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Institutions and Economic Growth in Historical Perspective: Part 2

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Institutions and Economic Growth in Historical Perspective: Part 2

Abstract

This is Part 2 of a two-part paper which surveys the historical evidence on the role of institutions in economic growth. The paper provides a critical scrutiny of 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 favourable for growth; and that the Glorious Revolution of 1688 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. Part 2 of the paper examines how institutions are situated in wider institutional systems, explores alternative approaches to explaining institutions, and applies the arguments established in earlier sections to the institution of serfdom. It concludes by drawing the implications of both parts of the paper for institutions and economic growth in historical perspective.

JEL-Code: N010, N300, N400, N500, N700, O170, P000.

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, European Marriage Pattern.

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TABLE OF CONTENTS

PART 1

Introduction

Lesson 1: Public-Order Institutions Are Necessary for Markets to Function

- 1.1. The Maghribi Traders
- 1.2. The Champagne Fairs

Lesson 2: Strong Parliaments Do Not Guarantee Economic Success

- 2.1. Did Strong Parliaments Always Create Good Institutions for Growth?
- 2.2. Was There a Discontinuity in Institutions and Growth in England after 1688?

Lesson 3: The Key Distinction Is Between Generalized and Particularized Institutions

Lesson 4: Property Rights Institutions and Contracting Institutions Both Matter, and Are Not Separable

Lesson 5: Property Rights Are More Likely to Be Beneficial for Growth if They Are Generalized Rather Than Particularized

Lesson 6: Security of Private Property Rights Is a Matter of Degree (and Needs Careful Analysis)

- 6.1. Secure Property Rights in Land
- 6.2. Secure Property Rights for State Creditors
- 6.3. Secure Property Rights for Taxpayers
- 6.4. Security of Property Rights: Analytical Challenges and Open Questions

PART 2

Lesson 7: Institutions Are Embedded in a Wider Institutional System

Lesson 8: Distributional Conflicts are Central

- 8.1. Resource Endowments, Serfdom and Growth
- 8.2. Efficiency, Serfdom and Growth
- 8.3. Distributional Conflicts, Serfdom and Growth
- 8.4. Serfdom and the Institutional System

9. Illustration of the Lessons: Serfdom and Growth

Conclusion

References

Institutions and Economic Growth
in Historical Perspective:
Part 2

This is Part 2 of a two-part paper. Part 1 can be found in Sheilagh Ogilvie & A. W. Carus, "Institutions and Economic Growth in Historical Perspective: Part 1", CESifo Working Paper No. 4861.

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 favoured by a specific family institution called the European Marriage Pattern (EMP), involving late 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, 2005b); 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, 2005b, 2012)]. The central role played by population in recent growth theory raises the question of the determinants of demographic behaviour 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 northwest 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 favoured 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, 2004c, 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, 2004c, 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, 1996, 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, 2005b); 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, 2004c, 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 relationships 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); Caldwell (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 labour 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, 2006b, 2010); Van den Heuvel (2007, 2008); Van der Heijden, Van Nederveen Meerkerk and Schmidt (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, 1996, 2000); Hafter (2007); Ogilvie (2003); Ogilvie, K pker and Maegraith (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 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 (1996, 2000); Sanderson (1996)].

Human capital indicators for European economies in the eighteenth and nineteenth centuries show that education levels varied hugely across societies with the EMP [Lindert (2004, pp. 91-2); A'Hearn, Baten and Crayen (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 (1996, 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); Johannsson (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, Baten and Crayen (2009)].

Historically, human capital investment shows no evidence of having positively affected economic growth in Europe before the late nineteenth century. England grew fast in the early modern period and industrialized before any other society, yet schooling and literacy stagnated there during the eighteenth century and were not high by European standards until well into the nineteenth. 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 nineteenth 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 nineteenth 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 behaviour, 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 behaviour” [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 eighteenth 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 eighteenth-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, Campbell and Lee (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 suggest 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, 2014)].

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 favourably 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 behaviour 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, 1981b); Pérez Moreda (1997); Reher (1998a, 1998b); Sonnino (1997); Michelotto (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 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 labour 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, 2014)]. 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 labour, 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 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, 2014); Dennison and Ogilvie (2013)]. Future research must place at the centre 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”.¹ 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 analysed as part of an entire institutional system.

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 favourable 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, Leybourne and Mills (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

¹ 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.”

western Europe from the medieval period to the nineteenth century, and serfdom as the central institutional manifestation of that divergence, in terms of the supply of land relative to the supply of labour, which was in turn determined by exogenously occurring population growth and land conquests.

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, Milgrom and Weingast (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, 1975b)], 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, Johnson and Robinson (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, Robinson and Johnson (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, Milgrom, and Weingast (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 twelfth to – in some societies – the nineteenth 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. 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, 2004b, 2004c, 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, 2005b, 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 was 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, labour, 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 nineteenth 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 (2014); Ogilvie (2014)]. 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, labour 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, 1975b)], and distributional conflicts [e.g. Brenner (1976); Acemoglu and Wolitzsky (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, Cantoni, Johnson and Robinson (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.

8.1. Resource Endowments, Serfdom and Growth

Serfdom was an institutional system which obliged a peasant to provide forced labour 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, practising 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 sixteenth and seventeenth 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 labour. This idea is based on a paper by Domar (1970) arguing that serfdom can be explained as a response to a high land-labour ratio. Labour scarcity created severe competition among employers (landlords) for labourers (peasants) to work their land. Moreover, the abundance of land meant that peasants had attractive options setting up as independent farmers and withdrawing their labour 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 labour on the landlord's farm (the demesne). Domar argued that this explains

the rise of serfdom in seventeenth-century Russia: the land-labour ratio rose because of the Muscovite colonial conquests and landlords devised serfdom as a way of protecting their supply of scarce peasant labour.

However, there are many examples of economies in which the land-labour ratio was high, but there was neither serfdom nor slavery. The most striking counter-example to Domar's model of serfdom is Europe after the Black Death. This virulent pandemic greatly increased the land-labour ratio in most parts of Europe by killing off 30-60 per cent 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-labour 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-labour 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-labour ratio only provided the *incentive* for landlords to organize institutions to prevent themselves from losing labourers. 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.

8.2. Efficiency, Serfdom and Growth

Despite the near unanimity among economists and economic historians that serfdom was harmful for growth,² 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 labour 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,

² Revisionist views claiming that serfdom did not harm the economy have been proposed [most recently in Cerman (2012, 2014)], but do not hold up well to empirical scrutiny [see Briggs (2014); Dennison (2011, 2014); Guzowski (2014); Klein (2014); North (2014); Ogilvie (2014); Rasmussen (2014); Seppel (2014)].

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 labour 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, 1975b, 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 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 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.³ Moreover, North and Thomas are wrong in claiming that peasants had to pay in the form of labour 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.

³ 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.

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, Johnson and Robinson (2005); Ogilvie (2007b)].

8.3. 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 labour scarcity (e.g. in Europe after the Black Death) caused serfdom either to strengthen or to break down. Plague-induced labour scarcity changed the incentives of both serfs and landlords. Certainly, as North and Thomas had argued, labour 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 labourers (the Domar argument). In actual practice, the change in relative supplies of land and labour 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 towards 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 labour 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 labour coercion which sought to combine resource endowments and power. It placed the relative scarcity of labour and land at centre stage, but formalized Brenner's point that labour scarcity can have two countervailing effects on serfdom, one intensifying it and one breaking it down. Their model suggests that labour 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 labour 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 (2011) argue that what decided whether labour 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 labour 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 towards 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 labour, 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.

8.4. 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 analyse 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 labour [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, labourers, 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 labour, to employ the labour of others, and to buy and sell land [Topolski (1974); Dennison (2011); Klein (2014); Ogilvie (2001, 2005c, 2012, 2014)], although landlords used their powers under serfdom to intervene in both labour 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, 2014); Klein (2014)]. 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, 2005b); 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, 1995b, 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, 2005b, 2012, 2014)]. 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, 1995b)]. 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, 1995b); Hagen (2002); Ogilvie (2005a, 2005b, 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 labourers, men over women, established householders over unmarried youths, insiders over migrants [Ogilvie (2005a, 2005b, 2012, 2014); 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, 1989b); Dennison and Ogilvie (2007); Ogilvie (2012, 2014)]. Landlords devolved to communal officers the organization of labour services and the collection of manorial dues [Peters (1995a, 1995b)]. 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 labour services or vacated his farm, 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 labour 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, 2005b, 2012, 2014)]. The most powerful stratum of serfs, who typically controlled the serf commune, was typically given very strong incentives to collaborate with landlord and state [Melton (1988); Blaschke (1991); Rudert (1995a, 1995b); Hagen (2002); Ogilvie (2005a, 2005b, 2005c); 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, 2005b, 2012, 2014); 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, 1989b); Seppel (2014); Ogilvie (2014)]. 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 labour [Hagen (1989); Cerman (2012)]. In a number of early modern central and eastern European serf societies, when lords demanded more forced labour, 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, 2014); Cerman (2008, 2012)].

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, neighbourly 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 (2014)]. Landlords typically secured this jurisdictional control from princes in return for fiscal and political favours, although to varying degrees in different serf societies [Kaak (1991); Ogilvie (2014)]. 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, 1989b); 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, 1989b); Cerman (2012); Ogilvie (2014)]. 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 (2014)]. Under serfdom, landlords responded to labour 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 (2014)]. 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 eighteenth and nineteenth 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, Robinson and Johnson (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 labour services, but was also legally obliged to compensate his landlord for the loss of this land and labour 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.

9. 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 nineteenth 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 nineteenth century [Ogilvie (2014)]. 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. 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, 1975b)]. 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 sixteenth 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, labour, 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 labourer. 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-favourable

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 labour 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.

10. Conclusion

This paper 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 paper 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 paper has suggested the direction in which they must be revised. Still others are probably right, and this paper 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 focussing 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 thirteenth-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 paper, 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 paper 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 paper 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 paper 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 paper 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 eighteenth-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 paper 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 respectable economists and historians to property regimes as disparate as ninth-century Italy, thirteenth-century England, seventeenth-century Germany, and rich western economies at the beginning of the twenty-first 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, analyse 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 paper 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 analysing 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 paper 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 paper 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.

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