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States and economic growth: Capacity and constraints[☆]

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ABSTRACT

State capacity has become one of the most discussed concepts in development economics and political economy. In this survey we argue that the study of economic history provides vital insights into the process through which modern states have acquired 'state capacity'. By evaluating the process of state building across a range of different countries in Europe and Asia, we are able to 'decompress' the relationship between state capacity and economic growth. Our analysis emphasizes the variegated nature of the state building process. We focus on recent research that helps to elucidate the mechanisms that relate state capacity to economic growth.

1. Introduction

Today's richest countries possess both sophisticated market economies and powerful, centralized, states. In contrast, the poorest people in the world tend to live in regions with dysfunctional markets and weak or failed states. This divergence between wealthy societies with strong states and poor economies with weak states is a comparatively recent phenomena. As late as 1800, the majority of the world's population lived in poverty and political authority across most of the world was dispersed and fragmented.

Since 1800, the developed world has experienced a twin revolution. Living standards in rich countries today are unimaginable to a person living in the premodern era. The average individual in the developed world is between 10 and 15 times richer than his ancestors. Alongside this unprecedented increase in wealth, the transformation in the scope and scale of the state has also been remarkable. OECD countries today tax between 20–40% of GDP. By contrast, preindustrial societies rarely succeeded in taxing more than 5% of GDP.

Recent scholarship in both political economy and development economics has emphasized the importance of state capacity in explaining why some countries have succeeded in achieving economic development whereas others have not. This literature points to the role of state capacity in explaining the durability of institutions that are both conducive to markets and to economic growth. It has been established that the richest countries in the world are characterized by long-lasting and centralized political institutions (Bockstette et al., 2002; Chanda and Putterman, 2007; Borcan et al., 2014; Besley and Persson, 2009, 2011, 2013; Dincecco and Kat, 2014); that poverty is particularly widespread and intractable in countries that lack a history of centralized government (Herbst, 2000; Gennaioli and Rainer, 2007; Michalopoulos and Papaioannou, 2013) and are internally fragmented (Michalopoulos and Papaioannou, 2014); and countries with weak state capacity are particularly vulnerable to civil war and internal conflict (Blattman and Miguel, 2010; Besley and Persson, 2011). This literature recognizes both that predatory behavior by states is frequently a cause

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of economic stagnation and that well-functioning states can provide the institutional framework necessary for sustained economic growth.

State capacity describes the *ability* of a state to collect taxes, enforce law and order, and provide public goods. As a concept, it has its origins in the work of political scientists and fiscal sociologists (Tilly, 1975, 1990; Skocpol, 1985; Mann, 1986; Ertman, 1997) who in turn built on a tradition in German scholarship associated with Otto Hintze and Joseph Schumpeter.[1] More recently, it has also entered the lexicon of development economists, international agencies, and mainstream economics (for a recent survey, see Bardhan, 2015).[2] This essay seeks provides a historical analysis of the rise of high-capacity states in Europe and the rest of the world. It further aims to better understand the relationship between state capacity and the emergence of modern economic growth.[3]

Understanding economic history is critical for comprehending the importance of state capacity. In historical terms, the emergence of well functioning states is a relatively recent phenomenon. For many premodern polities, even the term state is an anachronism: there was no state in much of Europe prior to the late middle ages. Otto Heinze observed that feudal rulers 'lacked the attributes of sovereignty—that is, independence beyond its borders and exclusive rights within them' (Hintze, 1906, 1975, p. 192). In medieval Europe, characterized by fragmented political authority, overlapping and competing legal jurisdictions, and private armies—the modern concept of a state—has little empirical purchase (Strayer, 1970). The word 'state' only came to acquire its modern meaning in English at the end of the sixteenth century (Skinner, 2009). This was not merely a semantic change; when 'the word 'state', *l'etat, stato*' or *Der Staat* came into usage in the early modern period it was 'a word for a new political experience' (Oakeshott, 2006, p. 361).

State capacity can be thought of as comprising two components. First, a high capacity state must be able to enforce its rules across the entirety of the territory it claims to rule (legal capacity). Second, it has to be able to garner enough tax revenues from the economy to implement its policies (fiscal capacity). State capacity then should be distinguished from either the size or the scope of the state. A state with a bloated and inefficient public sector may be comparatively ineffective at implementing policies and raising tax revenues. Furthermore, historians agree that the eighteenth century British state had high state capacity even though it played a very limited role in the economy. Similarly, state capacity requires a degree of political and legal centralization, but it should not be identified with political centralization *per se*. The rulers of feudal society in which many legal and fiscal choices were devolved to local lords indeed had low state capacity. But the concentration of political authority in the center may cause inefficiencies and thereby undermine state capacity (Oates, 1999). As Weingast (1995), argues, federalized states have provided conducive environments for both effective governance and economic development.

We begin by surveying the history of state development first in early modern Europe and then in other parts of the world (Section 2). The path to high state capacity was different in different parts of Europe and we argue that these differences had important implications for subsequent economic and political developments. In East Asia, the failure of imperial China to invest in state capacity led in part to the economic and political disasters China experienced between 1850–1950, while the comparatively higher level of state capacity in Tokugawa Japan set the stage for that country's successful program of modernization and economic growth. Meanwhile many of the problems that beset sub-Saharan Africa can be traced to weak and fragmented states.

Having established a correlation between the rise of state capacity and modern growth in Section 2, in Section 3, we evaluate possible causal mechanisms linking state capacity with modern economic growth. We provide several historical case studies in which the rise of more effective states in early modern Europe lead to greater market integration, better enforcement of the rule of law, and to the establishment of a common national identity.

In Section 4, we explore what factors have enabled some societies to successfully build effective states. We connect the economic history literature on state capacity with the literature on the deep determinants of development. One insight from recent research on the deep determinants of sustained economic growth is that both geography and population level characteristics, such as the level of human capital or the degree of ethnolinguistic fractionalization, are important predictors of development and the effectiveness of political institutions. Finally, in Section 5, we conclude by pointing out areas for future research.

2. Different paths to the modern state

Recent work by Besley and Persson (2011) has drawn attention to an important correlation between per capita GDP and measures of state capacity, usually defined as per capita tax revenues. This positive correlation is robust and holds over a wide range of definitions of 'state strength'. This finding is part of a wider reappraisal of the concept of state capacity. For example: Acemoglu et al. (2014, p. 1) note that '[i]t is *now* widely recognized that the weakness or lack of 'capacity' of states in poor countries is a fundamental barrier to their development prospects. Most poor countries have states which are incapable or unwilling to provide basic public goods such as the enforcement of law, order, education and infrastructure'.

This new emphasis on state capacity developed out of the widespread acknowledgement that economic and political institutions

[1] See the essays collected in Hintze (1906, 1975) and Schumpeter's classic essay which distinguished between medieval domain states and the modern tax state (Schumpeter, 1954, 1918). The seminal survey of the history of the state by Finer (1999a,b,c) also deserves acknowledgement.

[2] The concept of state capacity first attracted attention from development scholars in the context of the debate concerning the role played by 'developmental states' in East Asian economic growth (see Wade, 1990; Haggard, 2004). Alongside there theoretical contributions of Besley and Persson (2009, 2010, 2011) there are some other theoretical contributions to this nascent field including McBride et al. (2011) and Herrera and Martinelli (2013).

[3] Relatedly, Dincecco (2015) surveys recent work on the rise of effective states in Europe. Philip Hoffman's Presidential Address to the Economic History Association also calls for economic historians to focus on questions of how politics shape economic outcomes, observing 'we still know too little about what determines the laws, regulation, and policies that states adopt or what goods and services they furnish' (Hoffman, 2015a, p. 305).

are critical determinants of economic growth (see, among others, North and Thomas, 1973; North, 1981, 1990; Acemoglu et al., 2005a; Greif, 2006; Acemoglu and Robinson, 2012). Institutions matter because they structure the incentives that direct economic activity into either socially productive or unproductive ends. Thus, rather than focusing on whether or not a particular policy was beneficial or not, the 'institutional turn' directed attention to how particular political or economic institutions provided the necessary preconditions for economic growth to take place, first in western Europe and then in other parts of the world.[4] However, the institutional literature raised a further puzzle: if there is a degree of consensus about which institutions led to the emergence of sustained economic growth, what enabled some societies to adopt growth-enhancing institutions, but prevented other societies from doing so?

State capacity provides one answer to this question. Economies governed by strong, cohesive, and constrained states are better able to overcome vested interests and avoid disastrous economic policies, while societies ruled by weak states are prone to rent-seeking, corruption and civil war. State capacity, therefore, can complement market-supporting institutions in providing a conducive setting for economic development. This insight was understood by Adam Smith who noted the importance of the provision of peace, justice, and easy taxation (Smith, 1763). But it has only returned to the forefront of discussions in economic history and development economics in the past few years.

Rulers in early modern (1500–1800) Europe built state capacity in the pursuit of state power and victory in war. Prosperity and economic development were largely means to this end; they did not anticipate the possibility of modern economic growth. Many of their policies were destructive in the short-run. Contrary to the claims of heterodox development economists like Chang (2002), there are few clear-cut examples of successful state-led 'industrial policy' in this period.[5]

As Adam Smith also understood, powerful states can also impede economic growth and produce economic stagnation. The link between greater state capacity and sustained economic growth is contingent: it depends on whether state policies complement markets and market-supporting institutions. The experience of the twentieth century teaches that attempts to build state capacity in the absence of the rule of law or a market economy have failed to generate sustained economic growth.[6] And it should go without saying that there are drawbacks as well as advantages to 'seeing like a state' (Scott, 1999).

The recognition of the importance of state capacity in discussions of economic development and political economy is welcome. In contrast to a recent focus on the clinical role of economists in designing experiments that enable the evaluation of micro-level policy interventions, shifting the spotlight to state capacity obliges economists to engage with the wider concerns of social scientists in questions of state formation and political order, questions which are invariably illuminated by a knowledge and understanding of history.

2.1. Investing in state capacity in Europe

The first role for economic history in this literature is well established: to provide data for the rise of state capacity over the long run. The European State Finance Database and the research of numerous scholars means that it is now possible to trace the rise in central government revenues in major western European states from the mid-seventeenth century onwards (Bonney, 1995; Dincecco, 2009; Karaman and Pamuk, 2013). For precociously centralized states like England it is possible to recreate tax revenue back to the middle ages (Barratt, 1999; O'Brien and Hunt, 1999).

Tax revenue per capita is a commonly used metric of fiscal capacity. Fig. 1 plots the growth in fiscal revenues for a selected number of European states between 1500 and 1900. One interpretation of Fig. 1 is that the increase in tax revenues per capita across these polities suggests that state capacity increased equally across them over the period. Behind the aggregate data presented in Fig. 1, however, lies a considerable amount of variation in the institutions responsible for the rise of state power. Different countries have experienced different political histories and, hence, different paths to modern statehood. It is therefore necessary to better understand the individual historical experiences of different European states.

Tax revenues per capita do not tell the entire picture. It is possible for a state with decentralized fiscal institutions (e.g. tax farming) to extract just as much revenue from its population as a state with a fiscal bureaucracy. Importantly, however, there will be no incentives in the former state to impose more general rules, whereas in the latter there is. One contribution of the historical literature on state capacity has been to unpack the details surrounding fiscal and legal institutions so that we can dig below the standard metric of taxes collected per capita.

The complexity of the state-building process is revealed, for example, in the British case. By the eighteenth century, the British fiscal military state was capable of mobilizing tremendous resources through taxation and borrowing (Brewer, 1988; Vries, 2015). The British state is held up as a success story in the literature in institutional economics because it combined high fiscal capacity with constraints on the power of the sovereign and some measure of the rule of law (North and Weingast, 1989; Barker, 1995; Weingast, 1995; Acemoglu et al., 2005b; Acemoglu and Robinson, 2012). But what accounts for its success? How was it able to build a modern state that had both high fiscal capacity and rule of law?

In answering these questions historians have placed considerable weight on the importance of the long history England, if not

[4] The influence of the institutional literature (particularly North, 1981, 1990) after the collapse of Communism can perhaps be attributed to the fact that it provides both an explanation for why economies that rely on government planning are likely to fail and why attempts to import any isolated institution on its own, such as privatization or the price mechanism, may be ineffective (Boettke, 2001).

[5] See Juhász (2016) for analysis of a possible example of infant industry protection from the Napoleonic period.

[6] To take a contemporary example, a recent study utilizes a synthetic control approach to estimate the sizable economic damage caused by *chavezismo* in Venezuela (Grier and Maynard, 2016).

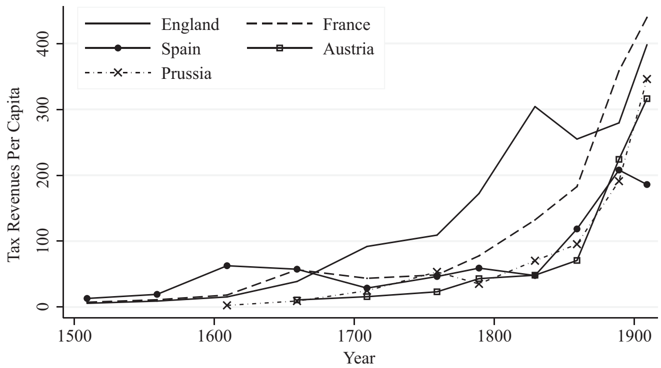

Fig. 1. Log Tax revenues per capita for five European powers. Source: Karaman and Pamuk (2013).

Britain, had as a coherent and comparatively centralized polity. The following statement is representative: 'Seventeenth century English governments …were fortunate to inherit a very long tradition of political integration and effective centralized rule. Despite well-developed localist sentiment and county loyalties, early modern England was a unitary state. No ethnic or territorial enclaves existed where the central government's writ did not run' (Prest, 1998, p. 16). According to this argument, due to the underlying homogeneity of its land and people, England possessed both a unified legal and fiscal system from the middle ages onwards.[7] This made England a uniquely coherent and congruent medieval polity.[8]

In Parliament, it possessed a national representative body (in contrast to the regional and provincial estates and assemblies of France and Spain) and a comparatively unified political elite (Mokyr and Nye, 2007). Recent accounts stress the ability of the medieval English monarchs to utilize Parliament in order to administer their realm. Due to the costs of information, Stasavage (2010) observes that representative institutions functioned best in smalll polities. Geographical compactness gave England an advantage over France as the latter kingdom was simply too large to be governed by a single representative body. Boucoyannis (2015) argues that it was the power of the English monarch to compel attendance in Parliament that ensured that it was a representative body. The formation of a nationwide and representative Parliament enabled English rulers such as Edward I to raise substantial tax revenues and to compete with the more powerful rulers of France on the continent.

The precocious centralization of English fiscal and legal institutions helped to ensure that a coalition in favor of restraining the power of the monarch could be built, and thus made possible a dramatic increase in the military capacity of the English state at the end of the seventeenth century. The classic contribution of North and Weingast (1989) emphasized the importance of the imposition of constitutional constraints after 1688 in reining in the power of the monarchy as a precondition for the subsequent success of the English (and after, 1707, British) state and economy. Although this view was met by considerable criticism by historians (e.g. see the essays collected in Coffman et al., 2013), it remains influential as a broad outline. The current consensus among economic historians modifies it by emphasizing the importance of the Civil War and Commonwealth periods (1642–1660) as a watershed in both the constitutional and fiscal history of England (O'Brien, 2011; Jha, 2015) and by stressing the important role played by political elites and the formation of political parties in producing a political equilibrium during the period 1690-1720 which limited the power of the crown while granting the state previously undreamt of powers to raise taxes, spend, and borrow (Carruthers, 1996; Stasavage, 2002, 2003; Cox, 2016).

It is evident from Fig. 1 that the advent of Parliamentary supremacy following the Glorious Revolution enabled a dramatic increase in state capacity. After the Glorious Revolution and Act of Union, Britain became a fiscal military state raising taxes on an hitherto unprecedented scale (Hoppit, 2000; O'Brien, 2011) and incurring tremendous debts (Dickson, 1993, 1967; Ventura and Voth, 2015). Moreover, contrary to the received wisdom, the state that arose after 1688 did not so much increase protection for existing property rights but reordered them, in many cases dismantling or discarding preexisting feudal or customary property rights in favor of property rights that were suitable for investment in commercial agriculture or for exploiting land for industrial purposes (Bogart and Richardson, 2009, 2011).[9]

North and Weingast (1989) saw 1688 as making a constitutional watermark leading to the better protection of property rights and the rule of law. Subsequent research has overturned many aspects of this thesis. In the century and a half following 1688, rules and laws did become more general. But the process was saw numerous setbacks. Although as Brewer (1988) documented, the excise

[7] The Anglo-Saxons established a relatively centralized monarchy in the ninth and tenth centuries which was then taken over largely intact by the Norman rulers (Campbell, 2000, p. 10). A common set of customs was imposed in the reign of Edward I (r. 1275–1307) (Gras, 1912, 1918). The Anglo-Saxon legal system was originally fragmented and decentralized but after the Norman conquest it was brought under a common law in the reign of Henry II (r. 1154–1189) (Berman, 1983, pp. 445–458). This was arguably possible due to the strength of the English monarchy (Glaeser and Shleifer, 2002). Barker writes: 'The common law, a body of law common to the whole of England as opposed to variable local custom was necessarily a product of centralization' (Barker, 1995, p. 181). Arthur Hogue observed that '[t]he exceptional strength of Angevin monarchy was essential for the development of a body of common law for the entire realm' (Hogue, 1966, p. 33).

[8] The medieval English kingdom was a geographically compact polity. However, even in England the power of the government was limited by geography. Royal authority was strongest in the densely population south-east. Areas like Northumberland, Cornwall, and the marches of Wales remained much more loosely governed.

[9] Brewer (1988) coined the term 'fiscal-military state' to describe the Hanoverian polity that emerged in the wake of the Glorious Revolution. More recent work has traced back the origins of this fiscal military state to the 1680s (Pincus, 2009) or the 1640s (O'Brien, 1988, 2001, 2011).

was modernized and bureaucratized in the period following 1688, the rest of the British state remained patrimonial in organization and modernization was a slow and gradual process—an open examination for entrance into the civil service was only introduced in 1870. In the sphere of business organization, the ability to form joint-stock companies was severely limited by the Bubble Act of 1720 and incorporation laws only began to be liberalized in the 1820s with the full legalization of joint-stock companies waiting until 1844 (Harris, 2000). Similarly, laws restricting religious freedom remained in place through the eighteenth century (see Machin, 1999). Nevertheless, the increase in state capacity was accompanied by a general movement towards what North et al. (2009) call 'open access'.

One reason England was able to develop fiscal capacity in such a precocious manner was due to the relative homogeneity of its people and geography from very early on. Comparing the historical experience of England and Spain, Voth (2016) argues that where there was more initial heterogeneity, the state building process developed very differently. England was able to successful build state capacity in part because of its higher level of initial cohesion. Johnson and Koyama (2014b) argue that tax farming was more persistent in France than in England because local economic conditions in France varied much more: it was the low level of initial heterogeneity in England that made it more cost effective for English monarchs to switch away from tax farming towards direct collection of excises and customs taxes earlier than did France or other European countries. Gennaioli and Voth (2015) place a similar emphasis on homogeneity in their study of the impact of military competition on the incentives of rulers to invest in state capacity. They argue that in initially more homogenous countries like England, the intensification of military competition after 1500 produced a clear incentive to invest in state capacity. However, in heterogenous kingdoms like Spain or Poland, where it was inherently more difficult and costly for rulers to invest in centralization than it was in England, this incentive did not necessarily exist and attempts to overcome vested local interests risked destabilizing the entire kingdom.

In contrast to England, medieval France was a collection of feudal appendages, loosely held together by their loyalty to the crown (Goubert, 1969; Major, 1994; Collins, 1999). Different principalities and kingdoms were added to the possessions of the French king through warfare and marriage alliances, over the course of the middle ages: Dauphiné in 1349, Burgundy in 1477, Provence in 1486, Brittany in 1532, Franche-Comté in 1678 to give just some examples.

Consequently, the French experience of state building differed from the English experience. In the face of far greater resistance from local power holders, it was significantly more protracted and drawn out. Even after Francois I (r. 1515–1547) passed a series of reforms designed to centralize and standardize his kingdom, different fiscal and legal systems held sway in the pays d'élection where the king was able to levy direct taxation from the pays d'état where he had to negotiate with local elites.[10] This legacy meant that France remained legally and fiscally fragmented until the French Revolution (Rosenthal, 1992). Nevertheless, as a historical tradition going back to Tocqueville (1998) has emphasized, ancien regime France did witness considerable increases in state capacity during the seventeenth century (Bonney, 1999; Collins, 1995; Johnson, 2006; Johnson and Koyama, 2014b) and, as we will discuss in Section 3.5, these played an important role in setting the stage for the subsequent development of a national identity which underlay the introduction of a constitution and rule of law.

Investment in state capacity also took place in Prussia and in the Habsburg empire during the eighteenth century, prior to the imposition of constraints on the executive. Prussia is viewed by historians as a fiscal-military state par-excellence, established by the force of will of the Hohenzollern dynasts (Brewer and Hellmuth, 1999). It rose to great power status in part because the rulers were able to invest in fiscal capacity and establish a powerful standing army.[11]

In Tilly's (1990) terminology, states like Prussia and Russia followed more coercive paths to modern statehood. Due its small population, the Prussia state initially relied on local conscription in combination with foreign mercenaries to boost the size of its army. A canton based system of recruitment was implemented in 1733 mandating the recruitment of a certain number of peasants from each canton (Büsch, 1997). Often viewed as the fiscal military state *par excellence*, the level of bureaucratization in eighteenth century Prussia is sometimes exaggerated in historical accounts. The Prussian state was able to dramatically increase tax revenues while continuing to rely on tax farming until the end of the eighteenth century (see Kiser and , 1994).

The Russian experience after the reforms of Peter I was still more coercive, as peasants were conscripted for life-long service in the army and the nobility obligated to serve the state (Duffy, 1981; Dukes, 1990).[12] The different road to modern statehood followed by Eastern European society has long led political scientists and historical sociologists to speculate about how this made them more susceptible to autocracy in the twentieth century (e.g. Moore, 1966).

Attempts to build state capacity faced similar barriers in the Habsburg empire, a large empire that ruled over numerous ethnicities and linguistic groups. This ethnolinguistic diversity posed further challenges to the process of establishing a modern state.[13] Nevertheless, like their rivals in Britain, France, and Prussia, the Habsburg rulers were able to build state capacity. The reigns of Maria Theresa and her son Joseph II saw many reforms that laid the foundation for a modern state. These included a large scale administrative reorganization in 1749 and several attempts to limit ecclesiastic privileges and submit church lands to taxation. This culminated in a major tax reform based on a new land survey in 1789. The legal system was similarly standardized: laws against superstition and magic were passed in 1755, ending witchcraft trials, while in 1768 seigneurs lost the ability to impose capital

[10] For more on legal fragmentation within early modern France and the cost it imposed see Hamscher (1976).

[11] Georg Heinrich von Berenhost, personal adjutant to Frederick II, was the first person to make the off-repeated observation that 'the Prussian monarchy is not a country which has an army, but an army which has a country, in which, as it were, it is just billeted'.

[12] In these examples, therefore, the ratio of tax revenue to GDP serves as a lower bound on the ability of early modern states to mobilize resources.

[13] This contrast should not be overdone. In the first part of the seventeenth century the Hohenzollern possessions shared little in common; they were culturally and politically disparate. Brandenburg was commonly known as 'the sand-box of the Holy Roman Empire' for the poor quality of its soil. Prussia had been ruled by Poland for a century and fell outside of the Holy Roman empire.

punishments in their courts. The crown outlawed judicial torture in 1776. These reforms were described by R.H.W. Evans as '[p]iece-meal but concrete and remarkably far-reaching' (Evans, 1991, p. 189).

Joseph II implemented still more radical, centralizing reforms. A professional bureaucracy was established and German made the official language of all administration. These officials were trained in Vienna and had a reputation for implementing rules impartially. Edicts were passed granting toleration for Protestants and Jews. And while Maria Theresa's reforms respected the distinctive character of each of her realms, Joseph II sought to forge these separate territories into a unitary state. His policies were only partially successful and his more radical plans were reversed by his successors. Nevertheless, one historian has noted that as a result of these reforms: '[a]t least in the Habsburg hereditary lands the notion of legal sovereignty of a central authority which alone could command obedience had made inroads into a concept of law which only guaranteed particular and personal privilege' (Hutton, 1980). The experiences of Prussia and the Habsburg lands thus differ from that of England. The initial heterogeneity of the former made establishing effective fiscal and legal institutions a more arduous process. Consequently, the transition to state institutions capable of implementing more general rules occurred later than in England. This would have consequences for the experiences of these countries in the twentieth century.

In contrast, Spain, long held up as the epitome of an overbearing and absolutist state in which the weight of government regulations and fiscal oppression brought about economic stagnation and decline, is now seen in the literature as exemplifying the costs associated with the failure to build a centralized state.

The concept of state capacity sheds light on this failure. Historians such as John Lynch and John Elliott have shown that while the Spanish monarchs of the sixteenth and seventeenth century possessed great personal authority and wealth they were unable to bring about the creation of unified fiscal and legal institutions across the different parts of their realm (Elliott, 1992; Lynch, 1992). The state-building efforts of the Spanish monarchy were largely confined to Castile. Elsewhere, in Aragon in the sixteenth century, for instance, 'semi-independent lords exercised numerous feudal rights to the detriment of the crown and their vassals, where Castilians were debarred from office, where laws were different and independently administered, and where taxation was checked by the cortes' (Lynch, 1992, p. 290). The overall thrust of this recent research is that the reasons for the ultimate failure of the Spanish empire lay not with profligate borrowing or overspending, as is advanced in traditional accounts, but lay instead on the revenue side and the failure to create a unified fiscal state (see Drelichman and Voth, 2014).[14]

Further evidence for this is provided by the work of Grafe (2012), who characterizes Spain as a confederation of urban republics. These city republics, along with local elites and landholders, were able to maintain their 'liberties' into the early modern period. Internal custom barriers impeded trade. Indirect taxes were collected and spent at the local level. It was only on the accession of the Bourbon dynasty that there was an attempt to fully unify the separate Spanish kingdoms. Building on the work of Epstein (2000), Grafe (2012) sees the failure to establish a centralized state in Spain as at the heart of an integration crisis that limited the development of a single market economy in the Iberian peninsular. Even when the Bourbon rulers did attempt to increase taxes in the eighteenth century, they failed in their attempt to impose a common tax (the *contribucìon unica*) on the entire country (Tortella and Comin, 2001, p. 159). A recent treatment by Hough and Grier (2015) extends this analysis to consider the consequences that the weakness of the Spanish state had for the institutions it imparted to its colonies in the New World.

2.2. Investing in state capacity outside of Europe

What about the experience of states outside of Europe? A literature inspired by Montesquieu (1748, 1989) and Wittfogel (1957) attributes the failure of economic development to occur in Asia to despotic states that taxed excessively and made property rights insecure (e.g. Jones, 1981; Rosenberg and Birdzell, 1986; Landes, 1998). The rulers of the great empires of Asia were certainly immensely powerful individuals capable of mobilizing huge resources for monumental building projects and for warfare on a tremendous scale. Indeed, the Qianlong emperor commanded an army whose nominal size exceeded a million individuals. Nevertheless, the ability of the rulers of premodern empires to effectively 'govern' their territories was limited. Qing China was highly bureaucratized by premodern standards yet the size the imperial bureaucracy was tiny relative to China's population and in relation to the vast territories that were claimed by the Qing rulers. Similarly the Ottoman emperor ruled a vast realm and in principle his power was absolute. But even at the height of Ottoman power, there were many parts of the empire such as Egypt, North Africa, and Iraq, that were highly autonomous while even within the core of the empire, the discretionary power of the emperor was quite limited.[15] Moreover, throughout this period the Ottoman fiscal system was highly decentralized (Balla and Johnson, 2009; Karaman and Pamuk, 2010; Coşgel et al., 2009; Coşgel, 2015).

Similarly, recent scholarship has established that taxes in China were low (Ma, 2011, 2012, 2013; Rosenthal and Wong, 2011; Sng, 2014; Vries, 2015; Ma and Rubin, 2016). This had positive effects as the policies of the Qing state did not impede the effectiveness of the market in goods and services (Pomeranz, 2000; Shiue and Keller, 2007; Li et al., 2013). However, many aspects

[14] The view that the decline of Spain was due to excessive borrowing is present in many traditional accounts such as Kennedy (1987) but it has been overturned by Drelichman and Voth (2010, 2011, 2014).

[15] The limited power of emperor within the Ottoman empire has been discussed frequently in the historical literature. For example Shaw writes: 'The nature of the Ottoman system in fact left the sultan with very limited power. First of all, the scope of his authority was limited to functions involving the exploitation of the empire's wealth, promoting the institutions and practices of Islam and the other religions of his subjects, expanding and defending the territory of the empire, and keeping order within it. Therefore, significant aspects of Ottoman life were left to be dealt with autonomously, not only by millets but also by the guilds, the corporations, the religious societies, and the other groups forming the corporative substructure of Ottoman society ... And it was only in the nineteenth century, as the result of Western influence, that Ottoman government in fact secured the kind of autocracy and centralized power that Europe traditionally assumed it had (Shaw, 1976, p. 165).

of the effectiveness of the Chinese state in the early modern period remain subject to debate. It is a matter of some contention whether or not the low taxes collected by the Chinese state reflected low fiscal capacity or a reliance on Confucian ideology. Kent Deng refers to 'under governance' in terms of the reigning political ideology observing that '[h]]eavy taxation remained politically taboo' (Deng, 2015, p. 328). Rosenthal and Wong (2011) write that the 'Chinese logic for successful state maintenance … emphasized light taxation and generally tried to avoid interfering with commerce' (174).[16] Sng (2014), on the other hand, compellingly argues that the low amounts of tax revenue collected by the central government in Qing China reflect the fragile political equilibrium that the Qing rulers faced in governing such a large empire using premodern technology. The Qing state relied on a land tax based on a fixed amount due each year based on the value of land.[17] The collection of this tax gave a large amount of discretion to the local officials who extracted bribes or otherwise manipulated the process for their own benefit. Sng (2014) develops a formal model which predicts that where the principal-agent problem facing the ruler was more severe, the weaker was the ruler's ability to tax. Consistent with this model, he presents evidence that taxes were significantly lower in areas further from the capital and that they declined significantly from the mid-eighteenth century onwards.[18] Vries (2015) similarly interprets the low taxes collected by the Qing state as reflective of a low-state capacity political equilibrium. In ongoing work Ma and Rubin (2016) formalize this idea in a more general model that explains why Chinese rule choose not to invest in fiscal capacity.[19]

There is little evidence that the average Chinese paid a price for the failure of the Qing empire to build a fiscal military state in the eighteenth century. On the contrary, the economy continued to expand during the High Qing period (1680–1794). Chinese peasants possessed secure property rights in land (Pomeranz, 2000). The importation of new world crops and the implementation of double cropping enabled agricultural production to increase inline with the population (Yang, 2014). However, the weakness and vulnerability of the Qing state became evident in the nineteenth century as it failed to respond to aggression from Western colonial powers from the 1830s onwards, while its failure to maintain internal order resulted in the Taiping Rebellion (see Kuhn, 1980).

Japan also ceased to face geopolitical competition after pacification at the end of the sixteenth century and as a result there was little incentive to build a fiscal-military state during the early modern period. However, unlike China, Japan was able to centralized its governing institutions and invest in fiscal capacity once it awoke to the threat posed by the West in the mid-nineteenth century. The Japanese state played a crucial role in the rapid expansion of the railway network and research by Tang (2014) suggests that this infrastructure spending had a causal impact on firm capital and on the overall efficiency of the economy. Sng and Moriguchi (2014) and Koyama et al. (2015) argue that this was because Japan was relatively compact geographically and, as a consequence, its elites were able to coordinate on a program of modernization. Thus Japan was able to rapidly build a modern state that was capable of imitating and adapting successful policies from the West. This enabled them to both defend themselves from the potential threat of Western imperial aggression and to implement policies that allowed them to experience rapid catch-up growth during the twentieth century. In contrast, the tremendous size of the Qing empire made it difficult for the state to penetrate into local society in every corner of the country for the maintenance of local order and the implementation of reform policies (Kuhn, 2002).

The analytical lens provided by the concept of state capacity is also useful for understanding patterns of economic development in modern East Asia. Building on a long standing debate about the impact of colonial rule in East Asia (Kohli, 1994; Haggard et al., 1997), recent research applies more rigorous econometric techniques to better identity the effect of past investments in state capacity on current outcomes. Mattingly (2015) studies the impact of Japanese colonialism on state building in Manchuria. The Japanese invested in state capacity but governed through extractive institutions. Relying on the fact that the provincial borders between Manchuria and nearby Inner Mongolia were drawn to divide a previously unified and homogenous region, Mattingly (2015) implements a regression discontinuity design that compares Manchuria with neighboring areas in Inner Mongolia. He finds that Japanese rule was associated with both higher state capacity and higher levels of economic development and that these advantages persist to this day. Dell et al. (2015) also use a regression discontinuity design to study the impact of state building in Vietnam. They find that villages in Northern Vietnam ruled by a bureaucratic, Chinese-style, state in 1698 both have higher state capacity and tax compliance today and are more prosperous than those areas that were ruled in a less formal and more patrimonial way by the Cambodian empire.

Lu et al. (2016) study the importance of state capacity for China's more recent economic history. Focusing on Sichuan, Lu et al. (2016) instrument for state capacity by collecting data on the path of the Central Red Army during the Long March. They show that counties along the path of the Red Army had more Communist party members. If the path taken by the Red Army was conditionally exogenous, controlling for geographic factors, it should only affect future development outcomes via its impact on local state capacity. They find that their measure of stare capacity—the number of party officials—is positively correlated with several measures of economic development including grain output growth per capita, education outcomes, and local infrastructure after the introduction of market reforms in 1978. The number of party officials had a negative impact on grain output prior to 1978. They interpret this finding as consistent with the argument that state capacity has a positive impact on development when it complements

[16] Also see Wong (2001, pp. 76–77).

[17] It was only after 1850 that the Qing state introduced an exercise tax or internal tariff, the *Likin*, the receipts of which were spent locally. This tax was initially introduced to pay for the armies required to defeat the Taiping Rebellion and is seen as marking a switch to greater political decentralization and internal fragmentation within the Qing empire.

[18] Sng notes that 'Low taxation in Qing China is often seen as a direct consequence of its adherence to the Confucian ideal of benevolent rule. However, the Qing state's tax revenue was too small to be explained by ideological beliefs, since Confucianism promoted a tax rate of 10%' (Sng, 2014).

[19] Similarly the ability of the Chinese state to provide public goods such as granaries and flood relief is seen by some scholars as evidence of the effectiveness of the Chinese state during the High Qing period (1660–1794) (e.g. Wong, 1997, 2012). For example, Rosenthal and Wong (2011) claim that 'the Chinese state managed to help maintain waterways, manage water-control works for irrigation, and build massive granary reserves and other projects that helped promote material security and economic growth' (175). Others, however, see these efforts as sporadic failures which we not sustained by the Qing state in the nineteenth century (Vries, 2015).

markets, as has been the case in the post 1978 reform period, but that it has no such positive effects when the state attempts to substitute directly for the market.

Many of the economic problems that beset African economies today can be attributed to weak and predatory states (e.g. Bates, 2008). Much of the recent research that has explored the history of state building in Africa attributes the weakness of modern African states to the slave trade and to the subsequent practices of colonial regimes. Nunn (2008) and Nunn and Wantchekon (2011) established that the slave trade had negative causal impact on African institutions, led to a culture of mistrust, and may have undermined the formation of states in the precolonial period. The colonial regimes employed extractive systems of taxation but also provided little in the way of administration or public goods (see Herbst, 2000; Frankema, 2010, 2011). Frankema (2011), for example, characterizes the fiscal regime of British Africa as minimizing effort rather than maximizing revenue. The amount of tax revenue extracted by colonial states in Africa was typically low and efforts to build fiscal bureaucracies were extremely limited (Frankema and van Waijenburg, 2014). Huillery (2014) details a similar failure to invest in state capacity in French West Africa and shows that the costs of the small colonial states that did exist fell on the African population.[20] However, this does not mean that the fiscal burden imposed by these states was light; van Waijenburg (2015), for example, draws attention to the extensive use of forced labor in colonial French Africa.

Other factors also help to explain the weakness and fragility of African states. Gennaioli and Rainer (2007) and Michalopoulos and Papaioannou (2013) emphasize the importance of pre-colonial ethnicity-level institutions in determining modern levels of state capacity. Fenske (2014) provides econometric evidence in support of Bates's (1983) argument that in precolonial Africa centralized states were more likely to emerge along ecological divides in order to safeguard and promote trade. The most striking difference between Africa and Europe, however, is in the different role played by warfare in the process of state building.

An extensive literature has establish the importance played by warfare in the rise of state capacity in early modern Europe (e.g Tilly, 1990; Besley and Persson, 2011, 2013; Dincecco and Prado, 2012; Gennaioli and Voth, 2015; Hoffman, 2015a). In sub-Saharan Africa, however, recent work suggests that warfare did not lead to the establishment of strong or more consensual states, but rather was associated with state weakness (Dincecco et al., 2015). As new sources of data become available, and as scholars innovate through, for instance, the use of field experiments (see the work discussed in Section 4.2), we expect more research to focus on the sources of persistent state weakness across much of sub-Saharan Africa.

In contrast, the United States greatly expanded its state capacity in the second part of the nineteenth century in the wake of the American Civil War. Economists have traditionally viewed the rise of the state in late nineteenth century America as a *response* to the tremendous growth of the US economy in this period (i.e., Glaeser and Shleifer, 2003). Recent research, however, points to a positive role for state capacity laying the preconditions for the increase in innovation that drove the late nineteenth century acceleration in economic growth. Acemoglu et al. (2016) use the number of postal stations as a proxy for the 'infrastructural power' of the state. They argue that the development of a nation-wide postal system provided the necessary institutional preconditions for innovation in late nineteenth century America. Preliminary empirical analysis suggests a positive relationship between patents and the number of post offices.[21]

3. State capacity and modern economic growth

We can now review the mechanisms connecting the rise of state capacity with the onset of modern economic growth. On the face of it, the nature of the relationship between state capacity and economic growth in the preindustrial period is far from obvious. Higher taxes and debt are not normally a recipe for economic development. Moreover, in the modern development literature the benefits of state capacity are often associated with effective provision of public services such as education, health, and of basic infrastructure, such as roads or electricity.[22] But the states of early modern Europe did not in general make large-scale investments in education or infrastructure until after 1800. The revenues generated by the increased fiscal capacity of European states after 1500 was predominantly spent on warfare rather than on other public goods.[23]

3.1. Protection from external predation

Perhaps the most important function of the state is to provide defense. Frequently this is defense against aggression by other states. Premodern polities were often at war. In the early modern period, particularly bellicose states like Russia and France were at war more often than they were at peace (Voigtländer and Voth, 2013). Warfare was economically costly, typically involving the devastation of agriculture land—as in the chevauchée of the Hundred Years War, for example—and often the destruction of towns and cities that resisted a siege.[24] It seems likely that the ability of early modern states after 1700 to establish territorial borders and

[20] This research has also revealed variation and heterogeneity within Africa. French and British colonial states in Africa was remarkably similar but there was variation within each colonial empire. British rule was more extractive in East than in West Africa and only in Mauritius did the state invest in fiscal capacity and build a bureaucracy (Frankema, 2011).

[21] Other recent work on the American experience studies the impact of state development on public health Troesken (2015) argues that in the American case there was a trade-off between the constitutional provisions that protected federalism and gave rise to economic and political freedom and public health.

[22] Recent research investigating the causes of bureaucratic performance and infrastructure spending includes Rasul and Rogger (2016), Burgess et al. (2015).

[23] Defense is usually viewed as a public good. However, warfare in this period was partly a private good from the perspective of rulers, who enjoyed the glory it gave them, but rarely bore the cost of losing a war (see Hoffman and Rosenthal, 1997; Hoffman, 2015b). One of the few exceptions to the absence of government provided insurance or public goods was the English Poor Law (Greif and Iyigun, 2013).

[24] The destructiveness of medieval war is evocatively and powerfully described by Sumption (1990).

limit the destructiveness of warfare played an important role in allowing Smithian economic growth to take place.

This is supported by recent scholarship from other historical periods. Classicists such as Ober (2015) suggest that classical Greece witnessed a period of sustained economic growth. Similarly, there was intensive growth in medieval Europe, particularly in the city states of northern Italy (see Fouquet and Broadberry, 2015). However, these 'growth efflorescences' were brought to an end by external invasion because these prosperous city states were not large or powerful enough to defeat the forces of Macedon and Rome or Spain and France.[25] Economic growth in the absence of sufficient state capacity was not self-sustaining precisely because economically successful societies attracted predators. This problem is akin to the 'violence trap' discussed by Cox et al. (2015). Greater state capacity enabled the states of western Europe to escape from this violence trap in the eighteenth and nineteenth centuries.

The Dutch Republic was the most prosperous economy of the early modern period and some economic historians have detected the origins of modern growth there (see de Vries and van der Woude, 1997; van Zanden and van Leeuwen, 2012). The slowdown of the Dutch economy after the end of the seventeenth century was largely due to the burdens imposed by fighting a series of costly wars against the France of Louis XIV. In contrast, greater state capacity undoubtedly played an important *negative* role in protecting eighteenth century England from a similar experience, enabling it to conduct a second hundred years war with France at the same time as undergoing the industrial revolution. Can we go further and articulate a *positive* role for the state in helping to provide some of the preconditions for modern economic growth?

3.2. States and markets as complements

Another mechanism is the complementarity between market performance and state capacity. Well functioning markets are not only required for allocative economic efficiency, they also provide the necessary conditions for sustained economic growth over time. But markets cannot operate in an institutional vacuum. They require property rights that are well defined and enforced and rely on governance institutions that can arbitrate claims and disputes.

Governance institutions do not have to be provided by a state—that is by an organization that claims a monopoly on the legitimate use of force within a circumscribed territory. Historically there are many instances of market actors developing their own governance mechanisms in the absence of state enforcement through private-order arrangements (Greif, 1989, 2006; Clay, 1997; Clay and Wright, 2005; Leeson, 2014; Stringham, 2015). A considerable volume of trade took place in the middle ages without relying on enforcement by any single political authority. The state is certainly not required for either impersonal trade or for the emergence of rules of behavior and the rule of law. What the historical record suggests, however, is that during the relevant centuries prior to the industrial revolution, commerce and trade came increasingly under the purview of the public-order institutions.[26] An account of the onset of modern economic growth in western Europe cannot therefore abstract away from the greater role played by public order institutions during this time period.

The rise of more powerful states led to greater market integration. Economic historians have long pointed out that markets in medieval and early modern Europe were fragmented (Heckscher, 1955; Epstein, 2000). Transport costs were high, particularly for overland transport: it was rarely economical to move bulky goods like grain far by road as the price would double every 250 miles (Masschaele, 1993). But these barriers were not only technological; they were also institutional. Internal trade barriers and tolls ensured that transactions costs were high and were responsible for impeding trade in all European countries (Dincecco, 2010).

Various studies have attempted to quantify the extent of market integration in early modern Europe (Shiue and Keller, 2007; Bateman, 2011; Chilosi et al., 2013; Bernhofen et al., 2016). This research shows that, in general, markets only became fully integrated in the nineteenth century. But there was a movement towards greater integration in the early modern period driven by a number of factors, including improved road networks, canals, and a decline in the violence associated with warfare after the seventeenth century.Among the most important factors was the role played by powerful states like France and Prussia in suppressing the attempts by local elites to extract rents. Two examples illustrate this point: tolls along the river Rhine and the Zollverein trade union.

The role tolls played in stifling trade along the river Rhine was studied by Heckscher (1955). Trade flourished along the Rhine during the medieval commercial revolution as it was a vital conduit for commerce between the North Sea and western Germany (see Lopez, 1971). As the volume of trade grew, a number of different cities and principalities bordering the river established tolls along it. Trade taxes were important as local rulers and princes within Germany lacked the capacity to impose other taxes on their own population (Middleton, 2005). Agricultural output remained difficult to tax because output was low and local landowners were powerful, while the cities were strong enough to assert their independence from the territorial rulers. The river traffic, in contrast, was comparatively easy to tax: 'the carriers could not well conceal the quantity or value of their cargos; if they had no money to pay, the toll-man took payment in kind' (Clapp, 1907, p. 6).

In the medieval period the Holy Roman emperor and the electors who owned lands bordering the Rhine attempted to regulate and limit the rights to collect tolls. However, as the power of the emperor declined, the number of tolls and other charges multiplied (Spaulding, 2011, p. 204). This situation reached a nadir after the end of the Thirty Years War (1618–1648). The decline of imperial

[25] Some economic historians have speculated that Song China achieved something comparable to an industrial revolution in the eleventh and twelfth centuries but this prosperity was similarly ended by external invasion first by the Juren and then by the Mongols (see Jones, 2003, 1988). The vulnerability of China to external invasion and the role played by these invasions in generating stop-start growth is explored in Ko et al. (2017). The term 'growth efflorescences' was introduced by Goldstone (2002).

[26] For a survey see Ogilvie and Carus (2014). The does not preclude a move towards less reliance on third-party enforcement in the future.

authority gave 'the princelings of the numerous principalities and powers along the Rhine free hand to fill their coffers by tapping the shipping as they pleased' (Clapp, 1907, p. 5).

These tolls were high and variable. Rates were not published, rather they varied by type of cargo and 'judgement and corruptibility of the officials' (Clapp, 1907, p. 7). The rate at which luxury goods like wine was taxed vastly exceeded the rate at which cheaper and more perishable goods were taxed.[27] Spaulding notes that 'most rulers actively sought to keep the level of their tolls secret' but that, in any case, 'the tolls actually paid resulted from on-the-spot negotiations between captains and toll collectors' (Spaulding, 2011, p. 210). Consequently each toll collector had the discretion to practice price discrimination which made it extremely difficult for merchants to plan since they could not anticipate the charges they would be obliged to pay: 'a cargo upstream from Rotterdam could never tell what new toll stations had been erected or what would be charged this trip at the old ones' (Clapp, 1907, p. 7).

There were approximately 62 customs posts on the entire Rhine in the late middle ages. In the sixteenth century a merchant paid tolls at 31 points between Basel and Cologne or one every nine miles (Heckscher, 1955, p. 57). By the 1690s it was claimed that there was a toll station every 6 miles along the Rhine (Ozment, 2004, p. 126). The total number of toll stations is unknown. Clapp reports that there 31 toll stations between Strasburg and Emmerich alone on the Dutch border in 1790. Between Mainz and the Dutch border the authority to levy tolls lay in the hands of the Electors of Hanover, Mainz, the Palatinate and Trier, as well as the King of Prussia, the Prince of Hessen-Rheinfels, and the cathedral chapter of Cologne (Spaulding, 2011, p. 213). The Archbishop of Mainz was notorious 'for extorting more at his seven toll stations, averaging one for every 15 kilometers (9 miles), than any other owner' (Heckscher, 1955, p. 57).

One problem with this proliferation of tolls was that it diverted trade to more costly inland routes. For example, it was cheaper to send goods overland and then along the river Weser to Bremen than along the direct route north (Clapp, 1907, p. 10). This is a classic illustration of the problem of double marginalization. Each toll collector did not take into account the effect that his toll would have on the overall level of commerce on the river. As a result, tax rates were too high and trade too low from both a private and social perspective.

The fiscally inefficient old regime on the Rhine was shattered by the events that followed 1789. French armies invaded in 1794 and occupied the Rhineland for the next two decades. This invasion marked 'a decisive break with the past, as centuries of traditional institutions, ways of thinking and acting were swept away' (Diefendorf, 1980, p. 23). This is consistent with the argument developed by Acemoglu et al. (2011) that the French invasion of Germany provided the conditions required for sustained economic growth by replacing wholesale the extractive institutions of the ancien regime. It is also inline with the formal model developed by Gennaioli and Voth (2015) who show how the pressure of war could make it incentive-compatible for some, but not all, European states to overcome local rent-seeking arrangements and centralize their fiscal systems. In addition to getting rid of serfdom, abolishing guild restrictions, and emancipating Jews, the French eliminated the majority of tolls and standardized the regulation of the river (Spaulding, 2011). This involved creating a modern fiscal bureaucracy to collect the taxes. Spaulding reports that 'trade volumes increased dramatically along the entire length of the Rhine'. The volume of trade moving through Cologne increased from just '1.5 million hundredweights (50 kg.)' in 1789 to '5,239,972, an increase of 346 percent' in 1807. In Mainz, he reports a 400% increase (Spaulding, 2011, p. 217). This success was continued by the Prussian administration who inherited it following the defeat of Napoleon and the Rhine became an increasingly important commercial artery in the nineteenth century as the German economy expanded.

A parallel development occurred with the abolition of tariff barriers between the German states in the nineteenth century. The fragmented nature of the Holy Roman Empire resulted in a proliferation of trade barriers during the early-modern period. The idea behind a customs union, or Zollverein, was an attempt to reduce these trade barriers and integrate regional markets. It was driven by the regional hegemon, Prussia, and built on the earlier (1818) abolition of internal tariffs within Prussia (Huning and Wolf, 2016). In this respect, the Zollverein represented an attempt by Prussia to economically unify Germany under its own leadership.[28] Using data on wheat prices, Keller and Shiue (2014) finds that the formation of the Zollverein reduced price differentials by as much as 30%. Additional changes such as the introduction of railways and other institutional reforms further facilitated market integration.[29] Together, these two case studies provide important examples of how in the early modern period state power could knock down barriers to market integration and thereby help pave the path for Smithian economic growth.

3.3. A more effective bureaucracy

Since Weber (1922, 1968), scholars have claimed that an effective and impartial bureaucracy is a key distinguishing feature of the modern states that arose in Europe after 1800. Yet the link between the establishment of a modern bureaucracy and sustained economic growth is certainly not obvious. Sustained growth began during the eighteenth century in England and in the nineteenth century in North America—prior to the development of a modern bureaucracy in either country. Imperial China had a professional and meritocratic bureaucracy from the Song dynasty onwards (Chen et al., 2016). Moreover, we are familiar with the failure of

[27] A cask of wine traveling from Mainz to Cologne, a journey of 115 miles, might have to pay 32 imperial thalers in tolls while a ton of herrings would only pay 8 thalers (Clapp, 1907, p. 10).

[28] Prussia strove to break apart rival customs unions such as the *Mitteldeutsche Hanndelsverein* (Ploeckl, 2013, p. 389). Ploeckl (2015) analyses this development using a model of coalition externalities.

[29] This is consistent with the more microlevel analysis of Ploeckl (2013) of impact of the Zollverein on market access and investment in Baden.

economic planning by bureaucrats in Communist and other socialist economies.[30] Bureaucracies suffer from a range of information and incentive problems (Tullock, 1965). Similarly, claims that planning and industrial policy played a crucial role in the growth of the East Asian tigers, for instance, have been shown to have been overblown (e.g. Haggard, 2004).

What, then, is the connection linking a functional bureaucracy to economic growth? Several points deserve emphasis. The first is that, whatever the range of services a state is expected to provide, it is imperative that it provide those services effectively.[31] The quality of a bureaucracy matters even if the scope of state activty is tightly constrained. Second, states that possess an effective administrative machinery are better able to overcome vested interests and resist rent-seeking by losers. Research by Acemoglu and Robinson (2000) and Coşgel et al. (2012) among others has shown that attempts by potential losers to block reforms or innovations have played an important role in impeding economic growth. A third important channel concerns the ability to raise taxes in a way that does not generate large deadweight losses. States with high fiscal capacity can raise revenue in ways that do not create large distortions in relative prices (Lindert, 2004). The shift from reliance on corvée labor and conscription as practiced by many premodern regimes to regular taxes was similarly efficiency enhancing. Collecting taxes in this way requires a bureaucracy that is impartial and not excessively corrupt.[32]

In Europe, the development of formal bureaucracies was a gradual process that only culminated in the second part of the nineteenth century. But it had deep roots. In the German territories, the emergences of formal bureaucracies was a development of the older cameralist tradition (Backhaus and Wagner, 1987). And it built on the medieval spread of universities across Germany. Cantoni and Yuchtman (2014) detail how a papal schism in the fourteenth century led to the formation of universities across Germany. They show that a high proportion of these graduates were legal scholars who took jobs in public administration. Dittmar and Meisenzahl (2016) further show that those cities in Germany that adopted compulsory schooling laws during the Reformation both produced a large number of notable individuals, many of whom were officials and bureaucrats, and also grew faster in the period between 1600 and 1800.[33] As Ertman (2005, p. 170) writes, it 'was from this large pool of available talent … that rulers drew their new corps of officials'. By the eighteenth century, increasingly professionalized administrative states had sprung up across Scandinavia and Germany (see Ertman, 2005, pp. 169–172).

The creation of these administrative and bureaucratic states in northern and central Europe did not translate into rapid economic growth during the early modern period—the Holy Roman Empire remained an economic backwater during this period—but it did leave a legacy that has proved important in modern times. And it helped to produce a culture and tradition of good governance that matters today. Becker et al. (2016) study the modern legacy of the bureaucratic reforms implemented in the Habsburg empire by Joseph II. Using a regression discontinuity design and looking across borders within modern Eastern European countries they find that areas that had been ruled by the Habsburgs are associated with less corruption and higher levels of trust today.

3.4. General rules and rule of law

State capacity, as we have noted, need not promote economic growth. States with high capacity can pursue destructive economic policies. Rather the point is that state capacity can be beneficial for growth when the state is constrained by law. One of the reasons for this is that high capacity states have the ability to enforce general rules. This ability is closely linked to what social scientists typically mean by rule of law.

Though the concept is much older, the term rule of law was made prominent by Dicey (1908). Rule of law was brought to the forefront of the discussion in economics and political science in the work of North (North, 1990) and in discussions of post-Communist transition before receiving renewed focus in the work of Acemoglu, Johnson, and Robinson (see Acemoglu et al., 2001, 2005b). For Acemoglu and Robinson (2012) rule of law is often associated with 'inclusive institutions', or constraints on the power of the government. This is consistent with the legal literature on rule of law, which tends to emphasize the importance of general and stable rules.[34] Hayek (1960) points out that since general rules are predictable they enable individuals to plan their lives around them which, in turn, maximizes the scope for individual freedom and limits the arbitrary power of rulers. North et al. (2009) discuss the importance of the rule of law in the context of the emergence of open access orders in which individuals and organizations are equally able to enter markets and compete irrespective of their personal connection to those in power. Following these authors, we adopt a minimal definition of rule of law as being the degree to which a society is governed by general rules which are applied to all

[30] The work of von Mises (1922) and Hayek (1948) makes it clear that bureaucrats are unable to effectively 'plan' economic growth or development. See White (2012, pp. 3267) for a comprehensive summary of this debate and White (2012, pp. 246–274) for analysis for economic planning in developing economies such as India.

[31] By effective provision, we mean that public goods are delivered in a cost-effective and non-corrupt manner. It is important to note that contra- Samuelson (1954), it is not the technical characteristics of a good that determine whether it has to be provided publicly. Characteristics of public goods such as the degree of excludability are institutionally determined. In many societies and at many points in time goods usually regarded as public goods today were provided privately (e.g. light houses (Coase, 1974), or, policing (Koyama, 2014)). In our view, state capacity does not refer to the range of services a state provides but rather to how effectively it is able to do those services it is responsible for providing.

[32] Control over corruption is a crucial part of the story as bribes introduce uncertainty into transactions between individuals and the state. They are a tax on small business or individuals otherwise unable to get around them and tend to favor monopolies and big players (Rose-Ackerman, 1978). An established tax bureaucracy thus plays an important role in minimizing the negative impact of the state on economic activity.

[33] To establish the causality, they use plague occurrence during the crucial decades leading up to the Reformation, as instrumental variable. Outbreaks of the plague destabilized local elite making both the adoption of Protestantism and new compulsory schooling laws more likely.

[34] Lon Fuller, for example, provides a procedural definition of rule of law which requires (1) legal equality in the sense that all individuals are equally subject to the law; (2) open and clear definition of the law; (3) laws that are stable over time; (4) a transparent and law making process that is guided by general rules; (5) an independent judiciary; (6) open access to the courts and other legal institutions; (7) rules that apply uniformly to all individuals (Fuller, 1969).

citizens equally.

Low capacity states are unable to implement or enforce general rules. While high capacity states do not necessarily enforce general rules, the historical record suggests that as rulers invested in capacity, they were often confronted with strong incentives to make their rules more general. This was often simply because the costs of applying centralized fiscal and administrative rules to heterogenous populations were lowered when those rules and institutions were made more general. Examples include the Edict of Villers-Cotterêts of 1539 introduced in France during the reign of Francis I (r. 1515–1547) or the Code Louis introduced by the ministers of Louis XIV (r. 1642–1715); these edicts were introduced to strengthen the power of the French monarchy but they had the side effect of standardizing legal institutions across the country (Hamscher, 2012).[35]

3.5. Nation-building

Early modern states resembled stationary bandits to use Olson's memorable phrase (McGuire and Olson, 1996). They taxed and they made war. And they relied on popular acquiescence rather than popular support. An important achievement of the most successful modern states after 1850 is that taxation came gradually to rest on quasi-voluntary compliance. This achievement was based on the perception that modern states were legitimate in the eyes of a majority of their populations. The legitimacy of a state depends on the beliefs of individuals. Scheve and Stasavage (2012) argue that mobilization for war played a crucial role in the establishment of inheritance taxes because warfare generated both a need for revenue, and a sense that the rich should contribute financially, if others were contributing through military service. Legitimacy requires an ideology. But individuals have to be able to coordinate on and share this ideology. This requires publicizing the aims and purposes of the state. Or it can involve hijacking existing legitimating values such as nationalism or religion. Nationalism has been a particularly effective ideology around which modern states have coalesced (Gellner, 1983; Anderson, 1991; Hobsbawm, 1991).

Development economists have pointed out that heterogenous preferences—often a synonym for the absence of a common national identity—are generally associated with lower public good provision, greater risk of civil war, and lower incomes (Easterly and Levine, 1997; Alesina et al., 1999, 2003; Arbatli et al., 2015). In contrast, more homogenous preferences lower the costs of public good provision and make it easier for individuals to coordinate on collective decisions (Buchanan and Tullock, 1962, pp. 113–116). These arguments are extremely relevant for economic historians.[36]

This suggests that the emergence of effective states is predicated on a degree of cultural, linguistic, and ethnic homogeneity. State building had to be accompanied by nation-building. The most successful modern states like Britain and France developed as nation states while larger multi-ethnic states like the Habsburg, Ottoman and Tzarist empires proved less successful and eventually disintegrated. But cultural, linguistic, and to an extent ethnic homogeneity are themselves variables that can be shaped by policymakers.[37] And, with this in mind, a growing literature investigates the interaction between state capacity and national identity.

Alesina and Reich (2015) develop a model to study the conditions under which a ruler or ruling elite will invest in homogenizing the preference of the population. They argue that the threat of democratization provided an important inspiration for rulers to instill common national preferences. The model they build allows for several possibilities including that where rulers do not instill national preferences but prefer to 'divide and rule', the common strategy adopted by European rulers in their colonies.

Nation-building policies such as the introduction of compulsory education require a certain level of state capacity. Therefore, attempts at nation-building will be limited or absent in states that lack capacity. Rulers possessing lower state capacity will be more likely to rely on methods based on the principle of divide and rule than will rulers with higher state capacity.

3.6. Fiscal Capacity and National Identity in Ancien Regime France

The relationship between investments in state capacity and nation-building was not limited to the post-1800 period. Johnson (2015) provides a specific example of how investments in fiscal capacity from ancien regime France was causally related to increases in support for national policies. Alexis De Tocqueville in *The Old Regime and the French Revolution* argued that many of the democratic and constitutional reforms of the Revolution were made possible by the policies of Bourbon monarchs during the previous century, policies which undermined the institutions of the feudal regime. The monarchy was able to increase its fiscal and legal capacity during the seventeenth and eighteenth centuries (Root, 1987; Kwass, 2000; Johnson and Koyama, 2014b). Johnson (2015) argues that one unintended consequence of the extension of the state capacity of the monarchy was that the new institutions introduced replaced and made obsolete pre-existing feudal institutions. This, in turn, shifted the attention of both nobles and non-nobles away from local interests and towards the business of reforming national institutions.

Johnson (2015) exploits the internal variation in state capacity at the end of the eighteenth century in France created as a consequence of reforms made in 1664 by Louis XIV's finance minister, Jean-Baptiste Colbert. He created a customs union which

[35] See the discussion in Johnson (2013) and Johnson and Koyama (2014b).

[36] Recent work by Hao and Xue (2016) shows that ethnic fractionalization as measured by surname distance in China was associated with the under-provision of schools in the early twentieth century.

[37] Ethnolinguistic fractionalization is not exogenous but rather the product of past developments some of which are associated with explicit programs of nation-building by the state (see Alesina and Reich, 2015) while others were the product of spontaneous developments such as those associated with the rise of print media as emphasized by scholars of nationalism such as Anderson (1991).

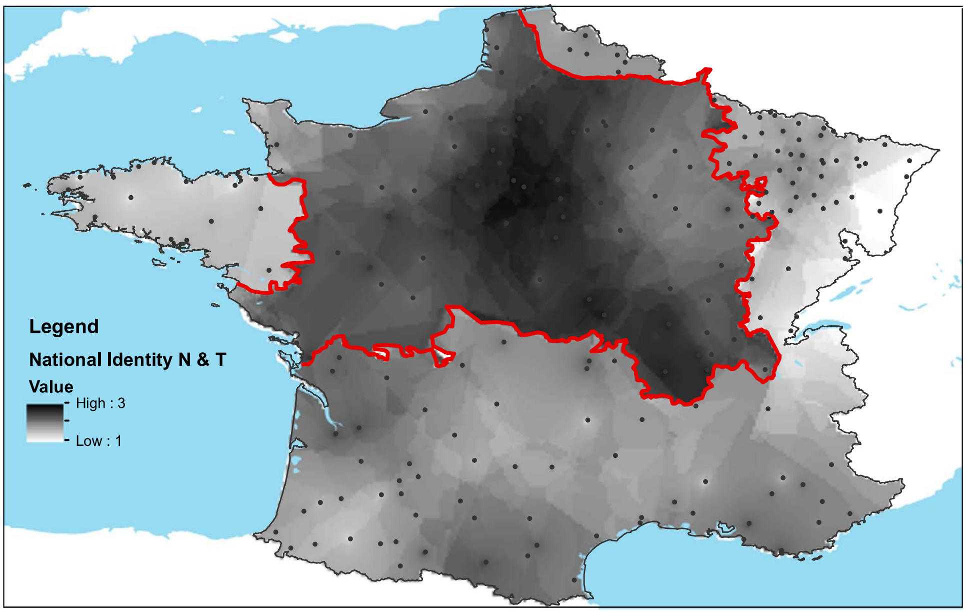

Fig. 2. *National Identity* in the 1789 General Cahiers. Darker color represents greater identification in the Cahiers by the Nobility and Third Estate with either the 'King' or 'France' according to Hyslop (1934). Each grid point in the map is assigned a value based on the inverse-weighted distance of surrounding 12 cities that sent in Cahiers (exponent of distance used is the default of 2). The Cinq Grosses Fermes region is delineated in red and treated as a barrier.

encompassed about half of the regions controlled by the monarchy.[38] As Colbert was a mercantilist, a prime objective in creating this customs area, known as the Cinq Grosses Fermes, was to facilitate internal trade and tax external trade. Royal authority was used wherever possible to suppress internal feudal taxes and regulations inside the CGF. Royal taxes were raised both on goods traded across the border of the customs union as well as within its borders (See, e.g., Heckscher, 1955, pp. 103–106; Bosher, 1964). Johnson (2015) calculates that in 1784, taxes collected per capita were on average 40% higher inside the CGF than outside.

Johnson (2015) tests Tocqueville's hypothesis using data from the Cahier des Doléances. These were a set of documents which Louis XVI requested to be submitted from every town in France on the eve of what would become the French Revolution in 1788. Each Estate (clergy, nobles, and everyone else) wrote down the 'grievances' they wanted to be discussed at the upcoming Estates General. Hyslop (1934) surveyed the General Cahiers, constituting 200 regions in France, and created codes for each covering various forms of local and national institutions mentioned in them. For instance, she recorded whether a specific Cahier requested more uniform weights and measures, wanted the same law for all estates, wished to abolish feudal dues, wished to abolish serfdom, or requested a more uniform legal code. Johnson (2015) investigates an index which reflects the degree to which each region's complaints reflect national or local concerns. The index runs from 1 to 3 where 1 represents local concerns and 3 represents the strongest concern for national issues such as the desire for uniform weights and measures.

Fig. 2 provides evidence that Tocqueville was correct to claim that being subject to more centralized institutions had the effect of shifting people's attention away from local and towards more national concerns. It shows the relationship between stated affiliation with national institutions from the Cahiers des Doléances and whether a region was subject to the strong institutions of the monarchy within the Cinq Grosses Fermes. Each dot represents a city from which the Cahiers have been coded for each of the Estates. The solid line represents the border of the CGF region. Each pixel in the map is shaded based on the inverse distance weighted value of the index of support for national institutions. Darker colors represents greater support for national institutions. As is clear from Fig. 2, there is a stark discontinuity in support for national institutions at the border of the CGF. Using a regression discontinuity framework, Johnson (2015) shows that this discontinuity is economically significant and robust to controlling for numerous geographic, political, and cultural variables. Cities inside the CGF affiliated more with national than local institutions in 1789 and were also richer in 1817–21. Furthermore, the source of this income difference can be traced to the willingness of these regions to use formal financial institutions and to contribute towards public goods. In the case of France, the development of fiscal capacity by the absolute monarchy was a necessary step towards generating support in the general population for broader-based and

[38] The Provinces excluded from this customs union were Angoumois, Artois, Auvergne, lower Navarre, Béarn, Brittany, Cambrésis, Foix, Dauphiné, Flanders, Forez, Franch-Compté, Gascony, Guyenne, Hainaut, Ile-de-Rhé, Ile d'Oléron, Languedoc, Limousin, Lyonnais (in parts), Marche, Provence, Roussillon, Rouergue, Saintonge, and Vivarais. The core provinces of this customs union were based on the regions of five tax farms created during the late middle ages. These historical tax farms were known as the (1) traite foraine, le rêve et le haut passage de Champagne et de Normandie, (2) la traite foraine de Normandie, (3) le traite domaniale de Champagne, Picardie, Normandie, et Bourgogne, (4) la douane de Lyon, and (5) les droits d'entrée sur l'épicieries, drogueries et grosses denrées. In 1589 René Brunet managed to consolidate them under a single owner. This consolidation was achieved during a very active period of wars of religion by Henri III (r. 1574–1589) who desperately needed the revenues (Roux, 1916, pp. 70–73). As such, the explanation for the boundaries of the Cinq Grosses Fermes (or Five Big Farms) in Colbert's time is likely attributable to a short-run desire by monarchs in the sixteenth century for increased lending through the tax farms to satisfy their borrowing needs (Johnson and Koyama, 2014a).

more inclusive institutions which were conducive to stable economic growth.

Taken together, this work provides evidence that high capacity states in Europe contributed to economic development through a range of channels: they made economies more robust to negative shocks such as warfare, helped to integrate domestic markets and laid the foundations for relatively impartial bureaucracies and the rule of law. Furthermore, as part of a self-reinforcing process, state-building itself helped previously heterogeneous population to coalesce around common goals such as the provision of more general rules. However, these mechanism do not, by themselves fully explain how these states achieved developed capacity in the first place. In the next Section, we turn to the deep determinants that help to explain why state-building efforts have succeeded in some parts of the world but have been less successful elsewhere.

4. Deep determinants of effective states?

What enables some societies to build effective states—states that are able to provide basic public goods but which are constrained and limited in scope and scale? To address this question we review recent findings from the literature in growth economics and political economy and suggest how these can inform economic historians working on the topic of state capacity.

4.1. State antiquity

Many recent findings emphasize the importance of deep, underlying determinants for modern economic and political outcomes. Comin et al. (2010) show that the level of technological development in 1500 strongly predicts incomes today. Going from having none of the available technologies in 1500 to having all of them increases per capita GDP by a factor of between 5.9 and 13.3. Reviewing these and other instances of long-run persistence, Spolaore and Wacziarg (2013) note that a long history of statehood is one of three factors, alongside geography and the agricultural transition that have been shown to be robust in explaining modern development.

Empirical studies of the origins of economic growth frequently use the measure of state antiquity devised by Bockstette et al. (2002) as a proxy for state capacity. Bockstette et al. (2002) and followup studies (Chanda and Putterman, 2007; Putterman and Weil, 2010) employ the simple idea of calculating for each modern country how much of that country had been ruled by a government above the tribal level for each fifty year period going back to the year 0 and whether or not that state was a domestic one or a foreign imposition. This gives a rough indicator of the extent to which a country has a history of indigenous statehood. They find that state history in 1500 best predicts modern development.[39]

Putterman and Weil (2010) innovated by adjusting this measure of state history to reflect the state history of the populations that comprise modern states. This measure, which gives a much higher measure of state history to countries settled by European colonialists like the USA and Australia, is associated with better political institutions today as reflected in standard measures such as executive constraints, expropriation risk, and government effectiveness.[40,41].

These studies are highly intriguing but they remain cross-country exercises that inevitably lack the richness that historical studies can bring to the question of the relationship between states and economic development. For a closer picture we need more micro-level historical studies and we need to pay attention to the mechanisms and channels linking a history of statehood to modern outcomes.

4.2. Culture

Culture is the second factor that deserves emphasis. A recent literature has established the importance of culture as an important variable that is amenable to serious scientific study. Several insights can be gleaned from this line of research. First, cultural values can be extremely persistent as shown by work by Guiso et al. (2006, 2008), Nunn and Wantchekon (2011), Voigtländer and Voth (2012), Alesina et al. (2013), and Grosjean and Khattar (2014), among others. Second, as modeled in theoretical papers on the intergenerational transmission of values, an important mechanism for cultural persistence is the incentives that parents have to inculcate culture values in their children (see Bisin and Verdier, 2001). Third, there is a complementarity between cultural values and institutional change which offers the potential to provide a powerful explanation of why attempts to reform institutions sometimes succeed and sometimes fail (Greif, 1994; Tabellini, 2008; Alesina and Giuliano, 2015).

One hypothesis that deserves further investigation is that there is a cultural element to building effective states and that a history of political independence or self-government can be important in determining that capacity to build state capacity today. There is some research along these lines. Tabellini (2010) discusses evidence that a tradition of inclusive political institutions has shaped culture in Europe at a regional level. Guiso et al. (2016) provide evidence that cities in northern Italy with a history of political

[39] In 1500 representative indices for state antiquity include: Ethiopia=1, China=0.906, Spain=0.562, USA and Australia=0.

[40] Borcan et al. (2014) extend the measure of state antiquity back to the origins of states and of agriculture. They find an inverse u-shaped relationship. State antiquity has a non-linear relationship with economic development: that is while state history has a strong positive association with modern development, state history squared has a highly negative relationship with modern development. This is true both within, as well as between, continents: the modern day countries with the oldest states in the world are doing less well than their neighbors with less state antiquity. Intriguingly, they argue that this non-monotonic relationship was already in place by 1500.

[41] In their original analysis Bockstette et al. (2002) discounted this measure so that more recent experiences of statehood mattered more than did distant episodes. In Borcan et al. (2014) they weigh all periods equally.

independence in the middle ages have higher levels of civic capital today as measured by the number of non-profit organizations per capita and levels of organ donation.

Conversely this mechanism can work in the opposite direction. A legacy of autocratic or extractive institutions can undermine prosocial values. Lowes et al. (2016) combine anthropological evidence with the innovative use of field experiments to show that the existence of the Kuba Kingdom in the Congo has apparently crowded-out pro-social norms among their modern descents who steal more and contribute less in a series of experimental games than do the descents of their stateless neighbors. Xue and Koyama (2016) study the legacy of persecutions in Qing China. They find that persecutions reduced the number of charitable organizations at a local level and left a long-lasting impact on both local public good provision and on cultural attitudes to political activism and the state. A better and more nuanced understanding of culture will allow us to better understanding of when and where it plays an important role in shaping state development.

4.3. Civil society

This discussion connects the state capacity with the literature on civil society and social capital. Building on the insights of de Tocqueville (2000), social scientists such as Putnam (1994) and Fukuyama (1995) stressed the importance of social capital for the success of liberal democracies.

Their work raises the question of the relationship between the level of social capital in society and the capacity of its political and state institutions. In their analysis of the transition between 'natural states' and 'open-access orders', North et al. (2009) place considerable importance on the ability of open-access orders to allow organizations to emerge that are independent of the state. This is in contrast to natural states that repress such organizations and view civil society as a threat to their political power.

Social capital and the state are often modeled as substitutes (e.g., Aghion et al., 2010). Recent research points towards important complementarities between an effective state and social capital. Acemoglu and Robinson (2016) focus on the coevolution of state and society in outlining the path to inclusive institutions. They argue that a flourishing and rich civil society was both a perquisite for successful state development and an important complement to it: '[the] capacity of the state and the organization of society fed on each other in a synergetic way'. Applying this argument to the English case we studied in Section 2.1, they argue that 'Tudor state-building, for example, was facilitated by the fact that civil society had social norms to discipline it. Society demanded that the state dispense justice and poor relief. Just as society impacted the state, so the state impacted society' (Acemoglu and Robinson, 2016, p. 15). This is an important argument because it points out that effective states coevolved with richer and developed civil societies and market economies over the course of European history. It suggests another reason why attempts to transplant either markets or democratic institutions into societies which have not experienced such developments often fail.

More research, however, is required to clarify the relationship between social capital and state capacity. Studying the institutions of chiefs in Sierra Leone, Acemoglu et al. (2014) find areas which are controlled by a small number of chiefs tend to have higher rather than lower social capital suggesting that in those areas, tightly-knit elites are able to use existing social capital to bolster their position. Satyanath et al. (2016) similarly show that it is naive to assume a simple causal relationship from social capital to inclusive political institutions; in Germany it was in areas with higher density of associations that the Nazi party was most successful.

5. Concluding comments

In this essay we reviewed the contributions of recent scholarship in economic history to our understanding of the role of the state in economic development. In the literature in development economics and political economy it is now commonplace to acknowledge that 'history matters'. We have argued that it is important to 'decompress' history in order to fully understand the evolution of modern states and the relationship between state building and economic growth. To this end, our analysis has focused on specific channels through which an appreciation of economic history can shed light on the process of state-building and economic growth.

The first lesson that we draw is that the process through which modern states were established varied greatly. The English case study points to the importance of securing constraints on the executive power of the king (North and Weingast, 1989; Acemoglu et al., 2005b). However, constraints on royal authority did not prevent, and indeed contributed to, the decline of Poland-Lithuania in the early modern period. Therefore, we have drawn attention to the alternative paths followed by France, Prussia, and the Habsburg empire in building modern states. This process was often violent and costly but, as we have argued, drawing on evidence from the fiscal management of the river Rhine and the emergence of the Zollverein, it left an institutional legacy that was favorable to subsequent economic growth.

Comparative research on state-building in other parts of the world such as Asia and Latin America is in its infancy, but we believe that it will generate insights that will be relevant for contemporary policymakers as well. States in East Asia modernized in response to geopolitical threats from the western powers. In the post-independence period one of the greatest challenges facing countries in sub-Saharan Africa has been that of building effective states.

A second point made clear from our survey is that economic development and state-building are both lengthy and gradual processes. This means that the deep past continues to matter for modern development opportunities. In a celebrated article, Lucas (1993) drew a comparison between the Philippines and South Korea. Both were poor countries in 1960 but in the subsequent decades Korea grew at over 6% while the Philippines grew at less than 2%. This contrast, he argued, could be called miraculous because it meant that Korea became a rich world economy while the Philippines remains mired in poverty and he drew attention to some of the policies and institutions that made it possible.

However, there were underlying differences between the two countries that were masked by their similar levels of per capita GDP in 1960. In particular, the history of state centralization was very different in both places. Korea had a long history of continuous statehood prior to colonization by the Japanese and division after World War 2, while, in contrast, throughout Philippine history political authority was rarely extended beyond the environs of Manila. Despite having comparable GDP in 1960, the tasks of building a modern economy and achieving sustained economic growth was always going to be much more difficult in the Philippines than in South Korea. Going forward, this suggests that an understanding of how modern states arose and built fiscal and legal capacity should shed light on the feasibility of programs to reform economies, introduce privatizations, or take measures against corruption.

As we have noted, the link between state capacity and economic growth that we observe historically is a contingent one. The origins of modern economic growth are to be found in the expansion of market exchange and trade that gave rise to a more sophisticated and complex division of labor that rewarded innovation and to the cultural and potentially non-economic factors that helped spur innovation (Howes, 2016; McCloskey, 2016; Mokyr, 2016). The importance of the rise of high capacity states to this story is that these states helped to provide the institutional conditions that either enabled growth and innovation to take place or at least prevented their destruction through warfare or rent-seeking.

The emergence of sustained economic growth in the nineteenth century was associated with strong but limited states. Twentieth century ambitions to use state power to remold societies either ended in failure or were at least partially reversed. We have focused on the recent literature linking the rise of the modern state to positive economic outcomes, but do not want to give the impression that we are neglecting how easy it is for governments to destroy economies (e.g., Shleifer and Vishny, 1998; Easterly, 2001). Bringing together insights from the state capacity literature with the political economy literature on government failures is a fruitful avenue for future research. We have also left for further work, the relationship between the rise of modern states and investments in public health and education from late nineteenth century onwards, two other important channels that link state capacity to long-run economic success. Finally, we suggest that the long-run relationship between culture, social capital, identity, and state capacity has only just begun to have been studied and awaits much future research.

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