

**Two Paths to Prosperity:
Culture and Institutions in Europe and China, 1000-2000**

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Chapter 1

Introduction

1. The Question

Towards the end of the first millennium, China was ahead of Europe in many dimensions. China's population had grown from about 50 or 60 million in the early 700s AD, to about 100 million towards the turn of the millennium, and population growth is estimated to have averaged 0.87 per year during the Northern Song period, 960-1127 (Broadberry et al. 2018). The capital city of the Northern Song Empire, Kaifeng, had reached a million inhabitants including its nine suburbs (Fairbanks and Goldman 2006, p. 88). Western Europe, by contrast, was much less densely populated, particularly in the North. Although precise estimates are not available, there is little doubt that population growth excluding immigration was much smaller than in China, and no European settlements came close to the size of the largest Chinese urban centers in this period (Mitterauer 2010, p.20-25).

These demographic differences mirrored the gaps in agricultural productivity. Song China employed advanced agricultural techniques, including the use of new rice varieties, extensive irrigation systems, terrace farming, crop rotation, fertilizers. Its canals and waterways supported an extensive trade network. Northern China was not just the world most populous trading area, it also produced large amounts of iron, much of it for military use.¹ In Western Europe, the early Middle Ages did witness some improvement, especially in the introduction of wheeled ploughs and the slow adoption of the three-field rotation (White, 1962, pp. 39-78; Duby 1974, pp. 186-

¹ In 1078, Northern China produced more than 114,000 tons of pig iron per year, double the amount produced by England at the beginning of the 18th century (Fairbanks 2006, p. 88).

197). European agriculture was characterized by localized economies centered around self-sufficient manors with only thin trickles of trade with more remote regions, however, and any excess production would primarily serve local markets or the local feudal lords (Mitterauer 2010, p.24).

China was also ahead of Europe in its technological and scientific achievements outside agriculture. What Bacon regarded as the three major inventions known at the time, the compass, gunpowder, and printing, all originated in China. During the Song period, Chinese astronomers made significant contributions, Chinese medicine became more refined, knowledge transmission became more systematic thanks to the establishment of state-sponsored academies to prepare for entry in the state bureaucracy. Thanks to these innovations, there is evidence that as early as the Southern Song (1127-1279) Chinese ships navigated to India and to East Africa. Chinese nautical technology led the world, foreign trade was a major source of revenue, and government issued paper money circulated widely throughout the country (Fairbanks and Goldman 2006, p. 88). Although medieval Europe showed evidence that it was open to absorb technological and intellectual advances from China and Islam, it was clearly far behind in its capacity to innovate until the later Middle Ages.

The proximate cause of these gaps between East and West is easy to identify. China had a strong and effective unitary state, while Europe was virtually stateless. As explained by Scheidel (2019), despite intense and frequent internal wars during previous centuries, China had been able to preserve its state infrastructures. The state had maintained its coercive capacity, and was able to subordinate Chinese élites forcing them to cooperate with the state. This is reflected in a remarkable state capacity, that was also used to provide public goods such as defense, major

infrastructures, some elements of social order, a commonly accepted means of payment. During the Song, central tax revenue is estimated to have approached a tenth of total output, and could support an army of about a million soldiers (Scheidel 2019, p. 253). In Europe instead, the collapse of the Roman Empire had been so devastating and prolonged that, by the turn of the first millennium AD, state infrastructures had almost completely disappeared (cf. Strayer 1970). Political and military power was fragmented between a multiplicity of local actors in frequent conflict with each other, and cooperation could not be enforced beyond the local level (Scheidel 2019, chp. 7).

Nine centuries later, however, relative positions had totally reversed. Europe was dominating the world economically, politically and intellectually, while China had fallen behind in most dimensions. Around 1850, GDP per capita in China was about one fifth of that of the UK, one fourth of that of the Netherlands, and less than half of that of Italy (Broadberry et al. 2018). The Industrial Revolution, achieved thanks to European scientific and technological innovations, had transformed the European economies, while China remained stagnant and seemed to have lost its capacity to innovate. Several European nation states had developed sophisticated and inclusive political institutions and had acquired significant state capacity, with tax revenues of the order of 10% of GDP in the second half of the 19th century (Tanzi and Schuknecht 2000, Table III.1). In China, by contrast, state capacity had declined, with tax revenues falling below 2% during the 19th century (Zhang 2022, p. 4), and political institutions remained autocratic and unaccountable. European and Chinese societies also diverged in many other dimensions, such as their culture, their social organizations, their family structures, their educational institutions, their legal systems.

What explains this dramatic reversal of fortunes and the social and political bifurcation

between these two parts of the world? A recurrent explanation stresses again the contrast between a politically fragmented Europe and the early formation of a unitary central state in China. Because Europe was politically so fragmented, its rulers were exceptionally weak. When nation states finally began to emerge, in the Late Middle Ages, European rulers had to bargain with a plurality of local power holders, and this led to the formation of more inclusive political institutions. In China instead, centralized state infrastructures never disappeared, despite frequent internal struggles and their weakening over time. The asymmetry between a powerful center and weaker local élites was much more pronounced than in Europe, allowing autocratic political institutions to persist over time (Stasavage 2020; Jia et al. 2020).

In turn, it is commonly argued, European political fragmentation favored economic development in ways that could not happen in unified and more despotic China. In Europe, knowledge accumulation and innovation found it easier to escape censorship, because neighboring sovereign states competed for intellectual supremacy and were often in conflict with each other (Mokyr 2016). Frequent wars forced emerging European states to invest in tax capacity (Gennaioli and Voth 2015) and in military technology (Hoffman, 2015), and accelerated the process of urbanization, because walled and well-defended cities offered the needed protection (Rosenthal and Wong 2011). The more inclusive European political institutions also protected business interests, because economic power-holders enjoyed some degree of political representation (Acemoglu and Robinson 2012). None of this could happen in China, where an autocratic central state was in control of education, the sovereign did not face competition from comparable external rivals, and central authority had no interest in protecting property rights from political abuse. Thus, the great economic and institutional reversal is viewed as a byproduct of the same forces that

explain why China was ahead of Europe earlier on, namely the initial contrast between prolonged internal and external political fragmentation in Europe, and the early formation of a unitary central state in China.

Although these arguments contain many elements of truth, the importance of the distinction between prolonged fragmentation in Europe and early unification in China should not be exaggerated, when it comes to explaining the great divergence. After all, China too was subject to severe external threats and invasions, and it was frequently ravaged by wars and violence. Moreover, conflict did not only have beneficial side effects on the accumulation of state capacity and on city fortification; wars also brought lasting destruction and poverty. In fact, prolonged conflict between neighboring sovereign states and political fragmentation is not unique to Europe, and yet it did not bring about comparable effects on economic and institutional development in other parts of the world.²

In this book we address the issue of the great divergence and institutional bifurcation between China and Europe from a different perspective. Our approach does not deny the relevance of the contrast between fragmented Europe and unified China, but it adds other crucial elements that distinguished Europe from China around 1000 AD, emphasizing the importance of non-state social organizations and cultural traditions. These other initial differences enhanced the consequences of the contrast between fragmentation and unification. Our perspective not only contributes to explain the puzzle of the great divergence between Europe and China. It also illuminates more generally how the evolution of institutions and the process of economic

² Dincecco et al. (2019) show that pre-colonial warfare is positive correlated with indicators of state capacity and local economic development within India. Yet, overall India did not reach the levels of economic development of Western Europe despite comparable and long lasting political fragmentation. We return to a comparison between Europe and India in the concluding chapter.

development are shaped by culture and by the internal organization of society.

Before moving forward, some caveats are in order. Given the breadth of the questions that we investigate, we lump together large and heterogeneous geographic areas and time periods, neglecting important differences between them. With regard to space, there is some ambiguity as to the exact geographical definition of “Europe”.³ Throughout this book, we refer to Europe as that part of the European continent to the West of the “Hajnal line” between St. Petersburg and Trieste, although much of what we will say about “Europe” may not apply to some regions in the Mediterranean region. With regard to time, although our analysis covers the entire second millennium, two periods are of special interest, the period called the Middle Ages in European history and the Industrial Revolution. Yet the Industrial Revolution cannot be properly understood without a closer look at intellectual and technological developments in the two centuries before 1750. Our selective focus also implies that we neglect temporary reversals in the tendencies that we describe, and important differences within Europe and China, and between different time periods. That said, the two civilizations, despite regional variation, did have enough of a common denominator of its various components to make such an analysis meaningful.

It is also important to clarify at the outset one aspect of our conceptual framework. Following a recent literature discussed below (Tabellini 2008a, Enke 2019 and 2023, Henrich 2020), throughout the book we rely on the important distinction between universalistic vs communitarian value systems (or equivalently between generalized vs limited morality). This

³ The *Economist* Magazine recently (Sept. 29, 2023) reflected on the ambiguities of the concept of “Europe.” It noted that “English-speakers may call Europe “the continent”, but that is because their language evolved on an island off its coast. In fact it is simply a convoluted promontory of Eurasia. This sets geographers a puzzle: where does Europe end? The eastern border especially is fuzzy...The idea of Europe started with the ancient Greeks, who contrasted it with despotic, barbarian Asia...The Enlightenment sense of who belonged in Europe rested on Europeans’ alleged rationality and cosmopolitanism.” As we will see throughout this book, some other features were shared by Europeans, which may have been decisive in defining the role of the “Eurasian promontory in world history.”

distinction refers to how the intensity of moral sentiments changes with social distance between individuals. In a utilitarian and consequentialist approach, it also refers to how altruism is affected by social distance. A universalistic value system is one where altruism and moral sentiments are not very sensitive to social distance, and they apply with similar strength to friends and strangers. In a communitarian value system, by contrast, altruism and moral sentiments are much stronger towards socially close people than for strangers. As emphasized by Enke (2023), this distinction is about the *slope* of the relationship between altruism and social distance, but not about the average strength of altruism and moral sentiments. In particular, this logical distinction does not entail a judgement over which value system is morally superior. In the words of Enke (2023), a communitarian is a great friend to have, while a universalist is a great stranger to encounter. Thus, when using this conceptual framework to discuss the divergent histories of China and Europe, we do not want to imply that the Western Christian tradition that we argue is more universalistic, is in any sense morally superior to the more communitarian Confucian tradition. Throughout the course of history, Europeans pillaged and enslaved much of the rest of the world and committed heinous crimes, no less (and perhaps more effectively) than other civilizations. Nevertheless, as we shall see, we do argue that the differences between these two traditions were significant, and they contributed to the dramatic bifurcation in social arrangements, economic development and political institutions between China and Europe.

2. Social organizations and the enforcement of cooperation

Our starting point is the premise that sustaining cooperation outside of the narrow household is a major challenge for any society. A single nuclear household is simply too small to supply a host

of essential goods and services that have a public-good and club-good dimension, such as risk sharing, protection against theft and external threats, market and transportation infrastructures, settlement of disputes, education, and water management. In modern societies, cooperative behavior to provide these basic public and club goods is largely (though not exclusively) enforced by state agents, thanks to state laws and the state enforcement powers. But in the distant past, the reach of the state was much weaker or totally absent in many parts of the world. Even an effective state like in Song China did not have the resources to adequately provide these public goods and to enforce cooperation at the local level. Yet, cooperation was particularly essential at the local level, because difficulties in transportation and communication made social and economic interactions scarce over long distances. Without an adequate enforcement of local cooperation, life would have been all but impossible.

Our analysis builds on a basic observation: starting around 1000 AD, Europe and China settled on different ways of solving this problem. In both parts of the world, local cooperation was achieved through non-state social organizations. But the nature of these organizations differed. In China, cooperation was mostly sustained within kin-based social networks, the clan being the prototypical organization. In Europe, instead, a different kind of social organization gradually emerged to sustain local cooperation among individuals unrelated by kin. Following Greif (2006a), we refer to these European organizations as “corporations”. Examples of European corporations that emerged during the Middle Ages or later and persisted for several centuries are fraternities, guilds, monastic and religious orders, universities and academic associations, self-governing cities, and the modern business corporation.

Chinese kin-based organizations and European corporations performed very similar social functions: they shared risks, provided individual protection, facilitated market transactions, provided sources of finance, organized education, provided religious services, settled disputes, and they also interacted with the state in enforcing tax collection and providing military resources. Yet, they differed in one key respect: *with whom* one cooperated. Chinese clans and linages were associations of individuals who claimed to descend from a common patrilineal ancestor. European corporations were associations of individuals unrelated by kin, who got together for a specific purpose. Of course, there was large heterogeneity in the nature, scope and form of these social organizations within China and Europe, and over time. Nevertheless, Chinese and European methods of sustaining local cooperation were clearly distinct and became increasingly so during what in Europe is now called the later Middle Ages and the early modern era. In a word, Chinese clans were held together by their common kin. European corporations were held together by a specific common interest.

This basic distinction between corporations and kin-based organizations, in turn, implied other differences. Chinese clans and linages were multi-purpose organizations: the same kin-based network provided a variety of local public goods and club goods: ancestral ceremonies, risk sharing and protection, financing, dispute settlement, and so on. Many (though not all) European corporations, instead, were formed for a primary specific purpose, sometimes religious, other times economic or political, or to provide education.

This difference, in turn, had a second implication. Chinese kin-based organizations created a partition of society among mutually exclusive and ascriptive dynastic groups, often in competition with each other. There was no exit option for all intents and purposes. In Medieval

Europe, instead, individuals often belonged to several overlapping groups: their guild, their fraternity, their parish, their city and so on. European society was formed by dense overlapping networks and associations, and this diffused a practice of cooperation and conflict resolution among unrelated individuals in a variety of domains (cf. Reynolds 1997). As discussed below, this feature of European society made it easier to scale up cooperation from the local to the national level through inclusive political institutions.

A third and related implication of the difference between Chinese kin-based organizations and European corporations concerns the methods for enforcing cooperation and the governance of social organizations. Cooperation is easier to enforce between members of the same dynasty than among unrelated individuals, because of reciprocal altruistic ties. Moreover, the threat of exclusion is much more fearsome in a society formed by multi-purpose kin-based associations than in a society of overlapping and single purpose associations: once excluded from a Chinese kin-based network, an individual had nowhere else to go to seek protection. For both reasons, Chinese clans could rely mostly on informal methods of enforcing cooperation, whereas external and formal enforcement procedures had to be used in several European corporations. Related to this, Chinese clans were typically hierarchical organizations based on seniority, where elder members supposedly acted in the interest of the entire clan without much need or practice for consultation and accountability. European corporations, instead, being associations of unrelated individuals, carefully regulated collective decisions through consensual practices. Corporations too were hierarchical organizations, but their rules often spelled out membership rights, paying attention to agency problems and imposing checks and balances on the leaders' authority.

Why did these very different social arrangements to sustain local cooperation emerge and spread out in these two parts of the world? And how did they affect the subsequent evolution of political institutions and of economic development? These questions form the main building blocks of our analysis. The remainder of this chapter summarizes how we answer them.

3. Cultural origins of social organizations

For social organizations to survive the test of time, they have to be self-sustaining, and complementary with other features of society. In particular, they have to be consistent with the surrounding cultural context. Using the conceptual framework of social network analysis, social interactions exhibit a strong degree of homophily: individuals prefer to interact with people who are similar to them (Jackson 2008, p.100-101). But similar in which way? In China, similarity was primarily based on having a common ancestor. In Europe, similarity was based on other criteria, such as location (living in the same town), occupation (belonging to the same guild), or more generally sharing a common interest. So, the question of why kin-based organizations emerged in China and corporate organizations spread out in Europe at about the same time, can be posed as follows: why did Chinese prefer to interact mostly with kin, while Europeans found it easy to interact with strangers? The answer, suggested by Greif and Tabellini (2010) and (2017), is that, around the turn of the first millennium, these two parts of the world had different value systems – see also Henrich (2020) and Enke (2019).

During and after the Song dynasty, Neo-Confucianism had become the dominant culture in China. This doctrine stresses the importance of moral obligations towards kin, gives prominence to ancestors' worship, and considers kin-based values as the basis of social order. This

communitarian value system made it easier to sustain cooperation among kin, who were tied together by strong bounds of reciprocal loyalty. As Bol (2008) and many other scholars have pointed out, Neo-confucianism, as formulated especially by Zhu Xi (1030-1100) was to become a value system that was “the living faith of China’s elite down to the twentieth century” (Fairbank and Goldman, 2006, p. 98). In this system, interpersonal relations, including cooperation, were to be governed by filial loyalty, strict gender hierarchy, and respect between relatives.

Europe was very different. Like in most ancient societies, tribal and kin-based values were also widespread there after the fall of the Roman Empire, particularly as a result of the Germanic invasions. But tribal traditions and communitarian values were gradually undermined by the deliberate actions of the Church. Starting in the early middle ages, the Church actively discouraged practices such as adoption, polygamy, concubinage, consanguineous marriages, and marriage without the woman’s consent. As documented by Schulz (2022) and others, these Church policies influenced the European family structures: the extended family gradually became a less important organization, and was replaced by the nuclear family. Marriage in Europe increasingly became neo-local: a young couple would establish a new household, residing with neither parents. This made extended kinship cooperation less effective. This is not to say that extended kinship did not remain a central part of social life and that it did not continue to play an important role in many cooperative arrangements. But over time the nuclear family turned into the basic building block of society, and it required different arrangements.

Christian culture, as elucidated by the Church, also strongly rejected the values associated with unilineal descent groups, and strengthened the commitment towards bilateral descent. But large kinship groups are unfeasible if ancestry is determined by symmetric maternal and paternal

criteria, because the number of ancestors quickly becomes too large (cf. Roland 2020a). Last but not least, Church policies also contributed to reinforce universalistic values, by stressing that all human beings are equal in front of God, that individuals are responsible for their own choices, and that loyalty to the community of believers takes priority over kin-loyalty.⁴ Largely thanks to the Church influence, therefore, around the turn of the first millennium the prevailing value system in Europe contained elements of universalism that were absent in China, and kin-based ties were weaker, leaving individuals with less protection from the extended family. In such an environment, cooperation between unrelated individuals for a specific purpose became easier to sustain. It should be added that the Church's policies encouraging nuclear families and the European Marriage Pattern may not have been the only factors in the evolution of Europe's social organizations. European agriculture, depending as it did on livestock, created opportunities for women that may not have existed elsewhere and thus contributed to unique developments such as relatively late marriage and neo-locality, a topic to be discussed in the next chapter.

Cultural traits are not determined once and for all, but they are continuously shaped by the social and economic environment. The different social organizations that began to emerge in China and Europe to sustain cooperation, in turn, exerted strong feedback effects on prevailing culture. As shown by Tabellini (2008a), an environment in which most interactions occur within a kin-based social network reinforces kin-based and communitarian values. Conversely, frequent interactions among socially distant people reinforces generalized trust and universalistic values.⁵

⁴ In line with this, Bergeron (2019) shows that exposure to former Christian missions in DR Congo is correlated with more universalistic values and preferences in lab-in-the field experiments.

⁵ Tabellini (2008a) models the distinction between communitarian vs universalistic values with reference to how rapidly moral obligations decay with social distance. Following Platteau (2000) and Banfield (1958), he refers to these value systems as limited vs generalized morality. Enke (2019) uses the terminology of communitarian vs universalistic values, and we use these terms throughout the book.

The diffusion of communitarian or universalistic values, in turn, further consolidates social organizations that are complementary with the prevailing culture. Thus, the complementarity between values and organizations can amplify initial differences, leading to progressively larger social and cultural bifurcation between societies that started with initially different cultural traits or social conditions. This is what happened in these two parts of the world. At the turn of the first millennium AD, differences in prevailing values and organizations between China and Europe could be detected, although we don't know with certainty how significant they were. Over time these differences became more pronounced and widespread, however, as the two societies evolved along different paths. As we discuss next, interactions with state institutions and different patterns of economic development reinforced these complementarities and the resulting bifurcations.

Recent scholarship has increasingly stressed the importance of cultural difference and family structures in the Great Divergence. Many ideas in this book are consistent with the important work of Henrich (2020), Schulz et al. (2019), and Enke (2019). These authors, too, discuss the contrast between Europe and China, emphasizing the uniqueness of European economic development and cultural evolution relative to the rest of the world. Their work explores the psychological and cultural foundations that differentiate Europeans from other populations, and also stresses the important cultural role played by the Church in European history, and the link between communitarian value systems and strong historical kinship ties. Relative to this line of research, we are more specific about the historical mechanisms that contributed to the economic and institutional divergence between China and Europe, and we discuss more extensively how divergence derived from the interplay among cultural, organizational, and institutional factors. We

refer more precisely to these contributions in context, in the following chapters.⁶

4. Social organizations and institutional bifurcation

In supplying local public goods and social services that the state could not adequately provide, social organizations acted as substitutes for the state at the local level. This substitution was often spontaneous and implicit, but in other instances it was explicitly recognized by the state who used social organizations as agents of a decentralized administration. Thus, self-governing cities in Europe administered justice, enforced tax collection, organized the provision of military resources, built infrastructures. Similarly, Chinese clans settled disputes, provided poor relief, assisted state magistrates in enforcing tax collection, were responsible for fielding soldiers. Through these roles, social organizations often had a symbiotic relation with the state: they influenced the evolution of state institutions, and they were also shaped and reinforced by interacting with the state. But the details of how this happened differed in Europe vs China, because of the different features of clans and corporations, and this contributed to set these two worlds increasingly apart from each other. In particular, the respective internal organization of society amplified the effects of political fragmentation in Europe, and of an early unitary state in China.

The evolution of legal systems is a striking example. In China, where the state was stronger from the beginning, the legal system was designed top-down with two main goals: to maintain

⁶ Our approach is also related to the interesting work of Gorodnichenko and Roland (2017) and Roland (2020a). Their distinction between individualistic vs collectivistic societies is conceptually and empirically not the same as our distinction between communitarian vs universalistic values, however. Communitarian cultures entail a strong attachment to a local community, and in this sense they are also more collectivist. As stressed by Enke (2023), however, the distinction between universalistic vs communitarian value systems is about how fast altruism changes with social distance, whereas the distinction between individualistic vs collectivistic cultures could also be interpreted as referring to the overall amount of altruism. Moreover, while these authors mostly emphasize statistical correlations between cultural features and economic and political outcomes, we build our arguments from historical analysis and put social organizations at center stage.

stability and to govern relations of the public administration with its subjects. Civil law only had a secondary role, because commercial disputes were primarily resolved by clans through arbitration and compromise. State magistrates would be involved only if settlements by clans had failed. In Europe by contrast, where the state was initially much weaker, the legal system had a bottom-up origin, and corporations influenced its evolution both on the demand and on the supply side. The prevalence of impersonal exchange and of contractual arrangements among unrelated individuals in Europe created a demand for external enforcement and well-functioning legal institutions, and provided the basis for the evolution of commercial and civil law. Legal principles first appeared in private contractual agreements within or between corporations, then they evolved as best practices in the community of merchants, accompanying the commercial revolution in the 12th and 13th centuries, and eventually were codified in the law. This process was also influenced by corporations on the supply side, because the codification and generalization of best practices was carried out by jurists and legal scholars who had served as administrators of corporations or had received specific training by corporations.

The way in which the legal system evolved in Europe and the priority given to civil law, in turn, had several important implications. First, it clarified the nature of corporations as separate legal entities and holders of specific rights. This in turn made corporations more powerful and resilient, and facilitated their acquisition of political rights and prerogatives. Second, the fact that legal institutions emerged very early on, at the beginning of state formation, also influenced how political institutions evolved. The administration of justice and law enforcement were among the first functions performed by European sovereigns, and specialized institutions emerged to deal with domestic affairs. This sequence in the emergence of state functions gave prominence to the

principle of the rule of law. The idea involved the notion that legislative and executive sovereign authority are limited by a pre-existing body of law, and the principle (if not the practice) of equality before the law. The early emergence of judicial state functions in Europe also explains the relevance acquired by national parliaments. As discussed by Boucoyannis (2021), early parliamentary assemblies performed several judicial functions of public importance, like resolving disputes between nobles or other power holders, overseeing instances of corruption by judges and other administrators, and addressing petitions.

European corporations also influenced the evolution of political institutions in a more direct way: they provided a concrete example of how to regulate collective decisions through consensual practices. Thanks to the diffusion of corporate arrangements throughout society, European citizens were used to consensual practices. Their notions of fairness and legitimacy derived from first-hand experience with guilds, city charters, religious organizations and other corporations. And more concretely, jurists and scholars who thought about political institutions were acquainted with how collective decisions were regulated within corporations. As a result, several principles of corporate governance were transplanted and adapted from corporations to political bodies. Two prominent examples are the principle of representation, namely the notion that a delegate can bind the group that it represents, and the majority principle (as opposed to unanimity). These principles, like several others, first emerged in corporations and were subsequently adapted to political institutions.

Ecclesiastic organizations played a special role in this process. The Church itself can be seen as a corporate body, and scholars of canon law thought carefully about how to regulate collective decisions inside religious organizations, drawing on their personal experience with the

administration of other corporations. Often the sequence first involved the adaptation of a norm of private law into the church administrative structure, and then its return in the secular domain as a constitutional norm (Tierney 1982).

None of this could happen in China, since kinship organizations relied on informal and more hierarchical governance principles, often based on seniority. On the contrary, the Neoconfucian doctrine of ancestors' worship and kin loyalty strengthened the legitimacy of the emperor, who promoted himself as the patriarch of an enlarged family, and his dynasty as chosen from heaven. The Chinese state had a long tradition of relying on a powerful and effective central bureaucracy. But unlike in Europe, its members were not recruited on the basis of their previous administrative experience in the civil society. They were selected through a demanding civil service exam, that required a long ad hoc preparation and extensive training in Confucian doctrine. This meritocratic process had several advantages from the perspective of regime stability. It created a cohesive social group of talented administrators sharing a basic ethical outlook, who had a large stake in preserving the regime, while at the same time severing the ties between each one of them and their clans of origin. This too contributed to prevent the rise of powerful elites or external social groups that could challenge imperial authority.

Arguably the diffusion of corporations in European society, by itself, cannot explain why the political institutions that emerged in Europe were more inclusive than in China. Certainly, this also reflected the greater initial political fragmentation in Europe, and the much weaker bargaining power of European sovereigns vis à vis other elites. Nevertheless, the internal organization of society amplified the effects of this contrast between a fragmented Europe and a unified China, by providing concrete examples of how governance could be arranged, and by shaping expectations

of fairness and legitimacy.

Two sets of corporations had a particularly strong impact on the evolution of European political institutions: the Church and self-governing towns. As already discussed, the Church played a critical role in eroding extended kinship values and in providing a successful example of how corporate governance principles could be adapted from the private to the public sphere. In addition, after the Investiture conflict in the late 11th century, the Church also deliberately enhanced European political fragmentation, by strategically undermining centralization of political powers between and within the emerging nation states (Møller and Stavnskaer Doucette 2022, Grzymala-Busse 2023). One reason why the Church could do this so effectively, retaining its independence from secular political powers, was that it had organized itself as a corporate structure with ramifications throughout Europe. It is interesting to note that in China Buddhist monasteries, who had not formed a congregation but were isolated and self-relying entities, did not survive as a political power once the Tang emperors became hostile.

Self-governing cities, too, exerted a key influence over the evolution of European political institutions, enhancing the effects of the initial political fragmentation. Like Chinese clans, self-governing cities enforced tax collection and contributed to other aspects of decentralized administration. But unlike Chinese clans, these corporate organizations had exclusive control over their territory. This enhanced their bargaining power against sovereigns, who did not yet have adequate resources to collect tax revenues on their own. When their financial needs were particularly acute, like in war episodes, sovereigns had to concede political rights to self-governing cities, in exchange for the additional tax resources. Often, these political rights took the form of representation in national parliaments. A key step in the evolution of European parliaments is the

inclusion of representatives of corporate groups in pre-existing councils of nobles. As shown by Cox et al. (2023), this step only occurred in Europe, but it was much more likely to happen if two conditions were satisfied: first, the presence of self-governing cities; second, the occurrence of wars. In other words, conflicts did facilitate the emergence of inclusive political institutions, but only in the presence of sufficiently strong corporate organizations, like self-governing cities. China too had large urban centers, but they had little autonomy and did not have an important role in decentralized state administration. Dynastic organizations, which instead did play an important administrative role, were not sufficiently powerful to extract political concessions. One reason is that their dynastic origin limited their scale, and did not allow them to have exclusive control over their territory except perhaps in scarcely populated areas.

The fact that corporate and territorial interests had political representation in Europe but not in China, helps to explain the divergent paths in their tax capacity. In Europe, the corporate groups responsible for tax collection eventually gained political rights to influence how revenues would be spent, and this made it easier to raise revenues in times of need. In China, clans who enforced tax collection had no political representation, nor could they influence the state bureaucracy and had no say on what government funds would be spent on. As a consequence, the agency problems and the resulting corruption were much more severe in China than in Europe. In the long run, this state of affairs turned out to be fatal to state capacity in China.

5. Social organizations and the great divergence

The different social arrangements in China and Europe also shaped economic development, in several ways. The most important reason why Europe surged ahead of China in the 18th and 19th

centuries is because the Industrial Revolution occurred in Europe and not in China. Of course, this was not due to chance, and social organizations are part of the explanation of why it happened.

The Industrial Revolution was driven by a host of scientific and technological innovations. European corporations were at the heart of this creation and accumulation of knowledge, following a tradition going back several centuries. Monasteries, Universities and later scientific societies -- all corporate organizations --- played a crucial role in intellectual and technological innovation. European states were not a direct part of this creative process, but the European political environment, as it had evolved since the fall of the Roman Empire, facilitated scientific and industrial innovations in three ways. First, the polycentric nature of political power, divided between a plurality of polities in competition with each other, allowed innovators to escape censorship and suppression by conservative powers. Second, the Christian churches, despite an ambiguous and often inconsistent relationship with useful knowledge, on balance created conditions that turned out to be conducive to technological progress (even if that was not the intention) . Third, business interests enjoyed some political representation, and this limited state interference with wealth accumulation and market functioning.

In China, by contrast, knowledge accumulation and education were largely controlled by the state administration. Clans has an important role in the provision of education, but the purpose of schooling was to prepare students to pass the civil service exam. Hence, the content of education was entirely determined by the state, and mandarins and government officials largely controlled the market for ideas and intellectual innovation. Moreover, the Chinese bureaucracy increasingly privileged the study of traditional Confucian doctrine, bent primarily on social peace and preserving regime stability. This conservative intellectual environment became particularly

detrimental in later centuries, once innovation in Europe was driven by highly trained experts, such as chemists, engineers, and mechanics.

In addition to their role in knowledge accumulation and scientific discoveries, European corporations contributed to European economic progress in at least two other ways. First, they facilitated the creation of thick and well-functioning financial markets and the diffusion of long-distance trade. Arms-length financing of major trade and business ventures, such as the East India Companies, were used in Europe at least a century before similar instruments started to appear in China (Harris 2020). These impersonal economic arrangements reflected a long tradition of economic and social interactions among unrelated individuals, and a legal system that facilitated such interactions. The Chinese social environment, where social and economic networks were predominantly among related individuals, found it much more difficult to transit from a local to a global and impersonal economy. This was not a handicap early on, when transactions were primarily local, but it became a liability when lower transportation and communication costs increased the relevance and frequency of transactions among strangers.

Second, European industrialization was also facilitated by the organization of production made possible by the model of a business corporation. In a capitalist firm, investment decisions are made by capital owners who are the residual claimants of the returns from investment, while labor earns a fix wage. This organization of production creates strong incentives to invest in labor savings innovations, because the returns accrue to those who control the investment decision. Moreover, the separation of ownership and control implies that business corporations can be easily scaled up in an environment of well-functioning financial markets. European economies could reap the advantage of this mode of production during the Industrial Revolution, because their economies

were already organized along these lines also in agriculture. Gregory King estimated in 1688 that perhaps two-thirds of the rural population owned little or no land (cited by Overton, 1996, p. 178), and the 1851 Census reported that 73 percent of the population in the countryside consisted of wage earners. In China, by contrast, household production was more common, because land concentration was much smaller, and labor sharing arrangements were much more prevalent. Wage labor employed in agriculture is estimated to have been less than 10% of the rural population in a comparable period. In this environment, clans were responsible for the survival of their members, and thus they drew no benefit from replacing labor with machines. Consequently, labor-saving innovations (such as mechanization) were less attractive, unless production could quickly be scaled up in proportion to the productivity enhancements. Moreover, control rights over investments typically rested with senior clan members, who were less inclined to innovate.

6. General lessons

A large literature has argued that culture directly influences economic outcomes and the functioning of existing institutions, by shaping the beliefs and values of individuals (Greif, 1994; Guiso et al. 2006, Tabellini 2008b, Roland 2020b). Culture is viewed as an important mechanism of historical persistence because, although endogenous, it is slow moving, so that current cultural traits often reflect features of the distant social and political environment. Our analysis of the Great Reversal points to another mechanism of cultural persistence and cultural influence: the embedding of specific cultural traits in social organizations. Culture (whether Catholic religion or Confucian doctrine), and in particular the difference between communitarian vs universalistic values, influences with whom people cooperate to create local public goods, which social networks

are formed, and how this local collaboration is sustained. Once these networks crystallize in an organization form, they exert an unintended and lasting influence on economic and political outcomes. In other words, the effects of culture are not only direct. They are also mediated by social organizations that are complementary with specific cultural traits. Once in place, these social organizations are hard to dismantle, and they contribute to spread and maintain the cultural foundations on which they are built.

The history of China and Europe exemplifies how, through social organizations, culture influences the evolution of political institutions, and vice versa how the state reinforced specific cultural traits. Here too, the interaction between culture and institutions is not only direct, but it is also mediated by social organizations. Historically, social organizations like clans and corporations fulfilled important administrative functions and had a significant control on day-to-day life. They could thus be exploited by the state as pillars of its decentralized administration. This interaction was a source of reciprocal influence. On the one hand, social organizations were strengthened by acting as agents of the state. On the other hand, the evolution of state institutions also reflected the nature of underlying social arrangements.

Little of this was in place at the start of the second millennium, but the seeds of the divergence were there already. The history of China and Europe during the second millennium AD illustrates how initially small differences in prevailing cultural traits, or specific historical circumstances that led to cultural innovations (like a new norm introduced by a religious authority), can set in motion a lasting process of progressive cultural, social and institutional bifurcation.

Although the book focuses on the historical divergence between Europe and China, the analysis of social organizations can also shed light on other historical episodes, and on other

problems of institutional and economic development. The fundamental challenge of state formation is how to scale up cooperation from the local to the national level. Most societies have found ways to sustain cooperation locally, within small communities such as tribes, villages, clans or other small groups. But scaling up cooperation among strangers poses new challenges, and requires different social arrangements. Our historical analysis of China vs Europe, and the work of Henrich (2020), Schulz et al. (2019), Schulz et al., (2019), suggest that these challenges are more easily met in societies where universalistic values are widespread and social organizations have evolved to sustain cooperation among strangers, like with the European corporations. In China, cooperation was scaled up and conflicts were resolved thanks to the early emergence of a strong autocratic regime, that relied on the enforcement powers of a centralized bureaucracy. In Europe, peaceful resolution of internal political conflicts and the emergence of inclusive political institutions were facilitated by widespread social practices that regulated cooperation among strangers. But the European path of economic and institutional development took centuries. Can this process be accelerated? And how can cooperation be scaled up in social environments where communitarian values are prevalent, and social organizations facilitating interactions among strangers have not yet emerged? Addressing these difficult questions is of fundamental importance for future research on economic and political development.

7. Book outline

The rest of the book is organized as follows.

In the next chapter we review the debate on the great divergence. We describe the reversal of economic fortunes between China and Europe in detail, and the many dimensions of their

divergence between the 11th and 19th centuries, critically discussing some explanations that have been put forward in the literature. The chapter emphasizes two initial differences between China and Europe that arguably played an important role in their subsequent divergence: the contrast between internal and external political fragmentation in Europe vs early unification under a strong central state in China, and their different family structures.

In Chapter 3 we lay out our conceptual and analytical framework, explaining the two mechanisms that are central in social and cultural bifurcation. First, the prevalence of communitarian vs universalistic culture leads to different organizational forms to sustain local cooperation. Second, the diffusion of one or the other organizational forms (between kins vs between strangers) contributes to spread cultural traits that are complementary with the prevailing social organizations. The central conclusion of this chapter is that initially small differences in cultural traits or in organizational forms can set in motion a lasting process of cultural and social bifurcation between societies that start from different initial conditions. We discuss how this conceptual framework applies to China vs Europe, and summarize the main logical implications of the analysis that are more thoroughly investigated throughout the remainder of the book.

In chapter 4 we describe the main cultural differences between China and Europe at the start of the first millennium, tracing their origin to the revival of Confucianism in China after c. 1000 and to the norms advocated by the Catholic Church in Europe at about the same time. We also discuss how these different doctrines influenced family structures and the resulting different importance of kinship ties in these two parts of the world. We point out that the influence of the Church went beyond family ties and norms of good behavior. The Church also provided a concrete and influential example of how to design corporate structures in a complex and large organization

of unrelated individuals.

Chapter 5 extensively documents the prevalence of kin-based organizations in China vs corporate arrangements in Europe, describing in detail the key features of these social organizations, and when and where they emerged. We identify key differences and similarities between them, and discuss how they evolved through time and space.

Chapter 6 discusses in detail the most important corporations that spread out in Europe during the Middle Ages: fraternities, monasteries, guilds, universities and self-governing cities. We also contrast these organizations with their corresponding Chinese counterparts during the same period, when they existed. Although the concept of corporation is often associated with the modern business firm, which emerged in Europe in the early 17th century, these Medieval corporate structures did not serve primarily an economic purpose (except for guilds). Instead, they fulfilled other social functions, including important political ones that required some form of cooperation. Business corporations also emerged in China, although much later than in Europe. But importantly, unlike in Europe, Chinese corporations never acquired much of a role in the political and public sphere.

Chapter 7 discusses institutional divergence. We first summarize the key features of Chinese state institutions, discussing why they remained stable over several centuries despite dynastic changes and internal wars, and emphasizing their complementarity with the prevailing kin-based social organizations. We discuss the emergence and evolution of state institutions in Europe during the Middle Ages, explaining how they were influenced by the corporate structures that permeated European society. We also stress the special role that two uniquely European corporations, the Catholic Church and self-governing cities, played in the evolution of European

political institutions. The main theme of this chapter is that the different organization of society in these two parts of the world amplified the effects of the historical circumstances that, during the second half of the first millennium, led to a politically united China vs a politically fragmented Europe

Chapter 8 discusses other aspects of the institutional bifurcation between China and Europe, that resulted from the interaction of the state with prevailing social organizations. In China, the state exploited the enforcement power of clans in its decentralized administration. European states did the same with self-governing cities. This interaction strengthened these social organizations, but also shaped the evolution of state institutions. In this chapter we illustrate the bifurcation between China and Europe, by discussing how their different social organizations shaped the evolution of their legal systems and of state capacity.

Chapter 9 turns to economic divergence, discussing why the Industrial Revolution occurred in Europe and not in China. We start by arguing that geography alone is not an adequate explanation. Instead, this chapter emphasizes the role of corporations and a universalistic set of values in the scientific and technological innovations that led to the Industrial Revolution, and explains why similar innovations did not happen in China.

In Chapter 10 we discuss modern China. The main question is how to explain China's exceptional economic convergence with the West after the death of Mao. We emphasize two aspects of historical continuity, that facilitated economic convergence. First, although the Maoist cultural revolution deliberately sought to erase clans and Confucian traditions, kin-based social networks re-emerged in China after Mao. These social networks absolved important economic functions in an environment of weak property rights and lack of familiarity with global

markets. For instance, the Chinese diaspora abroad, which had retained links with the motherland, acted as intermediary between China and the rest of the world. The second aspect of historical continuity is in the political sphere. Although sustained by a different political ideology, the post Mao system of government bore many similarities with the imperial regime. In particular, starting with Deng, local administrators enjoyed considerable leeway and discretion in initiating policy changes and reforms, but, as in the distant past, their careers were tightly controlled by the center through meritocratic performance criteria. With a new emphasis on economic growth, rather than stability and revenue maximization, this system of decentralized administration created strong incentives for local officials to promote economic development. The chapter concludes with a discussion of whether Chinese growth can continue under the centralization of power imposed under Xi Jinping.

Finally, chapter 11 concludes, drawing some comparison with India and the Islamic Middle East, and discussing some general lessons that can be drawn from our historical analysis.