1

Introduction

The process of modern economic development first began in Europe.[1] Yet modern Europe's most prosperous zones are located exactly where for hundreds of years military conflict was most rampant. Italy exemplifies this paradox. Today, northern Italian regions are wealthy, while many southern Italian regions remain poor.[2] Average per capita GDP is more than 50 percent higher in the north (Table 1.1). However, northern regions saw far more historical warfare than did southern regions. Between 1000 and 1799, there were nearly three times as many recorded major conflicts in the north (Table 1.1). For perspective, the typical modern civil war increases the amount of citizens who live in absolute poverty by 30 percent (Collier et al., 2003: 17). If warfare inevitably spawns a legacy of poverty, however, then how can we explain the robust positive relationship between historical warfare and regional prosperity today in Italy? In our view, any convincing account of Europe's "economic miracle" (Jones, 2003) must make sense of the apparent contradiction between wealth on the one hand and warfare on the other.

This book provides an explanation for Europe's puzzling historical path from warfare to wealth. Our argument runs as follows. The ninth-century fall of the Carolingian Empire gave rise to a high level of political fragmentation in Europe.[3] From (at least) this point onward, warfare was an enduring feature of Europe's historical landscape. Historical warfare inflicted many costs on rural populations. A basic historical function of the city was security. To mitigate the rural costs of conflict, rural populations migrated to urban centers. Following Glaeser and Shapiro (2002: 208), we call this phenomenon the "safe harbor effect." Over time, the city's historical role as a safe harbor translated into local economic

TABLE 1.1 *Historical Warfare and Per Capita GDP Today: Northern versus Southern Italy*

	Total Number of Conflicts, 1000–1799	Average Per Capita GDP (PPS), 2001–5
North	86	27,463
South	30	17,930

Notes: Per capita GDP (purchasing power standard units) is averaged over each NUTS2 region in the north and south, respectively. Historical warfare sums the number of recorded major conflicts over 1000–1799 within each NUTS2 region in the north and south, respectively. We describe our conflict database in detail in Chapter 2. We define the north and the south according to Malanima (1998: 95). "North" refers to the regions of Emilia Romagna, Liguria, Lombardy, Piedmont (including the Aosta Valley), and Veneto (including Friuli Venezia Giulia). "South" refers to the regions of Abruzzo, Apulia, Basilicata, Calabria, Campania, and Lazio.
Sources: Bradbury (2004) and Clodfelter (2002) for historical warfare and Eurostat (http://ec.europa.eu/eurostat) for per capita GDP.

development through several channels: the establishment of local privileges, including self-governance and property rights protections from predatory outside rulers; technological innovation and human capital accumulation; and economic agglomeration effects. We label this process the "warfare-to-wealth effect."

We focus on historical development at the city level (versus the national level) for this reason: urban development underpins national economic development (Glaeser, 2011: 1–2; Glaeser and Millett Steinberg, 2016: 4–7). Figure 1.1 illustrates the strong positive correlation between the urbanization rate and per capita GDP across modern-day nations.[4] Contemporary Europe's economic backbone is the urban belt – the regional urban corridor that runs from southern England to northern Italy through Belgium, the Netherlands, and parts of France and Germany (Figure 1.2). Average per capita GDP today is nearly 40 percent higher in the urban belt than the nonurban belt (Table 1.2). Modern Europe is predominantly urban (United Nations, 2015: 10), but things were not always this way. After the fall of the Carolingian Empire roughly one millennium ago, Europe's urbanization rate was approximately 3 percent (van Bavel, Bosker, Buringh, and van Zanden, 2013: 394). To truly understand the roots of long-run prosperity in

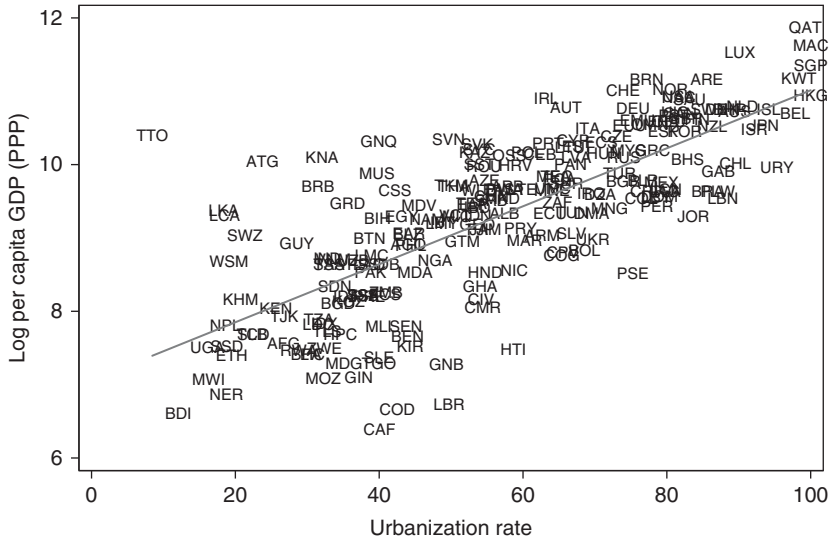

FIGURE 1.1 Per Capita GDP and the Urbanization Rate, 2015
Notes: Log per capita GDP is based on purchasing power parity (PPP). Urbanization rate is the percentage of the population living in urban zones as defined by national offices of statistics.
Source: World Bank (http://data.worldbank.org).

Europe, therefore, we must explain the historical transformation from countryside to city.

Our book has implications for three long-standing questions in the social sciences. First, which factors explain the economic rise of Europe? Second, where does state capacity come from? Third, are the lessons drawn from the European development experience universal?

To explain, we now trace each step of the book's argument according to the flowchart in Figure 1.3.

POLITICAL FRAGMENTATION

The book's period of analysis starts in the aftermath of the ninth-century fall of the Carolingian Empire, which gave rise to (or restored) a high level of political fragmentation (Strayer, 1970: 15; Hoffman, 2015: 123). Tilly (1992: 45) estimates that there were upward of 500 independent states in late medieval Europe. Average state size was small, at approximately 25,000 square kilometers – roughly equivalent to the size of modern-day

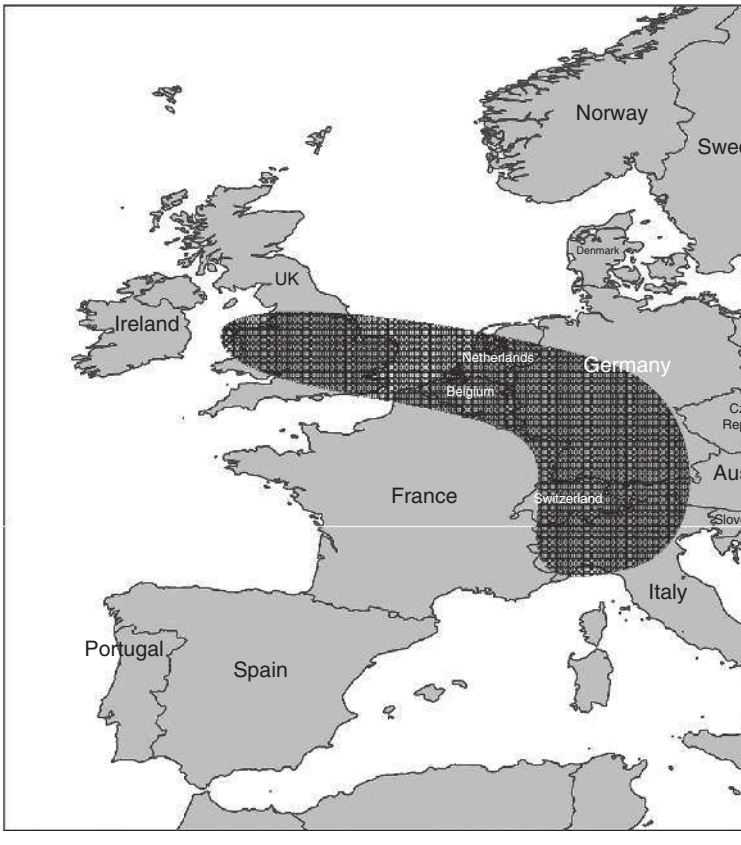

FIGURE 1.2 Europe's Urban Belt
Note: We base this map on Polèse (2009: xv).

TABLE 1.2 *Per Capita GDP: Urban Belt versus Nonurban Belt*

	Urban Belt 2001–5	Nonurban Belt 2001–5
Per Capita GDP (PPS)	26,002	18,907
Observations	56	203

Note: Per capita GDP data for NUTS2 regions is averaged over 2001–5 (using purchasing power standard units).
Source: Eurostat (http://ec.europa.eu/eurostat).

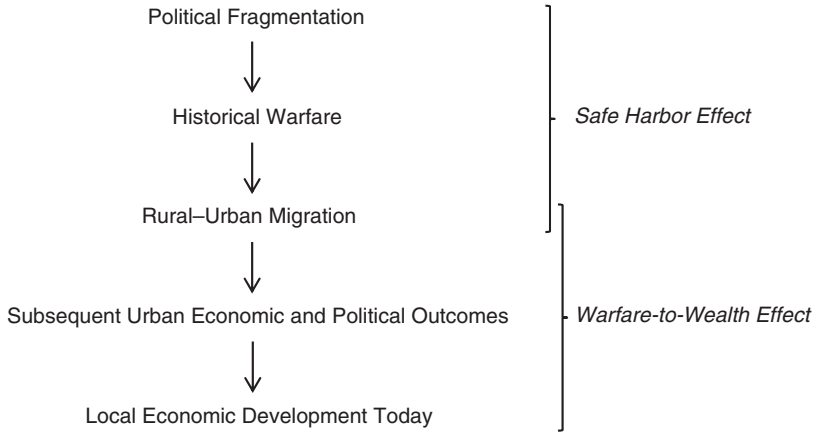

FIGURE 1.3 From Warfare to Wealth: Flowchart

El Salvador or Armenia (Tilly, 1992: 45). The high political fragmentation that resulted from the fall of Charlemagne's empire made instability and warfare more likely (van Zanden, 2009: 34), thereby increasing the city's importance as a safe harbor.

Scholars have analyzed the relationship between political fragmentation and long-run economic and political development in Europe. Jones (2003: 104–26) contends that the high historical dispersion of economic and political power was advantageous, because no central authority could impose policy decisions that would block progress for the "states system" as a whole.[5] According to Landes (1998: 29–44), historical political fragmentation promoted "preemptive" good governance, in order to

prevent individuals from switching allegiances from one polity to another.[6] Mokyr (1995: 17–19) relates historical inter-unit competition between states to technological innovations for the states system overall.[7] However, this literature does not study the implications of political fragmentation and warfare for the historical transformation from countryside to city, which we do in this book.

RURAL–URBAN MIGRATION

The economic effects of modern-day migration can be large. Clemens (2011: 85), for example, finds that the potential gains from lifting international policy barriers to labor mobility today range from 50 to 150 percent of world GDP. In European history, de Vries (1984: 222) calls migration the "linchpin of the urban economy and regulator of urban growth." We now review different explanations for historical urbanization in Europe with respect to our argument.

War-Related Migration

Several explanations for urbanization patterns in European history highlight political fragmentation and warfare.

Blaydes and Paik (2016) focus on the role of the Holy Land Crusades over the 1100s and 1200s. According to their argument, Crusader travels between northwest Europe and the Mediterranean Holy Land helped integrate the former region into east–west trade networks, because merchants could exchange textile products for luxury goods, including silk, spices, and porcelain. In turn, urban centers in the northwest (e.g., Bruges) became important trade hubs, promoting city population growth. Voightländer and Voth (2013a, 2013b) highlight the fourteenth-century Black Death (1347–50), which killed at least 30 percent of Europe's total population (Boone, 2013: 229). They contend that, by depleting the rural population, wages in the countryside rose. In turn, there was greater demand for urban manufactured goods, which promoted urbanization and trade. By helping spread disease, warfare kept mortality rates high. Thus, the interactions between disease, urbanization, and warfare help explain medieval Europe's economic takeoff.

Both the Holy Land Crusades and the Black Death were undoubtedly important historical events. Rather than analyze the consequences of a specific historical shock, however, we study the general process by which warfare promoted rural–urban migration in preindustrial Europe

as a whole. Furthermore, unlike Blaydes and Paik (2016), we study the consequences of within-Europe or "nearby" warfare – versus overseas or "faraway" warfare – for historical urbanization patterns.

Rosenthal and Wong (2011: 99–128) offer the argument that is the closest in spirit to ours. They contend that historical warfare induced an urban bias to artisanal activity in Europe. In contrast to agricultural activity, artisanal activity was not intrinsically bound to the land. Artisanal capital was not only mobile, but also prone to looting by troops along the war march. Thus, rural artisans under war threats preferred to relocate capital behind the relative safety of urban fortifications. Because of high urban wages and low borrowing costs, new urban manufacturers then had an incentive to substitute capital for labor, thereby promoting technological change.

We go beyond Rosenthal and Wong's contribution in several ways. First, we put forth new types of qualitative evidence to document the city's historical role as a safe harbor. Second, we develop a new conceptual framework to explain the relationship between historical warfare and long-run economic development. In our account, urban capital bias is only one of a handful of channels through which the city's role as a safe harbor could improve local economic performance. Third, we construct a new quantitative database that spans one thousand years, from the aftermath of the fall of the Carolingian Empire to the present day. Our effort to collect such a complete database makes this book stand out relative to much of the previous literature, and not just Rosenthal and Wong. To the best of our knowledge, our database is the first attempt to identify and geocode all major military conflicts fought on land in pre-industrial Europe. Fourth, we favor systematic methods, including statistical analysis, which enable us to reach well-grounded conclusions. In particular, systematic methods enable us to control for many of the alternative explanations put forth by previous scholars. Thus, we can have greater confidence that our results are a true reflection of our argument and are not spurious.

Geographical Endowments

Beyond political fragmentation and warfare, scholars including White (1962: 39–78), Pirenne (1969: 77–105), Rokkan (1975: 575–91), Tilly (1992: 17–19), and Hohenberg and Lees (1995: 18–19) highlight the importance of geographical endowments for historical urbanization in Europe.[8]

According to this classic view, urbanization patterns are at base a function of agricultural conditions and transportation access. To feed a nonagricultural population, the agricultural sector must be productive enough to generate a food surplus. High-quality soil enhances agricultural productivity and makes urban agglomerations possible. Urban agglomerations in turn promote artisanal and entrepreneurial activity. To facilitate commerce, trade routes are important. Urban leaders can build upon early economic success through agglomeration effects, which foster further development. Over time, urban leaders become richer, while places with poor geographical endowments fall behind. In the context of medieval Europe, the geographical endowments hypothesis contends that the central corridor that runs from the Low Countries to northern Italy through eastern France and western Germany was the most favorably endowed, because the soil was high quality and there was easy access to river trade routes. Thus, geographical endowments may explain why this corridor became urbanized from the medieval period onward.

While the focus on geographical endowments is plausible, however, we argue that this hypothesis cannot fully account for historical urbanization patterns. First, this view overlooks the Roman legacy of medieval city locations (Hohenberg and Lees, 1995: 22; Verhulst, 1999: 1, 21–3; Boone, 2013: 221–2). Even if urban centers saw decay after the Roman Empire's fall, they did not typically disappear (Boone, 2013: 222). By serving as a "geographical magnet," Roman fortifications helped determine the location of medieval towns (Verhulst, 1999: 22). Roman towns were typically founded for administrative and military purposes that were no longer relevant by the medieval period (Verhulst, 1999: 23). In this regard, medieval city locations display the "footprint of history" whereby a somewhat obsolete endowment – namely, Roman bureaucratic concerns – continued to influence urban placement (Bleakley and Lin, 2015: 558).

Second, the geographical endowments hypothesis omits the "accidental" way in which the geopolitical partitioning of Charlemagne's empire over the ninth century influenced medieval urbanization patterns (Ganshof, 1971: 289–98; Verhulst, 1999: 155; Stasavage, 2011: 95–100). The ninth-century custom was partible inheritance by the ruler's sons, making dynastic successions vulnerable to idiosyncratic disputes. In the aftermath of the Carolingian partitioning, the former border zones of West and East Francia became relatively large and stable kingdoms, while the former Carolingian core of Lotharingia – the central corridor that forms Europe's urban belt today – became politically fragmented.

The need to split the territory equally between the three heirs was the apparent basis for the Carolingian partitioning – not ethnic, linguistic, political, or religious borders (Ganshof, 1971: 289–98).

Third, the geographical endowments hypothesis discounts the role of endogenous food production in medieval and early modern Europe. According to the geographical endowments view, only locations with the right agricultural conditions could produce enough food to support an urban population. Food production, however, was endogenous in the medium run – if not the short run – because urban centers could make agricultural innovations (Bairoch, 1988: 336–40). An example is convertible husbandry, developed in fifteenth-century urban Flanders, which Mokyr (1995: 11) calls "one of the most important productivity-enhancing innovations in Europe agriculture." Beyond agricultural innovations, city growth itself could facilitate commercial agriculture (Smith, 2008: 257–8; Bates, 2010: 36–7; Rosenthal and Wong, 2011: 46). Furthermore, urban centers could sometimes exchange goods and services for food imports, thereby divorcing themselves from local agricultural limits (Hohenberg and Lees, 1995: 127; Smith, 2008: 254; Rosenthal and Wong, 2011: 46). Describing early modern Europe, de Vries (1984: 244) writes that the "apparently spectacular increase in agricultural productivity suggests that urbanization did not really face a ceiling to its expansion . . ."

Overall, this discussion indicates that the geographical endowments hypothesis, while plausible, does not entirely explain historical urbanization patterns in Europe. Still, our analysis will account for local geographical characteristics in several ways.

FROM WARFARE TO WEALTH

There are several channels through which the city's historical role as a safe harbor could translate into long-run economic development: (1) the establishment of local privileges, including self-governance and property rights protections from predatory outside rulers; (2) technological innovation and human capital accumulation; and (3) economic agglomeration effects. We now describe each channel, one by one.

Local Privileges

The first channel expands Rosenthal and Wong's (2011) argument as recounted earlier. We argue that artisans and entrepreneurs under the threat of warfare could not only move their capital behind the relative

safety of urban fortifications, but could also take advantage of local privileges granted as parts of political bargains with sovereign rulers who sought new funds to meet military-related demands (Tilly, 1994: 11, 24; Bates, 2010: 44–6; Blockmans and t'Hart, 2013: 425–7; Hoffman, 2015: 21–2). Such privileges included personal freedoms, self-governance through parliamentary institutions, and legal authorizations that protected private property rights from outside predation (Blockmans and t'Hart, 2013: 426).

Scholars have analyzed the relationship between national-level political institutions that checked royal power and long-run economic development in Europe. De Long and Shleifer (1993) show evidence that preindustrial economic growth was faster under non-absolutist governments – which they argue were better protectors of private property rights, due to institutional checks on royal power – than under absolutist governments. Acemoglu, Johnson, and Robinson (2005) relate economic development in preindustrial Europe to the interaction between the growth of Atlantic trade and the development of parliamentary government at the national level. In nations with relatively non-absolutist medieval political institutions (e.g., England), Atlantic trade enabled merchant elites to become economically powerful enough to demand political reforms that placed even greater checks on royal power. Executive checks made private property rights more secure. In turn, merchant elites were more willing to make new investments and expand trade, thereby promoting economic growth.[9]

The focus by De Long and Shleifer (1993) and Acemoglu, Johnson, and Robinson (2005) on historical development at the national level makes sense. The nation-state is the most common political unit today. Furthermore, historical data – always in rare supply – are more widely available at this level than at the local level. This focus, however, hides regional variations in historical development within nations. As described earlier, modern Europe's economic backbone is the urban corridor that spans southern England, Belgium and the Netherlands, eastern France and western Germany, and northern Italy. Thus, in our view, it is just as important to understand which historical factors influenced *local* development patterns as it is to understand which factors influenced development patterns at the national level.

Scholars have in fact analyzed the historical relationship between local political institutions and economic development within Europe. Van Zanden, Buringh, and Bosker (2012) construct a measure of medieval parliamentary activity at the regional level. They find a positive

correlation between regional parliamentary activity – which they argue placed checks on predatory outside rulers – and historical development. Similarly, Stasavage (2014) develops a historical measure of local self-governance. He finds that city autonomy promoted economic growth over the short run but reduced it over the long run. He argues that, over time, merchant elites could implement entry limits into their professions, thereby blocking innovation. We further discuss Stasavage's results in Chapter 3.[10]

De Long and Shleifer (1993), Acemoglu, Johnson, and Robinson (2005), van Zanden, Buringh, and Bosker (2012) and Stasavage (2014) all urbanization rates to proxy for historical development, even if historical urbanization patterns per se are not of principal interest to them. By contrast, we focus on the actual process by which historical warfare promoted rural–urban migration. In our view, historical city population growth is a fundamental outcome in and of itself, because it strikes at the heart of any explanation about the long-run development of the urban belt, modern Europe's economic backbone. Furthermore, unlike van Zanden, Buringh, and Bosker (2012) and Stasavage (2014), we do not take local political institutions as exogenous explanatory variables. As described here, we view local freedoms including self-governance as important parts of political bargains granted by rulers in response to political fragmentation and warfare.

Warfare and State Making

By analyzing how historical warfare promoted rural–urban migration, our book expands our understanding of the relationship between warfare and state making. Warfare is a prominent explanation for nation-state development in Europe.[11] According to Tilly (1992: 67–95), historical governments undertook political and fiscal reforms that enabled them to finance greater military efforts and better defend against survival threats from rival states.[12] Tilly's (1975: 42) well-known expression is "War made the state, and the state made war." Our book shows that, prior to the development of the nation-state, warfare helped "make the city" in literal terms by promoting rural–urban migration. In this regard, we provide a new perspective about how historical warfare drove social change in Europe.

Furthermore, by studying the relationship between historical warfare and rural–urban migration, we improve our overall understanding of the state development process. Dincecco (2011, 2015) evaluates institutional development in Europe at the nation-state level from the seventeenth century

onward. He argues that state development proceeded in two major steps. Following a long and arduous process, effective national governments were established by the nineteenth century. Such governments had high extractive and productive powers, enabling them to gather enough revenues to accomplish their intended policy actions, while spending public funds in ways (e.g., transportation infrastructure) that were likely to support economic development. What Dincecco's perspective omits, however, is an analysis of the "front end" of the state-making process in Europe, which our book provides. As described earlier, this book explains how warfare helped "make the city." The rise of the city preceded the rise of the nation-state in important ways (Blockmans, 1994: 220). Institutional developments at the city level were oftentimes historical precursors to nation-state level innovations. City-states pioneered representative government, not nation-states (Stasavage, 2011: 47–68; van Zanden, Buringh, and Bosker, 2012; Blockmans and t'Hart, 2013: 430–3). Similarly, city-states were the first to establish long-term public debts (Stasavage, 2011: 25–46). By studying the relationship between historical warfare and city development, this book sheds new light on the start of the state formation process in Europe. In turn, we gain a more complete view of how the modern state was made (Figure 1.4).[13]

Playing off of Tilly's (1975: 42) well-known expression that "war made the state," Morris (2014: 8) writes that "war made governments, and governments made peace." He argues that warfare created larger states, because the winners had to govern the losers (Morris, 2014: 3–26). To enforce order over larger groups, governments became more powerful. Powerful governments in turn promoted domestic peace, which facilitated economic development.[14] In the context of preindustrial Europe, order and

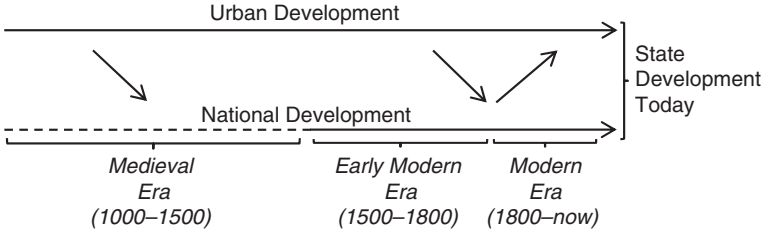

FIGURE 1.4 Historical State Development in Europe: Urban Level versus National Level
Notes: Historical institutional development in Europe took place at the city level from the medieval era onward, influencing institutional development at the national level. Institutional development today in Europe is a product of historical institutional development at both levels. For further details, see the text.

routine was synonymous with the city – and not necessarily with the nation-state (Friedrichs, 1995: 245–6). It seems likely that urban order was at least in part an outgrowth of the city's historical role as a safe harbor. Thus, by studying the process by which historical warfare promoted urban development, our analysis helps illustrate the logic of Morris's argument at the local level. Given that the city could procure internal stability prior to the nation-state, this perspective fleshes out the roots of the process by which government can make society safer and richer.[15]

Some urban centers maintained their autonomy through the 1700s (Stasavage, 2014: 343). By the second half of the eighteenth century, however, the nation-state had become the dominant political unit in Europe (Tilly, 1992: 45–7; Blockmans, 1994: 220; Spruyt, 1994a: 554–7). The nation-state's growing capacity to secure peace over large territorial units reduced the importance of the city's historical role as a safe harbor. Deep changes to the nature of warfare over the 1800s – including technological improvements such as the railway and telegraph and the rise of the mass army (Onorato, Scheve, and Stasavage, 2014) – further weakened the city's ability to fulfill its traditional security role.

By overcoming institutional fragmentation within large territorial units, national governments could promote economic development (e.g., Dincecco and Katz, 2016). We view effective governance at the national level as the continuation of the process of good governance first developed at the city level in Europe (Figure 1.4).

Technological Innovation and Human Capital Accumulation

Regarding the second channel for transformation from safe harbor to economic development, we argue that, due to the advantages of urban density, war-related rural–urban migration could promote both technological innovation and human capital accumulation. Scholars have analyzed the historical relationship between these factors and economic development in Europe. Dittmar (2011) relates the fifteenth-century invention of the moveable type printing press in Mainz to subsequent city population growth. He argues that the printing press promoted the acquisition of valuable business skills, including greater numeracy, entrepreneurial education, and book-keeping improvements. Becker and Woessmann (2009) analyze the relationship between the sixteenth-century Protestant Reformation and subsequent economic development in Prussia. Unlike Max Weber (1992: 13–38), who highlighted the "Protestant work ethic," Becker and Woessmann focus on the effect of

Protestantism on universal education. They contend that widespread literacy among Protestants improved economic productivity. Cantoni and Yuchtman (2014) study the relationship between university legal training and the revival of commerce in medieval Germany. Due to the Papal Schism of 1378, the French academy became intolerant of German faculty and students loyal to the Roman pope. To accommodate them, the pontiff promoted higher education in Germany, which Cantoni and Yuchtman argue improved university access for many Germans. In turn, a greater amount of administrators were trained in Roman law, reducing trade risks and promoting commercial exchange.

Although we acknowledge the historical importance of the printing press, the Protestant Reformation, and university establishment, our book brings to bear on urban development in Europe the role of warfare – an endemic historical feature that does not play a starring role in any of the accounts we have described.

Economic Agglomeration Effects

Regarding the third channel, we argue that war-related rural–urban migration could promote economic agglomeration effects beyond the flow of ideas. Urban density reduces production costs, encourages the division of labor, and fosters thick labor markets (Fujita and Thisse, 2002: 5–11; Glaeser and Joshi-Ghani, 2015: xx–xxi). Our book analyzes the process by which historical warfare promoted urban development. In turn, we improve our understanding of the roots of economic agglomeration effects in Europe today (Ciccone, 2002).

THE GREAT DIVERGENCE

Numerous scholars have analyzed the "Great Divergence" whereby Europe took off economically but China fell behind after 1800. To explain this phenomenon, Pomeranz (2000) highlights the role of colonial exploitation and slavery. Both early modern China and Europe faced ecological limits to further economic growth (e.g., fuel shortages, reduced soil fertility), which European nations solved through colonialization. By holding colonial markets captive, European nations forced the economic periphery in the "New World" to exchange natural resources for manufactured goods, thereby promoting technological change in the European core.[16] Free labor, by contrast, characterized the economic periphery in East Asia, meaning that peripheral nations there could always

decide to undertake proto-industrialization of their own. In turn, there was not only lower demand by the Asian periphery for manufactured goods from China, but also a lack of raw materials available for export to it.

Allen's (2009) account of the Great Divergence emphasizes domestic factors specific to eighteenth-century England, where labor costs were very high but energy costs were low. England's unique price environment influenced both the demand and the supply for technological change there. To reduce production costs, English entrepreneurs had a strong incentive to replace labor with machinery and energy (e.g., the steam engine). Moreover, high wages enabled individuals in England to invest in education, increasing literacy and numeracy and making technological innovations more likely. In China, by contrast, labor costs were low and energy costs were high, reducing the impetus for technological change.

Mokyr's (2002) explanation of the Great Divergence focuses on intellectual developments unique to early modern Europe. He argues that there are two types of knowledge: propositional (what we know about natural phenomena) and prescriptive (what we know about techniques). According to Mokyr, the seventeenth-century Scientific Revolution in Europe expanded the base of propositional knowledge. Due to the codification of this new knowledge base, the eighteenth-century "Industrial Enlightenment" reduced the access costs to best-practice techniques. Low access costs, in turn, produced a self-reinforcing spiral of both propositional and prescriptive knowledge, generating a European wave of technological innovations.

Greif and Tabellini (2015) analyze the roots of social cooperation in China and Europe. They contend that religious differences between these two world regions were evident by 1000. Such differences had implications for the diverse ways in which each society thought about morality, promoting kin-oriented morality in China and impersonal-oriented morality in Europe. Under kin-oriented morality, the clan was the most natural way to enforce cooperation, relying on dispute resolution by clan elders. Under impersonal-oriented morality, by contrast, the corporation was the most efficient way, relying on formal procedures such as legal codes. Over time, the initial importance of clans as a cooperation device strengthened kin obligations in China, while the initial importance of corporations reinforced the rule of law in Europe, thereby promoting persistent cultural differences. Kin-oriented morality meant that public goods provision would be better organized within the clan than the city. The share of individuals in society who subscribed to kin-oriented

morality was high in China, making the clan attractive as the main public goods provider and thereby reducing city size. In Europe, the opposite chain of logic held, driving up city size.

The arguments made by Pomeranz (2000), Mokyr (2002), Allen (2009), and Greif and Tabellini (2015) provide a sampling of the different ways in which scholars have attempted to explain the Great Divergence. Such arguments significantly improve our understanding of this critical phenomenon. Nonetheless, each downplays important parts of the long-run development experience in Europe relative to other world regions. Pomeranz's (2000) emphasis on core-periphery relations tends to overlook the historical roles of political fragmentation, endemic warfare, and the establishment of local freedoms within Europe itself. Unlike Pomeranz, both Mokyr (2002) and Allen (2009) stress domestic conditions particular to Europe. Yet they too discount the historical importance of warfare and politics. Furthermore, all three works focus their analysis at the level of the nation-state or higher. Greif and Tabellini (2015) explicitly relate their argument to historical trends in city population growth. To explain rural–urban migration, however, they do not leave a clear role for political fragmentation and warfare.[17]

By analyzing the relationship between historical warfare and urban development in comparative perspective, our book provides a new way to think about the economic and political divergence between Europe and other world regions. To illustrate, we now provide a sketch of our comparative argument. We view this argument as a first step in a research agenda that examines the long-run economic consequences of warfare across the globe rather than as the last word in such a debate. We focus on China and sub-Saharan Africa, two world regions that differ economically and politically from Europe but are relatively comparable in terms of physical size.

Europe versus China

Premodern China was not only huge in size, but also faced a largely unidirectional attack threat from nomads from the Eurasian Steppe (Ko, Koyama, and Sng, 2014: 46; Hoffman, 2015: 70–1, 74–5). Relative to China, high political fragmentation in preindustrial Europe induced greater conflict risk in the form of multidimensional attack threats, making city relocation more likely. Rural–urban migration was in fact lower in early modern China than in Europe during the same period (Winter, 2013:

405; Xu, van Leeuwen, and van Zanden, 2015: 15). Furthermore, unlike in China, political fragmentation and warfare often induced European rulers to grant local political and legal privileges to urban elites in exchange for new tax funds, thereby promoting a business environment that was favorable to economic development. Credible threats by urban elites in Europe to switch allegiances from one city or polity to another further enhanced their bargaining power vis-à-vis rulers.

Europe versus Sub-Saharan Africa

According to Akyeampong et al. (2014: 1), sub-Saharan Africa is the "development challenge of our time." Civil conflicts or wars took place in roughly one-third of all sub-Saharan African nations over the 1990s (Blattman and Miguel, 2010: 4). Precolonial sub-Saharan Africa was thinly populated, with only two people per square kilometer in 1500 (Herbst, 2000: 16). Given such a high land-labor ratio, rural inhabitants may have preferred to migrate to faraway virgin land in the face of nearby conflict rather than seek safety behind urban fortifications, a phenomenon that Herbst (2000: 39) calls the "primacy of exit." By contrast, the land-labor ratio in preindustrial Europe was relatively low, making it more likely that the city would function as a safe harbor in wartime. Consistent with this argument, urbanization in precolonial sub-Saharan Africa was low relative to that of Europe (Weil, 2014: 94–5).

The high historical land-labor ratio, moreover, may have contributed to an "enduring-warfare effect" in sub-Saharan Africa (Bates, 2008: 85; Reid, 2012: 10; Besley and Reynal-Querol, 2014). Unlike in Europe, the main goal of warfare in land-rich but labor-scarce sub-Saharan Africa was to capture slaves (Thornton, 1999: 16; Herbst, 2000: 42–3; Reid, 2012: 4–5). Precolonial sub-Saharan Africa's high land-labor ratio – and the traditional "raiding" style of warfare that it spawned – may have been more likely to promote open-ended conflict, particularly in combination with the transatlantic slave trade (Whatley and Gillezeau, 2011).

PLAN

We present our main argument, along with the core questions in the social sciences that we address, in this chapter. The rest of the book proceeds as follows. In Chapter 2 we describe the importance of historical warfare in Europe, drawing on the new conflict database that we

have constructed. We make the historical case for the safe harbor effect and the warfare-to-wealth effect, respectively, in Chapter 3. Chapter 4 contains our statistical analysis of the safe harbor effect, while Chapter 5 consists of this analysis for the warfare-to-wealth effect. In Chapter 6 we analyze the European development experience in comparative perspective. The Epilogue provides reflection on the implications of the book's results for economic development today.