

Political Economy

Mark Koyama*

May 5, 2019

Draft adapted from a chapter than will appear in the Handbook of Cliometrics

Abstract

This chapter surveys research on political economy in economic history. It discusses the integration of the public choice/political economy approaches with economic history by providing a highly selective thematic overview. Topics discussed include the origins of the state, different regime types, labor coercion, warfare, religion and state capacity. The chapter also provides detailed illustrations of how economic historians have investigated specific historical episodes such as the Glorious Revolution, French Revolution, the consequences of European empires, and the rise of Democracies.

*Mark Koyama: Associate Professor of Economics, Department of Economics, George Mason University, mkoyama2@gmu.edu. A paper is based on a chapter article that is forthcoming in the Handbook of Cliometrics. It was completed while I was the W. Glenn Campbell and Rita Ricardo-Campbell Fellowship at the Hoover Institution. I am grateful for comments from Mike Hauptert, Thilo Huning, Noel Johnson, Pseudoeramus, and proofreading from Kashiff Thompson.

1 Introduction

Economic historians have always been interested in political economy. However, for a long time, political economy was resistant to cliometric approaches. In the work of Frederick Lane (1958) and John Hicks (1969), economic theory was a metaphor to illuminate topics such as conflict, war, and state development. This approach was insightful, but it stopped short of the aim of cliometrics: to derive predictions from theory that can be tested using historical evidence.

To summarize progress since Lane and Hicks, I first consider the relationship between cliometrics and political economy, before providing a thematic survey of how cliometrics has advanced our understanding of state formation, warfare, public debt, the state and religion. The final part of the chapter considers some case studies including the Glorious Revolution, French Revolution and the political economy of empire.

Early cliometric work focused on employing neoclassical economics to understanding historical questions. These included the productivity of the slave economy in the American South or contributions to US growth in the late 19th century. This work is well-represented by the research which won Robert Fogel and Douglass North their Nobel prizes.¹

At the same time as economic history was revolutionized by cliometrics, the field of political economy was reborn in the hands of public choice scholars in Chicago, Rochester, and Virginia. This work was, by and large, abstract, theoretical, and ahistorical, as exemplified by classics such as *The Calculus of Consent* (1962), *The Theory of Political Coalitions* 1962, *The Logic of Collective Action* (1965), and *The Theory of Economic Regulation* (1971). Empirical work inspired by Buchanan, Tullock, Riker, Olson, and Stigler followed, but, initially focused on elections, voting systems, and regulation, it was somewhat removed from the concerns of most economic historians.

Public choice contrasts with conventional public finance exemplified by Musgrave (1959). The pioneers of post-war public finance explicitly differentiated it from older work which “proceeded in a historical and institutional context” (Musgrave, 1959, v). It began with the assumption that the optimal policy can be implemented by a social planner. It is normative rather than positive, focusing on what policies should be followed to maximize a social welfare function. Such institutional-free analysis had little role for history.

Public finance does not explicitly model government agents as rational actors. Public choice, in contrast, imposes behavioral symmetry. Its predictions are made on the basis of the self-interested behavior of politicians, bureaucrats, and voters. In the 1980s and 1990s, this public choice approach integrated into mainstream political science and economics, acquiring the

¹The Nobel Prize was awarded to Fogel and North for pioneering cliometrics, specifically, “research that combines economic theory, quantitative methods, hypothesis testing, counterfactual alternatives and traditional techniques of economic history, to explain economic growth and decline” (*The Prize in Economics 1993 – Press Release*, 1993).

label, political economy.²

2 The Introduction of Political Economy into Cliometrics

The influence of North, and the new institutional economics, was crucial to the integration of political economy into economic history.³ North helped introduce cliometric approaches to economic history, both in his own research, and through his editorship of the *Journal of Economic History*. Then, beginning in the late 1960s and early 1970s, North began to focus on institutional economics. Initially, he worked under the assumption that institutions were efficient (North and Thomas, 1973). Recognition that this was not necessarily the case, turned North’s attentions towards political economy (see North, 1981).

Through his status as a leading cliometrician, North bridged the historical literature and public choice and political economy scholarship (see North, 1981, Chapter 3). His influence did not stem from the fact that his writings were particularly quantitative; they were not. North framed his arguments in a way that was attractive to more quantitatively orientated scholars and which suggested ways that it *could* be tested. North’s work inspired other scholars to either build on his arguments or to challenge them.

Following North, interest in political economy topics among economic historians blossomed. Many strands of research employ the Northian emphasis on “rules of the game” and take into account the self-interested behavior of politicians, elites, voters, and bureaucrats. Engerman and Sokoloff (1994; 2000) traced the connection between factor endowments, institutions, and differential economic development in the Americas. Stephen Haber and coauthors applied institutional arguments to the complex political economy environment that is Latin America (Haber, 1997; Haber, Razo and Maurer, 2003). North himself revised his institutional framework throughout his career; the final iteration was the natural states to open-access framework of North, Wallis and Weingast (2009).

The first generation of research relied on a combination of theory and analytical narratives (Bates and Lien, 1985; Levi, 1988; North and Weingast, 1989; Greif et al., 1994; Bates et al., 1998). Since Acemoglu, Johnson, and Robinson’s seminal attempt to measure the impact of colonial institutions (2001), this line of research has fused with empirical research that attempts to identify of the impact of institutions.⁴

²The political economy label is particularly associated with the work of Persson and Tabellini (2000), Alberto Alesina and Dani Rodrik.

³See discussion in Diebolt and Hauptert (2018) of the impact of Fogel and North on economic history.

⁴The current state of the field is influenced by Acemoglu, Johnson and Robinson (2001, 2005*a*) who took Northian arguments and tested them econometrically using innovative empirical methods. Following the success of Acemoglu et al. (2001), this approach has bloomed both within economic history and in the related fields of growth economics, development and political economy. Other important publications by Acemoglu and Robinson and their coauthors include Acemoglu et al. (2005*b,a*); Acemoglu (2006).

Two approaches to research design have become particularly influential: instrumental variables (IV) and regression discontinuity design (RDD), in part because economic historians can rarely run experiments and often lack the panel data required for a difference-in-differences approach (DID).

Melissa Dell's (2010) influential study of the long-run effects of Peruvian Mita, for example, popularized use of RDD. Recent papers that employ IV approaches include Dippel (2014) who instruments for the forced integration of Native American communities by using data on historical mining rushes.

Not all topics in political economy are amenable to causal methods. In politics few things are truly exogenous. Instruments that satisfy the exclusion restriction are difficult to come by. Political borders often arise endogenously making RDD designs challenging. Therefore, it is important that economic historians studying political economy employ mixed methods. Formal models (as in the analytical narrative tradition), qualitative evidence, and descriptive econometrics all have a place in improving our understanding of the interaction of politics and economics. In political economy, perhaps more than in other fields, understanding the historical context and the data generating process remains of paramount importance.

In his Presidential Address to the Economic History Association, Hoffman (2015, 305) argued that “we still know too little about what determines the laws, regulations, and policies that states adopt or what goods and services they provided . . . Worse yet, we do not even understand how states arise in the first place or how they gain the ability to tax.” I will take a different view and argue that progress has been made in understanding both the rise of states and the development of modern welfare states. To substantiate this, the next Section provides a thematic approach to major cliometric contributions to political economy.

3 A Thematic Overview

3.1 Origins of the State

In contrast, to the assumption of a benevolent social planner maximizing a social welfare function, political economy begins by considering states as they actually are—i.e., organizations that are made up of the same individuals who populate private firms. Rather than taking the economy as its starting point (and treating it as an autonomous segment of society that can be analyzed independently of politics), political economy concerns itself with the interaction between the state and the economy. A natural starting point is the origins of the state.

Speculation about the emergence of states goes back millennia. But while it is possible to begin with Aristotle or Hobbes, modern social scientific analysis can be traced to Oppenheim (1922) and Carneiro (1970). In economics, Brennan and Buchanan (1980) developed a simple model of a revenue-maximizing leviathan state. These ideas were combined in Mancur

Olson's stationary bandit model (1993). For Olson, organized states arise from violence and disorder. The presence of competing warlords or roving bandits causes poverty, as each warlord robs without taking into account the damage he causes. However, if a single bandit establishes a monopoly of violence, such a stationary bandit will have a more encompassing interest in the society that he now "governs". Olson's story is both a parable and a model with testable predictions.

A key problem for such a stationary bandit is that mobile populations cannot be compelled to pay taxes; they can move to avoid fiscal extraction. Allen (1997) applied these ideas to ancient Egypt. Egypt developed a stable and long-lasting state because its geography helped rulers corral tax payers. Geographical circumscription was possible earlier than elsewhere because agriculture first developed along the fertile Nile valley, and this area of lush farmland was surrounded by inhospitable desert. Early statehood in Egypt brought stability, but may have made the average Egyptian worse off, as the surplus created by agriculture could be extracted by the political elite.

For both Olson and Carneiro agriculture was a precondition for statehood because farming produces a storable surplus of food. Mayshar, Moav and Neeman (2017), however, note that a slow rise in productivity alone could not have generated a surplus since, in a Malthusian environment, population size adjusts to prevent the creation of such a surplus. Only where output was transparent and storable, could states emerge. Mayshar et al. (2017) contrast the pattern of state development between Egypt and ancient Mesopotamia. Nile agriculture relies on flooding. How much the Nile flooded was public information, transparent to the Pharaoh. Hence the Egyptian state could take all the surplus. Egyptian peasants were tenant-serfs; elites were dependent on Pharaoh. In Mesopotamia, however, agricultural productivity, while transparent to the local elites, was opaque to a centralized state. Hence, authority tended to be organized at the city level. Consistent with this prediction: states were less stable in Mesopotamia than in Egypt.

3.2 City-States and Republics

The earliest large states that we know about were autocracies. Wittfogel (1957) ascribed the prevalence and resilience of autocracy in much of Asia to the demands of irrigation based agriculture. He argued that such systems of irrigation required strong, centralized state control. Where agriculture was heavily dependent on river water, rather than being rain-fed, strong and centralized autocratic states were likely to arise, such as the Pharaohs of Egypt, the Assyrian, Babylonian, Persian Emperors of Iraq and Iran, and the Emperors of China. Wittfogel's original hypothesis has been widely criticized. Recent empirical work suggests some support for it. Bentzen et al. (2017) find that irrigation-based agriculture is more likely to be associated with autocratic rule. Elis, Haber and Horrillo (2018) argue that there are optimal climatic conditions for the emergence of participatory democracy.

An alternative political organization to autocracies was the city-state. The best known

city-states were the *polis* of classical Greece. In comparison to the ancient empires, these were egalitarian. They permitted self-government among a strata of the population, either wealthy landowners in oligarchies or free males in democracies.

To understand how democracies emerged in ancient Greece, Fleck and Hanssen (2006) develop a model based on a time inconsistency problem. According to their account, democracy came about when and where there were productive opportunities for investment for the demos.⁵ Democratic rights ensured that these investments would not be expropriated by a ruler or an elite. Another hypothesis for why democracy emerged in ancient Greece is that ecological conditions produced a relatively egalitarian distribution of income and a large population of small-holder farmers. The development of the hoplite military formation also empowered these smallholders and necessitated their political representation. In Athens, the rise of navy was crucial in cementing the power of the demos (Kyriazis and Zouboulakis, 2004).

Classical Greek *polis* witnessed an economic, cultural, and intellectual flourishing (Ober, 2015). But they were limited in size and scope—unable to integrate outsiders—and in a state of constant hostility with one another. Inter-polis conflict was responsible for the catastrophic Peloponnesian War. The rise of Rome led to the establishment of an imperial monarchy, and monarchy was the main way subsequent European states organized themselves into the modern period.

The medieval period saw the revival of the city-state, especially in Italy and the Low Countries (Pirenne, 1925). These city-states evolved institutions that sought to limit social conflict, as analyzed in the Genoese case by Greif (1998, 2006). But like their ancient counterparts, most medieval city-states were limited in size.

Medieval city-states are often viewed as economic success stories (Cipolla, 1976). Their institutions were indeed initially conducive to economic growth, but as Stasavage (2014) documents, the constitutions of medieval city-states became more oligarchic over time. As this occurred, the growth advantage enjoyed by city-states declined. Using city population as a proxy for economic development, Stasavage finds that overall autonomous city-states did not grow faster than other cities on average. However, city-states that had been independent for less than 200 years, did grow faster; then, after 200 years of independence, they grew more slowly than did ordinary cities.

Stasavage interprets this in terms of a model of oligarchies proposed by Acemoglu (2008). In this model, as oligarchic societies represent the interests of producers, they tend to protect property rights and to impose low taxes. But they also erect barriers to entry which can result in sluggish growth in the long-run. In contrast, democracies impose higher taxes, redistribute more, but also tend to allow free entry. Oligarchic societies, therefore, tend to experience initially rapid growth followed by stagnation.

⁵Fleck and Hanssen (2013) discuss how the institution of tyranny—stable autocratic rule—helped to pave the way for democratization.

An example of this process is Venice where the prosperity associated with trade made merchants politically powerful. They ended the hereditary rule of the Doge in 1032, which became an elected office, and in 1172, established a Grand Council to further constrain executive authority. Tracing family names of the Council members, Puga and Treffer (2014) show that there was considerable mobility into and out of the Council, suggesting that membership of the political elite was fluid. However, this mobility threatened the profits of established merchants. This led to a period known as the Serrata (“closure”) in which the established merchants used their power in the Council to pass laws to close entrance. A law in 1297 restricted new entrants in the Council and one in 1323 restricted entry into long-distance trade. This speaks to the general trend: city-states were associated with impressive but transitory prosperity.

3.3 Medieval States and Feudal Institutions

An alternative to centralized monarchies or city-states were territorial states. Huning and Wahl (2016) argues that more observable agricultural output is associated with the emergence of larger territorial states. Testing this model using the Holy Roman Empire, they find higher observability leads to larger and longer lasting states.

The larger territorial states that emerged in medieval Europe were feudal. Feudalism has a bad reputation among economic historians. It represented the dispersal of coercive power to the extent that some historians deny that feudal polities were “states” (Strayer, 1965). Blaydes and Chaney (2013) find that feudalism led to greater political stability in western Europe. Under feudalism, rulers relied on powerful nobles for military support, and in return for their support, they granted these nobles privileges and political power. These bargains helped to solidify the nascent polities of western Europe. After 900 CE, Blaydes and Chaney (2013) find a divergence in the duration of Christian and Muslim rulers, in favor of the former (Figure 1).

Greater economic opportunities and constraints on the executive accompanied the increased stability of European monarchies. This more stable environment promoted urbanization and the Commercial Revolution. Feudalism ensured that monarchical abuses were self-limiting. Political elites had the military power to standup to overbearing monarchs (Blaydes and Chaney, 2013). Perhaps the most well-known instance of this was the ability of the English barons to force King John to sign Magna Carta (Koyama, 2016).

Salter and Young (2018) argue that medieval polities were successful because they aligned the incentives of landowning elites. Political rights in medieval societies were bundled with property rights. According to this view, medieval lords were incentivized to pursue policies that were beneficial to development because they had economic property rights in their realms. And unlike satraps or appointed governors in centralized empires, they had the political rights to bargain with their sovereigns and to hold them to account.

For Blaydes and Chaney (2013), the rise of feudalism has implications for the divergence

between Europe and the Middle East. In contrast to Western Europe, Islamic states came to rely on slave soldiers. Landlords were alienated from political power as a consequence. Levels of political stability in these two regions of the world thus diverged centuries prior to the divergence in per capita income (Blaydes, 2017).

Acharya and Lee (2018) point to the role of economic development in the formation of the European state system. They argue that when trade and commerce are underdeveloped, and hence the value of governance is low, there is no incentive for territorial states to emerge. In this world, there will be pockets of state authority but no territoriality. Territoriality emerges when there are overlapping markets for protection.

3.4 Labor Coercion

Feudal societies relied on labor coercion. North and Thomas (1971) hypothesized that serfdom arose as a quasi-voluntary institutional response to the frequent conflict and invasions that characterized the early middle ages. Domar (1970) argued that serfdom emerged where and when labor was scarce. This prediction can help to explain the emergence of serfdom in early medieval Europe and in Eastern Europe after c. 1600. Brenner (1976) noted that a purely demographic model was insufficient to explain the *decline* of serfdom in western Europe following the Black Death; this phenomenon required studying political power and class relations. Labor scarcity increased the bargaining power of laborers contributing to a crisis of class of surplus extraction, in Marxian terminology.

These explanations can be reconciled. Wolitzky and Acemoglu (2011) build a principal-agent model to study the relationship between labor scarcity, outside options, and labor coercion. In this framework, coercion and effort are complements. Hence, when labor is scarce, there is a stronger incentive to employ coercion. However, conditions of labor scarcity also improve workers' outside options, which reduces the incentive to use coercion.

What were the economic consequences of labor coercion? Studying early modern Bohemia, Klein and Ogilvie (2016) show how coercive labor market institutions shaped economic incentives. In particular, under serfdom, landlords suppressed activities from which they could not extract rent. Close to urban centers, landlords were more likely to enforce coercive restrictions on labor. These findings suggest that the power of landlords to coerce labor in central and eastern Europe helps to explain their relative economic underdevelopment relative to western Europe in the centuries leading up to the Industrial Revolution.

Serfdom persisted in Eastern Europe until the 19th century. Even in England, master and servant laws continued to be used to restrain wages in Industrial Revolution England (Naidu and Yuchtman, 2013). Ashraf et al. (2017) explain the decline of serfdom in early 19th century Prussia in terms of the economic incentives facing landowners. They hypothesize that as skilled labor became more important in the production process, elites had an incentive to emancipate serfs in order to encourage them to invest in broad-based human capital. They

find empirical support for this hypothesis using data on county-level emancipations from 19th century Prussia.

3.5 Conflict and Consensus

Politics involves competition over resources. Economics views efficiency as its central concern; the allocation of resources is determined by the price mechanism according to their highest-valued use. Political economy is concerned about the distribution of resources, in the absence of prices, and in the presence of political power. Ogilvie (2007) discusses how paying attention to political power undermines the conclusion that whatever institutions exist are efficient. Institutions result from socio-political conflicts over resources, and the absence of a political Coase Theorem means that conflicts often result in inefficiency (Acemoglu, 2003). Existing institutions need not be efficient.⁶

Institutions shaped by those with political power may be inimical to economic growth. The importance of political power can explain the attention that economic historians have devoted to understanding institutions that constrain rulers, and represent non-elites. In European history, the most important such institutions are the parliaments, which emerged in the 12th and 13th centuries.

De Long and Shleifer (1993) argue that representative institutions were associated with economic growth in medieval Europe. Zanden et al. (2012) measure the frequency that parliaments or estates met across Europe. They document the rise and spread of parliaments, and then their decline after 1500, outside England and the Netherlands. The underlying argument is that parliaments enabled merchants and the owners of capital to limit predation by rulers or landowning elites.

While parliaments contained rulers, other research stresses that parliaments emerged out of councils that rulers called (Congleton, 2010). Rulers recognized that parliaments could increase their ability to raise taxes and legitimize their rule. Boucoyannis (2015) discusses how the power of English kings, like Edward I, to compel attendance in Parliament ensured that it was a representative body. This perspective suggests that parliaments enabled, as well as constrained, pre-modern states.

A complementary hypothesis is offered by Leon (2019), who argues that the gradual expansion of the elite in medieval England laid the conditions for the peaceful transition to democracy. In his model the king expands the size of the elite to gain support against barons. Once this elite reaches a certain size, it becomes cheaper for the king to compensate them with rights rather than pay them directly, and this can make the rise of more representative institutions self-reinforcing.

⁶For a contrary perspective on institutions, see Doug Allen (2011) or Peter Leeson (2017). My understanding of their argument is that existing power relationships should be viewed as constraints. Hence existing institutions can be viewed as efficient relative to the appropriately defined set of constraints.

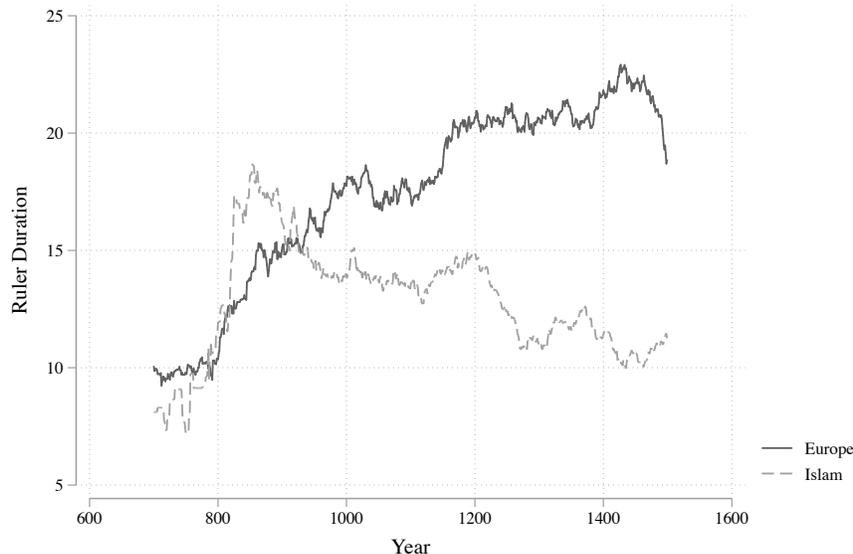


Figure 1: 100-year moving average for ruler duration. Data from Blaydes and Chaney (2013).

The view that representative institutions were necessarily good for economic development has been challenged. Taking the examples of Poland and Wüttemberg, Ogilvie and Carus (2014) argue that parliaments which only represented landed interests tended to grant legal monopolies to elites at the expense of broad-based economic growth. The Dutch Republic too, they argue, stagnated after 1670 due to entrenched power of established business interests.

Under what conditions, then, are parliaments likely to produce conditions favorable to economic development? Acemoglu et al. (2005*b*) study how the rise of Atlantic trade interacted with institutional developments in northwestern Europe. According to this argument, the opportunities for trade and commerce that opened up after 1500 strengthened the nascent merchant class in societies like England and the Dutch Republic where the state was not too strong, but strengthened the positions of absolutist monarchs in Spain and Portugal.⁷

Another perspective is provided by Cox (2017) who argues that independent city-states and national parliaments together provided the economic liberty that unleashed faster urban growth in the premodern period. Before 1100 inter-city urban growth rates were uncorrelated, but after 1100 urban growth rates in western Europe—but not elsewhere—began to move together. In other words, economic liberty promoted growth clusters. Cox argues that political fragmentation could lead to competitive pressures which could force rulers to

⁷Economic historians have rightly criticized the coding and the depiction of Spain and France as governed by overly powerful absolutist monarchs as out of date. But this research showed what was possible with historical data.

charge lower tax rates on commerce and trade. The effects of political fragmentation were largest, he suggests, in the presence of parliaments in which merchants were represented. But what factors led to the representation of merchants in parliaments? And what ensured that merchants did not use their power to erect barriers to entry?

3.6 Warfare

Military competition played an important role in ensuring institutional innovation and openness. States like Poland and Wüttemberg that erected barriers to economic development and did not invest in state building efforts were eventually subordinated by their rivals.

The role of warfare in state formation was stressed by Hintze (1906, 1975) and Tilly (1975, 1990). Economic historians have shown how frequent warfare led to investments in state capacity and to improvements in military technology. Hoffman (2011, 2015) documents how after 1500 technological innovations brought down the unit costs of guns and cannons in Western Europe. The military sector was one of the most innovative in the European economy in the period before the industrial revolution. Handguns, in particular, became both more effective and cheaper, lowering the costs of employing violence.

A theoretical perspective is required to understand why warfare promoted state development in some instances and state collapse in others. Gennaioli and Voth (2015) build a model that integrates insights from the Military Revolution literature (Parker, 1976, 1988). In their model, the incentive to invest in fiscal capacity depends on the chances a state has of defeating its rivals. Increased military competition provides incentives for some (initially more homogenous) states to invest in standardizing their fiscal systems, in order to invest in more capital-intensive means of waging war. But other states (which may be initially more heterogeneous and hence have higher costs of centralizing) may not find this worthwhile, and hence may end up losing out as a result of this intensified military competition. This model is consistent with the observation that the pressures of military competition led the most advanced and centralized European states to invest even more in state capacity, while it led to the destruction of others.

War and state-building went together in Europe's most advanced states. What role did intensified military competition play in explaining patterns of economic development in Europe? Dincecco and Prado (2012) estimate the impact of fiscal capacity on modern development. Instrumenting for fiscal capacity with causalities in premodern wars, they argue that this relationship reflects the effect of pre-modern fiscal innovations on current fiscal institutions, and these current institutions have a positive impact on economic growth.

Another possible channel was via urbanization. Dincecco and Onorato (2017*b*) argue that frequent warfare in medieval and early modern Europe led to urbanization and economic development. Cities acted as safe harbors from conflict. Conflict exposure was associated with between a 6 and 11% increase in urban population over the course of a century. Dincecco

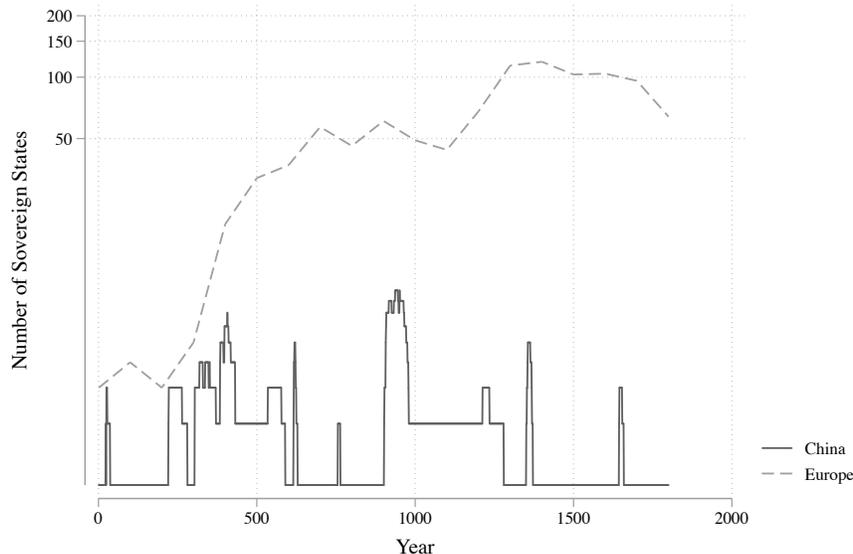


Figure 2: Number of states in China and Europe, AD 0–1800. Data from Ko et al. (2018).

and Onorato (2017a) argue that this effect has persisted and explains regional level variation in economic development in Europe today.

Other authors push back on this bellicose hypothesis, however. For one, frequent warfare did not promote urbanization, economic development, or the rise of more inclusive institutions in other parts of the world (Centeno, 1997). When population density is low, warfare may promote slave raiding rather than state-building (Herbst, 2000). Second, there may be issues about the endogenous location of battles.

3.7 Patterns of Political Fragmentation and Political Centralization

One reason why military intensification led to investment in fiscal capacity in Europe was the competitive European state system. What then, accounts for this competitive state system?⁸

Geography was an important factor. Diamond (1997) provided geographical hypotheses for why Europe tended to be politically fragmented, while China tended towards unification. Europe’s mountain ranges and fractured coastline promoted fragmentation. Hoffman (2015) criticized this hypothesis on the grounds that China was more, and not less, mountains than

⁸A literature extending back to Montesquieu and Hume argues that Europe’s political fragmentation was key to its eventual rise and to modern economic growth (Baechler, 1975; Jones, 1981, 2003; Hall, 1985; Rosenberg and L.E. Birdzell, 1986).

Western Europe.

Certainly, geographical factors intersect with political economic considerations. Ko, Koyama and Sng (2018) build on the research of historians of central Asia and theoretical models of state size such as (Alesina and Spolaore, 1997). They argue that in comparison to China, Europe faced invasion threats from multiple directions in the premodern period, impeding the growth of a single European-wide hegemon. In contrast, China faced a threat from the nomadic steppe. As a result, throughout Chinese history, a strong state tended to emerge in northern China, and this state tended to be strong enough to establish an empire over the rest of the region. Ko, Koyama and Sng (2018) test their model using a combination of historical evidence and time-series analysis of the impact of nomadic invasions on political centralization in China.

What about the consequences of political fragmentation? Karayalcin (2008) introduced a model that predicts that fragmentation should have led to lower taxes in Europe. This is not what we observe, however. Taxes were higher in late medieval and early modern Europe than in either the Ottoman empire or China. Ko, Koyama and Sng (2018) show that it might be in the interest of rulers of large empires to levy comparatively low taxes to reduce the probability of rebellion, but that this incentive is absent or much weaker in a competitive state system.

One insight from research is that political fragmentation was not an unambiguously positive factor in Europe's economic development. It imposed static costs and resulted in the multiplication of trade barriers, and in an over investment in military power that was itself a frequent cause of internecine warfare. In this respect, more centralized empires such as Qing China provided a potentially more fruitful environment for Smithian economic growth (and argued by Bin Wong (1997); Rosenthal and Wong (2011)). There were, however, important dynamic benefits associated with political fragmentation and competition.

3.8 State Finances

One example of the institutional innovations associated with warfare is in the area of state finances. The Italian city-states were almost continuously at war. Venice and Florence pioneered institutional innovations like public debt which enabled them to compete with much larger states and raise ever larger revenues to pay for their mercenary armies. The annual revenue of Florence in the 14th century varied between 250,000 and 350,000, but historians estimate the direct cost of the three-year war between Florence and the Papacy in 1375–1378 exceeded 2.5 million florins (Caferro, 2008, 177). To meet this shortfall, Italian city-states developed impersonal systems of public debt and permanent systems of taxation (Epstein, 2000).

Epstein (2000) documents that throughout the late medieval and early modern period city-states and republics paid less interest on their debts than did territorial monarchies. Stasavage (2011, 2016) shows that representative institutions enabled city-states to borrow earlier

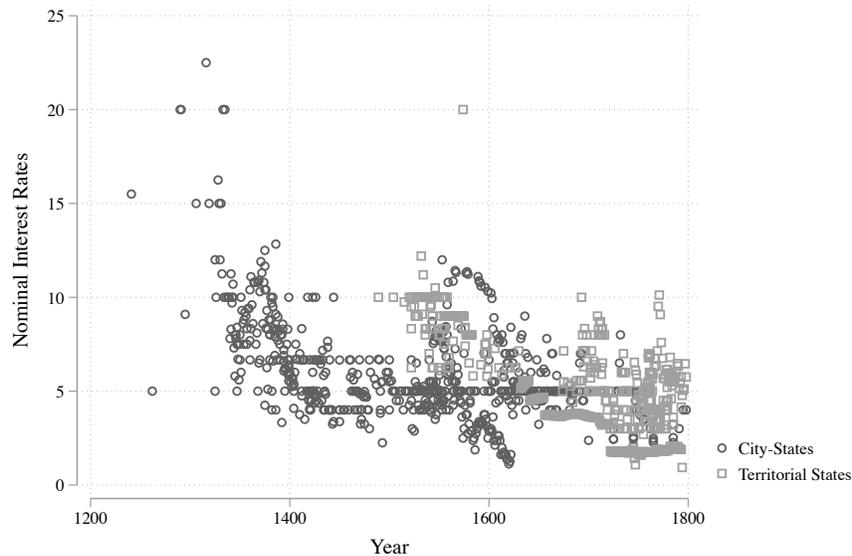


Figure 3: Interest rates in City-States and Territorial States. Adapted from Stasavage (2016)

and at lower cost. In city-states, the holders of capital were represented in government, ensuring that the promise to repay was credible. Figure 3, adapted from Stasavage (2011), is consistent with this argument (see, also Chiosi, 2014). Only in the 17th century did larger states, first the Dutch Republic, and then England, develop institutions that replicated the success of smaller city-states, such as the Bank of Amsterdam and the Bank of England (see Section 4.1).

3.9 Religion

Despite the important role religion occupied in the studies of Weber (1922, 1968, 1930) and Tawney (1926), religion was neglected by cliometric historians until recently. A recent literature specifically focuses on the intersection of religion and political economy.

Kuran (2010) drew attention to the important role Islam played in shaping economic opportunities in the Middle East. He shows that Islam infused both the law and politics of Middle Eastern countries with important consequences for the formation of long-lasting business organizations, and corporate institutions, independent of the state, such as universities. Recent studies of the Reformation have moved away from studying the direct effects of religious change on economic growth towards discussing the institutional consequences of the Reformation (see Becker et al., 2016; Cantoni et al., 2018).

One area where the study of religion overlaps most significantly with political economy is in the relationship between the Church and the state. Throughout history, religion has played

a key role in legitimizing political authority (Coşgel and Miceli, 2009; Coşgel et al., 2012; Greif and Rubin, 2015; Rubin, 2017). Coşgel and Miceli (2009) develop a model of how a religious authority can lower the costs of taxation for the political authorities.

Chaney (2013) uses variation in the flooding of the River Nile in medieval Egypt to explore the relationship between religious and secular authorities. He finds that Nile shocks increased the political power of religious leaders. Nile shocks resulted in great potential for unrest, and this improved the bargaining power of religious authorities with respect to secular leaders. This body of research suggests that to neglect religion is to fail to understand many aspects of premodern political economy. In a recent contribution Coşgel et al. (2018) compile a dataset of state religions going back to the year 1000 CE, which will prove useful for scholars working on these questions.

Rubin (2017) builds on these arguments to develop a novel account of the divergence that opened up between Northwestern Europe and the Middle East after 1500. The greater power of religion to legitimize political authorities in the Middle East constrained the development of institutions and the adoption of new technologies such as the printing press. The comparative weakness of the religious authorities in northwestern Europe, however, set in motion institutional developments that helped limit government and provide the institutional pre-conditions for sustained growth.

Finally, Johnson and Koyama (2019) examine the rise of religious freedom from the medieval ages to the twentieth century. Building on the research discussed above, they argued that the importance of religion to premodern polities meant that full religious freedom was inconceivable. Drawing attention to the various institutional arrangements premodern states established to deal with religious diversity, they point out their economic costs and the fragility of the resulting “conditional toleration” that resulted. Religion, cannot be ignored in studying the political economy of premodern states.

3.10 State Capacity

State capacity refers to the ability of the states to enforce property rights, implement policies, and provide public goods (Besley and Persson, 2011; Johnson and Koyama, 2017). It can be broken down into administrative capacity, legal capacity, and fiscal capacity. One challenge has been obtaining accurate measures of these concepts. Fiscal data now exists for a number of European countries from around 1650 onwards (Dincecco, 2009; Karaman and Pamuk, 2013). But we lack comparable measures of other aspects of state behavior.

Preindustrial states were usually small (by modern states) and fiscally and legally fragmented. Fiscally fragmented regimes suffered from local tax free-riding. Fiscal centralization thus enabled states to increase revenues and often complemented the expansion of markets and the division of labor. This made it easier for responsible governments to follow sound fiscal policies and thus lowered credit risk. However, there was always the chance that rulers would waste the new funds on reckless wars. Thus, it was only the conjunction of limitations

on the discretionary authority of government with centralized fiscal systems that enabled states to borrow a low cost.

Fiscal centralization was accompanied by legal centralization. Old Regime France was legally fragmented: customary law and the interpretation of Roman and canon law varied from place to place. During the 17th-18th centuries there was an effort to achieve some legal centralization. Johnson and Koyama (2014*b*) document how legal centralization and investment in state capacity was accompanied by a decline in witchcraft trials, in which obtaining convictions required a departure of standard legal procedures. Crettez et al. (2018) model the transition from legal decentralization to legal centralization in terms of a trade-off between allowing each region to choose its own idiosyncratic legal system and imposing legal centralization. The former allows a region to adopt rules closer to the preferences of its inhabitants; the latter eliminates legal disparities across regions. They apply this model to explain why the French Revolution was accompanied by a sharp move toward legal centralization.

Centralized fiscal systems were established comparably late in European history. Most European states achieved fiscal centralization and limited governments only after 1800. Dincecco (2009) dates the establishment of a centralized tax system in France and the Netherlands to the French Revolution. Centralized and limited regimes were only established in the Netherlands after 1848, France after 1870, and in Spain after 1876. Only once European states established centralized tax systems, and limited government, did yields on public debt fall.

This account is consistent with the data provided by Karaman and Pamuk (2013) which depict marked increases in fiscal capacity in England, France, the Dutch Republic, Prussia, and Habsburg Austria after 1700, but no corresponding increase in fiscal capacity in the Ottoman Empire, Poland-Lithuania, Russia or Sweden. Much of this increase in state capacity was associated with an intensification of interstate conflict. Karaman and Pamuk (2013) find that in states with representative institutions such as parliaments that this increase in fiscal capacity was most pronounced. In contrast, in absolutist states formal tax revenues were low. This was true of both the Ottoman Empire and Qing China. Due to a combination of economic growth and investment in state capacity and military technology, by the mid-19th century, a large gap in state power had opened up between western European states and the states of Asia.

Why did Asian states fail to keep-up with Western Europe? Fiscal centralization was a gradual process in Europe. State tax collection emerged out of private tax farming. Tax farmers organized in order to discipline and bind monarchs who had an incentive to expropriate tax collectors when in need of revenue (Johnson, 2006*b*; Johnson and Koyama, 2014*a*). Balla and Johnson (2009) discuss how the inability of tax farmers to organize in the Ottoman empire meant that they were unable to constrain the Ottoman state. To explain why tax rates were low in Qing China, Sng (2014) argues that a severe principal-agent problem meant tax collectors could embezzle revenues and extort taxpayers. In response, the ruler had to keep taxes low to minimize the threat of revolt. Ma and Rubin (2017) build a model that builds on this argument by highlighting the commitment problem autocrats face *vis-a-vis* their

own tax collectors. In times of crisis or war, autocratic rules cannot credibly commit not to expropriate tax collectors and administrators. One way to overcome this problem is to pay tax collectors very low formal salaries but also to turn a blind eye to the private exactions of tax collectors by not investing in monitoring technology. This results in an equilibrium where formal tax collected by the center are low and informal corruption is high. But it precludes investment in administrative capacity.

What accounts for the relative failure of Qing China to deal with new political threats after 1800? As Ma and Rubin (2017) discuss, whether states invested in fiscal capacity was a political decision. Koyama et al. (2018) study patterns of state development in East Asia after 1850. They examine why Japan embarked on political centralization following the intrusion of geopolitical threats from the Western powers after 1850, but why in China, political authority was decentralized and modernization efforts failed. They point to how geographical size constrained the options of political actors. In China, the conjunction of threats from both the north and the south necessitated decentralization and, as a consequence, the Chinese state lacked the capacity to ensure that modernization could be forced through successfully.

In summary, recent work in economic history has greatly improved our understanding of the political economy of preindustrial states. As a result of this body of research, which draws on the work of economists, political scientists, and historians, we have better explanations of the determinants and consequences of regime type. We also have new theories about the causes and consequences of political centralization and fragmentation. Our understanding of the relationship between religious and secular authority in the premodern period has also been greatly enhanced. The next section considers several important areas of research in political economy.

4 Case Studies

4.1 The Glorious Revolution

An important case study is England in the centuries leading up to the Industrial Revolution. The Glorious Revolution represents a widely studied critical juncture in English institutional history (North and Weingast, 1989; Pincus, 2009; Pincus and Robinson, 2014; Acemoglu and Robinson, 2012). It involved England in a global war against France and led to the establishment of the Bank of England in 1694. By making England a constitutional monarchy it laid the foundations of the party system and cabinet government (Stasavage, 2002, 2003; Cox, 2016).

The roots of this institutional transformation go further back in English history. One critical-juncture was the English Civil War (1642-1651). Building on a hypothesis advanced by Brenner (1993) on the role merchants played in the first English revolution, Jha (2015)

uses novel data on individual MPs to explore how emerging economic opportunities overseas helped the formation of a coalition in favor of constraining the crown. He finds that MPs with financial interests in overseas trade were more likely to support Parliament in the conflict with the crown. Shares aligned the interests of non-merchants, who otherwise would have lacked exposure to lucrative trading opportunities and hence expropriation risks overseas, with merchants. Ownership of shares in overseas trade shifted the views of non-merchants helping to consolidate support for reformers in Parliament.

Fiscal centralization also began before the Glorious Revolution. The previous ‘bureaucratic patchwork of authorities not subject to uniform surveillance or direction’ (Brewer, 1988, 91) and private tax farming began to change during the Civil War. Parliament raised new taxes, including the excise tax to fund a new professional army and navy (O’Brien, 2011). Taxes and expenditure fell in the 1660s, but the lessons about how to modernize England’s fiscal system were learned. Tax farming of the customs and then the excise was slowly dismantled and the Treasury was given oversight over revenues (Johnson and Koyama, 2014*a*).

The increase in taxes after 1688 was important, however. There was also increased reliance on indirect taxation—in particular the excise—collected by a professional bureaucracy. The customs, excise, and land tax accounted for 90% of revenue. From 1720 onwards, these revenues enabled the British state to secure its debt at low rates of interest—a transition key to the formation of a modern state.

Other aspects of British state administration remained dominated by patronage and cronyism. Cox (2017) draws attention to the importance of the civil list in the political economy of the Hanoverian state. After 1689, while Parliament controlled taxation and the military budget, civil positions remained controlled by the crown. This resulted in a commitment problem. Because MPs did not have control over the civil administration, they were reluctant to fund it, impeding the development of a civilian bureaucracy. Reform would only come in 1831 with the Civil List Act which established full Parliamentary control over the civilian budget and made it feasible for the British state to invest in a modern bureaucracy.

North and Weingast (1989) argued that the credibility of the English monarchy to repay its debts after 1688 translated into more secure property rights in general. While this claim has not survived subsequent scrutiny, in other respects, there was an improvement in institutional quality after 1688. It became easier to reorder property rights in order to exploit new investment opportunities. Parliament became a forum where land could be reallocated towards more productive uses (Bogart and Richardson, 2009, 2011). As a consequence, investment in road and river transport dramatically improved, with important consequences for subsequent economic growth (Bogart, 2011). Prior to the Glorious Revolution, estate bills often failed due to political conflict. As a consequence, investment in road and river transport dramatically improved, with important consequences for subsequent economic growth (Bogart, 2011). Dimitruk (2018) finds that political and constitutional changes after 1688 resolved or changed the nature of many of the conflicts in government. After the king became dependent on Parliament, sudden closures of Parliament were less likely.

The English/British case study is illuminating because it points to the importance of doing serious historical work rather than relying on proxies for institutional quality as in common in many areas of economics. For instance, according to standard measures, institutional quality was constant in England between 1689 and 1830. Maden and Murin (2017), for instance, claim that institutions did not drive British growth because they were unchanged in this period. But this is precisely the period that economic historians have found marked improvement in actual institutional performance.

Interest groups continued to push for rent-seeking legislation and to block potentially productive improvements. North et al. (2009) use the term, “open-access”, to describe modern, liberal, market economies in which entry is not controlled by political elites. One sign that 18th century England was not yet an open access economy is that political parties made a difference for investments in infrastructure. Bogart (2018) finds that periods of Whig dominance were associated with investments in productive infrastructure, particularly river projects.

Parliament did become less rent-seeking over time. Early 18th century Parliaments were notoriously venal, passing numerous acts that benefitted specific interests—most notably the Calico Act of 1721—at the expense of the larger public. Members of Parliament were expected to look out for their own material interests and to pursue what to modern eyes looks like corruption and venality (Root, 1991). Over the course of the 18th century, this changed. Mokyr and Nye (2007, 58) note that “[p]urely redistributive actions, however, began losing their appeal. Many special interest groups’ legislated privileges, monopolies, exclusions, limitations on labor mobility, occupational choice, and technological innovation found themselves on the defensive as the 18th century wore on.”

Consider the position taken by Edmund Burke as an MP for Bristol. Bristol was a port that benefited from mercantilist policies, notably protective tariffs on Irish goods. In 1778, however, Burke argued in favor of free trade with Ireland. This motion was successful but Burke was attacked by his constituents. He was unwilling to be bought off by his prosperous constituents and instead argued for the policies that he believed would benefit the country as a whole (see Prior, 1878).

This process of institutional change can be understood through Olson’s distinction between decentralized versus centralized rent-seeking. Britain moved from decentralized to centralized rent-seeking (Ekelund and Tollison, 1981). This was associated with a lot of competition over rents in Parliament but the elimination or streamlining of local rent-seeking. Over time, it became evident that the growth of the British economy as a whole was the surest way for elites to gain materially and to retain their status. The British landowning elite were not replaced; they came to benefit from the growth of a commercialized economy.

An important historical topic that has not yet received attention from cliometricians is the retrenchment of the fiscal-military state undertaken after 1815. While authors such as O’Brien (2011) and Vries (2015) make strong claims about the economic benefits of the mercantilist policies pursued by the British state, the period in which economic growth was strongest and

which saw substantive gains in real wages for ordinary workers was the period during which the fiscal-military state was being dismantled by Peel and Gladstone. Gladstone's success in reducing the fiscal burden of the state was remarkable. But this period of British history has yet to receive as much attention from economic historians as that before 1815.

4.2 The Political Economy of Empire

Concern with the economic costs of empire extends back to Adam Smith, a sharp critic of British imperialism. An extensive scholarship studies the costs and benefits of colonial empire. But a drawback of the historical literature is the extent to which it is influenced by the Hobson–Leninist theory of imperialism. Historians influenced by either Marxism or World Systems Theory place tremendous explanatory weight on imperialism to explain sustained economic growth in Europe and North America.

This work was largely based on impressionist evidence, however. No doubt Atlantic and colonial trade stimulated urbanization and economic growth, particularly in cities like Bristol, Liverpool, Bordeaux, and Glasgow. But these accounts are apt to neglect the importance of domestic over international commerce. As a proportion of GDP, trade with the imperial periphery was small (O'Brien, 1982). Moreover, it is difficult to dispute that the development of overseas empire, first in Asia, and then Brazil did not prompt industrialization in Portugal. Spain appears to have been “cursed” by the abundance of silver, obtained during its imperial heyday (Drelichman, 2005).⁹

Nevertheless, in the case of Britain, O'Brien and Escosura (1998) argue that the “mercantile and mercantilist matrix dominated by colonialization and commerce with continents beyond Europe” was important though not necessarily crucial for Britain long-run economic success. As the argument cannot rely on the share of trade in GDP which O'Brien himself established was small, it relies on the importance of overseas markets as a source of demand for British products and on increasing returns associated with the Atlantic trading nexus. Allen (2009), for instance, pointed out a role for colonization in boosting British wages, especially in trading entrepôts like London. Findlay and O'Rourke (2007) make the case that colonial trade played a critical role in the British Industrial Revolution. But, without a model or explicit theory, it is all but impossible to quantify these external benefits or linkages indicating that this is a topic that needs further research.

The impact of colonial institutions on colonized countries, in contrast, was of critical importance. This was because it only changed the economy of colonized countries, but their political economy, as well. Building on Sokoloff and Engerman (2000) and Acemoglu et al. (2001), a large literature has shown that extractive colonial institutions can help explain the

⁹Note, that the most recent research on the Spanish economy, for instance, points to domestic factors such as the absence of integrated markets, or a standardized fiscal system (Grafe, 2012; Álvarez Nogal and de la Escosura, 2013). Many of the bolder claims made on the behalf of the importance of empire to the origins of growth in Europe are ably dismissed by McCloskey (2010).

persistence of poverty in developing countries today. Acemoglu et al. (2001, 2002) argued that the colonial period saw a reversal in economic fortunes. The most developed parts of the Americas and Africa attracted the attentions of European colonial powers and, as a result, were among the least developed parts of the world by 1900.

In a seminal contribution, Nunn (2008) showed that the Trans-Atlantic slave trade left a lasting negative impact on economic development in Africa. The slave trade also lowered population density, impeded the formation of states, and left a legacy of mistrust (Nunn and Wantchekon, 2011). Other recent research has found long-lasting negative effects of the colonial rubber industry in the Congo (Lowe and Montero, 2018). There was some investment in colonial empires, particularly in the form of railroads (see Jedwab and Moradi, 2016). But in general the burden of empire was borne by the colonized (see Huillery, 2014).

The impact of colonial rule on African society should not lead one to believe that Africa was a *tabula rasa* prior to the arrival of the Europeans. Gennaioli and Rainer (2007) and Michalopoulos and Papaioannou (2013, 2016) point to the importance of pre-colonial African states. Michalopoulos and Papaioannou (2013) find that the complexity of pre-colonial institutions is associated with economic development as measured by light density. This confirms the hypothesis of political scientists that a history of statehood is important in explaining outcomes today.¹⁰

Colonial India has also been subjected to cliometric scrutiny. Banerjee and Iyer (2005) find that under British ruler landlords were given proprietary rights in land were unequal in the post-colonial period, spent less on development and public goods, and have experienced less of a decline in poverty. Iyer (2010) exploits a British colonial policy, whereby the territories of rulers of native states who died without a natural heir, were absorbed into the British empire in order to generate exogenous variation in whether an Indian state received direct or indirect colonial rule. She finds that direct British rule was associated with less public goods provision in the post-colonial period: low availability of schools, health centers and roads. This translates into higher levels of poverty and infant mortality. At the same time, British railroad investments played a crucial role in decreasing trade costs and raising incomes in colonial India (Donaldson, 2018) and reduced the incidence of famine (Burgess and Donaldson, 2017).

In India, the impact of colonial ruler interacted with preexisting state structures and distributions of political and social power. Chaudhary (2009) finds that primary education in British India was particularly low in areas that were religiously diverse and which had greater caste differences. Chaudhary and Rubin (2016) find that literacy was lower in Muslim states than Hindu states. They interpret this finding in the context of a model in which rulers have a greater incentive to provide public goods where a higher proportion of the population are co-religionists.

¹⁰This leads one to ask what determines patterns of pre-colonial state development in Africa? According to Fenske (2014), pre-colonial African states emerged in more ecologically diverse environments where the returns to trade were greater.

Besides this discussion of imperialism, the state, and economic growth, other aspects of the political economy of European and American empires have also come under cliometric scrutiny. Mitchener and Weidenmier (2005) provide evidence that the implicit American empire in Latin America, associated with Theodore Roosevelt's Corollary to the Monroe Doctrine in 1904, brought economic benefits, as reflected in the price of Latin American sovereign bonds. Roosevelt made the US's threat to intervene in South America credible. US hegemony, they suggest, provided the public goods of peace and security in the region. Ferguson and Schularick (2006) similarly find evidence for a positive empire effect which enabled countries on the poor periphery to benefit from cheaper capital. The mechanisms behind the empire effect were institutional: a common legal framework protected investor rights (Ferguson and Schularick, 2006, 284). Formal and informal empire reduced default risk.

Looking at the period between 1870 and 1914, Mitchener and Weidenmier (2008) find that belonging to an empire doubled trade relative to countries that were not empires or colonies. Important channels for this effect include trade policy and transaction costs. Empires were trading blocks, within which there was often a fixed exchange, and free trade with the metropole.¹¹ Another approach is Aceminotti et al. (2010). Looking within the British Empire, they note that whereas the white dominions were able to benefit from the lower borrowing costs associated with empire, the crown colonies were not able to do so as their fiscal policy was determined in London. Crown dependencies had very small levels of government debt, and hence did not benefit from the empire, as the white dominions were able to.

4.3 The Consequences of the French Revolution

While the French Revolution is the subject of a vast historical literature, it has not been intensively studied by economic historians. Until recently, research focused on the importance of government debt in prompting the crisis of 1789, the inflation that followed the Revolution, and the role that the Revolution played in the 19th century economic divergence that took place between Britain and France.

Recent scholarship explores the political economy consequences of the Revolution. Acemoglu et al. (2011) discuss how the invading French armies dismantled the institutions of the Old Regime that had prevailed for centuries, abolishing serfdom and guilds, emancipating Jews, and replacing existing elites. They find that cities in territories that happened to be invaded by the French then grew more rapidly in the following century.

What about the economic consequences of the Revolution in France itself? Rosenthal (1992) argued that old regime property rights impeded investment in irrigation and that the Revolution permitted the reallocation of these rights. The French Revolution was also characterized

¹¹These articles have come under criticism for taking into account the full cost of empire (see Coyne and Davies, 2007).

by the massive redistribution of Church property. Finley et al. (2017) exploit the extensive spatial variation in confiscations of Church property to investigate the importance of the initial allocation of property rights for the success of institutional reform. Church property was confiscated and redistributed by auction. Combining disaggregated data on revolutionary confiscations of Church lands with data from agricultural surveys between 1841 and 1929, Finley et al. (2017) find that in regions where more church land was auctioned off, land inequality was higher in the 19th century. This wealth imbalance was associated with higher levels of agricultural productivity and agricultural investments by the mid-19th century. The effects of revolutionary land redistribution on agricultural productivity declined over the 19th century as other areas gradually overcame the transaction costs associated with reallocating feudal property rights.

4.4 Political Repression

Another side of the state that is worth of consideration is political repression. Premodern states frequently purged political enemies and scapegoated religious or ethnic minorities—the most frequent victims of this in European history were Jews (Anderson et al., 2017). But in general, they lacked the capacity to conduct political repression on a large-scale and for prolonged periods. Society-wide repression and violence occurred, but it was highly destabilizing. Johnson and Koyama (2019) discuss how the extremely costly disruptions associated with the Reformation led European states to reduce their reliance on religion as a source of political legitimacy.

One important premodern example of sustained political repression was the Spanish Inquisition. Rather than being subject to the Pope, the Spanish inquisition was a tool of the Spanish monarchy. Vidal-Robert (2013) argues that the Inquisition was used to suppress domestic opposition when the crown was committed to overseas war. Using data from Catalonia, Vidal-Robert (2014) finds that inquisitorial trials reduced population growth during the early modern period. Even today Vidal-Roberts finds people living in areas with historically more intense levels of inquisitorial activity are more likely to think that new technologies will harm them.

Qing China conducted a fierce suppression of “word crimes” through so-called literary inquisition. Xue and Koyama (2017) study the long-lasting consequences of this political repression. The persecution of intellectuals for their speech and writing led to a fall in social capital—as measured by the formation of local charities—in the decades following a persecution. Over the longer run, areas affected by the literary inquisitions display lower levels of trust, greater political apathy, and worse provision of basic education during episodes of decentralization.

The most widely studied modern episodes of political repression are Nazi Germany and the Soviet Union (Gregory et al., 2011; Harrison, 2013). Nazi Germany provide an important setting for investigating the consequences of political repression. More than 1000 academics

lost their jobs between 1933 and 1934 because they were of non-Aryan descent (Waldinger, 2012). Many were at the pinnacle of their relative fields and would go on to win Noble prizes. The emigration of prominent scientists had both a negative direct effect on scientific output and a negative indirect effect via collaborations and partnerships, worse outcomes for PhD students and other peer effects.

4.5 Revolution, Democracy, Public Goods

Prior to the modern era, states provided few services beyond defense and law and order. The rise of states that provide a broad range of public goods and insurance services is a phenomenon of the last two centuries.

Lindert (2004) documents the gradual rise of public provision from the late eighteenth century onwards. Large-scale investment in public education began in Prussia. The French state created a system of secular and compulsory education after 1870. In Britain, investments in public education only took place after 1870 and were slower than elsewhere in Europe. In America, investments in schooling were more decentralized but by the early twentieth century the high school movement was giving ordinary Americans access to the best broad-based system of education in the world (Katz and Goldin, 2008). Social insurance and pensions were likewise introduced in Prussia first before spreading to other developed countries. In the UK, the foundations of the welfare state were laid by Liberal government before World War 1. In the United States the size and activism of the Federal Government remained contained until the Great Depression, but state governments played an important role in providing public goods at the local level.

These investments were driven by political considerations. One influential way to think about these developments is through the threat of revolution. In Acemoglu and Robinson (2000, 2006) the masses threaten revolution to obtain redistribution. If this threat is permanent, elites have an incentive to extend the franchise to make credible their promise to redistribute in the future. Aidt and Franck (2015) find that mobilization, in the form of the Swing riots, increased the vote share of pro-reform politicians in Parliament before the Great Reform Act.¹²

The revolutionary threat hypothesis is not the only explanation for the transition to democracy. Political scientists have focused on inter-elite bargains and the role played by Conservative political parties (Dasgupta and Ziblatt, 2015; Ziblatt, 2017). Galor and Moav (2006)

¹²Dower et al. (2018) address the relationship between the threat of revolution and the emergence of representative institutions using data from Russia during the Great Reforms that abolished serfdom. They find that peasants received less representation in local assemblies (*zemstvo*) in districts that experienced more frequent peasant unrest in the years preceding 1864. This result is consistent with Acemoglu and Robinson (2000) who predict that political reforms are most likely to be offered when the poor posed only a temporary threat to the establish order. When the poor pose a permanent threat, however, democratization is no longer the sole way the elite can credibly commit to future redistribution.

discuss how the growing importance of human capital in the economy undermined the incentives of worker's to overthrow the capitalist system. Galor et al. (2009) argue that while landowning elites had an incentive to oppose the granting of compulsory education, industrialists could actually benefit from this, as the basic skills learnt at schools were complements to industrial production. This helps explain why a political base in favor of compulsory education emerged in the late 19th century.

Not all societies experienced a smooth transition to democracy in the 19th and 20th centuries. Carvalho and Dippel (2018) study transitions in power from white planters to colored merchants in the Caribbean. Even though colored merchants were more politically accountable to the citizenry, political outcomes did not improve as much as one might expect. They identify three mechanisms by which an 'iron law of oligarchy' persists even in an electoral setting. The legacy of oligarchy, ethnic fractionalization, and weak institutions play an important role in accounting for the relative underdevelopment of many countries in sub-Saharan Africa and the Middle East today as discussed in Section 4.2.

The rise of democracy did not necessarily have a monotonic effect on public good provision, however. Chapman (2016) argues that the expansion of the franchise in Britain was initially associated with increased public goods spending. However, as voting rights were granted to poorer citizens, spending on public goods and infrastructure actually decreased.

The United States established democratic institutions before any major western European nation but lagged behind in terms of government investment in public goods. Troesken (2015) discusses the trade-offs faced by authorities in the US in deciding whether to invest in public health improvements. The decentralized federalist structure of the United States allowed individual states to adopt different public health policies. This facilitated jurisdictional sorting and allowed states to respond to local epidemics. But it was not suitable for coordinating responses to diseases that cross state boundaries. Using the example of small pox, Troesken shows that federalism impeded the introduction of measures such as vaccination against small pox that were crucial for lowering mortality rates. He argues that this same federalist structure ensured greater protection for individual liberty and spurred economic growth, but it came at a cost in terms of public health.

5 Concluding Comments

Cliometrics is based on the application of economic methods to historical questions. Economic theory can clarify questions and crystalize them in the form of testable predictions that can be taken to the historical evidence. As this evidence is often quantitative, cliometric economic historians have been at the forefront of introducing more formal econometric and statistical methods to the study of history.

Political economy also involves the application of economic models to non-standard settings. In its modern form, it also stresses the importance of using economic theory to guide the

empirical analysis of political questions. Its practitioners likewise need to have command over both economic theory and econometric techniques and knowledge of institutional details and particularities. Cliometrics and modern political economy can thus be viewed as two closely related and complementary fields within economics and the social sciences.

Political economy questions intrude on almost all aspects of economic history. This chapter has surveyed some prominent topics in the literature from the emergence of the state, the rise of state capacity, the political economy of empire, and the consequences of revolution. In addition to those topics discussed in this chapter, many other subjects could have been touched upon. Studies of the development of banking institutions in the 19th century US, for instance, increasingly consider questions of political economy. To what extent did local elites dominate and control banking institutions, and to what extent were these institutions characterized by limited versus open access (Bodenhorn, 2017)? The topic of trade and tariffs also raises questions of power and the extent to which particular interests are represented politically (Irwin, 2017). This chapter has surveyed some prominent topics in the literature from the emergence of the state, the rise of state capacity, the political economy of empire, and the consequences of revolution. Political economy questions intrude on almost all aspects of economic history, leaving much fertile ground for future research.

References

- Accominotti, Olivier, Marc Flandreau, Riad Rezzik and Frédéric Zumer (2010), ‘Black man’s burden, white man’s welfare: control, devolution and development in the British empire, 1880–1914’, *European Review of Economic History* **14**(1), 47–70.
- Acemoglu, Daron (2003), ‘Why not a political Coase Theorem? Social conflict, commitment and politics’, *Journal of Comparative Economics* **31**(4), 620–652.
- Acemoglu, Daron (2006), ‘A simple model of inefficient institutions’, *Scandinavian Journal of Economics* **108**, 515–546.
- Acemoglu, Daron (2008), ‘Oligarchic versus democratic societies’, *Journal of the European Economic Association* **6**(1), 1–44.
- Acemoglu, Daron, Davide Cantoni, Simon Johnson and James A. Robinson (2011), ‘The Consequences of Radical Reform: The French Revolution’, *American Economic Review* **101**(7), 3286–3307.
- Acemoglu, Daron and James A. Robinson (2000), ‘Why Did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective’, *The Quarterly Journal of Economics* **115**(4), 1167–1199.
- Acemoglu, Daron and James A. Robinson (2006), *The Economic Origins of Dictatorship and Democracy*, Cambridge University Press, Cambridge.
- Acemoglu, Daron and James A. Robinson (2012), *Why Nations Fail*, Crown Business, New York.
- Acemoglu, Daron, Simon Johnson and James A. Robinson (2001), ‘The colonial origins of comparative development: An empirical investigation’, *The American Economic Review* **91**(5), 1369–1401.
- Acemoglu, Daron, Simon Johnson and James A. Robinson (2002), ‘Reversal of Fortune: Geography

- and Institutions in the Making of the Modern World Income Distribution’, *The Quarterly Journal of Economics* **117**(4), 1231–1294.
- Acemoglu, Daron, Simon Johnson and James A. Robinson (2005*a*), Institutions as a fundamental cause of long-run growth, in P. Aghion and S. Durlauf, eds, ‘Handbook of Economic Growth’, Vol. 1 of *Handbook of Economic Growth*, Elsevier, chapter 6, pp. 385–472.
- Acemoglu, Daron, Simon Johnson and James Robinson (2005*b*), ‘The rise of Europe: Atlantic trade, institutional change, and economic growth’, *American Economic Review* **95**(3), 546–579.
- Acharya, Avidit and Alexander Lee (2018), ‘Economic foundations of the territorial state system’, *American Journal of Political Science* **62**(4), 954–966.
- Aidt, Toke S. and Raphaël Franck (2015), ‘Democratization Under the Threat of Revolution: Evidence From the Great Reform Act of 1832’, *Econometrica* **83**, 505–547.
- Alesina, Alberto and Enrico Spolaore (1997), ‘On the number and size of nations’, *The Quarterly Journal of Economics* **112**(4), 1027–56.
- Allen, Douglas W. (2011), *The Institutional Revolution*, Chicago University Press, Chicago.
- Allen, Robert C (1997), ‘Agriculture and the origins of the state in Ancient Egypt’, *Explorations in Economic History* **34**(2), 135 – 154.
- Allen, Robert C. (2009), *The British Industrial Revolution in a Global Perspective*, Oxford University Press, Oxford.
- Álvarez Nogal, Carlos and Leandro Prado de la Escosura (2013), ‘The rise and fall of Spain (1270–1850)’, *The Economic History Review* **66**(1), 1–37.
- Anderson, R. Warren, Noel D. Johnson and Mark Koyama (2017), ‘Jewish persecutions and weather shocks 1100–1800’, *Economic Journal* **127**(602), 924–958.
- Ashraf, Quamrul H., Francesco Cinnirella, Oded Galor, Boris Gershman and Erik Hornung (2017), Capital-Skill Complementarity and the Emergence of Labor Emancipation, Department of Economics Working Papers 2017-03, Department of Economics, Williams College.
- Baechler, Jean (1975), *The Origins of Capitalism*, Basil Blackwell, Oxford.
- Balla, Eliana and Noel D. Johnson (2009), ‘Fiscal crisis and institutional change in the Ottoman Empire and France’, *The Journal of Economic History* **69**(03), 809–845.
- Banerjee, Abhijit and Lakshmi Iyer (2005), ‘History, institutions, and economic performance: The legacy of colonial land tenure systems in India’, *American Economic Review* **95**(4), 1190–1213.
- Bates, Robert H., Avner Greif, Margaret Levi, Jean-Laurent Rosenthal and Barry R. Weingast, eds (1998), *Analytic Narratives*, Princeton University Press, Princeton, New Jersey.
- Bates, Robert H. and Da-Hsiang Donald Lien (1985), ‘A Note on Taxation, Development, and Representative Government’, *Politics Society* **14**(1), 53–70.
- Becker, Sascha O., Steven Pfaff and Jared Rubin (2016), ‘Causes and consequences of the Protestant Reformation’, *Explorations in Economic History* **62**, 1–25.
- Bentzen, Jeanet Sinding, Nicolai Kaarsen and Asger Moll Wingender (2017), ‘Irrigation and autocracy’, *Journal of the European Economic Association* **15**(1), 1–53.
- Besley, Timothy and Torsten Persson (2011), *Pillars of Prosperity*, Princeton University Press, Princeton, New Jersey.
- Bin Wong, R (1997), *China Transformed : Historical Change and the Limits of European Experience*, Cornell University Press, Ithaca, NY.
- Blaydes, Lisa (2017), ‘State building in the Middle East’, *Annual Review of Political Science* **20**(487–504).
- Blaydes, Lisa and Eric Chaney (2013), ‘The feudal revolution and Europe’s rise: Political diver-

- gence of the Christian and Muslim worlds before 1500 CE', *American Political Science Review* **107**(1), 16–34.
- Bodenhorn, Harold (2017), Opening access: banks and politics in New York from the Revolution to the Civil War. unpublished manuscript.
- Bogart, Dan (2011), 'Did the Glorious Revolution contribute to the transport revolution? evidence from investment in roads and rivers', *The Economic History Review* **64**(4), 1073–1112.
- Bogart, Dan (2018), 'Party connections, interest groups and the slow diffusion of infrastructure: Evidence from Britain's first transport revolution', *The Economic Journal* **128**(609), 541–575.
- Bogart, Dan and Gary Richardson (2009), 'Making property productive: reorganizing rights to real and equitable estates in Britain, 1660–1830', *European Review of Economic History* **13**(01), 3–30.
- Bogart, Daniel and Gary Richardson (2011), 'Property rights and parliament in industrializing Britain', *Journal of Law & Economics* **54**(2), 241 – 274.
- Boucoyannis, Deborah (2015), 'No taxation of elites, no representation: State capacity and the origins of representation', *Politics and Society* **4**(3), 303–332.
- Brennan, Geoffrey and James M. Buchanan (1980), *The Power to Tax*, Liberty Fund, Indianapolis, Indiana.
- Brenner, Robert (1976), 'Agrarian class structure and economic development in pre-industrial Europe', *Past and Present* **70**(1), 30–75.
- Brenner, Robert (1993), *Merchants and Revolution*, Princeton University Press, Princeton, New Jersey.
- Brewer, John (1988), *The Sinews of Power*, Harvard University Press, Cambridge, M.A.
- Buchanan, James M. and Gordon Tullock (1962), *The Calculus of Consent*, University of Michigan Press, Michigan.
- Burgess, Robin and David Donaldson (2017), Railroads and the demise of famine in colonial India. Working paper.
- Cafarro, William (2008), 'Warfare and economy in Renaissance Italy, 1350–1450', *Journal of Interdisciplinary History* **39**(2), 167–2009.
- Cantoni, Davide, Jeremiah Dittmar and Noam Yuchtman (2018), 'Religious competition and reallocation: The political economy of secularization in the Protestant reformation', *The Quarterly Journal of Economics* **133**(4), 2037–2096.
- Carneiro, Robert L. (1970), 'A theory of the origin of the state', *Science* **169**(3947), 733–738.
- Carvalho, Jean-Paul and Christian Dippel (2018), Elite identity and political accountability: A tale of ten islands. unpublished manuscript.
- Centeno, Miguel Angel (1997), 'Blood and Debt: War and Taxation in Nineteenth-Century Latin America', *American Journal of Sociology* **102**(6), 1565–1605.
- Chaney, Eric (2013), 'Revolt on the Nile: Economic shocks, religion and political power', *Econometrica* **81**(5), 2033–2053.
- Chapman, Jonathan (2016), Extension of the franchise and government expenditure on public goods: evidence from nineteenth century England. Mimeo.
- Chaudhary, Latika (2009), 'Determinants of primary schooling in British India', *The Journal of Economic History* **69**(1), 269–302.
- Chaudhary, Latika and Jared Rubin (2016), 'Religious identity and the provision of public goods: Evidence from the Indian princely states', *Journal of Comparative Economics* **44**(3), 461 – 483.
- Chilosi, David (2014), 'Risky Institutions: Political Regimes and the Cost of Public Borrowing in Early Modern Italy', *The Journal of Economic History* **74**(03), 887–915.

- Cipolla, Carol M. (1976), *Before the Industrial Revolution*, Methuen and Co LTD, London.
- Congleton, Roger (2010), *Perfecting Parliament: Constitutional Reform, Liberalism, and the Rise of Western Democracy*, Cambridge University Press, Cambridge.
- Coşgel, Metin M. and Thomas J. Miceli (2009), ‘State and religion’, *Journal of Comparative Economics* **37**(3), 402–416.
- Coşgel, Metin M., Thomas J. Miceli and Jared Rubin (2012), ‘The political economy of mass printing: Legitimacy and technological change in the Ottoman empire’, *Journal of Comparative Economics* **40**(3), 357–371.
- Coşgel, Metin, Matthew Histen, Thomas J. Miceli and Sadullah Yildirim (2018), ‘State and religion over time’, *Journal of Comparative Economics* **46**(1), 20 – 34.
- Cox, Gary (2017), The developmental traps left by the Glorious Revolution. Mimeo.
- Cox, Gary W. (2016), *Marketing Sovereign Promises: Monopoly Brokerage and the Growth of the English State*, Cambridge University Press, Cambridge.
- Cox, Gary W. (2017), ‘Political institutions, economic liberty, and the great divergence’, *The Journal of Economic History* **77**(3), 724–755.
- Coyne, Christopher and Steve Davies (2007), ‘Empire: Public goods and bads’, *Econ Journal Watch* **4**(1), 3–45.
- Crettez, Betrad, Bruno Deffains and Olivier Musy (2018), ‘Legal centralization: A Tocquevillian view’, *Journal of Legal Studies* **Forthcoming**.
- Dasgupta, Aditya and Daniel Ziblatt (2015), ‘How did Britain democratize? views from the sovereign bond market’, *The Journal of Economic History* **75**(1), 1–29.
- De Long, J. Bradford and Andrei Shleifer (1993), ‘Princes and merchants: European city growth before the industrial revolution’, *Journal of Law & Economics* **36**(2), 671–702.
- Dell, Melissa (2010), ‘The persistent effects of Peru’s mining mita’, *Econometrica, Econometric Society* **78**(6), 1863–1903.
- Diamond, Jared (1997), *Guns, Germs, and Steel*, W.W. Norton & Company, New York.
- Diebolt, Claude and Michael Hauptert (2018), ‘A cliometric counterfactual: What if there had been neither Fogel nor North?’, *Cliometrica* **12**(3), 407–34.
- Dimitruk, Kara (2018), “‘I intend therefore to prorogue’”: the effects of political conflict and the Glorious Revolution in parliament, 1660–1702’, *European Review of Economic History* **22**(3), 407–34.
- Dincecco, Mark (2009), ‘Fiscal centralization, limited government, and public revenues in Europe, 1650-1913’, *Journal of Economic History* **69**(1), 48–103.
- Dincecco, Mark and Massimiliano Gaetano Onorato (2017a), *From Warfare to Welfare*, Cambridge University Press, Cambridge.
- Dincecco, Mark and Massimiliano Gaetano Onorato (2017b), ‘Military conflict and the rise of urban Europe’, *Journal of Economic Growth* .
- Dincecco, Mark and Mauricio Prado (2012), ‘Warfare, fiscal capacity, and performance’, *Journal of Economic Growth* **17**(3), 171–203.
- Dippel, Christian (2014), ‘Forced coexistence and economic development: evidence from native American reservations’, *Econometrica* **82**(6), 2131–2165.
- Domar, Evsey D. (1970), ‘The causes of slavery or serfdom: A hypothesis’, *The Journal of Economic History* **30**(1), 18–32.
- Donaldson, Dave (2018), ‘Railroads of the Raj: Estimating the impact of transportation infrastructure’, *American Economic Review* **108**(4-5), 899–934.
- Dower, Paul Castaneda, Evgeny Finkel, Scott Gehlbach and Steven Nafziger (2018), ‘Collective

- action and representation in autocracies: Evidence from Russia's Great Reforms', *American Political Science Review* **112**(1), 125–147.
- Drelichman, Mauricio (2005), 'All that glitters: Precious metals, rent seeking and the decline of Spain', *European Review of Economic History* **9**(03), 313–336.
- Ekelund, Robert B. and Robert D. Tollison (1981), *Mercantilism as a Rent-Seeking Society*, Texas A & M University Press, College Station, Texas.
- Elis, Roy, Stephen Haber and Jordan Horrillo (2018), The ecological origins of economic and political systems. Manuscript.
- Engerman, Stanley L. and Kenneth L. Sokoloff (1994), Factor endowments: Institutions, and differential paths of growth among New World economies: A view from economic historians of the United States, Working Paper 66, National Bureau of Economic Research.
- Epstein, S. R. (2000), *Freedom and Growth, the rise of states and markets in Europe, 1300–1700*, Routledge, London.
- Fenske, James (2014), 'Ecology, Trade, And States In Pre-Colonial Africa', *Journal of the European Economic Association* **12**(3), 612–640.
- Ferguson, Niall and Moritz Schularick (2006), 'The empire effect: The determinants of country risk in the first age of globalization, 1880–1913', *The Journal of Economic History* **66**(2), 283–312.
- Findlay, Ronald and Kevin H. O'Rourke (2007), *Power and Plenty*, Princeton University Press, Princeton, New Jersey.
- Finley, Theresa, Raphaël Franck and Noel D. Johnson (2017), The effects of land redistribution: Evidence from the French Revolution. Working paper.
- Fleck, Robert K and F Andrew Hanssen (2006), 'The origins of democracy: A model with application to ancient Greece', *Journal of Law & Economics* **49**(1), 115–46.
- Fleck, Robert K. and F. Andrew Hanssen (2013), 'How Tyranny Paved the Way to Democracy: The Democratic Transition in Ancient Greece', *Journal of Law and Economics* **56**(2), 389–416.
- Galor, Oded and Omer Moav (2006), 'Das Human-Kapital: A Theory of the Demise of the Class Structure', *Review of Economic Studies* **73**(1), 85–117.
- Galor, Oded, Omer Moav and Dietrich Vollrath (2009), 'Inequality in Landownership, the Emergence of Human-Capital Promoting Institutions, and the Great Divergence', *Review of Economic Studies* **76**(1), 143–179.
- Gennaioli, Nicola and Hans-Joachim Voth (2015), 'State capacity and military conflict', *Review of Economic Studies* . Forthcoming.
- Gennaioli, Nicola and Ilia Rainer (2007), 'The modern impact of precolonial centralization in Africa', *Journal of Economic Growth* **12**(3), 185–234.
- Grafe, R. (2012), *Distant Tyranny: Markets, Power, and Backwardness in Spain, 1650-1800*, Princeton Economic History of the Western World, Princeton University Press.
- Gregory, Paul R., Philipp J.H. Schröder and Konstantin Sonin (2011), 'Rational dictators and the killing of innocents: Data from Stalin's archives', *Journal of Comparative Economics* **39**(1), 34–42.
- Greif, Avner (1998), *Self-Enforcing Political Systems and Economic Growth: Late Medieval Genoa*, Princeton University Press, Princeton, New Jersey, chapter 1, pp. 23–64.
- Greif, Avner (2006), *Institutions and the Path to the Modern Economy*, Cambridge University Press, Cambridge, U.K.
- Greif, Avner and Jared Rubin (2015), Endogenous political legitimacy: The English Reformation and the institutional foundations of limited government. Memo.

- Greif, Avner, Paul Milgrom and Barry R Weingast (1994), ‘Coordination, commitment, and enforcement: The case of the merchant guild’, *Journal of Political Economy* **102**(4), 745–76.
- Haber, Stephen, Armando Razo and Noel Maurer (2003), *The Politics of Property Rights*, Cambridge University Press, Cambridge.
- Haber, Stephen, ed. (1997), *How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800–1914*, Stanford University Press, Palo Alto, CA.
- Hall, John A. (1985), *Power and Liberties*, Penguin Books, London.
- Harrison, Mark (2013), ‘Accounting for Secrets’, *The Journal of Economic History* **73**(04), 1017–1049.
- Herbst, Jeffrey (2000), *States and Power in Africa: Comparative Lessons in Authority and Control*, Princeton University Press, Princeton, N.J.
- Hicks, John (1969), *A Theory of Economic History*, Oxford University Press, Oxford, UK.
- Hintze, Otto (1906, 1975), Military organization and the organization of the state, in F.Gilbert, ed., ‘The historical essays of Otto Hintze’, Oxford University Press, Oxford, pp. 178–215.
- Hoffman, Philip T. (2011), ‘Prices, the military revolution, and western Europe’s comparative advantage in violence’, *Economic History Review* **64**(1), 39–59.
- Hoffman, Philip T. (2015), ‘What do states do? politics and economic history’, *The Journal of Economic History* **75**, 303–332.
- Huillery, Elise (2014), ‘The Black Man’s Burden: The Cost of Colonization of French West Africa’, *The Journal of Economic History* **74**(01), 1–38.
- Huning, Thilo R. and Fabian Wahl (2016), You reap what you know: Observability of soil quality, and political fragmentation. BEHL Working Paper WP2015-05.
- Irwin, Douglas A. (2017), *Clashing over Commerce: A History of US Trade Policy*, University of Chicago Press, Chicago.
- Iyer, Lakshmi (2010), ‘Direct versus indirect colonial rule in India: Long-term consequences’, *The Review of Economics and Statistics* **92**(4), 693–713.
- Jedwab, Remi and Alexander Moradi (2016), ‘The Permanent Effects of Transportation Revolutions in Poor Countries: Evidence from Africa’, *The Review of Economics and Statistics* **98**(2), 268–284.
- Jha, Saumitra (2015), ‘Financial asset holdings and political attitudes: Evidence from revolutionary england’, *Quarterly Journal of Economics* **130**(3), 1485–1545.
- Johnson, Noel D. (2006b), ‘The cost of credibility: The company of general farms and fiscal stagnation in eighteenth century France’, *Essays in Economic and Business History* **24**.
- Johnson, Noel D. and Mark Koyama (2014a), ‘Tax farming and the origins of state capacity in England and France’, *Explorations in Economic History* **51**(1), 1–20.
- Johnson, Noel D. and Mark Koyama (2014b), ‘Taxes, lawyers, and the decline of witch trials in France’, *Journal of Law and Economics* **57**.
- Johnson, Noel D. and Mark Koyama (2017), ‘States and economic growth: Capacity and constraints’, *Explorations in Economic History* **64**(2), 1–2.
- Johnson, Noel D. and Mark Koyama (2019), *Persecution & Toleration: The Long Road to Religious Freedom*, Cambridge University Press, Cambridge.
- Jones, Eric L. (1981, 2003), *The European Miracle*, 3rd edition edn, Cambridge University Press, Cambridge.
- Karaman, Kivanc and Şevket Pamuk (2013), ‘Different paths to the modern state in Europe: The interaction between warfare, economic structure and political regime’, *American Political Science*

- Review* **107**(3), 603–626.
- Karayalcin, Cem (2008), ‘Divided we stand united we fall: The Hume-North-Jones mechanism for the rise of Europe’, *International Economic Review* **49**, 973–997.
- Katz, Laurence F. and Claudia Goldin (2008), *The Race Between Education and Technology*, Harvard University Press, Cambridge, M.A.
- Klein, Alexander and Sheilagh Ogilvie (2016), ‘Occupational structure in the Czech lands under the second serfdom’, *The Economic History Review* **69**(2), 493–521.
- Ko, Chiu Yu, Mark Koyama and Tuan-Hwee Sng (2018), ‘Unified China and Divided Europe’, *International Economic Review* **59**(1), 285–327.
- Koyama, Mark (2016), ‘The long transition from a natural state to a liberal economic order’, *International Review of Law and Economics*. Forthcoming.
- Koyama, Mark, Chiaki Moriguchi and Tuan-Hwee Sng (2018), ‘Geopolitics and Asia’s Little Divergence: State Building in China and Japan After 1850’, *Journal of Economic Behavior & Organization* **155**, 178–204.
- Kuran, Timur (2010), *The Long Divergence*, Princeton University Press, Princeton, New Jersey.
- Kyriazis, Nicholas C. and Michel S. Zouboulakis (2004), ‘Democracy, sea power and institutional change: An economic analysis of the Athenian naval law’, *European Journal of Law and Economics* **17**(1), 117–132.
- Lane, Frederic C. (1958), ‘Economic consequences of organized violence’, *The Journal of Economic History* **18**(4), 401–417.
- Leeson, Peter T. (2017), *WTF*, Stanford University Press, Stanford, CA.
- Leon, Gabriel (2019), ‘Feudalism, collaboration and path dependence in England’s political development’, *British Journal of Political Science* **Forthcoming**, 1–23.
- Levi, Margaret (1988), *Of Rule and Revenue*, University of California Press, London.
- Lindert, Peter H. (2004), *Growing public: social spending and economic growth since the eighteenth century*, Cambridge University Press, Cambridge.
- Lowes, Sara and Eduardo Montero (2018), Blood rubber. unpublished manuscript.
- Ma, Debin and Jared Rubin (2017), The paradox of power: Understanding fiscal capacity in imperial China and absolutist regimes. Mimeo.
- Maden, Jakob B. and Fabrice Murin (2017), ‘British economic growth since 1270: the role of education’, *Journal of Economic Growth* **22**, 229–272.
- Mayshar, Joram, Omer Moav and Zvika Neeman (2017), ‘Geography, transparency and institutions’, *American Political Science Review* **111**(3), 622–636.
- McCloskey, Deirdre N. (2010), *Bourgeois Dignity: Why Economics Can’t Explain the Modern World*, University of Chicago Press, Chicago.
- Michalopoulos, Stelios and Elias Papaioannou (2013), ‘Pre-colonial ethnic institutions and contemporary African development’, *Econometrica* **81**(1), 113–152.
- Michalopoulos, Stelios and Elias Papaioannou (2016), ‘The Long-Run Effects of the Scramble for Africa’, *American Economic Review* **106**(7), 1802–1848.
- Mitchener, Kris James and Marc Weidenmier (2005), ‘Empire, public goods, and the Roosevelt corollary’, *The Journal of Economic History* **65**(3), 658–692.
- Mitchener, Kris James and Marc Weidenmier (2008), ‘Trade and empire’, *The Economic Journal* **118**(533), 1805–1834.
- Mokyr, Joel and John V. C. Nye (2007), ‘Distribution coalitions, the industrial revolution, and the origins of economic growth in Britain’, *Southern Economic Journal* **74**(1), 50–70.

- Musgrave, Richard (1959), *Theory of public finance; a study in public economy*, McGraw-Hill, New York.
- Naidu, Suresh and Noam Yuchtman (2013), ‘Coercive Contract Enforcement: Law and the Labor Market in Nineteenth Century Industrial Britain’, *American Economic Review* **103**(1), 107–44.
- North, Douglass C. (1981), *Structure and Change in Economic History*, Norton, New York, U.S.A.
- North, Douglass C. and Barry Weingast (1989), ‘Constitutions and commitment: the evolution of institutions governing public choice in seventeenth century England’, *Journal of Economic History* **49**, 803–32.
- North, Douglass C., John Joseph Wallis and Barry R. Weingast (2009), *Violence and Social Orders: a conceptual framework for interpreting recorded human history*, Cambridge University Press, Cambridge.
- North, Douglass C and Robert P. Thomas (1971), ‘The rise and fall of the manorial system: A theoretical model’, *The Journal of Economic History* **31**(4), 777–803.
- North, Douglass C. and Robert Paul Thomas (1973), *The Rise of the Western World*, Cambridge University Press, Cambridge, U.K.
- Nunn, Nathan (2008), ‘The long-term effects of Africa’s slave trades’, *Quarterly Journal of Economics*, Vol **123**(1), 139–176.
- Nunn, Nathan and Leonard Wantchekon (2011), ‘The Slave Trade and the Origins of Mistrust in Africa’, *American Economic Review* **101**(7), 3221–52.
- Ober, Josiah (2015), *The Rise and Fall of Classical Greece*, Princeton University Press, Princeton.
- O’Brien, Patrick (1982), ‘European economic development: The contribution of the periphery’, *The Economic History Review* **35**(1), 1–18.
- O’Brien, Patrick K. (2011), ‘The nature and historical evolution of an exceptional fiscal state and its possible significance for the precocious commercialization and industrialization of the British economy from Cromwell to Nelson’, *The Economic History Review* **64**(2), 408–446.
- O’Brien, Patrick Karl and Leandro Prados de la Escosura (1998), ‘The costs and benefits for europeans from their empires overseas’, *Revista de Historia Económica Journal of Iberian and Latin American Economic History* **16**(1), 29–89.
- Ogilvie, Sheilagh (2007), ‘Whatever Is, Is Right’? Economic Institutions in Pre-Industrial Europe (Tawney Lecture 2006)’, *Economic History Review* **60**(4), 649–684.
- Ogilvie, Sheilagh and A.W. Carus (2014), Institutions and Economic Growth in Historical Perspective, in P.Aghion and S. N.Durlauf, eds, ‘Handbook of Economic Growth’, Vol. 2 of *Handbook of Economic Growth*, Elsevier, chapter 8, pp. 403 – 513.
- Olson, Mancur (1965), *The Logic of Collective Action*, Harvard University Press, Cambridge, MA.
- Olson, Mancur (1993), ‘Dictatorship, democracy, and development’, *American Political Science Review* **87**, 567–576.
- Oppenheim, Franz (1922), *The State*, B.W. Huebsch, New York.
- Parker, Geoffrey (1976), ‘The “military revolution,” 1560-1660—a myth?’, *The Journal of Modern History* **48**(2), pp. 195–214.
- Parker, Geoffrey (1988), *The Military Revolution: military innovation and the rise of the West, 1500–1800*, Cambridge University Press, Cambridge.
- Persson, Torsten and Guido Tabellini (2000), *Political Economics: Explaining Economic Policy*, MIT Press., Cambridge.
- Pincus, Steve (2009), *1688 The First Modern Revolution*, Yale University Press, New Haven and London.

- Pincus, Steven C.A. and James A. Robinson (2014), 'What really happened during the glorious revolution?', in S.Galiani and I.Sened, eds, 'Institutions, Property Rights, and Economic Growth: The Legacy of Douglass North', Cambridge University Press., Cambridge, pp. 192–222.
- Pirenne, Henri (1925), *Medieval Cities*, Doubleday Anchor Books, New York.
- Prior, Sir James (1878), *The Life of the Right Honourable Edmund Burke*, G Bell, London.
- Puga, Diego and Daniel Treffer (2014), 'International trade and institutional change: Medieval Venice's response to globalization*', *The Quarterly Journal of Economics* **129**(2), 753–821.
- Riker, William H. (1962), *The Theory of Political Coalitions*, Yale University Press, New Haven.
- Root, Hilton L. (1991), 'The redistributive role of government: Economic regulation in old régime France and England', *Comparative Studies in Society and History* **33**(02), 338–369.
- Rosenberg, Nathan and Jr. L.E. Birdzell (1986), *How the West Grew Rich, the economic transformation of the industrial world*, Basic Books, New York, U.S.A.
- Rosenthal, Jean-Laurent (1992), *The Fruits of Revolution*, Cambridge University Press, Cambridge.
- Rosenthal, Jean-Laurent and R Bin Wong (2011), *Before and Beyond Divergence*, Harvard University Press, Cambridge.
- Rubin, Jared (2017), *Rulers, Religion, and Riches: Why the West got rich and the Middle East did not*, Cambridge University Press, Cambridge.
- Salter, Alex and Andrew Young (2018), 'Polycentric sovereignty: The medieval constitution, governance quality, and the wealth of nations.', *Social Science Quarterly* **Forthcoming**.
- Sng, Tuan-Hwee (2014), 'Size and dynastic decline: The principal-agent problem in late imperial China 1700-1850', *Explorations in Economic History* **54**(0), 107–127.
- Sokoloff, Kenneth L. and Stanley L. Engerman (2000), 'History lessons: Institutions, factor endowments, and paths of development in the New World', *Journal of Economic Perspectives* **14**(3), 217–32.
- Stasavage, David (2002), 'Credible commitment in early modern Europe: North and Weingast revisited', *Journal of Law, Economics, and Organization* **18**(1), 155–86.
- Stasavage, David (2003), *Public Debt and the Birth of the Democratic State*, Cambridge University Press, Cambridge.
- Stasavage, David (2011), *States of Credit*, Princeton University Press, Princeton.
- Stasavage, David (2014), 'Was Weber right? the role of urban autonomy in Europe's rise', *American Political Science Review* **108**, 337–354.
- Stasavage, David (2016), 'What we can learn from the early history of sovereign debt', *Explorations in Economic History* **59**(Supplement C), 1 – 16.
- Stigler, G. J. (1971), 'The theory of economic regulation', *The Bell Journal of Economics and Management Science* **2**(1), 3–21.
- Strayer, Joseph (1965), 'Feudalism in western europe', in R.Coulborn, ed., 'The Idea of Feudalism', Archon Books, Hamden Connecticut, pp. 15–26.
- Tawney, R.H. (1926), *Religion and the Rise of Capitalism*, Verso, London.
- The Prize in Economics 1993 – Press Release* (1993).
- URL:** <http://www.nobelprize.org/nobelprizes/economic-sciences/laureates/1993/press.html>
- Tilly, Charles (1975), 'Reflections on the history of european state-making', in C.Tilly, ed., 'The Formation of Nation States in Western Europe', Princeton University Press, Princeton, New Jersey, pp. 3–84.
- Tilly, Charles (1990), *Coercion, Capital, and European States, AD 990-1990*, Blackwell, Oxford.
- Troesken, Werner (2015), *The Pox of Liberty: How the Constitution Left Americans Rich, Free,*

- and Prone to Infection*, University of Chicago Press, Chicago.
- Vidal-Robert, Jordi (2013), War and inquisition: Repression in early modern Spain. Working Paper, Department of Economics, University of Warwick.
- Vidal-Robert, Jordi (2014), Long-run effects of the Spanish Inquisition, CAGE Online Working Paper Series, Competitive Advantage in the Global Economy (CAGE) 192.
- Vries, Peter (2015), *State, Economy, and the Great Divergence: Great Britain and China, 1680s–1850s*, Bloomsbury, London.
- Waldinger, Fabian (2012), ‘Peer effects in science: Evidence from the dismissal of scientists in Nazi Germany’, *Review of Economic Studies* **79**(2), 838–861.
- Weber, Max (1922, 1968), *Economy and Society*, Bedminster, New York.
- Weber, Max (1930), *The Protestant Ethic and the Spirit of Capitalism*, Allen and Unwin, London, U.K.
- Wittfogel, Karl (1957), *Oriental Despotism: A Comparative Study of Total Power*, Yale University Press, New Haven.
- Wolitzky, Alexander and Daron Acemoglu (2011), ‘The economics of labor coercion’, *Econometrica* **79**(2), 555–601.
- Xue, Melanie Meng and Mark Koyama (2017), Autocratic rule and social capital: Evidence from imperial China. Mimeo.
- Zanden, Jan Luiten Van, Eltjo Buringh and Maarten Bosker (2012), ‘The rise and decline of European parliaments, 1188–1789’, *Economic History Review* **65**(3), 835–861.
- Ziblatt, Daniel (2017), *Conservative Parties and the Birth of Democracy*, Cambridge University Press, Cambridge.