

Review: Counterfactuals, Empires, and Institutions

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Counterfactuals, Empires, and Institutions: Reflections on Walter Scheidel's *Escape from Rome*[†]

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This essay reviews Escape from Rome: The Failure of Empire and the Road to Prosperity by Walter Scheidel. It examines the argument that Europe's persistent fragmentation following the collapse of the Roman Empire is responsible for the origins of the modern world. First, I consider Scheidel's argument that the rise of Rome at the end of the first millennium BCE was relatively overdetermined, but that once Rome fell, it was highly unlikely for any subsequent empire to dominate Europe. Second, I examine the institutional consequences of this divergence in state building. Finally, I reflect on the role of counterfactuals in history. (JEL Y80)

1. Introduction

The origins of sustained economic growth continue to fascinate scholars from across the social sciences and humanities. In particular, the question What explains the Great Divergence that occurred between the Western World and other parts of Eurasia, notably China after 1750 CE? remains ever more relevant. Many explanations have been proposed. Few treatments, however, are as insightful as Walter Scheidel's *Escape from Rome: The Failure*

of Empire and the Road to Prosperity (2019).

Escape offers an outstanding modern summation of a strand of research that goes back at least as far as Montesquieu and David Hume, and which links the comparatively recent *economic* divergence to a prior *institutional* divergence between a polycentric and divided Europe and an imperial and centralized China.¹ Scheidel reworks the classic thesis that a competitive and fragmented

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¹ Montesquieu attributed European liberty and military process to geography in chapter vi, book XVII, of *De L'Esprit des Lois* (1989 [1748]). Subsequent contributions include Pirenne (1925); Hicks (1969); Jones (2003 [1981]); Hall (1986); Rosenberg and Birdzell (1986); Baechler (1975); Kennedy (1987); Diamond (1997); Chaudhry and Garner (2006); Mokyr (2007); Karayalçın (2008); Chu (2010); Olsson and Hansson (2011); Rosenthal and Wong (2011); Lagerlöf (2014); Ko, Koyama, and Sng (2018); and Fernández-Villaverde et al. (2020).

state system was a necessary condition for the eventual economic rise of Western Europe.

Scheidel explains this divergence in terms of the long historical evolution, not only of Europe, but also of Asia, especially China. He asks why a large-scale empire arose only once in European history, but was a reoccurring equilibrium feature of state formation elsewhere in Eurasia. In so doing, Scheidel provides an excellent institutional history of European state formation from Rome onwards.

Escape from Rome begins with the observation that for the last 1,500 years, Europe and China have been characterized by contrasting state systems—political fragmentation in Europe and unitary empire in China—but that prior to this point, patterns of state formation at either end of Eurasia looked remarkably similar.

Both the Romans and the Han dynasty ruled large empires with professional bureaucracies and standing armies, paid for through taxation. And in the first few centuries CE, these two empires were coming to resemble each other more closely: there was convergence as empire in Western Europe became more strongly institutionalized, bureaucratic, and autocratic.

If there was a watershed moment, it was not the fall of the Western Empire, conventionally dated to 476 CE, because the long decline and fall of the later Han dynasty in China also gave way to a long period of chaos and intermittent war. Rather, what was decisive was a nonevent: the *failure* to reconstitute a Europe-wide empire following the fall of the Western Empire. This failure gave rise to an early medieval divergence in political and economic institutions. Scheidel sets out to explain how this early medieval divergence took place and what its consequences were. He considers several canonical causes of European fragmentation: geography, culture, and institutions, and how they impact one another.

2. Empire Formation at Either End of Eurasia

2.1 The Rise of Rome

Europe has not always been politically fragmented. For around 500 years at the beginning of the first millennium CE, much of the continent, as well as North Africa and the Near East, was ruled by a single polity. All accounts of Europe's abiding political fragmentation also have to explain the rise and longevity of the Roman Empire.

Two factors, Scheidel notes, are important for explaining empire formation: the strength of the imperial core and the weakness of the periphery. Understanding the former is straightforward. The secret to Roman success was its manpower, which in turn rested on its ability to recruit new citizens and on its alliance system. Rome could simply mobilize more and larger armies than its rivals. The Romans always won, as an anonymous graffitist scratched on a rock face in first-century Jordan; but they did so despite numerous battlefield defeats. It was not Roman bellicosity or military ability that was unique, but Roman levels of mobilization.

There were three aspects to Roman manpower. First, unlike other ancient city states, Rome was generous in offering citizenship to immigrants and freemen. As a result, the citizen population of Rome itself rose rapidly during the Republican period. Second, the Roman alliance system within Italy was an important and stable source of additional manpower. Italian elites found the alliance sufficiently rewarding such that Rome's enemies, like Hannibal, found it difficult to induce them to defect. Third, the proportion of male Roman citizens who served in the military was remarkably high. The Roman state conscripted labor in lieu of actual taxation.

Table 1 lists my own computations of military mobilization rates (army size as a

TABLE 1
MILITARY MOBILIZATION RATES

	Low intensity		
	Qing China	Roman Empire	England
Year	1700	100	1600
Approximate population	150 million	60 million	4 million
Army size	800,000	360,000	18,000
Mobilization	0.5%	0.6%	0.45%
	Medium intensity		
	Russia	England	France
Year	1720	1695	1695
Approximate population	15.5 million	5 million	20 million
Army size	120,000	100,000	400,000
Mobilization	0.84%	2%	2%
	High intensity		
	Prussia	Sweden	Roman Republic
Year	1750	1707	225 BCE
Approximate population	3.75 million	1.4 million	3 million
Army size	150,000	120,000	160,000
Mobilization	4%	8.5%	5.3%

Notes: This table reports estimated mobilization rates for selected premodern polities. Sources: Roman mobilization rates are provided by Scheidel (2019); for estimates of the sizes of non-Roman armies, I consulted the following sources for each country: France, Rowlands (2002); Russia, Duffy (1981); Sweden, Wolke (2018). Estimates for the English army size in 1695 are from http://www.spanishsuccession.nl/english_army.html. Population estimates are from McEvedy and Jones (1978).

share of total population) to put Republican mobilization rates in a comparative perspective. While military mobilization rates were routinely high for pastoral or nomadic peoples, the norm for settled agrarian societies was a mobilization rate of less than 1 percent of total population. This would correspond to approximately 3–4 percent of the adult male population. The reason for this was that in such societies, a soldier was an idle mouth.² Qing China, the Roman Empire in the reign of Trajan (circa 100 CE),

and Elizabethan England were relatively low-intensity regimes, with mobilization rates of 0.6 percent or less. In comparison, during the late seventeenth and eighteenth centuries, European states like England and France sometimes achieved mobilization rates of around 2 percent when at war. The only states able to maintain mobilization rates comparable to the 5–8 percent attained by Republican Rome were Sweden and Prussia in the eighteenth century—both of which are characterized by historians as

²Of course, this was why in many empires there was a tendency for frontier soldiers to become farmers

during peacetime. This, however, reduced their military effectiveness.

effectively garrison states—and such high levels of mobilization proved to be unsustainable, especially for Sweden, whose military capacity collapsed in the eighteenth century. Republican Rome was remarkable in maintaining very high levels of mobilization for several centuries.

Roman war mobilization, in turn, was critical to holding together the political equilibrium at home. The Roman system under the republic was like a criminal gang that compensated its victims by enrolling them in further criminal activities. It was not coincidental that Rome was at war roughly 90 percent of the time in the Republican period (291/310 years between 410–101 BCE) (Scheidel 2019, p. 80).

Nevertheless, Roman military success was made possible by the fragility of nearby states. Early Roman state formation could proceed without major external interference because it began in an Italian peninsula that was at the periphery of the ancient world, distant from the central political-military networks of the region. Rome's major geopolitical competitors—Carthage, Macedon, the Seleucid and Ptolemaic Empires—could not match Roman levels of mobilization. They lacked both Roman manpower and the equivalent of the Roman alliance system in Italy. In comparison to Rome, the position of the elites who ruled the successor states of Alexander the Great rested on an extremely narrow military base.³ Roman advantages with respect to the less institutionalized tribal societies of Northern and Western Europe were even starker.

Rome's long-term success was also predicated on its control of the Mediterranean, achieved early in its expansion following the

³ Scheidel (2019) notes that “the well-trained Hellenistic field armies were precious in that they could not readily be replaced. The Seleucid and Ptolemaic empires each rested on core units of approximately 36,000 heavy infantry and cavalry augmented by some 15,000 mercenaries” (pp. 96–97).

First Punic War. Scheidel (2019, p. 74) notes that “Roman mastery of the Mediterranean was unique: never again in history would one power exercise lasting control over its entire coastline.” Control of the Mediterranean was a vital factor in the expansion of the Roman Empire. However, “later history documents the difficulties of reaching the requisite position of preeminence. This happened only once, at a time when lack of competition made it less challenging to establish hegemony over the less developed western half of the Mediterranean. Considering how much Rome struggled against just a single opponent during its first war with Carthage, a more crowded naval environment might well have prevented naval expansion” (p. 74).⁴

At a deeper level, climatic conditions favored the expansion of the Mediterranean economic zone. Harper (2017) notes that Roman expansion occurred at a time when the Mediterranean experienced a uniquely favorable climate. Warm, wetter, and more predictable weather meant that the agricultural productivity of southern Europe and North Africa was higher.⁵ The ratio of the population density of societies surrounding the Mediterranean to that of Northwestern Europe was much greater than would be the case in later centuries, particularly after the clearing of the Eurasian forest and the development of the iron plow.

After a certain point, the rise of Rome then, far from being an accident of history, was overdetermined by both geographical, climatic, and institutional factors. There are counterfactual scenarios in which Roman expansion was plausibly derailed, but these had to occur sufficiently early on in Roman history. The most viable opportunity was in the late fourth century BCE, had Alexander the Great swung his Macedonian phalanxes

⁴ All citations that appear as page numbers only refer to Scheidel 2019.

⁵ See Harper and McCormick (2018).

west. Such an intervention could have upset the balance of power in the Italian peninsula sufficiently so as to prevent subsequent Roman expansion. Following this brief window in the late fourth century BCE, however, Scheidel finds few moments where a minimal rewriting of history could have prevented Rome's rise. The last such viable opportunity for Scheidel was Hannibal's inability to either conquer Rome or force it to the peace table. But even this opportunity, he considers "unpromising" (p. 119).⁶

2.2 Why Was Rome Unique? The First Great Divergence

Why then did none of Rome's successor states come close to achieving a comparable level of hegemony in Europe? Again, Scheidel employs a counterfactual approach. He argues that though the rise of Rome was almost impossible to derail by the end of the third century, major rewrites of history would be required to generate anything like a second large-scale, long-lasting empire in Europe.

Perhaps the best opportunity to build a second Europe-wide empire was the first: Justinian I's ambitious reconquest of North Africa and Italy in the mid-sixth century.⁷ This attempt to reconstitute the western Roman Empire failed almost immediately, as both external invasions and bubonic plague assailed it. Moreover, given the weakening of internal state structures, "At no time did the eastern empire dispose of the military manpower that had allowed the Republican and

⁶For Livy, and many others, Hannibal's decision not to march on Rome following his victory at Cannae has been seen as a major "what if" moment. The consensus of modern scholars, however, is that Hannibal lacked the resources, including manpower, to successfully besiege the city of Rome. He was unable to capture the city of Nola, a much smaller city, on three occasions between 216–214 BCE.

⁷Scheidel does not consider the attempt to recover the Western Empire by Leo I in 468 CE.

early monarchical Rome to penetrate and hold large parts of Western Europe" (p. 138).

This is the first of several counterfactual imperial moments that Scheidel considers. To generate insights and to be credible, counterfactuals have to involve only minimal rewrites of history. By this rule, even Justinian's reconquest was extremely unlikely to succeed. Subsequent attempts to rewrite history—so as to conjure either an Islamic European empire, a long-lasting and hegemonic Frankish empire, or a medieval German empire under either the Ottonians or the Hohenstaufens—are even more implausible.

The same is true of later historical moments where European polycentricity seemed imperiled. The Mongols possessed the military capacity to defeat European field armies. However, their ability to dominate sedentary populations far away from the steppe must be doubted.⁸ Even a comprehensive Mongol victory over European forces would likely have reinforced the political fragmentation of those polities that escaped direct Mongol rule. This counterfactual, moreover, requires an aggressive rewriting of history. By the early modern period, any attempt to gain European hegemony, whether by the Habsburgs, Louis XIV, or Napoleon, was met with a coordinated response, or "balancing" by other powers.

The lesson from these counterfactual exercises is that, over time, Europe's polycentricity became more entrenched. Political fragmentation was self-reinforcing. The contrast is with China, where the Han empire also weakened and collapsed in the third and fourth centuries. But unlike the Roman Empire, China was eventually reunified

⁸As summarized in Ko, Koyama, and Sng (2018), the military effectiveness of steppe nomads like the Mongols declined precipitously away from the steppe. The mobility of Mongol armies relied on maintaining a ratio of horses to men of approximately ten to one. This could not be sustained in Central or Western Europe.

under the Sui dynasty in the sixth century. The initial failure to reinstitute empire in Europe set in motion developments that would put European state building on a different trajectory. This is what Scheidel calls the “First Great Divergence”—a divergence in patterns of state formation that took place between 500 and 1000 CE.

The first aspect of this divergence was fiscal. In China a fiscal system based on land taxation could be reconstituted with each “dynastic cycle.” In Europe, however, as Wickham (2005) discusses, the Roman fiscal system gradually disappeared in post-Roman Western Europe. Scheidel calls this process one of “state deformation.” In the absence of organized taxation, the scale of political authority and military mobilization shrank. The initial legacy of the “escape from Rome” was thus one of enduring state fiscal weakness.

A second aspect of this concerned the nature of political institutions. One peculiar feature of European history is a dialectic whereby the weakness of European polities, particularly their inability to raise taxes, became, in the long-run, a source of strength and resilience. Precisely because they were comparatively weak, European rulers had to bargain with their nobilities. Over time this process of negotiating and bargaining, however, enabled them to institutionalize their power and lowered the number of revolts, coups, and assassinations.⁹ Using the duration of rulers as a measure of political stability, Blaydes and Chaney (2013) demonstrated that Europe began to diverge from the Middle East from the ninth century onwards. The medieval practice of rulers negotiating with their nobility would be the future foundation for investments in state capacity (see the discussion in Johnson

and Koyama 2017). Intriguingly, Chinese emperors were also able to achieve greater political stability at the same time that European monarchs did so (Wang 2018). But, whereas in Europe this was accompanied by the rise of representative institutions, in China greater longevity appears to have been the result of a more reliable system of hereditary succession. The Chinese practice of polygamy ensured that rulers in later Chinese dynasties did not suffer from a lack of male heirs—this did not entirely prevent dynastic disputes—but it meant that Chinese dynasties did not undergo periodic internal crises that afflicted European monarchs unable to conceive male children in wedlock. But greater political stability in later Chinese dynasties was not accompanied by an increase in state capacity.¹⁰

Third, the First Great Divergence set in motion ideational and cultural developments that would exacerbate Europe’s deviation from broader Eurasian trends. A recent literature points to the critical, but hitherto understudied, role that religion played in state formation in both Europe and the Middle East (Rubin 2017, Johnson and Koyama 2019). Consider, for example, the decisive role the Catholic Church played in both maintaining Europe’s polycentric political institutions by playing secular rulers against one another, and in breaking down tribal kinship networks. The latter development, Schulz (2020) and Schulz et al. (2019) demonstrate, was critical to the emergence of representative institutions in Western Europe.

The ability of the Catholic Church to attain the political authority to play such an important role in medieval history was a *function* of Europe’s enduring political fragmentation in the post-Roman world. The example of

⁹ See Congleton (2010) and discussions in Salter (2015) and Salter and Young (2019) for discussions of this bargaining process.

¹⁰ See Sng (2014) for an evidence of declining state capacity in Qing dynasty China (also see Ma and Rubin 2019).

the Byzantine empire and of Russia suggests that Christianity on its own could be molded into a religion that was fully compatible with imperial rule, thus: “A political center’s ability to control elite constituents, coerce rivals, and tax resources was the key variable: the lower this ability, the more likely the church was to interfere with state formation” (Scheidel 2019, p. 316). Had a Rome-like empire survived or been reconstituted in Europe, Scheidel argues that it would have acted like the Byzantine empire, which controlled and regulated the economy, managed the church, and did not adopt any of medieval Europe’s innovative institutions such as communes, guilds, public debt, or parliaments (p. 509).

3. *Geography Interacts with Politics: Causes of the First Great Divergence*

An older social scientific literature attributes many economic and political outcomes to geography. More recent scholarship often attacks such geographical explanations (e.g., Acemoglu and Robinson 2012). These two positions can be reconciled by the observation that geography clearly matters, but that its influence is often mediated by political institutions.

Scheidel’s explanation for Europe’s unique path of state formation rests on such an *interaction* between geography and institutional development. Two factors were particularly important: first, “fractured land”; and second, the Eurasian steppe.

Diamond (1997) made famous the argument that “fractured land,” that is, mountain barriers, forests, and jagged coastlines, impeded the development of empires in Europe. In comparison to Diamond and other scholars who have emphasized the link between Europe’s geography and its persistent political fragmentation, Scheidel draws attention to the “dialectical process in which the physical environment and

state formation, both contingent and acting upon each other, fostered ever-stronger path dependence” (Scheidel 2019, pp. 263–64).

Criticizing one version of the fractured land hypothesis, Hoffman (2015) notes that the observation that Europe is on average more mountainous than China is false. Defining an area as mountainous if it is over 1,000 meters in elevation, then only 6 percent of Europe is mountainous compared to 33 percent of China. But the important factor was not simply the presence of mountain ranges or rugged terrain, but the degree to which these boundaries intersected with productive land. In China, the Central Plain formed a large enough area of productive farmland to be the nexus for early state formation. Over time, this northern basis was joined to the Yangtze delta, forming a core large enough to dominate the entirety of China proper.

Fernández-Villaverde et al. (2020) test the fractured land hypothesis by developing and simulating a model of state formation. In this model, Eurasia is divided into hexagonal cells that begin the simulation as independent polities. Over time, as polities come into conflict with one another, the outcome is decided by their geographical characteristics and underlying agricultural productivity or initial population density. This model of state formation can replicate some of the most important patterns we observe historically: Europe tends to be politically fragmented, whereas a unitary state always forms in China; other parts of Eurasia experience intermediate levels of state formation. The results of this model in general support Scheidel’s claims that the presence of a dominant core region of high land productivity in China—in the form of the North China Plain—and the lack thereof in Europe were also crucial for the emergence of political fragmentation in Europe and political unification in China.

The other crucial geographical factor for Scheidel was distance from the Eurasian

steppe. The grinding of the African tectonic plate against the Eurasian tectonic plate that produced the Alps pushed the frontier of the Eurasian steppe much further east than would otherwise have been the case. The resulting gradated steppe frontier contrasts to that of China where, as Ko, Koyama, and Sng (2018) note, all the major historical Chinese cities were almost or at least as close to the steppe as the easternmost major Western European city.

The vast Eurasian steppe produced nomadic societies of horsemen who, because of their skill as archers, high mobilization levels, and ability to retreat into the steppe when threatened, posed an irreducible threat to sedentary societies (Gat 2006, Turchin 2009, Lieberman 2009). Ko, Koyama, and Sng (2018) formally model the impact a strong one-sided military threat, such as that which emanated from steppe, had on state formation in China. They contrast this with the weaker, but multisided, external threats that beset Europe. The former gives rise to a single empire; the latter produces a multiplicity of polities. This model informs Scheidel's discussion: the threat of horsemen from the north encouraged resource pooling and state centralization across much of Eurasia, but particularly in China, whereas in Europe, its impact was marginal. It was the nature of warfare with the steppe that prevented centralized military authority from entirely disintegrating during China's not infrequent dynastic crises.

4. *Consequences of the First Great Divergence*

Many factors viewed as critical to the onset of sustained economic growth can be folded into Scheidel's overall argument. Since the work of Douglass North, scholars have distinguished between the proximate causes of growth, such as investment

in physical or human capital or innovation, and deeper explanations (North and Thomas 1973). Conceived as the incentive structures that determine the incentive to invest or innovate, institutions have been viewed as among the most important "deep" causes of the origins of economic growth. But what determines institutional change?

For Scheidel, Europe's robust and enduring polycentrism set in motion a particular system of institutional dynamics. The First Great Divergence laid the foundation for the institutional transformation that would eventually make modern economic growth (and hence the Second Great Divergence) possible.

Here, Scheidel (2019) draws together several long-standing arguments. Many scholars have pointed to the intensity of the political-military competition that characterized early modern Europe (including, notably, Tilly 1990, Voigtländer and Voth 2013, Hoffman 2015) and contrasted this to the internal stasis of Chinese institutions in the same era. Investment in state capability was the result of intense interstate competition.¹¹

With the exceptions of the Black Death and the Thirty Years' War, post-Roman Europe was subject to fewer system-wide shocks than were other parts of Eurasia. Ko, Koyama, and Sng (2018) show that while warfare was more common in Europe than in China, the most devastating premodern

¹¹ For surveys of this literature, see Johnson and Koyama (2017) and Koyama (2019). There is disagreement within this literature about the extent to which particular mercantilist policies played a positive or negative role. There is less disagreement about the link between state capacity and the improving performance of internal markets, due to the abolition of internal tariff barriers and improvements in transport infrastructure. Scheidel does not take a position between those who argue that limiting the arbitrary power of the state was crucial (e.g., Boettke and Candela 2019) and those who view the exercise of state power as responsible for economic growth (e.g., Findlay and O'Rourke 2007, O'Brien 2011).

wars occurred in China. In a related vein, Root (2017) contrasts patterns of network stability in China and Europe. European polycentricity, in this argument, hinges on the resiliency of its decentralized network. China in contrast, organized as a hub-and-spoke system, was a more efficient network but less resilient. Smaller states in Europe were able to survive into the early modern period despite frequent warfare, in part because they were more capital intensive (see Abramson 2017).

It should be noted that some recent scholarship argues against drawing too sharp a distinction between Eastern and Western Eurasia here. Andrade (2016), for instance, contests the importance of a competitive state system in explaining East/West differences in military technology, at least before the imposition of the Great Qing peace after 1683. Before then, he notes that China was often divided and often at war. But Andrade (2016), nonetheless, accepts the premise of the claim that interstate competition was a driver of military innovation.

Scheidel links the intensity of political-military competition in late medieval and early modern Europe with the institutional divergence that first occurred in 500–1000 CE. He draws attention to the fact that in post-Roman Europe, nominal political power became unbundled from economic resources and military power, which devolved to landed elites, and from ideological power, now the possession of the Catholic Church. It was, in part, this unbundling that rendered any attempt to rebuild a centralized empire moot. Empire building would not just have required the conquest of large parts of the continent, it would have necessitated creating from scratch a fiscal system, destroying local nobilities, crushing independent cities, and subordinating religious authorities. The unbundling of social power was thus critical in allowing the formation of mediating institutions like estates

and parliaments and provided space for the emergence of independent cities.

Cultural developments, while far from irrelevant, were for Scheidel largely downstream of geographical factors.¹² Mokyr (2017) focuses on a nexus of cultural and intellectual developments that came together to produce a functioning market for ideas and, as a consequence, a technologically innovative society. As Mokyr makes clear, this Republic of Letters rested on Europe's fortuitous combination of cultural unity with political fragmentation. Political fragmentation meant that heterodox thinkers could flee persecution and that bad policies in one state could be remedied elsewhere. Conservative forces were not able to coordinate suppression of new ideas.¹³ Europe's cultural unity meant that the scholars across the entire continent could communicate with one another. The resulting European culture of growth transcended political or religious boundaries.

What about other factors such as trade and colonial empires? The term California school was coined in the 1990s to refer to a group of scholars, then based in various Californian universities, who sought to revise traditional, Europe-focused, accounts of the origins of modern economic growth (Goldstone 1996, Wong 1997, Pomeranz 2000). Pomeranz (2000), in particular, focused on Europe's colonial empires, the source of natural resources, and "ghost acreage" held to be critical to Europe's eventual economic growth. Whatever precise weight one puts on colonialism or Atlantic trade as an input into the Great Divergence, for Scheidel's

¹²The possible exception to this statement is the role played by Christianity, which Scheidel concedes was to a large extent independent of geography.

¹³The contrast is again with China as discussed by Mokyr (2017, pp. 287–338). Particularly, in the Qing period, Chinese states frequently intervened to suppress potential dissent and persecute intellectuals through "literary inquisitions" (Xue 2020).

purposes what matters is demonstrating that Europe's overseas adventurism was a function of its political fragmentation. It was not, he argues, Europe's relative proximity to North America that mattered; by the late fifteenth century European sailors would not have been deterred by longer or more arduous voyages. Rather, it was interstate competition that provided robust incentives for European states to send men and material overseas. Fragmentation was also important in generating the required technologies and expertise. Mercantile city-states like Genoa, products of European's fragmentation, supplied critical inputs, especially in developing shipbuilding capabilities and seamanship. While the Roman Empire had a professional navy, it was focused on patrolling and suppressing piracy rather than exploration or discovering new trade routes. Had the Roman Empire survived, it is impossible to imagine devoting comparable resources to overseas empire building.

The long-distance voyages that the Ming dynasty embarked upon in the early fifteenth century are often celebrated as examples of Chinese naval prowess and used to argue that European expansion into the Atlantic was fortuitous. Scheidel takes the opposite position. He views them as "a textbook case of monopolistic decision making: launched at enormous expense for no tangible material benefit, they were equally swiftly shut down once political preferences at the imperial court changed" (p. 402). It is the contrast between these voyages, undertaken for reasons of dynastic prestige, and the later European voyages that is illuminating.

In sum, then, Scheidel's claim is that all of the many factors that plausibly laid the foundations for the origins of sustained economic growth were themselves made possible by Europe's persistent political fragmentation and by the First Great Divergence in the second part of the first millennium CE. Even demographic or factor-priced-based

explanations he contends are "predicated on specifically European modes of state formation" (Scheidel 2019, p. 500). Thus the fall of the Roman Empire laid the foundations of modernity.

Scheidel's relentless emphasis on the centrality of state fragmentation is fairly persuasive—in my own published work, I have also stressed its importance. Assessments of European versus Chinese institutions or modes of governance that fail to take into account the very different incentives facing the Qianlong emperor (r. 1735–96) from say, a William II, or a Louis XIV, are usually unsatisfying for precisely this reason.¹⁴ It follows that any argument based on institutional factors has to also explain the different state structures that obtained in Europe versus East Asia. The principle limitation of existing arguments, including Scheidel's, is that we are not yet in a position to turn this qualitative statement into a quantitative one: we don't know "how much it mattered." Political fragmentation can be plausibly linked with a host of developments in medieval and early modern Europe. But ideally, we would want to distinguish those areas where it was truly critical from those spheres where it was but one among many contributory factors.

The other limitation is that much of the existing scholarship, including *Escape*, is primarily motivated by the comparison between Europe and China. Future work will have to study state formation in the Middle East and India in more detail. Scheidel does consider the rest of Eurasia but, due in part to the less developed nature of the relevant literatures, his analysis of these regions is more cursory than his detailed examination of Europe and China. In particular, it is European history that is subjected to the

¹⁴This is the case, for instance, with Landes's (2006) account of alleged cultural stagnation in China. Landes does not investigate the different incentives facing Chinese and European policy makers.

most rigorously counterfactual analysis. A fully counterfactual analysis of a persistently fragmented China or differential institutional developments in India or the Middle East awaits future work.

5. *New Vistas for Quantitative Historians and Social Scientists*

It is informative to set *Escape* in a broader context. First, how does *Escape* relate to discussions among economic historians working on the Great Divergence? Second, to what extent is it compatible with the other grand narratives that leading social scientists have proposed for the rise of modernity? Finally, does Scheidel point the way toward a shared approach that can help dovetail the separate research programs of historians and social scientists?

I have noted that Scheidel dates the origins of the Second Great Divergence to an institutional First Great Divergence that began in the early Middle Ages. Among economic historians, the debate about dating the origins of sustained economic growth remains ongoing. Goldstone (forthcoming) provides both a summary of the latest GDP per capita estimates and a provocative discussion of how they can be interpreted. What is in dispute is whether the Great Divergence was late or early. Scholars in the California school argued that the economic paths of East Asia and Western Europe only diverged relatively late; sustained economic growth in Britain only took off in the late eighteenth century (e.g., Wong 1997, Pomeranz 2000). Steven Broadberry and coauthors, in contrast, argue that per capita income growth began its upward trajectory much earlier than this (Broadberry, Campbell, and van Leeuwen 2013; Fouquet and Broadberry 2015; Broadberry, Guan, and Li 2018).

The import of this is that even if the divergence itself only took place fairly late, as Goldstone avers, the *origins* of the

divergence might be much deeper. And this is what a growing body of recent literature, of which *Escape* is the most recent, argues for (see Greif 2006, van Zanden 2009, Kurian 2010, Rubin 2017, Acemoglu and Robinson 2019). Together with this literature, taking the arguments of *Escape* seriously strengthens the case for early European exceptionalism. And as Scheidel notes, this exceptionalism did not hinge on broad East/West differences but on modes of state formation. That is, the exceptionalism was institutional and did not have a major immediate impact on economic growth—many areas of Western Europe lagged behind the most advanced Asian societies for centuries after the First Great Divergence began. But it does suggest that these Asian societies, like the Roman Empire, were unlikely to experience sustained, innovation-driven, economic growth on their own. Using the terminology of Goldstone (2002), societies like Song China or the Islamic Middle East were capable of “growth efflorescences” based on commercialization and urbanization, but not modern economic growth.

Other periods of robust polycentricity are also associated with prosperity. Drawing on archaeological evidence collected over the course of several decades, Ober (2015) argues that the city-states of classical Greece experienced several centuries of robust economic growth.¹⁵ The Italian city-states of the Middle Ages also saw considerable prosperity. According to the estimates in Fouquet and Broadberry (2015) per capita GDP in fifteenth-century Italy was not exceeded in Britain until after 1800. The problem facing both the Greek and the Italian city-states was one of scale. Rich independent city-states attracted the attention of predatory neighbors and over time, they increasingly were unable to bear the high fixed costs of military

¹⁵ Much of this evidence is discussed in Morris (2005).

defense. The First Great Divergence identified by Scheidel was notable, therefore, because it produced, perhaps for the first time, a polycentric system of *medium-sized* states.

Escape can also be fruitfully compared to Acemoglu and Robinson's *The Narrow Corridor* (2019). Acemoglu and Robinson argue that what made modern economic and liberal institutions possible was a dialectical "race" between the power of the state on the one hand, and the ability of civil society to hold the state accountable, on the other hand. Based on *Escape*, Scheidel would not disagree with this. The two arguments share other commonalities: both *Escape* and *The Narrow Corridor* shift the origins of European institutional development back to the first millennium CE. Acemoglu and Robinson view Europe as entering the corridor because early medieval European societies benefited from the egalitarian legacy of the German tribes who used bottom-up institutions to constrain state power and from the legacy of Roman universalism and Roman law. The difference I discern between these two arguments is that, in contrast to Scheidel, Acemoglu and Robinson downplay the role of the state system as a meta-level institution—the historical vignettes they employ are focused on institutional developments within each society.

6. The Role of Counterfactuals in History

The title of *Escape* is a reference to how Europe evaded the long shadow of the Roman Empire through building a quite different institutional ecology in the early Middle Ages. But it also offers a potential model of how one can escape from a scholarly impasse in historical research. Among many historians there is widespread concern that the big-picture questions that preoccupied previous generations of historians

are being neglected.¹⁶ Scheidel notes that professional historians have "largely abandoned" the search for the causes of the Great Divergence. Drawing on his own bibliography, he observes that "only one in five of some forty-odd scholars who have made significant contributions to this grand debate have earned an advanced degree in history. Social scientists have been at the forefront of this line of research: economists led the pack" Scheidel (2019, pp. 19–20).

Deep methodological differences exist between economists and political scientists on the one hand, and historians on the other hand. As a consequence of these divisions, developments made in one field are often not shared by scholars in adjacent fields. Some historians—notably scholars of China such as Wong (1997) and Pomeranz (2000) and ancient historians such as Morris (2010) and Scheidel himself—have sought to bridge these differences, writing works of global history that are fully engaged with the latest social science research. But in other areas of history this divide has gotten larger, even as historians have renewed their interest in topics such as economic development and capitalism.

For Scheidel, the biggest barrier to interdisciplinary dialogue is that historians have been reluctant to take an explicitly counterfactual approach. As a consequence, they have tied their hands and been unable to address big-picture questions in a way that is compelling to scholars in related disciplines. This is evident in the debate

¹⁶This concern was strongly stated in, for instance, *The History Manifesto* (Guldi and Armitage 2014). But that call to engage in big-picture thinking was marred by neglect and/or misrepresentation of the work of social scientists, particularly economic historians and economists; see Koyama (2015). Despite this problem there continue to be, of course, many excellent works of big picture history. Recent notable examples include Parker's (2013) study of the climatic origins of the seventeenth century crisis, Manning's (2018) survey of the ancient Mediterranean world, and Harper's *The Fate of Rome* (2017).

between historians working on the history of capitalism and economic historians. In recent best-selling books Baptist (2016) and Beckert (2014) make strong causal claims about the contributions of slavery and cotton textiles to modern economic growth, claims that are unconvincing to most economic historians (see Hilt 2017, Olmstead and Rhode 2018). While much in this debate hinges on issues of data and evidence, part of the confusion stems from the fact that to the social scientists, historians like Baptist are making strong (implicit) counterfactual arguments, while at the same time rejecting the label of counterfactual analysis.¹⁷ This debate has not been resolved because the two sides lack a vocabulary for fruitful discussion.¹⁸

Scheidel proposes to tackle the challenge of doing credible, big-picture, history head-on through an explicitly counterfactual approach. His approach will have intuitive appeal for economists and other social scientists used to focusing on *causal* questions.

Historians have traditionally rejected counterfactual reasoning, either seeing it as a parlor trick or as an inappropriate intrusion of the natural sciences into the domain of the arts and humanities.¹⁹ In a recent critical survey, Evans (2013, p. 93), for instance, sees counterfactual histories as both encouraging a great-man view of history and downplaying the role of systematic trends and developments and hence labels it “a monopoly of the right.” This criticism largely falls flat, however, even if much counterfactual history

¹⁷ Baptist (2016, p. 130) makes the bold (counterfactual) claim that slave-produced cotton was “absolutely necessary” for the world to break out of the Malthusian trap. But he provides no evidence for what is a causal claim. It rests on estimates of GDP that suffer from double and triple counting inputs.

¹⁸ In a sense, the debate has not been fully joined as Baptist (2016) in particular has not responded to the many scholarly criticisms of his work.

¹⁹ In his classic *What Is History?*, Carr (1961, p. 127) argued that “a historian should never deal in speculation about what did not happen.”

has focused on military history and revolved around the decisions of a single individual (“What if Hitler had invaded Britain?” or “What if Hitler had not invaded the Soviet Union?”). There is no necessary reason why this should be so.

Scheidel is fully aware of the shortcoming of much counterfactual history. Alternative history easily becomes historical fiction. The critical issue, however, is that regardless of whatever criticism can be leveled at a particular counterfactual argument, implicit or explicit counterfactuals are hard to avoid. Since Hume, it has been understood that arguments about causation are implicitly or explicitly arguments about counterfactuals. And most people interested in history want answers to causal, that is to say, counterfactual questions. Given our inevitable reliance on “what might have been” arguments, Scheidel contends that the more transparent approach is to address counterfactuals openly:

Explicit counterfactuals force us to confront the weaknesses of deterministic as well as revisionist assumptions, however implicit they might be: the notion that deviations from what happened might have proven short-lived and some approximation of actual outcomes would have happened anyway, or, conversely, that minor contingencies could have produced massive divergences from observed history. Merely to think about this makes us more careful about causal inferences. (Scheidel 2019, p. 24)

This is undoubtedly so. There are important differences, however, between how counterfactuals are used by historians and economic historians and how most economists usually think about causality. Consider the Rubin potential outcomes framework, the standard way economists approach causality. Suppose we are interested in the effect of a treatment t on x_i . The problem is that we do not observe the object of interest x_i in both the presence ($x_i|t = 1$), and the absence, of the treatment ($x_i|t = 0$). While

we never observe the counterfactual, and hence the true effect of the treatment, under certain assumptions and given a sufficient number of observations, we can estimate an *average* treatment effect. The potential outcomes framework thus allows us to credibly estimate causal effects in a range of settings, such as the effect of classroom size on educational outcomes, the effects of unemployment benefits on unemployment duration, or a host other similar such questions.

This framework, however, is *not* available to historians studying big macro questions such as the origins of World War I or the fall of the Roman Empire. Put simply: there is no control group for Europe had Archduke Franz Ferdinand not been assassinated.²⁰

The questions that concern Scheidel, like many of the big questions in economic history—the origins of the Industrial Revolution or the role played by slavery in American economic development—are like the origins of World War I, and not amenable to the standard tool kit taught to applied microeconomists.

So the counterfactual analysis employed by Scheidel and other historians remains more of an art than a science. Scheidel's counterfactual exercises are controlled by two principles: a minimal rewrite rule and a restriction on second-order counterfactuals. The first specifies “the least amount of tweaking of actual history and avoidance of arbitrary intervention” (p. 24). The second requires that critical arguments cannot hinge on secondary effects generated by the initial counterfactual intervention.

²⁰The challenges of applying the potential outcome framework to questions of history and economic development are also discussed by MacLeod (2013). Similarly, the kinds of exercise useful in conducting a simple counterfactual analysis—such as the Blinder–Oaxaca decomposition used in labor economics—are partial equilibrium exercises. They do not allow us to consider the effect of large changes, of the sort that might induce general equilibrium effects. For this, one needs a model.

These provide some guidance. But in practice, economic historians have found that controlled counterfactuals require stronger assumptions and are often best guided by explicit models.²¹ For example, Fogel's (1964) conclusion that the railroad had only a minimal impact on American economic growth was based on a standard competitive model in which the marginal product of inputs was always equal to marginal cost. When you relax this assumption, Hornbeck and Rotemberg (2021) estimate that the railroad was much more important than Fogel supposed.

In the case of *Escape from Rome*, scholars should judge Scheidel's counterfactual analysis as more or less plausible based on their assessment of his empirical and theoretical arguments about how premodern polities and economies worked. In general, I found it an outstanding compendium of the most up-to-date scholarship on medieval and early modern Europe and East Asia. But period specialists may have more specific comments.

Critical responses to *Escape* have argued that Scheidel's restriction on second-order effects is overly constraining. This is a valid concern if we are interested in exploring counterfactuals for their own sake. But what Scheidel is ultimately concerned with, and what we should be concerned with, is the robustness of two outcomes: persistent political fragmentation and the Great Divergence that, in his view, hinged on this fragmentation. So the criticism that things really could have gone another way, or that Scheidel is too quick to dismiss the chances of, say, a Muslim led-invasion of Western Europe in the eighth century, following a defeat of

²¹For instance, Harley and Crafts (2000) construct a computable general equilibrium model of the English economy during the Industrial Revolution to assess their claim that productivity growth was confined to a small number of sectors such as cotton textiles and iron.

Charles Martel, misses the central point.²² Of course, history is strewn with all kinds of ex ante low probability events that ended up being realized, but what matters for Scheidel is establishing that the chances of a centralized empire emerging in Europe after Rome fell were *low* and *declined* over time. And he succeeds in doing this.

In summary, *Escape* demonstrates that the field can benefit from the input of historians who can provide both sweeping historical surveys covering several centuries and continents and who also have detailed period expertise and command of the latest, specialized, scholarship. Economists can contribute to a lot to this discussion by formalizing insights and arguments and subjecting them to more formal econometric investigation. Hopefully *Escape* will inspire more scholars to contribute to one of the most important questions either in history or in the social sciences.

REFERENCES

Abramson, Scott F. 2017. "The Economic Origins of the Territorial State." *International Organization* 71 (1): 97–130.

Acemoglu, Daron, and James Robinson. 2012. *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. New York: Crown Publishers.

Acemoglu, Daron, and James A. Robinson. 2019. *The Narrow Corridor: States, Societies, and the Fate of Liberty*. New York: Penguin Books.

Andrade, Tonio. 2016. *The Gunpowder Age: China, Military Innovation, and the Rise of the West in World History*. Princeton and Oxford: Princeton University Press.

Baechler, Jean. 1975. *The Origins of Capitalism*. Oxford: Basil Blackwell.

Baptist, Edward E. 2016. *The Half Has Never Been Told: Slavery and the Making of American Capitalism*. New York: Basic Books.

Beckert, Sven. 2014. *Empire of Cotton: A Global History*. New York: Alfred A. Knopf.

Blaydes, Lisa, and Eric Chaney. 2013. "The Feudal Revolution and Europe's Rise: Political Divergence of the Christian West and the Muslim World before 1500 CE." *American Political Science Review* 107 (1): 16–34.

Boettke, Peter J., and Rosolino A. Candela. 2019. "Productive Specialization, Peaceful Cooperation, and the Problem of the Predatory State: Lessons from Comparative Historical Political Economy." *Public Choice* 182 (3–4): 331–52.

Broadberry, Stephen, Bruce M. S. Campbell, and Bas van Leeuwen. 2013. "When Did Britain Industrialise? The Sectoral Distribution of the Labour Force and Labour Productivity in Britain, 1381–1851." *Explorations in Economic History* 50 (1): 16–27.

Broadberry, Stephen, Hanhui Guan, and David Daokui Li. 2018. "China, Europe, and the Great Divergence: A Study in Historical National Accounting, 980–1850." *Journal of Economic History* 78 (4): 955–1000.

Carr, E. H. 1961. *What Is History?* London: Penguin Books.

Chaudhry, Azam, and Phillip Garner. 2006. "Political Competition between Countries and Economic Growth." *Review of Development Economics* 10 (4): 666–82.

Chu, Angus C. 2010. "Nation States vs. United Empire: Effects of Political Competition on Economic Growth." *Public Choice* 145 (1–2): 181–95.

Congleton, Roger D. 2010. *Perfecting Parliament: Constitutional Reform, Liberalism, and the Rise of Western Democracy*. Cambridge, UK: Cambridge University Press.

Diamond, Jared. 1997. *Guns, Germs, and Steel: The Fates of Human Societies*. New York: W. W. Norton & Company.

Duffy, Christopher. 1981. *Russia's Military Way to the West: Origins and Nature of Russian Military Power, 1700–1800*. London: Routledge.

Evans, Richard J. 2013. *Altered Pasts: Counterfactuals in History*. Waltham, MA: Brandeis University Press.

Fernández-Villaverde, Jesús, Mark Koyama, Youhong Lin, and Tuan-Hwee Sng. 2020. "The Fractured Land Hypothesis." NBER Working Paper 27774.

Findlay, Ronald, and Kevin H. O'Rourke. 2007. *Power and Plenty: Trade, War, and the World Economy in the Second Millennium*. Princeton: Princeton University Press.

Fogel, Robert W. 1964. *Railroads and American Economic Growth: Essays in Econometric History*. Baltimore: Johns Hopkins University Press.

Fouquet, Roger, and Stephen Broadberry. 2015. "Seven Centuries of European Economic Growth and Decline." *Journal of Economic Perspectives* 29 (4): 227–44.

Gat, Azar. 2006. *War in Human Civilization*. New York: Oxford University Press.

Goldstone, Jack A. 1996. "Gender, Work, and Culture:

²²See for instance Thonemann (2020).

Why the Industrial Revolution Came Early to England but Late to China.” *Sociological Perspectives* 39 (1): 1–21.

Goldstone, Jack A. 2002. “Efflorescences and Economic Growth in World History: Rethinking the ‘Rise of the West’ and the Industrial Revolution.” *Journal of World History* 13 (2): 323–89.

Goldstone, Jack A. Forthcoming. “Dating the Great Divergence.” *Journal of Global History*.

Greif, Avner. 2006. *Institutions and the Path to the Modern Economy*. New York: Cambridge University Press.

Guldi, Jo, and David Armitage. 2014. *The History Manifesto*. Cambridge, UK: Cambridge University Press.

Hall, John A. 1986. *Power and Liberties: The Causes and Consequences of the Rise of the West*. London: Penguin Books.

Harley, C. Knick, and N. F. R. Crafts. 2000. “Simulating Two Views of the Industrial Revolution.” *Journal of Economic History* 60 (3): 819–42.

Harper, Kyle. 2017. *The Fate of Rome: Climate, Disease, and the End of an Empire*. Princeton: Princeton University Press.

Harper, Kyle, and Michael McCormick. 2018. “Reconstructing the Roman Climate.” In *The Science of Roman History: Biology, Climate and the Future of the Past*, edited by Walter Scheidel, 11–52. Princeton and Oxford: Princeton University Press.

Hicks, John. 1969. *A Theory of Economic History*. New York: Oxford University Press.

Hilt, Eric. 2017. “Economic History, Historical Analysis, and the ‘New History of Capitalism.’” *Journal of Economic History* 77 (2): 511–36.

Hoffman, Philip T. 2015. *Why Did Europe Conquer the World?* Princeton: Princeton University Press.

Hornbeck, Richard, and Martin Rotemberg. 2021. “Railroads, Market Access, and Aggregate Productivity Growth.” Unpublished.

Johnson, Noel D., and Mark Koyama. 2017. “States and Economic Growth: Capacity and Constraints.” *Explorations in Economic History* 64: 1–20.

Johnson, Noel D., and Mark Koyama. 2019. *Persecution & Toleration: The Long Road to Religious Freedom*. Cambridge, UK: Cambridge University Press.

Jones, Eric L. 2003. *The European Miracle: Environments, Economies and Geopolitics in the History of Europe and Asia*. 3rd ed. Cambridge, UK: Cambridge University Press. [1981].

Karayalçın, Cem. 2008. “Divided We Stand, United We Fall: The Hume–North–John Mechanism for the Rise of Europe.” *International Economic Review* 49 (3): 973–97.

Kennedy, Paul. 1987. *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000*. New York: Random House.

Ko, Chiu Yu, Mark Koyama, and Tuan-Hwee Sng. 2018. “Unified China and Divided Europe.” *International Economic Review* 59 (1): 285–327.

Koyama, Mark. 2015. Review of *The History Manifesto* by Jo Guldi and David Armitage. *Journal of Economic History* 75 (2): 584–87.

Koyama, Mark. 2019. “Political Economy.” In *Handbook of Cliometrics*, edited by Claude Diebolt and Michael Haupert. https://doi.org/10.1007/978-3-642-40458-0_54-1. Berlin and Heidelberg: Springer.

Kuran, Timur. 2010. *The Long Divergence: How Islamic Law Held Back the Middle East*. Princeton: Princeton University Press.

Lagerlöf, Nils-Petter. 2014. “Population, Technology and Fragmentation: The European Miracle Revisited.” *Journal of Development Economics* 108: 87–105.

Landes, David S. 2006. “Why Europe and the West? Why Not China?” *Journal of Economic Perspectives* 20 (2): 3–22.

Lieberman, Victor. 2009. *Strange Parallels: Southeast Asia in Global Context, c. 800–1830*. Vol. 2, *Mainland Mirrors: Europe, Japan, China, South Asia, and the Islands*. New York: Cambridge University Press.

Ma, Debin, and Jared Rubin. 2019. “The Paradox of Power: Principal–Agent Problems and Administrative Capacity in Imperial China (and Other Absolutist Regimes).” *Journal of Comparative Economics* 47 (2): 277–94.

MacLeod, W. Bentley. 2013. “On Economics: A Review of *Why Nations Fail* by D. Acemoglu and J. Robinson and *Pillars of Prosperity* by T. Besley and T. Persson.” *Journal of Economic Literature* 51 (1): 116–43.

Manning, J. G. 2018. *The Open Sea: The Economic Life of the Ancient Mediterranean World from the Iron Age to the Rise of Rome*. Princeton: Princeton University Press.

McEvedy, Colin, and Richard Jones. 1978. *Atlas of World Population History*. New York: Penguin Books.

Mokyr, Joel. 2007. “The Market for Ideas and the Origins of Economic Growth.” *Tijdschrift voor Sociale en Economische Geschiedenis* 4 (1): 3–38.

Mokyr, Joel. 2017. *Culture of Growth*. Princeton: Princeton University Press.

Montesquieu, Charles de. 1989. *The Spirit of Laws*. Translated and edited by Anne M. Cohler, Basia Carolyn Miller, and Harold Samuel Stone. Cambridge, UK: Cambridge University Press. [1748].

Morris, Ian. 2005. “Archaeology, Standards of Living, and Greek Economic History.” In *The Ancient Economy: Evidence and Models*, edited by J. G. Manning and Ian Morris, 91–126. Stanford: Stanford University Press.

Morris, Ian. 2010. *Why the West Rules—for Now: The*

Patterns of History, and What They Reveal about the Future. New York: Farrar, Straus and Giroux.

North, Douglass C., and Robert Paul Thomas. 1973. *The Rise of the Western World.* Cambridge, UK: Cambridge University Press.

Ober, Josiah. 2015. *The Rise and Fall of Classical Greece.* Princeton: Princeton University Press.

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." *Economic History Review* 64 (2): 408–46.

Olmstead, Alan L., and Paul W. Rhode. 2018. "Cotton, Slavery, and the New History of Capitalism." *Explorations in Economic History* 67: 1–17.

Olsson, Ola, and Gustav Hansson. 2011. "Country Size and the Rule of Law: Resuscitating Montesquieu." *European Economic Review* 55 (5): 613–29.

Parker, Geoffrey. 2013. *Global Crisis: War, Climate Change and Catastrophe in the Seventeenth Century.* New Haven: Yale University Press.

Pirenne, Henri. 1925. *Medieval Cities: Their Origins and the Revival of Trade.* Translated by Frank D. Halsey. Princeton and Oxford: Princeton University Press.

Pomeranz, Kenneth. 2000. *The Great Divergence: China, Europe, and the Making of the Modern World Economy.* Princeton: Princeton University Press.

Root, Hilton L. 2017. "Network Assemblage of Regime Stability and Resilience: Comparing Europe and China." *Journal of Institutional Economics* 13 (3): 523–48.

Rosenberg, Nathan, and L. E. Birdzell Jr. 1986. *How the West Grew Rich: The Economic Transformation of the Industrial World.* New York: Basic Books.

Rosenthal, Jean-Laurent, and R. Bin Wong. 2011. *Before and Beyond Divergence: The Politics of Economic Change in China and Europe.* Cambridge, MA: Harvard University Press.

Rowlands, Guy. 2002. *The Dynastic State and Army under Louis XIV: Royal Service and Private Interest, 1661–1701.* Cambridge, UK: Cambridge University Press.

Rubin, Jared. 2017. *Rulers, Religion, and Riches: Why the West Got Rich and the Middle East Did Not.* New York: Cambridge University Press.

Salter, Alexander William. 2015. "Rights to the Realm: Reconsidering Western Political Development." *American Political Science Review* 109 (4): 725–34.

Salter, Alexander William, and Andrew T. Young. 2019. "Polycentric Sovereignty: The Medieval Constitution, Governance Quality, and the Wealth of Nations." *Social Science Quarterly* 100 (4): 1241–53.

Scheidel, Walter. 2019. *Escape from Rome: The Failure of Empire and the Road to Prosperity.* Princeton and Oxford: Princeton University Press.

Schulz, Jonathan. 2020. "Kin-Networks and Institutional Development." Unpublished.

Schulz, Jonathan F., Duman Bahrami-Rad, Jonathan P. Beauchamp, and Joseph Henrich. 2019. "The Church, Intensive Kinship, and Global Psychological Variation." *Science* 366 (6466). <http://dx.doi.org/10.1126/science.aaau5141>.

Sng, Tuan-Hwee. 2014. "Size and Dynastic Decline: The Principal-Agent Problem in Late Imperial China 1700–1850." *Explorations in Economic History* 54: 107–27.

Spanish Succession. "The English Army." http://www.spanishsuccession.nl/english_army.html.

Thonemann, Peter. 2020. "But What If...: A Counterfactual Examination of the History of Europe." *Times Literary Supplement*, January 31.

Tilly, Charles. 1990. *Coercion, Capital, and European States, AD 990–1990.* Oxford: Basil Blackwell.

Turchin, Peter. 2009. "A Theory for Formation of Large Empires." *Journal of Global History* 4 (2): 191–217.

van Zanden, Jan Luiten. 2009. *The Long Road to the Industrial Revolution: The European Economy in a Global Perspective, 1000–1800.* Leiden, the Netherlands: Brill Publishers.

Voigtländer, Nico, and Hans-Joachim Voth. 2013. "Gifts of Mars: Warfare and Europe's Early Rise to Riches." *Journal of Economic Perspectives*, 27 (4): 165–86.

Wang, Yuhua. 2018. "Sons and Lovers: Political Stability in China and Europe before the Great Divergence." October. Unpublished.

Wickham, Chris. 2005. *Framing the Middle Ages: Europe and the Mediterranean, 400–800.* Oxford: Oxford University Press.

Wolke, Lars Ericson. 2018. *The Swedish Army of the Great Northern War, 1700–1721.* Warwick, UK: Helion and Company.

Wong, R. Bin. 1997. *China Transformed: Historical Change and the Limits of European Experience.* Ithaca, NY: Cornell University Press.

Xue, Melanie Meng. 2020. "Autocratic Rule and Social Capital: Evidence from Imperial China." Mimeo.