CHAPTER EIGHT

Institutions and Economic Growth in Historical Perspective

Sheilagh Ogilvie and A.W. Carus
Faculty of Economics, University of Cambridge, United Kingdom

Abstract

This chapter surveys the historical evidence on the role of institutions in economic growth and points out weaknesses in a number of stylized facts widely accepted in the growth literature. It shows that private-order institutions have not historically substituted for public-order ones in enabling markets to function; that parliaments representing wealth holders have not invariably been favorable for growth; and that the Glorious Revolution of 1688 in England did not mark the sudden emergence of either secure property rights or economic growth. Economic history has been used to support both the centrality and the irrelevance of secure property rights to growth, but the reason for this is conceptual vagueness. Secure property rights require much more careful analysis, distinguishing between rights of ownership, use, and transfer, and between generalized and particularized variants. Similar careful analysis would, we argue, clarify the growth effects of other institutions, including contract-enforcement mechanisms, guilds, communities, serfdom, and the family. Greater precision concerning institutional effects on growth can be achieved by developing sharper criteria of application for conventional institutional labels, endowing institutions with a scale of intensity or degree, and recognizing that the effects of each institution depend on its relationship with other components of the wider institutional system.

Keywords

Institutions, Economic growth, Economic history, Private-order institutions, Public-order institutions, Parliaments, Property rights, Contract enforcement, Guilds, Serfdom, The family, Maghribi traders, Champagne fairs

JEL Classification Codes

N01, N03, N04, N07, O17, P00, N05

8.1. INTRODUCTION

The literature on economic growth, old and new, rests on wide-ranging and often unexamined historical assumptions, which therefore raise many fundamental questions. Where and when did economies develop the threshold levels of property rights and market functioning which neoclassical growth models implicitly assume to be met (Aron, 2000)? What are the institutional origins of the asymmetries between sectors which underlie

Handbook of Economic Growth, Volume 2A
ISSN 1574-0684, http://dx.doi.org/10.1016/B978-0-444-53538-2.00008-3

dualistic growth models (Lewis, 1954, 1958; Ranis and Fei, 1961)? What institutional arrangements have fostered growth-favoring incentives for human capital investment and innovation in some societies and growth-inhibiting ones in others, as emphasized by endogenous growth models (Romer, 1987, 1990; Aghion and Howitt, 1992; Grossman and Helpman, 1991)? Why have institutional rules favored collective action to resist technological innovations in some societies, but not in others (Parente and Prescott, 2000, 2005)? What are the institutional arrangements that influence demographic behavior and the trade-off between quality and quantity of children in unified growth theory (Galor, 2005a,b)? How has socio-political conflict in past centuries engendered the institutions that foster or stifle economic growth (Acemoglu et al. 2005)?

Recognizing the importance of such questions, the growth literature has increasingly filled in these blanks and made explicit claims about economic history and institutions. Yet some of these claims are not, on closer examination, supported by historical evidence. Others are controversial, and must be revised in the light of what is known. Still other claims are probably right, but not for the reasons given by those who make them. In many ways, then, research in economic history has still hardly been brought to bear on the institutional sources of long-run economic growth.

No single essay could discuss all the implications of economic history regarding the effects of institutions on growth, and this one does not seek to do so either. Instead, we single out eight of the most important lessons historical research can offer economists trying to understand the relationship between institutions and growth.

One common view in the growth literature is that history shows that private-order institutions can substitute for public-order ones in enabling markets to function (North and Thomas, 1970, 1971, 1973; North, 1981; Milgrom et al. 1990; Greif, 1989, 2006c; Greif et al. 1994). Past societies are supposed to have lacked public authorities able and willing to enforce the institutional rules for economic activity, and some of the literature has come to accept the view that private-order substitutes—coalitions, networks, guilds, communities, collective reprisal systems, private judges, serfdom—successfully replaced them. Economic history does not support this view, as emerges repeatedly from the empirical research surveyed in this chapter: on the Maghribi traders and the Champagne fairs in Lesson 1, on merchant guilds in Lesson 3, on peasant communities in Lesson 4, and on serfdom in Lesson 8. Historical evidence suggests strongly that although markets are required for economies to grow, public-order institutions are necessary for markets to function.

This central role of public-order institutions in economic growth has been recognized in parts of the literature (Acemoglu et al. 2005). Parliaments manned by wealth holders are widely viewed as a major component of beneficial public-order institutions, and particular attention has been devoted to the idea that parliamentary powers increased significantly in Britain after 1688, creating the institutional preconditions for the Industrial Revolution three quarters of a century later (North and Weingast, 1989; Acemoglu et al. 2005; Acemoglu and Robinson, 2012). Lesson 2 surveys the historical evidence on

18th century European parliaments in general, and the Glorious Revolution in particular, and finds that parliaments manned by wealth holders historically have a very mixed record of supporting economic growth. Whether a strong parliament manned by wealth holders supported growth in practice depended on underlying institutional mechanisms at lower levels of politics and the economy, which influenced how wealth holders obtained wealth, how they got parliamentary representation, and how parliament could be used to further policies and institutions that fostered rather than stifling growth.

A different way in which the literature has pursued the role of public-order institutions in economic growth is by seeking to classify political as well as economic institutions according to whether they have, historically, proved favorable to growth. One part of the literature has distinguished between open-access social orders which have facilitated economic growth, and closed-access orders which have hampered it (e.g. North et al. 2006, 2009). Another approach has been to distinguish between political and economic institutions that have favored growth by being inclusive, and those that have impeded it by being extractive (e.g. Acemoglu and Robinson, 2012). Lesson 3 surveys these classification systems and suggests that greater precision can be achieved by drawing a more constrained distinction, between generalized institutions (whose rules apply uniformly to all economic agents, regardless of their identity or membership in particular groups), and particularized institutions (which apply only to a subset of agents in the economy). The explanatory potential of this distinction is explored in Lesson 3 in the context of the institutional bases for the growth in long-distance trade during the medieval and early modern Commercial Revolution, and in Lesson 5 in the context of property rights in Britain before and during the Industrial Revolution.

Property rights play an overwhelmingly important role in the entire literature on institutions and economic growth, and history has been employed in this literature in numerous ways. Historical evidence is widely used to support the view that property rights have been the single most important institutional influence on economic growth at least since medieval times (North and Thomas, 1970, 1971, 1973; North, 1981, 1989, 1991; North and Weingast, 1989; Greif et al. 1994; Acemoglu and Johnson, 2005; Acemoglu et al. 2005; Acemoglu, 2009). Other parts of the literature, by contrast, have questioned the very idea that property rights played any role at all in economic growth (Clark, 2007; McCloskey, 2010). Despite the fact that economic history has been mobilized to support both sides of this debate, historical research findings have still not been fully brought to bear on the emergence of property rights, the multiple ways in which they can affect economic growth, and their importance relative to other institutions. Lessons 4–6 address the various challenges this has created. Lesson 4 considers the view that property rights institutions are both separable from, and more important than, contracting institutions (Acemoglu and Johnson, 2005). Historical evidence casts doubt on this idea: both types of institutions involved relationships between ordinary people and rulers, and both had to improve jointly before growth could occur. Lesson 5 asks why property rights are supposed to be good for growth and what precise characteristics they must have in order to provide these benefits. Surveying the evidence for Britain before and during the Industrial Revolution, it finds that in order for property rights to support growth, they not only had to be well defined, private, and secure, but also *generalized* in the sense of applying to all agents in the economy, not just to a privileged subset. Security, however, is the feature of property rights most strongly emphasized as a key to economic growth, both historical and modern. Lesson 6 subjects security of property rights to closer analysis. Surveying the evidence for Europe since the medieval period, it finds that the security of property rights cannot be analyzed without breaking down the concept into three types—security of ownership, security of use, and security of transfer. Security on all three dimensions, the historical evidence reveals, was a matter of gradation rather than outright presence or absence. This explains why it has been possible for the economic history of medieval and early modern Europe to be used to argue both that property rights were irrelevant to economic growth and that they played a central role in causing it to take place.

Although the literature on economic growth has tended to focus on one type of institution at a time, its attempts to classify institutional regimes as favorable or harmful to growth tacitly recognize that institutions are embedded in wider institutional systems. The historical evidence surveyed in this chapter highlights the importance of analyzing not just each institution in isolation but also how it interacts with other components of the surrounding institutional system. This emerges clearly in Lesson 4 where we see how contracting and property institutions were jointly necessary to encourage economic growth during the agricultural revolution. The same importance of the institutional system as a whole emerges from the survey in Lesson 7 of historical demography, which has come to play an increasingly important role in recent literature on economic growth (Galor, 2005a,b; Acemoglu, 2009; Guinnane, 2011). Historically, it turns out that both contributory factors such as demographic responsiveness to economic signals, women's position, and human capital investment; and the over-arching relationship between demographic behavior and economic growth, resulted not from any specific type of family institution in isolation, but rather from the interaction of multiple components of the wider institutional system.

The literature on economic growth has been riven for decades by the debate about whether institutions are merely epiphenomena of more fundamental natural and geographical factors (e.g. Sachs, 2003), are efficient solutions to economic problems (e.g. North and Thomas, 1970, 1973; Greif, 2006c), or result from socio-political conflicts over distribution (e.g. Acemoglu et al. 2005; Ogilvie, 2007b). The historical institutions examined in Lesson 8 provide plentiful evidence that distributional conflicts are central, both to the development of institutions and to their impact on growth. The explanatory power of the conflict approach to institutions is illustrated particularly clearly by the institution of serfdom, which has attracted repeated attention from economists because of its impact on agricultural performance and thus on overall economic growth in the centuries before and during industrialization (Domar, 1970; North and Thomas, 1970, 1973; Acemoglu and Wolitzky, 2011; Acemoglu et al. 2011). The historical evidence on serfdom confirms the centrality of distributional conflicts to the rise, survival, and disappearance of key institutions, and provides a particularly vivid example of how the problem of the lack of a political Coase theorem must be solved in order for institutions to change. But it also shows the importance of analyzing any given institution as one component of a wider institutional system—an analytical point that reappears many times throughout the lessons that follow.

8.2. LESSON 1: PUBLIC-ORDER INSTITUTIONS ARE NECESSARY FOR MARKETS TO FUNCTION

Markets are necessary for economic growth, and this raises the question of what institutions are necessary for markets to function. Economic history is widely supposed to support the claim that the functioning of the market does not necessarily require public-order institutions: private-order institutions can substitute for them. This is taken to imply that modern poor economies can achieve sustained economic growth without good governments or well-functioning legal systems, since private-order substitutes have a successful historical record of sustaining growth (Helpman, 2004; Dixit, 2004, 2009; Dasgupta, 2000; World Bank, 2002). This claim is factually mistaken, as a closer look at the evidence shows.

Private-order institutions are those formed through voluntary collective action by private agents without any involvement of public authorities. Public-order institutions, by contrast, are those associated with the formal public authorities of a society—states, local governments, bureaucracies, legal systems, rulers, courts, and parliaments (Katz, 1996, 2000). A few examples apparently supporting the view that private-order institutions have a successful track record in underpinning markets have attained the status of stylized facts within the economics profession more widely, and are repeatedly cited (Aoki, 2001; Bardhan, 1996; Ba, 2001; Bernstein, 2001; Clay, 1997; Dasgupta, 2000; Dixit, 2004, 2009; Faille, 2007; McMillan and Woodruff, 2000; Miguel et al. 2005; Helpman, 2004; O'Driscoll and Hoskins, 2006; World Bank, 2002). But these examples turn out to be false or misleading. When the evidence is examined more closely, the well-known stylized facts disappear, and there is no indication that private-order institutions could by themselves provide, or ever have provided, an institutional framework for markets.

The only way to show this is to look at the evidence in detail. Since we cannot do this for every such stylized example, we delve more deeply into the two cases that are most widely cited in the literature on economic growth. The first is the case of the Jewish Maghribi traders, who are supposed to have sustained successful commercial growth over long distances between the late 10th and the early 12th century using a private-order institution called a coalition (Greif, 1989, 1993, 2012). The second is the example of the Champagne fairs in what is now northern France, which grew to be the most important European trading center from the late 12th to the late 13th century, and are supposed to have achieved this growth by ensuring contract enforcement through private judges (Milgrom et al. 1990) and community-based reprisals (Greif, 2002, 2006b,c). This section looks at these cases in some detail to demonstrate why these claims are false and cannot be used to support either theory or policy. Later lessons discuss various other institutional arrangements—serfdom, village communities, merchant guilds—which are also widely portrayed as examples of efficient private-order institutions with a track record of supporting growth, and indicate where subsequent research has cast doubt upon their empirical basis.

8.2.1 The Maghribi Traders

A first widely cited historical example of the supposed irrelevance of public-order institutions and the efficacy of private-order substitutes is the Maghribi traders' coalition. The Maghribi traders were a group of Jewish merchants who traded across the Muslim Mediterranean between the 10th and the 12th centuries. Everything we know about them comes from the Geniza (synagogue storeroom) in Old Cairo, the city where most of these merchants lived, so they are often called "the Geniza merchants." There is a debate between those who claim that most of the Geniza merchants came from the Maghreb (essentially the region now occupied by Tunisia and Libya) and rarely established commercial relationships with non-Maghribi Jewish traders (Greif, 1989, 1993, 2012), and others who point out that these merchants neither exclusively came from, nor solely traded in, the Maghreb (see Goldberg, 2005, 2012a,b,c; Toch, 2010; Edwards and Ogilvie, 2012a). Without prejudging this debate, here we use "Maghribi traders" since the term is established in the economics literature, although the term "Geniza merchants" is more widespread among historians.

Two influential articles have argued that these merchants formed a well-defined and cohesive coalition based on Jewish religion and family origins in the Maghreb (Greif, 1989, 1993). According to this account, these medieval Jewish merchants lacked access to effective legal institutions for monitoring and enforcing contracts. Instead, they relied on informal sanctions based on collective relationships inside an exclusive coalition. Members of the Maghribi coalition, according to this view, only used other members as commercial agents. Within this closed ethnic and religious coalition, members conveyed information about each other's misbehavior efficiently to other members, and collectively ostracized members who cheated other members. The Maghribis are supposed to have chosen this type of contracting institution both because there was no effective legal system and because they held collectivist Judaeo-Muslim cultural beliefs which contrasted with the individualistic Christian values held by the medieval Genoese merchants, who consequently chose to enforce their contracts using legal mechanisms (Greif, 1994).

The Maghribis' multilateral reputation mechanism, it is claimed, provided an effective institutional basis for the growth of long-distance trade across the Muslim Mediterranean from the late 10th to the early 12th century, and substituted for the absence of an effective legal system.

This portrayal of the medieval Maghribi traders has been widely deployed to draw lessons for modern economic growth. Some use this characterization of Judaeo-Muslim collectivism versus European individualism to argue that it is cultural differences that are central to both institutions and growth (Aoki, 2001; Mokyr, 2009). Others claim that the Maghribi traders show that economic growth does not require public legal mechanisms but can be based on private-order institutions (Clay, 1997; Faille, 2007; Greif, 1989, 2006b,c; McMillan and Woodruff, 2000; O'Driscoll and Hoskins, 2006), or that the social capital of closely knit networks can effectively support market-based economic growth (World Bank, 2002; Miguel et al. 2005). Still others incorporate this model of the Maghribi traders into their accounts of how informal, reputation-based institutions contributed to long-run productivity growth (Helpman, 2004; Dixit, 2004, 2009; Dasgupta, 2000). According to Helpman, for instance, "If we had data that allowed us to calculate TFP growth during the medieval period, we probably would have found that the institutional innovations of the Maghribi traders … led to TFP growth" (2004, pp. 118–9).

However, the empirical portrayal of the Maghribi traders' coalition (Greif, 1989,1993, 2006c) was based on a limited number of documents, which other scholars, both earlier and later, have interpreted very differently (Goitein, 1966, 1967/1993; Stillman, 1970, 1973; Udovitch, 1977a,b; Gil, 2003, 2004a,b; Friedman, 2006; Ackerman-Lieberman, 2007; Margariti, 2007; Goldberg, 2005, 2012a,b,c; Trivellato, 2009; Toch, 2010; Edwards and Ogilvie, 2012a). The coalition model requires the Maghribi traders to have formed agency relations only with other members of their closed ethnic-religious coalition, yet a number of scholars have pointed out that the Maghribi traders transacted in open and pluralistic constellations rather than a closed or monolithic coalition (Udovitch, 1977a,b; Goldberg, 2005, 2012a,b,c; Toch, 2010). Others have noted that the surviving documents show the Maghribi traders establishing agency relations with non-Maghribi Jews and even with Muslims (Goitein, 1967/1993; Stillman, 1970, 1973; Goldberg, 2005, 2012a,b,c). The existence of business relationships with non-Maghribis shows that the Maghribi traders must have had other mechanisms for contract enforcement that did not rely on collective ostracism inside a closed coalition.

Five cases from the Geniza letters were adduced as providing evidence of the existence of a Maghribi coalition (Greif, 1989, 1993, 2012). Edwards and Ogilvie (2012a) re-analyzed these cases and found that none of them substantiated the existence of a coalition, with no case in which multilateral sanctions were imposed on any opportunistic contracting party by the collectivity of the Maghribi traders. Goldberg (2012b,c) carried out a quantitative and qualitative analysis of hundreds of commercial documents in the Geniza and did not find "any case of an individual being ostracised even after an accusation of serious misconduct spread through the business circle" (Goldberg, 2012b, p. 151). Although there was some evidence that Maghribi traders made use of reputational sanctions, these involved limited transmission of information, primarily to locations and persons directly associated with the conflicting parties. Research studies of businessmen in many economies, including modern ones, find similar reputational sanctions to those observed among the Maghribi traders being used as a complement to legal sanctions (Byrne, 1930; De Roover, 1948; Macaulay, 1963; Goldthwaite, 1987; McLean and Padgett, 1997; Dahl, 1998; Gelderblom, 2003; Court, 2004; Selzer and Ewert, 2005, 2010). The use of reputation mechanisms does not imply that an economy lacks an effective legal framework for contract enforcement or is capable of growing successfully without one.

Other scholars have pointed out that the Geniza documents provide evidence of a wide array of public-order contract-enforcement mechanisms that supported contracts both among Maghribi traders and between them and other Jews and Muslims (Goitein, 1967/1993; Udovitch, 1977a,b; Gil, 2003; Goldberg, 2005, 2012a,b,c; Goitein, 1967/1993; Harbord, 2006; Goitein and Friedman, 2007; Margariti, 2007; Ackerman-Lieberman, 2007; Trivellato, 2009; Toch, 2010; Cohen, 2013). Counter to the claim that the Maghribi traders only used informal reciprocity as a basis for their business associations, with no legal forms of enterprise, the documents reveal these merchants using formal legal partnerships alongside informal business cooperation; even the latter, moreover, involved responsibilities that were recognized in courts of law (Udovitch, 1977a,b; Gil, 2003; Goldberg, 2005, 2012a,b,c; Harbord, 2006; Ackerman-Lieberman, 2007; Trivellato, 2009; Toch, 2010; Cohen, 2013). In a number of cases, Maghribi merchants enforced agency agreements using legal mechanisms; they avoided using the legal system to resolve disputes if possible, but they saw the advantages of a court judgment as a last resort (Goitein, 1967/1993; Gil, 2003; Goldberg, 2005, 2012a,b,c; Goitein and Friedman, 2007; Margariti, 2007; Ackerman-Lieberman, 2007; Trivellato, 2009; Cohen, 2013). This finding resembles those for many groups of merchants and businessmen in commercial societies between the Middle Ages and the modern day, who typically preferred to avoid litigation if at all possible, but used it as a last resort (Gelderblom, 2003; Edwards and Ogilvie, 2008, 2012a).

Commercial divergence between Maghribi and Italian traders can be explained by the broader institutional framework the two groups faced, in which public-order institutions played an important role (Goitein, 1967/1993; Stillman, 1970; Epstein, 1996; Gil, 2004a,b; Goldberg, 2005, 2012a,b,c; Van Doosselaere, 2009; Edwards and Ogilvie, 2012a). The Maghribi traders were a Jewish minority in a Muslim-ruled polity, while Genoese merchants enjoyed full political rights as citizens in their own autonomous city-state. The two groups' contrasting socio-political status had inevitable repercussions for their respective economic privileges, legal entitlements, political influence, and relations with the majority population (Goitein, 1967/1993; Epstein, 1996; Goldberg, 2005, 2012a,b,c). Political and military instability increased commercial insecurity in the central Mediterranean from the mid-11th century on, which caused the Maghribi traders to reduce the geographical scope of their trade and intensify their involvement in intraregional commerce and local industry (Stillman, 1970; Gil, 2004a,b; Goldberg, 2005, 2012a,b,c). Genoese merchants, by contrast, were protected from commercial insecurity by the Genoese navy, precisely because merchants were important in the Genoese polity (Epstein, 1996;Van Doosselaere, 2009). Finally, at the beginning of the 13th century, a powerful association of Muslim merchants, the Karimis, secured privileges from the political authorities granting it an extensive legal monopoly and excluding outsiders, including Jewish traders, from many aspects of long-distance trade (Goitein, 1967/1993).

The current state of research therefore does not empirically confirm the idea that the Maghribi traders enforced contracts through a private-order coalition. The Maghribis used reputation mechanisms indistinguishable from those used by businessmen in most economies, both historical and modern, buttressed by public-order institutions including legal partnership contracts, powers of attorney, litigation in state courts, and appeals to the local and central political authorities. The broader framework of public-order institutions also played a role in the Maghribis' ability to sustain commercial growth. The Maghribi traders therefore do not support the idea that private-order institutions substituted for missing public-order ones.

8.2.2 The Champagne Fairs

A second historical example which is widely used in support of the idea that public-order institutions are irrelevant for growth because of the effectiveness of private-order substitutes is that of the Champagne fairs. These were a cycle of trade fairs held annually in the county of Champagne, a polity governed almost autonomously by the counts of Champagne until it was annexed by the Kingdom of France in 1285. The Champagne fairs operated as the undisputed fulcrum of international exchange in Europe from c. 1180 to c. 1300, and were central to the substantial acceleration of European trade known as the medieval Commercial Revolution (Bautier, 1953, 1970; Verlinden, 1965; Edwards and Ogilvie, 2012b).

Two well-known papers by economists have argued that the Champagne fairs achieved their success with a private-order institution substituting for public-order ones. Milgrom et al. (1990) claimed that commercial growth at this most important medieval European trading location was fostered by private law-courts intermediated by "law merchants" who enforced contracts and guaranteed property rights in trade goods and capital. An alternative account was provided by Greif (2002, 2006b,c), who claimed that the Champagne fairs were sustained by a "community responsibility system," consisting of collective reprisals between corporative groups of businessmen. Both theories are based on the assumption that there were no public-order institutions able or willing to guarantee property rights or enforce contracts in 13th-century Europe, and that this compelled businessmen to devise their own private-order institutional arrangements. These ideas are widely referred to in the economics literature, but closer scrutiny casts doubt upon their empirical basis.

8.2.2.1 Private Judges

Milgrom et al. (1990) argued that the medieval expansion of international trade in centers such as the Champagne fairs was made possible by private-order courts in which private judges kept records of traders' behavior. Before agreeing on any deal, a merchant would ask a private judge about the reputation of his potential trading partner. By communicating reputational status of traders on demand, the private judges enabled merchants to boycott those who had previously defaulted on contracts. The private judges are also supposed to have levied fines for misconduct, which merchants voluntarily paid because non-payment meant losing all future opportunities to trade at the Champagne fairs. Institutional arrangements combining private judges and individual merchants' reputations created incentives for all merchants to fulfill contractual obligations, even though state enforcement was absent and repeated interactions between trading partners were rare. From this portrayal of the Champagne fairs, it was concluded that international trade expanded in medieval Europe through merchants' developing "their own private code of laws," employing private judges to apply these laws, and deploying private-order sanctions against offenders—all "without the benefit of state enforcement of contracts" (Milgrom et al. 1990, p. 2).

This view of the Champagne fairs is widely accepted by economists and policy-makers, and is used to underpin far-reaching conclusions about the institutional basis for exchange in modern economies. Dixit (2004, pp. 12–13, 47–8, 98–9) mentions private judges providing enforcement to merchant customers at the Champagne fairs as an example of a well-functioning private government. Davidson and Weersink (1998) use the Champagne fairs to specify the conditions necessary for markets to function in developing economies without adequate state enforcement. Swedberg (2003, pp. 12–13), places this portrayal of private courts in medieval Champagne at the center of his view of medieval merchant law as "laying the legal foundations for modern capitalism." Richman (2004, p. 2334–5) argues that private judges at the Champagne fairs show how "coordination among a merchant community can support multilateral exchange without relying on state-sponsored courts."

Economic historians, by contrast, have pointed out for some decades that there were no private judges at the Champagne fairs. On the contrary, the Champagne fairs were supported by a rich array of public-order legal institutions, which were voluntarily utilized by international merchants (Bautier, 1953, 1970; Terrasse, 2005; Edwards and Ogilvie, 2012b). One component of these public-order legal institutions consisted of a dedicated fair court which operated throughout the duration of each fair. The fair wardens who decided the cases in this court were princely officials, not private judges. But there were also several other levels of the princely justice-system which foreign merchants used to enforce their commercial contracts—the high tribunal of the count of Champagne as the prince, the courts of the count's bailiffs, and the courts of the district provosts (Arbois de Jubainville and Pigeotte, 1859–66; Arbois de Jubainville, 1859; Bourquelot, 1839–40; Benton, 1969; Edwards and Ogilvie, 2012b). In addition, the towns in which the fairs were held operated their own municipal courts, also attracting commercial business from international merchants. Local abbeys also had the right to operate courts at the fairs, and foreign merchants made intensive use of these abbey courts (Bautier, 1953; Terrasse, 2005). The jurisdiction of the various legal tribunals which guaranteed property rights and contract enforcement at the Champagne fairs emanated not from the merchants using the fairs, but from the public authorities, since even the municipal and abbey courts operated under devolved jurisdiction granted by the rulers of Champagne. Furthermore, there is no evidence in any surviving documents relating to the Champagne fairs that any of these tribunals applied a private, merchant-generated law-code (Edwards and Ogilvie, 2012b). The Champagne fairs therefore provide no support for theories of economic growth arguing that private-order institutions can substitute for missing public-order institutions in enabling markets to function. Markets are necessary for growth, and the Champagne fairs support the view that public-order institutions are necessary for markets.

8.2.2.2 Community-Based Reprisals

A second set of claims concerning private-order institutions at the Champagne fairs postulated that commercial growth both at these fairs and elsewhere in medieval Europe was underpinned by collective reprisals between corporative communities of businessmen (Greif, 2002, 2006b,c). In this portrayal, public law-courts did exist in medieval Europe, but could not support economic growth because they were controlled by local interests which refused to protect foreign merchants' property rights or enforce their contracts impartially. Instead, it is claimed, a private-order institution called the community responsibility system stepped into the breach by providing incentives for local courts to supply impartial justice. According to this account, all long-distance traders were organized into communities or guilds. If a member of one community defaulted on a contract with a member of another, and the defaulter's local court did not provide compensation, the injured party's local court would impose collective reprisals on all members of the defaulter's community, incarcerating them and seizing their property to secure compensation. The defaulter's community could only avoid such sanctions by ceasing to trade with the injured party's community. If this prospect was too costly, the defaulter's community had an incentive to provide impartial justice. It is claimed that this combination of corporative justice and collective reprisals provided the institutional basis for economic growth in the early centuries of the Commercial Revolution, and that the Champagne fairs were a prime example of this private-order institution in operation. This interpretation of medieval history is used to draw wider implications for economic growth, including the claim that state involvement in contract enforcement is not a precondition for impersonal exchange (Greif, 2002, pp. 201–2; Greif, 2006b, pp. 232–4).

Two main arguments were advanced in support of the view that private-order institutions effectively substituted for missing public-order institutions in supporting economic growth at the Champagne fairs (Greif, 2002, 2006b). First, it was claimed that the Champagne fairs did not have a legal system with jurisdiction over visiting merchants. The fair authorities "relinquished legal rights over the merchants once they were there. An individual was subject to the laws of his community—represented by a consul—not the laws of the locality in which a fair was held" (Greif, 2006b, p. 227). The second claim was that enforcement of merchant contracts relied on the exclusion of defaulting debtors and all their compatriots from the fairs. This threat of collective reprisals, it was argued, made merchants' communal courts compel defaulters to fulfill their contracts (Greif, 2002, p. 185).

However, there are also serious difficulties with this second private-order theory. The rulers of Champagne did not relinquish legal rights over visiting merchants and did not ever permit them to be subject solely to the laws of their own communities. For the first 65 years during which the fairs were international trading centers (c. 1180–1245), all visiting merchants were subject to the public legal system prevailing at the fairs, which consisted of courts operated by the ruler's officials or by municipal governments and abbeys under devolved jurisdiction from the ruler (Bourquelot, 1839–40, 1865; Tardif, 1855; Arbois de Jubainville, 1859; Arbois de Jubainville and Pigeotte, 1859–66; Goldschmidt, 1891; Davidsohn, 1896–1901; Bassermann, 1911; Alengry, 1915; Chapin, 1937; Bautier, 1953, 1970; Terrasse, 2005; Edwards and Ogilvie, 2012b). In 1245, the count of Champagne issued a charter exempting a subset of visiting foreign merchants (Roman, Tuscan, Lombard, and Provençal traders visiting one of the six annual fairs) from judgment by his officials, but only by bringing them under his direct jurisdiction as ruler (Bourquelot, 1865, p. 174). The ruler of Champagne neither relinquished legal rights over visiting merchants nor left them to the jurisdiction of their own communities.

The evidence indicates that the role of merchant communities at the Champagne fairs was minimal (Bautier, 1953, 1970; Edwards and Ogilvie, 2012b). No merchants had community consuls (judges) at the fairs for the first 60 years of the fairs' international importance, from c. 1180 to c. 1240. Many important groups of merchants at the fairs never had consuls or communities at all. And even the few groups of merchants that did have community consuls in later phases of the fairs' existence (after c. 1240) could only use them for internal contract enforcement and relied on the public legal system to enforce contracts between their members and merchants of different communities (Edwards and Ogilvie, 2012b). The Champagne fairs flourished as the most important centre of international trade in Europe for 80 years with no recorded collective reprisals, which were only used, in a limited way, in the final phase of the Champagne fairs' ascendancy, after c. 1260 (Bautier, 1953, 1970).

The evidence casts doubt on the claim that collective reprisals were a private-order substitute for missing public-order institutions to enforce contracts. The reprisal system was fully integrated into the public legal system; the right of reprisal required a series of formal legal steps in public law-courts; and the enforcement of reprisals relied on state coercion (Tai, 1996, 2003a,b; Boerner and Ritschl, 2002; Ogilvie, 2011). The few merchant communities at the Champagne fairs played no observable role in implementing reprisals. Rather, reprisals were imposed and enforced by the public authorities, via the public legal system (Edwards and Ogilvie, 2012b). The economic history of the Champagne fairs does not support the idea that private-order collective reprisals underpinned economic growth in the absence of public-order institutions.

8.2.2.3 Public-Order Institutions and the Champagne Fairs

On the contrary, the Champagne fairs show that the policies and actions undertaken by the public authorities were crucial for the medieval Commercial Revolution (Ogilvie, 2011; Edwards and Ogilvie, 2012b). Between the mid-11th and the late 12th century, the rulers of Champagne guaranteed the property rights of all merchants at the fairs, regardless of their community affiliation (Bautier, 1953, 1970; Bourquelot, 1865). From as early as 1148, the counts of Champagne undertook deliberate and comprehensive action to ensure property rights and personal security for merchants traveling to and from the fairs, and were unusual among medieval fair-authorities in devoting considerable political and military resources to extending such guarantees beyond their territorial boundaries (Bautier, 1953; Laurent, 1935). The counts of Champagne also ensured that the persons and property of visiting merchants were secure at the fairs themselves, enforcing property rights through their own law-courts, employing their own officials to police the streets, and cooperating with municipal and ecclesiastical officials to guarantee security in the fair towns (Bourquelot, 1839–40; Bourquelot, 1865; Laurent, 1935; Terrasse, 2005).

As already mentioned, the public authorities also provided legal contract enforcement at the fairs. The counts of Champagne operated a multitiered system of public law-courts which judged lawsuits and officially witnessed contracts with a view to subsequent enforcement. Cases involving foreign merchants were adjudicated at most levels of this public legal system (Arbois de Jubainville and Pigeotte, 1859–66; Arbois de Jubainville, 1859; Bourquelot, 1839–40; Benton, 1969). By the 1170s, the counts had supplemented ordinary public legal provision at the fairs by appointing the fair-wardens mentioned earlier, who were public officials (Goldschmidt, 1891). Public alternatives to the princely court system also existed, strengthening contract enforcement, since jurisdictional competition created incentives for courts to provide impartial judgments. Three of the Champagne fair towns operated municipal courts which had the right to judge commercial conflicts, derived most of their revenues from doing so, and successfully attracted litigation from international merchants (Bourquelot, 1865; Bautier, 1953; Arbois de Jubainville, 1859; Tardif, 1855; Terrasse, 2005). The church provided an additional set of public law-courts offering contract enforcement to merchants at the fairs, and successfully competed with princely and municipal law-courts in doing so (Bautier, 1953).

The state, in the shape of the counts of Champagne and their administrators, also contributed to the fairs' success institutionally by providing infrastructure and loan guarantees (Bautier, 1953; Bourquelot, 1865; Edwards and Ogilvie, 2012b). The counts built fortifications around the fair towns, roads connecting them, canals from the Seine into the fair town of Troyes, and large buildings to expand accommodation for visiting merchants. They granted tax breaks to other organizations, especially ecclesiastical ones, as incentives for them to provide infrastructure for merchants in the form of accommodation, warehousing, and selling space. The counts encouraged investment in fair infrastructure by granting burghers in the fair towns secure private property rights and free rights to transact in real property (Terrasse, 2005). The counts of Champagne further facilitated the development of the fairs as money markets by guaranteeing loans which merchants made at the fairs to creditors from whom obtaining payment might otherwise be difficult because of high status or privileged legal position—i.e. as rulers they insured lenders against elite confiscation (Bassermann, 1911; Schönfelder, 1988).

Finally, the counts of Champagne created a good institutional environment for commercial growth in their territory by what they did *not* do: they refrained from granting legal privileges to local merchants or other elites that discriminated against foreign merchants (Chapin, 1937; Edwards and Ogilvie, 2012b). Initially, this may have been because the four Champagne fair towns were not great centers of international trade before the fairs arose, and thus did not have powerful, institutionally entrenched guilds of indigenous merchants lobbying for privileges. Then the fairs made the counts wealthy, freeing them from the need to sell privileges to the fair towns and their elites in order to finance princely spending. But the counts also resisted the temptation to sell privileges to special interests, even though these would have brought them short-term gains at the expense of long-term growth. Under the counts, therefore, the Champagne fairs offered the combination of a continuous international trading forum with no institutional discrimination for or against any group of merchants, a combination nearly unique in 13th-century Europe (Alengry, 1915; Chapin, 1937).

The counts of Champagne provide clear evidence of the importance of the political authorities in providing the minimal requirements for market-based economic activity to flourish. They guaranteed personal safety, secure private property rights, and contract enforcement; they built infrastructure, they regulated weights and measures; they supported foreign merchant lenders against politically powerful debtors; and they ensured equal treatment of foreign merchants and locals. The distinguishing characteristic of all these institutional rules was that the counts established them not as particularized privileges granted to specific merchant guilds or communities, but rather as generalized institutional guarantees issued "to all merchants, all merchandise, and all manner of persons coming to the fair" (Alengry, 1915, p. 38). These institutional rules were then maintained and extended by each count in the interests of protecting "his fairs" as a piece of property that delivered a valuable stream of revenues. During this period, from c. 1180 to c. 1300, the Champagne fairs became the fulcrum of European trade, and public-order institutions played a major role in the economic growth that ensued.

But the centrality of public-order institutions to economic growth is a two-edged sword: good public-order institutions can contribute to growth, but bad public-order institutions can harm it. The Champagne fairs provide a clear case of this proposition in action. In 1285, Champagne was annexed by the French crown (Alengry, 1915; Bautier, 1953). The French regime that took over the Champagne fairs gradually ceased to provide the generalized institutional mechanisms that had attracted and sustained international trade since c. 1180 (Laurent, 1935; Bautier, 1953; Strayer, 1980; Boutaric, 1867; Schulte, 1900; Edwards and Ogilvie, 2012b). Security of private property rights, contract enforcement, and access to commercial infrastructure were no longer guaranteed as generalized rules applicable to everyone, but rather became particularized privileges offered (and denied) to specific merchant groups in order to serve the short-term interests of French royal policy. The new public authorities in charge of the fairs no longer guaranteed a level playing-field to all merchants—domestic or foreign, allied or non-allied—but rather granted privileges that favored some groups and discriminated against others (Alengry, 1915; Bourquelot, 1865; Strayer, 1969; Laurent, 1935). The French crown began to tax and coerce particular groups of merchants to serve its fiscal, military, and political ends. By the late 1290s, long-distance trade was deserting Champagne and moving to centers such as Bruges in the southern Netherlands where property rights and contract enforcement were more impartially provided (Schulte, 1900; Bautier, 1953; Munro, 2001; Edwards and Ogilvie, 2012b). The Champagne fairs succeeded as long as the public authorities provided generalized institutional mechanisms applicable to all traders; they declined when the regime switched to particularized institutional privileges which discriminated in favor of (and against) specific groups of merchants (Munro, 1999, 2001; Ogilvie, 2011; Edwards and Ogilvie, 2012b). The Champagne fairs show clearly that by the time of the medieval Commercial Revolution, the policies and actions undertaken by the public authorities were already crucial to economic growth—for good or ill.

What do these findings imply for economic growth more widely? Private-order institutions do not, as is sometimes assumed, have a historical track record of supporting growth by substituting for public-order institutions in guaranteeing property rights or enforcing contracts. This does not exclude a role for private-order institutions in growth, but this role appears to consist in complementing public-order institutions, not substituting for them. For centuries, the public authorities have played a central role in defining the institutional rules of the game for economic activity, for good or ill. There is no historical evidence that private-order institutions have been able to guarantee property rights or enforce contracts independently. This does not mean, however, that public-order institutions always exercise a beneficial impact on economic growth. Public-order institutions that are impartial and generalized are necessary for markets to function. But public-order institutions that are partial and particularized not only fail to support growth but may actively stifle it.

8.3. LESSON 2: STRONG PARLIAMENTS DO NOT GUARANTEE ECONOMIC SUCCESS

This places the spotlight squarely on public-order institutions. As the Champagne fairs show, the public authorities matter for growth, for good or ill. But what characteristics of public-order institutions are good for growth? An idea that has gained considerable traction in the growth literature is that economic growth requires strong parliamentary institutions representing the interests of wealth holders (North and Weingast, 1989; Acemoglu et al. 2005; Acemoglu and Robinson, 2012). For modern poor countries, this implies that strengthening parliaments will ensure the institutional basis for economic success. These are attractive arguments, since there are reasons for believing that representative government is a good thing for its own sake. But does economic history support the idea that strong parliaments are invariably beneficial for economic growth?

This idea was first proposed by North and Weingast (1989), who argued that the Glorious Revolution of 1688 strengthened the English parliament in ways that produced institutions favorable to economic growth. The case of England after 1688, they claimed, provided strong historical support for two theoretical arguments concerning why parliaments are good for growth. First, they argued, a parliament possesses an inherently greater diversity of views than a monarchical government, increasing the costs for special-interest groups of engaging in rent-seeking to secure state regulations favorable to their interests but harmful to wider economic growth (for the initial elaboration of this view, see Ekelund and Tollison (1981, p. 149)). Second, a parliament that represents wealth holders will be one that enforces their interests, which are assumed to include secure private property rights and resistance to rent-seeking by special-interest groups (North and Weingast, 1989, p. 804). Although North and Weingast did not precisely define "wealth holders," their account of 18th-century England portrayed this group as including large landowners, merchants, industrialists, and state creditors (North and Weingast, 1989, pp. 810–12, 815, 817–18). The enhanced influence of these wealth holders via greater parliamentary control over the executive after 1688 is supposed to have caused secure private property rights to emerge for the first time in any society in history and ensured that the economy grew faster and industrialized earlier in England than in comparable Western European societies such as France (North and Weingast, 1989, pp. 830–1). These arguments have influenced the growth literature by apparently providing historical support for the idea that politically inclusive bodies such as parliaments create institutions favorable to growth. In one recent formulation, "the reason that Britain is richer than Egypt is because in 1688, Britain (or England to be exact) had a revolution that transformed the politics and thus the economics of the nation" (Acemoglu and Robinson, 2012, p. 4).

Attractive though these ideas seem, there are both theoretical and empirical problems with them. The theoretical problem is that there is no reason to believe that wealth holders such as large landowners, merchants, or industrialists will necessarily seek policies and institutions that are beneficial for the growth of the whole economy. They may instead seek to establish policies and institutions that benefit themselves, regardless of whether those harm growth. The empirical problem is that historical evidence drawn from a wider sample of economies provides at best mixed support for the idea that control over rulers by parliaments, even when those parliaments represented wealth holders, ensured the creation of favorable property rights, suppressed rent-seeking, or brought about successful economic growth.

8.3.1 Did Strong Parliaments Always Create Good Institutions for Growth?

There were a number of early modern European economies which, like England, had powerful parliaments that were manned by wealth holders, exercised considerable control over the executive, and strongly influenced economic policy, but created institutions and policies that did not favor economic growth.

One example is Poland, a territory well known for the strength of its parliament (the *Sejm*), which was so strong that no ruler of Poland was able to promulgate any legislation or implement any policy without parliamentary consent (Czapliński, 1985; Mączak, 1997; Czaja, 2009). The Polish parliament represented wealth holders, who were made up of the large noble landowners, a group also strongly represented in the English parliament. But the wealth holders represented in the Polish parliament did not manifest a natural diversity of views (Mączak, 1997; McLean, 2004). Rather, they manifested a very homogeneous view, namely that the power of the state should be deployed wherever possible to enforce their own legal privileges over factor and product markets under the second serfdom (Kaminski, 1975; Kula, 1976; Mączak, 1997; Frost, 2006). This gave rise to economic policies that were harmful for economic growth, in two ways. First, the Polish parliament prevented the implementation of many economic policies that were feasible in an early modern European economy and that would have created good incentives for economic agents in the country at large to allocate resources efficiently and undertake productive investments (Topolski, 1974; Kula, 1976; Guzowski, 2013). Second, the Polish parliament successfully promoted economic policies that benefited particular groups in society, specifically the large noble landowners (*szlachta*) who were disproportionately represented in parliament (Kaminski, 1975; Kula, 1976; Mączak, 1997; Frost, 2006).

From the 16th through to the 19th century, Poland was subject to the second serfdom. As we shall see in greater detail in Lesson 8, serfdom was an institutional system that endowed landlords with coercive legal privileges over the economic choices of the vast mass of the rural population and over the operation of factor and product markets in agriculture (Topolski, 1974; Kaminski, 1975; Kula, 1976). Agriculture was the largest sector in all pre-industrial economies, and serfdom constrained agricultural growth. One result of the second serfdom was that per capita GDP was much lower, and grew much more slowly, in Eastern than in Western Europe between c. 1000 and the abolition of serfdom in the later 18th or the early 19th century (Brenner, 1976; Ogilvie, 2013b). The intensity of the second serfdom and its deleterious effects on economic growth varied considerably across Eastern-Central and Eastern Europe, and the balance of power between rulers and parliamentary bodies played a major role in this variation (Brenner, 1976; Harnisch, 1986, 1994; Cerman, 2012; Ogilvie, 2013b). The second serfdom was typically less restrictive in those societies in which the ruler had more power relative to the parliament, since this enabled the ruler to resist extremes of rent-seeking by the noble landowners who were primarily represented in parliaments in those countries (Ogilvie, 2013b; Harnisch, 1986, 1989b). Those Eastern European societies, such as Poland or Mecklenburg, which had very strong parliamentary organs representing the interests of wealth holders, were also those in which the second serfdom was most oppressive and economic growth most stifled, although the existence and direction of a causal connection between strong parliaments and strong second serfdom has not been definitively established (Harnisch, 1986, 1989b; Mączak, 1997; Cerman, 2008, 2012; Ogilvie, 2013b).

The lesson for economic growth is clear. In societies in which the wider institutional system endowed wealth holders with coercive privileges giving them large economic rents, these wealth holders used those rents to obtain representation in parliament. They then used their control over parliament to intensify their own privileges in such a way as to redistribute more wealth toward themselves, even at the expense of the rest of the economy. Under such circumstances, parliamentary control over the executive choked off growth rather than encouraging it.

It might be argued that the problem with the early modern Polish parliament was that the wealth holders it represented were landowners alone, rather than also including the merchants and industrialists emphasized by North and Weingast, and hence that Poland is not a fair test of their theory. But a second example of a European polity with strong parliamentary control over the executive, the German state of Württemberg, is not subject to this objection. Württemberg was a highly democratic German state with strong parliamentary influence over the sovereign from the late 15th century through to the 19th century (Grube, 1954, 1957, 1974; Carsten, 1959; Vann, 1984; Ogilvie, 1999). So widely recognized was the influence of the Württemberg parliament over the crown and the executive arm of government that Charles James Fox famously remarked that there were only two constitutions in Europe, that of Britain and that of Württemberg (Anon. 1818, p. 340). Württemberg also lacked an indigenous landholding nobility, so its parliament was manned almost completely by bourgeois representatives, consisting of substantial businessmen—those active in commerce and industry—selected by the communities of the c. 60 administrative districts from among their own citizenry (Vann, 1984; Ogilvie, 1997, 1999). Thus, Württemberg was a polity with a strong parliament representing bourgeois wealth holders drawn primarily from industrial and commercial occupations, and these parliamentary representatives exercised unusually strong influence over state economic policies (Vann, 1984). But the policies favored by the Württemberg parliament consisted of granting legal monopolies and other exclusive privileges to special-interest groups such as craft guilds, retailers' guilds, and cartellistic companies of merchants and industrial producers (Troeltsch, 1897; Gysin, 1989; Flik, 1990; Dormois, 1994; Medick, 1996; Ogilvie, 1997, 1999, 2004a). So ubiquitous were such privileges, even in the most highly commercialized sectors of the economy, that the Göttingen professor Meiners (1794, p. 292) described how in Württemberg external trade "is constantly made more difficult by the form which it has taken for a long time. The greatest share of trade and manufactures are in the hands of closed and for the most part privileged companies." The entrenched institutional privileges of these traditional interest groups represented in a strong parliament contributed to the stagnation of the Württemberg economy throughout the entire early modern period and its late industrialization compared even to other German territories (Boelcke, 1973, 1984; Schomerus, 1977; Gysin, 1989; Hippel, 1992; Twarog, 1997; Fliegauf, 2007; Burkhardt, 2012; Kollmer-von Oheimb-Loup, 2012).

Again, the lesson for economic growth is clear. The underlying institutions of a society influence whether a strong parliament will foster or stifle growth, since it is they that influence the mechanisms both for becoming wealthy and for getting into parliament, as well as the policies deemed desirable by parliamentary representatives. Strong control over the executive by a parliament manned by wealth holders, even those recruited from industry and commerce, will only encourage growth if the wealth holders in question regard it as in their interest to promote generalized institutional arrangements that benefit the growth of the entire economy rather than particularized institutions that redistribute wealth to themselves. The historical evidence shows that there is no guarantee that they will do so.

More autocratic German states provide a striking contrast to parliamentary Württemberg and cast further doubt on the general validity of the idea that influence over the executive by strong parliaments manned by business interests will inevitably give rise to economic policies that encourage growth. In German states such as Prussia, the sovereign was much stronger relative to the parliament than in Württemberg (Carsten, 1950, 1959; Feuchtwanger, 1970; Koch, 1990; Clark, 2006; Wheeler, 2011). As a result, by the early 19th century the executive arm of government in Prussia became strong enough to withstand much more of the rent-seeking pressure exerted by parliaments manned by representatives of wealth holders. Instead, the Prussian rulers were able to ram through institutional reforms which weakened the privileges of guilds, municipal corporations, and village communities (Rosenberg, 1958; Tipton, 1976; Brophy, 1995; Wheeler, 2011). Prussia abolished its guilds after c. 1808, while Württemberg retained them until 1864. The Prussian state even became strong enough after c. 1808 to abolish serfdom and gradually to restrict many other market-distorting institutional privileges enjoyed by both noble landlords and peasant communes (Schmoller, 1888; Henderson, 1961a,b,c; Tipton, 1976; Sperber, 1985). These state infringements on traditional institutional privileges were not possible in more democratic German territories such as Württemberg, where, although serfdom never existed in the east-Elbian form, the powers of communities over agriculture, guilds over industry, and cartellistic merchant companies over commerce were maintained, with parliamentary support, to a much later date (Tipton, 1976; Schomerus, 1977; Medick, 1996; Ogilvie, 1992, 1999). The economic policies pushed through forcibly against parliamentary protest by the autocratic Prussian state abolished the regime of privileges and rents for special-interest groups, creating better (if not perfect) incentives for the economy at large (Tipton, 1976; Hohorst, 1977). The level of economic development as measured by the best available proxy—the urbanization rate—was much higher in Prussia than in Württemberg over the entire period from 1750 to 1900, and the rate of economic growth was faster in Prussia (Edwards and Ogilvie, 2013).

The Dutch Republic provides a final example of a European society in which a strong parliament manned by wealth holders failed to create the institutional basis for sustained economic growth. From its foundation in 1581 to its dissolution in 1795, the United Provinces of the Netherlands was a republic governed by the States-General, a parliamentary government manned by representatives from each of the seven provinces; each province in turn was governed by the Provincial States, a provincial parliament (Blockmans, 1988; Israel, 1989; Koenigsberger, 2001). The Dutch Republic thus lacked a sovereign altogether and enjoyed parliamentary control over the executive at both the central and the provincial level. So democratic was its government that it strongly influenced the framing of the US Constitution in 1776 (Pocock, 2010). Dutch parliamentary institutions were manned not just by relatively small-scale businessmen such as those in Württemberg, but by large-scale, long-distance traders and industrialists. For the first century of its existence, the Dutch Republic was the miracle economy of early modern Europe, with high agricultural productivity, innovative industries at the forefront of technology, highly competitive global merchants, sophisticated financial markets, high living-standards, and rapid economic growth (De Vries, 1974; Israel, 1989; Bieleman, 1993, 2006, 2010; De Vries and Van der Woude, 1997). But after c. 1670, although the Dutch Republic retained its strong parliamentary institutions, its economy stagnated (De Vries and Van der Woude, 1997; Van Zanden and Van Riel, 2004).[1] This stagnation was caused at least partly by the power of entrenched business elites, whose parliamentary representation was one factor that enabled them to implement institutional arrangements that

[1] Van Zanden and Van Leeuwen (2012) present new macroeconomic estimates suggesting that the province of Holland experienced economic stagnation rather than actual decline between c. 1670 and c. 1800, but their figures refer solely to Holland, by far the most economically successful province of the Netherlands. Even for Holland, they find that industry had a near-zero growth rate between 1665 and 1800 and trade contracted at a rate of 0.13% p.a. between 1720 and 1800 (Tab. 4).

secured rents for themselves at the expense of the wider economy (Mokyr, 1974, 1980; Buyst and Mokyr, 1990; De Vries and Van der Woude, 1997; Van Zanden and Van Riel, 2004). Occupation by French Revolutionary armies enforced institutional reform in the Netherlands after c. 1795, which returned the economy to gradual economic growth, but even then the economy did not industrialize until the later 19th century, very tardily by European standards (Mokyr, 1974, 1980; Buyst and Mokyr, 1990; De Vries and Van der Woude, 1997; Van Zanden and Van Riel, 2004; Van den Heuvel and Ogilvie, 2013). The Dutch Republic thus had all the ingredients emphasized by North and Weingast (1989): executive controlled by strong parliament, parliament manned by wealth holders, wealth holders recruited from big business. But this did not prevent institutional putrefaction and stagnant economic growth after c. 1670.

The forces preventing strong representative institutions manned by wealth holders from giving rise to beneficial economic policies can be seen at work even in 18th-century England. North and Weingast (1989, p. 817) ask what prevented the English parliament from acting as abusively as the crown in passing bad economic regulations that benefited rent-seeking groups. Their answer is "the natural diversity of views in a legislature." Yet the example of other early modern European polities shows that legislatures do not always have a natural diversity of views. And the example of England itself shows that even an English style of parliament does not always pass beneficial economic policies.

Eighteenth-century British policies enforcing the ownership of and trade in slaves are one example of economic policies maintained by a parliament in order to sustain the property rights of the wealth holders whose interests it represented. This was recognized by Adam Smith, who argued (1776, Bk. IV, Ch. 7) that although slavery is both economically inefficient and morally repugnant, it is more difficult to restrict under a parliamentary form of government because slave-owners are represented in the parliamentary assembly and put pressure on magistrates to protect their property rights over their slaves.[2] Slavery, indeed, is an example of how there are types of security of private property rights which can be bad for economic growth, an argument we explore more fully in Lesson 5.

English parliamentary support for the mercantilistic regulations and military activities that defended the English colonies is another example. As early as 1817, the economist

[2] Smith (1776), Bk. IV, Chapter 7 ("Of Colonies"), paras. 76–77: "The law, so far as it gives some weak protection to the slave against the violence of his master, is likely to be better executed in a colony where the government is in a great measure arbitrary than in one where it is altogether free. In every country where the unfortunate law of slavery is established, the magistrate, when he protects the slave, intermeddles in some measure in the management of the private property of the master; and, in a free country, where the master is perhaps either a member of the colony assembly, or an elector of such a member, he dare not do this but with the greatest caution and circumspection. The respect which he is obliged to pay to the master renders it more difficult for him to protect the slave. …That the condition of a slave is better under an arbitrary than under a free government is, I believe, supported by the history of all ages and nations."

Jean-Baptiste Say argued that the costs of maintaining overseas colonies far outweighed the benefits. Colonialism, he argued, was sustained by means of a subsidy, mandated by the government and supported by parliament, which transferred resources from home consumers to the planter and merchant classes.[3] Some modern economic historians have also argued that the colonies cost the British economy more than they benefited it (e.g. Thomas and McCloskey, 1981), although this is contested by others who claim that colonial trade ensured the gainful use of underemployed resources (e.g. O'Brien and Engerman, 1991). O'Rourke et al. (2010) come to the conclusion that the rapid growth of world trade when mercantilist restrictions were removed in the 19th century demonstrates that in the 18th century "a regime of multilateral free trade would have been preferable to mercantilism," although they acknowledge that in a world in which other European powers were also behaving in a mercantilistic way, it may have been essential for each individual country to participate in (and win) mercantilistic conflicts. As this debate illustrates, however, 18th-century English parliamentary support for mercantilism and colonialism was a policy whose effects on the growth of the wider economy were ambiguous, while its benefits in creating rents for plantation-owners and merchants were indisputable.

Another example of an economic policy supported by the English parliament, even though it harmed the economy at large, is provided by the Corn Laws. These were a set of trade laws introduced in 1815 which imposed heavy duties on imported grain (Gash, 1961, 1972; Prest, 1977; Hilton, 1977, 2006; Ward, 2004; Schonhardt-Bailey, 2006). If it had been possible to import cheap grain, agricultural laborers, industrial workers, and manufacturers would have benefited, but landowners, whose interests were strongly represented in the British parliament, would have suffered (Fairlie, 1965, 1969; Vamplew, 1980). The Corn Laws, which increased the profits of landed wealth holders whose interests were represented in Parliament, were only abolished in 1846 under the extraordinary external pressure of harvest failure and famine in Ireland (Gash, 1961; Hilton, 1977, 2006). Even then, the abolition of the Corn Laws was widely opposed in Par-

[3] Say (1817), Bk. I, Ch. XIX, para. 25: "All these losses fall chiefly upon the class of home-consumers, a class of all others the most important in point of number, and deserving of attention on account of the wide diffusion of the evils of any vicious system affecting it, as well as the functions it performs in every part of the social machine, and the taxes it contributes to the public purse, wherein consists the power of the government. They may be divided into two parts; whereof the one is absorbed in the superfluous charges of raising the colonial produce, which might be got cheaper elsewhere; this is a dead loss to the consumer, without gain to any body. The other part, which is also paid by the consumer, goes to make the fortunes of West-Indian planters and merchants. The wealth thus acquired is the produce of a real tax upon the people, although, being centred in few hands, it is apt to dazzle the eyes, and be mistaken for wealth of colonial and commercial acquisition. And it is for the protection of this imaginary advantage, that almost all the wars of the eighteenth century have been undertaken, and that the European states have thought themselves obliged to keep up, at a vast expense, civil and judicial, as well as marine and military, establishments, at the opposite extremities of the globe."

liament on the grounds that repeal would weaken landed wealth holders and empower commercial interests (McCord, 1958; Hilton, 1977, 2006). Abolition required a heroic act of statesmanship by an individual political leader, Robert Peel, which ended his own political career and split his party for a generation (Gash, 1961, 1972), although it had the beneficial effect of reducing grain prices in Britain, increasing market integration across Europe, and favoring economic growth (Semmel, 1970; Peet, 1972; Williamson, 1990; Ward, 2004; Sharp and Weisdorf, 2013). The representation of wealth holders in the English parliament, therefore, did not inevitably result in the passage of economic policies that benefited the growth of the entire economy rather than enhancing the profits of powerful special-interest groups.

It may be true that the English state did not implement as many harmful economic policies favoring special-interest groups as did many continental European states. But this was already the case before 1688 (see, e.g. Archer, 1988; Ogilvie, 1999; Brewer, 1989), and was not necessarily because of the strength of the English parliament. An alternative explanation for the relative paucity of growth-stifling economic policies in early modern England is not so much parliamentary limits on the crown, but rather the absence of a paid local bureaucracy, which made it very difficult to enforce harmful economic policies even when they *were* promulgated by Parliament or executed by the Crown (Brewer, 1989). Most continental European economies experienced an earlier and more extensive growth of state regulation in the hothouse of early modern land-based warfare (Ogilvie, 1992). In these societies, the state appointed paid local personnel, enabling it to grant monopolies and other economic privileges to rent-seeking groups and to offer effective enforcement of these growth-stifling policies (Brewer and Hellmuth, 1999; Ogilvie, 1992, 1999). In England, by contrast, insofar as the Stuart monarchs had managed to put in place the innovation of a centralized administrative apparatus in the early decades of the 17th century, it was destroyed in the 1640s during the Civil War (North and Weingast, 1989, p. 818). Britain did not create a paid local bureaucracy in the 18th century and effective bureaucratic enforcement of regulations in the domestic economy did not begin until after c. 1800 (Brewer, 1989).

These historical findings do not imply that it is unimportant what economic policies a country's parliament is willing to support. Nor do they imply that it is undesirable for a parliament to represent a diversity of views, among which should be those of businessmen and property owners. But the sheer presence of a parliament that represents wealth holders and can influence the executive does not guarantee that a diversity of views will be represented or that growth-favoring economic policies will be implemented. A number of pre-modern European economies had strong parliaments that influenced the executive and were manned by wealth holders, including representatives recruited from commerce and industry. Yet these strong parliaments did not always represent a diversity of views or ensure good economic policies. On the contrary, if the wealth holders that were represented in parliament were themselves agreed that good economic policies were ones that were beneficial to themselves, parliamentary strength could entrench policies that were obstacles to wider economic growth. This is reflected in the fact that a number of European economies with strong parliaments manned by wealth holders remained extremely poor (Poland), experienced long-term stagnation (Württemberg), or moved from growth to stagnation (the Dutch Republic). This was the case whether that economy was located in Eastern Europe under the second serfdom, in Central Europe with strong corporative institutions, or in the comparatively commercialized northwest corner of the continent. The reason was that wealth holders, even ones recruited from big business, did not always know (or care) what economic policies would be best for generalized economic growth rather than their own particularized profits. As a consequence, parliaments manned by business representatives were capable of supporting policies that generated rents for special-interest groups rather than ones that created good incentives for the whole economy. North and Weingast (1989, p. 804) address this crucial issue for England by stating that "the institutional structure that evolved after 1688 did not provide incentives for Parliament to replace the Crown and itself engage in similar 'irresponsible' behavior." But this assertion does not explain what it was about the post-1688 institutional structure in England that prevented this from happening. The historical evidence shows that what matters for growth is not whether a country had a strong parliament (or a weak executive), but what that parliament (or executive) did. Even more important for growth was the underlying institutional framework of the society, which determined how people came to become wealth holders and hence which policies they sought through political action.

8.3.2 Was There a Discontinuity in Institutions and Growth in England after 1688?

A second test of the claim that an increase in parliamentary power in England after 1688 unleashed economic growth is provided by England alone. A more circumscribed version of the theory, after all, might argue that *something* about the style of parliament that emerged in England after 1688 was crucial for growth, even if all the other types of parliament observed in European history were not. Even for England, however, the empirical findings do not support the idea that the Glorious Revolution of 1688 marked an institutional or economic discontinuity.

Extensive parliamentary control over the crown prevailed in England long before 1688 (Goldsworthy, 1999). Since the medieval period, English monarchs had been obliged to get parliamentary consent before levying taxes (Harriss, 1975; Hartley, 1992; Hoyle, 1994). Between 1603 and c. 1642, the early Stuart monarchs (James I and Charles I) sought to restrict this longstanding parliamentary power, and this was one of the major issues underlying the English Civil War (Lambert, 1990; Braddick, 1994). This Civil War, which ended in 1651, established the precedent that the monarch could not govern without the consent of Parliament (Braddick, 1994). The monarchy was restored in 1660, and both Charles II (r. 1660–1685) and James II (r. 1685–1688) attempted to use royal prerogative to pass legislation without parliamentary consent. The Bill of Rights of 1689 explicitly declared passing a bill using royal prerogative to be illegal; but this was simply a reassertion of the English parliament's centuries-old right to veto legislation, although it did extend parliamentary authority to monitor crown spending (Goldsworthy, 1999; Harris, 2004). Although, therefore, the events of 1688 indubitably contributed to enhancing parliamentary authority over the executive, this was in large part a restatement of parliamentary controls over rulers which dated back to at least 1651, which in turn had been a reassertion of the longstanding parliamentary powers that had existed in England between the medieval period and the accession of the Stuarts in 1603 (Harrison, 1990; Goldsworthy, 1999). Only a very few of the parliamentary powers asserted in 1689 were new; most had existed for a long time; and thus the 1689 Bill of Rights must be seen as an incremental component of a longstanding evolutionary development rather than any sort of revolution in the relationship between Parliament and the executive. This casts doubt on the view that the Glorious Revolution of 1688 made a major contribution to early-18th-century economic growth, let alone to the Industrial Revolution, which only began after c. 1760 and involved relatively slow economic growth until c. 1820 (Crafts, 1987; Mokyr, 1987; Williamson, 1987; Broadberry et al. 2013).

Nor did the Glorious Revolution of 1688 mark any *economic* discontinuity. If the style of parliament that emerged in England after 1688 (whatever its features) was crucial for growth, then one should observe a discontinuity in economic growth rates in England before and after 1688. But none of the estimates for the growth rate of the English economy between 1500 and 1820 show any discontinuity around 1688. Maddison (http://www.ggdc.net/MADDISON/oriindex.htm) shows an almost stable growth rate between 1500 and 1820: if anything, growth was slightly faster during the 16th century than it was during the 17th or 18th centuries; his series shows no discontinuity around 1688. Van Zanden (2001) finds rapid growth in England in the second half of the 17th century, but slower growth in the 1700–1820 period; his series also shows no discontinuity around 1700. Broadberry et al. (2011, esp. Table 10) find high per capita GDP growth from the 1650s to the 1690s (0.69% p.a.) but much lower growth from the 1690s to the 1760s (0.27% p.a.). Murrell (2009) examines more than 50 separate data series spanning the period 1688–1701 and estimates the dates of structural breaks: he finds that the entire second half of the 17th century was a period of economic change in England, but that there was no structural break in the years following 1688. Clark (2010) proposes a different data series, which shows real GDP per capita in England hardly changing at all in the 17th century, before increasing modestly in the 18th century and growing strongly in the period 1800–1820. Clark's estimates have been questioned on several grounds, as Broadberry et al. (2011) point out, so it does not seem unreasonable to place most weight on the three broadly similar estimates of Maddison, Van Zanden, Broadberry, Campbell, Klein, Overton and Van Leeuwen. If one does so, evidence that there was a noticeable increase in growth after 1688 is conspicuous only by its absence.

Even for England, therefore, it is not possible to assign an important role to increased parliamentary power after 1688 in any explanation of economic growth or industrialization. There was no discontinuity in the growth of the English economy around 1688. This is not to deny that there may have been institutional causes of the good performance of the English economy in the early modern period. But these must have been institutional arrangements that were already causing the English economy to function well by 1500. Insofar as long-term growth had institutional sources, these resided not in sudden discontinuities but rather in the gradual development of institutional arrangements over the longer term.

What do these historical findings imply for economic growth more widely? Public-order institutions are important for markets to function, but parliaments representing business interests are not their distinguishing feature. Some economies with strong parliaments experience successful historical growth, but others stagnate or even decline, and do so partly because of institutions and policies implemented by their strong parliaments to redistribute resources toward the interests they represent. Other economies with spectacularly weak parliaments achieve successful economic growth over long historical time-spans, partly because of the weakness of those parliaments and their resulting inability to defend entrenched business interests against disruptive innovations. Historical evidence suggests the need to analyze the underlying institutions of each society which influence how wealth holders become wealthy, how they obtain parliamentary representation, and how parliamentary policy concretely affects the economic framework that fosters or stifles growth.

8.4. LESSON 3: THE KEY DISTINCTION IS BETWEEN GENERALIZED AND PARTICULARIZED INSTITUTIONS

Where does that leave us? Lesson 1 taught us that public-order institutions are indispensable for markets. But what exactly is it about public-order institutions that determines growth? In Lesson 2 we reviewed one of the popular answers—parliaments are what makes the difference—and rejected it. So the question remains: what features of public-order institutions influence growth? Economic history does suggest an answer to this question, but it requires that we look at institutions in a somewhat different way than is customary. Rather than looking at the high-profile aspects of government examined by political scientists and political historians, such as parliaments, rulers, power struggles, or revolutions, we focus on how institutions apply to the populations subject to them, and whether that application is uniform or varies systematically by group. When viewed in that perspective, it turns out that generalized institutions—those of more uniform application, i.e. more closely resembling a level playing field among the members of a society—are conducive to growth. Particularized institutions, on the other hand—those whose application varies sharply by group membership, and tilt the playing field in favor of some groups—hinder growth.

The literature has proposed various ways of classifying institutions according to their effects on growth. Some influential recent classification systems have made significant advances by recognizing the importance of political institutions for economic growth and incorporating historical evidence. Thus North et al. (2006, 2009) distinguish open-access social orders, which have benefited growth, and limited-access ones, which have harmed it. Along similar lines, Acemoglu and Robinson (2012) distinguish between inclusive and extractive institutions, where the inclusive systems encourage economic participation by large proportions of people, encourage people to make best use of their skills and choose their own jobs, allow people to make free choices, ensure secure private property, provide unbiased legal judgements, maintain impartial public contracting institutions, and permit entry of new businesses (Acemoglu and Robinson, 2012, pp. 74–75). The existence of inclusive economic institutions, in turn, depends on inclusive political institutions, which are defined more generally as those that are "sufficiently centralized and pluralistic," where centralization means that the state has a monopoly on legal violence and pluralism means that power is broadly distributed in society (Acemoglu and Robinson, 2012, p. 81). Extractive institutions, whether economic or political, are defined as being those that are not inclusive.

These proposed distinctions are useful: they focus on the historical influence of institutions on long-term growth, and they incorporate political and distributional aspects of such institutions. Their usefulness is limited, however, by their vagueness. Both distinctions are extremely broad and leave unclear exactly which aspects of a society's institutional system are critical from the authors' points of view. We believe that the historical research available to date permits the more precise distinction between what we call *generalized* and *particularized* institutions.

Generalized institutions are those whose rules apply uniformly to everyone in a society, regardless of their identity or their membership in particular groups, e.g. a state in which a rule of law is established to some degree, or a competitive market with free entry (Ogilvie, 2005d, 2011; Puttevils, 2009; Hillmann, 2013). The institutional rules of such states and markets apply to any economic agent impartially, without regard to any personal characteristic appertaining to the individual or the group he or she belongs to, rather than the transaction in question (Ogilvie, 2005d, 2011). The rules of particularized institutions, in contrast, apply differentially to different subsets of agents in the economy (Ogilvie, 2005d, 2011; Puttevils, 2009; Hillmann, 2013). Typically, these subsets consist of persons defined according to characteristics that have little or no *prima facie* bearing on the transaction classes in question. These characteristics may be anything, but in practice often include gender, religion, race, parentage, social stratum, group membership, or possession of specific socio-political privileges explicitly entitling their holders to distort markets in their own interest. Particularized institutions include those that favor particular castes, communities, or guilds, as well as systems of serfdom and slavery. Thus, for instance, the rules and entitlements of a medieval guild applied only to its own members, based on their possession of the specific legal privilege of membership, which in turn depended on non-economic criteria such as gender, parentage, religion, and other personal characteristics; non-members of the guild were treated completely differently (Ogilvie, 2005d, 2011). Likewise, as we shall see in Lesson 8, the rules and entitlements of serfdom applied differentially to serf overlords (who were endowed with privileged rights of property and transaction in land, labor, capital, and output), compared to serfs (whose property rights and transactions were institutionally limited). The rules of a guild or the rules of serfdom might guarantee your property rights or enforce your contracts, but only because of your particular identity, rights, and entitlements as a member of a particular subset of economic agents, defined according to transaction-unrelated criteria such as guild membership or serf status (Ogilvie, 2005d, 2011).

In real life there are, of course, no perfectly generalized institutions; even the historical states that best approximated a rule of law often permitted obvious lapses and inconsistencies. It is best to think of the distinction between generalized and particularized institutions as a continuum along which historical institutions are distributed. In addition, the mixture of generalized and particularized institutions is different in each society: this will be discussed in more detail when we consider comprehensive institutional systems in Lesson 7. Generalized and particularized institutions co-exist in all economies, in other words; but historically, those societies in which generalized institutions gradually came to predominate were those where sustained economic growth became possible.

The distinction between the two emerges as central in a number of historical examples of institutional frameworks that fostered—or stifled—long-term growth. To illuminate the precise institutional features and causal mechanisms involved, this section will analyze in detail one historical example widely referred to by economists, that of the institutional framework that fostered growth in long-distance commerce between the medieval period and the Industrial Revolution. Later sections of this chapter then develop the usefulness of this classification system in the context of property rights (Lesson 5), and in the context of serfdom (Lesson 8).

Let us begin, however, by exploring the distinction between generalized and particularized institutions in the growth of international trade. Between c. 1000 and c. 1800, there was a substantial and sustained growth of long-distance trade, first between Europe and its near abroad and after c. 1500 between Europe and other continents. A widely held view in the recent economics literature is that this Commercial Revolution was facilitated by particularized institutions called merchant guilds, corporative associations of wholesale traders (Greif et al. 1994; Greif, 2006c; Ostrom, 1998; Maggi, 1999; Taylor, 2002; Anderson, 2008; Dixit, 2009). Merchant guilds had existed since Greek and Roman antiquity, but became a salient institution in much of Europe between c. 1000 and c. 1500 (Ogilvie, 2011). Although they declined in some societies, particularly the Netherlands and England, from the 16th century on, they survived in many parts of southern, central, Scandinavian, and Eastern Europe into the 18th or early 19th centuries. New merchant guilds (and privileged merchant companies that often resembled guilds) formed in emerging sectors such as proto-industrial exporting and the intercontinental trade until around 1800. Merchant guilds also spread to European colonies, especially to Spanish America, where they were only abolished with independence in the 19th century (Woodward, 2005, 2007).

These particularized institutions thus indisputably *accompanied* the growth of trade in medieval and early modern Europe. But it has recently been urged that they *facilitated* it, by guaranteeing property rights and contract enforcement for long-distance merchants (Greif et al. 1994; Greif, 2006c; Gelderblom and Grafe, 2004; Ewert and Selzer, 2009, 2010; Volckart and Mangels, 1999). Unconvinced, other scholars remark that merchant guilds and associations had been formed by rent-seeking traders for millennia to tilt the playing field in their favor, and that it was, rather, the gradual emergence of more generalized institutional mechanisms that facilitated the growth of trade during the medieval and early modern Commercial Revolution (Boldorf, 1999, 2006, 2009; Dessí and Ogilvie, 2003, 2004; Lindberg, 2008, 2009, 2010; Ogilvie, 2011).

Private property rights are the first sphere in which the distinction between particularized and generalized institutions proves to be central in understanding the basis for commercial growth. In an influential article, Greif et al. (1994) proposed a theoretical model according to which, if merchants belonged to a merchant guild that could make credible collective threats against rulers, this guild could pressure rulers into committing themselves to refrain from attacking the property of guild members and to provide these guilded merchants with adequate levels of security against outside aggressors. This article went on to argue that this was actually why the merchant guild arose and existed in medieval Europe: it was an efficient solution to the problem of guaranteeing security of private property rights for long-distance merchants.

Closer empirical scrutiny, however, casts doubt on the idea that these particularized institutions played a positive role in guaranteeing private property rights during the Commercial Revolution. The enhancements to commercial property rights that merchant guilds might have generated in theory turn out to have been minor in practice; insofar as they existed, they accrued only to guild members, not the economy, or even a local economy, as a whole (Dessí and Ogilvie, 2003, 2004; Ogilvie, 2011, Ch. 6; Lambert and Stabel, 2005; Henn, 1999; Briys and De ter Beerst, 2006; Blondé et al. 2007; Harreld, 2004a,b). Furthermore, merchant guilds also engaged in activities which *reduced* the security of commercial property rights for others, by attacking the trade of rival merchants or lobbying their own governments to do so in order to defend their cartellistic privileges over particular wares, transaction types, and trade routes. These attacks created insecurity of private property rights which not only damaged competitors but spilled over (harmfully) to uninvolved third parties (Barbour, 1911; Katele, 1986; Pérotin-Dumon, 1991; Tai, 1996, 2003a,b; Reyerson, 2003; Ogilvie, 2011).

Historical research shows that it was generalized institutions that improved the security of private property rights during the Commercial Revolution (Lindberg, 2008, 2009, 2010; Ogilvie, 2011, Ch. 6). Princely states and urban governments provided generalized security to all merchants in those times and places at which long-distance trade expanded, as at the Champagne fairs (discussed in Lesson 1). Urban governments and rulers also organized infrastructure such as convoys, fortifications, military defence, and law and order, in order to attract merchants, including those who were not members of guilds (Byrne, 1916; Williams, 1931; Laurent, 1935; Bautier, 1953; Lane, 1963; Lopez, 1987; Doumerc, 1987; Nelson, 1996; Tai, 1996; Dotson, 1999; Stabel, 1999; Laiou, 2001; Middleton, 2005; Ogilvie, 2011; Edwards and Ogilvie, 2012b). Different European societies differed in the precise balance between particularized guarantees of property rights to privileged merchant guilds in return for favors, and generalized guarantees of property rights to all traders in the expectation of being able to tax an expanding trade. But those European polities which followed a more generalized path were those to which long-distance merchants migrated and in which they most vigorously generated gains from trade—Champagne under the counts in the 13th century; Bruges in the 14th; Antwerp in the 15th; Amsterdam in the 16th and early 17th; and London in the 17th and 18th centuries (Ogilvie, 2011; Gelderblom, 2005a, 2013). Long-distance trade expanded more successfully in those periods and locations in which the public authorities guaranteed property rights in a generalized way to all economic agents rather than in a particularized way to members of privileged guilds.

The distinction between particularized and generalized institutions also emerges as central to commercial growth in the evolution of contract enforcement. It has recently been maintained that merchant guilds were also an efficient solution to problems of consistent contract enforcement in international trade. Guild jurisdictions, it is claimed, offered better contract enforcement to merchants than public courts because they had greater commercial expertise, superior information, shared business values, and a special form of law (Milgrom et al. 1990; North, 1991; Benson, 1989). In one variant, merchant guilds are thought to have solved contract enforcement problems by using internal social capital to put pressure on members not to break contracts: if one guild member reneged on a business agreement, information would pass rapidly through the guild and other members would impose social sanctions on him for harming their collective reputation (North, 1991; Benson, 1998, 2002; Grafe and Gelderblom, 2010; Ewert and Selzer, 2009, 2010; Selzer and Ewert, 2005, 2010). In another variant of this claim, merchant guilds are held to have offered an efficient solution to contract enforcement via the kind of reprisals system discussed in Lesson 1: if a member of one guild defaulted on a contract with a member of another, the injured party's guild would impose collective reprisals on all members of the defaulter's guild, giving the latter an incentive to use internal peer pressure or guild courts to penalize the defaulter (Greif, 1997, 2002, 2004, 2006b,c; Boerner and Ritschl, 2005).

Closer empirical scrutiny, however, casts doubt on all variants of the idea that particularized provision of contract enforcement via merchant guilds played an important role in contract enforcement during the growth of long-distance trade. Guild jurisdictions were not universal, those that existed operated under devolved authority from the public legal system, guild tribunals were not capable of resolving complicated business conflicts, many guilded merchants preferred public jurisdictions, and there is no evidence that guild courts applied an autonomous merchant law (Woodward, 2005, 2007; Gelderblom, 2005b; Sachs, 2006; Ogilvie, 2011; Harreld, 2004a,b; Jacoby, 2003; Paravicini, 1992; Lambert and Stabel, 2005; Baker, 1979, 1986; Edwards and Ogilvie, 2012b; Kadens, 2012). Peer pressure left even less empirical trace, with almost no evidence that merchant guilds used it to enforce commercial contracts and several striking cases in which even the most powerful merchant guilds failed to sanction members for defaulting on contracts and had to petition the public authorities for enforcement (Ogilvie, 2011; Sachs, 2006; Gelderblom, 2005b; Ashtor, 1983).

Collective inter-guild reprisals existed, but progressively lost out to superior alternatives, the generalized institutions for commercial contract enforcement which we shall examine shortly. Inter-guild reprisals were widely disliked by medieval merchants themselves, since they harmed entire communities of long-distance merchants and increased the risks of trade for innocent third parties (Wach, 1868; Planitz, 1919; De Roover, 1963; Lloyd, 1977; Lopez, 1987; Tai, 1996; Sachs, 2006). These serious disadvantages were widely recognized by contemporaries, who sought to limit or abolish the reprisals system as soon as trade began to expand after c. 1050 (Mas-Latrie, 1866; Wach, 1868; Goldschmidt, 1891; Del Vecchio and Casanova, 1894; Planitz, 1919; Tai, 1996, 2003a,b; Volckart and Mangels, 1999; Laiou, 2001; Boerner and Ritschl, 2002; Ogilvie, 2011). When collective reprisals were invoked, they were fully embedded into the public legal system as a final stage in a series of formal steps based on consulting written records, mobilizing sureties, invoking arbitration panels, and litigating in public law-courts (Boerner and Ritschl, 2002; Ogilvie, 2011; Edwards and Ogilvie, 2012b). Collective reprisals against the communities of offenders were an ancient practice reaching back into antiquity (Dewey and Kleimola, 1970, 1984; Dewey, 1988). What was new in the medieval Commercial Revolution was the gradual and uneven attempt to circumscribe collective reprisals within formal, public legal proceedings (Mas-Latrie, 1866; Wach, 1868; Goldschmidt, 1891; Planitz, 1919; Cheyette, 1970; Lloyd, 1977; Tai, 1996, 2003a,b; O'Brien, 2002; Boerner and Ritschl, 2002; Fortunati, 2005; Sachs, 2006; Ogilvie, 2011; Edwards and Ogilvie, 2012b).

Peer pressure, reprisals, and rent-seeking corporate groups characterized all ancient and medieval trade, as far as we know, up to the beginning of the Commercial Revolution (Ogilvie, 2011). The new component in many European institutional systems, during that period, was the emergence of generalized institutions whose rules and entitlements applied to all economic agents, not just members of particular groups. A first set of these generalized mechanisms consisted of contractual instruments such as pledges, guarantorship, and cessions of credit (whereby a merchant sold or transferred his rights as creditor to a third party who was better able to enforce them). All three mechanisms were formal, generalized institutional innovations devised by business and legal professionals in the great medieval European trading centers (Szabó, 1983; Reyerson, 1985; Greve, 2001, 2007; González de Lara, 2005; Gelderblom, 2005b; Sachs, 2006). The notarial system of registering contracts in writing, depositing, and storing them, and ultimately certifying them before arbitration panels or in courts of law was another institutional innovation devised in Mediterranean trading centers at the beginning of the Commercial Revolution. Princes and churches had operated notarial systems before, but lay notaries providing services to private individuals emerged in the 11th century and supported the early Commercial Revolution in southern Europe (Doehaerd, 1941; Lopez and Raymond, 1955; Reyerson, 1985; Greve, 2000; Gelderblom, 2005b; Ogilvie, 2011). A little later, the development of municipal offices offering analogous registration, depository, and certification services for long-distance trading contracts in northwest Europe was another institutional innovation which had not been present in the early medieval period (Wach, 1868; Dollinger, 1970; Gelderblom, 2005b; Dijkman, 2007; Ogilvie, 2011). Arbitration panels manned by arbiters appointed from a broad circle of experienced lay judges and neutral merchants, whose decisions were recognized and enforced by public law-courts, constituted a further institutional innovation observable from the early years of the Commercial Revolution (Price, 1991; Epstein, 1996; Basile et al. 1998; Volckart and Mangels, 1999; Gelderblom, 2003, 2005b; Lambert and Stabel, 2005; Sachs, 2006; Aslanian, 2006; Ogilvie, 2011). Finally, if all these mechanisms failed, public law-courts operated by princes, feudal lords, religious institutions, and local municipalities competed to provide justice to international merchants in every locality and time-period in which long-distance trade expanded after c. 1050 (Baker, 1979; Reyerson, 1985; Basile et al. 1998; Boerner and Ritschl, 2002; Gelderblom, 2005b; Munzinger, 2006; Sachs, 2006; Dijkman, 2007; Harreld, 2004a,b; Ogilvie, 2011; Edwards and Ogilvie, 2012b). These generalized alternatives to the traditional patterns, many of them dating from the earliest years of the medieval Commercial Revolution, were consistently successful in promoting growth. Long-distance commerce grew in those places and time-periods in which generalized contracting institutions, provided by the market, the public legal system, the city government, and various other levels of the public authorities, began to offer acceptable contract enforcement which was open to all traders, not just members of particular privileged guilds.

The key feature of these new institutions for guaranteeing property rights and enforcing contracts was not that they were embedded in an open-access social order or that they occurred in polities with sufficient centralization and pluralism: those characteristics were sometimes present, but not always (Ogilvie, 2011, esp. Ch. 5). Rather, it was that these institutions created incentives consistent with economic growth: their rules and entitlements applied impartially to all economic agents rather than only to members of particular groups. Political variables undoubtedly influenced the balance between generalized and particularized institutions in different European societies. But strong representative institutions were neither a necessary nor a sufficient component of such socio-political factors since, as we saw in Lesson 2, representative political institutions could actually help entrench particularized economic institutions such as privileged, cartellistic groups of merchants.

In practice, a range of socio-political factors, in addition to the presence of representative institutions such as parliaments, helped shift the balance toward more generalized institutions in the economy more widely. One strand of research emphasizes the emergence of fiscal systems and financial markets freeing states from financial dependence on granting privileges to special-interest groups (Schofield, 1963, 2004; Elton, 1975; 'T Hart, 1989, 1993; 'T Hart, 1993; Hoyle, 1994; Fritschy, 2003; Davids, 2006). A second strand focuses on the importance of a highly diversified urban system in which towns did not act in concert but rather competed and limited each other's ability to secure privileges from the political authorities (Rabb, 1964; Ashton, 1967; Croft, 1973; Archer, 1988; 'T Hart, 1989; Britnell, 1991; Lis and Soly, 1996; De Vries and Van der Woude, 1997; Harreld, 2004a,b; Van Bavel and Van Zanden, 2004; Gelderblom, 2005a,b; Van Zanden and Prak, 2006; Nachbar, 2005; Price, 2006; Murrell, 2009). A third strand of research emphasizes the importance of having a variegated social structure which included prosperous, articulate and politically influential individuals who wished to engage in entrepreneurial activities but were not members of privileged interest-groups and hence were inclined to object to particularized institutions that imposed barriers to entry (Rabb, 1964; Ashton, 1967; Croft, 1973; De Vries, 1976; De Vries and Van der Woude, 1997). Some subset of these socio-political factors shifting the balance from particularized to generalized economic institutions prevailed in all those medieval and early modern European societies which experienced successful commercial growth. But after c. 1500 these factors coincided in two European polities, the Netherlands and England, where generalized institutions gained ground and where economic growth greatly accelerated (De Vries and Van der Woude, 1997; Ogilvie, 2000, 2011). Generalized and particularized institutions continued to co-exist in all early modern societies, but those where generalized institutions came to dominate enjoyed faster economic growth, not just in trade but also in agriculture and industry, as we shall see in the coming sections.

These historical findings have wider implications for economic growth, not least because of the many potential links between particularized institutions and social capital. Social capital, as is well known, typically involves building institutions whose rules and entitlements are characterized by "closure," i.e. a clear definition of who is a member of a group and who is not (see Coleman, 1988, pp. 104–10; Sobel, 2002, p. 151; Ogilvie, 2005d, 2011; Hillmann, 2013). To generate social capital, institutions need to have closure, information advantages, collective penalties, and commitment devices: that is, they need to be particularized. Once such institutions are formed, though, it is hard to prevent them from being abused to resist changes that threaten existing benefits enjoyed by members of the closed groups enjoying the benefits of closure. Economic history illuminates a darker side of social capital, insofar as it is generated by building particularized institutions whose rules apply exclusively to entrenched groups, rather than generalized institutions whose rules apply to everyone.

8.5. LESSON 4: PROPERTY RIGHTS INSTITUTIONS AND CONTRACTING INSTITUTIONS BOTH MATTER, AND ARE NOT SEPARABLE

Two types of institution that appear to be important for economic growth, as we have seen, are those guaranteeing private property rights and those enforcing contracts. But how precisely do they affect economic growth, and is one more important than the other? Acemoglu and Johnson (2005) have argued that these two types of institution should be strictly distinguished from one another: property rights institutions protect ordinary people against expropriation by the powerful, while contracting institutions enable private contracts between ordinary people. For these reasons, the argument continues, property rights institutions have a first-order effect on long-run economic growth, whereas contracting institutions matter much less. People can find ways of altering the terms of contracts in such a way as to avoid the adverse effects of poor contracting institutions, it is claimed, but cannot do the same against the risk of expropriation by rulers and elites (Acemoglu and Johnson, 2005).

Economic history, however, provides only mixed support for this argument. Historically, there is considerable overlap between contracting institutions and property rights institutions. Indeed, as Lessons 5 and 6 will argue, we need to pay much more analytical attention to the precise characteristics of property rights that matter for growth. But even before embarking on that analysis, the historical evidence suggests strongly that one key characteristic is the degree to which property rights can be freely transferred by contract from one person to another. When people trade, they simultaneously transfer property rights to another person and make a contract. The enforceability of the contract depends on how securely the property rights are defined, and the security of the property rights depends on whether a person is allowed to enter into contracts involving his or her property. Furthermore, rulers and elites intervene not just in property rights (e.g. by expropriating people's property) but also in contracts (e.g. by invalidating agreements, in the interest either of themselves directly or of their clients). In medieval Europe, for instance, property rights governing ownership of many assets (not just land, but also financial assets and moveable goods) were often securely guaranteed in law (Pollock and Maitland, 1895; Campbell, 2005; Clark, 2007; McCloskey, 2010). However, contracts governing transfers of these property rights were sometimes guaranteed very insecurely, particularly if they involved powerful people such as rulers, members of the elite, or people to whom rulers or elites had sold privileges (legal rights to distort markets in the purchasers' interest) (Ogilvie, 2011, 2013b). Historical evidence thus poses difficulties for the idea that one can draw a useful analytical distinction between institutions enforcing contracts and those guaranteeing property rights.

Economic history also casts doubt on the idea that poor contracting institutions do not matter because ordinary people can devise informal substitutes. As Lesson 1 discussed, the two best-known historical cases which are supposed to have demonstrated the success of informal substitutes for poor contracting institutions turn out to be factually wrong. There is no evidence that the 11th-century Maghribi traders operated an informal, private-order coalition to circumvent poor public contract enforcement. Nor is there any evidence that the 12th- and 13th-century Champagne fairs relied on private judges or community-implemented reprisals to circumvent lack of public contract enforcement. It was extremely difficult to circumvent poor contracting institutions with private-order substitutes. Instead, medieval and early modern merchants voted with their feet by moving their business from locations where public-order contract enforcement was inferior to those where it was superior (Ogilvie, 2011; Gelderblom, 2005a, 2013). Economic history does not support the view that it was easy to devise informal substitutes for poor public-order contracting institutions.

The third thing we can learn from economic history is that there are important junctures in long-term economic growth at which property institutions and contracting institutions are jointly essential, in the sense that the growth benefits of one cannot emerge until the other is present. One of the most critical of these is the European agricultural revolution. Agriculture was by far the most important sector of the pre-modern economy, and most economic historians regard a sustained increase in agricultural productivity as an important contributory factor to the European Industrial Revolution. Just such an agricultural revolution began in the Netherlands in the late 15th century, England in the late 16th, parts of France in the 18th, and various territories of German-speaking Europe at different points in the 19th (Mingay, 1963; Chorley, 1981; Bairoch, 1989; Brakensiek, 1991, 1994; Allen, 1992; Overton, 1996a,b; Campbell and Overton, 1998; Kopsidis, 2006; Olsson and Svensson, 2010). For such an increase in agricultural growth to take place, a number of institutional changes were needed—some in property institutions, others in contracting institutions. Until both sets of institutional changes took place, agriculture typically failed to grow.

Secure private property rights in land were almost certainly needed for agricultural growth, although it is important to recognize that there is debate about this issue among economic historians (Allen, 1992, 2004; Neeson, 1993; Overton, 1996a,b; Shaw-Taylor, 2001a,b). Secure private property rights in land existed in most societies in medieval and early modern Europe, as we shall see in Lesson 6. But these private property rights co-existed with and were constrained by other types of property right. The village community often collectively owned a share of the pasture, woods, and wasteland in the village, and constrained the ways in which individuals could use their privately owned arable (crop-growing) fields (Allen, 1992; Neeson, 1993; Brakensiek, 1991; Kopsidis, 2006). The importance of such communal property rights and the constraints they placed on private property rights varied considerably across pre-modern European societies, across regions within the same society, and even from one village to the next (Whittle, 1998, 2000; Campbell, 2005). They also changed over time, with communal property rights gradually being replaced by private property rights in most European societies between c. 1500 and c. 1900 (Overton, 1996a,b; Brakensiek, 1991, 1994; Olsson and Svensson, 2010).

One component of this process (which in England was called the enclosure movement) was the shift from communal to private property rights in pasture. This benefited growth not so much because it solved the tragedy of the commons (Hardin, 1968), since the whole point of community management of collective pasture was to prevent overuse (see Neeson, 1993). In England, in any case, common rights were often owned and traded privately by individuals, typically the largest farmers in the village (Shaw-Taylor, 2001a,b). Instead, the main mechanism by which privatization of common pasture encouraged agricultural growth was by reducing the transaction costs involved in flexibly shifting pasture to alternative uses, which was essential for a number of the new, higher-productivity agricultural techniques that emerged during this period (Slicher van Bath, 1963, 1977; Overton, 1996a,b).

The second component of the enclosure movement affected arable (crop-bearing) land. Typically, each European village divided up all arable land into three large tracts, which were cultivated in three-year rotation to replenish soil nutrients (Slicher van Bath, 1963, 1977; De Vries, 1976). Within each tract, each villager owned and farmed scattered strips, but the village as a whole decided on crops, rotations, and other techniques, and the whole village had collective gleaning and grazing rights on individual arable land after the harvest (Overton, 1996a,b; Brakensiek, 1991, 1994). In different European societies and regions at different dates between c. 1500 and c. 1900, these scattered, open arable strips were reorganized and consolidated to form contiguous holdings over which individuals had exclusive private property rights. This increased scale economies by reducing the time costs involved for each villager in moving from one strip to another, reduced the transaction costs of adopting new arable techniques, and increased individual incentives to invest in productivity improvements (Overton, 1996a,b).

There is considerable debate about the precise growth effects of these changes in property rights. For England, although Allen (1992) contended that such changes in property rights did not increase agricultural productivity, Overton (1996a,b) contested those arguments on grounds of inaccurate periodization, misinterpretation of evidence, and sample selection bias, concluding that improvement in private property rights decreased equity but increased productivity and contributed to faster growth of agriculture. Many German territories experienced similar improvements in agricultural property rights between c. 1770 and c. 1870, often influenced by English and Dutch models, and this German enclosure movement has evoked similar debate (Brakensiek, 1991, 1994; Kopsidis, 2006). The current consensus is that in German societies, as well, replacing communal with private property rights facilitated introducing agricultural innovations, bringing new land under cultivation, shifting lands to new uses, and increasing agricultural growth (Brakensiek, 1991, 1994; Kopsidis, 2006; Fertig, 2007). Improvements in private property rights thus almost certainly did play a role in accelerating agricultural growth.

However, improving private property rights typically did not increase agricultural productivity and growth immediately. Rather, the growth benefits only emerged in the longer term. This was because property rights institutions were not enough in themselves. To have the incentive to increase productivity, the owners of land with better property rights also had to have a reasonable expectation of getting a return for the high investments entailed in introducing innovations. This required *contracting* institutions enabling farmers to obtain the labor and capital they needed, to sell agricultural surpluses, and to purchase other goods which the newly specialized farms no longer produced themselves.

First, the agricultural revolution required contracting institutions enabling the flexible mobilization of the appropriate quantity and quality of labor into the production process (DeVries, 1974, 1976; Overton, 1996a,b; Ogilvie, 2000). The new crops and crop-rotation systems that could be introduced once property rights improved required more intense digging, ploughing, fertilizing, and weeding. Higher grain and milk yields created more work in harvesting, threshing, butter-churning, and cheese-making (Chambers, 1953; Caunce, 1997). Farmers needed to use their own family's labor more intensively and to employ plentiful and flexible supplies of non-familial labor. But contracting in labor markets was often blocked by forced labor extorted from serfs, communal barriers to labor migration, wage ceilings favoring employers, limits on women's work, and other restrictive labor practices reflecting the interests of powerful individuals and groups concerned with distributing larger shares of resources to themselves (DeVries, 1976; Harnisch, 1989a,b; Klein, 2013; Ogilvie, 2004a,b, 2013a,b). Such restrictions on contracting in labor were imposed via particularized institutions such as serfdom, village communities, urban corporations, and craft guilds, whose rules did not treat all economic agents impartially, allowing them to offer and hire labor voluntarily in competitive markets with free entry, but rather differentiated between them according to non-economic criteria such as serf status, gender, religion, ethnicity, community citizenship, and guild membership (Sharpe, 1999; Ogilvie, 1997, 2000, 2004a,b; Ulbrich, 2004; Wiesner, 1989; Wiesner-Hanks, 1996; Wiesner, 2000). Even in comparatively progressive Hanover, as late as 1820, landlords used forced labor from serfs because it was costless to them, although, as the English traveler (Hodgskin, 1820, p. 85) remarked, "If the landlord had to hire laborers, he might have his work tolerably well performed, but it is now shamefully performed, because the people who have it to do have no interest whatever in doing it well and no other wish but to perform as little as possible within the prescribed time." By contrast, in those places in which the agricultural revolution began early (Flanders, the Netherlands, and England), there were good contracting institutions in the labor market, both for farm servants and for migrant agricultural workers. This ensured that the appropriate quantity of skilled and highly motivated labor could be applied at the right intensity at the appropriate point in the agricultural year (De Vries, 1974, 1976; Van Lottum, 2011a,b; Kaal and Van Lottum, 2009; Kussmaul, 1981, 1994).

Contracting institutions governing credit—not high finance in the form of loans to elites and the state, but small investment loans to ordinary people—were also essential for agricultural growth. Changing farming practice always requires at least small investments, as shown by the focus on agricultural micro-credit in modern developing economies (World Bank, 1982) as well as studies of historical European rural economies (De Vries, 1976; Holderness, 1976). Even though the early modern agricultural revolution did not involve machines, it did require capital (Habakkuk, 1994; Holderness, 1976; Lambrecht, 2009; Thoen and Soens, 2009; Van Cruyningen, 2009; Ogilvie et al. 2012). Enclosure of pastures and open fields required fences, hedges, and ditches. New crops required seed purchases. Soil improvement required extra fertilizer, sand, lime, and marl. Heavier harvests required buying more and better draught animals. Farmers and workers had to be supported during the transition to new techniques. Good contracting institutions in the Low Countries and England made it possible for Dutch and English farmers to tap the few sources of capital available in early modern Europe (De Vries and Van der Woude, 1997; Schofield and Lambrecht, 2009). In the Netherlands, capital-rich townsmen invested directly in land and loaned funds to farmers through the country's advanced credit markets (De Vries, 1974, 1976; Van Cruyningen, 2009). In England, landlords had to make their estates pay since they enjoyed few of the privileges to intervene in contracting enjoyed by their Central or Eastern European counterparts. This gave them strong incentives to lend their tenants capital for farm improvements, or even borrow themselves for this purpose in England's financial markets, which were catching up with those of the Netherlands during the 16th and 17th centuries (Holderness, 1976; Muldrew, 1993, 1998, 2003; Spufford, 2000). Good contracting institutions meant that English grain merchants were able and willing to extend credit to farmers, and incidentally to smooth price fluctuations, by speculating on the outcome of the harvest, as described by Defoe (1727, vol. 2, p. 36): "These Corn-Factors in the Country ride about among the Farmers, and buy the Corn, even in the Barn before it is thresh'd, nay, sometimes they buy it in the Field standing, not only before it is reap'd but before it is ripe."

Elsewhere in Europe, the contracting institutions that might have ensured the supply of credit to agriculture developed more slowly. Much of the available capital in the economy was accumulated by rulers through taxes, state loans, and sales of monopolies and offices, then squandered on war or court display (Brewer, 1989; Brewer and Hellmuth, 1999). Another substantial portion of available capital was levied as rents by noble landlords, and then spent on royal offices, monopolies, or conspicuous consumption (Ogilvie, 2000). In many economies—France, Spain, Italy, and many German territories—even commercial and industrial profits tended to flow into landed estates, noble status (conferring tax freedom), bureaucratic office, or legal monopolies over certain lines of business (De Vries, 1976). In societies where the greatest returns and least risk lay in purchasing land or royal favor, poor contracting institutions meant that risky economic projects such as improvement of the land were starved of capital. In many European economies, special-interest groups enjoyed privileged access to contracting institutions governing credit, from which ordinary people, including most peasants in the countryside, were excluded; although peasants were sometimes partly able to circumvent these restrictions by using undocumented and informal lending contracts, these had higher transaction costs (Ogilvie et al. 2012). Part of the delay in introducing the new agricultural techniques outside the Netherlands and England before 1750 resulted from the difficulty of saving or borrowing the requisite capital, especially for ordinary rural people who were making the main agricultural decisions. These restrictive practices in credit markets were often imposed via particularized institutions such as serfdom, village communities, and urban corporations. To give just one example, community institutions in 17th- and 18th-century Germany disallowed loans agreed between willing lenders and willing borrowers on grounds of community membership, wealth, gender, marital status, or whether the borrower was regarded favorably by the headman or village councillors (Sabean, 1990; Ogilvie, 1997; Ogilvie et al. 2012). Restrictive practices in credit markets reflected the interests of powerful individuals and groups who were concerned with redistributing resources to themselves and who made use of favorable institutional arrangements to achieve this end.

Farmers not only needed good contracting institutions to secure the inputs of labor and capital required by new agricultural techniques. They also needed good contracting institutions in output markets so they could sell their farm surpluses profitably, and buy goods they no longer produced themselves (Britnell, 1996; Grantham and Sarget, 1997; Bolton, 2012). But many of the same institutions that hindered contracting in labor and capital also impeded exchanges of food, raw materials and industrial goods. Rulers and town governments in Spain, France, and the Italian and German states often enforced particularized institutional arrangements called "staples," legal rights of prior purchase which they used to force farmers in the surrounding countryside to sell their output in towns at lower-than-market prices (De Vries, 1976; Ogilvie, 2011). This was one of the reasons the highly urbanized regions of northern Italy and southern Germany failed to stimulate an agricultural revolution in the 16th century, in contrast to the Dutch and Flemish cities, where urban consumers had to pay farmers market prices. In Spain, grain price ceilings and other institutional restrictions on contracting in output markets drove peasants off the land, and by 1797 there were almost 1000 deserted villages in rural Castile; grain had to be imported to alleviate famine (De Vries, 1976).

The particularized privileges of towns were not the only barrier to good contracting institutions that would have enabled farmers to profit from investing in the new agricultural techniques. Seigneurial tolls (internal customs barriers) blocked the development of good contracting institutions such as a national grain market in France until 1789, discouraging farmers and worsening famines (Ó Gráda and Chevet, 2002). In Bohemia, Poland, and many eastern German territories, the great landlords forced peasants to sell them grain at fixed (below-market) prices. The landlords exported the grain to Western Europe or used it to brew their own beer in demesne breweries, which they then forced the peasants to buy back from them at fixed (above-market) prices (Cerman, 1996; Ogilvie, 2001, 2005c; Dennison and Ogilvie, 2007). Blocked by poor contracting institutions, peasants could not gain enough profit from grain surpluses for it to be worthwhile investing in new techniques, even where they enjoyed secure private property rights in their land. These restrictive practices in output markets were again often imposed by landlords, village communities, or urban corporations. In early modern Bohemia, for instance, landlords used their institutional powers under serfdom to compel peasants to sell them foodstuffs at below-market prices, penalizing them when they sold grain or livestock outside the estate without first offering it to the manor (Ogilvie, 2001, 2005c). Again, these restrictive practices in output markets reflected the distributional interests of powerful individuals and groups who were concerned with distributing resources to themselves and who made use of institutional privileges to do so.

These differences in contracting institutions thus played a major role, alongside differences in property rights institutions, in deciding whether, when and where agricultural growth could take place in Europe between the 16th and the 19th century. Agricultural growth did not need just secure private property rights. Farmers had to be able to employ laborers readily, borrow money easily, sell profitably to customers, and find cheap supplies of goods they no longer made at home. The Low Countries and England were lucky: they emerged from the medieval period with serfdom weakened or non-existent (as we shall see in Lesson 8), landlords who therefore had economic weight but few legal powers, village communities that were only loosely organized, and town privileges that were poorly enforced and constrained by competition from rival towns within a highly variegated urban system (as we saw in Lesson 3). Some particularized institutions still survived in the Low Countries and England, as we shall see in Lessons 6 and 7. But in the interstices between them, new and more generalized contracting institutions sprang up and grew vigorously in the 16th and 17th centuries, before any interest-group could organize to stop them. In most other parts of Europe, however, landlords, privileged towns, and village communities retained much more extensive rights to intervene in private contracts well into the 18th century, and in some regions long past 1800. Even the abolition of seigneurial privileges in France during the Revolution, and in Prussia and many other German territories after 1808, left many restrictive contracting institutions intact. Not until traditional contracting institutions were broken down, by popular revolution, military defeat, or long and grinding social conflict, could farmers break out of the agricultural productivity trap which had long blocked growth in the largest sector of the economy (Slicher van Bath, 1963, 1977; De Vries, 1976).

Studies of the institutional preconditions for the agricultural revolution in many parts of Europe, even outside England and the Netherlands, explicitly emphasize that improvements in property rights did not in themselves lead to growth. They only did so when they were accompanied by improvements in contracting institutions in the labor market, the credit market, and the output market. Theiller (2009) shows that the emergence of better property rights in land (as evidenced by a rental market) in late medieval Normandy was triggered by the emergence of local market centers enabling and permitting peasants to sell their agricultural surpluses. Serrão (2009) shows how the emergence of urban market demand in Portugal between the 17th and 19th centuries created incentives for farmers to adopt new technologies and invest in their farms, before the liberal reforms to property rights toward the end of that period. Olsson and Svensson (2009)'s analysis of 18th- and 19th-century Sweden shows that the volume of marketable surplus was significantly affected both by privatization of property rights during the radical Swedish enclosures of the early 19th century and by the incentives created by good contracting institutions in markets for agricultural output. For 18th- and 19th-century Germany, special emphasis is placed on the development of market structures and the removal of impediments to trade, enabling the selling of agricultural output at attractive prices and with low transaction costs (Brakensiek, 1991, 1994). Even more substantial German farmers often resisted privatization of commons for an initial period because of the high risks involved and the absence of the well-functioning markets required to secure a return on the non-trivial investments involved. As a result, the reforms to German agricultural property rights proceeded very gradually, over more than a century, from c. 1770 until c. 1890, and their pace and degree varied considerably among territories, regions, and even villages, according to the availability of good contracting institutions as well as the distributional implications of institutional change and the balance of power among state officials, landlords, peasants, and rural laborers (Brakensiek, 1994, p. 139). These findings suggest a strong degree of interlinkage not only between property rights institutions and contracting institutions, but also between both sets of institutions and distributional considerations, a point to which we return in Lessons 7 and 8.

These findings have a number of wider implications for economic growth. First, property rights institutions are not separable from contracting institutions. One measure of security of private property rights is the extent to which those property rights can be securely transferred from one person to another, as we shall see in Lesson 6. This is not a trivial or incidental feature of property rights, but rather central to one of the mechanisms by which secure private property rights can benefit growth, namely by ensuring that resources are allocated to their highest-value uses. If contracting institutions are insecure, an important aspect of how private property rights benefit growth will also be insecure.

Second, property institutions and contracting institutions are jointly essential for economic growth. To unleash the growth benefits of secure private property rights, contracting institutions also have to function well, so as to enable property-owners to save and borrow capital to invest in improving the productivity of their property, employ labor to work on that property, and profitably sell output produced using that property.

Third, it is simplistic to define property rights institutions as those protecting ordinary people against expropriation by rulers and elites and contracting institutions merely as those enabling private contracts between ordinary people. Rulers and elites intervene not just in property rights but also in contracts, refusing to enforce them in their own interests or those of favored groups to whom they have sold privileges. Both property rights institutions and contracting institutions thus involve an economic relationship between ordinary people on the one hand and rulers on the other. Economic history suggests that distributional conflicts and the coercive powers of elites and rulers have always played an important role in contracting institutions, just as they have in the security of private property rights. Poor economies could not improve contracting institutions without dealing with power and distributional conflicts.

Fourth, informal alternatives cannot substitute for poor public contract enforcement. Historically, economic growth occurred when the political authorities improved generalized contract enforcement and ceased supporting particularized interventions by special-interest groups that diminished the security of contracts. Poor economies could not achieve growth by means of informal contracting institutions; they needed to address weaknesses in public-order contract enforcement.

8.6. LESSON 5: PROPERTY RIGHTS ARE MORE LIKELY TO BE BENEFICIAL FOR GROWTH IF THEY ARE GENERALIZED RATHER THAN PARTICULARIZED

Property rights may not be more important than any other type of institution, but there is little doubt that they have major effects on economic growth. It is therefore tempting to regard them as unconditionally beneficial. But the term "property rights" covers a wide variety of arrangements, and historical evidence suggests that only some of these are good for economic growth.

The historical findings, in fact, require us to remind ourselves why property rights are supposed to be good for economic growth. Three answers can be given to this question (De Soto, 1989; Milgrom and Roberts, 1992; Besley and Ghatak, 2010). First, property rights can provide good incentives for assets to be allocated to their most productive uses because property rights motivate the transfer of assets to the people who value them most. Second, property rights can give owners good incentives to devise productive uses for an asset, in order to maintain or increase its value. And third, property rights can make it possible for owners to use an asset as collateral for borrowing funds, which they can use for investments (see esp. De Soto, 2000).

What characteristics do property rights have to have in order to benefit growth via these three mechanisms? One characteristic is that property rights should be well-defined, in the sense that it is clear to everyone in the economy who owns an asset, including how he or she may use it, how and to whom it may be transferred, and what kind of contracts may be concluded concerning it. Well-defined property rights are needed to induce those who value an asset greatly to be willing to pay for its transfer to them, to create good incentives for an asset's current owners to invest in it, and to ensure that an owner can use it as collateral.

A second widely emphasized characteristic is that property rights must be private, in the sense that an asset is held by an individual entity that can exclude others from using it. Private property rights, it is argued, give the individual owner good incentives to use the asset productively, invest to maintain or increase its value, and trade or lease it to other users (Besley and Ghatak, 2010).

A third characteristic is the security of property rights so widely emphasized in the literature (see North and Thomas, 1973; North, 1989, 1991). However, as we shall see in Lesson 6, security of property rights must be broken down into at least three components: security of ownership rights; security of use rights; and security of transfer rights. All three of these are important for ensuring that assets are transferred to the users who value them most, are invested in and used productively, and are available as collateral.

But it is not enough that property rights should be well defined, private, and secure (in all senses of that term). To support growth, property rights must also be generalized, a concept we defined in Lesson 3. That is, ownership, use, and transfer rights in an asset must be available to all agents in the economy, not just to a subset of them. In order for property rights to ensure that an asset passes into the hands of the person who has the highest possible value for it because he or she will use it most productively, the ownership, use, and transfer of that asset must be open to anyone, regardless of their personal characteristics or group affiliation, and transactions involving that asset must be governed by impersonal, voluntary exchange in open and competitive markets rather than by personal characteristics or coercive action. Similarly, to provide incentives to invest in the productive use of the asset, property rights will be more effective if they are generalized, since one incentive for productive use is to maintain the value of the asset with a view to transferring it or renting it to someone else in future. If property rights in that asset are particularized, and are thus restricted to being transferred or rented to a limited circle, this will reduce the incentive for the current owner to maintain its value through productive use. Likewise, the capacity for property rights to support the use of an asset as collateral for investment loans will be limited to the extent that they do not apply to all economic agents and cannot be freely transferred to all economic agents. To the extent that property rights are particularized, therefore, that characteristic will limit all three of the ways in which these rights could in principle support economic growth. Indeed, particularized property rights may positively damage growth by denying ownership, use, and transfer of assets to everyone outside the particular subset of privileged persons, which may comprise large proportions of all agents in the economy (e.g. all women, non-whites, slaves, serfs, non-nobles, non-guild members, etc.).

The possibility that well-defined, private, and secure property rights might not always support growth is occasionally mentioned in some of the literature on institutions and growth in historical perspective. North, for instance, refers to the existence of historical property rights that did not benefit growth because they "redistributed rather than increased income" (1991, p. 110). However, there has been little further analysis of the specific characteristics of property rights that might cause them to redistribute rather than increase income. The full implications of this distinction have not received sufficient emphasis in the literature, which continues to operate on the assumption that the only characteristic of property rights that matters is their security, a concept whose precise characteristics are left quite vague.

Evidence on historical property rights and historical economic growth provides numerous examples of property rights that were clearly defined, were enjoyed privately by individuals, and were perfectly secure against confiscation, but did not benefit growth because they were particularized. That is, the rules establishing and maintaining those property rights circumscribed use of a particular asset to a particular circle of people who were defined according to non-economic criteria or group membership, and limited transfers or contracts involving that asset to that restricted circle. In historical developing economies, such particularized property rights were widespread and various, so much so that they are best analyzed by scrutinizing concrete examples. An excellent context in which to do so is provided by the debate about whether property rights got more or less favorable for growth in Britain in the century before and during the Industrial Revolution.

This issue is no mere historical quibble. Rather, it is central to assessing the historical role of property rights in economic growth, since a number of economic historians have argued that, contrary to the claims of North and Weingast (1989), restrictions on private property rights in England actually increased after 1688, contributing to England's sustained 18th-century growth and to its Industrial Revolution after c. 1780 (Harris, 2004; Hoppit, 2011; Allen, 2011). As summarized by Hoppit (1996, p. 126), "despotic power was only available intermittently before 1688, but it was always available thereafter." Proponents of this view argue that the fact that state restrictions on property rights increased before and during the first Industrial Revolution implies that economic growth does not require secure, well-defined, private property rights, but rather a powerful, interventionist state that is willing and able to take away private individuals' property against their will.

What kind of property rights were the ones that the British state started limiting in the post-1688 period? Hoppit (2011) identifies a whole array of property rights that were restricted or abolished in Britain in the 18th century. After c. 1690, the British government increasingly granted turnpike (toll road) privileges, which empowered their holders to compel land sales, and canal-building permits, which empowered compulsory dissolution of water rights. In 1748, the British government abolished Scottish hereditary jurisdictions—that is, the ownership of particular judicial offices by private individuals who had inherited them from their noble forebears. Between 1787 and 1833, the government first restricted and then abolished property rights in slaves. Between 1825 and 1850, the British government granted charters that empowered railway companies to compel the sale of tens of thousands of acres of private landed property. Between 1750 and 1830, Parliament passed more than 5200 acts of enclosure of open fields, commons, and wastes, redefining and redistributing property rights over some 21% of the land area of England, in many cases against the will of the existing owners.

How is it possible for 18th- and 19th-century Britain to be used to support such diametrically opposed conclusions about whether private property rights are good for growth? The contradiction arises largely from conflating generalized with particularized property rights. The type of property right that is good for growth is a generalized right which allocates clear disposition over an asset to a particular entity, enabling that entity to trade the asset freely and voluntarily in a market. The incentives created by this type of property right ensure that in a market economy, as long as transaction costs are not too high, the asset will be allocated to the user who values it the most, that he or she will then have the incentive to invest in its productive use, and that he or she can use it as collateral to borrow funds for investment purposes. These are the reasons that security of this type of private property right is regarded as being beneficial for economic growth. The property rights that were restricted in 18th-century England, by contrast, were largely particularized ones, which restricted use, transfers, and contracts involving assets to a limited subset of economic agents, who were defined at least partly according to non-economic criteria.

A first set of these particularized private property rights were what might be termed feudal ownership rights, which had been put in place by rulers and elites centuries earlier to generate rents for themselves. Some of these feudal ownership rights limited the freedom of disposition over land so as to maintain concentrated estates that would be large enough to support feudal armies; this applied specifically to noble or gentry land. Other feudal ownership rights assigned use and transfer rights in particular types of land to a subset of economic agents defined according to community membership or social stratum, e.g. membership in the group of substantial farmers in a village (Shaw-Taylor, 2001a,b). Feudal ownership rights also endowed members of particular social strata (e.g. the nobility) with special prerogatives over land owned, held, or used by other social strata. These feudal property rights were attached to personal or group characteristics of their holders and were typically not bought and sold impersonally in markets. As a result, they made it difficult for land to pass into the hands of people who had more productive uses for it.

Many of the salient changes in property rights in 18th- and early 19th-century Britain should not be seen as an attack on security of private property rights, therefore, but rather a reorganization of property rights from particularized to generalized ones. Bogart and Richardson (2011) argue that between 1688 and 1830 the British state did not restrict the security of private property rights, but rather responded to requests from the public to reorganize rights to land and resources in such a way as to enable individuals, families, and communities to exploit new technologies and other opportunities that the inflexible regime of particularized ownership rights inherited from the medieval past could not accommodate. For one thing, much land was held under a legal arrangement called "equitable estate" which limited its mortgage, lease, and sale. For another, many types of land tenure limited the transfer of the affected land to a small subset of persons defined according to their personal identity or membership of the local community. Third, in particular types of village (common-field villages) property rights required owners of land to maintain it in specific traditional uses, made any change in use or ownership subject to agreements with other parties, and subjected such agreements to extensive legal challenges which made them difficult to enforce (Bogart and Richardson, 2011, p. 242). The British state's granting of charters for enclosures, turnpikes, canals and railways thus did not constitute an incursion against the type of generalized private property right which is supposed to encourage growth. Rather, it enhanced the ability to break down particularized ownership rights which meant that assets could only be used by or transferred to a subset of economic agents. These property rights, because of their particularized nature, could not readily be transferred to higher-productivity users and were thus ill suited to allocating assets to their highest-value uses or responding to opportunities offered by technological innovations.

The argument advanced by Bogart and Richardson (2009, 2011) probably overstates the extent to which the reorganization of particularized into generalized property rights was caused by the Glorious Revolution of 1688. The 16th and 17th centuries had already seen extensive reorganizations of particularized ownership rights in England, including the first two waves of enclosures and a number of changes in leases and land tenures (Overton, 1996a,b; Allen, 1999). Although some types of reorganization of particularized ownership rights certainly intensified in the 18th century, many key steps had already taken place long before 1688. Bogart and Richardson (2009, 2011) tacitly acknowledge this fact by arguing that what changed after 1688 was not so much that feudal property rights began for the first time to be reorganized, but rather that the transaction costs of bringing about such reorganization were reduced by a change in the way Parliament and the crown interacted.

A second type of particularized property right which the British state began to restrict during the 18th century was the ownership of public offices. For instance, Scottish hereditary jurisdictions, which the British state abolished in 1748, granted powers of jurisdiction in civil and criminal cases, and could only be used by or transferred to a very small subset of economic agents; in fact, a hereditary jurisdiction was restricted to being owned by the heir of a clan head who had in turn inherited it from his forebears (Chambers, 1869). As Brewer (1989) emphasizes, hereditary ownership of official positions (those of judges, tax-collectors, etc.) remained widespread in many European societies in the 18th century. It contributed to the relative inefficiency of government in those societies compared to Britain, since it ensured a copious stream of rents to owners of the hereditary offices, who had incentives to exploit the coercive powers associated with such offices to obtain profits for themselves. Owners of the office of tax-gatherer skimmed off a share of the taxes collected, while owners of the office of judge demanded fees and bribes from litigants (Brewer, 1989). By abolishing property rights in public offices, the 18th-century British state was not constricting a generalized right which enabled an asset to be allocated to its highest-value use, but rather abolishing a particularized entitlement which enabled entrenched interests to exercise coercion and redistribute resources toward themselves.

The gradual abolition of slavery between 1787 and 1833 must be regarded in a similar light. The ownership of slaves was a coercive right to extort labor and other services from their original owners, the individuals who had been enslaved. Property rights in slaves were not generalized, since they did not apply equally to all economic agents: they could be enjoyed by slave-owners but not by slaves, and the conditions under which they could be transferred from slave-owners to slaves were extremely restrictive. By abolishing property rights in slaves, the state was not limiting a right enabling the asset to be allocated to its highest-value use, but rather abolishing a coercive entitlement maintained as part of a particularized institutional regime whose rules treated slaves and slave-owners completely differently from one another.

The final type of reorganization of property rights that took place in 18th-century Britain relates to the issue of eminent domain, the legal power enjoyed by the state to take private property for public use.[4] Eminent domain represents a conflict between private property rights and the public good which has still not been satisfactorily resolved in modern economies (Fischel, 1995; Benson, 2005, 2008). Sometimes a project which would benefit economic growth (e.g. an infrastructure project) can be blocked by the existence of secure private property rights which cannot be purchased at a competitive price through voluntary exchange because of market failure. Private acquisition of multiple contiguous parcels of land for a road, canal, or railway may be impossible, either because of the transaction costs of negotiating with multiple owners (a coordination problem) or

[4] The term was first used in by the Dutch jurist Grotius (1625), in the following context: "The property of subjects is under the eminent domain [*dominium eminens*] of the state, so that the state or he who acts for it may use and even alienate and destroy such property, not only in the case of extreme necessity, in which even private persons have a right over the property of others, but for ends of public utility, to which ends those who founded civil society must be supposed to have intended that private ends should give way. But it is to be added that when this is done the state is bound to make good the loss to those who lose their property." As quoted in Nowak and Rotunda (2004, p. 263).

because of the thinness of the market which gives owners a monopoly position encouraging them to demand very high prices (a holdout problem). The coordination problem may reinforce the holdout problem. These market failures may create a case for constraining private property rights. This is the only instance of state restrictions on private property rights in 18th-century England which involved an actual conflict between generalized private property rights and economic growth (Bogart and Richardson, 2011). But this type of conflict arises because of market failure, is present in all economies, and is one that modern societies have not yet resolved. It cannot therefore be taken as demonstrating that state restrictions on private property rights are generally beneficial for growth, in the absence of market failures. On the other hand, eminent domain does represent a restriction on generalized property rights which has the potential to benefit economic growth in the presence of market imperfections. This raises an important qualification to the principle that secure and generalized private property rights are invariably good for growth, and it must therefore be taken seriously in thinking about the institutional foundations of economic growth.

What do these findings imply for economic growth more widely? Not all forms of property rights—even if they are well defined, private, secure and transferable—are good for growth. Generalized property rights that can be held by, used by, and transferred to any economic agent, regardless of his or her personal identity or group affiliation, will, if markets are competitive, allocate assets to their most productive uses, give their owners the incentive to use them productively, and enable their owners to employ them as collateral. But particularized property rights that can only be held by, used by, and transferred to a small subset of economic agents, often defined according to non-economic criteria, will limit these growth benefits. People with productive uses for an asset who do not belong to the limited circle of those to whom particularized property rights in that asset apply will not be able to own, use, rent, borrow, or buy that asset. These limits on who may hold or use the asset will reduce incentives for investing in it and reduce its capacity to operate as collateral. Particularized property rights may not only fail to support growth in the ways that generalized ones do, but may positively damage growth by denying use, transfer, or rental of property to everyone outside the particular subset of privileged persons, which may include large proportions of all agents in an economy. Growth will therefore benefit from improvements in the security of *generalized* property rights, but from restrictions on the security of *particularized* property rights.

8.7. LESSON 6: SECURITY OF PRIVATE PROPERTY RIGHTS IS A MATTER OF DEGREE (AND NEEDS CAREFUL ANALYSIS)

The concept of secure private property rights, as we saw in Lesson 5, is not straightforward. Secure private property rights will affect growth differently, depending on whether they are generalized or particularized. But as the present section will argue, even the concept of "security" of property rights needs further analysis before it can be useful. The economics literature on the historical role of institutions in growth emphasizes the importance of property rights that are secure. But as indicated in Lesson 5 above, the understanding of security in this literature appears to involve at least three very different components: security of ownership, security of use, and security of transfer.

Security of ownership means that no one can take an asset away from you arbitrarily: you have a well-defined ownership right that you can reasonably expect to enforce via the legal system or some other institutional mechanism. Security of use means that no one can prevent you from exercising that ownership right by investing in improving the productivity of the asset or altering the way it is used in order to increase its yield. Security of rights of transfer means that no one can intervene to prevent you from transferring that asset temporarily or permanently to someone else by selling, mortgaging, lending, leasing, bequeathing, or otherwise alienating it.

These three components of the security of private property rights, though conflated in the literature, are both analytically and empirically distinct. Analytically, they are distinct because the three types of security are likely to affect growth in different ways and to differing degrees. Empirically, they are distinct because they can occur in different combinations: thus one may have completely secure rights of ownership in one's land but there may (or may not) be limitations on the security of one's right to decide how to use or transfer those ownership rights; likewise, one may have relatively insecure rights of ownership (in the sense that one may have it confiscated by the crown or one's feudal overlord) but be completely secure in how one can use those rights while one has them and in one's right to choose whom to sell, lease, or bequeath them to. From the point of view of the economic effects of property rights, we have already seen that limitations on ownership, use, and transfer of property are important: Lesson 5 showed that particularized property rights imposed one set of limitations; but as we shall see in the present section there are others. For the purposes of the present section, we therefore distinguish between security of ownership, security of use, and security of transfer, while recognizing that any simple classification scheme is subject to the drawback that in practice there is likely to be a continuous range of security, at least within some bounds.

Partly as a result of conflating these three different components of security of private property rights, the economics literature contains two diametrically opposed views of the historical role of secure private property rights in growth. The first assumes that secure private property rights did not exist in Europe in the medieval and early modern period (e.g. North and Weingast, 1989; Olson, 1993; Acemoglu et al. 2005; Acemoglu and Robinson, 2012). Rather, secure private property suddenly came into being in one particular economy, England, at a specific point in time, after the Glorious Revolution of 1688 (North and Weingast, 1989). This sudden and dramatic shift from insecure to secure private property rights is supposed to have enabled England to surpass other European economies and, three quarters of a century later, to become the first country to industrialize (see e.g. North and Weingast, 1989; Olson, 1993; Acemoglu et al. 2005; Acemoglu and Robinson, 2012).

Other economists, however, adopt a diametrically opposed view, arguing that private property rights were completely secure in economies such as England long before 1688, indeed as far back as the records go. Clark (2007), for instance, argues that in 12th-century England security of private property was already good and land markets were already free, so much so that medieval England already satisfied the checklist of good institutions applied to modern developing economies by the World Bank and the IMF. McCloskey (2010), too, points out that England had secure private property rights from at least the 11th century, "that there was little new in British property rights around 1700," and that many other medieval and early modern societies, both inside and outside Europe, also had secure private property rights in the medieval and early modern period (McCloskey, 2010, p. 25).

These divergent accounts of pre-modern English property rights are not just a quibble within a specialized literature. They have much wider implications for the relationship between institutions and economic growth. The view that England moved from insecure to secure private property rights in 1688 is used to argue that property rights play a fundamental role in causing economic growth. Conversely, the view that England already had secure private property rights in the medieval period (or long before) is taken to imply that property rights (and institutions in general) must be irrelevant for economic growth (Clark, 2007, pp. 148ff; McCloskey, 2010, pp. 318ff).

How is it possible for the economic history of medieval and early modern England to be used to support two such contradictory views of the role of property rights in economic growth? To answer this question, it is essential to distinguish between the different components of security (of ownership, of use, and of transfer), and to understand what is known about the historical development of property rights in England. North and Weingast (1989) argued that in 1688 private property rights became secure for three key groups: for owners of land, giving them good incentives to invest; for lenders to the state, encouraging the rise of capital markets; and for taxpayers, protecting them from state rapacity. We begin with land, since agriculture was the most important sector, and hence, property rights in its major input had the greatest potential to affect growth.

8.7.1 Secure Property Rights in Land

In conjunction with their argument regarding the importance of the English parliament after 1688, discussed above (Lesson 2), North and Weingast (1989) also argue that before 1688 landed property in England was deeply insecure even when a stable political regime was in place, because the sovereign was able to redefine property rights at will in his own favor. The Glorious Revolution of 1688, North and Weingast argue, created for the first time in any economy in history institutional limits on a ruler's ability to confiscate private land and capital; this in turn fostered "the ability to engage in secure contracting across time and space" (North and Weingast, 1989, p. 831). Olson (1993, p. 574) echoes this view, asserting that "individual rights to property and contract enforcement" became more secure in England after 1688 than in any other country, and arguing that this was why England industrialized first. Many contributions to the growth literature now accept the view that medieval and early modern Europe failed to experience economic growth because of "lack of property rights for landowners, merchants and proto-industrialists" (Acemoglu et al. 2005, p. 393). This involved insecurity not just of ownership but also of transfer and of use (at least in the sense of investment): "Most land was caught in archaic forms of property rights that made it impossible to sell and risky to invest in. This changed after the Glorious Revolution. … Historically unprecedented was the application of English law to all citizens" (Acemoglu and Robinson, 2012, p. 102). The Glorious Revolution of 1688, therefore, is supposed to have created security of private property rights in all three senses: security of ownership, certainly, but also security of use and transfer.

The empirical findings, however, do not support these claims. Secure private property rights in land existed in England from the 11th century onwards (Smith, 1974; Macfarlane, 1978; Harris, 2004; Campbell, 2005; Clark, 2007; McCloskey, 2010; Bekar and Reed, 2012). Contemporaries, ranging from small farmers to gentry landowners to great nobles to jurists, to the monarch himself, universally regarded property rights as fundamentally secure and not subject to confiscation (Pollock and Maitland, 1895; McCloskey, 2010). Thus individuals had security of ownership, in the sense of protection against arbitrary confiscation by the government or other powerful parties. However, they also had security of transfer, in the sense of having the right to sell, lease, mortgage, bequeath, and otherwise alienate their land. Royal, ecclesiastical, abbatial, and manorial law-courts competed with one another to guarantee and enforce individual ownership and transfer rights even for humble people (Smith, 1974; Macfarlane, 1978; Britnell, 1996; Whittle, 1998, 2000; Campbell, 2005; Clark, 2007; McCloskey, 2010; Briggs, 2013). Security of use rights was somewhat more constrained, for the reasons discussed in Lesson 4: in some regions and localities, village communities had some rights to regulate the ways in which private owners could use their land, specifically via communal regulation of agricultural technology, although in other regions and localities such constraints were very minor.

So overwhelming is the evidence that ownership and transfer rights in private property rights were secure in England from the Middle Ages onwards, that even North and Weingast (1989, p. 831) acknowledge "the fundamental strength of English property rights and the common law that had evolved from the Magna Carta." The Bill of Rights promulgated in 1689 after the Glorious Revolution did not in fact impose any limitation on the English government's ability to confiscate private property and did not require any compensation to be paid when the government did confiscate private property (Harris, 2004, p. 226). Fortunately, however, the English common law had ensured extensive security of ownership and transfer of property in England since the 11th century and, as Harris (2004, p. 228) points out, the judiciary showed far-reaching independence in England long before 1688.

Major political changes took place in England during the 17th century, and these led to some one-off changes in landed property rights. The Stuart monarchs made a series of abortive attempts to introduce absolutist government on the Continental European model in England between 1603 and 1641, and these initiatives involved some insecurity of ownership of landed property for opponents of the Crown. The Civil War of 1642–51 increased insecurity of ownership, as any civil war will, and the Restoration of the monarchy in 1660 resulted in further one-off changes in ownership rights. But, as McCloskey (2010) points out, for investors to have been deterred by such major political changes, they would have had to anticipate their occurrence. In actuality, none of these events were a predictable component of the early modern English property rights regime, so they cannot be viewed as a source of the kind of *ex ante* uncertainty that would have deterred investment. Moreover, the 18th century saw similar insecurity, since the regime in Britain continued to be uncertain: in 1690, serious conflicts between Parliament and Crown caused the king, William of Orange, to go back to the Netherlands; and between then and 1745, a series of Jacobite rebellions aiming to restore the Stuart dynasty operated as an organizing node for opposition to the regime. Insecurity of government always causes some insecurity of private ownership rights, but this operates mainly through expectations. It is unlikely that the regime changes of 17th-century England were expected by investors, and it is unlikely that investors attached no weight to the possibility of a Jacobite overthrow of the monarchy in the first half of the 18th century.

Quantitative analyses also cast doubt on the idea that security of any aspect of landed property rights—ownership, use, or transfer—experienced a discontinuity in England around 1688. Clark (1996) compiled a data series of land rents and land values in England between 1540 and 1750. His analysis finds that neither 1688 nor any of the other political upheavals of the 1540–1750 period marked any discontinuity. From this, he concludes that individuals must have been secure in their property rights over their land from as early as 1540.

This does not, however, mean that property rights were completely static between the medieval period and the industrial revolution, as argued by Clark (2007) or McCloskey (2010). Between c. 1350 and c. 1500, England saw significant changes in the manorial powers of landlords, communal regulation of arable fields and pastures, the costs and impartiality of legal enforcement, and the complexity of tenures and leases (Wrightson, 1982; Wrightson and Levine, 1995; Campbell, 2000, 2005, 2009; Harris, 2004; Briggs, 2009, 2013). As Lesson 4 discussed, additional changes to property rights took place during the agricultural revolution between c. 1550 and c. 1800, during which many communal property rights were restricted or abolished, tenurial forms were simplified, restrictions on alienation imposed by the inheritance system were removed, and the legal enforcement of property conflicts was improved (Overton, 1996a,b; Allen, 1999).

These changes influenced all components of security of property rights. Ownership and transfer rights were particularly strongly affected via changes in the detailed functioning of the legal system, which was a major defence against confiscation or incursion, while use rights were particularly strongly affected via changes in the communal and manorial regulation of agricultural practice, particularly enclosure and changes in leases. Such changes in security of ownership, use, and transfer of land in medieval and early modern England were incremental, did not show any discontinuity around 1688, and continued throughout the 18th century (Neeson, 1984, 1993, 2000; Allen, 1992; Overton, 1996a,b; Shaw-Taylor, 2001a,b). By the 1760s, when the Industrial Revolution was beginning, the complexity of rights governing the ownership, use, and transfer of property in England, and the transaction costs involved in enforcing such rights, had been reduced compared to medieval times. Secure rights of ownership and transfer of property existed in England from at least the 11th century onwards, and even rights of use were fairly secure in many regions. But the way these various rights operated and the economic incentives they created in practice changed over the ensuing centuries, in a gradual and incremental process.

The discussion so far has focused on England, about which the growth literature makes the strongest claims. But similar findings exist for other countries. Secure private rights of ownership, use, and transfer of landed property can be observed in a large number of European economies from the medieval period onwards. Italian economies show secure private ownership rights from the ninth century at latest, and hint strongly at secure rights of transfer in that property as well (Feller, 2004; Van Bavel, 2010, 2011; McCloskey, 2010). The Netherlands had secure private rights of ownership and transfer from the medieval period onwards, which some have argued were more extensive than in England; secure rights of use also became widespread at the latest by the beginning of the Dutch agricultural revolution, in the late 15th century (Van Bavel, 2010, 2011; De Vries, 1974; Bieleman, 2006, 2010). The German territory of Württemberg had secure private ownership and transfer rights in land from at latest the 15th century onwards, which applied to all members of society down to the poorest, included females as well as males, were unrestricted by noble privilege (since Württemberg had no landholding nobility), and included unusually generalized transfer rights such as the right to subdivide all land at will and for women to inherit equally with men; use rights were somewhat less secure because of the strong powers of Württemberg communities, but certain categories of freehold land involved secure use rights in the sense that the owner could redeploy the land to more productive uses such as textile crops (Hippel, 1977; Sabean, 1990; Röhm, 1957). In many societies in Central and Eastern-Central Europe, too, from the medieval period onwards peasants had secure private ownership rights in their land, and secure transfer rights permitting inheritance, sale, rental, and mortgaging; use rights were more restricted, but were nonetheless secure for certain categories of land (Cerman, 2008, 2012; McCloskey, 2010). Again, however, this cannot be taken to imply that property rights in these societies did not change in any way that could affect economic growth between the medieval period and the 19th century. As we saw in Lesson 4, most European societies underwent changes in ownership, use, and transfer rights in land which, together with changes in contracting institutions, contributed to an increase in agricultural productivity and an acceleration in agricultural growth between the late medieval period and the 19th century.

8.7.2 Secure Property Rights for State Creditors

A similar analysis applies to the second set of property rights whose security is emphasized as a basis for economic growth in 18th-century England. North and Weingast (1989) also argue that the Glorious Revolution of 1688, by establishing parliamentary supremacy over public finances, created an environment in which lenders could rely upon the state to meet its financial promises. This, they contend, resulted in investors placing their trust and capital in the British state instead of its foreign rivals, creating the conditions for a financial revolution which greatly improved the sophistication of credit markets, and fuelled the accelerating growth of the British economy between 1688 and 1815. These scholars conclude that the introduction of secure private property rights for state creditors in England after 1688 shows "how institutions played a necessary role in making possible economic growth and political freedom" (North and Weingast, 1989, p. 831). The security of private property for state creditors which this literature regards as being created suddenly in 1688 consists primarily of ownership rights (in the sense that the state could not confiscate creditors' assets by failing to repay), but also extends to transfer rights, since North and Weingast emphasize that security of private property for state creditors also involved "the creation of impersonal capital markets" and "the ability to engage in secure contracting across time and space" (1989, e.g. p. 831). Cameron (1989, p. 155) argues that the Glorious Revolution, by creating security for state creditors, "reacted favorably on private capital markets, making funds available for investment in agriculture, commerce, and industry"—that is,1688 saw an increase in security of both ownership and transfer.

Again, however, the empirical findings indicate that the development of property rights for state creditors was not characterized by a sudden switch from insecurity to security, whether in terms of ownership or transfer. Rather, security of ownership and transfer of assets by state creditors in England fluctuated substantially with political events, while improving incrementally over long periods of time. Analysis of the institutional rules and practices governing taxation and public borrowing in England between c. 1600 and c. 1850 shows that the Civil War (1642-51), although not a sharp break-point, marked a bigger change than 1688 (O'Brien, 2001; Harris, 2004). Overall, however, the development of property rights for state creditors was characterized by very significant elements of continuity between the early 17th and the early 19th century. O'Brien (2001) provides detailed evidence indicating that property rights for lenders to the state were secure in England in the early 17th century, and that in all important ways the institutions necessary for good governance of the public finances were in place prior to the Glorious

Revolution. Harris (2004) argues that there were fundamental institutional continuities after 1688 and that the degree of insecurity, at least of ownership rights, remained quite high, since many institutional tools for effective oversight of the public finances were unavailable to public creditors in England until the 19th century.

This does not mean that security of ownership or transfer rights for creditors of the English state underwent no change over time, and hence can have made no contribution to economic growth. Analysis of interest rates on English government borrowing suggests that property rights for owners of capital developed continuously across the early modern period rather than shifting from insecurity to security suddenly at any particular date. In conjunction with their previously discussed claims, North and Weingast (1989) further asserted that 1688 saw a sharp discontinuity, with a sudden shift from insecure to secure property rights for government creditors causing a sharp decline in the interest rate which the British government had to pay to borrow funds. But Stasavage (2002) tracked interest rates on English government debt in the second half of the 17th century and the first half of the 18th, and concluded that security of private property rights for state creditors was not irrevocably established in 1688 but instead fluctuated between then and 1740. It was particularly violently affected by which political party controlled ministerial posts and the two chambers of parliament. Political events rather than institutional changes most strongly influenced investors' willingness to commit capital to the British state (Stasavage, 2002). Sussman and Yafeh (2006), too, found that interest rates on British government debt did not show any discontinuity after the Glorious Revolution, instead remaining high and volatile for another forty years. The evidence shows neither a sudden switch from insecurity to security around 1688 nor complete stasis between the medieval period and the 19th century.

8.7.3 Secure Property Rights for Taxpayers

Similar issues arise with the third type of property rights which are supposed to have become more secure in England in 1688 and to have contributed to that country's subsequent economic success. Before 1688, it is said, the English Crown frequently engaged in confiscating its subjects' wealth via taxation; through these unconstrained fiscal powers, it is claimed, the sovereign controlled a large fraction of the resources in the English economy and reduced the security with which his subjects could use the remainder (North and Weingast, 1989; Acemoglu et al. 2005, p. 393). The Glorious Revolution of 1688, according to this view, limited the right of the state to demand property from individuals for the first time in any society in history.

These claims sit uneasily, however, with the evidence that after 1688 the British state increased its capacity to raise revenue from individuals through taxation (Harris, 2004). The Bill of Rights promulgated in 1689 made the taxing power of the British state conditional on parliamentary approval, but did not limit Parliament's powers of taxation and did not require any representation or consent from the vast majority of taxpayers who were not represented in Parliament. The landed, financial, and commercial groups in society were over-represented in the British Parliament, while the vast mass of ordinary taxpayers were either under-represented or had no vote at all.

State revenues from taxation and borrowing in England greatly increased between 1689 and 1815, both in absolute terms and as a share of national income (Mathias and O'Brien, 1976, 1978; O'Brien, 1988). Fortunately, state extraction only began to increase in England at the point at which per capita incomes and economic growth had already risen to quite high levels (O'Brien, 1988, pp. 23–4; Brewer, 1989). However, between 1689 and 1815, real gross national product increased by a factor of 3 while real peacetime taxation rose by a factor of 15 (O'Brien, 2001, pp. 8, 10). This huge increase in government control over national resources after 1688 casts serious doubt on the view that 1688 marked an improvement in the security of ownership rights of British taxpayers. Even between 1603 and 1641, when the early Stuart monarchs were trying to introduce continental-style absolutism to England, total government expenditure was a maximum of 1.2–2.4% of national income; after 1688 the state rapidly increased its share of national income to 8–10% (McCloskey, 2010, pp. 318–19). The percentage of English national income over which individuals as opposed to the state enjoyed secure private property rights—whether in terms of ownership or in terms of use—declined after 1688.

In principle, this enhanced state capacity might have supported activities, such as provision of public goods, that indirectly enhanced private property rights or benefited economic growth in other ways. The British state's increased ability to raise funds after 1688 certainly enabled it to undertake a number of new activities. However, these probably did not benefit economic growth. One of the first things the new English king did after public finances were placed on a stable footing in 1688 was to use them to launch a major war against France. This was not a mere blip but the beginning of a long-term trend. The vast majority of English state expenditures after 1688 were not spent on civil government, in the sense of infrastructure, education, or other public goods that might have benefited long-term economic growth. Rather, state expenditures were predominantly allocated to military purposes or to servicing the state debt, which was itself incurred primarily for military purposes (O'Brien, 1988, 2001).

This military spending was not beneficial for the economy. As Williamson (1984, p. 689) shows, British economic growth was modest between 1760 and 1820, both relative to its subsequent performance and relative to modern developing economies, because "Britain tried to do two things at once—industrialize and fight expensive wars, and she simply did not have the resources to do both." Although the precise size of the impact of war on the British economy in the 18th century is debated, most agree that it was negative and non-negligible (Williamson, 1987; Crafts, 1987; Mokyr, 1987). The increased ability of the English state to borrow and tax during the 18th century thus probably did not favor economic growth: the English economy grew in spite of rising state spending, not because of it. Again, however, the evidence shows neither a sudden switch from insecurity to security of taxpayers' ownership, use or transfer rights at any specific date, nor complete stasis between the medieval period and the 19th century.

8.7.4 Security of Property Rights: Analytical Challenges and Open Questions

What do these findings imply for economic growth? The historical findings support neither of the two views prevalent in the growth literature about the relationship between economic growth and security of private property rights, whether these are defined in terms of ownership, use, or transfer. Economic history shows that secure rights of ownership, use, and transfer for landholders, lenders, and taxpayers did not emerge suddenly, recently, or in a single precociously advanced economy from which they subsequently diffused to other backward ones. Secure rights to own, use, and transfer land, capital, and other assets emerged gradually in a large number of European societies over half a millennium or more. None of these societies guaranteed individuals perfectly secure rights of ownership, use, or transfer over property, but none of them lacked such security altogether. Rights of ownership, use, and transfer of private property in most societies in medieval and early modern Europe were neither perfectly insecure nor perfectly secure, but rather changed incrementally over very long periods of time. Economic growth cannot be ascribed to a sudden switch from insecure to secure rights of ownership, use, and transfer; but nor, as we saw in Lesson 4, was growth left wholly unaffected by the incremental changes that did take place in the property rights regime.

These empirical findings from history pose an analytical problem for economics. If rights of ownership, use, and transfer over private property were reasonably secure in England in 1200, but also changed between then and 1800, what do we actually mean by property rights being "secure" enough to lead to economic growth? All economists and historians would probably agree that a necessary condition for economic growth is some degree of security of ownership, in the sense of protection from seizure or taxation of the entirety of what private individuals own or can gain through exchange, investment, and innovation. Most would probably also agree that economic growth also requires some degree of security in the rights to use one's property, whether by investing in improving it or by devising more productive uses for it. And most would agree that economic growth requires some degree of security in the right to transfer assets to other people, whether by selling them, renting them out, or using them as collateral for loans. But which component of security of property matters most for growth? How much security? And how do we measure it?

Without more refined analytical categories than mere security, we are unlikely to achieve a better understanding of the contribution of property rights to growth. Even distinguishing between security of ownership, security of use, and security of unrestricted transfer only takes us so far. The empirical findings from history suggest two directions in which economics must develop its analytical tools for thinking about security of private property rights.

First, constraints on security of private property rights are multifaceted. Constraints on security of ownership rights include such variegated incursions as state confiscation, eminent domain, manorial ejection, rapacious taxation, failure to repay loans, inability to defend one's property title using the legal system, and many more. Constraints on security of use rights are even more varied, and include interlinkage with labor and product markets (e.g. under serfdom), collective usufruct rights, communal regulation of crop rotations, manorial prerogatives, and many more. Constraints on security of unrestricted transfer rights include conditionality of sales; bans on hypothecation; village citizenship requirements; noble entailment; familial redemption rights; limits on female inheritance and marital property; inheritance customs; and many more. These constraints on security of ownership, use, and transfer rights in private property do not necessarily all change at the same time or in the same direction. Furthermore, the intensity of these various constraints on security of private property is not necessarily perfectly correlated across societies. The historical evidence, for instance, suggests that early modern England had, by European standards, strong security of private use rights protecting owners against communal or manorial intervention, but weak security of private ownership and transfer rights for married women; the former type of security of private property right changed significantly during the 18th century, while the latter did not. Similar examples of complex combinations of security and insecurity of different components of property rights can be provided for every pre-modern European economy. Economics needs analytical tools for deciding which of the numerous observed constraints on how people could own, use, and transfer property should be employed as criteria for defining "security" of property rights, and tools for establishing which of these aspects of security were likely to be more or less important for economic growth.

The second need for analytical attention is created by the fact that property rights are only one component of the wider system of institutions in a society. Security of rights of ownership, use, and transfer can be enhanced by other components of the system—for instance, by contracting institutions, as we saw in Lesson 4. But security of rights of ownership, use, and transfer can also be *constrained* by yet other components of the system—for instance, by village communities or the manorial system. As we saw in Lesson 5, the historical evidence suggests that in all pre-industrial European economies, even the most advanced, generalized property rights were constrained by other, more particularized components of the institutional system. Economics therefore needs analytical tools for understanding the interaction between security of private property rights and other components of the broader institutional system.

8.8. LESSON 7. INSTITUTIONS ARE EMBEDDED IN A WIDER INSTITUTIONAL SYSTEM

An understandably widespread assumption is that a particular institution will affect growth similarly in all economies and time-periods. Once secure private property rights are present in an economy, for instance, it is tempting to assume that they will exert an effect on growth that does not depend on the wider environment. But the evidence from historical societies suggests that this assumption is incorrect. Each institution, rather, is embedded in a wider institutional system and is constrained by the other institutions in that system; institutional labels turn out to be approximations which mask important variations that matter for economic growth. While institutional systems are not yet well understood, it is clear that to grasp how these variations affect growth, we must take the rest of the institutional system into account, because the impact of any particular institution on growth is constrained by the entire system in which it is embedded.

This lesson is vividly illustrated by the historical findings about an institution some recent contributions to the growth literature have portrayed as especially important: the family. These contributions claim that early and successful economic growth in the West was favored by a specific family institution called the European Marriage Pattern (EMP), involving late female marriage, high female celibacy, and nuclear rather than extended families. But as we shall see, the apparent relevance to economic growth of historical findings on the institution of the family has been obscured by the failure to take the larger institutional context into account.

Theories of economic growth have increasingly focused on historical demography in recent years, as economists have begun to incorporate fertility decline and population growth rates into their explanations of long-run growth (Galor, 2005a,b; Acemoglu, 2009; Guinnane, 2011). Unified growth theory, in particular, regards falling fertility and slowing population growth as essential preconditions for economies to convert a greater proportion of the yields from factor accumulation and technological innovation into per capita income growth (Galor, 2005a,b, 2012). The central role played by population in recent growth theory raises the question of the determinants of demographic behavior and its relationship with economic growth over the long-term.

One recent approach to this question has sought to ascribe the transition to sustained economic growth in Europe before and during the Industrial Revolution to a specific family institution called the European Marriage Pattern (EMP), involving norms of late female marriage, high female celibacy, and nuclear rather than extended families. This unique family institution, it is claimed, lay behind the early modern divergence in economic growth rates between Europe and the rest of the world, between north-west Europe and the rest of the continent, and between England and everywhere else (Greif, 2006a; Greif and Tabellini, 2010; De Moor, 2008; De Moor and Van Zanden, 2010; Foreman-Peck, 2011; Voigtländer and Voth, 2006, 2010). The EMP is supposed to have favored economic growth by improving women's position, increasing human capital investment, adjusting population growth to economic trends, and sustaining beneficial cultural norms. If these claims were true, they would imply that people in poor economies would have to change very deeply rooted aspects of their private lives before they could enjoy the benefits of economic growth.

Historical demography, however, provides no supporting evidence for the view that the EMP (or any specific type of family institution) influenced economic growth. A metastudy of the historical demography literature (Dennison and Ogilvie, 2013) finds that the three key components of the EMP—late marriage, high celibacy, and nuclear families—were not invariably associated with each other. Where they were associated, they did not invariably lead to economic growth. Indeed, where the components of the EMP did coincide in their most extreme form (German-speaking and Scandinavian Europe), economic growth was slower and industrialization later than in societies such as England and the Netherlands where the EMP was less pronounced. The most rapidly growing European economy, that of England, moved further away from the EMP in the century before and during the Industrial Revolution. The idea that the EMP had a clear causal influence on economic growth is not supported by the evidence.

In each society where the EMP was prevalent, it was embedded in a wider institutional framework. But the wider institutional system differed greatly from one European economy to the next. These wider institutional frameworks, not the institution of the family in isolation from them, influenced whether women enjoyed a good economic position, human capital investment was high, population responded flexibly to economic signals, or specific cultural norms were enforced. It was the institutional system as a whole, not the family or any other institution in isolation, that decided whether an economy grew or stagnated.

This can be seen by examining the institutional determinants of women's position, which is widely regarded as an important contributory factor to economic growth in poor countries (Birdsall, 1988; Dasgupta, 1993; Ray, 1998; Mammen and Paxson, 2000; Ogilvie, 2003, 2004c; Doepke and Tertilt, 2011). Some recent contributions to the literature claim that the EMP contributed to European economic growth by improving women's economic status (De Moor, 2008; De Moor and Van Zanden, 2010; Foreman-Peck, 2011; Voigtländer and Voth, 2006, 2010). However, there is no evidence to support the proposition that women's economic status in early modern Europe was determined solely, or even predominantly, by the institution of the family as opposed to the wider institutional framework (Ogilvie, 2003, 2004b,c, 2013a; Dennison and Ogilvie, 2013). The many empirical studies of women's economic position in pre-modern Europe suggest that women had a good economic position in some societies with the EMP and a bad one in others. England and the Netherlands assigned women a better economic position than other European societies (see the survey in Ogilvie (2003), Ch. 7), and these countries had the most successful economies in early modern Europe. But England and the Netherlands were also distinctive in many other ways: their factor prices, resource endowments, geopolitical position, trade participation, parliaments, legal systems, financial arrangements, and early liberalization of manorial, communal, and corporative institutions, have all been adduced as causes of their early economic success (Mokyr, 1974; De Vries and Van der Woude, 1997; Van Zanden and Van Riel, 2004). There has been much debate about the origins of English and Dutch distinctiveness. It seems obvious, however, that to qualify for consideration, any plausible explanation must invoke factors confined largely to England and the Netherlands—rather than a factor such as the EMP, which England and the Netherlands shared with many other societies in Western, Nordic, Central, and Eastern-Central Europe whose economies grew slowly and industrialized late.

Outside the precociously advanced market economies of England and the Netherlands, women's economic status was much worse. This was not because of the EMP or any other type of family institution, but because of the wider institutional system in which the family was embedded. In Germany, Scandinavia, France, and many other regions, the EMP prevailed but women's participation in industrial and commercial occupations was restricted by guilds of craftsmen, retailers, and merchants (Wiesner, 1989, 2000; Ogilvie, 2003, 2004b,c, 2005d, 2013a; Hafter, 2007). In many regions of Switzerland, Germany, and France, as micro-studies have shown, the EMP prevailed but women's work, wages, property rights, and in some cases even their consumption choices, were limited by local communities—again, by corporative institutions (Wiesner, 1989; Wiesner-Hanks, 1996; Wiesner, 2000; Ogilvie, 2003, 2010, 2013a; Hafter, 2007). In Bohemia (the modern Czech Republic), also characterized by the EMP, female household-headship was low, daughters could not inherit, and communal institutions collaborated with manorial administrators to harass women working independently outside male-headed households (Ogilvie and Edwards, 2000; Ogilvie, 2001, 2005a,b; Velková, 2012; Klein and Ogilvie, 2013). Whether women enjoyed economic autonomy under the EMP (or any type of family institution) depended on the balance of power among other institutions. Strong guilds which succeeded in excluding women from industrial and commercial activities and training existed both in northern Italy (in the absence of the EMP) and in German-speaking Central Europe (in its presence). Much weaker guilds which increasingly failed to exclude women from training and skilled work prevailed both in Eastern Europe (in the absence of the EMP) and in England and the Netherlands (in its presence) (Ogilvie, 2003, 2004b,c, 2005d, 2007b). Other corporative institutions such as village communities were extremely strong both in Russia (non-EMP) and in Germany (EMP) (Ogilvie, 1997, 2003, 2004b, 2006; Dennison and Ogilvie, 2007; Dennison, 2011). Corporative institutions played a central role in lowering women's economic status but show no systematic relationship with the EMP or any other family institution.

The importance of the wider institutional system, as opposed to the institution of the family in isolation, also emerges when we examine human capital investment. The EMP, it is argued, involved lengthy life-cycle phases during which young people were working outside the household, giving them the opportunity and incentive to invest in their human capital. The lower fertility resulting from late marriage and high lifetime celibacy is also claimed to have contributed to a shift from a high quantity of poorly educated offspring to a lower quantity of more highly educated ones, thus improving the quality of their human capital (Foreman-Peck, 2011). But parents will only invest in their offspring's education (as opposed to buying it as a consumption good) if such investment promises a positive return. There are two mechanisms by which this incentive can operate. First, parents may expect to share the returns from their offspring's education via transfers from offspring in adulthood. But this runs counter to a basic characteristic of the EMP, namely that the net intergenerational wealth flow runs from parents to children: offspring leave home early to work in other households, migrate to other localities, form independent households upon marriage, do not reside as adults in the same household (or even the same locality) as their parents, and seldom remit earnings to the parental generation (Caldwell, 1976, 1982). A family system with these characteristics creates disincentives for parents to invest in their offspring's human capital since they cannot expect to share returns when offspring reach adulthood.

The second mechanism by which parents may be motivated to invest in their offspring's education (as opposed to purchasing it as a consumption good) is altruism: their offspring's future well-being increases parents' own well-being. But this incentive will only operate if skilled jobs are open to all members of society. Parents will invest in girls' education only if females are able to take work that requires skills, instead of being restricted to activities which rely on learning-by-doing rather than formal training. Even for boys' education, skilled occupations must be open to all rather than being restricted to members of specific groups. But access to skilled occupations in pre-industrial Europe did not depend solely, or even systematically, on the institution of the family. Rather, it depended on the wider framework of institutions regulating labor markets: craft guilds, merchant associations, urban privileges, village communities, and manorial regulations. Women were allowed access to skilled jobs (e.g. in crafts or commerce) only in some societies with the EMP, specifically the Netherlands and England, and even then not without restrictions (Van Nederveen Meerkerk, 2006a,b, 2010; Van den Heuvel, 2007, 2008; Van der Heijden et al. 2011). In other EMP societies, such as Germany, Scandinavia, and France, craft guilds excluded females (and many "outsider" males) from skilled industrial work, and guilds of merchants and retailers restricted their participation in commerce (Wiesner, 1989; Wiesner-Hanks, 1996; Wiesner, 2000; Hafter, 2007; Ogilvie, 2003; Ogilvie et al. 2011). This reduced the incentive to invest in girls' education, although better-off parents still purchased it as a consumption good. The EMP by itself cannot have been crucial in creating incentives for female education since the EMP existed both in societies where women were more often permitted to do skilled work and those where coercive institutions excluded them. Rather, what decided whether females learned vocational skills was the strength or weakness of barriers to entry imposed by corporative institutions seeking economic rents for insiders by restricting low-cost competitors such as women (Ogilvie, 1986, 2003; Wiesner-Hanks, 1996; Wiesner, 2000; Sanderson, 1996).

Human capital indicators for European economies in the 18th and 19th centuries show that education levels varied hugely across societies with the EMP (Lindert, 2004, pp. 91–2; A'Hearn et al. 2009, p. 801; Reis, 2005, p. 203; Dennison and Ogilvie, 2013, esp. Table 4). This is not surprising, since the family was not the only, or the main institution that affected education levels. Schooling, literacy, and numeracy in early modern Europe were more strongly influenced by other institutions: the market, the church, the state, the local community, the occupational guild (Ogilvie, 1986, 2003; Wiesner-Hanks, 1996; Wiesner, 2000). These non-familial institutions show no significant correlation with the prevalence of the EMP. In some societies, such as Germany and Scandinavia, the church allied with the state and the local community to impose compulsory schooling on children of both sexes, monitor compliance, and penalize violations, leading to very high education levels (Ogilvie, 1986, 2003; Johansson, 1977, 2009). In other societies, such as England, such institutional pressures were absent, leading to much lower levels of school enrolment and literacy. Numeracy was typically learned, to some degree at least, informally in response to market demand in commercialized economies, explaining why England, with its mediocre school enrolment and literacy, had numeracy levels similar to more institutionally regulated societies such as Germany or Scandinavia (A'Hearn et al. 2009).

Historically, human capital investment shows no evidence of having positively affected economic growth in Europe before the late 19th century. England grew fast in the early modern period and industrialized before any other society, yet schooling and literacy stagnated there during the 18th century and were not high by European standards until well into the 19th century. Economic historians who disagree on almost all other issues concur that human capital investment was not important in the English Industrial Revolution (Mokyr, 2009; Allen, 2003). Conversely, other European societies had outstandingly good educational indicators but slow economic growth. The Netherlands had high levels of school enrolment, literacy, and numeracy, but after the end of the Dutch Golden Age in 1670 its economy stagnated and it industrialized very late. German territories had much higher school enrolment and literacy than England and even the Low Countries, but stagnated throughout the early modern period and did not industrialize until after c. 1840. A similar pattern is found in Lutheran Scandinavia, with high school enrolment and literacy rates, but slow growth and late industrialization (Dennison and Ogilvie, 2013).

The available evidence strongly suggests, then, that human capital neither was affected by the EMP nor played any causal role in economic growth before the late 19th century. In many parts of central and northern Europe, school attendance and literacy were imposed and enforced by churches, rulers, landlords, communal officials, and occupational guilds.

These organizations used their institutional powers to impose "social disciplining" on ordinary people for the benefit of elite interests (Ogilvie, 2006). In many societies, education levels were not chosen by ordinary people themselves, for economic or other reasons, but rather imposed on them by elites to serve their own interests, and thus depended on the powers these elites enjoyed via the wider institutional system: the church, the state, serfdom, communities, guilds. This wider institutional system, not the EMP, explains the absence of a systematic relationship between educational indicators and economic growth in Europe before the late 19th century.

In the recent literature on the EMP, yet another pathway has been suggested as a link between the EMP and European economic growth. It has been claimed that England had a particularly extreme version of the EMP, and that the resulting late marriage and high lifetime celibacy ensured that English population growth was uniquely responsive to economic signals. This is supposed to have ensured that in England economic surpluses resulted in capital accumulation, enabling productivity-enhancing innovation and fuelling faster economic growth than in France or China (Voigtländer and Voth, 2006, 2010). However, the historical demography literature does not support the idea that England had an extreme version of the EMP (Dennison and Ogilvie, 2013). Nor does the evidence show higher demographic responsiveness to economic trends in England than elsewhere. An econometric study of French demographic behavior, for instance, found that "at no time between 1670 and 1830 were marriages less responsive to economic conditions in France than in England" and concluded that the origins of the contrast between French and English growth performance "are not to be found in difference of demographic behavior" (Weir, 1984, pp. 43–4). In Germany, too, the elasticity of fertility with respect to economic signals was higher than in England (though slightly lower than in France) throughout the 18th century (Guinnane and Ogilvie, 2008, pp. 23–7). Among the nine European economies studied by Galloway (1988), the responsiveness of fertility to changes in grain prices was weaker in England than in societies where economic growth was much slower (Austria, Sweden, Belgium, the Netherlands) or where the EMP did not prevail (Tuscany). In 18th-century China, where family institutions were also very different from the EMP, recent studies also show fertility rates responding to changes in grain prices (Wang et al. 2010; Campbell and Lee, 2010). For England itself, several analyses have found that preventive checks on population growth weakened or disappeared by c. 1750, indicating that fertility became less responsive to economic signals in England at the precise period when economic growth began to accelerate and to diverge most from growth in other Western European economies (Galloway, 1988; Nicolini, 2007; Crafts and Mills, 2009). Evidence for various European economies suggests that these findings can be explained at least partly in terms of interactions between the family and other components of the institutional system, especially village communities, privileged urban corporations, occupational guilds, and serfdom (Ehmer, 1991; Ogilvie, 1995; Guinnane and Ogilvie, 2008, 2013).

The embeddedness of particular institutions in the broader institutional system also emerges from studying cultural attitudes associated with the EMP. It has been suggested that the EMP caused nuclear families to predominate over wider kinship groups, thereby fostering growth-inducing attitudes, specifically trust beyond the familial group and gender equality. These cultural norms are supposed to have been further propagated by medieval Catholic religious ideology, which is supposed to have compared favorably in this respect to the ideological norms disseminated by non-Christian religions such as Islam (Greif, 2006a; Greif and Tabellini, 2010; De Moor, 2008; De Moor and Van Zanden, 2010). However, these are difficult claims to substantiate empirically. A number of scholars have found that religious attitudes to family and gender issues varied greatly across medieval Catholic Europe, and that this was because they were shaped by a broader framework of social institutions that differed greatly from one Catholic, European society to the next (Biller, 2001; Bonfield, 2001; Donahue, 1983, 2008; Dennison and Ogilvie, 2013). Demographic behavior and family structure also varied enormously across medieval Catholic Europe, with nuclear families dominant in some societies but extended families more important in others, including in strongly Catholic societies such as Italy and Iberia (Smith, 1981a,b; Pérez Moreda, 1997; Reher, 1998a,b; Sonnino, 1997; Micheletto, 2011). It is difficult, therefore, to find empirical support for the notion that the EMP sustained distinctive cultural norms, whether about non-familial trust or gender issues. The widely variegated distribution of European family institutions is not consistently associated with any distinctive set of cultural attitudes, and there is no evidence that such attitudes had a causal effect on European economic growth.

The idea, then, that the emergence of sustained economic growth in early modern Europe was caused by any particular type of family institution is not supported by the historical evidence and, in fact, is refuted by much of it. Whether a society with any given family institution experienced economic growth depended on overall characteristics of its economy and institutional system. In early modern England, the EMP existed within a framework of well-defined, private, transferable and (in most senses) secure property rights; well-functioning factor and product markets; and relatively few particularized institutions constraining female (or male) economic autonomy; economic growth was usually positive and ultimately spectacular. In the early modern Netherlands, the EMP initially existed in a similar framework of property rights, well-functioning markets, and successful economic growth; but after c. 1670 the Dutch economy stagnated and industrialization came late, for reasons that are still vigorously debated but are believed to have included a resurgence of particularized institutional privileges (Mokyr, 1974, 1980; De Vries and Van der Woude, 1997; Van den Heuvel and Ogilvie, 2013). In German-speaking Central Europe, Scandinavia, and the Czech lands, the EMP existed in a more coercive framework of mobility restrictions (including, in some areas, serfdom) and corporative barriers to entry in labor markets (for most women and many men); economic growth remained slow until these institutional obstacles were removed (Ogilvie, 1997, 2003; Dennison and Ogilvie, 2013).

Research in historical demography finds that the institution of the family was interlinked with the wider institutional system in multiple ways (Laslett, 1988; Ehmer, 1991; Solar, 1995; Guinnane and Ogilvie, 2008, 2013). It was these complex interactions among different institutions within an over-arching system, not any single institution in isolation, that affected economic growth itself, as well as influencing potential contributory factors such as women's status, human capital investment, demographic responsiveness, and—to the limited extent that these are empirically observable—cultural attitudes. Current scholarship suggests that the EMP may have required a social framework of strong non-familial institutions that could substitute for familial labor, insurance and welfare which small, nuclear-family households could not provide, and to which large numbers of unmarried individuals did not have access (Laslett, 1988; Solar, 1995; Dennison and Ogilvie, 2013). However, it was not inevitable that this wider framework should be made up of institutions that also happened to benefit economic growth, such as generalized private property rights, well-functioning markets, or impartial legal systems. Instead, this wider framework could as easily have been—and in many cases actually was—made up of particularized institutions with more malign growth effects, including serfdom, guilds, communities, religious bodies, and absolutist states (Ehmer, 1991; Ogilvie, 1995, 2003; Guinnane and Ogilvie, 2008, 2013; Dennison and Ogilvie, 2013). Future research must place at the center of its analysis the wider institutional system that constrained both demographic and economic decisions during European economic growth. No specific type of family institution in isolation can be regarded as necessary, let alone sufficient, for economic growth.

These findings make clear that a specific institution that matters for economic growth will often not operate similarly across different societies and time-periods. Private property rights, for instance, are embedded in broader institutional systems that differ greatly across societies, with the result that they will not affect growth identically everywhere. If they are not embedded in an institutional system containing, for example, accessible and enforceable contracting institutions, they will fail to unleash economic growth, as we saw in Lesson 4. Likewise, the same family institution can exist in different societies characterized by widely differing institutional systems, and will consequently affect economic growth in widely differing ways. The evidence we have shows that the growth effects of any individual institution are constrained by other parts of the institutional system differently in different societies, and that it is the entire institutional system, not any single institution in isolation, that is important for economic growth.

While it is understandable that economists should wish to simplify the analysis of institutions in order to try to get at their essential features, it is important to remember the remark attributed to Einstein to the effect that "everything should be made as simple as possible, but not simpler."[5] While the embeddedness of particular institutions in larger systems undoubtedly adds greatly to the complexity of the analytical (and especially the empirical) task, it seems to be an undeniable fact we cannot simplify away. Institutions just are not easily separable from their contexts and identifiable under the traditional or common-sense headings of conventional labels, but rather have to be analyzed as part of an entire institutional system.

8.9. LESSON 8: DISTRIBUTIONAL CONFLICTS ARE CENTRAL

We have seen in Lessons 1 through 7 that many economists concerned with growth ascribe a major causal role to institutions, whose roots they trace far back in history. But there are also many who challenge the very idea of an institutional system favorable to growth, independent of geographical or cultural context. Some regard institutions essentially as superstructure, with other variables, such as geographical resource endowments or cultural attitudes, as more fundamental causes of economic growth which bring institutions in their wake (e.g. Sachs, 2003). Others hold that a society always has the institutions that are efficient given its endowments, technology, or cultural attitudes (e.g. North and Thomas, 1970, 1973; Greif, 2006c). There are even those who regard both institutions and growth as fundamentally caused by stochastic shocks amplified by subsequent path dependency (e.g. Crafts, 1977; Crafts et al. 1989).

The geographical and efficiency approaches are particularly prominent in the literature on institutions and growth in historical perspective. A number of scholars have sought to explain the historical development of institutions and economic growth in terms of geography and resource endowments. Thus Diamond (1997) explains the last nine thousand years of economic growth and human institutions in terms of geographical characteristics. Pomeranz (2000) accounts for economic divergence between Europe and China since 1750 through coal deposits, disease, ecology, and proximity to exploitable "peripheries." Sachs (2001) argues that tardy growth in modern LDCs derives from their location in tropical zones where agricultural techniques are inherently less productive and the disease burden higher. As we shall see shortly, Domar (1970) explains the economic divergence between Eastern and Western Europe from the medieval period to the 19th century, and serfdom as the central institutional manifestation of that divergence, in terms of the supply of land relative to the supply of labor, which was in turn determined by exogenously occurring population growth and land conquests.

5 See Calaprice (2011, pp. 384–5, 475), who also reports the following less simple (but probably more accurate) variant of this idea, from Einstein's Herbert Spencer Lecture, "On the Method of Theoretical Physics," delivered in Oxford on 10 June 1933: "It can scarcely be denied that the supreme goal of all theory is to make the irreducible basic elements as simple and as few as possible without having to surrender the adequate representation of a single datum of experience."

The efficiency view of institutions and growth is also widespread among economists, as we have seen in earlier lessons. According to this view, the task of the economic historian is not to find out which institutions are most conducive to growth, but to discover how apparently inefficient and growth-discouraging institutions in past societies were actually efficient in their particular natural or cultural context, whatever the appearances. In this spirit, not only the historical institutions we have met in the lessons above, but many others, have been reinterpreted by one economic historian or another in efficiency terms as a beneficial solution to one or more obstacles to possible transactions—merchant guilds (Greif et al. 1994; Greif, 2006c), craft guilds (Hickson and Thompson, 1991; Epstein, 1998; Zanden, 2009), village communities (McCloskey, 1976, 1991; Townsend, 1993; Richardson, 2005), serfdom (North and Thomas, 1970, 1973; Fenoaltea, 1975a,b), the noble feud (Volckart, 2004), vigilante justice (discussed in Little and Sheffield, 1983; Hine, 1998), and lynching (surveyed in Carrigan, 2004), among many others.

If it were true that institutions were always responses to natural endowments or efficient solutions to economic problems, then they would not matter for growth. It is their significance for growth, however, that motivates economists to understand why institutions arise and why they change.

Fortunately, there is an alternative to viewing institutions either as superstructures of more fundamental natural forces, or as efficient responses to such forces. According to this alternative approach, the institutions of a society result partly or wholly from conflicts over distribution (see Knight, 1995; Acemoglu et al. 2005; Ogilvie, 2007b). This conflict view is based on the idea that institutions affect not just the efficiency of an economy but also how its resources are distributed. That is, institutions affect both the size of the total economic pie and who gets how big a slice. Most people in the economy might well want the pie to be as big as possible—hence the assumption of the efficiency theorists. But people will typically disagree about how to share out the slices. Since institutions affect not only the size of the pie (through influencing efficiency) but also the distribution of the slices (through apportioning the output), people typically disagree about which institutions are best. This causes conflict. Some people strive to maintain particular institutions, others merely cooperate, others quietly sabotage them, and still others resist. Individuals struggle over institutions, but so do groups—and some groups organize for that very purpose. Which institution (or system of institutions) results from this conflict will be affected not just by its efficiency but by its distributional implications for the most powerful individuals and groups (Knight, 1995; Acemoglu et al. 2005; Ogilvie, 2007b).

Efficiency theories do sometimes mention that institutions result from conflict. But they seldom incorporate conflict into their explanations. Instead, conflict remains an incidental by-product of institutions portrayed as primarily existing to enhance efficiency. Thus, for instance, North often mentions distributional effects of institutions in his early work, but explains their rise and evolution in terms of economic efficiency (North and Thomas, 1970, 1973; North, 1981). Greif (2006c) also sometimes acknowledges that institutions can have distributional effects, but analyzes the specific institutions he selects—the Maghribi traders' coalition, the European merchant guild—in terms of their efficiency in encouraging medieval commerce and their compatibility with prevailing cultural beliefs. Insofar as rent-seeking is acknowledged, it is characterized as efficient, on the grounds that "monopoly rights generated a stream of rents that depended on the support of other members and so served as a bond, allowing members to commit themselves to collective action" (Greif et al. 1994, p. 749, 758).

Yet a conflict approach which incorporates the distributional activities of institutions into its analysis without assuming such activities to be efficient can explain many facts about pre-modern institutions that efficiency views cannot. One of the frequently cited justifications of the efficiency view is the longevity of the particular institutions it seeks to rediagnose as efficient. If they were not efficient, the challenge goes, why did they last for centuries? Wouldn't they have disappeared much sooner if they had been so bad for output and growth? The conflict view has a powerful explanation for the longevity of institutions that have historically inflicted considerable damage on the growth of the economies in which they prevailed.

For instance, the conflict view would agree that there is a good economic reason why, as we saw in Lesson 3, guild-like merchant associations existed so widely from the 12th to—in some societies—the 19th century. But this reason was not that they increased aggregate output by guaranteeing property rights or contract enforcement. Rather, they limited competition and reduced exchange by excluding craftsmen, peasants, women, Jews, foreigners, and the urban proletariat from most profitable branches of commerce. Merchant guilds and associations were so widespread and so tenacious not because they efficiently solved economic problems, making everyone better off, but because they efficiently distributed resources to a powerful urban elite, with side benefits for rulers (Lindberg, 2009, 2010; Ogilvie, 2011). This rent-seeking agreement between political authorities and economic interest-groups was explicitly acknowledged by contemporaries, as in 1736 when the ruler of the German state of Württemberg described the merchant guild that legally monopolized the national worsted textile proto-industry as "a substantial national treasure" and extended its commercial privileges at the expense of thousands of impoverished weavers and spinners on the grounds that "especially on the occasion of the recent French invasion threat and the military taxes that were supposed to be raised, it became apparent that no just opportunity should be lost to hold out a helping hand to [this merchant guild] in all just matters as much as possible." (Quoted in Troeltsch, 1897, p. 84.)

The conflict approach would also hold that there is a good economic explanation for why craft guilds were widespread in Europe for many centuries. But this is not that they were good for the whole economy. Empirical micro-studies of guilds' actual activities—as opposed to the rhetorical advocacy of their benefits in literature and legislation—show

how they underpaid employees; overcharged customers; stifled competition; excluded women and Jews; and blocked innovation. Guilds were widespread not because were good for everyone, but because they benefited well-organized interest groups. They made aggregate economic output smaller, but dished out large shares of it to established male masters, with fiscal and regulatory side-benefits to town governments and rulers (Ogilvie, 1997, 2003, 2004a,b,c; 2005d; 2007a; 2008).

The conflict view would also agree that there is a good economic explanation for the tenacity of strong peasant communes, which existed in large parts of Europe for centuries, as we saw in Lesson 4. But this is not that they were efficient for the whole economy. Their regulation of land-markets, migration, technology, settlement, and women's work often hindered the allocation of resources, in ways so innumerable that village micro-studies are still uncovering their true extent and implications. This not only diminished aggregate output but brutally narrowed the consumption and production options of poorer social strata, women, minorities, and migrants. Strong communes persisted not because they efficiently maximized the aggregate output of the entire economy, but because they distributed large shares of a much more limited output to village elites (rich peasants, male household heads), with fiscal, military, and regulatory side-benefits to rulers and landlords (Melton, 1990; Ogilvie, 1997, 2005a,b, 2007b; Dennison and Ogilvie, 2007; Dennison, 2011).

Finally, a conflict approach would agree that there is a good economic reason for the long existence of serfdom; but this is not that it efficiently solved market imperfections in public goods, agricultural innovation, or investment. Rather, serfdom created an economy of privileges that hindered efficient resource allocation in land, labor, capital, and output markets. But although serfdom was profoundly ineffective at increasing aggregate output, it was highly effective at distributing large shares to landlords, with fiscal and military side-benefits to rulers and economic privileges for serf elites.

The example of serfdom, in fact, provides an excellent illustration of the superiority of the conflict view of institutions to alternative approaches which explain institutions in terms of geographical resource endowments or economic efficiency. Indeed, economists concerned with institutions and growth have repeatedly turned their attention to serfdom, precisely because it played such a central role in the divergent growth performance of European economies between the Middle Ages and the 19th century. Serfdom set the institutional rules for agriculture, the most important sector of the medieval economy (Campbell, 2000). In the late Middle Ages, serfdom broke down in some European economies (mainly in the west), but intensified or emerged newly in others (mainly in the east), although the chronology and manifestation of this development varied enormously within both zones of the continent (for recent surveys see Cerman, 2013; Ogilvie, 2013b). But through this entire period agriculture remained by far the most important sector even of the most highly developed economies in Europe: it consumed most land, labor and capital; it produced most food and raw materials; and for industry or commerce to grow, inputs and outputs had to be released from farming (De Vries, 1976; Crafts, 1985; Ogilvie, 2000). The survival, breakdown, and intensity of serfdom in different European societies played a fundamental role in their divergent agricultural performance and hence their divergent growth record between the medieval period and the Industrial Revolution.

Because of its central role in long-term growth and stagnation, serfdom has been used as a test case for nearly every possible approach to institutions and growth—in terms of resource endowments (e.g. Postan, 1966; Domar, 1970), economic efficiency (e.g. North and Thomas, 1970, 1973; Fenoaltea, 1975a,b), and distributional conflicts (e.g. Brenner, 1976; Acemoglu and Wolitzky, 2011). The decline of serfdom is widely regarded as a major contributor to the growth of agriculture in Western Europe and its political abolition in Central and Eastern Europe under the impact of the French Revolution is regarded as a major example of institutional effects on growth (Acemoglu et al. 2011). Yet serfdom was not monolithic, it was embedded in the institutional systems of different European economies in different ways, and its growth effects depended, as we shall see, on its interactions with other components of each institutional system. Serfdom therefore provides an excellent context for contrasting different approaches to institutions, illustrating the strengths of the conflict approach, and demonstrating the work that remains to be done in tracing how institutions affected growth in historical perspective.

8.9.1 Resource Endowments, Serfdom, and Growth

Serfdom was an institutional system which obliged a peasant to provide forced labor services to his landlord in exchange for being allowed to occupy land. A serf was legally tied to the landlord in a variety of ways, typically by being prohibited from migrating, marrying, practicing certain occupations, selling certain goods, participating in factor and product markets, or engaging in particular types of consumption without obtaining permission from his landlord. Serfdom was therefore a particularized institution (in the language suggested in Lesson 3) which affected economic growth by restricting access to factor and product markets, preventing allocation of resources to the highest-productivity uses, and creating poor incentives for investment in human capital, land improvements, and technological innovations.

Most economies in Europe were characterized by some version of serfdom between c. 800 and c. 1350. After that date, serfdom began gradually to decline in some societies, such as England, although it survived for longer in others, such as France and western Germany. In the 16th and 17th centuries, some parts of Eastern-Central and Eastern Europe where classic serfdom had either never existed or had declined, including Russia, the Czech lands, Slovakia, Poland, Hungary, and eastern German territories such as Prussia, experienced an intensification of manorial controls by landlords, which has been called the second serfdom. This system remained in force in these economies until its abolition, usually through state action, which occurred in different Central and Eastern European societies at different dates between c. 1760 and c. 1860.

One widely held view within economics is that serfdom was an institutional response to resource endowments, specifically to the relative supply of land and labor. This idea is based on a paper by Domar (1970) arguing that serfdom can be explained as a response to a high land-labor ratio. Labor scarcity created severe competition among employers (landlords) for laborers (peasants) to work their land. Moreover, the abundance of land meant that peasants had attractive options setting up as independent farmers and withdrawing their labor from landlords altogether. This created a strong incentive for landlords to organize an institution to prevent peasants from doing these things, by legally binding them to the estate, forbidding them from migrating to competing employers, and obliging them to deliver a certain quantity of forced labor on the landlord's farm (the demesne). Domar argued that this explains the rise of serfdom in 17th-century Russia: the land-labor ratio rose because of the Muscovite colonial conquests and landlords devised serfdom as a way of protecting their supply of scarce peasant labor.

However, there are many examples of economies in which the land-labor ratio was high, but there was neither serfdom nor slavery. The most striking counterexample to Domar's model of serfdom is Europe after the Black Death. This virulent pandemic greatly increased the land-labor ratio in most parts of Europe by killing off 30–60% of the population between 1348 and 1350. According to Domar's theory, this should have caused serfdom to intensify, or to come into being in societies in which it had not previously existed. However, this did not happen. Instead, many parts of Western Europe saw serfdom break down after the Black Death, and never reappear no matter what happened to the land-labor ratio.

The decline of serfdom in Western Europe after the Black Death had already stimulated Postan (1966) to propose his own theory of serfdom in terms of resource endowments. Postan's theory was diametrically opposed to that of Domar, since it argued that the rising land-labor ratio after the Black Death caused the decline of serfdom because it made landlords compete for peasants by offering better conditions. Postan had only put this forward as an account of the decline of serfdom in Western Europe after the Black Death, not as a general model of serfdom in all societies. Domar (1970) did regard himself as advancing a general model of serfdom in terms of relative resource endowments. But he knew enough about the historical findings to recognize that a high land-labor ratio only provided the incentive for landlords to organize institutions to prevent themselves from losing laborers. Whether they actually did so depended on whether they were able to organize politically, i.e. were powerful enough to coerce peasants and prevent other landlords from competing them away by offering them better conditions (e.g. the freedom to take economic and demographic decisions without landlord permission). So Domar's model is one in which serfdom arises from relative resource endowments plus the political power of different social groups—i.e. it is broadly consistent with the conflict model of serfdom which we shall discuss shortly.

8.9.2 Efficiency, Serfdom, and Growth

Despite the near unanimity among economists and economic historians that serfdom was harmful for growth,[6] it was one of the first institutions to be re-diagnosed as efficient. In the early 1970s, North and Thomas, (1970, 1971, 1973) proposed a model of the "rise of the western world," according to which serfdom was "an efficient solution to the existing problems" in medieval economies, a voluntary contract that committed peasants to provide labor services to lords in exchange for "the public good of protection and justice" (1973, p. 21). North and Thomas explicitly stated that "serfdom in Western Europe was essentially not an exploitative arrangement …[it] was essentially a contractual arrangement where labor services were exchanged for the public good of protection and justice" (1971, p. 778). The reason serfs had to be forced to render these payments was that protection and justice were non-excludable, so individual serfs had an incentive to free-ride. Serfs were protected from being exploited by the landlord as the monopoly supplier of protection, according to North and Thomas, by institutional rules (the "customs of the manor") and by the fact that they had a low-cost exit option (absconding from their lord). The reason serfs had to be forced to pay in the form of forced labor services rather than cash or kind was uncertainty (the lords could not know *ex ante* how much the serfs were able to produce), transaction costs (the costs incurred by a landlord in reaching a bargain with a large number of peasants), and absence of markets (so that cash or kind would be of no use to the landlord since there was nothing to purchase with them).

The implication of these efficiency theories and others (e.g. Fenoaltea, 1975a,b, 1984) was that serfdom was an efficient institution given the characteristics of the economies in which it occurred, and was therefore beneficial for economic growth until these characteristics changed. But there is little evidence for this. Protection and justice were, in fact, excludable. Protection was provided by the lord's manor house or castle from which serfs could be excluded if they did not pay. Furthermore, the lord's fortifications did not protect serfs against that large proportion of the random violence of medieval society which took the form of unpredictable raids. Justice was also excludable: manorial courts operated by the landlord or his officials could refuse to provide justice to anyone, could strip a serf of legal protection by outlawing him, and could charge court fees to cover the costs of judging legal conflicts. Further doubt is cast on the idea that serfdom was an efficient solution to the provision of justice by the fact that feasible alternatives did exist: the prince, the church, abbeys, and towns all provided law-courts, which offered alternatives to the manorial courts and often did not even acknowledge differences in serf status. Also, neither absconding nor the customs of the manor provided effective protection to serfs against monopolistic landlords. A strong landlord could simply ignore

[6] Revisionist views claiming that serfdom did not harm the economy have been proposed (most recently in Cerman, 2012, 2013), but do not hold up well to empirical scrutiny (see Briggs, 2013; Dennison, 2011, 2013; Guzowski, 2013; Klein, 2013; North, 2013; Ogilvie, 2013b; Rasmussen, 2013; Seppel, 2013).

custom, and many did. Furthermore, absconding was a costly option which required the serf to abandon land, possessions, family, and social capital.

An even more fundamental problem for the efficiency view of serfdom is that much of the insecurity and injustice against which serfs were being "protected" by their landlords was actually produced by feudal landlords themselves. Serfdom was thus much more like a protection racket in which the landlords, as the more powerful party, generated both the problem and the solution. Serfdom did not constitute a bundle of voluntary contracts which contributed to economic efficiency, but rather was a set of rent-seeking arrangements devoted to redistributing resources from peasants to landlords.[7] Moreover, North and Thomas are wrong in claiming that peasants had to pay in the form of labor rather than cash or kind because of absence of markets. Every serf society that has ever been observed had markets for goods as well as for factor inputs, as we shall discuss in greater detail shortly.

The findings for serfdom show clearly the dangers of trying to explain institutions purely as efficient solutions to economic problems. Serfdom, it is clear, also involved coercive power, and some of the problems to which it is supposed to have been a solution were themselves caused by the exercise of this power. This suggests that we cannot assume that any institution we observe, even if it survives for hundreds of years, did so because it was the efficient set of social rules for maximizing aggregate economic output. We have to investigate what effect it had on the distribution of this output (Acemoglu et al. 2005; Ogilvie, 2007b).

8.9.3 Distributional Conflicts, Serfdom, and Growth

A fundamental break from viewing serfdom as resulting from resource endowments or economic efficiency, and thus being neutral or beneficial for economic growth, came with the work of Brenner (1976). Brenner pointed out serious problems with the view that labor scarcity (e.g. in Europe after the Black Death) caused serfdom either to strengthen or to break down. Plague-induced labor scarcity changed the incentives of both serfs and landlords. Certainly, as North and Thomas had argued, labor scarcity increased serfs' incentives to use their increased bargaining position to break down serfdom. But it also increased landlords' incentives to intensify serfdom in order to secure their supply of scarce laborers (the Domar argument). In actual practice, the change in relative supplies

7 North (1981, p. 131) later conceded that "carrying over the modern-day notion of contract to the serf-lord relationship is imposing a modern-day concept which is misleading. The serf was bound by his lord and his actions and movements were severely constrained by his status; no voluntary agreement was involved. Nevertheless, it is crucial to re-emphasize a key point of our analysis; namely, that it was the changing opportunity cost of lords and serfs at the margin which changed manorialism and eventually led to its demise." However, this does not address all the problems with his model, especially the excludability of the protection and justice services provided by landlords and the fact that landlords themselves generated much of the insecurity and justice they are supposed to have been protecting serfs against.

of land and labor after the Black Death saw serfdom develop in diametrically opposite directions in different European societies. In most Western European economies, serfdom broke down after the Black Death, albeit at different rates and times. In most parts of Eastern Europe, manorial powers survived the Black Death and greatly intensified under the second serfdom.

This was not because serfdom ceased to be efficient and to promote economic growth in the west but continued to be efficient and to promote growth in the east. Rather, which path an economy followed was "a question of power, indeed of force" (Brenner, 1976, p. 51). The outcome in each specific society was determined by the ability of both peasants and landlords to band together collectively with their fellows as well as to ally with the coercive power of the state. In Western Europe, the stronger central state that emerged toward the end of the medieval period pursued policies of "peasant protection" with the motivation of maintaining the peasantry's ability to pay taxes to the state rather than rents and labor services to landlords. In Eastern Europe, by contrast, the state allied with the landlords and enforced their controls over the peasantry in exchange for a share of the spoils. Brenner argued that serfdom was always an exploitative arrangement that redistributed resources from peasants to landlords. He also argued that this redistribution had harmful effects on economic performance: the effect of the second serfdom, in his view, was that "the possibility of …economic growth was destroyed and East Europe consigned to backwardness for centuries" (Brenner, 1976, p. 60).

Acemoglu and Wolitzky (2011) extended Brenner's perspective by proposing a model of labor coercion which sought to combine resource endowments and power. It placed the relative scarcity of labor and land at center stage, but formalized Brenner's point that labor scarcity can have two countervailing effects on serfdom, one intensifying it and one breaking it down. Their model suggests that labor scarcity, via its effect on the price of output and the returns to coercion, tended to intensify serfdom, as argued by Domar (1970). However, their model also suggests that labor scarcity, by improving the outside options of peasants, tended to weaken serfdom, as argued by Postan (1966) and North and Thomas (1971). Acemoglu and Wolitzky argue that what decided whether labor scarcity led serfdom to intensify or alternatively to decline was whether the value of output and the returns to coercion exceeded the value of the outside options of peasants. In Eastern Europe, they argue, missing markets meant that serfs had few external options, so the value of these options was surpassed by the returns to coercion; hence falling population in Eastern Europe intensified serfdom. In Western Europe, by contrast, the existence of markets gave serfs profitable outside options, which exceeded the value of the returns to coercion, so population decrease caused serfdom to decline.

This is a major advance over previous contributions, but leaves out what historical research shows about three important institutions which co-existed with serfdom and affected its operation: the state, the community, and the market. Regarding the state, as Acemoglu and Wolitzky themselves acknowledge (2011, pp. 569–71), their model treats each employer of serfs as an individual rather than recognizing that in practice serf landlords typically exercised coercion collectively and used this collective coercion (often enforced via the state) to regulate serfs' outside options. Although Acemoglu and Wolitzky contend that their argument still holds when the state is included, the fact remains that it fails to address the argument of Brenner (1976), according to which the strongest variable determining whether labor scarcity would strengthen or weaken serfdom was politics, specifically collective action by serfs and landlords and relations between each social group and the state.

Regarding the community, the Acemoglu and Wolitzky model treats each serf employee as an individual, rather than recognizing that in practice serfs formed communities which operated, at least in some ways, as institutional entities. The existence of communal institutions enabled serfs to engage in collective action toward both the landlord and the state. But the serf community also provided an entity with which landlords and the state could bargain in order to help them coerce individual serfs who sought to violate the constraints of serfdom, taxation, or conscription.

Regarding the market, Acemoglu and Wolitzky (2011) simply assume it to be missing in Eastern Europe, rather than recognizing that in practice Eastern European serfs did have access to, and participated in, markets for labor, capital, land, and output. The existence of these markets meant that serfs did have outside options, but the existence of market participation by serfs also offered landlords an additional and highly attractive source of rents. In practice, as we shall see, many landlords used their institutional powers to extract rents from their serfs' participation in markets, the profits from which contributed to their wealth, which they then invested partly in political action to sustain and intensify their own economic privileges under serfdom.

8.9.4 Serfdom and the Institutional System

Closer examination of the variables that created, sustained, and ultimately broke down serfdom strongly supports the view that distributional conflicts and political forces were central. But it also shows the importance of widening our focus beyond one institution in isolation to the wider institutional system. We cannot restrict our attention solely to serfdom, in the sense of the institutional rules governing relations between peasants and landlords. We must also analyze adjacent institutions, particularly those pointed out in the preceding section: the market, the community, and the state.

Markets were neither missing nor irrelevant to peasants' lives in serf societies, whether in medieval Western Europe or in early modern Eastern Europe. In the past few decades, micro-studies have revealed unambiguously that peasants in medieval and early modern serf societies made widespread use of markets. They used markets to buy and sell land (Cerman, 2008, 2012, 2013; Campbell, 2009), to offer and employ labor (Campbell, 2009; Dennison, 2011), to lend and borrow money (Briggs, 2004, 2009; Campbell, 2009; Ogilvie, 2001; Bolton, 2012), and to buy and sell food and craft products (Kaminski, 1975; Smith, 1996; Britnell, 1996; Cerman, 1996; Ogilvie, 2001; Bolton, 2012). Market participation can be widely observed among serfs not just in medieval England, but also in Germany, Switzerland, Austria, Italy, and France in the Middle Ages, as well as many regions of Eastern-Central and Eastern Europe under the early modern second serfdom, including Poland, Hungary, the Czech lands, and Russia (Kaminski, 1975; Dennison, 2011; Cerman, 2012; Ogilvie, 2012). This market participation was not limited to the richest serfs, but extended to all strata of serf society, including women, laborers, landless cottagers, and those subsisting at the edge of starvation (Kaminski, 1975; Cerman, 2012; Ogilvie, 2001, 2012).

Markets were present in serf economies, therefore, and offered attractive outside options for serfs. However, markets also offered attractive options for landlords. The result was that serfs' access to markets was often constrained by landlords' exercise of power in search of further rents. Thus serfs used markets widely to hire out their own labor, to employ the labor of others, and to buy and sell land (Topolski, 1974; Dennison, 2011; Klein, 2013; Ogilvie, 2001, 2005c, 2012, 2013b), although landlords used their powers under serfdom to intervene in both labor and land transactions to obtain rents or when they perceived a benefit to themselves (Harnisch, 1975; Ogilvie, 2001, 2005c, 2012; Dennison and Ogilvie, 2007; Velková, 2012). Serfs bought and sold agricultural and industrial output in markets, even though again landlords used their powers under serfdom to intervene in these markets by obliging serfs to buy licenses, pay arbitrary fees, offer their products first for sale to the landlord at dictated prices, or buy certain products solely from the landlord's own demesne operations (Cerman, 1996; Ogilvie, 2001, 2005c, 2012, 2013b; Klein, 2013). It was not, therefore, that markets were missing in serf societies, and that serfs thus lacked outside options, but rather that landlords intervened in these markets in such a way as to redistribute to themselves part of the profits from serfs' market participation. The interaction with markets entrenched serfdom more deeply and contributed to its longevity by further benefiting landlords at the expense of serfs.

Village communities also played a central role in the existence and survival of serfdom. Scholars such as Brenner (1976) had claimed that, under serfdom, village communities were stifled by landlord oppression. However, subsequent micro-studies have made clear that this was not the case (Wunder, 1978, 1996; Ogilvie, 2005a,b; Dennison and Ogilvie, 2007; Cerman, 2008, 2012). There was no question about the institutional capacity of village communities to operate as autonomous bodies under serfdom (Peters, 1995a,b, 1997; Wunder, 1995). Village communities organized direct resistance against attempts to intensify serfdom, and appealed to princely and urban jurisdictions against the landlord (Harnisch, 1972; Ogilvie, 2005a,b, 2012, 2013b). The strength of serfs' communal institutions and their ability to bargain with outside institutions, such as the state, other landlords, and towns, influenced the extent to which the landlord could intervene in their market transactions.

However, village communities played a complicated role in serfdom; they did not simply operate successfully and single-mindedly to protect serfs' interests. Serf communities were not fully independent of manorial intervention. The top village officers were often selected and appointed by the landlord (Harnisch, 1975; Peters, 1995a,b). Even the communal officials who were selected by serfs themselves were co-opted disproportionately by (and from) the top stratum of rich serfs. This oligarchy ran the village in its own interests and benefitted from communal autonomy (Melton, 1988; Rudert, 1995a,b; Hagen, 2002; Ogilvie, 2005a,b, 2012; Dennison and Ogilvie, 2007). Communal institutions typically implemented the choices of their most powerful members partly by limiting those of the least powerful—big farmers over laborers, men over women, established householders over unmarried youths, insiders over migrants (Ogilvie, 2005a,b, 2012, 2013b; Dennison and Ogilvie, 2007).

These characteristics of serf communities were not merely incidental. Rather, they were central components of how serfdom functioned. In normal times—i.e. except during legal conflicts or revolts of serfs against their landlords—community institutions carried out essential tasks that supported the manorial administration and ensured that serfdom functioned smoothly (Harnisch, 1986, 1989a,b; Dennison and Ogilvie, 2007; Ogilvie, 2012, 2013b). Landlords devolved to communal officers the organization of labor services and the collection of manorial dues (Peters, 1995a,b). They also deployed an elaborate community responsibility system which made the entire serf community responsible for the failings of any individual (Harnisch, 1989b; Peters, 1997). If a serf shirked on his labor services or vacated his farm without permission, his community was institutionally obliged to take up the slack. This created strong incentives for the community to report its delinquent or economically weak members to the manor; such communal reports lay behind many serf expulsions (Harnisch, 1989b). Collective responsibility for rendering forced labor and other payments to the landlord and the state also motivated communities to enforce the mobility restrictions of serfdom, and on many occasions one can observe communal officials pursuing absconding fellow serfs on behalf of the landlord (Peters, 1997). Conversely, staying in the good graces of the communal officials and the village oligarchy was essential if a serf hoped to secure a certificate that he had been a good farmer, which might in turn persuade the landlord to take a positive view of his applications regarding access to land or other resources (Harnisch, 1975; Hagen, 2002; Dennison and Ogilvie, 2007; Ogilvie, 2005a,b, 2012, 2013b). The most powerful stratum of serfs, who typically controlled the serf commune, was given very strong incentives to collaborate with landlord and state (Melton, 1988; Blaschke, 1991; Rudert, 1995a,b; Hagen, 2002; Ogilvie, 2005a,b,c; Dennison, 2011). The serf commune was thus an important component of the institutional system that helped to keep serfdom in being and intensified its negative growth effects while benefiting landlords (Ogilvie, 2005a,b, 2012, 2013b; Dennison and Ogilvie, 2007).

The state, finally, also affected the existence and survival of serfdom. Serfs were the state's main source of tax payments and army conscripts (Harnisch, 1989a,b; Seppel, 2013;

Ogilvie, 2013b). Often serfs were the sole source of tax payments, since the nobility typically used their dominance over parliamentary institutions to free themselves from taxation. This fact gave the state two countervailing incentives vis-à-vis serfdom. On the one hand, fiscal interests motivated the state to compete with landlords for serf money and labor (Hagen, 1989; Cerman, 2012). In a number of early modern Central and Eastern European serf societies, when lords demanded more forced labor, state courts granted redress to serfs, if only to safeguard serfs' fiscal capacities. On the other hand, the costs of maintaining state officials on the ground created strong incentives for the state to devolve tax-collection and conscription to local personnel, which meant collaborating with the landlord's administration and the whole regime of serfdom. The state thus competed with landlords for serf output but collaborated with landlords in the process of extracting that output (Hagen, 1989; Ogilvie, 2005c, 2013b; Cerman, 2008, 2012; Rasmussen, 2013; Seppel, 2013).

The state was also the gatekeeper of serfs' access to the legal system. In most societies under serfdom, the serfs' own village courts enjoyed the lower jurisdiction, which issued decisions on minor offences, neighborly conflicts, and land transactions (Kaak, 1991). But the higher jurisdiction over major offences was exercised in the first instance not by princes' courts but by landlords' courts (Cerman, 2012; Ogilvie, 2013b). Landlords typically secured this jurisdictional control from princes in return for fiscal and political favors, although to varying degrees in different serf societies (Kaak, 1991; Ogilvie, 2013b). In some European serf societies, such as Bohemia and Russia, landlords also successfully secured state legislation restricting serfs' right of appeal to princely courts (Ogilvie, 2005c; Dennison, 2011). But in many others, including Prussia, serfs retained (or were explicitly granted) the institutional entitlement to appeal against their landlords to state courts (Harnisch, 1975, 1989a,b; Hagen, 2002).

The legal balance of power between serfs and their landlords was influenced by the power of the ruler relative to the nobility in each polity (Harnisch, 1989a,b; Cerman, 2012; Ogilvie, 2013b). Where the ruler was weak compared to the nobles, the powers of landlords over serfs tended to be greater. But this did not mean that the state had no effect on serfdom in such societies: where the ruler depended heavily on noble support, he not only refrained from granting redress to serfs but positively supported landlords in most conflicts. Where the ruler lacked alternative sources of financial and political support and needed the support of landlords to obtain grants of taxes and payment of princely debts from the parliament, the ruler was more likely to acquiesce in most noble demands, including intensification of serfdom with state enforcement, as we saw in Lesson 2. Where the ruler had more plentiful alternative sources of revenue (e.g. from taxes on mining) and political support (e.g. from towns), he was able to resist the demands of the nobility (often expressed partly through a parliament) to a greater extent.

Probably the most important role the state played in serfdom was by legislating to shape, sustain, and ultimately abolish the entire system (Harnisch, 1986, 1994; Ogilvie, 2013b). Under serfdom, landlords responded to labor scarcity by using mobility restrictions to prevent serfs from voting with their feet to migrate to better conditions, and by cooperating with other lords to send fugitives back. Like any cartellistic arrangement, this landlord cartel was threatened by free-rider problems: lords collectively benefited from other lords' compliance but individually profited by violating the arrangement. This free-rider problem, as well as the transaction costs of coordinating enforcement across multiple manorial jurisdictions, gave landlords a strong incentive to seek support from the political authorities to enforce the institutional constraints of serfdom (Ogilvie, 2013b). In this way, the state played a fundamental role in sustaining the institution of serfdom.

However, the state also played a fundamental role in the ultimate abolition of serfdom, which took place at different dates in Eastern-Central and Eastern European societies in the course of the 18th and 19th centuries. In a number of serf societies, such as Prussia and Russia, the state reforms that abolished serfdom involved setting up a system of legal obligations requiring former serfs and their descendants to make redemption payments to their former landlords and their descendants as a form of recompense for losing the land, cash rents, and labour services that disappeared with the abolition of serfdom (Harnisch, 1986, 1994). In so doing, the state played a final, essential role in institutional change: mediating an enforceable agreement between serfs and landlords which credibly committed former serfs to reimburse former landlords for the losses caused by the institutional transformation.

The economic history of serfdom thus provides an excellent illustration of the importance to institutional change of dealing with the lack of what Acemoglu (2003) calls a "political Coase theorem." A party that holds (or obtains) some institutional power cannot make a credible commitment to bind its own future actions without an outside agency with the coercive capacity to enforce such a commitment. The absence of a political Coase theorem means that institutional changes that would make an entire economy better off are often blocked by the fact that it is difficult for the potential gainers from institutional reform to commit themselves to reimburse the losers after the latter have lost their institutional powers (Acemoglu, 2003; Acemoglu et al. 2005, p. 436; Ogilvie, 2007, pp. 666–7). The economic history of serfdom provides arguably the best example of this principle influencing the process of institutional change. In societies such as Russia and Prussia, serfdom was only abolished to the extent that the state was able to solve this problem of the missing "political Coase theorem" by mediating and enforcing a commitment for the gainers to compensate the losers. When Prussian serfdom was abolished in 1807, for instance, the state legislated that each former serf was to be allocated a parcel of land and freed from forced labor services, but was also legally obliged to compensate his landlord for the loss of this land and labor by making a series of redemption payments over a period of decades (Knapp, 1887; Harnisch, 1986, 1994). The state thus mediated and enforced a commitment that the serfs, as gainers from the abolition of serfdom, would compensate the landlords, as losers.

Economic history thus provides considerable support for the proposition that institutions are not just a response to resource endowments or efficient solutions to economic problems, in which case they would not matter for growth, but rather that they result partly or wholly from conflicts over distribution and hence have the potential to play a causal role in influencing whether an economy will grow or stagnate. But the growth literature, in pursuing a conflict view of institutions, has not yet made the best use of the historical evidence, and has placed excessive emphasis on high politics and top-down revolutions. The available evidence suggests, rather, that some of the most important institutions that harmed long-term growth in European history—institutions such as serfdom—arose from deep-seated and enduring distributional struggles among special-interest groups, carried out on a local level, far from the noise of parliamentary and ministerial struggles in national capitals, and often outside the formal political arena altogether. Conversely, societies that managed to minimize the influence of such groups over economic policies were the ones that gradually reduced the traction of particularized institutions and increased that of generalized ones, enabling their economies to achieve growth. Economic history thus strongly supports the centrality of socio-political conflict to developing the institutions that affect growth (for good or ill), but suggests that we must widen our definition of conflict from national politics as conventionally conceived, to include lower-level distributional conflicts and slow, gradual, non-revolutionary processes in the provinces.

8.10. ILLUSTRATION OF THE LESSONS: SERFDOM AND GROWTH

Having made it our main illustrative example for Lesson 8, we have now said enough about serfdom that we can further show how it exemplifies each of the eight lessons as well. Serfdom is of some independent interest in any case, as it governed the economic options of a majority of the population in agriculture, by far the largest economic sector in nearly every European economy throughout the medieval period and in many areas until the end of the 19th century. The decline of serfdom in Western Europe and intensification in Eastern Europe after the late medieval period certainly coincided with, and probably contributed to, the significant divergence in the growth of per capita income in the two parts of the continent between then and the 19th century (Ogilvie, 2013b). Understanding serfdom is therefore necessary if one wishes to understand divergence or convergence in the long-term growth performance of European societies between the Middle Ages and the Industrial Revolution.

First, serfdom shows clearly the importance of public-order institutions for economic growth, the argument advanced in Lesson 1. There is no empirical support for the idea that serfdom was an efficient private-order substitute for missing public-order institutions, whether in ensuring private property rights or in guaranteeing contract enforcement

(North and Thomas, 1970, 1971, 1973; Fenoaltea, 1975a,b). The decline of serfdom in Western Europe in the late medieval period was closely related to the unwillingness of the public authorities in those societies to provide support to the landlords in enforcing their institutional privileges over serfs. Conversely, the intensification of serfdom in Eastern-Central and Eastern European societies from the 16th century onwards was only possible because the state provided coercive support to landlords. Finally, the abolition of the second serfdom in Eastern European societies between the 1780s and the 1860s relied upon the public authorities to solve the problem of the missing political Coase theorem.

Second, serfdom shows clearly that a strong parliament, even one representing the interests of wealth holders, is not invariably beneficial for economic growth. In some serf societies, such as Poland, the parliament was extremely strong relative to the ruler. In all serf societies, the parliament represented wealth holders in the shape of the noble landed interests. The stronger the parliament in a serf society, the greater the ability of the landed nobility to hold the state to ransom, demanding that it provide state enforcement to back up the powers of landlords over the rural population, as a precondition for parliament to grant taxes or military support to the ruler. The history of European serfdom shows that economic growth depends not on whether a society has an institution that calls itself a parliament, exercises control over the executive, and represents wealth holders, but rather on the underlying institutions of that society, which determine how people obtain wealth, how wealth holders obtain parliamentary representation, and whether they then use that parliamentary representation to implement institutional rules that redistribute resources to themselves or alternatively ones that enable growth for the entire economy.

Third, serfdom illustrates the centrality of the distinction between generalized and particularized institutions. Serfdom was a completely particularized institution, in the sense that the rules it imposed and the services it provided depended completely on an individual's personal status and privileges as a serf or a non-serf. Access to land, labor, capital, and output under serfdom was not available or transferable to everyone impartially but rather depended upon the identity of the economic agent as a landlord, a freeman, or a serf. Furthermore, most forms of serfdom depended heavily on collaboration with a second particularized institution, that of the village community. The rules of the village community also operated in a particularized way, in the sense that ownership, use, and transfers of inputs and outputs depended upon an individual's personal status and privileges, e.g. as a village member rather than a migrant, a male householder rather than a woman or a dependent male, a substantial farmer rather than a landless laborer. However, in European serf societies, the completely particularized institutions of serfdom and the village community co-existed with the institutions of the state and the market, which were at least partly generalized. The precise balance between particularized and generalized institutions in serf societies determined how long serfdom survived, how much it constrained growth, as well as when and how it would be abolished.

Fourth, serfdom shows how property rights institutions and contracting institutions both matter, and are not separable. When people in serf societies traded, they simultaneously transferred property rights to another person and made a contract. Landlords intervened not just in property rights but also in contracts, by invalidating agreements in their own interests or those of clients to whom they had granted market privileges. Moreover, the abolition of serfdom in Eastern-Central and Eastern Europe often improved the security of private property rights in land, but did not see any improvement in agricultural growth. One reason was that in order for the growth benefits of improved property rights to be unleashed, it was also necessary for contracting institutions to improve so as to provide peasants with incentives to incur the costs and risks of investing in human capital, land improvements, and innovations. That is, the political authorities had to establish not only generalized property rights but also generalized contract enforcement. This required them to stop supporting particularized interventions by special-interest groups that diminished the security of contracts. Only when this was undertaken could the benefits of growth-favorable property rights be unleashed and economic growth quicken. Serfdom shows that distributional conflicts and the coercive powers of elites played a major role in contracting institutions, just as they did in the enforcement of property rights.

Fifth, serfdom shows that secure private property rights can be good or bad for growth, depending on whether they are generalized or particularized. Under serfdom, landlords had very secure, clearly defined, and extensive private property rights. But these were property rights that were particularized, in the sense that they were based on non-economic characteristics of the owner: his personal status and legal privileges as a noble landlord and his possession of coercive power over his serfs. Transactions involving these secure private property rights were governed by the personal characteristics of the lord, including his coercive capacities. These very secure and well-defined private property rights prevented growth from taking off, by limiting the extent to which resources were allocated to the users that had the highest-productivity uses for them. Instead, the particularized property rights that prevailed under serfdom allocated assets to those with legal privileges and coercive capacities. The particularized nature of private property rights under serfdom limited the extent to which serfs could invest in increasing the productivity of their land, as well as their ability to use it as collateral to obtain loans for investment purposes.

Sixth, serfdom shows that security of private property rights—whether of ownership, use, or transfer—was a matter of degree, rather than presence or absence. In many European serf societies, serfs had rights of ownership over their holdings: in some, it was virtually impossible for a serf to be evicted from his farm by his landlord; in most others, eviction required a legal case to be made that the serf had violated the conditions of his tenure, for instance by failing to pay his rent or labor dues. In most European serf societies that have been studied, there were also secure rights of use, in the sense that serfs can be observed choosing which crops to cultivate (e.g. cash crops such as flax) and investing in their holdings (e.g. by constructing buildings or by manuring fields). In most European serf societies, serfs also bought, sold, and bequeathed their holdings, and were able to lease and rent at least some parcels of land. In principle, a serf required his landlord's permission for all land transfers, but in a majority of cases this was granted virtually automatically. This was certainly the case in England under serfdom, and thus long before 1688, since serfdom declined in England after c. 1350. Moreover, serfs had a considerable (if not perfect) degree of security of ownership and use rights over their property, not just in medieval England but in virtually every other European serf society that has ever been studied. Security of ownership and use over private property existed in nearly every medieval and early modern European society, but their generalized features were often constrained by the operation of adjacent or conflicting particularized institutional arrangements. Serfdom provides a clear example of how security of private property rights is a matter of degree rather than kind. It also illustrates the importance of breaking down the concept of "security" of property rights into its different components, examining each separately, and analyzing how each component influenced economic growth.

Seventh, serfdom shows clearly the importance of recognizing that institutions are embedded in a wider institutional system and are constrained by the other institutions in that system. Behind the facade of serfdom lay a set of institutional arrangements that varied greatly across different European societies and across time-periods. This was because serfdom did not exist in isolation, as a set of institutional rules governing the relationship between peasants and noble landlords. Rather, it was embedded in a wider system of other institutions—the market, the village community, the state, the family, and many others. The functioning of serfdom, its survival, and its impact on growth were all affected by the availability and often the active intervention of these other institutions.

Eighth, serfdom demonstrates the centrality of distributional conflicts to the evolution of institutional systems and their impact on growth. Serfdom survived for centuries in the teeth of changing resource endowments and rampant inefficiency, because it benefited powerful groups: landlords, rulers, and members of the serf oligarchy. But the distributional conflicts that sustained serfdom raged not only, or even predominantly, at the level of high politics. Rather, they consisted of lower-level and longer-lasting distributional struggles among special-interest groups, mostly outside the arena of national politics.

8.11. CONCLUSION

This chapter has sought to bring historical evidence to bear on the question of how institutions affect long-run economic growth. Although we still need to know much more about the institutions that influenced economic success in past centuries, there is much we can say even with the evidence we have, positively and negatively, about the conditions for growth. The growth literature contains a number of strong claims about economic history and institutions. This chapter has shown that some of these claims are not supported by historical research, and must be replaced. Others are controversial, and the evidence surveyed in this chapter has suggested the direction in which they must be revised. Still others are probably right, and this chapter has tried to show how they could be rendered more useful for theory and policy if they made better use of the historical evidence.

We can definitively rule out some very widely held hypotheses which claim that some specific, singular institution played a key causal role in economic growth. Private-order institutions are widely claimed to be capable of substituting for public-order institutions in supporting economic growth. But as we saw in Lessons 1 and 3, the historical examples which are supposed to support this view turn out not to have existed. Private-order institutions can supplement public-order institutions, but cannot substitute for them. Public-order institutions are necessary for markets to function—for good or ill. Parliaments are a second institution widely claimed to play a central role in facilitating economic growth. But, as we saw in Lesson 2, parliaments have a very spotty historical record of supporting growth, and in the few cases they have done so they appear to have required to possess very specific characteristics and to be embedded in a wider system of supporting institutions. Even secure private property rights, widely regarded as a key to economic growth, turn out not to have been invariably beneficial in the historical record. In those cases in which such property rights played an important causal role in growth, as in the European agricultural revolution they needed to possess the special characteristic of being generalized, and they needed also to be supported by other components of the institutional system, especially contracting institutions. These findings enable us to rule out simple institutional recipes, such as focusing solely on building private-order social networks, establishing parliaments, or developing property rights, at the expense of other parts of the institutional system.

A clear corollary emerges from these findings. Institutions do not operate in isolation but as part of a wider system. Property rights institutions are facilitated by contracting institutions and constrained by communal and manorial ones. Contracting institutions operate well or badly depending on public-order institutions; the organizing abilities of urban and rural communes; the privileges of corporative occupational associations; and the powers of landlords under manorial systems such as serfdom. The institution of the family is interdependent with the wider framework of non-familial institutions. Serfdom depended on the state, on peasant communes, and even on markets. Most of the central economic institutions over the past millennium appear to have affected growth only in interaction with other components of the wider institutional system.

The most important lesson from our investigation of institutions and growth in history, however, concerns perspectives for the future. Again and again, the result of our lessons has led us to the remark cited at the end of Lesson 7: "everything should be made as simple as possible, but not simpler." Two apparently opposed kinds of simplification are now particularly conspicuous. One of them tries to find the point at which the indispensable set of institutions came into existence. Since the Glorious Revolution of 1688 occurred conveniently about three generations before the first stirrings of English industrialization, it has been seized upon (as we saw in Lessons 2, 5, and 6) as the turning point of history, at which the institutions essential to growth began. The other, apparently opposite, simplification is that many societies have the right institutions, e.g. secure property rights, without experiencing growth. In particular, it is pointed out that 13th-century England had all the institutions that matter to growth, and yet failed to industrialize.

As we saw in a number of the lessons in this chapter, the apparent disagreement between these two kinds of simplification is superficial. What they agree on is more important—the assumption that institutions can be exhaustively described, in all their implications for growth, by their informal, ordinary-language names such as secure property rights, public-order institutions, or parliament. The assumption is that each such label refers unambiguously to a particular, identifiable social configuration of some kind. This chapter has shown that this assumption is untenable. The reason English economic history can be used to argue both that property rights are essential for growth and that property rights are irrelevant for growth is that property rights encompasses an enormous variety of heterogeneous phenomena. Informal institutional labels, as the historical evidence surveyed in this chapter has shown, are imprecise, they are ambiguous, and in many cases they overlap; none of them has anything like a sharp definition.

A major theme of this chapter has been that the entities referred to by these labels are not well defined—i.e. that the assumption shared by the two apparently opposite kinds of simplification is false. Conventional institutional labels are ill defined in at least three ways: they lack sharp criteria of application (they refer to a large variety of different social configurations); they lack a scale of intensity or degree (they are assumed to be either present or absent, with no gradations in between); and they fail to reflect the interconnections between the configuration they apparently refer to and the entire institutional system of which that configuration is an integral part, let alone to give any hint how the character of that configuration changes as its institutional context and interdependencies change. The historical findings surveyed in this chapter therefore open up three challenges for future research on institutions and growth.

The first challenge is to sharpen the criteria of application of conventional institutional labels. Each institutional label currently used in the analysis of economic growth refers to a large variety of different social configurations. Parliaments, even those representing the interests of wealth holders, as we saw in Lesson 2, can refer to anything from the post-1688 English parliament (relatively pluralistic, if still corrupt), to the 18th-century Württemberg *Landschaft* (the other constitutional monarchy in Europe, but manned by guildsmen and given to granting privileges to rent-seeking corporate groups), to the Polish *Sejm* (much more powerful than the feeble Polish executive, but mainly used to enforce the powers of noble landlords under serfdom). The historical evidence presented in this chapter suggests that economists need to break down the concept of parliament manned by wealth holders analytically by registering how wealth holders obtain their wealth, what kind of wealth it is, how wealth holders obtain representation in parliament, how variegated their economic interests are, and what mechanisms and levers of economic intervention the specific parliamentary institution grants to its members. Likewise, the conventional institutional label "secure property rights" has been applied by respectworthy economists and historians to property regimes as disparate as ninth-century Italy, 13th-century England, 17th-century Germany, and rich Western economies at the beginning of the 21st century. The historical evidence presented in Lessons 5 and 6 suggests that we need to break down the concept of secure private property rights into rights of ownership, use, and transfer; and within each type of right, analyze whether it is a generalized right applying to all economic agents or a particularized right applying only to a privileged subset. It seems likely that other conventional institutional labels—contracting institutions, communities, guilds—would benefit from analytical attention devoted to sharpening the criteria by which they are defined and measured, and the way in which these separate characteristics might be expected to affect economic growth.

The second challenge for future research is to provide a scale of intensity or degree for measuring institutions. The current institutional labels used in the analysis of growth assume those institutions to be either present or absent, with no gradations in between. The growth literature contains too many claims that certain institutions were completely absent or, alternatively, completely present. Public-order institutions are supposed to have been completely absent from the medieval trading world, as we saw in Lessons 1 and 3, implying a major role for private-order substitutes in achieving economic growth—and yet empirical research finds that public-order institutions were present and reveals that they served an important role in commercial growth in those medieval economies, even though they undoubtedly changed over the ensuing centuries, albeit not always in a positive direction. Parliaments are supposed to have had no control over the executive arm of the English government before 1688 and virtually complete control thereafter, as we saw in Lesson 2, implying a major role for democratization in achieving economic growth—and yet the empirical findings reveal that parliamentary powers were usually a matter of incremental changes, except during periods of revolution (and sometimes even then). Property rights, as we saw in Lesson 5, are portrayed as being either completely absent before 1688 or completely present in 1300, implying respectively a major role in economic growth or complete irrelevance to it—and yet the empirical findings reveal that property rights were a matter of degree and incremental change. The historical findings surveyed in this chapter suggest the need for economists to pay much greater analytical attention to devising scales of intensity or degree for conventional institutional labels such as property rights or public-order institutions, preferably for each of the many distinct characteristics of these institutions whose identification is the focus of our first challenge.

Our third challenge for future research is to work out ways of analyzing and measuring the linkages between the configurations to which conventional institutional labels apparently refer—that is, of understanding how institutions interconnect with the wider institutional system. Even very similar property rights regimes, as Lesson 4 showed, could give rise to very different economic outcomes during the agricultural revolution depending on the quality of contracting institutions, which in turn depended on the characteristics of such variegated institutional mechanisms as the village community, serfdom, urban corporations, and the state. As Lesson 7 showed, the apparently identical family institution of the European Marriage Pattern could be associated with widely varying growth outcomes, depending on the rest of the institutional system within which it was embedded, especially corporative institutions such as guilds and communities that influenced women's status, human capital investment, and demographic decisions. Even serfdom, as we saw in Lesson 8, cannot be understood in isolation from the rest of the institutional system—the village community, the state, and the market. The historical evidence surveyed in this chapter suggests that in order to understand institutional influences on long-run growth, economists need ways of characterizing the wider institutional system of which each institution is just one component, and of mapping how the character of that configuration changes as its institutional context and interdependencies change.

This is not to say that any of these challenges will be easy to surmount. But the historical findings surveyed in this chapter show that they will have to be tackled if we are to make further progress. Our best hope of success at this task will be to combine the ability of economics to simplify everything as much as possible, with the ability of history to identify where the complexity of the data resists further simplification and tells us that better analytical tools must be devised.

ACKNOWLEDGMENT

The authors would like to express their gratitude to Jeremy Edwards for his exceptionally stimulating suggestions on several drafts of this chapter; and to Tracy Dennison for her very helpful comments on the final version.

REFERENCES

Acemoglu, D., 2003. Why not a political Coase theorem? Social conflict, commitment and politics. Journal of Comparative Economics 31 (4), 620–652.

Acemoglu, D., 2009. Introduction to Modern Economic Growth. Princeton University Press, Princeton, NJ.

Acemoglu, D., Cantoni, D., Johnson, S., Robinson, J.A., 2011. The consequences of radical reform: the French Revolution. American Economic Review 101 (7), 3286–3307.

Acemoglu, D., Johnson, S.H., 2005. Unbundling institutions. Journal of Political Economy 113 (4), 949–995.

Acemoglu, D., Johnson, S., Robinson, J.A., 2005. Institutions as a fundamental cause of long-run growth. In: Aghion, P., Durlauf, S.N. (Eds.), Handbook of Economic Growth, vol. 1A. Elsevier, Amsterdam/London, pp. 385–472.

Acemoglu, D., Robinson, J.A., 2012. Why Nations Fail: The Origins of Power, Prosperity and Poverty. Crown Publishers, New York.

Acemoglu, D., Wolitzky, A., 2011. The economics of labor coercion. Econometrica 79 (2), 555–600.

Ackerman-Lieberman, P., 2007. A partnership culture: Jewish economic and social life seen through the legal documents of the Cairo Geniza. Columbia University, Ph.D. Dissertation.

Aghion, P., Howitt, P., 1992. A model of growth through creative destruction. Econometrica 60 (2), 323–351.

A'Hearn, B., Baten, J., Crayen, D., 2009. Quantifying quantitative literacy: age heaping and the history of human capital. Journal of Economic History 69 (03), 783–808.
Alengry, C., 1915. Les foires de Champagne: Etude d'histoire économique. Rousseau et Cie, Paris.
Allen, R.C., 1992. Enclosure and the Yeoman: The Agricultural Development of the South Midlands, 1450–1850. Clarendon, Oxford.
Allen, R.C., 1999. Tracking the agricultural revolution in England. Economic History Review 52 (2), 209–235.
Allen, R.C., 2003. Progress and poverty in early modern Europe. Economic History Review 56 (3), 403–443.
Allen, R.C., 2004. Agriculture during the Industrial Revolution, 1700–1850. In: Floud, R., Johnson, P. (Eds.), The Cambridge Economic History of Modern Britain, vol. 1: Industrialisation, 1700–1860. Cambridge University Press, Cambridge, pp. 96–116.
Allen, R.C., 2011. Global Economic History: A Very Short Introduction. Oxford University Press, Oxford.
Anderson, J.E., 2008. Trade and informal institutions. In: Anon. (Ed.), Handbook of International Trade. Blackwell Publishing, Oxford, pp. 279–293.
Anon., 1818. The states of Wirtemberg. Edinburgh Review 29, 337–363.
Aoki, M., 2001. Toward a Comparative Institutional Analysis. MIT Press, Cambridge, MA.
Arbois de Jubainville, M. H. de, 1859. Histoire de Bar-sur-Aube sous les comtes de Champagne. Durand, Dufay-Robert, Jardeaux-Ray, Paris, Troyes, Bar-sur-Aube.
Arbois de Jubainville, M. H. de, Pigeotte, L., 1859–66. Histoire des ducs et des comtes de Champagne. A. Durand, Paris.
Archer, I.W., 1988. The London lobbies in the later sixteenth century. Historical Journal 31 (1), 17–44.
Aron, J., 2000. Growth and institutions: a review of the evidence. The World Bank Research Observer 15 (1), 99–135.
Ashton, R., 1967. The parliamentary agitation for free trade in the opening years of the reign of James I. Past & Present 38, 40–55.
Ashtor, E., 1983. The Levant Trade in the Later Middle Ages. Princeton University Press, Princeton, NJ.
Aslanian, S., 2006. Social capital, trust and the role of networks in Julfan trade: informal and semi-formal institutions at work. Journal of Global History 1 (3), 383–402.
Ba, S., 2001. Establishing online trust through a community responsibility system. Decision Support Systems 31 (3), 323–336.
Bairoch, P., 1989. Les trois révolutions agricoles du monde développé: rendements et productivité de 1800 à 1985. Annales. Histoire, Sciences Sociales 44 (2), 317–353.
Baker, J.H., 1979. The law merchant and the common law before 1700. Cambridge Law Journal 38, 295–322.
Baker, J.H., 1986. The law merchant and the common law. In: Baker, J.H. (Ed.), The Legal Profession and the Common Law: Historical Essays. Hambledon Press, London, pp. 341–386.
Barbour, V., 1911. Privateers and pirates of the West Indies. American Historical Review 16 (3), 523–566.
Bardhan, P., 1996. The nature of institutional impediments to economic development. Center for International and Development Economics Research Papers C96–066.
Basile, M.E., Bestor, J.F., Cocquillette, D.R., Donahue, C. (Eds.), 1998. Lex Mercatoria and Legal Pluralism: A Late Thirteenth-Century Treatise and Its Afterlife. Ames Foundation, Cambridge.
Bassermann, E., 1911. Die Champagnermessen. Ein Beitrag zur Geschichte des Kredits. Mohr, Tübingen.
Bautier, R.-H., 1953. Les foires de Champagne. Recherches sur une évolution historique. Recueils de la Société Jean Bodin 5, 97–147.
Bautier, R.-H., 1970. The fairs of Champagne. In: Cameron, R. (Ed.), Essays in French Economic History. R.D. Irwin, Homewood, IL, pp. 42–63.
Bekar, C.T., Reed, C.G., 2012. Land Markets and Inequality: Evidence from Medieval England. Simon Fraser University Department of Economics Working Papers 12–14.
Benson, B.L., 1989. The spontaneous evolution of commercial law. Southern Economic Journal 55 (3), 644–661.

Benson, B.L., 1998. Law merchant. In: Newman, P. (Ed.), The New Palgrave Dictionary of Economics and the Law. Macmillan, London.
Benson, B.L., 2002. Justice without government: the merchant courts of medieval Europe and their modern counterparts. In: Beito, D., Gordon, P., Tabarrok, A. (Eds.), The Voluntary City: Choice, Community and Civil Society. University of Michigan Press, Ann Arbor, pp. 127–150.
Benson, B.L., 2005. The mythology of holdout as a justification for eminent domain and public provision of roads. The Independent Review 10 (2), 165–194.
Benson, B.L., 2008. The evolution of eminent domain: a remedy for market failure or an effort to limit government power and government failure? The Independent Review 12 (3), 423–432.
Benton, J.F., 1969. Philip the Fair and the Jours of Troyes. Studies in Medieval and Renaissance History 6, 281–344.
Bernstein, L., 2001. Private commercial law in the cotton industry: value creation through rules, norms, and institutions. Michigan Law Review 99 (7), 1724–1790.
Besley, T., Ghatak, M., 2010. Property rights and economic development. In: Rodrik, D., Rosenzweig, M.R. (Eds.), Handbook of Development Economics, vol. 5. North Holland, Amsterdam, pp. 4526–4595.
Bieleman, J., 1993. Dutch agriculture in the Golden Age, 1570–1660. Economic and Social History in the Netherlands 4, 159–185.
Bieleman, J., 2006. Dutch agricultural history c. 1500–1950. In: Thoen, E., Van Molle, L. (Eds.), Rural History in the North Sea Area : An Overview of Recent Research, Middle Ages-Twentieth Century. Brepols, Turnhout.
Bieleman, J., 2010. Five Centuries of Farming: A Short History of Dutch Agriculture, 1500–2000. Wageningen Academic Publishers, Wageningen.
Biller, P., 2001. The Measure of Multitude: Population in Medieval Thought. Oxford University Press, Oxford.
Birdsall, N., 1988. Analytical approaches to population growth. In: Chenery, H., Srinivasan, T.N. (Eds.), Handbook of Development Economics, vol. I. North Holland, Amsterdam/New York, pp. 477–542.
Blaschke, K., 1991. Dorfgemeinde und Stadtgemeinde in Sachsen zwischen 1300 und, 1800. In: Blickle, P. (Ed.), Landgemeinde und Stadtgemeinde in Mitteleuropa. Ein struktureller Vergleich. Oldenbourg, Munich, pp. 119–143.
Blockmans, W.P., 1988. Alternatives to monarchical centralization. In: Koenigsberger, H.G. (Ed.), Republik und Republikanismus in Europea der Frühen Neuzeit. Oldenbourg, Munich.
Blondé, B., Gelderblom, O., Stabel, P., 2007. Foreign merchant communities in Bruges, Antwerp and Amsterdam, c. 1350–1650. In: Calabi, D., Christensen, S.T. (Eds.), Cultural Exchange in Early Modern Europe, vol. 2: Cities and Cultural Exchange in Europe, 1400–1700. Cambridge University Press, Cambridge, pp. 154–174.
Boelcke, W.A., 1973. Wege und Probleme des industriellen Wachstums im Königreich Württemberg. Zeitschrift für Württembergische Landesgeschichte 32, 436–520.
Boelcke, W.A., 1984. Industrieller Aufstieg im mittleren Neckarraum zwischen Konjunktur und Krise. Zeitschrift für Württembergische Landesgeschichte 43, 287–326.
Boerner, L., Ritschl, A., 2002. Individual enforcement of collective liability in premodern Europe. Journal of Institutional and Theoretical Economics 158, 205–213.
Boerner, L., Ritschl, A., 2005. Making financial markets: contract enforcement and the emergence of tradable assets in late medieval Europe. Society for Economic Dynamics 2006 Meeting Papers 884.
Bogart, D., Richardson, G., 2009. Making property productive: reorganizing rights to real and equitable estates in Britain, 1660–1830. European Review of Economic History 13 (1), 3–30.
Bogart, D., Richardson, G., 2011. Property rights and parliament in industrializing Britain. Journal of Law and Economics 54 (2), 241–274.
Boldorf, M., 1999. Institutional Barriers to Economic Development: The Silesian Linen Proto-industry (17th to 19th Century). Institut für Volkswirtschaftslehre und Statistik, Universität Mannheim, Working Papers 566–99.
Boldorf, M., 2006. Europäische Leinenregionen im Wandel. Institutionelle Weichenstellungen in Schlesien und Irland (1750–1850). Böhlau, Cologne/Weimar/Vienna.
Boldorf, M., 2009. Socio-economic institutions and transaction costs: merchant guilds and rural trade in eighteenth-century Lower Silesia. European Review of Economic History 13 (2), 173–198.

Bolton, J.L., 2012. Money in the Medieval English Economy 973–1489. Manchester University Press, Manchester.
Bonfield, L., 2001. Developments in European family law. In: Kertzer, D.I., Barbagli, M. (Eds.), The History of the European Family, vol. 1: Family Life in Early Modern Times, 1500–1789. Yale University Press, New Haven, CT, pp. 87–124.
Bourquelot, F., 1839–40. Histoire de Provins. Lebeau, Paris.
Bourquelot, F., 1865. Études sur les foires de Champagne, sur la nature, l'étendue et les règles du commerce qui s'y faisait aux XIIe, XIIIe et XIVe siècles. L'Imprimerie Impériale, Paris.
Boutaric, E.P., 1867. Actes du Parlement de Paris, Première série: De l'an 1254 à l'an 1328. H. Plon, Paris.
Braddick, M.J., 1994. Parliamentary Taxation in Seventeenth-Century England: Local Administration and Response. Royal Historical Society, Woodbridge, Suffolk.
Brakensiek, S., 1991. Agrarreform und Ländliche Gesellschaft: die Privatisierung der Marken in Nordwestdeutschland 1750–1850. Schöningh, Paderborn.
Brakensiek, S., 1994. Agrarian individualism in North-Western Germany, 1770–1870. German History 12 (2), 137–179.
Brenner, R., 1976. Agrarian class structure and economic development in pre-industrial England. Past & present 70, 30–75.
Brewer, J., 1989. The Sinews of Power: War, Money and the English State, 1688–1783. Unwin Hyman, London.
Brewer, J., Hellmuth, E. (Eds.), 1999. Rethinking Leviathan: The Eighteenth-Century State in Britain and Germany. Oxford University Press, Oxford.
Briggs, C., 2004. Empowered or marginalized? Rural women and credit in later thirteenth- and fourteenth-century England. Continuity and Change 19 (1).
Briggs, C., 2009. Credit and Village Society in Fourteenth-Century England. Oxford University Press, Oxford.
Briggs, C., 2013. English serfdom, c. 1200 - c. 1350: towards an institutional analysis. In: Cavaciocchi, S. (Ed.), Schiavitu e servaggio nell'economia europea. Secc. XI-XVIII./Slavery and Serfdom in the European Economy from the 11th to the 18th Centuries. XLV settimana di studi della Fondazione istituto internazionale di storia economica F. Datini, Prato 14–18 April 2013. Firenze University Press, Florence.
Britnell, R.H., 1991. The towns of England and Northern Italy in the early fourteenth century. Economic History Review 44 (1), 21–35.
Britnell, R.H., 1996. The Commercialisation of English Society, 1000–1500. Manchester University Press, Manchester.
Briys, E., De ter Beerst, D.J., 2006. The Zaccaria deal: contract and options to fund a Genoese shipment of alum to Bruges in 1298. Paper presented at the XIV International Economic History Congress, Helsinki, August.
Broadberry, S., Campbell, B., Klein, A., Overton, M., et al., 2011. British economic growth, 1270–1870: an output-based approach. University of Kent Department of Economics Studies in Economics 1203.
Broadberry, S., Campbell, B., Van Leeuwen, B., 2013. When did Britain industrialise? The sectoral distribution of the labor force and labor productivity in Britain, 1381–1851. Explorations in Economic History 50 (1), 16–27.
Brophy, J.M., 1995. Salus publica suprema lex: Prussian Businessmen in the New Era and Constitutional Conflict. Central European History 28 (2), 122–151.
Burkhardt, M., 2012. Zentren und Peripherie zu Beginn der Industriellen Revolution in Württemberg - ein kartografischer Nachtrag. Zeitschrift für Württembergische Landesgeschichte 71, 479–480.
Buyst, E., Mokyr, J., 1990. Dutch manufacturing and trade during the French Period (1795–1814) in a long-term perspective. In: Aerts, E., Crouzet, F. (Eds.), Economic Effects of the French Revolutionary and Napoleonic Wars, Leuven University Press, Leuven, pp. 64–78.
Byrne, E.H., 1916. Commercial contracts of the Genoese in the Syrian trade of the twelfth century. Quarterly Journal of Economics 31 (1), 128–170.
Byrne, E.H., 1930. Genoese Shipping in the Twelfth and Thirteenth Centuries. The Medieval Academy of America, Cambridge, MA.

Calaprice, A. (Ed.), 2011. The Ultimate Quotable Einstein. Princeton University Press, Princeton, NJ.

Caldwell, J.C., 1976. Toward a restatement of demographic transition theory. Population and Development Review 2 (3/4), 321–366.

Caldwell, J.C., 1982. Theory of Fertility Decline. Academic Press, London, New York.

Cameron, R.E., 1989. A Concise Economic History of the World: From Paleolithic Times to the Present. Oxford University Press, Oxford.

Campbell, B.M.S., 2000. English Seigniorial Agriculture, 1250–1450. Cambridge University Press, Cambridge.

Campbell, B.M.S., 2005. The agrarian problem in the early fourteenth century. Past & Present 188, 3–70.

Campbell, B.M.S., 2009. Factor markets in England before the Black Death. Continuity and Change 24 (1), 79–106.

Campbell, C., Lee, J.Z., 2010. Demographic impacts of climatic fluctuations in northeast China, 1749–1909. In: Kurosu, S., Bengtsson, T., Campbell, C. (Eds.), Demographic Responses to Economic and Environmental Crisis. Reitaku University Press, Kashiwa, pp. 107–132.

Campbell, B.M.S., Overton, M., 1998. L'histoire agraire anglaise jusqu'en 1850: revue historiographique sur l'état actuel de la recherche'. Histoire et Sociétés rurales 9 (1), 77–105.

Carrigan, W.D., 2004. The Making of a Lynching Culture: Violence and Vigilantism in Central Texas, 1836–1916. University of Illinois Press, Urbana/Chicago, IL.

Carsten, F.L., 1950. The Great Elector and the foundation of the Hohenzollern despotism. English Historical Review 65 (255), 175–202.

Carsten, F.L., 1959. Princes and Parliaments in Germany. Clarendon, Oxford.

Caunce, S., 1997. Farm servants and the development of capitalism in English agriculture. Agricultural History Review 45 (1), 49–60.

Cerman, M., 1996. Proto-industrialisierung und Grundherrschaft. Ländliche Sozialstruktur, Feudalismus und Proto-industrielles Heimgewerbe in Nordböhmen vom 14. bis zum 18. Jahrhundert (1381–1790). Ph.D. Dissertation, Vienna.

Cerman, M., 2008. Social structure and land markets in late medieval central and east-central Europe. Continuity and Change 23 (1), 55–100.

Cerman, M., 2012. Villagers and Lords in Eastern Europe, 1300–1800. Palgrave Macmillan, Houndmills/New York.

Cerman, M., 2013. Seigniorial systems in east-central and eastern Europe, 1300–1800: regional realities. In: Cavaciocchi, S. (Ed.), Schiavitu e servaggio nell'economia europea. Secc. XI-XVIII./Slavery and Serfdom in the European Economy from the 11th to the 18th Centuries. XLV settimana di studi della Fondazione istituto internazionale di storia economica F. Datini, Prato 14–18 April 2013. Firenze University Press, Florence.

Chambers, R., 1869. History of the Rebellion of 1745–6, W. & R. Chambers, London.

Chambers, J.D., 1953. Enclosure and labour supply in the Industrial Revolution. Economic History Review 5 (3), 319–343.

Chapin, E., 1937. Les villes de foires de Champagne des origines au début du XIVe siècle. Champion, Paris.

Cheyette, F.L., 1970. The sovereign and the pirates, 1332. Speculum 45 (1), 40–68.

Chorley, G.P.H., 1981. The agricultural revolution in northern Europe, 1750–1880: nitrogen, legumes, and crop productivity. Economic History Review 34 (1), 71–93.

Clark, G., 1996. The political foundations of modern economic growth: England, 1540–1800. Journal of Interdisciplinary History 26 (4), 563–588.

Clark, C.M., 2006. Iron Kingdom: The Rise and Downfall of Prussia, 1600–1947. Allen Lane, London.

Clark, G., 2007. A Farewell to Alms: A Brief Economic History of the World. Princeton University Press, Princeton, NJ.

Clark, G., 2010. The macroeconomic aggregates for England, 1209–1869. Research in Economic History 27, 51–140.

Clay, K., 1997. Trade without law: private-order institutions in Mexican California. Journal of Law, Economics and Organization 13 (1), 202–231.

Cohen, M.R., 2013. A partnership gone bad: a letter and a power of attorney from the Cairo Geniza, 1085. In: Wasserstein, D., Ghanaim, M. (Eds.), The Sasson Somekh Festschrift [not yet titled], Tel Aviv.
Coleman, J.S., 1988. Social capital in the creation of human capital. American Journal of Sociology 94, S95–S120.
Court, R., 2004. "Januensis ergo mercator": trust and enforcement in the business correspondence of the Brignole family. Sixteenth Century Journal 35 (4), 987–1003.
Crafts, N., 1977. Industrial Revolution in Britain and France: some thoughts on the question, "Why was Britain first?" Economic History Review 2nd ser. 30, 429–441.
Crafts, N., 1985. British Economic Growth during the Industrial Revolution. Clarendon, Oxford.
Crafts, N.F.R., 1987. British economic growth, 1700–1850; some difficulties of interpretation. Explorations in Economic History 24 (3), 245–268.
Crafts, N., Mills, T.C., 2009. From Malthus to Solow: how did the Malthusian economy really evolve? Journal of Macroeconomics 31 (1), 68–93.
Crafts, N., Leybourne, S.J., Mills, T.C., 1989. Trends and cycles in British industrial production, 1700–1913. Journal of the Royal Statistical Society Series A (Statistics in Society) 152 (1), 43–60.
Croft, P., 1973. Introduction: the revival of the Company, 1604–6. In: Croft, P. (Ed.), The Spanish Company. London Record Society, London, pp. xxix-li.
Czaja, R., 2009. Die Entwicklung der ständischen Versammlungen in Livland, Preußen und Polen im Spätmittelalter. Zeitschrift für Ostmitteleuropa-Forschung 58 (3), 312–328.
Czapliński, W., 1985. The Polish Parliament at the summit of its development. Zakład Narodowy Imienia Ossolińskich, Wrocław.
Dahl, G., 1998. Trade, Trust and Networks: Commercial Culture in Late Medieval Italy. Nordic Academic Press, Lund.
Dasgupta, P., 1993. An Inquiry into Well-Being and Destitution. Clarendon Press, Oxford.
Dasgupta, P., 2000. Economic progress and the idea of social capital. In: Dasgupta, P., Serageldin, I. (Eds.), Social Capital: A Multifaceted Perspective. World Bank, Washington, pp. 325–424.
Davids, K., 2006. Monasteries, economies and states: the dissolution of monasteries in early modern Europe and T'ang China. Paper presented at the Global Economic History Network (GEHN) Conference 10, Washington, 8–10 September 2006.
Davidsohn, R., 1896–1901. Forschungen zur Geschichte von Florenz. E.S. Mittler und Sohn, Berlin.
Davidson, J., Weersink, A., 1998. What does it take for a market to function? Review of Agricultural Economics 20 (2), 558–572.
Defoe, D., 1727. The Complete English Tradesman. Charles Rivington, London.
Del Vecchio, A., Casanova, E., 1894. Le rappresaglie nei comuni medievali e specialmente in Firenze. C. e G. Zanichelli, Bologna.
De Moor, T., 2008. The silent revolution: a new perspective on the emergence of commons, guilds, and other forms of corporate collective action in western Europe. International Review of Social History 53, 179–212.
De Moor, T., Van Zanden, J.L., 2010. Girlpower: the European Marriage Pattern and labour markets in the North Sea region in the late medieval and early modern period. Economic History Review 63 (1), 1–33.
Dennison, T., 2011. The Institutional Framework of Russian Serfdom. Cambridge University Press, Cambridge.
Dennison, T., 2013. The institutional framework of serfdom in Russia: the view from 1861. In: Cavaciocchi, S. (Ed.), Schiavitu e servaggio nell'economia europea. Secc. XI-XVIII./Slavery and Serfdom in the European Economy from the 11th to the 18th Centuries. XLV settimana di studi della Fondazione istituto internazionale di storia economica F. Datini, Prato 14–18 April 2013. Firenze University Press, Florence.
Dennison, T., Ogilvie, S., 2007. Serfdom and social capital in Bohemia and Russia. Economic History Review 60 (3), 513–544.
Dennison, T., Ogilvie, S., 2013. Does the European Marriage Pattern Explain Economic Growth? CESifo Working Paper 4244.

De Roover, R., 1948. The Medici Bank: Its Organization, Management, Operations and Decline. New York University Press, New York.
De Roover, R., 1963. The Rise and Decline of the Medici Bank, 1397–1494. Harvard University Press, Cambridge, MA.
De Soto, H., 1989. The Other Path: The Invisible Revolution in the Third World. Harper & Row, New York.
De Soto, H., 2000. The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else. Basic Books, New York.
Dessí, R., Ogilvie, S., 2003. Social Capital and Collusion: The Case of Merchant Guilds. CESifo Working Papers 1037.
Dessí, R., Ogilvie, S., 2004. Social Capital and Collusion: The Case of Merchant Guilds (Long Version). Cambridge Working Papers in economics 0417.
De Vries, J., 1974. The Dutch Rural Economy in the Golden Age, 1500–1700. Yale University Press, New Haven, CT.
De Vries, J., 1976. The Economy of Europe in an Age of Crisis, 1600–1750. Cambridge University Press, Cambridge.
De Vries, J., Van der Woude, A., 1997. The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500–1815. Cambridge University Press, Cambridge.
Dewey, H.W., 1988. Russia's debt to the Mongols in suretyship and collective responsibility. Comparative Studies in Society and History 30 (2), 249–270.
Dewey, H.W., Kleimola, A.M., 1970. Suretyship and collective responsibility in pre-Petrine Russia. Jahrbücher für Geschichte Osteuropas 18, 337–354.
Dewey, H.W., Kleimola, A.M., 1984. Russian collective consciousness: the Kievan roots. Slavonic and East European Review 62 (2), 180–191.
Diamond, J., 1997. Guns, Germs and Steel. W.W. Norton, New York, NY.
Dijkman, J., 2007. Debt litigation in medieval Holland, c. 1200 – c. 1350. Paper presented at the GEHN conference, Utrecht, 20–22 September 2007.
Dixit, A.K., 2004. Lawlessness and Economics: Alternative Modes of Governance. Princeton University Press, Princeton, NJ.
Dixit, A.K., 2009. Governance institutions and economic activity. American Economic Review 99 (1), 5–24.
Doehaerd, R., 1941. Les relations commerciales entre Gênes, la Belgique, et l'Outremont d'après les archives notariales gênoises aux XIIIe et XIVe siècles. Palais des académies, Brussels.
Doepke, M., Tertilt, M., 2011. Does Female Empowerment Promote Economic Development? World Bank Policy Research Working Paper 5714.
Dollinger, P., 1970. The German Hansa. Macmillan, London.
Domar, E.D., 1970. The causes of slavery or serfdom: a hypothesis. Journal of Economic History 30 (1), 18–32.
Donahue, C., 1983. The canon law on the formation of marriage and social practice in the later Middle Ages. Journal of Family History 8 (2), 144–158.
Donahue, C., 2008. Law, Marriage, and Society in the Later Middle Ages: Arguments about Marriage in Five Courts. Cambridge University Press, Cambridge.
Dormois, J.-P., 1994. Entwicklungsmuster der Protoindustrialisierung im Mömpelgarder Lande während des 18. Jahrhunderts. Zeitschrift für Württembergische Landesgeschichte 53, 179–204.
Dotson, J.E., 1999. Fleet operations in the first Genoese-Venetian war, 1264–1266. Viator: Medieval and Renaissance Studies 30, 165–180.
Doumerc, B., 1987. Les Vénitiens à La Tana (Azov) au XVe siècle. Cahiers du monde russe et soviétique 28 (1), 5–19.
Edwards, J., Ogilvie, S., 2008. Contract Enforcement, Institutions and Social Capital: The Maghribi Traders Reappraised. CESifo Working Papers 2254.
Edwards, J., Ogilvie, S., 2012a. Contract enforcement, institutions, and social capital: the Maghribi traders reappraised. Economic History Review 65 (2), 421–444.

Edwards, J., Ogilvie, S., 2012b. What lessons for economic development can we draw from the Champagne fairs? Explorations in Economic History 49 (2), 131–148.

Edwards, J., Ogilvie, S., 2013. Economic growth in Prussia and Württemberg, c. 1750 - c. 1900. Unpublished paper, University of Cambridge, June 2013.

Ehmer, J., 1991. Heiratsverhalten, Sozialstruktur und ökonomischer Wandel. England und Mitteleuropa in der Formationsperiode des Kapitalismus. Vandenhoeck & Ruprecht, Göttingen.

Ekelund, R.B., Tollison, R.D., 1981. Mercantilism as a Rent-Seeking Society: Economic Regulation in Historical Perspective. Texas A&M University Press, College Station, TX.

Elton, G.R., 1975. Taxation for war and peace in early Tudor England. In: Winter, J.M. (Ed.), War and Economic Development: Essays in Memory of David Joslin. Cambridge University Press, Cambridge.

Epstein, S.A., 1996. Genoa and the Genoese, 958–1528. University of North Carolina Press, Chapel Hill, NC.

Epstein, S.R., 1998. Craft guilds, apprenticeship, and technological change in preindustrial Europe. Journal of Economic History 58, 684–713.

Ewert, U.-C., Selzer, S., 2009. Building bridges, closing gaps: the variable strategies of Hanseatic merchants in heterogeneous mercantile environments. In: Murray, J.M., Stabel, P. (Eds.), Bridging the Gap: Problems of Coordination and the Organization of International Commerce in Late Medieval European Cities. Brepols, Turnhout.

Ewert, U.-C., Selzer, S., 2010. Wirtschaftliche Stärke durch Vernetzung. Zu den Erfolgsfaktoren des hansischen Handels. In: Häberlein, M., Jeggle, C. (Eds.), Praktiken des Handels: Geschäfte und soziale Beziehungen europäischer Kaufleute in Mittelalter und früher Neuzeit. UvK Verlag, Konstanz, pp. 39–70.

Faille, C., 2007. Trading on reputation. Reason (January, 2007).

Fairlie, S., 1965. The nineteenth-century corn law reconsidered. Economic History Review 18 (3), 562–575.

Fairlie, S., 1969. The Corn Laws and British wheat production, 1829–76. Economic History Review 22 (1), 88–116.

Feller, L., 2004. Quelques problèmes liés à l'étude du marché de la terre durant le Moyen Âge. In: Cavaciocchi, S. (Ed.), Il mercato della terra: secc. XIII-XVIII: atti della trentacinquesima Settimana di studi, 5–9 maggio 2003, Le Monnier, Florence, pp. 21–47.

Fenoaltea, S., 1975a. Authority, efficiency, and agricultural organization in medieval England and beyond: a hypothesis. Journal of Economic History 35 (3), 693–718.

Fenoaltea, S., 1975b. The rise and fall of a theoretical model: the manorial system. Journal of Economic History 35 (2), 386–409.

Fenoaltea, S., 1984. Slavery and supervision in comparative perspective: a model. Journal of Economic History 44, 635–668.

Fertig, G., 2007. Äcker, Wirte, Gaben. Ländlicher Bodenmarkt und liberale Eigentumsordnung im Westfalen des 19. Jahrhunderts. Akademie Verlag, Berlin.

Feuchtwanger, E.J., 1970. Prussia: Myth and Reality. The Role of Prussia in German History. Wolff, London.

Fischel, W.A., 1995. Regulatory Takings: Law, Economics, and Politics. Harvard University Press, Cambridge, MA.

Fliegauf, U., 2007. Die Schwäbischen Hüttenwerke zwischen Staats- und Privatwirtschaft. Zur Geschichte der Eisenverarbeitung in Württemberg (1803–1945). Thorbecke, Ostfildern.

Flik, R., 1990. Die Textilindustrie in Calw und in Heidenheim 1705–1870. Eine regional vergleichende Untersuchung zur Geschichte der Frühindustrialisierung und Industriepolitik in Württemberg. Steiner, Stuttgart.

Foreman-Peck, J., 2011. The Western European marriage pattern and economic development. Explorations in Economic History 48 (2), 292–309.

Fortunati, M., 2005. The fairs between lex mercatoria and ius mercatorum. In: Piergiovanni, V. (Ed.), From Lex Mercatoria to Commercial Law. Duncker & Humblot, Berlin, pp. 143–164.

Friedman, M.A., 2006. Qusayr and Geniza documents on the Indian Ocean trade. Journal of the American Oriental Society 126 (3), 401–409.

Fritschy, W., 2003. A "financial revolution" reconsidered: public finance in Holland during the Dutch Revolt, 1568–1648. Economic History Review 56 (1), 57–89.

Frost, R.I., 2006. The nobility of Poland-Lithuania, 1569–1795. In: Scott, H.M. (Ed.), European Nobilities in the 17th and 18th Centuries: Northern, Central and Eastern Europe. Palgrave-Macmillan, New York, NY, pp. 266–310.
Galloway, P.R., 1988. Basic patterns in annual variations in fertility, nuptiality, mortality, and prices in pre-industrial Europe. Population Studies 42 (2), 275–303.
Galor, O., 2005a. The demographic transition and the emergence of sustained economic growth. Journal of the European Economic Association 3 (2/3), 494–504.
Galor, O., 2005b. From stagnation to growth: unified growth theory. In: Aghion, P., Durlauf, S.N. (Eds.), Handbook of Economic Growth, vol. 1, Part A. Elsevier, Amsterdam/London, pp. 171–293.
Galor, O., 2012. The demographic transition: causes and consequences. Cliometrica 6 (1), 1–28.
Gash, N., 1961. Mr Secretary Peel: The Life of Sir Robert Peel to 1830. Longman, London.
Gash, N., 1972. Sir Robert Peel : The life of Sir Robert Peel After 1830. Longman, Harlow.
Gelderblom, O., 2003. The governance of early modern trade: the case of Hans Thijs (1556–1611). Enterprise and Society 4 (4), 606–639.
Gelderblom, O. 2005a. The decline of fairs and merchant guilds in the Low Countries, 1250–1650. Economy and Society of the Low Countries Working Papers 2005–1.
Gelderblom, O. 2005b. The Resolution of Commercial Conflicts in Bruges, Antwerp, and Amsterdam, 1250–1650. Economy and Society of the Low Countries Working Papers 2005–2.
Gelderblom, O., 2013. Cities of Commerce: The Institutional Foundations of International Trade in the Low Countries, 1250–1650. Princeton University Press, Princeton, NJ.
Gelderblom, O., Grafe, R., 2004. The costs and benefits of merchant guilds, 1300–1800: position paper. Paper presented at the Fifth European Social Science History Conference, Berlin, 24–27 March 2004.
Gil, M., 2003. The Jewish merchants in the light of eleventh-century Geniza documents. Journal of the Economic and Social History of the Orient 46 (3), 273–319.
Gil, M., 2004a. Institutions and events of the eleventh century mirrored in Geniza letters (Part I). Bulletin of the School of Oriental and African Studies 67 (2), 151–167.
Gil, M., 2004b. Jews in Islamic Countries in the Middle Ages. Brill, Leiden.
Goitein, S.D., 1966. Studies in Islamic History and Institutions. Brill, Leiden.
Goitein, S.D., 1967/93. A Mediterranean Society: The Jewish Communities of the Arab World as Portrayed in the Documents of the Cairo Geniza. University of California Press, Berkeley/Los Angeles.
Goitein, S.D., Friedman, M.A., 2007. India Traders of the Middle Ages: Documents from the Cairo Geniza ("India Book"). Brill, Leiden/Boston.
Goldberg, J., 2005. Geographies of trade and traders in the eleventh-century Mediterranean: A study based on documents from the Cairo Geniza. Columbia University, Ph.D. Dissertation.
Goldberg, J., 2012a. Trade and Institutions in the Medieval Mediterranean: The Geniza Merchants and their Business World. Cambridge University Press, Cambridge.
Goldberg, J., 2012b. The use and abuse of commercial letters from the Cairo Geniza. Journal of Medieval History 38 (2), 127–154.
Goldberg, J.L., 2012c. Choosing and enforcing business relationships in the eleventh-century mediterranean: reassessing the "Maghribī traders". Past & Present 216 (1), 3–40.
Goldschmidt, L., 1891. Handbuch des Handelsrechts. Enke, Stuttgart.
Goldsworthy, J.D., 1999. The Sovereignty of Parliament: History and Philosophy. Clarendon Press, Oxford.
Goldthwaite, R.A., 1987. The Medici Bank and the world of Florentine capitalism. Past & Present 114, 3–31.
González de Lara, Y., 2005. The Secret of Venetian Success: The Role of the State in Financial Markets. Instituto Valenciano de Investigaciones Económicas (IVIE) Working Paper WP-AD 2005–28.
Grafe, R., Gelderblom, O., 2010. The rise and fall of the merchant guilds: re-thinking the comparative study of commercial institutions in pre-modern Europe. Journal of Interdisciplinary History 40 (4), 477–511.
Grantham, G.W., Sarget, M.-N., 1997. Espaces privilégiés: Productivité agraire et zones d'approvisionnement des villes dans l'Europe préindustrielle. Annales. Histoire, Sciences Sociales 52(3), 695–725.
Greif, A., 1989. Reputation and coalitions in medieval trade: evidence on the Maghribi traders. Journal of Economic History 49 (4), 857–882.

Greif, A., 1993. Contract enforceability and economic institutions in early trade: the Maghribi traders' coalition. American Economic Review 83 (3), 525–548.
Greif, A., 1994. Cultural beliefs and the organization of society: a historical and theoretical reflection on collectivist and individualist societies. Journal of Political Economy 102 (5), 912–950.
Greif, A., 1997. On the Social Foundations and Historical Development of Institutions that Facilitate Impersonal Exchange: From the Community Responsibility System to Individual Legal Responsibility in Pre-modern Europe. Stanford University Working Papers 97–016.
Greif, A., 2002. Institutions and impersonal exchange: from communal to individual responsibility. Journal of Institutional and Theoretical Economics 158 (1), 168–204.
Greif, A., 2004. Impersonal exchange without impartial law: the community responsibility system. Chicago Journal of International Law 5 (1), 109–138.
Greif, A., 2006a. Family structure, institutions, and growth: the origins and implications of western corporations. American Economic Review: Papers and Proceedings 96 (2), 308–312.
Greif, A., 2006b. History lessons. The birth of impersonal exchange: the community responsibility system and impartial justice. Journal of Economic Perspectives 20 (2), 221–236.
Greif, A., 2006c. Institutions and the Path to the Modern Economy: Lessons from Medieval Trade. Cambridge University Press, Cambridge.
Greif, A., 2012. The Maghribi traders: a reappraisal? Economic History Review 65 (2), 445–469.
Greif, A., Milgrom, P., Weingast, B., 1994. Coordination, commitment, and enforcement: the case of the merchant guild. Journal of Political Economy 102 (4), 912–950.
Greif, A., Tabellini, G., 2010. Cultural and institutional bifurcation: China and Europe compared. American Economic Review: Papers and Proceedings 100 (2), 135–140.
Greve, A., 2000. Brokerage and trade in medieval Bruges: regulation and reality. In: Stabel, P., Blondé, B., Greve, A. (Eds.), International Trade in the Low Countries 14th-16th Centuries. Garant, Leuven/Apeldoorn, pp. 37–44.
Greve, A., 2001. Die Bedeutung der Brügger Hosteliers für hansische Kaufleute im 14. und 15. Jahrhundert. Jaarboek voor middeleeuwse geschiedenis 4, 259–296.
Greve, A., 2007. Hansen, Hosteliers und Herbergen: Studien zum Aufenthalt hansischer Kaufleute in Brügge im 14. und 15. Jahrhundert. Brepols, Turnhout.
Grossman, G.M., Helpman, E., 1991. Innovation and Growth in the Global Economy. The MIT Press, Cambridge, MA.
Grotius, H., 1625. De jure belli ac pacis libri tres, in quibus jus naturae et gentium, item juris publici praecipua explicantur. Buon, Paris.
Grube, W., 1954. Dorfgemeinde und Amtsversammlung in Altwürttemberg. Zeitschrift für Württembergische Landesgeschichte 13, 194–219.
Grube, W., 1957. Der Stuttgarter Landtag, 1457–1957. Ernst Klett Verlag, Stuttgart.
Grube, W., 1974. Stadt und Amt in Altwürttemberg. In: Maschke, E., Sydow, J. (Eds.), Stadt und Umland: Protokoll der X. Arbeitstagung des Arbeitskrieses für südwestdeutsche Stadtgeschichtsforschung, Calw, 12.-14. November 1971, Kohlhammer, Stuttgart, pp. 20–28.
Guinnane, T.W., 2011. The historical fertility transition: A guide for economists. Journal of Economic Literature 49 (3), 589–561.
Guinnane, T.W., Ogilvie, S., 2008. Institutions and demographic responses to shocks: Württemberg, 1634–1870. Yale University Economic Growth Center Discussion Paper 962.
Guinnane, T.W., Ogilvie, S., 2013. A Two-Tiered Demographic System: "Insiders" and "Outsiders" in Three Swabian Communities, 1558–1914. Yale University Economic Growth Center Discussion Paper 1021.
Guzowski, P., 2013. The role of enforced labour in the economic development of church and royal estates in 15th and 16th-century Poland. In: Cavaciocchi, S. (Ed.), Schiavitu e servaggio nell'economia europea. Secc. XI-XVIII./Slavery and Serfdom in the European economy from the 11th to the 18th Centuries. XLV settimana di studi della Fondazione istituto internazionale di storia economica F. Datini, Prato 14–18 April 2013. Firenze University Press, Florence.
Gysin, J., 1989. "Fabriken und Manufakturen" in Württemberg während des ersten Drittels des 19. Jahrhunderts, Scripta Mercaturae Verlag, St. Katharinen.

Habakkuk, J., 1994. Marriage, Debt, and the Estates System: English Landownership 1650-1950. Clarendon, Oxford.
Hafter, D.M., 2007. Women at Work in Pre-industrial France. Penn State Press, University Park, PA.
Hagen, W.W., 1989. Seventeenth-century crisis in Brandenburg: the Thirty Years War, the destabilization of serfdom, and the rise of absolutism. American Historical Review 94 (2), 302–325.
Hagen, W.W., 2002. Ordinary Prussians. Brandenburg Junkers and Villagers 1500–1840. Cambridge University Press, Cambridge.
Harbord, D., 2006. Enforcing Cooperation among Medieval Merchants: the Maghribi Traders Revisited. Munich Personal Repec Archive Working Paper.
Hardin, G., 1968. The tragedy of the commons. Science 162 (3859), 1243–1248.
Harnisch, H., 1972. Zur Herausbildung und Funktionsweise von Gutswirtschaft und Gutsherrschaft. Eine Klageschrift der Bauern der Herrschaft Neugattersleben aus dem Jahre 1610. Jahrbuch für Regionalgeschichte 4, 179–199.
Harnisch, H., 1975. Klassenkämpfe der Bauern in der Mark Brandenburg zwischen frühbürgerlicher Revolution und Dreißigjährigem Krieg. Jahrbuch für Regionalgeschichte 5, 142–172.
Harnisch, H., 1986. Peasants and markets: the background to the agrarian reforms in feudal Prussia east of the Elbe, 1760–1807. In: Evans, R.J., Lee, W.R. (Eds.), The German Peasantry: Conflict and Community in Rural Society from the Eighteenth to the Twentieth Centuries. Croom Helm, London, pp. 37–70.
Harnisch, H., 1989a. Bäuerliche Ökonomie und Mentalität unter den Bedingungen der ostelbischen Gutsherrschaft in den letzten Jahrzehnten vor Beginn der Agrarreformen. Jahrbuch für Wirtschaftsgeschichte 1989 (3), 87–108.
Harnisch, H., 1989b. Die Landgemeinde in der Herrschaftsstruktur des feudalabsolutistischen Staates. Dargestellt am Beispiel von Brandenburg-Preussen. Jahrbuch für Geschichte des Feudalismus 13, 201–245.
Harnisch, H., 1994. Der preußische Absolutismus und die Bauern. Sozialkonservative Gesellschaftspolitik und Vorleistung zur Modernisierung. Jahrbuch für Wirtschaftsgeschichte 1994 (2), 11–32.
Harreld, D.J., 2004a. High Germans in the Low Countries: German Merchants and Commerce in Golden Age Antwerp. Brill, Leiden.
Harreld, D.J., 2004b. Merchant and guild: the shift from privileged group to individual entrepreneur in sixteenth-century Antwerp. Paper delivered at the Fifth European Social Science History Conference. Berlin, 24–27 March 2004.
Harris, R., 2004. Government and the economy, 1688–1850. In: Floud, R., Johnson, P. (Eds.), The Cambridge Economic History of Modern Britain, vol. 1: Industrialisation, 1700–1860. Cambridge University Press, Cambridge, pp. 204–237.
Harrison, G., 1990. Prerogative revolution and Glorious Revolution: political proscription and parliamentary undertaking, 1687–1688. Parliaments, Estates and Representation 10 (1), 29–43.
Harriss, G.L., 1975. King, Parliament, and Public Finance in Medieval England to 1369. Clarendon Press, Oxford.
Hartley, T.E., 1992. Elizabeth's Parliaments: Queen, Lords, and Commons, 1559–1601. Manchester University Press, Manchester.
Helpman, E., 2004. The Mystery of Economic Growth. Harvard University Press, Cambridge, MA.
Henderson, W.O., 1961a. Die Struktur der preußischen Wirtschaft um 1786. Zeitschrift für die Gesamte Staatswissenschaft 117, 292–319.
Henderson, W.O., 1961b. The Industrial Revolution on the Continent: Germany, France, Russia, 1800–1914. F. Cass, London.
Henderson, W.O., 1961c. The rise of the metal and armament industries in Berlin and Brandenburg, 1712–1795. Business History 3 (2), 63–74.
Henn, V., 1999. Der "dudesche kopman" zu Brügge und seine Beziehungen zu den "nationes" der übrigen Fremden im späten Mittelalter. In: Jörn, N., Kattinger, D., Wernicke, H. (Eds.), "Kopet uns werk by tyden": Beiträge zur hansischen und preussischen Geschichte. Walter Stark zum 75. Geburtstag. Thoms Helms Verlag, Schwerin, pp. 131–142.

Hickson, C.R., Thompson, E.A., 1991. A new theory of guilds and European economic development. Explorations in Economic History 28, 127–168.

Hillmann, H., 2013. Economic institutions and the state: insights from economic history. Annual Review of Sociology 39 (1), 215–273.

Hilton, B., 1977. Corn, Cash, Commerce: The Economic Policies of the Tory Governments, 1815–1830. Oxford University Press, Oxford.

Hilton, B., 2006. Mad, Bad, and Dangerous People? England, 1783–1846. Clarendon Press, Oxford.

Hine, K.D., 1998. Vigilantism revisited: an economic analysis of the law of extra-judicial self-help or why can't Dick shoot Henry for stealing Jane's truck. American University Law Review 47, 1221–1255.

Hippel, W. von, 1977. Die Bauernbefreiung im Königreich Württemberg. Harald Boldt, Boppard am Rhein.

Hippel, W. von, 1992. Wirtschafts- und Sozialgeschichte 1800 bis 1918. In: Schwarzmaier, H., Fenske, H., Kirchgässner, B., Sauer, P., Schaab, M. (Eds.), Handbuch der baden-württembergischen Geschichte: vol. 3: Vom Ende des Alten Reiches bis zum Ende der Monarchien. Klett-Cotta, Stuttgart, pp. 477–784.

Hodgskin, T., 1820. Travels in the North of Germany: Describing the Present State of the Social and Political Institutions, the Agriculture, Manufactures, Commerce, Education, Arts and Manners in that Country Particularly in the Kingdom of Hannover. A. Constable, Edinburgh.

Hohorst, G., 1977. Wirtschaftswachstum und Bevölkerungsentwicklung in Preußen 1816 bis 1914. Arno, New York.

Holderness, B.A., 1976. Credit in English rural society before the nineteenth century, with special reference to the period 1650–1720. Agricultural History Review 24, 97–109.

Hoppit, J., 1996. Patterns of parliamentary legislation, 1660–1800. The History Journal 39, 109–131.

Hoppit, J., 2011. Compulsion, compensation and property rights in Britain, 1688–1833. Past & Present 210, 93–128.

Hoyle, R.W., 1994. Parliament and taxation in sixteenth-century England. English Historical Review 109 (434), 1174–1196.

Israel, J., 1989. Dutch primacy in world trade, 1585–1740. Clarendon, Oxford.

Jacoby, D., 2003. Foreigners and the urban economy in Thessalonike, ca. 1150-ca. 1450. Dumbarton Oaks Papers 57, 85–132.

Johansson, E., 1977. The history of literacy in Sweden, in comparison with some other countries. Educational Reports, Umeå 12, 2–42.

Johansson, E., 2009. The history of literacy in Sweden, in comparison with some other countries. In: Graff, H.J., Mackinnon, A., Sandin, B., Winchester, I. (Eds.), Understanding Literacy in its Historical Contexts: Socio-cultural History and the Legacy of Egil Johansson. Nordic Academic Press, Lund, pp. 28–59.

Kaak, H., 1991. Die Gutsherrschaft: theoriegeschichtliche Untersuchungen zum Agrarwesen im ostelbischen Raum. Walter de Gruyter, Berlin/New York.

Kaal, H., Van Lottum, J., 2009. Immigrants in the Polder. Rural-rural long distance migration in north-western Europe: the case of Watergraafsmeer. Rural History 20, 99–117.

Kadens, E., 2012. The myth of the customary law merchant. Texas Law Review 90 (5), 1153–1206.

Kaminski, A., 1975. Neo-serfdom in Poland-Lithuania. Slavic Review 34 (2), 253–268.

Katele, I.B., 1986. Captains and corsairs: Venice and piracy, 1261–1381. University of Illinois at Urbana-Champaign, Ph.D. Dissertation.

Katz, A., 1996. Taking private ordering seriously. University of Pennsylvania Law Review 144 (5), 1745–1763.

Katz, E.D., 2000. Private order and public institutions: comments on McMillan and Woodruff's "Private order under dysfunctional public order". Michigan Law Review 98 (8), 2481–2493.

Klein, A., 2013. The institutions of the second serfdom and economic efficiency: review of the existing evidence for Bohemia. In: Cavaciocchi, S. (Ed.), Schiavitu e servaggio nell'economia europea. Secc. XI-XVIII./Slavery and Serfdom in the European Economy from the 11th to the 18th Centuries. XLV settimana di studi della Fondazione istituto internazionale di storia economica F. Datini, Prato 14–18 April 2013. Firenze University Press, Florence.

Klein, A., Ogilvie, S., 2013. Occupational Structure in the Czech Lands under the Second Serfdom. CESifo Working Papers.

Knapp, G.F., 1887. Die Bauernbefreiung und der Ursprung der Landarbeiter in den älteren Theilen Preußens. Duncker und Humblot, Leipzig.

Knight, J., 1995. Models, interpretations, and theories: constructing explanations of institutional emergence and change. In: Knight, J., Sened, I. (Eds.), Explaining Social Institutions. University of Michigan Press, Ann Arbor, MI, pp. 95–119.

Koch, H.W., 1990. Brandenburg-Prussia. In: Miller, J. (Ed.), Absolutism in Seventeenth-Century Europe. Macmillan, Basingstoke, pp. 123–155.

Koenigsberger, H.G., 2001. Monarchies, States Generals and Parliaments: The Netherlands in the Fifteenth and Sixteenth Centuries. Cambridge University Press, Cambridge.

Kollmer-von Oheimb-Loup, G., 2012. Die Entwicklung der Wirtschaftsstruktur am Mittleren Neckar 1800 bis 1950. Zeitschrift für Württembergische Landesgeschichte 71, 351–383.

Kopsidis, M., 2006. Agrarentwicklung: historische Agrarrevolutionen und Entwicklungsökonomie. Steiner, Stuttgart.

Kula, W., 1976. An Economic Theory of the Feudal System: Towards a Model of the Polish Economy. NLB, London.

Kussmaul, A., 1981. Servants in Husbandry in Early Modern England. Cambridge University Press, Cambridge.

Kussmaul, A., 1994. The pattern of work as the eighteenth century began. In: Floud, R., McCloskey, D.N. (Eds.), The Economic History of Britain Since 1700, vol. 1. Cambridge University Press, Cambridge, pp. 1–11.

Laiou, A.E., 2001. Byzantine trade with Christians and Muslims and the Crusades. In: Laiou, A.E., Mottahedeh, R.P. (Eds.), The Crusades from the Perspective of Byzantium and the Muslim World. Dumbarton Oaks Research Library and Collection, Washington, DC, pp. 157–196.

Lambert, S., 1990. Committees, religion, and parliamentary encroachment on royal authority in early Stuart England. English Historical Review 105 (414), 60–95.

Lambert, B., Stabel, P., 2005. Squaring the circle: merchant firms, merchant guilds, urban infrastructure and political authority in late medieval Bruges. Paper presented at the Workshop on Mercantile Organization in Pre-Industrial Europe. Antwerp, 18–19 November 2005.

Lambrecht, T., 2009. Rural credit and the market for annuities in eighteenth-century Flanders. In: Schofield, P.R., Lambrecht, T. (Eds.), Credit and the Rural Economy in North-Western Europe, c. 1200-c.1850. Brepols, Turnhout, pp. 75–98.

Lane, F.C., 1963. Venetian merchant galleys, 1300–1334: private and communal operation. Speculum 38, 179–205.

Laslett, P., 1988. The European family and early industrialization. In: Baechler, J., Hall, J.A., Mann, M. (Eds.), Europe and the Rise of Capitalism. Basil Blackwell, Oxford, pp. 234–242.

Laurent, H., 1935. Un grand commerce d'exportation au moyen âge: la draperie des Pays Bas en France et dans les pays mediterranéens, XIIe - XVe siècle. E. Droz, Paris.

Lewis, W.A., 1954. Economic development with unlimited supplies of labour. Manchester School of Economics and Social Studies 22, 139–191.

Lewis, W.A., 1958. Unlimited labour: further notes. Manchester School of Economics and Social Studies 26, 1–32.

Lindberg, E., 2008. The rise of Hamburg as a global marketplace in the seventeenth century: a comparative political economy perspective. Comparative Studies in Society and History 50 (3), 641–662.

Lindberg, E., 2009. Club goods and inefficient institutions: why Danzig and Lübeck failed in the early modern period. Economic History Review 62 (3), 604–628.

Lindberg, E., 2010. Merchant guilds in Hamburg and Königsberg: a comparative study of urban institutions and economic development in the early modern period. Journal of European Economic History 39 (1), 33–66.

Lindert, P.H., 2004. Growing Public: Social Spending and Economic Growth Since the Eighteenth Century. Cambridge University Press, Cambridge.

Lis, C., Soly, H., 1996. Ambachtsgilden in vergelijkend perspectief: de Noordelijke en de Zuidelijke Nederlanden, 15de–18de eeuw. In: Lis, C., Soly, H. (Eds.), Werelden van verschil: ambachtsgilden in de Lage Landen. Brussels, pp. 11–42.
Little, C.B., Sheffield, C.P., 1983. Frontiers and criminal justice: English private prosecution societies and American vigilantism in the eighteenth and nineteenth centuries. American Sociological Review 48 (6), 796–808.
Lloyd, T.H., 1977. The English Wool Trade in the Middle Ages. Cambridge University Press, Cambridge.
Lopez, R.S., 1987. The trade of medieval Europe: the south. In: Postan, M.M., Miller, E. (Eds.), The Cambridge Economic History of Europe, vol. 3: Economic Organization and Policies in the Middle Ages. Cambridge University Press, Cambridge, pp. 306–401.
Lopez, R.S., Raymond, I.W., 1955. Medieval Trade in the Mediterranean World. Columbia University Press, New York.
Macaulay, S., 1963. Non-contractual relations in business: a preliminary study. American Sociological Review 28 (1), 55–67.
Macfarlane, A., 1978. The Origins of English Individualism: the Family, Property and Social Transition. Blackwell, Oxford.
Mączak, A., 1997. Polen-Litauen als Paradoxon: Erwägungen über die Staatlichkeit des frühmodernen Polen. In: Lubinski, A., Rudert, T., Schattkowsky, M. (Eds.), Historie und Eigen-Sinn. Festschrift für Jan Peters zum 65. Geburtstag, Böhlau, Weimar, pp. 87–92.
Maggi, G., 1999. The role of multilateral institutions in international trade cooperation. American Economic Review 89 (1), 190–214.
Mammen, K., Paxson, C., 2000. Women's work and economic development. Journal of Economic Perspectives 14, 141–164.
Margariti, R.E., 2007. Aden and the Indian Ocean Trade: 150 Years in the Life of a Medieval Arabian Port. University of North Carolina Press, Chapel Hill, NC.
Mas-Latrie, R. de, 1866. Du droit de marque ou droit de représailles au Moyen Âge [premier article]. Bibliothèque de l'école des chartes 27, 529–577.
Mathias, P., O'Brien, P., 1976. Taxation in Britain and France, 1715–1810: a comparison of the social and economic incidence of taxes collected for central government. Journal of European Economic History 5, 601–650.
Mathias, P., O'Brien, P., 1978. The incidence of taxes and the burden of proof. Journal of European Economic History 7, 211–213.
McCloskey, D., 1976. English open fields as behavior towards risk. Research in Economic History 1, 124–170.
McCloskey, D., 1991. The prudent peasant: new findings on open fields. Journal of Economic History 51 (2), 343–355.
McCloskey, D., 2010. Bourgeois Dignity: Why Economics Can't Explain the Modern World. University of Chicago Press, Chicago.
McCord, N., 1958. The Anti-Corn Law League, 1838–1846. Allen & Unwin, London.
McLean, P.D., 2004. Widening access while tightening control: office-holding, marriages, and elite consolidation in early modern Poland. Theory and Society 33 (2), 167–212.
McLean, P., Padgett, J.F., 1997. Was Florence a perfectly competitive market? Transactional evidence from the Renaissance. Theory and Society 26 (2–3), 209–244.
McMillan, J., Woodruff, C., 2000. Private order under dysfunctional public order. Michigan Law Review 98 (8), 2421–2458.
Medick, H., 1996. Weben und Überleben in Laichingen 1650–1900. Untersuchungen zur Sozial-, Kultur- und Wirtschaftsgeschichte aus der Perspektive einer lokalen Gesellschaft im frühneuzeitlichen Württemberg. Vandenhoeck & Ruprecht, Göttingen.
Meiners, C., 1794. Bemerkungen auf einer Herbstreise nach Schwaben. Geschrieben im November 1793. In: Meiners (Ed.), Kleinere Länder- und Reisebeschreibungen, vol. 2, Spener, Berlin, pp. 235–380.
Melton, E., 1988. Gutsherrschaft in East Elbian Germany and Livonia, 1500–1800: a critique of the model. Central European History 21 (4), 315–349.

Melton, E., 1990. Enlightened seigniorialism and its dilemmas in serf Russia, 1750–1830. Journal of Modern History 62 (4), 675–708.
Micheletto, B.Z., 2011. Reconsidering the southern Europe model: dowry, women's work and marriage patterns in pre-industrial urban Italy (Turin, second half of the 18th century). The History of the Family 16 (4), 354–370.
Middleton, N., 2005. Early medieval port customs, tolls and controls on foreign trade. Early Medieval Europe 13 (4), 313–358.
Miguel, E., Gertler, P., Levine, D., 2005. Does social capital promote industrialization? Evidence from a rapid industrializer. Review of Economics and Statistics 87 (4), 754–762.
Milgrom, P.R., Roberts, J.F., 1992. Economics, Organization and Management. Prentice-Hall, Englewood Cliffs, NJ.
Milgrom, P.R., North, D.C., Weingast, B.R., 1990. The role of institutions in the revival of trade: the medieval law merchant, private judges and the Champagne fairs. Economics and Politics 2 (1), 1–23.
Mingay, G.E., 1963. The agricultural revolution in English history: a reconsideration. Agricultural History 37 (3), 123–133.
Mokyr, J., 1974. The Industrial Revolution in the Low Countries in the first half of the nineteenth century: a comparative case study. Journal of Economic History 34 (2), 365–391.
Mokyr, J., 1980. Industrialization and poverty in Ireland and the Netherlands. Journal of Interdisciplinary History 10 (3), 429–458.
Mokyr, J., 1987. Has the Industrial Revolution been crowded out? Some reflections on Crafts and Williamson. Explorations in Economic History 24 (3), 293–319.
Mokyr, J., 2009. The Enlightened Economy: An Economic History of Britain, 1700–1850. Princeton University Press, Princeton, NJ.
Muldrew, C., 1993. Credit and the courts: debt litigation in a seventeenth-century urban community. Economic History Review 46 (1), 23–38.
Muldrew, C., 1998. The Economy of Obligation: The Culture of Credit and Social Relations in Early Modern England. St. Martin's Press, New York/Basingstoke.
Muldrew, C., 2003. "A mutual assent of her mind"? Women, debt, litigation and contract in early modern England. History Workshop Journal 55 (1), 47–71.
Munro, J., 1999. The Low Countries' export trade in textiles with the Mediterranean Basin, 1200–1600: a cost-benefit analysis of comparative advantages in overland and maritime trade routes. International Journal of Maritime History 11 (2), 1–30.
Munro, J., 2001. The "new institutional economics" and the changing fortunes of fairs in medieval and early modern Europe: the textile trades, warfare, and transaction costs. Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte 88 (1), 1–47.
Munzinger, M.R., 2006. The profits of the Cross: merchant involvement in the Baltic Crusade (c. 1180–1230). Journal of Medieval History 32 (2), 163–185.
Murrell, P., 2009. Design and Evolution in Institutional Development: The Insignificance of the English Bill of Rights. University of Maryland Department of Economics Working Paper, 13 December 2009.
Nachbar, T.B., 2005. Monopoly, mercantilism, and the politics of regulation. Virginia Law Review 91 (6), 1313–1379.
Neeson, J.M., 1984. The opponents of enclosure in eighteenth-century Northamptonshire. Past & Present 105, 114–139.
Neeson, J.M., 1993. Commoners: Common Right, Enclosure and Social Change in England, 1700–1820. Cambridge University Press, Cambridge.
Neeson, J.M., 2000. English enclosures and British peasants: current debates about rural social structure in Britain c. 1750–1870. Jahrbuch für Wirtschaftsgeschichte 2000 (2), 17–32.
Nelson, L.H. (Ed.), 1996. Liber de restauratione Monasterii Sancti Martini Tornacensis: the restoration of the Monastery of Saint Martin of Tournai, by Herman of Tournai. Catholic University of America Press, Washington, DC.
Nicolini, E.A., 2007. Was Malthus right? A VAR analysis of economic and demographic interactions in pre-industrial England. European Review of Economic History 11 (1), 99–121.
North, D.C., 1981. Structure and Change in Economic History. Norton, New York/London.

North, D.C., 1989. Institutions and economic growth: an historical introduction. World Development 17 (9), 1319–1332.

North, D.C., 1991. Institutions, transaction costs, and the rise of merchant empires. In: Tracy, J.D. (Ed.), The Political Economy of Merchant Empires: State Power and World Trade, 1350–1750. Cambridge University Press, Cambridge, pp. 22–40.

North, M., 2013. Serfdom and corvée labour in the Baltic area 16th-18th centuries. In: Cavaciocchi, S. (Ed.), Schiavitu e servaggio nell'economia europea. Secc. XI-XVIII./Slavery and serfdom in the European economy from the 11th to the 18th centuries. XLV settimana di studi della Fondazione istituto internazionale di storia economica F. Datini, Prato 14–18 April 2013. Firenze University Press, Florence.

North, D.C., Thomas, R.P., 1970. An economic theory of the growth of the western world. Economic History Review 2nd Ser. 23, 1–18.

North, D.C., Thomas, R.P., 1971. The rise and fall of the manorial system: a theoretical model. Journal of Economic History 31 (4), 777–803.

North, D.C., Thomas, R.P., 1973. The Rise of the Western World. Cambridge University Press, Cambridge.

North, D.C., Weingast, B.R., 1989. Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England. Journal of Economic History 49 (4), 803–832.

North, D.C., Wallis, J.J., Weingast, B.R., 2006. A Conceptual Framework for Interpreting Recorded Human History. NBER Working Papers 12795.

North, D.C., Wallis, J.J., Weingast, B.R., 2009. Violence and Social Orders. A Conceptual Framework for Interpreting Recorded Human History. Cambridge University Press, Cambridge.

Nowak, J.E., Rotunda, R.D., 2004. Constitutional Law. Thomson/West, St. Paul, MI.

O'Brien, J.G., 2002. In defense of the mystical body: Giovanni da Legnano's theory of reprisals. Roman Legal Tradition 1, 25–55.

O'Brien, P.K., 1988. The political economy of British taxation, 1660–1815. Economic History Review 41 (1), 1–32.

O'Brien, P.K., 2001. Fiscal Exceptionalism: Great Britain and its European Rivals from Civil War to Triumph at Trafalgar and Waterloo. LSE Department of Economic History Working Paper 65/01.

O'Brien, P.K., Engerman, S.L., 1991. Exports and the growth of the British economy from the Glorious Revolution to the Peace of Amiens. In: Solow, B.L. (Ed.), Slavery and the Rise of the Atlantic Systems. Cambridge University Press, Cambridge, pp. 177–209.

O'Driscoll, G.P., Hoskins, L., 2006. The case for market-based regulation. Cato Journal 26, 469–487.

Ogilvie, S., 1986. Coming of age in a corporate society: capitalism, Pietism and family authority in rural Württemberg, 1590–1740. Continuity and Change 1 (3), 279–331.

Ogilvie, S., 1992. Germany and the seventeenth-century crisis. Historical Journal 35, 417–441.

Ogilvie, S., 1995. Population Growth and State Policy in Central Europe Before Industrialization. Centre for History and Economics Working Paper.

Ogilvie, S., 1997. State Corporatism and Proto-industry: The Württemberg Black Forest, 1580–1797. Cambridge University Press, Cambridge.

Ogilvie, S., 1999. The German state: a non-Prussian view. In: Hellmuth, E., Brewer, J. (Eds.), Rethinking Leviathan: The Eighteenth-Century State in Britain and Germany. Oxford University Press, Oxford, pp. 167–202.

Ogilvie, S., 2000. The European economy in the eighteenth century. In: Blanning, T.W.C. (Ed.), The Short Oxford History of Europe, vol. XII: The Eighteenth Century: Europe 1688–1815. Oxford University Press, Oxford, pp. 91–130.

Ogilvie, S., 2001. The economic world of the Bohemian serf: economic concepts, preferences and constraints on the estate of Friedland, 1583–1692. Economic History Review 54, 430–453.

Ogilvie, S., 2003. A Bitter Living: Women, Markets, and Social Capital in Early Modern Germany. Oxford University Press, Oxford.

Ogilvie, S., 2004a. Guilds, efficiency and social capital: evidence from German proto-industry. Economic History Review 57 (2), 286–333.

Ogilvie, S., 2004b. How does social capital affect women? Guilds and communities in early modern Germany. American Historical Review 109 (2), 325–359.

Ogilvie, S., 2004c. Women and labour markets in early modern Germany. Jahrbuch für Wirtschaftsgeschichte 2004 (2), 25–60.
Ogilvie, S., 2005a. Communities and the second serfdom in early modern Bohemia. Past & Present 187, 69–119.
Ogilvie, S., 2005b. Staat und Untertanen in der lokalen Gesellschaft am Beispiel der Herrschaft Frýdlant (Böhmen). In: Cerman, M., Luft, R. (Eds.), Untertanen, Herrschaft und Staat in Böhmen und im "Alten Reich". Sozialgeschichtliche Studien zur Frühen Neuzeit. Oldenbourg, Munich, pp. 51–86.
Ogilvie, S., 2005c. The use and abuse of trust: the deployment of social capital by early modern guilds. Jahrbuch für Wirtschaftsgeschichte 2005 (1), 15–52.
Ogilvie, S., 2005d. Village community and village headman in early modern Bohemia. Bohemia 46 (2), 402–451.
Ogilvie, S., 2006. "So that every subject knows how to behave": social disciplining in early modern Bohemia. Comparative Studies in Society and History 48 (1), 38–78.
Ogilvie, S., 2007a. Can We Rehabilitate the Guilds? A Sceptical Re-appraisal. Cambridge Working Papers in Economics 0745.
Ogilvie, S., 2007b. "Whatever is, is right"? Economic institutions in pre-industrial Europe. Economic History Review 60 (4), 649–684.
Ogilvie, S., 2008. Rehabilitating the guilds: a reply. Economic History Review 61 (1), 175–182.
Ogilvie, S., 2010. Consumption, social capital, and the "industrious revolution" in early modern Germany. Journal of Economic History 70 (2), 287–325.
Ogilvie, S., 2011. Institutions and European Trade: Merchant Guilds, 1000–1800. Cambridge University Press, Cambridge.
Ogilvie, S., 2012. Choices and Constraints in the Pre-industrial Countryside. Cambridge Working Papers in Economic and Social History (CWPESH) 0001.
Ogilvie, S., 2013a. Married women, work and the law: evidence from early modern Germany. In: Beattie, C., Stevens, M. (Eds.), Married Women and the Law in Northern Europe c.1200-1800. Boydell and Brewer, Woodbridge, pp. 213–239.
Ogilvie, S., 2013b. Serfdom and the institutional system in early modern Germany. In: Cavaciocchi, S. (Ed.), Schiavitu e servaggio nell'economia europea. Secc. XI-XVIII./Slavery and Serfdom in the European Economy from the 11th to the 18th Centuries. XLV settimana di studi della Fondazione istituto internazionale di storia economica F. Datini, Prato 14–18 April 2013. Firenze University Press, Florence.
Ogilvie, S., Edwards, J.S.S., 2000. Women and the "second serfdom": evidence from early modern Bohemia. Journal of Economic History 60 (4), 961–994.
Ogilvie, S., Küpker, M., Maegraith, J., 2011. Krämer und ihre Waren im ländlichen Württemberg zwischen 1600 und 1740. Zeitschrift für Agrargeschichte und Agrarsoziologie 59 (2), 54–75.
Ogilvie, S., Küpker, M., Maegraith, J., 2012. Household debt in early modern Germany: evidence from personal inventories. Journal of Economic History 72 (1), 134–167.
Ó Gráda, C., Chevet, J.M., 2002. Famine and market in *ancien régime* France. Journal of Economic History 62 (3), 706–733.
Olson, M., 1993. Dictatorship, democracy, and development. American Political Science Review 87 (3), 567–576.
Olsson, M., Svensson, P., 2009. Peasant economy - markets and agricultural production in southern Sweden 1711–1860. In: Pinilla Navarro, V. (Ed.), Markets and Agricultural Change in Europe from the 13th to the 20th Century. Brepols, Turnhout, pp. 75–106.
Olsson, M., Svensson, P., 2010. Agricultural growth and institutions: Sweden, 1700–1860. European Review of Economic History 14 (2), 275–304.
O'Rourke, K.H., Prados de la Escosura, L., Daudin, G., 2010. Trade and empire. In: Broadberry, S., O'Rourke, K.H. (Eds.), The Cambridge Economic History of Modern Europe, vol. 1: 1700–1870. Cambridge University Press, Cambridge, pp. 96–121.
Ostrom, E., 1998. A behavioral approach to the rational choice theory of collective action: presidential address, American Political Science Association, 1997. American Political Science Review 92 (1), 1–22.

Overton, M., 1996a. Agricultural Revolution in England: The Transformation of the Agrarian Economy 1500–1850. Cambridge University Press, Cambridge.

Overton, M., 1996b. Re-establishing the English agricultural revolution. Agricultural History Review 43 (1), 1–20.

Paravicini, W., 1992. Bruges and Germany. In: Vermeersch, V. (Ed.), Bruges and Europe. Mercatorfonds, Antwerp, pp. 99–128.

Parente, S.L., Prescott, E.C., 2000. Barriers to Riches. MIT Press, Cambridge, MA.

Parente, S.L., Prescott, E.C., 2005. A unified theory of the evolution of international income levels. In: Aghion, P., Durlauf, S.N. (Eds.), Handbook of Economic Growth, vol. 1, Part B. Elsevier, Amsterdam/London, pp. 1371–1416.

Peet, R., 1972. Influences of the British market on agriculture and related economic development in Europe before 1860. Transactions of the Institute of British Geographers 56, 1–20.

Pérez Moreda, V., 1997. La péninsule Ibérique: I. La population espagnole à l'époque moderne (XVIe-XVIIIe siècle). In: Bardet, J.-P., Dupâquier, J. (Eds.), Histoire des populations de l'Europe, vol. 1. Fayard, Paris, pp. 463–479.

Pérotin-Dumon, A., 1991. The pirate and the emperor: power and the law on the seas. In: Tracy, J.D. (Ed.), The Political Economy of Merchant Empires: State Power and World Trade, 1350–1750. Cambridge University Press, Cambridge, pp. 196–227.

Peters, J., 1995a. Inszenierung von Gutsherrschaft im 16. Jahrhundert: Matthias v. Saldern auf Plattenburg-Wilsnack (Prignitz). In: Peters, J. (Ed.), Konflikt und Kontrolle in Gutsherrschaftsgesellschaften: über Resistenz- und Herrschaftsverhalten in ländlichen Sozialgebilden der frühen Neuzeit. Vandenhoeck & Ruprecht, Göttingen, pp. 248–286.

Peters, J. (Ed.), 1995b. Konflikt und Kontrolle in Gutsherrschaftsgesellschaften: über Resistenz- und Herrschaftsverhalten in ländlichen Sozialgebilden der frühen Neuzeit. Vandenhoeck & Ruprecht, Göttingen.

Peters, J., 1997. Die Herrschaft Plattenburg-Wilsnack im Dreißigjährigen Krieg – eine märkische Gemeinschaft des Durchkomments. In: Beck, F., Neitmann, K. (Eds.), Brandenburgische Landesgeschichte und Archivwissenschaft: Festschrift für Lieselott Enders zum 70. Geburtstag. Verlag Hermann Böhlaus Nachfolger, Weimar, pp. 157–170.

Planitz, H., 1919. Studien zur Geschichte des deutschen Arrestprozesses, II. Kapital: Der Fremdenarrest. Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, Germanistische Abteilung 40, 87–198.

Pocock, J.G.A., 2010. The Atlantic republican tradition: the republic of the seven provinces. Republics of Letters: A Journal for the Study of Knowledge, Politics, and the Arts 2 (1), 1–10.

Pollock, F., Maitland, F.W., 1895. The History of English Law Before the Time of Edward I. Cambridge University Press, Cambridge.

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

Postan, M.M., 1966. Medieval agrarian society in its prime: England. In: Postan, M.M. (Ed.), The Cambridge Economic History of Europe, vol. 1: The Agrarian Life of the Middle Ages. Cambride University Press, Cambridge, pp. 548–632.

Prest, J., 1977. Politics in the Age of Cobden. Macmillan, London.

Price, J.M., 1991. Transaction costs: a note on merchant credit and the organization of private trade. In: Tracy, J.D. (Ed.), The Political Economy of Merchant Empires: State Power and World Trade, 1350–1750. Cambridge University Press, Cambridge, pp. 276–297.

Price, W.H., 2006. The English Patents of Monopoly. Harvard University Press, Cambridge, MA.

Puttevils, J., 2009. Relational and institutional trust in the international trade of the Low Countries, 15th – 16th centuries. Paper presented at the N.W. Posthumus Institute work in progress seminar. Amsterdam, 16–17 April 2009.

Rabb, T.K., 1964. Sir Edwyn Sandys and the parliament of 1604. American Historical Review 69 (3), 646–670.

Ranis, G., Fei, J.C.H., 1961. A theory of economic development. American Economic Review 51 (4), 533–565.

Rasmussen, C.P., 2013. Forms of serfdom and bondage in the Danish monarchy. In: Cavaciocchi, S. (Ed.), Schiavitu e servaggio nell'economia europea. Secc. XI-XVIII./Slavery and Serfdom in the European Economy from the 11th to the 18th Centuries. XLV settimana di studi della Fondazione istituto internazionale di storia economica F. Datini, Prato 14–18 April 2013. Firenze University Press, Florence.

Ray, D., 1998. Development Economics. Princeton University Press, Princeton, NJ.

Reher, D.S., 1998a. Family ties in Western Europe: persistent contrasts. Population and Development Review 24 (2), 203–234.

Reher, D.S., 1998b. Le Monde ibérique: I. L'Espagne. In: Bardet, J.-P., Dupâquier, J. (Eds.), Histoire des populations de l'Europe, vol. 2. Fayard, Paris, pp. 533–553.

Reis, J., 2005. Economic growth, human capital formation and consumption in western Europe before 1800. In: Allen, R.C., Bengtsson, T., Dribe, M. (Eds.), Living Standards in the Past: New Perspectives on Well-being in Asia and Europe. Oxford University Press, Oxford, pp. 195–225.

Reyerson, K.L., 1985. Business, Banking and Finance in Medieval Montpellier. Pontifical Institute of Mediaeval Studies, Toronto.

Reyerson, K.L., 2003. Commercial law and merchant disputes: Jacques Coeur and the law of marque. Medieval Encounters 9 (2–3), 244–255.

Richardson, G., 2005. The prudent village: risk pooling institutions in medieval English agriculture. Journal of Economic History 65 (2), 386–413.

Richman, B.D., 2004. Firms, courts, and reputation mechanisms: towards a positive theory of private ordering. Columbia Law Review 104 (8), 2328–2368.

Röhm, H., 1957. Die Vererbung des landwirtschaftlichen Grundeigentums in Baden-Württemberg. Bundesanstalt für Landeskunde, Remagen am Rhein.

Romer, P.M., 1987. Growth based on increasing returns due to specialization. American Economic Review 77 (2), 56–62.

Romer, P.M., 1990. Endogenous technological change. Journal of Political Economy 98 (5), S71–S102.

Rosenberg, H., 1958. Bureaucracy, Aristocracy and Autocracy: The Prussian Experience, 1600–1815. Harvard University Press, Cambridge, MA.

Rudert, T., 1995a. Gutsherrschaft und Agrarstruktur: der ländliche Bereich Mecklenburgs am Beginn des 18. Jahrhunderts. P. Lang, Frankfurt am Main/New York.

Rudert, T., 1995b. Gutsherrschaft und ländliche Gemeinde. Beobachtungen zum Zusammenhang von gemeindlicher Autonomie und Agrarverfassung in der Oberlausitz im 18. Jahrhundert. In: Peters, J. (Ed.), Gutsherrschaft als soziales Modell. Vergleichende Betrachtungen zur Funktionsweise frühneuzeitlicher Agrargesellschaften. Oldenbourg, Munich, pp. 197–218.

Sabean, D.W., 1990. Property, Production and Family in Neckarhausen, 1700–1870. Cambridge University Press, Cambridge.

Sachs, J.D., 2001. Tropical Underdevelopment. NBER Working Paper 8119.

Sachs, J.D., 2003. Institutions Don't Rule: Direct Effects of Geography on Per Capita Income. NBER Working Paper 9490.

Sachs, S.E., 2006. From St. Ives to cyberspace: the modern distortion of the medieval "Law Merchant". American University International Law Review 21 (5), 685–812.

Sanderson, E.C., 1996. Women and Work in Eighteenth-Century Edinburgh. Macmillan, Basingstoke.

Say, J.B., 1817. Traité d'économie politique, ou, Simple exposition de la manière dont se forment, se distribuent et se consomment les richesses. Déterville, Paris.

Schmoller, G. von, 1888. Die Einführung der französischen Regie durch Friedrich den Großen 1766. Sitzungsberichte der preußischen Akademie der Wissenschaften 1, 63–79.

Schofield, P.R., Lambrecht, T., 2009. Introduction: credit and the rural economy in north-western Europe, c. 1200-c. 1800. In: Schofield, P.R., Lambrecht, T. (Eds.), Credit and the Rural Economy in North-Western Europe, c. 1200-c.1850. Brepols, Turnhout, pp. 1–18.

Schofield, R.S., 1963. Parliamentary Lay Taxation, 1485–1547. University of Cambridge, Ph.D. Dissertation.

Schofield, R.S., 2004. Taxation under the Early Tudors: 1485–1547. Blackwell, Oxford.

Schomerus, H., 1977. Die Arbeiter der Maschinenfabrik Esslingen. Forschungen zur Lage der Arbeiterschaft im 19. Jahrhundert. Ernst Klett Verlag, Stuttgart.

Schönfelder, A., 1988. Handelsmessen und Kreditwirtschaft im Hochmittelalter. Die Champagnemessen. Verlag Rita Dadder, Saarbrücken-Scheidt.
Schonhardt-Bailey, C., 2006. From the Corn Laws to Free Trade: Interests, Ideas, and Institutions in Historical Perspective. MIT Press, Cambridge, MA.
Schulte, A., 1900. Geschichte des mittelalterlichen Handels zwischen Westdeutschland und Italien mit Ausschluss von Venedig. Duncker und Humblot, Leipzig.
Selzer, S., Ewert, U.-C., 2005. Die neue Institutionenökonomik als Herausforderung an die Hanseforschung. Hansische Geschichtsblätter 123, 7–29.
Selzer, S., Ewert, U.C., 2010. Netzwerke im europäischen Handel des Mittelalters. Konzepte - Anwendungen - Fragestellungen. In: Fouquet, G., Gilomen, H.-J. (Eds.), Netzwerke im europäischen Handel des Mittelalters. Thorbecke, Ostfildern, pp. 21–48.
Semmel, B., 1970. The Rise of Free Trade Imperialism: Classical Political economy, the Empire of Free Trade and Imperialism, 1750–1850. Cambridge University Press, Cambridge.
Seppel, M., 2013. The growth of the state and its consequences on the structure of serfdom in the Baltic provinces, 1550–1750. In: Cavaciocchi, S. (Ed.), Schiavitu e servaggio nell'economia europea. Secc. XI-XVIII./Slavery and Serfdom in the European Economy from the 11th to the 18th Centuries. XLV settimana di studi della Fondazione istituto internazionale di storia economica F. Datini, Prato 14–18 April 2013. Firenze University Press, Florence.
Serrão, J.V., 2009. Land management responses to market changes. Portugal, seventeenth-nineteenth centuries. In: Pinilla Navarro, V. (Ed.), Markets and Agricultural Change in Europe from the 13th to the 20th Century. Brepols, Turnhout, pp. 47–74.
Sharp, P., Weisdorf, J., 2013. Globalization revisited: Market integration and the wheat trade between North America and Britain from the eighteenth century. Explorations in Economic History 50 (1), 88–98.
Sharpe, P., 1999. The female labour market in English agriculture during the Industrial Revolution: expansion or contraction? Agricultural History Review 47 (2), 161–181.
Shaw-Taylor, L., 2001a. Labourers, cows, common rights and parliamentary enclosure: the evidence of contemporary comment c. 1760–1810. Past & Present 171, 95–126.
Shaw-Taylor, L., 2001b. Parliamentary enclosure and the emergence of an English agricultural proletariat. Journal of Economic History 61 (3), 640–662.
Slicher van Bath, B.H., 1963. The Agrarian History of Western Europe, A.D. 500–1850. E. Arnold, London.
Slicher van Bath, B.H., 1977. Agriculture in the vital revolution. In: Rich, E.E., Wilson, C.H. (Eds.), The Cambridge Economic History of Europe: vol. 5: The Economic Organization of Early Modern Europe. Cambridge University Press, Cambridge, pp. 42–132.
Smith, A., 1776. An Inquiry into the Nature and Causes of the Wealth of Nations. W. Strahan and T. Cadell, London.
Smith, R.M., 1974. English peasant life-cycles and socio-economic networks: a quantitative geographical case study. University of Cambridge, Ph.D. Dissertation.
Smith, R.M., 1981a. Fertility, economy and household formation in England over three centuries. Population and Development Review 7 (4), 595–622.
Smith, R.M., 1981b. The people of Tuscany and their families in the fifteenth century: medieval or Mediterranean? Journal of Family History 6, 107–128.
Smith, R.M., 1996. A periodic market and its impact upon a manorial community: Botesdale, Suffolk, and the manor of Redgrave, 1280–1300. In: Smith, R.M. (Ed.), Razi, Z. Medieval Society and the Manor Court. Clarendon Press, Oxford, pp. 450–481.
Sobel, J., 2002. Can we trust social capital? Journal of Economic Literature 40 (1), 139–154.
Solar, P.M., 1995. Poor relief and English economic development before the Industrial Revolution. Economic History Review NS 48 (1), 1–22.
Sonnino, E., 1997. L'Italie: II. Le tournant du XVIIe siècle. In: Bardet, J.-P., Dupâquier, J. (Eds.), Histoire des populations de l'Europe, vol. 1. Fayard, Paris, pp. 496–508.
Sperber, J., 1985. State and civil society in Prussia: thoughts on a new edition of Reinhart Koselleck's "Preussen zwischen Reform und Revolution". Journal of Modern History 57 (2), 278–296.

Spufford, P., 2000. Long-term rural credit in sixteenth- and seventeenth-century England: the evidence of probate accounts. In: Arkell, T., Evans, N., Goose, N. (Eds.), When Death Do Us Part: Understanding and Interpreting the Probate Records of Early Modern England. Oxford University Press, Oxford, pp. 213–228.

Stabel, P., 1999. Venice and the Low Countries: commercial contacts and intellectual inspirations. In: Aikema, B., Brown, B.L. (Eds.), Renaissance Venice and the North: Crosscurrents in the Time of Bellini, Dürer and Titian, London, pp. 31–43.

Stasavage, D., 2002. Credible commitment in early modern Europe: North and Weingast revisited. Journal of Law, Economics and Organization 18 (1), 155–186.

Stillman, N.A., 1970. East-West relations in the Islamic Mediterranean in the early eleventh century: a study in the Geniza correspondence of the house of Ibn 'Awkal. University of Pennsylvania, Ph.D. Dissertation.

Stillman, N.A., 1973. The eleventh century merchant house of Ibn 'Awkal (a Geniza study). Journal of the Economic and Social History of the Orient 16 (1), 15–88.

Strayer, J.R., 1969. Italian bankers and Philip the Fair. In: Herlihy, D., Lopez, R.S., Slessarev, V. (Eds.), Economy, Society and Government in Medieval Italy: Essays in Memory of Robert L. Reynolds. Kent State University Press, Kent, OH, pp. 239–247.

Strayer, J.R., 1980. The Reign of Philip the Fair. Princeton University Press, Princeton.

Sussman, N., Yafeh, Y., 2006. Institutional reforms, financial development and sovereign debt: Britain 1690–1790. Journal of Economic History 66 (4), 906–935.

Swedberg, R., 2003. The case for an economic sociology of law. Theory and Society 32 (1), 1–37.

Szabó, T., 1983. Xenodochia, Hospitäler und Herbergen - kirchliche und kommerzielle Gastung im mittelalterlichen Italien (7. bis 14. Jahrhundert). In: Peyer, H.C., Müller-Luckner, E. (Eds.), Gastfreundschaft, Taverne und Gasthaus im Mittelalter. R. Oldenbourg, Munich/Vienna, pp. 61–92.

Tai, E.S., 1996. Honor among thieves: piracy, restitution, and reprisal in Genoa, Venice, and the Crown of Catalonia-Aragon, 1339–1417. Harvard University, Ph.D. Dissertation.

Tai, E.S., 2003a. Marking water: piracy and property in the pre-modern West. Paper presented at the conference on Seascapes, Littoral Cultures, and Trans-Oceanic Exchanges, Library of Congress, Washington DC, 12–15 February.

Tai, E.S., 2003b. Piracy and law in medieval Genoa: the *consilia* of Bartolomeo Bosco. Medieval Encounters 9 (2–3), 256–282.

Tardif, J., 1855. Charte française de 1230 conservée aux archives municipales de Troyes. Bibliothèque de l'école des chartes 16, 139–146.

Taylor, A.M., 2002. Globalization, Trade, and Development: Some Lessons from History. NBER Working Paper w9326.

Terrasse, V., 2005. Provins: une commune du comté de Champagne et de Brie (1152–1355). L'Harmattan, Paris.

'T Hart, M.C., 1989. Cities and statemaking in the Dutch republic, 1580–1680. Theory and Society 18 (5), 663–687.

'T Hart, M.C., 1993. The Making of a Bourgeois State: War, Politics and Finance during the Dutch Revolt. Manchester University Press, Manchester.

Theiller, I., 2009. Markets as agents of local, regional and interregional trade. Eastern Normandy at the end of the Middle Ages. In: Pinilla Navarro, V. (Ed.), Markets and Agricultural Change in Europe from the 13th to the 20th Century, Brepols, Turnhout, pp. 37–46.

Thoen, E., Soens, T., 2009. Credit in rural Flanders, c. 1250-c.1600: its variety and significance. In: Schofield, P.R., Lambrecht, T. (Eds.), Credit and the Rural Economy in North-Western Europe, c. 1200-c.1850. Brepols, Turnhout, pp. 19–38.

Thomas, R.P., McCloskey, D.N., 1981. Overseas trade and empire 1700–1860. In: Floud, R., McCloskey, D. (Eds.), The Economic History of Britain Since 1700, vol. 1. Cambridge University Press, Cambridge.

Tipton, F.B., 1976. Regional Variations in the Economic Development of Germany during the Nineteenth Century. Wesleyan University Press, Middletown, CT.

Toch, M., 2010. Netzwerke im jüdischen Handel des Früh- und Hochmittelalters?. In: Fouquet, G., Gilomen, H.-J. (Eds.), Netzwerke im europäischen Handel des Mittelalters. Thorbecke, Ostfildern, pp. 229–244.

Topolski, J., 1974. The manorial-serf economy in central and eastern Europe in the 16th and 17th centuries. Agricultural History 48 (3), 341–352.
Townsend, R.M., 1993. The Medieval Village Economy: A Study of the Pareto Mapping in General Equilibrium Models. Princeton University Press, Princeton, NJ.
Trivellato, F., 2009. The Familiarity of Strangers: The Sephardic Diaspora, Livorno, and Cross-cultural Trade in the Early Modern Period. Yale University Press, New Yaven, CT.
Troeltsch, W., 1897. Die Calwer Zeughandlungskompagnie und ihre Arbeiter. Studien zur Gewerbe- und Sozialgeschichte Altwürttembergs. Gustav Fischer, Jena.
Twarog, S., 1997. Heights and living standards in Germany, 1850–1939: the case of Württemberg. In: Steckel, R.H., Floud, R. (Eds.), Health and Welfare during Industrialization. University of Chicago Press, Chicago.
Udovitch, A.L., 1977a. Formalism and informalism in the social and economic institutions of the medieval Islamic world. In: Banani, A., Vryonis, S. (Eds.), Individualism and Conformity in Classical Islam. Undena Publications, Wiesbaden, pp. 61–81.
Udovitch, A.L., 1977b. A tale of two cities: commercial relations between Cairo and Alexandria during the second half of the eleventh century. In: Miskimin, H.A., Herlihy, D., Udovitch, A.L. (Eds.), The Medieval City. Yale University Press, New Haven, CT, pp. 143–162.
Ulbrich, C., 2004. Shulamit and Margarete: Power, Gender, and Religion in a Rural Society in Eighteenth-Century Europe. Brill Academic Publishers, Boston.
Vamplew, W., 1980. The protection of English cereal producers: the Corn Laws reassessed. Economic History Review 33 (3), 382–395.
Van Bavel, B.J.P., 2010. Manors and Markets: Economy and Society in the Low Countries, 500–1600. Oxford University Press, Oxford.
Van Bavel, B.J.P., 2011. Markets for land, labor, and capital in northern Italy and the Low Countries, twelfth to seventeenth centuries. Journal of Interdisciplinary History 41 (4), 503–531.
Van Bavel, B.J.P., Van Zanden, J.L., 2004. The jump-start of the Holland economy during the late-medieval crisis, c. 1350–c. 1500. Economic History Review 57, 503–532.
Van Cruyningen, P., 2009. Credit and agriculture in the Netherlands, eighteenth - nineteenth centuries. In: Schofield, P.R., Lambrecht, T. (Eds.), Credit and the Rural Economy in North-Western Europe, c. 1200-c. 1850. Brepols, Turnhout, pp. 99–108.
Van den Heuvel, D., 2007. Women and Entrepreneurship: Female Traders in the Northern Netherlands, c. 1580–1815. Aksant, Amsterdam.
Van den Heuvel, D., 2008. Partners in marriage and business? Guilds and the family economy in urban food markets in the Dutch Republic. Continuity and Change 23 (2), 217–236.
Van den Heuvel, D., Ogilvie, S., 2013. Retail development in the Consumer Revolution: The Netherlands, c. 1670–c. 1815. Explorations in Economic History 50 (1), 69–87.
Van der Heijden, M., Van Nederveen Meerkerk, E., Schmidt, A., 2011. Women's and children's work in an industrious society: The Netherlands, 17th-19th centuries. In: Ammannati, F. (Ed.), Religione e istituzioni religiose nell'economia Europea. 1000–1800/Religion and religious institutions in the European economy, 1000–1800. Atti della Quarantatreesima Settimana di Studi 8–12 maggio 2011. Firenze University Press, Florence, pp. 543–562.
Van Doosselaere, Q., 2009. Commercial Agreements and Social Dynamics in Medieval Genoa. Cambridge University Press, Cambridge.
Van Lottum, J., 2011a. Labour migration and economic performance: London and the Randstad, c. 1600–1800. Economic History Review 64 (2), 531–570.
Van Lottum, J., 2011b. Some considerations about the link between economic development and migration. Journal of Global History 6 (2), 339–344.
Vann, J.A., 1984. The Making of a State: Württemberg, 1593–1793. Cornell University Press, Ithaca, NY.
Van Nederveen Meerkerk, E., 2006a. De draad in eigen handen. Vrouwen in loonarbeid in de Nederlandse textielnijverheid, 1581–1810. Vrije Universiteit, Amsterdam.
Van Nederveen Meerkerk, E., 2006b. Segmentation in the pre-industrial labour market: women's work in the Dutch textile industry, 1581–1810. International Review of Social History 51, 189–216.

Van Nederveen Meerkerk, E., 2010. Market wage or discrimination? The remuneration of male and female wool spinners in the seventeenth-century Dutch Republic. Economic History Review 63 (1), 165–186.
Van Zanden, J.L., 2001. Early modern economic growth: a survey of the European economy, 1500–1800. In: Prak, M. (Ed.), Early Modern Capitalism: Economic and Social Change in Europe 1400–1800. Routledge, London, pp. 69–87.
Van Zanden, J.L., 2009. The Long Road to the Industrial Revolution: The European Economy in a Global Perspective, 1000–1800. Brill, Leiden.
Van Zanden, J.L., Prak, M., 2006. Towards an economic interpretation of citizenship: the Dutch Republic between medieval communes and modern nation-states. European Review of Economic History 10 (2), 11–147.
Van Zanden, J.L., Van Leeuwen, B., 2012. Persistent but not consistent: the growth of national income in Holland 1347–1807. Explorations in Economic History 49 (2), 119–130.
Van Zanden, J.L., Van Riel, A., 2004. The Strictures of Inheritance: The Dutch Economy in the Nineteenth Century. Princeton University Press, Princeton, NJ.
Velková, A., 2012. The role of the manor in property transfers of serf holdings in Bohemia in the period of the "second serfdom". Social History 37 (4), 501–521.
Verlinden, C., 1965. Markets and fairs. In: Postan, M.M., Rich, E.E., Miller, E. (Eds.), The Cambridge Economic History of Europe, vol. 3: Economic Organization and Policies in the Middle Ages. Cambridge University Press, Cambridge, pp. 119–153.
Voigtländer, N., Voth, H.-J., 2006. Why England? Demographic factors, structural change and physical capital accumulation during the Industrial Revolution. Journal of Economic Growth 11 (4), 319–361.
Voigtländer, N., Voth, H.-J., 2010. How the West "Invented" Fertility Restriction. NBER Working Paper 17314.
Volckart, O., 2004. The economics of feuding in late medieval Germany. Explorations in Economic History 41, 282–299.
Volckart, O., Mangels, A., 1999. Are the roots of the modern *lex mercatoria* really medieval? Southern Economic Journal 65 (3), 427–450.
Wach, A., 1868. Der Arrestprozess in seiner geschichtlichen Entwicklung. 1. Teil: der italienischen Arrestprozess. Hässel, Leipzig.
Wang, F., Campbell, C., Lee, J.Z., 2010. Agency, hierarchies, and reproduction in northeastern China, 1749–1840. In: Tsuya, N.O., Wang, F., Alter, G., Lee, J.Z. (Eds.), Prudence and Pressure: Reproduction and Human Agency in Europe and Asia, 1700–1900. MIT Press, Cambridge, MA, pp. 287–316.
Ward, T., 2004. The Corn Laws and English wheat prices, 1815–1846. Atlantic Economic Journal 32 (3), 245–255.
Weir, D.R., 1984. Life under pressure: France and England, 1670–1870. Journal of Economic History 44 (1), 27–47.
Wheeler, N.C., 2011. The noble enterprise of state building: reconsidering the rise and fall of the modern state in Prussia and Poland. Comparative Politics 44 (1), 21–38.
Whittle, J., 1998. Individualism and the family-land bond: a reassessment of land transfer patterns among the English peasantry. Past & Present 160, 25–63.
Whittle, J., 2000. The Development of Agrarian Capitalism: Land and Labour in Norfolk, 1440–1580. Clarendon, Oxford.
Wiesner, M.E., 1989. Guilds, male bonding and women's work in early modern Germany. Gender & History 1 (1), 125–137.
Wiesner, M.E., 2000. Women and Gender in Early Modern Europe. Cambridge University Press, Cambridge.
Wiesner-Hanks, M.E., 1996. Ausbildung in den Zünften. In: Kleinau, E., Opitz, C. (Eds.), Geschichte der Mädchen- und Frauenbildung, vol. I: Vom Mittelalter bis zur Aufklärung. Campus Verlag, Campus, Frankfurt/New York, pp. 91–102.
Williams, D.T., 1931. The maritime relations of Bordeaux and Southampton in the thirteenth century. Scottish Geographical Journal 47 (5), 270–275.
Williamson, J.G., 1984. Why was British growth so slow during the Industrial Revolution? Journal of Economic History 44, 687–712.

Williamson, J.G., 1987. Debating the British Industrial Revolution. Explorations in Economic History 24 (3), 269–292.

Williamson, J.G., 1990. The impact of the Corn Laws just prior to repeal. Explorations in Economic History 27 (2), 123–156.

Woodward, R.L., 2005. Merchant guilds. In: Northrup, C.C. (Ed.), Encyclopedia of World Trade from Ancient Times to the Present, vol. 3. M.E. Sharpe, New York, pp. 631–638.

Woodward, R.L., 2007. Merchant guilds (*Consulados de Comercio*) in the Spanish world. History Compass 5 (5), 1576–1584.

World Bank, 1982. World Development Report 1982: Agriculture and Economic Development. Oxford University Press, Oxford.

World Bank, 2002. World Development Report 2002: Building Institutions for Markets. Oxford University Press, Oxford.

Wrightson, K., 1982. English Society 1580–1680. Hutchinson, London.

Wrightson, K., Levine, D., 1995. Poverty and Piety in an English Village: Terling, 1525–1700. Clarendon, Oxford.

Wunder, H., 1978. Peasant organization and class conflict in east and west Germany. Past & Present (78), 47–55.

Wunder, H., 1995. Das Selbstverständliche denken. Ein Vorschlag zur vergleichenden Analyse ländlicher Gesellschaften in der Frühen Neuzeit, ausgehend vom "Modell ostelbische Gutsherrschaft". In: Peters, J. (Ed.), Gutsherrschaft als soziales Modell. Vergleichende Betrachtungen zur Funktionsweise frühneuzeitlicher Agrargesellschaften. Oldenbourg, Munich, pp. 23–49.

Wunder, H., 1996. Agriculture and agrarian society. In: Ogilvie, S. (Ed.), Germany: A New Social and Economic History, vol. II: 1630–1800. Edward Arnold, London, pp. 63–99.