity. As we will see, however, the empirical patterns tend to be quite similar for a number of alternative proxies. Chapters 2 to 4 provide much more detail and discussion about our data and their sources.

Some Basic Facts Figure 1.3 shows that these indicators of fiscal and legal capacity are positively correlated. It plots the tax share on the vertical axis and the property-rights protection index on the horizontal axis. A clear picture emerges. Countries that have better fiscal capacity also tend to have better legal capacity. Both measures are also positively correlated with contemporaneous GDP per capita. When we divide the observations into low-, middle-, and high-income countries, according to their 2000 GDP per capita in the Penn World Tables, almost all of the high-income countries lie to the northeast in the chart, whereas the low-income countries lie to the southwest. Moreover, the positive relationship between fiscal and legal capacity is apparent within each of the three income groups.

The two uppermost observations in the northeast corner of the graph are Denmark and Sweden, both with high income, an overall tax take above 50%, and a level of property-rights protection on a par with other top performers such as Switzerland. The two leftmost observations in the southwest corner are Mali and Niger, both with low income, among the lowest tax takes, and the

4. See, e.g., Acemoglu, Johnson, and Robinson (2001) and Hall and Jones (1999).

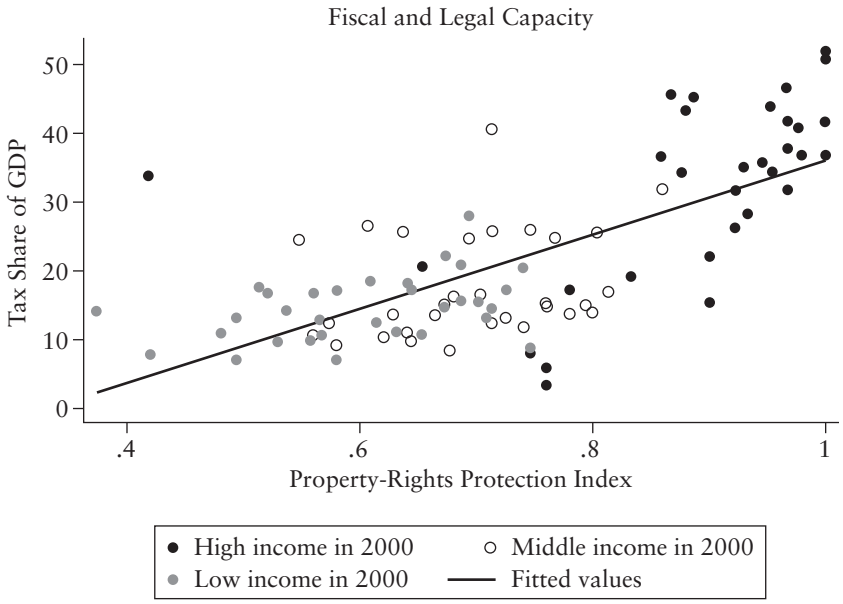

Figure 1.3 Legal and fiscal capacity conditional on income.

two worst scores in our sample on the property-rights protection index. A few outliers among the high-income countries stand out by deviating significantly from the regression line. The observation with a tax share above 30% of GDP and one of the lowest indexes of property-rights protection is the Seychelles. The group of three high-income countries charging less than 10% of GDP in taxes is made up of the oil states of Bahrein, Kuwait, and Oman.

Figure 1.4 illustrates that the two dimensions of state capacity are also systematically correlated with political violence. Specifically, we divide the countries into two groups: those that have experienced at least one year in civil war in the half-century between 1950 and 2000 and those that have not, according to the Armed Conflict Dataset (ACD). Clearly, past civil-war experience is much more common at low levels of state capacity. Two countries in the upper part of the graph stand out a bit. The high tax-take country with some civil-war experience is France and the peaceful country with taxes above 40% of GDP and midrange property-rights protection is Botswana.

Figure 1.5 revisits the fiscal-cum-legal capacity plot, once again, when the observations are subdivided by their scores on the 2009 *State Fragility Index*—i.e., the index underlying Figure 1.2. Here, the correlation is even starker. When we classify countries by having some fragility or not, the observations divide

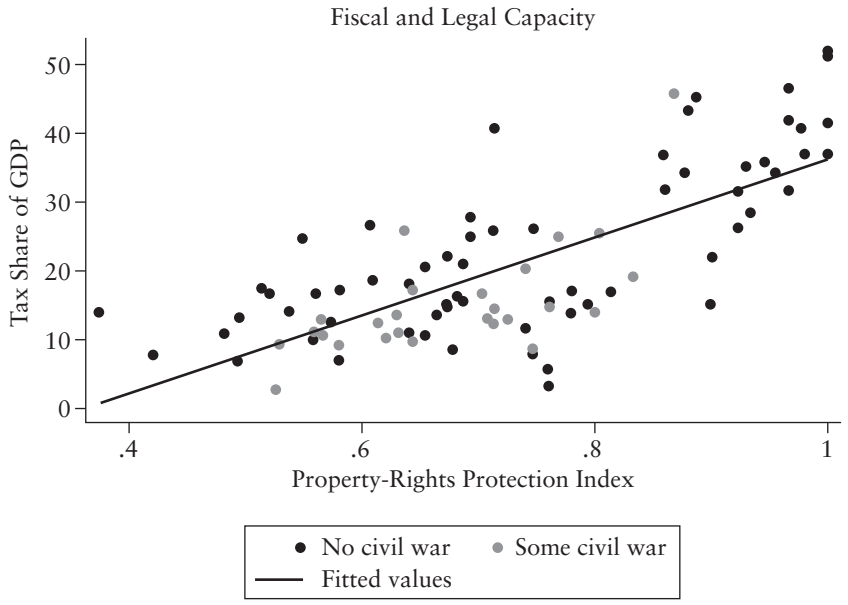

Figure 1.4 Legal and fiscal capacity conditional on civil war.

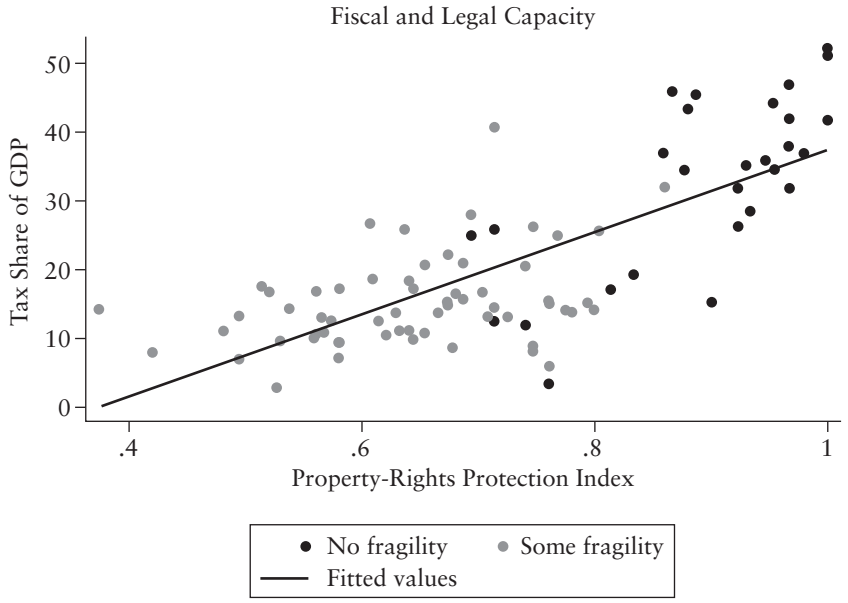

Figure 1.5 Legal and fiscal capacity conditional on fragility.

almost perfectly into a nonfragile, high-state-capacity group and a fragile, low-state-capacity group.

1.2 The Main Questions

One of the primary purposes of this book is to explain why development clusters, as seen in Figures 1.3 to 1.5. To better understand such patterns in the data, we basically have to pose—and answer—three general questions:

1. What forces shape the building of different state capacities and why do these capacities vary together?
2. What factors drive political violence in its different forms?
3. What explains the clustering of state institutions, violence, and income?

Adam Smith saw things very clearly more than 250 years ago when he wrote the passage quoted at the beginning of this chapter. Smith listed "peace, easy taxes, and a tolerable administration of justice" as sufficient conditions for prosperity. His three pillars of prosperity are broadly the same as ours, although with a somewhat different emphasis. For us, peace refers to the absence of internal conflict (and political repression) rather than international wars. Indeed, we argue that the latter can even be a force for effective state building. For us, easy taxes means taxes that are easily extracted and broad-based—not a statement about the level. Further, for us, the analysis of justice means finding ways of ensuring that the state supports contracts, enforces property rights, and limits (public or private) predation. Subject to this slight change of focus, our three main questions basically become an inquiry into the circumstances that enable nations to erect Smith's three pillars of prosperity.

In this endeavor, we pool together ideas from four broad research agendas: (1) the study of long-run development and its determinants, (2) the study of civil wars and other forms of internal conflict, (3) the study of the importance of history for today's patterns of development, and (4) the study of how economics and politics interact in shaping societal outcomes. Thus, our work builds on many earlier strands of scholarship, and in what follows we try to give due credit to our predecessors in the large and in the small.

When grappling with the three central questions, we draw extensively on our own research during the last few years on the economics and politics of

state building and violence in the process of development [see, e.g., Besley and Persson (2009b, 2010a,b, 2011)]. Even though we rely heavily on this earlier research, the book goes far beyond our articles and papers in terms of synthesis and overall perspective. Like our research papers, it aims at presenting new theory as well as new evidence. In line with that goal, most of the chapters interweave theoretical and empirical material.

The theory appears as a sequence of formal models, designed to gradually shed more light on the development clusters that we observe in the data. In the grand scheme of development, of course, many economic and political outcomes are jointly determined in a web of two-way relations, but to untangle this web requires an approach that starts out simply and gradually adds new layers of more complex interactions. For example, political institutions are taken as given and as a determinant of other outcomes all the way up to Chapter 7, where we start analyzing how these institutions might themselves be determined.

Aside from providing motivation for the theory, the empirics largely take the form of raw or partial correlations in cross-sectional contemporary and historical data. These correlations are closely related to the predictions of the theory. But with only a few exceptions, we stop short of an empirical strategy that seriously tries to isolate the causal relations in the data. Taking that further step is not so easy, because the whole point of our analysis is that most of the variables of interest are determined jointly. Laying bare causal relations in the data thus requires that we credibly isolate an exogenous variation in some particular variable of interest. As usual with cross-country data, that is not a trivial task.

The rest of this introductory chapter provides an overview of the book and its main messages. We explain our theoretical approach, describe the most important ideas that arise from it, and take an initial look at some data. As we continue with the overview, we also outline the contents of the seven chapters to follow. At the end of the chapter, we highlight some of the main themes that recur in the gradual development of our argument.

1.3 Fiscal Capacity

Existing Research by Economists State capacity is not a concept that appears prominently in traditional approaches by economists. With a few exceptions, macroeconomic analyses of development view income per capita, rather than

policy-supporting institutions of the state, as the main outcome to be explained. Consider the two measures of state capacity illustrated in Figures 1.3–1.5. When it comes to fiscal capacity, theories of taxation—be it in public finance or political economics—emphasize constraints on the government's ability to impose a certain tax rate on a certain tax base. But these are generally incentive constraints, tied to asymmetric information or political forces, rather than constraints owing to lack of an administrative infrastructure. As for legal capacity, the government's capability to enforce contracts or protect investors is almost universally assumed, rather than analyzed, in contract theory or finance. To abstract in this way from the hurdles for policymaking raised by the extractive and productive capacities of government seems unwarranted in view of the history of today's rich countries and the reality of today's poor countries.

Existing Research by Historians The lack of attention by economists stands in stark contrast to the view taken by many political and economic historians who see the state's capacity to raise revenue as an important phenomenon in itself. Moreover, historians link this capacity to a thirst for military success and regard it as a key factor behind the successful development of nation states [see, e.g., Brewer (1989), Hintze (1906), or Tilly (1975, 1985)]. As famously stated, "war made the state and the state made war" (Tilly, 1975, p. 42).

In line with the core thesis, tax systems in countries such as the United States, the United Kingdom, and Sweden have indeed been reformed and expanded in connection with actual or latent external conflicts. Political scientists such as Migdal (1988) have emphasized that one of the major problems of developing countries is that their states are often too weak and lack the capacity to raise revenue and govern effectively. However, historians have not really systematically explored the links between the fiscal (extractive) capacity and legal (productive) capacity of the state, although Strayer (1970) does stress the building of fiscal and judicial institutions in the early development of European states.

Basic Theoretical Approach One cornerstone of our framework is to distinguish between policymaking and institution building. In particular, the capacity of the state is built up over time, and current capacity constrains the policies pursued by the current incumbent government. For example, today's ability to levy an income tax is constrained by the existing fiscal capacity of the state, e.g., the administrative capacity to monitor and enforce tax payments and the

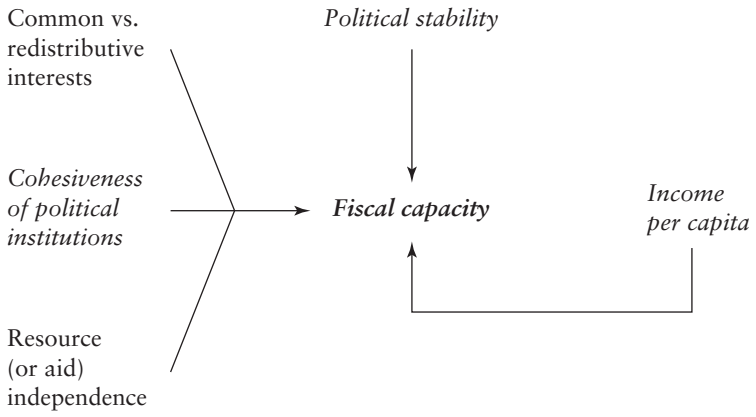

Figure 1.6 Scope of Chapter 2.

institutions necessary to implement income-tax withholding by firms. Another cornerstone of our framework is to consider state building as the outcome of purposeful and forward-looking decisions by successive incumbents. Specifically, we model decisions about future state capacity as an explicit investment problem. In this problem, incumbents weigh the present costs of investing against uncertain future expected benefits.

Investments in Fiscal Capacity Chapter 2 lays down the very first building block in our theoretical framework by formulating the simplest possible model by which to analyze state building. The flowchart in Figure 1.6 is a stylized illustration of the analysis in Chapter 2. The fonts in the chart as well as in the flowcharts to follow have specific meanings. Thus, we use bold italics for those outcomes that are endogenous in the analysis, italics for those that are temporarily taken as given but will eventually be made endogenous, and a regular font for those outcomes that are taken as given throughout the book. As Figure 1.6 illustrates, most political and economic factors are taken as given in Chapter 2, where they are represented by exogenous parameters; but when we generalize the analysis in later chapters, several of these parameters are turned into endogenous variables.

The simplest version of our core model has two symmetric groups, two time periods, and a single form of state capacity. In each period, a government representing one of the groups sets a tax rate on a given level of income. The revenue can be used for various forms of spending, although existing political institutions constrain how much money can be transferred to the incumbent's

own group at the expense of the opposition group. At a cost, the period-1 incumbent government can invest in fiscal capacity that becomes available in the second period. The survival of the incumbent until the next period is uncertain, but exogenous, as are the future uses of government revenue. We analyze how given economic and political factors affect the motives to invest.

Three Possible States Depending on its particular constellation of parameter values, a particular country in a particular time period can end up in any of three possible states. We call the first possible outcome a *common-interest state*. Here, future government revenue is mainly expected to be used in the common interest, e.g., on defense against the threat of external conflict. In common-interest states, any incumbent makes considerable investments in fiscal capacity.

The second possibility is a *redistributive state*. In such states, government revenue is predominantly used for redistribution with the incumbent being more or less constrained by political institutions. Incumbents still invest in fiscal capacity, as there is enough political stability.

Finally, we may have a *weak state,* in which case government revenue is also used for redistribution, but political institutions are noncohesive and political instability is high. Under these circumstances, no incumbent invests in the fiscal powers of the state.

A simple regression analysis shows that cross-country correlations in the data are consistent with some of the basic theoretical predictions of the core model.

Extensions of the Basic Framework Chapter 2 also shows how our core model can be given microeconomic underpinnings. Moreover, it shows how one can relax a number of the stark assumptions underlying the basic framework: only two periods, no economic distortions by taxation, linear functional forms, only one good, no income inequality, equally sized groups, the absence of political polarization, and so on. In each of these extensions, we show how the core model is altered, what the alterations mean for the analysis of investments in fiscal capacity, and the principal additional insights obtained.

1.4 Legal Capacity

In Chapter 3, we begin our successive extension of the core model formulated in Chapter 2. In particular, we introduce a second dimension of policy and state

capacity, namely market-supporting regulation and the constraints imposed by legal capacity. This extension serves two useful purposes. It allows us to study the relationship between the two aspects of state building. It also serves to endogenize income, as better market support helps raise private incomes. The chapter presents alternative microeconomic foundations for the reduced-form model that we use in later chapters. One of these microfoundations emphasizes imperfect contracting opportunities in the capital market and the other stresses imperfect protection of private property rights against predation by other private agents or government bureaucrats. Chapter 3 also demonstrates a way to introduce private capital accumulation into our model on top of government investments in the state.

Complementarities in State Capacity An immediate result in Chapter 3 is that fiscal and legal capacity tend to be *complements*. In other words, investments in one aspect of the state reinforce the motives to invest in the other. If future fiscal capacity is higher, additional fiscal benefits make it more advantageous to invest in legal capacity to expand market incomes and the prospective tax base. Analogously, if future legal capacity is higher, it makes market incomes and tax bases higher, which, in turn, raise the motive to invest in fiscal capacity.

This complementarity has important implications. On the one hand, it provides a clear hint as to why fiscal and legal capacity may be positively correlated with one another, as well as with income, as they are in Figure 1.3. On the other hand, it suggests that many determinants of state capacity should be *common,* i.e., factors that raise fiscal capacity should be expected to raise legal capacity as well and *vice versa*.

Which major determinants does the approach in Chapters 2 and 3 identify? A precise statement of the results must await our formal analysis. But it is useful to preview some of the main predictions of the theory, the intuition behind these predictions, and some of the correlations we find in the data. Figure 1.7 gives a hint of the different determinants we consider. Note that income is in bold italics rather than italics in this flowchart to illustrate the broader scope of the analysis compared to Chapter 2.

The Use of Public Revenue If additional tax revenue is expected to be spent in the common interest of both groups, say on classic public goods rather than on redistribution, then incumbents from any group are happy to build additional fiscal capacity. This prediction is clearly in tune with the argument put forward

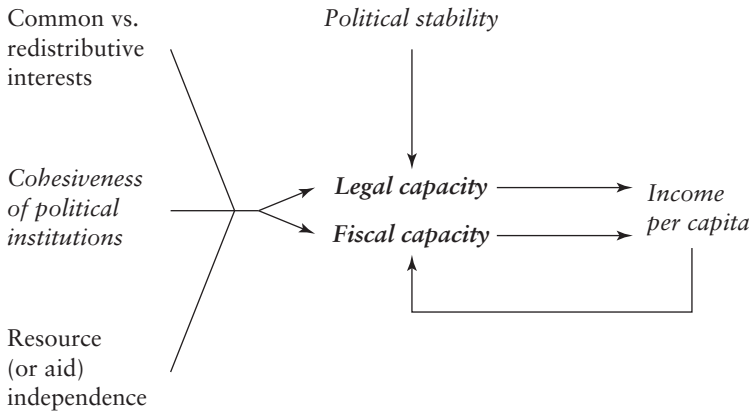

Figure 1.7 Scope of Chapter 3.

by the writers on economic and political history. By complementarity, however, we get an auxiliary prediction: incumbents would also have stronger incentives to build more market-supporting legal capacity, as higher tax rates can then be imposed on a higher tax base.

War as a Measure of Common Interests Are the data consistent with this basic idea? Consider defense, the classic example of a public good, as an instance of common-interest spending. Assume that a high incidence of actual external conflict in the past proxies well for a high perceived risk of conflict. Then, we can crudely gauge the past demand for public goods by the historical prevalence of war. The theory identifies the past demand for public goods as a positive determinant of past investments in legal and fiscal capacity and therefore as a positive determinant of the stock of state capacity we observe today. For each country where the data exist, we use the Correlates of War data set to compute the historical prevalence of war as the share of years in external war since 1816 or the year of independence, whichever occurs later, until the year 2000.

Of course, by taking past wars as given, this procedure does not address the fact that wars reflect the joint interactions between two (or among many) countries. Addressing this properly would require analyzing at least two countries and the joint determination of state capacities and the risk of war. Such an approach would certainly be natural and interesting, but is beyond the scope of the present book.

Let us correlate past wars with the two measures of fiscal and legal capacity in Figures 1.3 to 1.5. We show in Chapters 2 and 3 that alternative measures

yield similar results. Specifically, we compute the partial correlations between state capacities and past prevalence of war, while holding constant other determinants of state capacity such as ethnic homogeneity, political institutions, and political stability, as well as legal origins (Chapters 2 and 3 give further details on the data and the computation of the partial correlations.)

Figure 1.8 shows that the partial correlations are consistent with the prediction of the theory: a larger incidence of war in the past is indeed associated

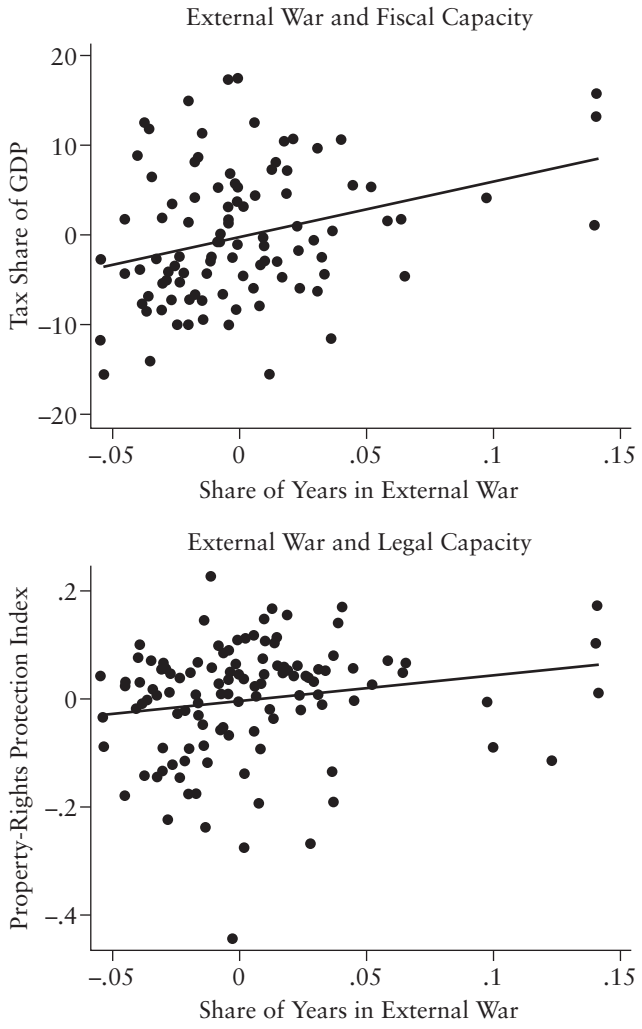

Figure 1.8 State capacity and external war.

with higher state capacity today.[5] The upper panel is for fiscal capacity, plotting the overall tax share against the share of years in war.[6] The slope is positive with a magnitude such that a state with 20% more of its history in wartime has a higher tax take in the present by 10% of GDP. The lower panel is for legal capacity, plotting the index of property-rights protection against time in war. Again, the slope is positive, and although the magnitude of this index is harder to interpret directly, we see that part of its variation is associated with variation in wartime experience. This preliminary evidence is thus consistent with the extended Hintze-Tilly hypothesis.

Ethnic Homogeneity In Chapters 2 and 3, we also consider another aspect that is likely to tilt a society's spending patterns more in the direction of public goods than redistribution, namely an absence of polarization or heterogeneity in the demand for public goods among different groups. When this aspect is measured by the degree of ethnic homogeneity in the population, we find a strong partial correlation in the data between ethnic homogeneity and both forms of state capacity.

This argument takes the degree of ethnic or cultural homogeneity as given. An interesting extension, which we will not pursue in this book, would be to explicitly consider the motives for the state to cultivate such homogeneity. Indeed, it is a common argument among scholars of nationalism that the relative ethnic and cultural homogeneity in Europe is, partly, the result of various mechanisms used by European states to socialize their citizens so as to increase the military power of the state. See Posen (1993) for a succinct statement of this view and a supportive case study of the historical rivalry between France and Germany.

Political Institutions A second determinant isolated by the theory is the structure or—as we say—the cohesiveness of political institutions. In some countries, incumbent groups are constrained to treat opposition groups quite well, by

5. There are two outliers in the sample: England and France with more than 40% of their history in wartime. To get nicer pictures, Figure 1.8 shows the partial correlations with state capacity when England and France are excluded from the sample, even though these countries have little effect on the underlying estimates.

6. Both the vertical and the horizontal axes include negative as well as positive numbers. This is because we hold other determinants of the tax share as well as the share of years in wartime constant. When partialing out the effects of these determinants, we obtain residuals of each variable, which are centered at zero.

institutions such as checks and balances on the executive or election systems that grant a relatively large representation for electoral losers. Such political institutions will tend to promote common-interest rather than redistributive spending, whichever group holds power. This, in turn, ensures current incumbents that the state will not be used against their own interests in the future, which promotes investment in the state. Suppose now that we take cohesiveness of political institutions as given, as we do until Chapter 7. Then, a high incidence of cohesive political institutions in the past should be correlated with high investments in both forms of state capacity in the past. As a result, we should observe high levels of legal and fiscal capacity today.

Once again, let us look at the broad patterns in the data. We measure the institutional constraints in the theory by the executive constraints variable in the Polity IV data set (alternative measures of political institutions give similar results in Chapters 2 and 3). Specifically, for each country, we compute its average score on this variable in between 1800 (or the year of independence) and 2000. The original variable is coded on a scale from 1 to 7, but we normalize the average score for each country to lie between 0 and 1. Figure 1.9 plots the partial correlations, computed in the same way as for Figure 1.8, between cohesive political institutions in the past and current fiscal capacity (upper graph) and legal capacity (lower graph), respectively.

Evidently, the correlations with both types of state capacity are strong and positive. The slope of the regression line in the upper graph indicates that a country with average executive constraints one standard deviation (about 0.31) higher than another has about 5% of GDP higher taxes today. Clearly, the partial correlation between legal capacity and executive constraints displayed in the lower panel is also positive and even stronger than the correlation with fiscal capacity.

Political Stability Another determinant of state capacity in Figure 1.7 is political stability. If common interests are weak and political institutions are noncohesive, each incumbent will tend to devote most of the state's revenue to redistribution in favor of her own group. If instability is high, so that a current incumbent faces a high probability of replacement, investments in fiscal capacity may stop altogether, as such investments may backfire in the future by enabling more redistribution away from the incumbent's own group. As we will see in Chapters 2 and 3, empirical measures of political stability do in fact covary positively with alternative representations of fiscal and legal capacity.

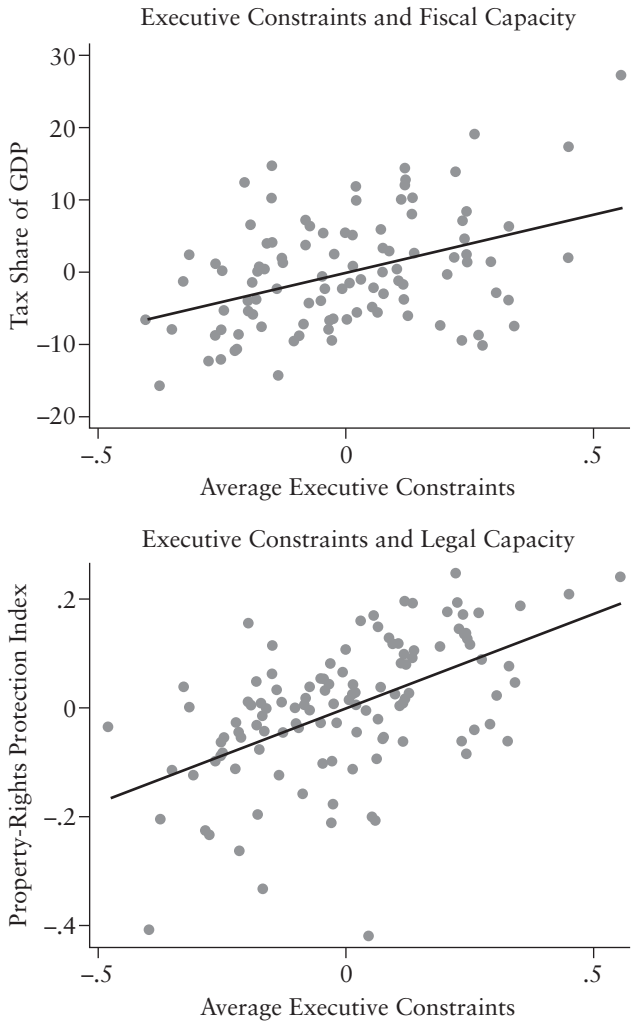

Figure 1.9 State capacity and executive constraints.

However, in many poor countries—especially those with weak or fragile states—instability is intimately associated with political violence, one of the topics to be considered later in the book. We thus return to political instability later.

Economic Structure In addition to these *political* determinants of state capacity, Figure 1.7 also highlights some *economic* determinants. One is economic structure. If we hold constant the level of income, the relative shares of resource rents,

or (cash) aid, in income become important. To the extent that such resource flows accrue directly to the government, a higher dependence on resources or aid means that market incomes are smaller. The smaller tax base diminishes the motives to invest in market-supporting legal capacity. By complementarity, this also makes investments in fiscal capacity less attractive. Clearly, this simple argument may provide an important clue as to why resource-dependent or aid-dependent countries in Africa or parts of Asia may have weaker incentives to build their states. This observation is similar to a standard argument about obstacles to development in so-called rentier states [see, e.g., Mahdavy (1970) for an early contribution with an application to oil revenue in Iran].

Income per Capita If we hold economic structure constant, a higher level of income per capita means a higher level of market income, which raises the incentives to invest in both sides of the state. Low income can thus serve to diminish the investments in fiscal and legal capacity. That argument takes income as given, however, and it is very likely that we also have feedback effects in the other direction. In particular, low legal capacity to support markets will keep income low, ceteris paribus. We show how such an effect arises in the microfounded versions of the model.

In Chapter 3, we also discuss how low fiscal capacity may cause low income. The mechanism for this is more subtle: without the capability for redistribution via taxes and transfers, incumbents may try to redistribute by seeking rents for their groups. Rent seeking pursued via measures such as inefficient regulation creates production distortions that feed on to low incomes. We show that this is not only a logical possibility, but may well be a plausible political equilibrium when fiscal capacity is endogenously determined. The chapter explains how we can interpret this result as a positive analog to the Diamond-Mirrlees normative theory of production efficiency in the context of optimal taxation.

Correlations between state capacity and income such as those in Figure 1.3 may thus reflect causal links in both directions. Figure 1.7 illustrates such prospective two-way feedback effects. Moreover, the existence of positive feedback effects can create virtuous or vicious circles that may help produce clusters of strong state capacities in strong economies or weak state capacities in weak economies.

State-Capacity Traps We would expect states that lack sufficient state capacity to acquire it by investing in economic institutions to raise taxes and support

markets. Our analysis gives insights into two main reasons why this may not be the case.

In a weak state, there is no incentive to invest in fiscal capacity because institutions are not cohesive. If a country ends up in such a fiscal-capacity trap, this trap will seriously limit the ability of the state to provide public goods.

We also study predatory states. These arise when poor governance allows a narrow elite to engage in predatory behavior that extracts transfers from private producers. Such predation is typically related to high levels of corruption, but may also include other forms of extralegal predation. Poor governance means that the state is sanctioning and reinforcing such behavior by not extending legal protection to producers. Such states end up in a legal-capacity trap with no incentive to create effective legal systems so as to establish the rule of law.

1.5 Political Violence

Our analysis in Chapters 2 and 3 suggests that the risk of external violence can promote state building by enhancing common interests relative to redistributive interests across different groups in society. The risk of internal political violence appears to be very different. Conditions that sow the seeds for internal violence are hardly a sign of common interests but rather of extreme redistributive struggles across groups. It is thus quite intuitive to suppose that the risks of internal violence might drive the motives for state building in a different direction compared to the risks of external violence. Consistent with that intuition, we have already seen that countries where civil wars are common tend to have low levels of state capacity (recall Figure 1.4). Chapters 4 and 5 take a closer look at this aspect of development clusters. We now preview some of that analysis.

Some Basic Facts Sadly, civil war—the armed struggle between the government and some insurgent group—has been quite a common phenomenon in the last 60 years. According to the ACD, more than 10% of all country-years in the world since 1950 have been associated with civil war. In addition to such two-sided violence, many governments try to enhance their probability of remaining in office by engaging in violent acts against the population without civil war breaking out; we refer to this kind of one-sided violence as repression. According to the Banks (2005) data set, 8% of all country-years since 1950

have been associated with repression in the stark form of purges (elimination of political opponents) in the absence of civil war (see Chapter 4 for more details on the data).

The upper and lower panels on the left of Figure 1.10 show the worldwide prevalence of civil war and repression over time, plotting the share of countries with civil war or repression by year. Clearly, civil war was on the rise until a turnaround at the end of the Cold War, whereas repression (without civil war) was on the decline during the same time period. The panels on the right of the figure plot the prevalence of violence by country against per capita income (measured in 1980). Civil war is mostly a poor-country feature, whereas repression has its main mass a bit higher up in the world income distribution. Interestingly, both sets of graphs give a clear sense of substitutability between these two forms of political violence.

Existing Research by Economists and Political Scientists Not surprisingly, many political scientists and some economists have studied the economic and political determinants of civil war. This research is quite fragmented, however, at least from our perspective of understanding the development clusters we observe in the data. Existing theoretical work on conflicts and civil war has little room for institutions, including state capacities, and is not particularly well connected to the data. Existing empirical work on civil war and repression, on the other hand, has weak connections to theory so some of its results are not easy to interpret. Virtually all empirical research takes income as given, even though violence and income may well have similar determinants; e.g., there are two separate literatures on the "resource curse," one claiming that resource dependence may cause low income and growth and the other arguing that resource dependence may cause civil war. Finally, there are separate literatures on civil war and repression, even though both phenomena seem to reflect the fact that political institutions fail to resolve conflicting interests in a peaceful way.

Our approach to analyzing political violence has two steps. First, we extend our core model to incorporate the possibility of both repression and civil war and make predictions about how these forms of violence are related to the major determinants of investments in state capacity. This extended core model effectively endogenizes one of the determinants of state building, namely political stability. As a second step, we jointly analyze political violence and state building in that richer framework.

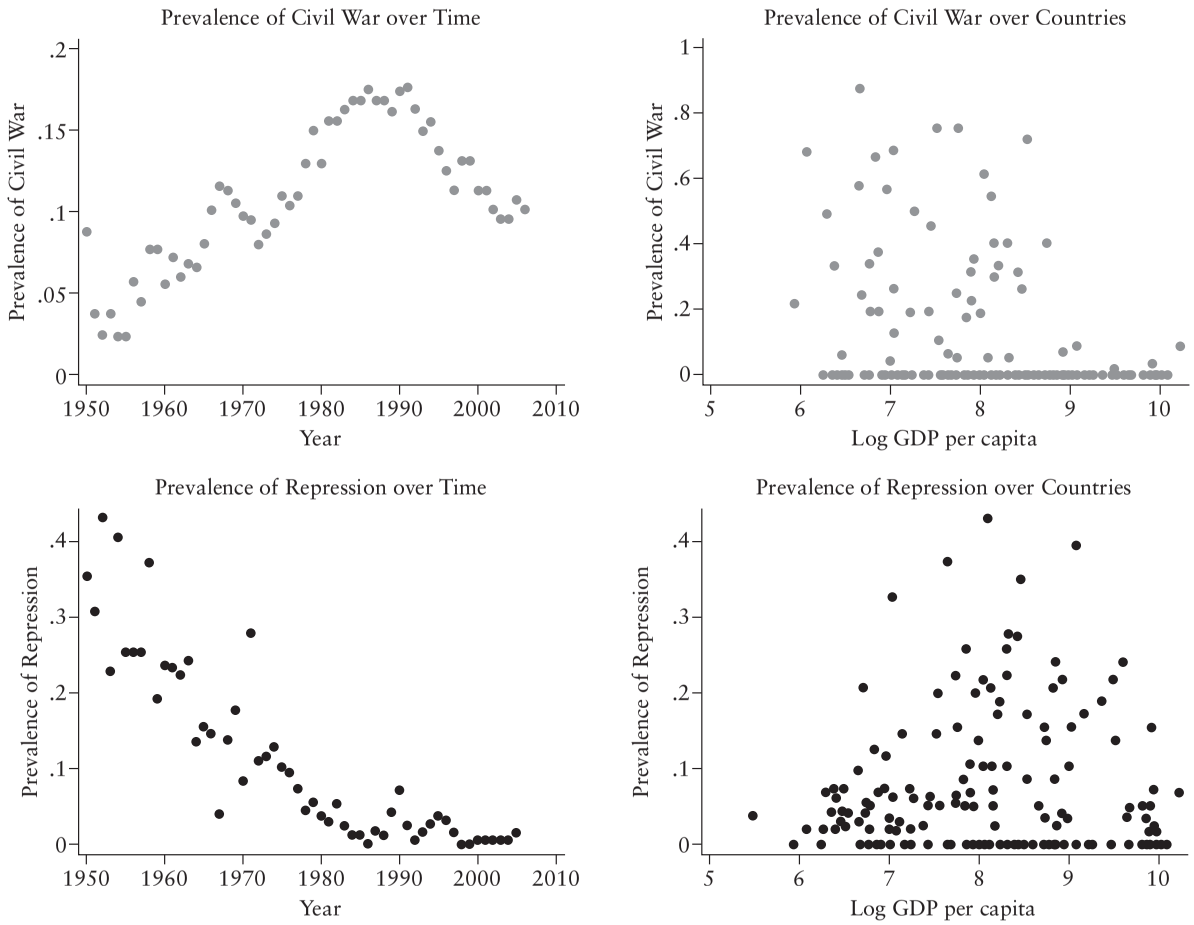

Figure 1.10 Prevalence of civil war and repression.

Basic Theoretical Approach Thus we start out in Chapter 4 with the same two-group, two-period model as in Chapter 3, although we take state-capacity investments and therefore income per capita as given. On the other hand, we allow both groups to invest in violence. The opposition group can invest in armed forces in period 1, so as to try and take power in period 2. The incumbent group can also invest in armed forces to raise its probability of remaining in power. Absent conscription, soldiers are hired at prevailing wages: the opposition has to raise the necessary resources from its own group, whereas the incumbent uses revenue from the public purse. Both groups then face a trade-off: the costs of investing in violence must be weighed against a higher probability of holding power and controlling the opportunity to redistribute in the group's favor. In this simple setting, we can analyze two central questions. (1) When do we observe violence rather than peace, and if so which type of violence? (2) Which economic, political, and institutional variables determine one-sided (repression) and two-sided (civil war) violence?

Three Possible Violence States Given the "conflict technology" that we posit, both groups' propensity to invest in violence is increasing in a common latent variable, namely the ratio of expected marginal benefits to the marginal cost of investment. We show that three conflict outcomes are possible and that these outcomes are ordered in the latent variable. When the ratio of expected benefits to cost is low, no group finds it worthwhile to invest in violence and we observe a *peaceful* outcome. As this ratio becomes somewhat higher, the incumbent but not the opposition takes to violence, and we observe *repression;* the incumbent's violence threshold is lower than the opposition's threshold because we assume that the incumbent has an advantage in terms of lower costs or higher effectiveness of fighting. At high benefit-cost ratios, finally, both groups invest in violence and we observe *civil war.*

Determinants of Political Violence What are the roots of repression and civil war that this simple theory identifies? A first and simple insight is that the three violence outcomes are ordered in the same latent variable. This means that their determinants should be common and strongly suggests that the research on repression and civil war ought to be integrated. Another set of results, of more direct relevance for development clusters, follows when we relate the likelihood of conflicts to the determinants of state capacity studied in Chapters 2 and 3.

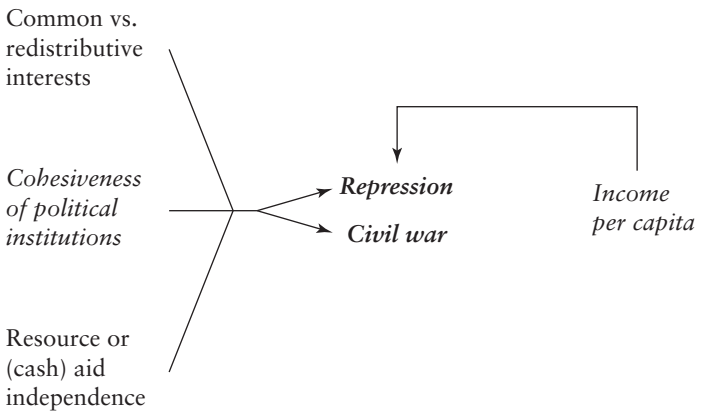

Figure 1.11 Scope of Chapter 4.

To explain the results, we have to explore the expected marginal benefits and costs of investments in violence in more detail. Given that a larger investment in violence of any group raises its probability of holding power and setting policy, the marginal benefit is the share a winner can expect to grab of the total expected redistributive pie, i.e., expected future revenue minus spending on public goods. The marginal cost is simply the real wage paid to the soldiers.

Consider Figure 1.11, where the determinants of state capacity are listed as prospective determinants of violence. When common interests are low, it is expected that less of future revenue will be spent on public goods, which raises the expected benefit of investing in violence to boost the probability of holding office. When political institutions are noncohesive, the winner gets a larger share of any redistribution, which also raises the expected benefit of fighting. A higher level of expected resource rents or cash aid also raises the expected benefit of fighting, as this increases the available redistributive pie. Finally, a lower level of income per capita diminishes the real wage, which cuts the cost of investing in violence. Recalling the discussion around Figure 1.7, we reach a striking conclusion: all factors that diminish the incumbent's motives to invest in the state tend to raise the two groups' motives to invest in violence. To what extent these stronger motives will actually translate into realized repression or civil war depends on the levels of the incumbent's and the opposition's violence thresholds. These, in turn, reflect factors such as the incumbent's and the opposition's relative costs of raising resources for violence and their relative capabilities in fighting.

Extensions of the Basic Framework Chapter 4 also looks at a few extensions of the political-violence framework. One of these is to reintroduce political heterogeneity or polarization in the same way as in one of the extensions considered in Chapter 2. Generally, a higher degree of heterogeneity diminishes the common interests in society, which raises the gain to holding power, and this, in turn, boosts the incentives for both groups to invest in violence. This extension provides a way to study the greed and grievance motives for conflict [see Collier and Hoeffler (2004)] in the same analytical setting.

Another extension picks up the predation theme from one of the extensions in Chapter 3. If the investments in violence by the incumbent group are made by a small elite that is also the main benefactor of predation by the state, there are additional motives for staying in power. As a result, the society's propensity for repression as well as civil war goes up, and this effect is stronger the less institutions constrain the ruling elite from infringements on other citizens.

Empirical Support In the remainder of Chapter 4, we show how one may go from theoretical predictions to serious empirical testing. The first step uses the basic model, together with assumptions about what variables and parameters are observable and unobservable in the data, to derive a set of testable predictions. The second step finds credible sources of exogenous time variation in the determinants suggested by the theory. Using the occurrence of natural disasters for shocks to real wages and aid flows and revolving memberships on the U.N. Security Council for shocks to aid flows, we find quite strong econometric support for the model predictions. The exogenous shocks affect the likelihood of observing government repression as well as civil war *within* each country. In particular, we find that exogenous hikes in aid significantly raise the probability of both types of conflict.

1.6 State Spaces

Having used essentially the same core model to study the investments in fiscal and legal capacity in Chapter 3 and investments in political violence in Chapter 4, the next step is to put these pieces together. We do this in Chapter 5, where the state-capacity investment problem is revisited with political stability being endogenously determined by the investments in violence. The flowchart in Figure 1.12 illustrates this analysis schematically.

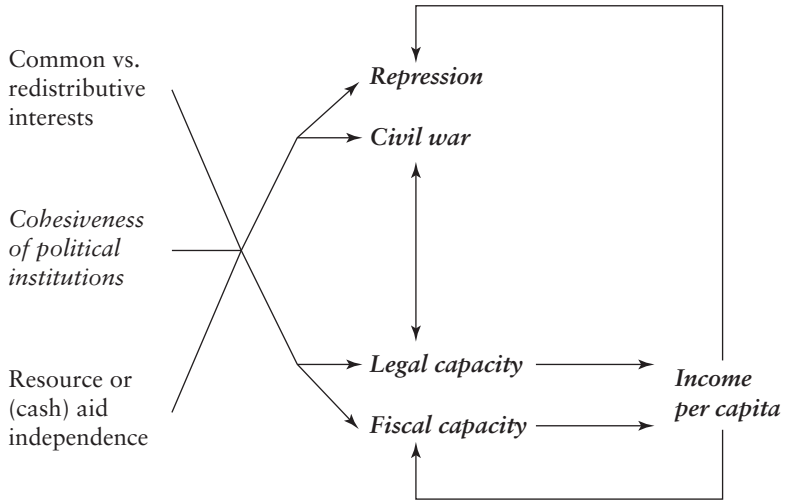

Figure 1.12 Scope of Chapter 5.

State Capacity and Political Violence The analysis in Chapter 5 suggests three channels whereby state capacity and political violence become related. First, as we have just seen, a set of common variables drives both of these outcomes, although in opposite directions. Second, there is a magnification effect: other factors that raise the risk of internal conflict may raise the perceived political instability for the incumbent, something that generally diminishes the motives to build strong institutions. Third, the framework entails feedback effects, whereby investments in state capacity alter the likelihood of conflict—these can go in either direction.

Based on these insights, we expect state capacity and political violence to become negatively correlated. Figure 1.4 suggested that the raw data are indeed consistent with this expectation. Figure 1.13 goes one step further by plotting the partial correlations (computed as in Figures 1.8 and 1.9) between the prevalence of civil war from 1950 to 2000 and fiscal or legal capacity, respectively. Whereas the corresponding correlations with external war (reproduced in the upper panels of the figure) are positive, the correlations with civil war (in the lower panels) are indeed negative. But there is certainly no claim of causality here. Via the three channels mentioned earlier, state capacity and internal violence are very much jointly determined.

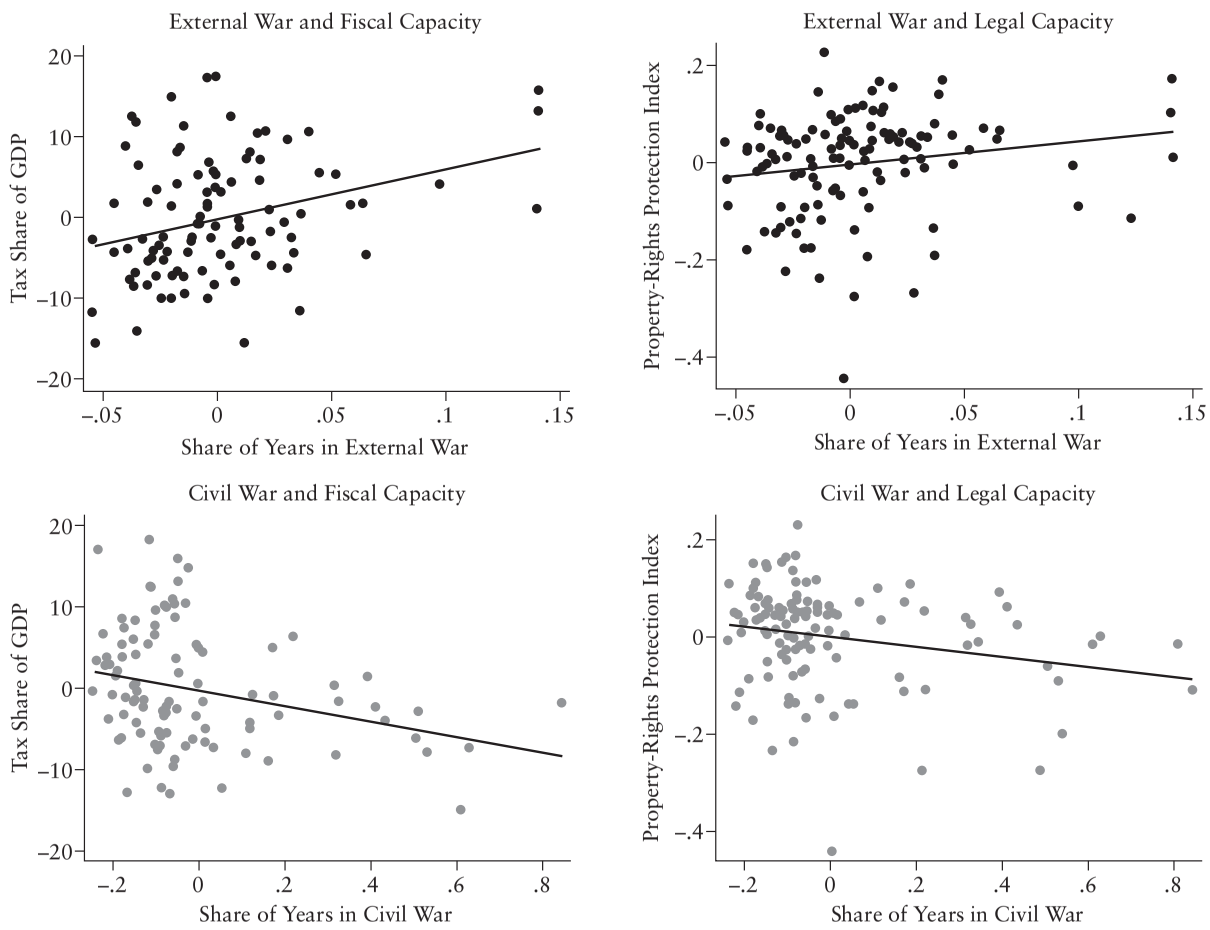

Figure 1.13 State capacity and external and civil war.

	Weak	Redistributive	Common Interest
Peace			
Repression			
Civil War			

Figure 1.14 Our state space.

Chapter 5 also reintroduces private capital formation into the analysis, drawing on one of the microfounded extensions in Chapter 3. This extension shows how a higher risk of civil war may deter private investments. Since lower investments mean lower income, this illustrates yet another mechanism whereby low income and the incidence of conflict may become linked to one another.

The Bigger Picture Another way of expressing the results from our theoretical analysis in Chapter 5 is laid out in Figure 1.14. This matrix illustrates nine possible outcomes, combining our three investment states—weak, redistributive, and common-interest—with the three violence states—peace, repression, and civil war.

In Chapter 5, we show how the location in this state-space matrix for a particular country at a particular time can be predicted by its parameter values in our comprehensive core model. A precise description of these results must await the formal analysis to follow. However, the verbal discussion in our present overview gives a strong hint that we should expect a certain concentration of outcomes along the diagonal of the matrix. In particular, countries with high demands for public goods and cohesive political institutions will find themselves in the upper-right corner associated with high state capacity and the absence of political violence. A country without those preconditions is a weak or redistributive state and suffers from one of the two forms of political violence, but its exact location in the matrix depends on its particular parameter constellation.

Once we have filled out the matrix in Figure 1.14, we refer to the results as an *Anna Karenina principle of development,* based on the first sentence of Leo Tolstoy's 1870s novel: "All prosperous countries resemble each other; every nonprosperous country is nonprosperous in its own way."

1.7 *Development Assistance*

Whether foreign aid helps or hurts development or whether it all depends has been a subject of constant discussion over the last few decades in the academic community as well as the development community. Some optimists have argued that aid can promote prosperity, whereas others have contended that it can even have a pernicious effect on state building and conflict.

Different Types of Interventions in Different Types of States In Chapter 6, we put our modeling machinery to work in analyzing that specific question. We show how our analytical framework can be used to analyze different types of foreign interventions: cash aid, project aid, technical assistance, peace keeping, or postconflict resolution. Figure 1.15 illustrates the scope of this analysis. Our framework allows us to discuss the equilibrium responses to different foreign interventions of policy, state-building, conflict, and—ultimately—welfare.

Having filled in the matrix in Figure 1.14, we discuss how the response to development assistance is affected by the preconditions. Fragile states—those that have poor state effectiveness and are prone to political violence—are particularly complex. But our modeling framework can, at least, pose these dilemmas in a sharp way. Although we do not reach any definitive conclusions, we believe that our approach advances the discussion beyond the current state of the art.

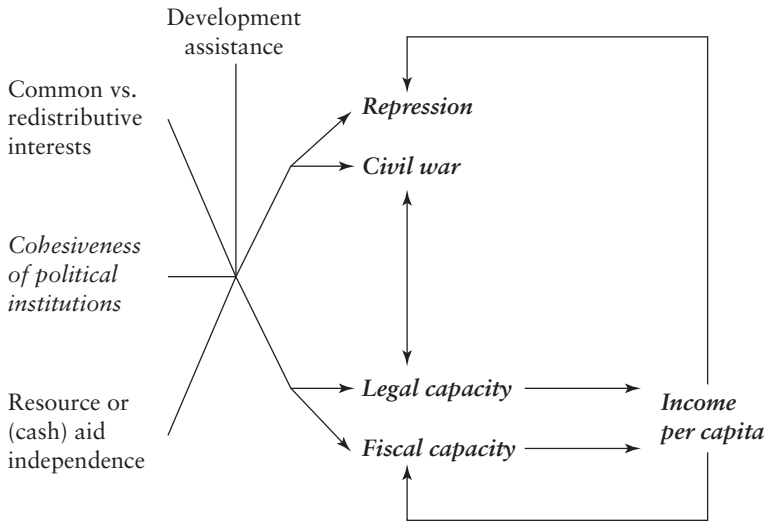

Figure 1.15 Scope of Chapter 6.

Symptoms versus Determinants Ongoing discussions about assistance to weak states are not founded in any underlying theory, which explains why they tend to mix up symptoms and determinants. For example, fragile-state indexes frequently include low income per capita as a criterion. Although low income may certainly strengthen the motives to invest in violence ceteris paribus, it is only an intermediate factor. Our approach implies that the fundamental determinants of fragile states are such things as the strength of common interests in society, the structure of political institutions, the degree of resource or aid dependence, or the technologies for organizing and conducting violence. Other phenomena such as civil war, repression, low spending on public goods, low taxation, weak enforcement of property rights, and corruption are all symptoms.

The Bauer Paradox Overall, Chapter 6 shows how the likely effects of foreign intervention depend on the type of aid, as well as the situation of the receiving country. One of our overall conclusions resonates with the somewhat pessimistic paradox suggested by Peter Bauer—that aid is most likely to work well in countries that do not really need very much aid anyway. Our approach can be seen to fuel either aid pessimism or optimism. The possibility that aid can have negative consequences that reduce its impact may fuel a pessimistic view, especially as such responses are poorly understood from an empirical point of view. However, it is also clear that designing interventions well can make aid more effective.

1.8 Political Reform

The core model in our book suggests that cohesiveness of political institutions is an important determinant of state capacity as well as of political violence, and an important condition for the effect of development assistance. Of course, cohesiveness is a theoretical concept without an immediate real-world counterpart. In Chapter 7, we discuss how one can map theory into reality. In general, we expect democracies to be more cohesive than autocracies; parliamentary forms of government to be more cohesive than presidential forms of government; and proportional electoral systems to be more cohesive than majoritarian electoral systems. However, federal governments may or may not be more cohesive than unitary governments.

As noted earlier, our gradual approach in this book takes the cohesiveness of political institutions as given up to Chapter 6. Given the importance of

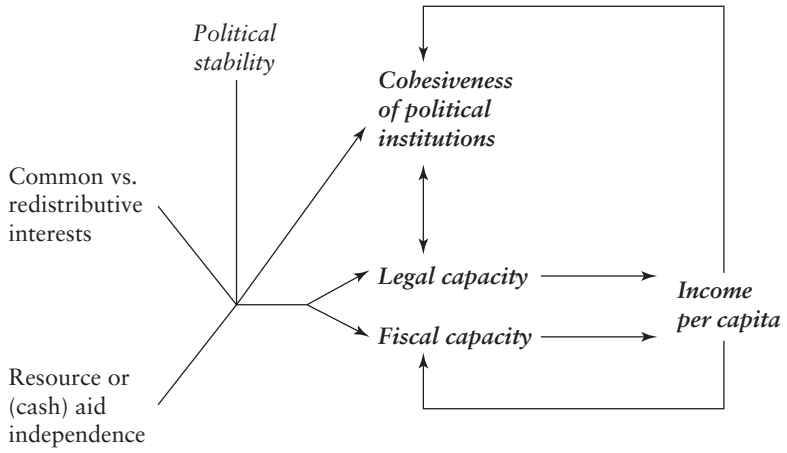

Figure 1.16 Scope of Chapter 7.

political institutions in our argument and the fact that these institutions are also subject to change over time, Chapter 7 makes a start on the difficult task of endogenizing the choice of institutions. We discuss normative as well as positive models of political reform along the lines suggested by Figure 1.16.

Different Horizons We first derive a normative benchmark result when institutions are designed once and for all at a constitutional convention behind a veil of ignorance. In this case, the conveners will always create cohesive political institutions because such institutional arrangements provide the best incentives for creating state capacity.

We then look at the choices for period 2 made by the period-1 incumbent. In this case, we show that choosing cohesive institutions requires a considerable degree of competition for political power. This may shed some light on political reforms in Europe in the decades around the turn of the nineteenth century. Several countries with conservative or liberal governments—such as Denmark, Sweden, and the Netherlands—followed up universal suffrage with reforms toward full parliamentary democracy and/or proportional representation elections, as the labor movement grew stronger in pace with ongoing industrialization and the landed and industrial elites were too divided to work toward a common purpose.

We also obtain the flipside of this result: reform toward less consensual institutions becomes more likely if the incumbent faces little competition for power. This result provides a way of thinking about the decade after independence in Africa. Incumbent rulers in several African countries—such as Nigeria,

Sudan, and Uganda—started their postcolonial era with European-style parliamentary regimes. First-generation incumbents, who did not face a strong threat of replacement, quickly repealed those regimes in favor of presidential regimes without too many checks and balances.

Micropolitical Foundations In Chapter 7 we discuss reform in a macropolitical setting. But we also attempt to build micropolitical foundations for the approach. In doing so, we study some institutional details in the process whereby the policymakers are appointed and policy compromises are negotiated. This provides insights into what specific features of the political process determine the cohesiveness of institutions and the peaceful rate of political turnover.

We show that a latent possibility of violence introduces a trade-off in the building of cohesive political institutions. Such institutions are more desirable for incumbents in that they reduce the costly use of violence. However, since violence also creates the possibility of entrenchment in power, this force will tend to reduce incentives for creating cohesive institutions.

Our macro analysis of incumbent behavior neglects features that create inertia in the choice of institutions. In Chapter 7, however, we show that formal supermajority requirements will tend to make cohesive institutions more sustainable. We also discuss the possible role of trust in supporting cohesiveness.

Finally, we turn to a different dimension of political institutions, introduced in our extension in Chapter 3 on corruption and predation. This concerns the possibility that an incumbent can improve governance to make predation more difficult. As in the case of cohesive institutions, a low probability of turnover makes improvements in governance less likely. But a new factor also plays a very important role: entrenched elites, which make up only a small fraction of the population, will typically resist such governance reform as it threatens their rents from holding power.

1.9 Main Themes

In the preceding sections we sketched the contents of the book, chapter by chapter. Here, we describe some of the main themes that run through the book in parallel as the full story unfolds. This description serves as a reading guide to those interested in particular aspects of our analysis.

The Core Model Many of our ideas are presented through the lens of the comprehensive symmetric two-group, two-period model, the gradual development of which we have just described. The perspective here is macroeconomic and macropolitical, meaning that most of the analysis focuses on the investment decisions made by the incumbent (in state capacities and political violence) and opposition groups (in political violence), whereas the result of all other economic and political behavior is represented in reduced form.[7] This model and its results are contained in the first sections of Chapters 2 through 7, which all carry a title involving "the Core Model."

The reader who is interested in the gist of our theoretical argument can follow the gradual building and extension of this core model by reading these sections in sequence. Microeconomic and micropolitical foundations for the behavioral relations in the core model are discussed in the following section of each chapter, generally under the title "Developing the Model." These auxiliary sections also contain various extensions, which relax or modify the assumptions underlying the core model.

Polarization and Inequality In the core model, the main political actors are two completely symmetric groups. This is very convenient for the formal analysis, but of course the symmetry assumption is a gross oversimplification. In reality, phenomena such as polarization, income inequality, and groups of different sizes are parts of economic and political life. One subtheme of the book explores the implications of these phenomena. In particular, they appear in Subsections 2.2.3–2.2.5, 3.2.2, and 4.2. At the risk of oversimplifying, the general result we find is that greater polarization and more income inequality tend to diminish the motives for investments in the state, but boost the motives for investing in political violence.

The Predatory State Many developing countries are governed by small and, often, strongly entrenched elites. This causes tensions not only among groups, but also within groups, between elites and rank-and-file members. Such tensions constitute an important theme that spans a great deal of recent research on development, in economics as well as in political science. We pick this up in some of our extensions of the core model, notably in Sections 3.2.4, 4.2.4, 5.4, and 7.2.6. Our general findings on this theme underscore the possibility of a

7. For a seminal macropolitical analysis of government applied to stabilization policy, see Lindbeck (1976).

predatory state that raises higher hurdles for investments in the state, creates stronger motives for investing in violence, and poses additional obstacles for welfare-enhancing political reform.

Resource and Aid Dependence Resource dependence and aid dependence are important issues in the research community as well as the development community. In particular, the notion of the "resource curse" appears in one literature to label the hypothesis that an abundance of natural resources (or aid) may actually serve to reduce income. But it also appears in another, separate, literature to label the hypothesis that resource abundance may promote violence. Resource dependence appears throughout the book, most notably in the core model as it is developed in Chapters 2 through 5, culminating in our finding—described in Section 5.2—that both hypotheses may come out of a single comprehensive model. Chapters 4 and 6 focus on the effects of development assistance, theoretically as well as empirically.

Private Accumulation To emphasize the most novel parts of the analysis, our modeling generally zooms in on the accumulation decisions by incumbent governments and abstracts from private accumulation of physical capital, human capital, and productive knowledge. This simplification is not only unrealistic, but misses the possibility of making contact with traditional growth theory. For these reasons, we devote some microfounded extensions to reintroducing private capital accumulation. In particular, Section 3.2.3 considers the interactions between individual private investment and government investment in state capacity and Section 5.2 considers the interactions between individual private investment and the risk of conflict, given the collective investments in violence. In both cases, private investments tend to magnify the effects predicted by our simpler models, effectively adding a multiplier to the effects on aggregate outcomes of interest.

Data Although we are trying to break new theoretical ground in much of the book, we are also trying to stay closely connected to the data. Thus, the introduction to each chapter includes some salient facts, typically displayed as correlations or patterns in the raw data. Moreover, almost all the chapters end by revisiting the data. Typically, each visit to the data takes the form of studying some partial correlations in light of the predictions from the theory developed in the chapter. But in Chapter 4, we take a longer tour into empirical territory, deriving a more credible econometric strategy from our theory and applying it to more serious empirical testing than in other chapters.

Notes on the Literature Throughout our journey, we try to acknowledge the adventures of traveling companions, whose work is either prior or parallel to our own. In some cases, we discuss this in situ at the appropriate point in the text. But we try to not break the flow with literature reviews. Instead, we collect a broader summary of themes and contributions in a short section at the end of each chapter, called "Notes on the Literature."

1.10 Final Remarks

Chapter 8 summarizes the main things we will have learned. Taking stock of the findings is a bit premature at this early stage, however. Let us very briefly preview some general answers, in the abstract, to the three questions about development clusters that we posed at the beginning of this chapter.

1. What forces shape the building of different state capacities and why do these capacities vary together? According to this book, the answer lies in some common determinants and a crucial complementarity between investments in different parts of the state. The book also identifies conditions, investment traps, under which no motives for state building exist.

2. What factors drive political violence in its different forms? Our answer is that, to a significant extent, these factors are largely the same as those factors, including income, that help determine state capacity.

3. What explains the clustering of state institutions, violence, and income? The book says that the answer lies partly in common positive determinants or lack thereof and partly in the two-way feedbacks between income and state capacity and between income and violence.

In addition to an abstract theoretical discussion of the main messages of the book, Chapter 8 also takes stock of our findings in a concrete empirical way. Based on the main outcome variables emphasized in our theory, we define and compute our own Pillars of Prosperity index for some 150 countries. Moreover, using empirical counterparts to the theoretical determinants of state capacity and political violence, we discuss how well one can predict the outcomes on this index by a small set of socioeconomic and political variables. Comparing actual and predicted outcomes for individual countries yields an interesting

perspective on development clusters, but also suggests several shortcomings in our theoretical framework.

Whatever the value of its findings, our book only takes a few steps toward a fuller understanding of the observed clustering among income, institutions, and violence. The final chapter ends by listing a number of issues where more research might follow.

1.11 Notes on the Literature

Influential contemporary commentaries on government policy (national and international) in developing countries include Collier (2007), Easterly (2006), Sachs (2005), and Stern, Dethier, and Rogers (2005). The different perspectives offered in these works serve as useful background reading to the debates reflected in this book. Collier and Gunning (1999) and Sachs et al. (2004) discuss the origins of Africa's poor economic performance.

A long-standing debate concerns the proper role of the state in economic development. Chenery (1975) nicely summarizes the discussions that shaped development policy in the postwar period, identifying a set of important structural features of developing economies where state intervention could, in principle, generate better economic performance. Bauer (1972) was a fervent critic of this view and its implications for aid.

Myrdal (1968) saw the problem of weak institutions early on; the "soft state"—facing a multidimensional problem with lacking legislation, weak enforcement, collusion, and corruption—is indeed a recurring theme in his *Asian Drama*. Bates (1981) offers a perceptive account of how government failure lies at the heart of many policy problems in Africa. Nowadays, it is commonplace to put politics at the heart of our understanding of development, seeing economic and political development proceeding in step. Recent works on development that put political economics at center stage include Acemoglu and Robinson (2005), Bueno de Mesquita, Morrow, Siverson, and Smith (2003), and North, Weingast, and Wallis (2009). Bockstette, Areendam, and Putterman (2002), Chanda and Putterman (2004), and Putterman (2008), which link state antiquity to contemporary economic performance with an emphasis on institutional factors, are also related works. A strong statement about the importance of institutions for development can be found in Rodrik, Subramanian, and Trebbi (2004).

State failure has become a central concept in discussions about development. Collier (2008) focuses on the consequences of trying to introduce democracy in poor countries. Bates (2008, 2009) discusses the problems encountered in building effective states in Africa. As discussed at the beginning of the chapter, an extensive policy literature deals with the problems of weak and failing states [see ERD (2009), OECD (2010a), Rice and Patrick (2008), and USAID (2005)].

The economic-history literature has produced numerous explanations for development patterns. A major concern has been to explain the rise in incomes in Western Europe from the beginning of the nineteenth century. A series of largely complementary explanations has emerged, which stresses the importance of different factors. Thus, North and Thomas (1973) offer an explanation based on institutions, Landes (1998) and Clark (2008) give greater weight to cultural change, whereas Mokyr (1990) emphasizes the role of technology. Rosenberg and Birdzell (1986) stress flexibility of market organization, as well as the interplay between economics and politics.

Strayer (1970) is an important contribution to our understanding of the central role played by fiscal and judicial institutions in the development of European states in medieval times. Dincecco (2011) looks at weak and strong states in historical perspective, and Ma (2010) provides an account of state development in China based on incentives to build state capacities. Mann (1986, 1993) is an influential account of sources of power and the development of the state from a sociological perspective. Gellner (1983) is a classic reference emphasizing the importance of nationalism in preceding state development. As noted in the text, Posen (1993) argues that European states strategically developed common nationalistic interests so as to facilitate warfare against rival states.

Fiscal capacity and state building more generally and their relation to war have constituted a major theme in the literature on economic and political history, such as in the work of Brewer (1989), Hintze (1906), and Tilly (1985). However, weak states were late to enter the academic economics literature. Acemoglu (2005) develops a formal model, where rulers in weak states have short time horizons and spend too little on productive public goods, which diminishes their ability to raise future taxes, whereas rulers in strong states have blunt accumulation incentives owing to their security of tenure. Besley and Persson (2009b, 2010a) study fiscal and legal capacity building as a joint investment problem and derive a general complementarity result. Acemoglu, Ticchi, and Vindigni (2011) study the role of bureaucracies in creating (in)effective states.