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What Do States Do? Politics and Economic History

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Although politics has a huge effect on economic outcomes, we still know too little about what public goods states furnish or what determines the laws, regulations, and policies that states adopt. Worse yet, we do not really understand how states arise in the first place and how they gain the ability to tax. There are numerous unanswered questions here that economic historians can profitably work on, and their research will be particularly valuable if they model the politics, gather data on taxation and spending by local and central governments, and pay serious attention to the historical details and to political behavior that may not involve optimization.

Politics, it is clear, has a massive impact on economic outcomes. States redistribute wealth, make up for market failures, and enact policies that can devastate an economy or promote long-run growth. Think, for instance, of the striking contrast between North and South Korea today (Figure 1). Its ultimate cause is not culture or endowments, but starkly different politics, which makes the difference between starvation in the North and prosperity in the South.

Nor is that all states do. They also provide the essential public goods of security, the rule of law, and a means of exchange. Without these, life is brutal and trade little more than barter. Life without a state, both in the past and today, has usually been vicious anarchy. Not even a fervent libertarian, after all, would have chosen to live in Somalia in

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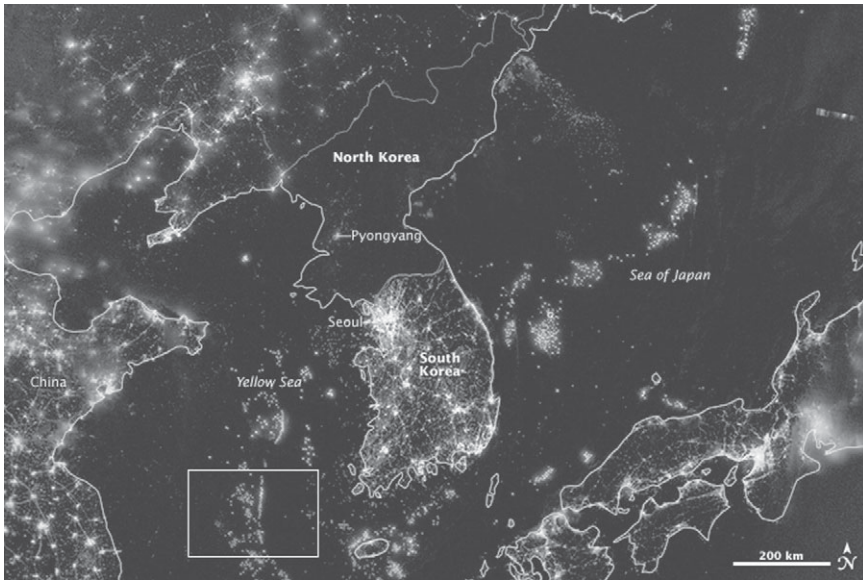


FIGURE 1
NIGHTTIME LUMINOSITY IN NORTH AND SOUTH KOREA (2012).

Note: Nighttime luminosity, as Chen and Nordhaus have shown, is a good proxy for GDP, particularly for countries where economic data is unavailable (Chen and Nordhaus 2011).

Source: NASA <http://earthobservatory.nasa.gov/IOTD/view.php?id=79796&src=ve> (consulted 26 August 2014).

the 1990s. One might of course object that peaceful cooperation could emerge among people who interacted repeatedly with one another in the absence of anything like a state. After all, the folk theorem for repeated games suggests that is a possible equilibrium. But in reality societies that have no state are violent, with death rates from warfare that dwarf casualty rates when states do exist. In 27 nonstate societies summarized by Steven Pinker, war slaughtered an average of 524 people each year, for every 100,000 members of the society. That is far more than in twentieth-century Germany and Russia, where the corresponding figures are 144 and 135 deaths annually per 100,000 people, despite the Holocaust, a civil war in Russia, and the devastation of two violent World Wars (Pinker 2011, pp. 52–53).

Beyond security, money, and the rule of law, states (or local governments operating under state authority) have long taken care of flood control—they have been doing that for centuries in China and Egypt—and since the nineteenth century they have provided water purification, sewage treatment, and other goods and services that are either public or

involve externalities or natural monopolies. In the United States, clean water and sewer systems furnished by municipalities explain (so Werner Troesken has argued) some 60 percent of the increase in life expectancy between 1850 and 1950. The municipal water purification and sanitary sewers not only wiped out typhoid, but it also greatly reduced deaths caused by other ailments (such as heart disease, kidney failure, and respiratory disease) that a case of typhoid could bring on or aggravate (Cutler and Miller 2005; Ferrie and Troesken 2008; Troesken 2014). They had a large impact in Britain and France as well (Kesztenbaum and Rosenthal 2012; Chapman 2014b). States (with the aid, once again, of local governments) have also built roads, canals and ports, and operated rail lines and airports. They are major suppliers of education, pensions, medical care, subsidized housing, and insurance against disability or unemployment, and in addition to all this social spending, they pay for most fundamental scientific research today and are the only weapon available to those who would seek to redistribute wealth in order to fight inequality.¹

Yet although politics therefore has long had a huge effect on economic outcomes, we still know too little about what determines the laws, regulation, and policies that states adopt or what goods and services they furnish. The link between the state's actions and the politics is often unexplored, and the politics itself is rarely laid bare, particularly if we leave the United States and consider the history of other parts of the world. Nor do we know what shapes the changes in state policies and expenditures over time.

Worse yet, we do not even understand how states arise in the first place or how they gain the ability to tax, without which any other state action is nearly impossible. And fundamental data on tax revenues and what states and local governments spent money on are frequently unavailable (again, this is particularly true outside the United States), even though a bit of historical research could gather the necessary numbers.

There are enough tasks and unanswered questions here to keep an army of economic historians busy for years. Let me sketch what I believe the key tasks and questions are and what the payoffs will be. The result will be more of an exhortation than a article, because the tasks are as yet undone and the questions still unanswered. But one theme will emerge from the call to action: We have spent too much energy worrying about how to restrain an overly powerful state. Yes, states can do immense damage, as Douglass C. North and Barry R. Weingast; Daron Acemoglu,

¹ For examples of social spending and expenditures on infrastructure and education, see Lindert 2004, Goldin and Katz 2008, and Bogart 2010.

Simon Johnson, and James A. Robinson; and others have long argued, and as North Korea and other striking examples make clear.² But the problem, as Stephan R. Epstein argued, was that states were often too weak (Epstein 2000). That was certainly true in continental Europe before the nineteenth century; Britain alone had a powerful state thanks to political innovations during and after the Glorious Revolution. It was true in nineteenth-century China, and it is true in developing countries today, or so ongoing work in political economy maintains (Besley and Persson 2010). We should analyze how states gain the capacity to act effectively and what goods and service they should provide and what they should leave to private markets.

The place to start is by specifying what we mean by state, because Max Weber's oft repeated definition (a state monopolizes the legitimate use of violence) is virtually useless for historical research. We can then ask what economic theory, historical examples, and the other social sciences say about how states emerge, about the alternatives that can delay their development, and what about what shapes their taxation and spending, both at the level of the central government and by local authorities. Much more needs to be done, including collecting more data and undertaking careful historical research that takes politics seriously.

A BETTER DEFINITION OF A STATE

To define a state, most social scientists, almost without thinking, simply adopt the definition Max Weber formulated: A state is a community that successfully claims a monopoly over the legitimate use of violence within a given territory.³ But it is of little use for historical research, because until recently entities that we would certainly consider states could not come close to making such a claim. Private violence against African Americans (or the threat of such violence) was considered legitimate among many whites in the U.S. South from Reconstruction to the Civil Rights Era. Does that mean that there was no state in the old Confederacy? Similarly, western Europe witnessed numerous violent rebellions over issues ranging from working conditions and the price of food to political rights,

² See, for example, North and Weingast (1989); Acemoglu, Johnson, and Robinson (2002); North, Weingast, and Wallis (2009); Acemoglu and Robinson (2012).

³ "Staat ist diejenige menschliche Gemeinschaft, welche innerhalb eines bestimmten Gebietes . . . das Monopol legitimer physischer Gewaltsamkeit für sich (mit Erfolg) beansprucht" (Weber 1999, p. 397). Morgan Kousser has pointed out to me that Weber's definition took hold among American social scientists only after World War II, even though support of violence by paramilitary groups during the Weimar Republic would be yet another example of a state's failing to achieve a monopoly over the legitimate use of force.

right up into the twentieth century, and the rebels could make claims to legitimacy (Tilly et al. 1975). The same was true in nineteenth-century China.⁴ Did western European states therefore not spring into existence until the 1930s? Was there no state in late Qing-Dynasty China? And do states still not exist in neighborhoods on the South Side of Chicago or in poor suburbs of French cities, where at least some young men seem to feel that resorting to violence is justifiable?⁵

Successfully establishing a monopoly of violence is difficult. It requires resources and (at the very least) popular acquiescence, both of which took time for states to get. So by sticking to Weber's definition, we overlook the centuries of work that states did both to acquire resources and to win people over so that the cost of ruling (including the political risks and the expenses involved in collecting tax revenue from a recalcitrant population) would not be prohibitive. Those tasks are among the things economic historians should be studying, but Weber's definition rules them out, for they all precede the very existence of a state as he defined it.

A better definition would characterize a state as a community with two defining characteristics. First, it can employ violence, although it may not have an effective monopoly over its use. Second, it can levy substantial permanent taxation. States therefore come into existence when in addition to being able to use force they also gain the capacity to impose and collect significant amounts of tax revenue, not just temporarily during emergencies but for the foreseeable future.

With this definition as a point of departure, economic historians could focus on taxing and spending and study how states achieved the ability to tax in the first place, which would include gaining at least the grudging assent of the population. Once the state is established, they could gather data on what the tax revenues and expenditures were, including what assets and incomes were subject to taxation, what sort of spending was favored, and how the responsibilities were divided up between the central and local government. Surprisingly, data of that sort is still not readily available, particularly outside the United States. For much of

⁴ See, for example, the volume of the *Cambridge History of China* that covers the nineteenth century (Fairbank 1978).

⁵ For poor young men who rioted in the French suburbs in 2005, violence was a legitimate way to protest their sense of exclusion from French society. As for Chicago, although it is quite safe overall, the neighborhood of Englewood, on the South Side, has a murder rate (74 per 100,000 people in the 12 months ending 27 July 2014, according to data downloaded 2 August 2014, at <http://crime.chicagotribune.com/chicago/community/west-englewood>) that would put it among the ten most dangerous municipalities in the world in 2013 if it were itself a city. Most of the murders there are committed by young men—often gang members—who see violence as a legitimate way to retaliate, get their way, or defend themselves against threats that the police seem unable to stop, at least without effective gun control.

nineteenth-century Europe, for instance, data on categories of spending exists in archives or obscure government publications, but it is not yet easily accessed. It is being gathered, but much more remains to be done, especially for Asia and Latin America and for local spending everywhere.⁶ And the situation is even worse—though not hopeless—before the nineteenth century.

The data itself may seem mundane, but it will not only allow us to analyze the effect of taxes and government expenditures—something economic historians have long done—but even more important, it will make it possible for us to explore the politics behind the tax and spending decisions. Here too some of the initial spadework has already been done, particularly for the United States, and, for other economies, for social spending.⁷ But much remains unknown. Who favors particular taxes or expenditures? Which pivotal leaders or members of the elite in autocracies? Which legislators and constituents, if there are representative institutions? Who is lobbying for the fiscal policy and who benefits or suffers from it? Are supporters organized and therefore able to overcome free rider problems? Do political actors use decisions about taxation and spending to rally adherents to their side or to benefit their followers? Those are questions that one can ask even for an autocratic government, because kings and dictators had to have some support among elites or influential officials. After all, the absolutist monarch Louis XIV negotiated tax increases with local elites in the seventeenth century, by giving them a variety of favors (including a share of local levies or a voice in how the revenue was spent) in return for their assent (Beik 1985).

WHEN DO STATES ARISE?

So when and how do states that meet this definition arise? What are the circumstances that give authorities the ability not just to use force but impose substantial permanent taxation? Historians often trace the origins of heavy taxation back to war. So do political scientists and historical sociologists, and there is at least some quantitative evidence to back up

⁶ For examples of the research that has been done and the data that is available, see Wallis (2006), Dincecco (2009, 2011), and the Global Price and Income History web site at <http://gpih.ucdavis.edu/index.htm>.

⁷ See, for example, Wallis, Fishback, and Kantor (2006) and Lindert (2004). There is more that could be done, for instance with roll call votes, and not just in the United States; for examples, see Poole and Rosenthal (2001), and Rosenthal and Voeten (2004). Roll call or election data from local elections also deserve study; in the United States, there are state roll call records back to the early Republic (Lampi 2013).

their claim.⁸ For France, that sort of taxation was ushered in during the Hundred Years War (1337–1453) with England; for Prussia, it came in the wake of the Thirty Years War (1618–1648) and the First Northern War (1655–1660). The story is similar in East Asia. China, for instance, was first unified (in 221 BC) by the rulers of Qin, who defeated their rivals in two centuries of warfare because they could tax (and conscript troops—another form of taxation) on a scale that their opponents could not match (Hui 2005, pp. 85–87, 96–98, 141–42).

There are formal economic models that support the relationship between war and the ability to tax heavily. In the models, which were inspired by historical examples and by the inability of many developing countries to collect much tax revenue, war promotes investment in fiscal infrastructure, and the infrastructure in turn limits individuals' ability to shield income from taxation (Besley and Persson 2009, 2010). Or war can teach political leaders (via learning by doing) how to cut the political costs of levying taxes and hence help them increase their tax revenue (Hoffman 2015).

Reality, however, is more complicated. The connection between warfare and taxation, as Charles Tilly stressed, is shaped by domestic politics, resource endowments, and international relations (Tilly 1990, pp. 1–28). War does not always give rise to states in our sense of the word—in other words, polities that can impose heavy permanent taxation. Although in the simplest economic models, war always generates more tax infrastructure, in more complicated models it need not do so. That can happen, for instance, if there are valuable natural resources that domestic political groups can fight over, and the civil war that results can actually weaken the tax infrastructure (Besley and Persson 2010). And if initial costs of setting up a fiscal system are high enough, then war may no longer bring any investment in fiscal infrastructure at all.⁹

History tells us the same thing, for warlords and political leaders have been able to fight for decades without substantial permanent taxation.

⁸ See, for instance, Tilly (1990, pp. 1–28) and Levi (1988, pp. 43, 96). The quantitative evidence comes from Turchin (2013), who uses an evolutionary model in which the spread of military technology intensifies warfare, and the warfare in turn encourages the evolution of traits that encourage cooperation and make possible the formation of larger states. He then compares the predictions of the model with data on the formation of large states in Eurasia in the years 1500 BC–1500 CE, and finds that the model's substantial predictive power derives from the effect that the diffusion of military technology has on the intensity of war.

⁹ In Besley and Persson's simplest model, it always pays to invest in more financial infrastructure when the threat of war is high, because the marginal cost of the investment is zero. But if that marginal cost is positive and large enough, it will not pay to undertake any investment at all (Besley and Persson 2010, pp. 6, 9).

That is in fact what happened in western Europe during the Middle Ages, when warriors and military lords battled one another incessantly without ever establishing fiscal systems that could raise appreciable amounts of permanent tax revenue.¹⁰ To judge from the kings and princes who led these armies, the risk of dying on the battlefield was enormous: in the eleventh century, for instance, their death rate was double that of soldiers in violent combat today, and far higher than the murder rate in the world's most dangerous cities.¹¹ Or to take a more recent example, consider the Turkana, a group of some one-half of a million nomadic pastoralists in East Africa. They fight defensive wars and raid other ethnic groups even though they have no centralized political or military authority and nothing like a fiscal system. The warfare is dangerous—23 percent of Turkana men die in warfare between puberty and the end of fatherhood—but no state compels them to fight and they do not seem to be motivated by ties of kinship or repeated dealings among warriors (Mathew and Boyd 2011; Gray et al. 2003). And there are other contemporary groups in the Amazon, other parts of Africa, or ungoverned corners of Pakistan that also manage to wage war without permanent taxation or what we would consider a state (Barth 1956; Lindholm 1981; Beckerman et al. 2009).

By itself, therefore, warfare is not enough to create a state. It may help spur some warring groups to set up a fiscal system, and that in turn will lead to a correlation between warfare and state formation. But the warfare alone is not sufficient for state formation, or otherwise warfare would always give birth to states. Something else in addition to warfare must therefore be involved. If we look at particular examples of how significant permanent taxation was established, they do usually involve warfare and the public good of security, although other public goods (such as providing money with a stable value that would obviate the need for barter and facilitate transactions over time) may play a role too. The correlation between warfare and state formation would lead us to expect as much. But the whole process was also inseparable from politics, and the politics

¹⁰ Medieval rulers did collect revenue from tolls, mints, and from their own personal possessions, and they could collect taxes during war. But the amounts collected were not substantial, and the tax revenue usually ceased the moment there was a truce (Guenée 1971, pp. 167–180, 254–257; Lutz 1977–, sv “Steuer, Steuerwesen”; Collins 1991, p. 154).

¹¹ The rate of death on the battlefield for European rulers comes from Eisner (2011). For the eleventh century, the rate was 1,140 deaths per 100,000 ruler years, which Eisner compares to a death rate in heavy combat today of roughly 600 deaths per 100,000 person years and the murder rate in Ciudad Juarez (a dangerous city in Mexico) of approximately 130 annual deaths per 100,000 people. Comparisons with other cities with high murder rates in 2014 lead to similar results. Eisner's battlefield deaths, it should be noted, do not include the large number of regicides. In the eleventh century, for example, these would add another 1,784 violent deaths per 100,000 ruler years.

(so we shall see) was essential to making the leap from warfare to state formation.

French kings, for instance, gained the right to impose sizeable permanent taxes during the Hundred Years War (1337–1453), when they battled the kings of England to see who would rule France.¹² But the French monarchs did not obtain that right immediately. Initially, they could levy taxes only when war was actually being waged, as had been the case before the Hundred Years War. The fighting during the war, though, was interrupted by truces or temporary halts to the hostilities. During those lulls in the fighting, tax collection stopped, and with no money for pay, soldiers had to be furloughed. To support themselves, the troops who had been released would then plunder the countryside, leaving a trail of death, refugees, and smoking ruins.

Stopping these brigands had wide support, but when it came to pay for the effort, people dug in their heels. Suppressing the brigandage required peacetime taxation, and many feared that the royal government would pocket the tax revenue collected during a truce or divert the money toward some other goal such as paying for the expenses of the royal household. Halting the pillaging would also require shifting tax revenue from a corner of the kingdom where furloughed soldiers posed no problem to a province where they raged out of control. That too generated opposition, as did shifting taxes from regions that faced no threat in war time to regions that were in danger.

This political stalemate was not broken until a disastrous French defeat in 1356, when their King, John II, was taken prisoner by the English. In this dire and exceptional situation, the French king's subjects were willing to grant a peacetime levy to pay his ransom, and his son, who became King Charles V in 1364, managed to get these taxes increased and made permanent in the 1360s. He did so by simultaneously undertaking two critical actions. First, he fashioned a political coalition in favor of permanent taxation by tailoring taxes to suit the powerful nobility; second, he showed that he would use the money to wipe out the brigands. Those actions won him the taxation, and local evidence indicates that per capita taxes rose more than 20-fold.

The king's son, in short, had solved the free rider problem by working out the politics and demonstrating that he would indeed use the tax revenue to provide the precious public good of security. But his success was not immediate. Initially, he failed to get peacetime taxation out of regional assemblies, and a kingdom wide representative assembly in 1356 did not

¹² For what follows, see Henneman (1971, 1976).

grant permanent taxation either (Henneman 1976, pp. 24–25, 39–50, 283, 288). The whole political process involved learning how others involved would behave—whether they too would contribute and whether the king’s son would use the money collected to wipe out the brigands.

That sort of process is likely to be path dependent, or so experimental evidence suggests. The relevant experiments involve paying for a public good, and while one might have doubts that results obtained with student subjects playing for small sums of money would carry over to decisions where life and property are at stake, the experimental research does make it clear that the outcomes are path dependent and shaped by past behavior. In the experiments, the subjects do not play what would be their dominant strategy if they were concerned only about their own monetary pay off—namely, contribute nothing and free ride. The experimental evidence in fact suggests that they are also concerned about the whole group’s payoff, that they dislike it when others free ride, and—most important of all—that they try out and evaluate strategies based on the recent history of play. If past play convinces them that others will contribute and that all will benefit, then they too will chip in.¹³

If the same rules governed behavior by those with a political voice in the fourteenth century, then actions by a leader such as the king’s son were the key to establishing permanent taxation in France. By stamping out the brigandage and reaching agreements with local elites, the future Charles V convinced each of the elites with a political voice that others would in fact contribute, that the public good of security would in fact be delivered, and that all would therefore benefit. They would in effect learn that paying the taxes was a winning strategy. Without this initial learning, the French kings might have had to wait much longer to get permanent tax revenue.

France’s path to substantial permanent taxation was not the only one, for other polities took a very different route. In Brandenburg Prussia, force played a role, but a political bargain with elites was still essential. Because Brandenburg Prussia had been ravaged during the Thirty Years War (1618–1648), its ruler, the Elector Frederick William, sought enough tax revenue to establish a standing army. He began by offering concessions to the nobility—in particular, greater power over their serfs—and

¹³ See Arifovic and Ledyard 2012. Their explanation for the participants’ behavior assumes that participants’ utility functions are linear in three terms: their own payoff, the average payoff to the group, and the amount by which their payoff is less than the average payoff to the group. They also assume that experimental subjects also learn by randomly trying out new strategies and evaluating old ones. With their model, cooperation in the public goods experiments can then emerge endogenously in a way that is affected by past play.

in return a representative assembly of nobles and towns in Brandenburg agreed to temporarily increase taxes. That funded his army and allowed him to enter a war between Sweden and Poland. He then invoked the fighting to unilaterally impose even higher taxes, and when the war was ended, his army then suppressed resistance to making the tax increases permanent. At the same time, he kept the nobles on his side by offering them employment as army officers and government officials (Carsten 1954; Vierhaus 1984; Volckart 2000).

The road to a state that could mobilize resources on a large scale was different still in China. There, two centuries of warfare led to the triumph of the first dynasty to unify China, the Qin (221–206 BC), whose leaders swallowed up rival states because they could raise more tax revenue and conscript more soldiers than their opponents. The Qin and the next dynasty, the Han (206 BC–AD 220), also took the first steps toward creating a bureaucracy that increased the resources the state could muster and at the same time had the important long run political effect of keeping elites loyal by drawing them into state service.¹⁴

In all of these examples, the process of establishing substantial permanent taxation was path dependent; it depended on history—on the initial steps taken by rulers and elites. To analyze what happened, we therefore have to pay close attention to the history—to what was done by Charles V, Frederick William, the Qin and Han Emperors, and by the other actors with a political voice. These rulers could have easily failed to establish states, for as we know, warlords and other political leaders can fight for decades or more without ever being able to levy substantial permanent taxation. Getting the history right also demands that we seriously weigh the obstacles to establishing states: among them organizations that can provide substitutes for the public goods or services a state furnishes and so reduce that appeal of creating a state to provide them. At the end of the Roman Empire, for example, bishops in western Europe provided famine and disaster relief that today would be the task of states (Brown 1996, p. 62). The Church—an all-encompassing religious institution—had become a substitute for a state in a world without one.¹⁵ Similarly, local authorities (a lord in medieval Europe, for instance) could muster armed followers and provide defense in place of a state.

¹⁴ The account of what happened in China is taken primarily from Hui 2005 and from the insightful comparison in Burbank and Cooper 2010, pp. 54–59.

¹⁵ One could argue that the Church was itself a state, since it had a permanent source of revenue (the tithe) and could mobilize military resources, at least by the time of the Crusades. But it claimed to be distinct from (and perhaps superior to) any state, and in theory at least it was not supposed to employ violence, which it would leave to those political authorities who would do its bidding.

Understanding what happens will require scrutinizing the politics, and it may also mean that we have to look beyond economics and draw upon work by behavioral economists, political scientists, and evolutionary anthropologists.¹⁶ Some of the behavior may simply involve imitation (such as coordinating on a particular equilibrium or copying what is widespread) and it may not be the result of optimization. But that is true of much political behavior—even voter turn out in modern democracies (Palfrey and Pogorelskiy 2014). When analyzing the politics we will have to consider how to model what happens as political leaders first create a fiscal system and then learn how to squeeze more revenue out of it, whether it is in ancient China during the rise of the Qin, Brandenburg Prussia during the reign of Frederick William, or modern democracies.¹⁷ Their learning may require that they abandon tax farmers and set up instead a large fiscal administration staffed with bureaucratic officials. Or the learning may depend on the incentives that leaders and officials create for tax compliance.¹⁸ All those policy choices are at least in part political and they too all merit future research.

WHAT DO STATES SPEND THEIR TAX REVENUE ON?

Suppose that a warlord, chief, or king finally has gotten his hands on substantial permanent tax revenue. What then does he use it for? In other words, when a state finally comes into existence, what do its leaders spend their tax revenue on? And when do they use their tax revenue to provide public goods and services that enhance economic growth?

Answering the first question turns out to be difficult for many parts of the world, because the origins of states lie so far back in the past that the requisite data on government spending and taxation simply do not exist. But it can be answered for parts of Europe, where states arose relatively late, at the end of the Middle Ages or the sixteenth and seventeenth centuries. There we do have enough evidence for England, France, and Prussia, and for those three states the answer to the question is clear for the years 1600–1790, for they directed the bulk of their revenue to

¹⁶ For example, it would mean turning to the sort of model proposed by the behavioral economists Bowles and Gintis (2011) to explain the behavior that the evolutionary anthropologists Boyd and Mathew (2011) observed among the Turkana and that I believe prevailed in western Europe in the early Middle Ages.

¹⁷ For such a model, see Hoffman (2015).

¹⁸ For an example of how an early fiscal bureaucracy helped boost tax revenues, see Brewer (1990). As for incentives for tax compliance, consider imperial China, where the payment of taxes became the evidence used to substantiate property rights (Von Glahn 2012). I thank Richard Von Glahn for this example.

TABLE 1
MILITARY EXPENSES AS A PERCENT OF ANNUAL GOVERNMENT SPENDING:
ENGLAND, FRANCE, PRUSSIA (1688–1790)

Country and Period	Minimum	Median	Maximum
England 1688–1790	25	48	84
France 1600–1688	19	73	94
Prussia 1688–1789	68	90	98

Note: Military expenses include subsidies for allies, but not debt service, even though the sole purpose of borrowing was to pay for wars. Debt repayments are also excluded to avoid double counting. Figures for England concern net public expenditures.

Source: Mitchell and Deane 1962, pp. 389–391 (England); <http://esfdb.websites.bta.com> (data on seventeenth-century French expenditure supplied Richard Bonney); <http://esfdb.websites.bta.com/table.aspx?resourceid=11768> (data for Prussia gathered by Martin Körner).

the military, either directly, or indirectly by subsidizing allies (Table 1). Their only other major expense was also related to war: servicing debt run up in past conflicts.¹⁹ So war dominated their expenditures, and the same was likely true of the other states in early modern Europe. And that is hardly surprising. They had created states by working out the politics of funding warfare, and we would expect them to use their newly granted permanent tax revenue to pay for the ongoing fighting.

Early modern Europe, however, may well have been exceptional, for warfare there was not simply a matter of providing the public good of defense. Rather, it was at least in part a consumption good for the kings and princes who made political decisions about peace and fighting. Throughout their childhood, they had learned that warfare was the calling of kings, and once they were adults and in power their advisers would remind them, as Machiavelli did, that they should have “no object, thought, or profession but war.” They had been raised to prize glory in war, an intangible that could only be earned on the battlefield and was impossible to divide up via peaceful bargaining.²⁰ Elites with a political voice shared their taste and enthusiasm for war, and both they and the

¹⁹ If debt service were included in military spending, then the percent of government expenditures that went to the military would never have fallen below 57 percent in England, France, and Prussia during the years covered in Table 1. The trouble, however, is that the available debt service figures include repayments of principal, which means there would be some double counting. In compiling data on military spending, one has to keep in mind that tax revenue could be collected and spent locally. The same goes for mobilizing resources in kind, such as the services of conscript soldiers. Those practices were particularly common in large states (such as the Ottoman Empire or the Chinese Empire) before the nineteenth century.

²⁰ The quotation comes from Machiavelli (1977, p. 247). For how kings were encouraged to pursue glory and its indivisibility, see Cornette (1993) and Hoffman (2012). The political philosopher Thomas Hobbes mentioned glory as one of the chief reasons for war.

kings who waged war avoided most of the costs of fighting. Although nobles did certainly die in combat, their assets and the kings' were usually not taxed to pay for wars, and if we leave aside civil wars, the rulers of the major powers ran no risk of being dethroned after a military loss, at least in the years 1498–1789 (Hoffman 2015, Table 2.2).

Incentives of that sort are a recipe for overspending on war. Indeed, if a political decision maker (a king or his chief adviser in a monarchy; in a democracy, it would be a president, prime minister, or pivotal member of a representative assembly) avoids the costs of war and reaps a disproportionate share of the benefits war brings, then warfare will be likely, and it cannot be prevented by any peaceful transfer of resources (Jackson and Morelli 2007). So we would expect European kings to fight frequently and spend heavily on war. And we would expect the fighting and military spending in Europe to subside in the nineteenth century, after the Napoleonic Wars had changed the underlying rules so that even monarchs could be deposed after a loss and after decision making had passed into the hands of leaders who had not been raised to pursue the glory of war. In this new equilibrium of domestic politics and international relations, leaders had much less reason to fight (Hoffman 2015; Schroeder 1994).

Warfare did in fact grow less common in nineteenth-century Europe, and so did casualties on the battlefield. Brutal wars were still fought, but if we look at western Europe and compare the years 1815–1914 (the period between the Napoleonic Wars and World War I) with the preceding period 1650–1815, then the fraction of time spent fighting fell 77 percent, and battlefield casualties 78 percent.²¹

But did military spending also subside in nineteenth-century Europe? And was spending on the military before the nineteenth century exceptionally high in Europe? Those questions are important, because heavy military spending would make it harder for a state to furnish growth enhancing public goods, but they are surprisingly hard to answer, because we lack the necessary data—in particular, disaggregated government spending figures that would let us measure military spending or other categories of government expenditure across time and countries, both in Europe and in other parts of the world. Before the nineteenth century, governments generally did not publish regular accounts of their expenditures or tax

²¹ The calculation is based on the wars listed in Dincecco (2009, Appendix Table 1). The wars considered include all conflicts listed in Clodfelter (2002) that were fought at least in part in western Europe and which that involved at least one of the following countries: Austro-Hungary, Belgium, Britain, Denmark, France, Italy, the Netherlands, Portugal, Prussia, Spain, and Sweden. Naval campaigns and colonial wars were excluded. Casualty figures before the nineteenth century, though, are subject to considerable uncertainty.

revenues. The seventeenth and eighteenth-century numbers for England, Prussia, and France in Table 1 are therefore unusual. And when fiscal data finally does make it into print in the nineteenth century, it often appears in obscure periodicals, and categorizing the spending is not easy. Although numbers for military spending have been gathered by the Correlates of War Project from 1816 on, and Peter Lindert has done the necessary spade work for social spending after 1880, data for other categories of nineteenth-century spending still have to be collected.²² The task is even more complicated because much government spending was done at the local level, by municipal or provincial authorities. That was particularly true of spending on education and on infrastructure such as roads, sewers, and water systems. Categorizing total public spending therefore requires aggregating data across different layers of government.²³

So it is difficult to answer our two simple empirical questions. Still, it does seem likely that military spending was elevated in western Europe before 1800. In the eighteenth century, per-capita tax revenues among the leading military powers in western Europe dwarfed those in China and the Ottoman Empire (Karaman and Pamuk 2010; Brandt, Ma, and Rawski 2014), and since it is unlikely that the military absorbed a smaller fraction of the government budget in western Europe than in China or the Ottoman Empire, per-capita military spending must have been higher in western Europe too.

As for whether military spending subsided in nineteenth-century Europe, it is clear that it did not. Despite the precipitous drop in battlefield deaths and the frequency of war, real military spending actually rose substantially, at least in Britain and France, where we can compare the late eighteenth and nineteenth centuries: It increased more than two-fold in Britain between 1780 and 1864, and more than four-fold in France during the same period. And it climbed even higher at the end of the century in Britain and France and the rest of western Europe too as an arms took hold in the build up to World War I (Hoffman 2015, Table 6.4; Eloranta 2007).

A simple model of the politics involved (one different from the model in Jackson and Morelli 2007) can explain why military spending rose in nineteenth-century Europe despite there being far less war. With political leaders no longer pursuing glory in war, it was easier to bargain and find peaceful solution to conflicts, and the leaders had a greater incentive to

²² See <http://www.correlatesofwar.org/> and <http://lindert.econ.ucdavis.edu/data-and-estimates> (web sites consulted 20 January 2015). The data has been gathered for some countries—see Fontvieille (1976) for an example—but for others the work has not yet been done.

²³ As John Wallis (2006) has done for United States spending from 1902 on.

find such solutions because they now faced the risk of being deposed if they actually fought and lost. But they would still need armies and navies to enforce their bargains. The result would be a cold war, with continued spending on the military but much less actual fighting (Hoffman 2015).

Military spending in nineteenth-century Europe was also lifted by rising incomes as western Europe industrialized and by constitutional changes that boosted tax revenues relative to national income. Before the French Revolution, tax rates in any given country in continental Europe had varied widely across regions and social groups, with many groups (such as nobles or residents of particular regions) enjoying tax exemptions. In France, the Revolution erased these differences, creating a uniform fiscal system that the armies of the Revolution and Napoleon then imposed on territory they conquered. Countries that resisted a French invasion undertook similar reforms, either to bolster their own revenues for fighting Napoleon or as part of nineteenth-century constitutional change. The growing power of representative institutions then increased tax revenues even more (Dincecco 2009, 2011).

Although more powerful representative institutions could raise tax revenue and so increase military spending, one might expect that they would reduce the share of the budget that the military received, because the pivotal political decision makers in the nineteenth century (who might be a minister, a party leader, or a median member of Parliament) would prefer to shift spending away from the military and toward growth enhancing goods and services such as transportation infrastructure or clean water and sewers. But the move toward representative government and democracy did not seem to have that effect. Total government expenditure data for the nineteenth century is not yet readily available for many European countries, but we can at least analyze what happens to the ratio of military spending to tax revenue, which is a reasonable proxy for the military's budget share. And if we regress that ratio on a measure of growing democracy and add country fixed effects and controls for wars (military casualties as fraction of the population) and for growing incomes (urbanization rates as proxy for per gross domestic product (GDP)), then more democracy does not seem to be correlated with less military spending relative to taxation in Austria, Britain, France, Germany, and Italy (Table 2). One should of course not place too much weight upon such a panel regression, for too many explanatory variables are endogenous and measured with error. Still, it does seem puzzling that the military did not seem to be getting a smaller share of tax revenues as democracy advanced.

TABLE 2
REGRESSION OF THE RATIO OF ANNUAL MILITARY SPENDING TO ANNUAL TAX REVENUE 1816–1913 (AUSTRIA-HUNGARY, BRITAIN, FRANCE, GERMANY, ITALY)

Explanatory Variable	Coefficient (Standard Error)
Military deaths in war/population	0.037 (0.015)
Urbanization (fraction of population in cities > 100K)	0.894 (0.224)
Democracy (Polity zero to ten point scale, with ten signifying full democracy)	0.001 (0.007)
Number of observations	428

Note: The democracy measure combines indexes of civil liberties, constraints on the executive, and citizens' ability to express preferences about policies and leaders. It ranges from zero (no democracy) to ten (full democracy). The panel regression also included fixed effects for the five countries involved.

Sources: The Global Price and Income History web site (<http://gpih.ucdavis.edu/Evidence.htm> web site consulted 15 January 2013) for tax revenues collected by Dincecco 2009; Polity IV database (<http://www.systemicpeace.org/> consulted 18 January 2013) for the measure of democracy; and the Correlates of War database (<http://www.correlatesofwar.org/> consulted 6 April 2012) for the other variables.

On the other hand, greater democracy does seem to have been correlated with more spending on public goods and services that contribute to economic growth—goods and services such as education, the enforcement of property rights, and public works such as transportation infrastructure, clean water, and sewers. During the years 1816–1913, spending on education and public works in France, Spain, and the Netherlands increased when representative assemblies got control of purse (Dincecco 2011, pp. 110–113). And democracy did spur spending on education, not just in Europe but elsewhere in the world (Lindert 2004, vol. 1, pp. 24–25).

A simple model of a median voter or a pivotal decision maker would lead us to expect such a result, and so would more sophisticated models that would link steps toward democracy to both an increased ability to levy taxes and better protection of private property rights (Besley and Persson 2009). The story is complicated, however, because much of the money for education and public works was allocated locally. Spending on schools was high in Germany, even though the national government was far from democratic, because local governments made the decisions about using taxes to pay for schooling, as in the United States (Lindert

2004, vol. 1, pp. 24–25). In Britain, the extension of the franchise yielded more local government spending on roads, sewers, and clean water, but the causality did not run in a simple monotonic way from more democracy to more local government expenditure on growth enhancing infrastructure. Rather, politicians used extension of the franchise as a means of getting valuable infrastructure by breaking free of a politics that had been limited to redistributing within the elite (Lizzeri and Persico 2004). The extension of the franchise was even more complicated than that because the poor actually opposed raising taxes to pay for the infrastructure (Chapman 2014a). Widening the franchise too far would work against getting sewers and clean water.

So if we want to understand what impels governments to spend on growth enhancing public goods and services, we have to pay close attention to the politics and to the history, as has been done for work on education (Goldin and Katz 2008; Lindert 2004). But much more remains to do. In many cases, we do not even know what total government spending was, in part because we have to measure not just national but local government expenditure. Education is again the major exception here, for educational funding has been studied, as has its economic impact. For infrastructure, work on its impact and on the politics behind it are underway (Troesken 2001; Ferrie and Troesken 2008; Kesztenbaum and Rosenthal 2011; Troesken 2014), but that research could certainly be pushed further and extended to other countries and to time periods before the late nineteenth century. And there are other growth enhancing goods and services that cry out for study. The rule of law is one, particularly the provision of courts or other venues for settling private disputes. Historians have written a great deal about the rise of such courts, with late medieval and early modern Europe being a prime example. But an economic analysis of their impact is sorely lacking, particularly when it comes to the administrative and judicial reforms of nineteenth-century Europe, which imposed uniform rules on the fragmented legal systems of continental Europe.

We also need more work on scientific research, on its economic consequences, and on the politics behind it. The same goes for the training of scientists, engineers, and other technically skilled labor. The scientific research usually combined government and private efforts, but we know too little about the economic consequences and the politics behind what the government did. Government action here reached back much further into the past than one might expect, and it too involved local authorities. In the United States (so the late Ross Thomson has estimated), some 56 percent of technical innovators in the years between 1820 and 1941 had

learned from working for federal or local governments—all well before the huge expansion of the federal support for science and technology during and after World War II (Thomson 2014). The economic impact of that learning was likely huge.

Any study of the impact of the research—even when it was done by private entrepreneurs—will also have to take into account the effect of government laws and regulations that complemented the researchers' discoveries and helped resolve problems with externalities when those discoveries were put to use. The legal and administrative measures adopted to control agricultural pests in nineteenth and twentieth-century California are an excellent illustration of governmental efforts to ensure that research enhanced productivity. To take one example among many, after phylloxera had wreaked havoc in California vineyards, the California State Legislature in 1880 boosted funding for the state university's agricultural research. The state government also created a Board of Viticultural Commissioners, which did its own research on remedies against phylloxera, and the Board and the University then worked to put their research into practice.²⁴ As that example illustrates, the governments that acted were often local ones.

PUBLIC OR PRIVATE PROVISION

There are of course private alternatives to many of the growth enhancing goods and services governments provide. Private actors can build roads and collect tolls from users. They can also provide clean water, either by constructing the water system themselves or by operating a government build system. They can even provide security ranging from guard services to the sort of mercenary armies that were common in Europe and Asia in the early modern period. The private alternatives may of course be problematic, if the goods or services are public or involve externalities or natural monopolies.²⁵ But even when those problems can be solved, private provision still usually assumes that the state is strong enough to regulate markets, to remake property rights, and to resolve disputes over them. In eighteenth-century France, for instance, it would have been profitable for private entrepreneurs to drain marshes and irrigate fields, even

²⁴ For the example of phylloxera, see Olmstead and Rhode (2008, pp. 242–4). The state and federal government also created numerous bodies and regulations to deal with pests in California (Olmstead and Rhode 2008, pp. 254–6).

²⁵ The world's railroads in the years 1880–1912 provide an interesting example of problems with private provision (Bogart 2010). State construction actually made the railroads more efficient, although nationalizations of existing private lines had the reverse effect.

though their private projects were plagued by externalities. The problem was that the legal system encouraged individuals to seize all the profits of any planned drainage or irrigation project, and it frustrated efforts to solve the problem via private bargaining (Rosenthal 1992). Reforming the legal system to resolve those problems was politically impossible, for it would have meant changing both property rights and fundamental political bargains between the monarchy and local elites. That sort of drastic solution required the French Revolution. Only then did the French state become strong enough to make private provision of drainage and irrigation feasible on a large scale.

Britain avoided that problem. The issue here, it should be stressed, was not protection of property rights against a predatory state in eighteenth-century France. Property rights were in fact secure in Old-Regime France—if anything, too secure. Rather, it was the political weakness of the French monarchy. The French kings not only collected much less tax revenue relative to the size of their economy than the British, but they could not tamper with the underlying political equilibrium that protected existing property rights, taxes, and the make up of the judicial system.²⁶

In Britain, by contrast, the state wielded far more power in the eighteenth century. Although it is well known that the Glorious Revolution constrained the king, we forget that it also boosted the taxes that were collected and made Parliament the ultimate authority over the projects that private provision would necessitate. Thanks to the Glorious Revolution, Parliament alone would henceforth have the power to authorize the projects, and it alone could rearrange property rights when that was necessary. The result was an explosion of private projects—from canals to toll roads—that enhanced economic growth. Parliament could also create new local government bodies to provide goods such as water or infrastructure, so that greater private provision could march hand in hand with more public provision too.²⁷

Analyzing the politics is therefore essential for understanding when private provision prevails and when it fails to make any headway. At first glance it might seem that simple theory alone could make sense of the politics and thereby explain the trends and patterns of private provision. One might imagine, for instance, that private provision would simply

²⁶ For taxes as a fraction of GDP in France and Britain, see Hoffman and Norberg (1994, pp. 300–1).

²⁷ For the many things Parliament did after the Glorious Revolution and the effect on transportation in particular and the British economy in general, see Bogart (2005), Bogart and Richardson (2011), and Pincus and Robinson (2012).

disappear as the scale of government increased. A simple principal agent model might suggest as much, because a risk averse agent would shun a big government project whose return was correlated with those of the agent's other assets. Although the government could break the project down into small pieces, at some point economies of scale in supervision would make it better for the government to hire multiple agents and pay them a fixed salary—or in other words, turn them into bureaucrats.²⁸

Unfortunately, that simple theory does not fit reality. To begin with, private provision has not vanished. It is true that large-scale military entrepreneurs did slowly disappear after 1760 in Europe, after having financed wars and mobilized armies ever since the late Middle Ages (Parrott 2012). The private companies that fought naval and colonial wars, such as the East India Company and the Dutch East India Company, also vanished. But after a pause from the late eighteenth to the late twentieth century, the military entrepreneurs have come back, with Blackwater being the best known recent example.

The politics suggests why, at least in democracies. Nationalism facilitated conscription, from the French Revolution through World War II and the early years of the Cold War. But once the draft and military casualties become unpopular, political leaders had an incentive to adopt a military policy that would avoid the wrath of voters. That might mean switching from conscription to a volunteer army or finding technological substitutes for ground troops, which could range from atomic weapons to drones. But it could also mean hiring modern mercenaries, as in Iraq.

In any case, we have to analyze the politics and political history to understand why mercenaries have made a comeback in modern democracies and why they were not used heavily in the West between the late eighteenth century and the late twentieth century. The same holds for explaining why private provision waxes and wanes over time. In the United States, the shift from private water companies in the nineteenth century to municipal provision in the twentieth was at least in part Progressive Era politicians' response to problems of corruption. The move back to private water provision in the late twentieth century was

²⁸ Suppose an agent receives a wage payment y plus a share f of the effort x that he puts into a government project. Suppose he also faces cost of effort cx^2 that is quadratic in his effort and a cost of risk afs^2 that proportional to the share he receives times the variance s^2 of the output from the government project. Then the optimal share to give the agent $(1 - 2c/as^2)$ will fall as the variance of the project rises, and if the variance is large enough or the cost of risk to the agent high enough (as it would be with big projects), then the government should supervise the agent and pay him a fixed wage. Dividing up the project will lead to the same outcome if there are economies of scale in supervision.

a reaction to other political problems, from excessive pay for patronage employees to the deterioration of water systems brought on by low water rates that elected officials had granted to voters (Troesken 2006).

In France, by contrast, a very different political history meant that private companies have always been much more likely to provide clean water. The root cause is that central governments in France, from before the French Revolution to the present, have made it difficult for cities to impose or increase taxes, and with no tax revenue to borrow against for capital intensive projects like water systems, the cities have turned to private companies for the provision of clean water. By contrast, the tradition of federalism in the United States made it much easier for local governments to levy taxes and borrow against future tax revenue, which paved the way for municipal provision (Hoffman, Postel-Vinay, and Rosenthal 2007, p. 184).

REDISTRIBUTION

Today, economic inequality has become a salient issue. Inequality is rising in parts of the West (Goldin and Katz 2008; Piketty and Saez 2013), and it is predicted to climb even higher in the future (Piketty 2013). And to judge from the words that appear in books, writers think it deserves far more attention than in the past. In the English language books that Google has scanned, for example, the phrase “income inequality” crops up much more often today than it did before the 1970s (Figure 2). And English is not an exception.²⁹

There are a number of remedies against rising inequality, but they all require some sort of government action. Some of the treatments involve supplying more growth enhancing public goods and services, such as education or—even more important—intervention in early childhood to help kids acquire noncognitive skills (Heckman 2000, 2006). But others focus on redistribution—on taxing the rich and offering the poor more social spending. That is something only states can do.

In democracies, simple median voter models fail to account for the variations in redistributive taxation and social spending that we observe (Lindert 1996). To explain them, we have to examine the politics more carefully. Low voter turnout among the poor reduces redistribution (at least in the United States), and so, more generally, do differences

²⁹ A Google ngram search for the equivalent phrase “Einkommensungleichheit” in German books yielded similar results for the years 1920–2008. For French, a Google ngram search for “inégalité des revenus” produced a graph that was a bit different: it rose earlier (in the 1940s) and peaked in 1980.

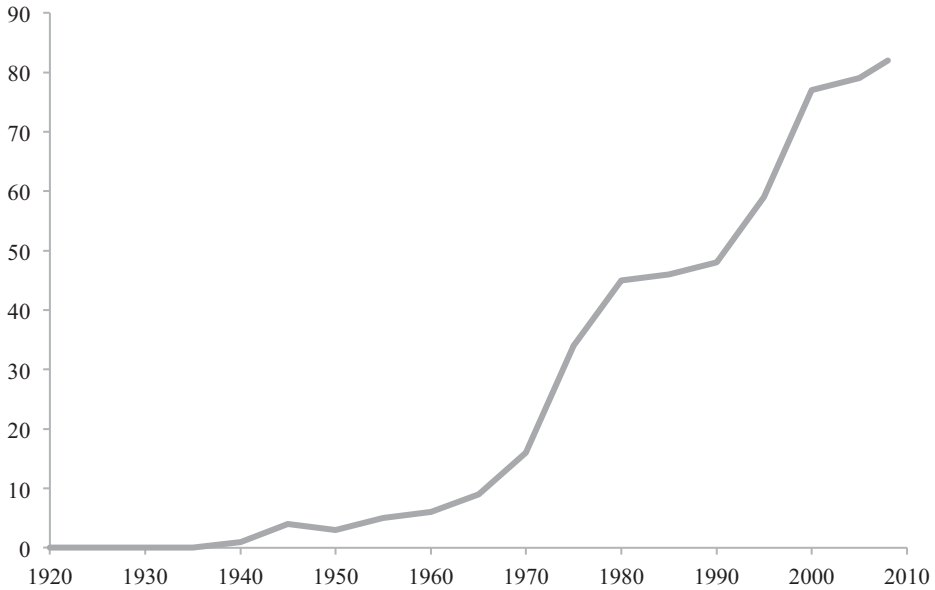


FIGURE 2
FREQUENCY OF THE EXPRESSION “INCOME INEQUALITY” IN ENGLISH BOOKS,
1920–2008 (PER MILLION WORD PAIRS)

Note: The search counts the frequency of the expression relative to word pairs in the English language books that Google has scanned. The results are smoothed with a three year moving average and plotted here only every five years and for the last year available (2008).

Source: Google Ngram search 26 January 2015.

of ethnicity and income between the poor and voters in the middle of the income distribution (Lindert 1996; McCarty, Poole, and Rosenthal 2006). Political institutions, such as the separation of powers and the lack of proportional representation, help explain why European countries redistribute more today than the United States does (Alesina, Glaeser, and Sacerdote 2001).

But even with those political variables taken into account, there is much that we do not understand. Consider, for example, taxes imposed on the highest incomes. Despite political institutions that would presumably discourage high tax rates on upper incomes, the United States was actually a leader of the movement to heavily tax the rich between World War I and World War II (Piketty 2013, pp. 802–7). The high marginal tax rates for upper incomes remained in force through the 1970s, and although it was possible to avoid them to some extent, they did have a real bite. But in the 1980s, the United States chopped the highest marginal income tax rate from 70 percent to 28 percent, and Britain did much the



FIGURE 3
TOP MARGINAL INCOME TAX RATES: BRITAIN, FRANCE, GERMANY, AND THE
UNITED STATES, 1975–2013

Source: Thomas Piketty data files at <http://piketty.pse.ens.fr/en/capital21c2> (consulted 3 September 2014).

same, cutting its levy on the highest incomes from 98 percent in 1978 to 40 percent in 1988. France and Germany, by contrast, kept their top tax rates about the same (Figure 3).

Such changes in tax rates are puzzling, particularly in democracies, for rates that do not vary will bring in the same revenue and yet spare risk averse voters unnecessary shifts in their after tax income. The differences across countries are equally perplexing. Arguing that it is easy for the rich in Britain and the United States to lobby for tax cuts because they are a small group for whom the lobbying expenses are a tiny fraction of income fails as an explanation: after all, why did the rich in France and Germany fail to get lower taxes? Claiming that Britain and the United States were simply responding to slower economic growth fails too. The differences in their growth rates and growth rates in France and Germany

were minimal between 1970 and 1980, and the gap in economic growth rates had actually been much larger in the 1950s and 1960s, but that did not prompt the United States and the United Kingdom to cut their tax rates then.³⁰

Nor is it enough to point to Ronald Reagan and Margaret Thatcher, although they certainly played a role. The politics is in fact more complex than that. In the United States, for example, it was the threat posed by a movement of political entrepreneurs that provoked the tax cuts in the 1980s. Riding the 1978 success of the popular ballot initiative that limited property taxes in California (Proposition 13), the political entrepreneurs pressured state legislatures to call for a constitutional convention to adopt an amendment that would balance the federal budget and limit federal taxes and spending. By 1979—a year before Reagan was elected—fully 30 state legislatures had voted in favor of a constitutional convention to adopt a balanced budget amendment to the United States constitution, and the threat of such a convention was getting Congress's attention. To ward off the constitutional convention, Congress responded by cutting taxes deeply—in fact, even more deeply than the Reagan administration wanted.³¹

CONCLUSION

As the tax cuts in the United States illustrate, we have only scratched the surface in uncovering the politics and history behind the variation in tax rates. Again, much more remains to be done. If the United States can again serve as an example, the key actors may no longer be organized high income groups but rather legislators who can extract campaign contributions from these groups by brandishing the threat of imminent tax increases (McCaffery and Cohen 2006). And beyond variations in the tax rates, we need to analyze their impact. Do the tax cuts account for most of the rising income inequality in Britain and the United States? It has been

³⁰ Between 1970–1980, per capita GDP (in purchasing power parity corrected 1998 U.S. dollars) grew at following rates in percent per year: 2.7 in France, 2.5 in Germany, 2.1 in the United States, and 1.8 in the United Kingdom, according to figures from the United States Bureau of Labor Statistics that are compiled at <http://www.publicpurpose.com/lm-ppp60+.htm> (consulted 24 January 2015). For the years between 1950 and 1973, Maddison (2007, p. 383) has the following growth rates for per capita GDP in percent per year: 4.0 percent in France, 5.0 percent in Germany, 2.4 percent in the United Kingdom, and 2.5 percent in the United States.

³¹ The account here is taken from Martin 2013, 164–81, which is a model of careful analysis of the politics and history behind changes in tax rates. As Martin points out, Reagan endorsed most of the movement's demands, but he declined to support the call for a constitutional convention. In 1979, a clear majority of Americans supported a balanced budget amendment.

argued that they do, by giving top executives an incentive to bargain for a greater share of corporate profits. But evidence also supports a different explanation based on changing social norms—yet another illustration of how we may have to look to other fields to explain the behavior we want to analyze.³²

We need the same sort of research for all the other things states do: We should study the impact of state actions and analyze the politics behind the decisions political leaders take. That means paying close attention to the history, because we cannot simply skim over the surface and say “it was Reagan” or “it was separation of powers.” To explain the politics, we have to consider alternatives to the state (particularly in the distant past), and ask which authorities or what level of government will act or put policies into practice—the central or local? We have to collect more data for central and local governments across the world, and we may have to look beyond our usual methods—to behavioral economics, evolutionary anthropology, political science, or fiscal sociology—to explain what actors do. Above all else, we have to leave aside the fixation on constraining the executive. Constraints on state power are certainly important, but states can also do extraordinary good.

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³² For the argument about executives’ incentives, see Piketty, Saez, Stantcheva (2014). For norms, see the evidence from the United States in Frydman and Molloy (2011).

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