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INSTITUTIONS AND ECONOMIC DEVELOPMENT IN EARLY MODERN CENTRAL EUROPE

By Sheilagh C. Ogilvie

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I. Introduction

Institutions and economies underwent profound changes between 1500 and 1800 in most parts of Europe.¹ Differences among societies decreased in some ways, but markedly increased in others. Do these changes and these variations tell us anything about the relationship between social organisation and economic well-being? This is a very wide question, and even the qualified 'yes' with which I will answer it, though based on the detailed empirical research of some hundreds of local studies undertaken in the past few decades, is far from definitive. Many of these studies were inspired by an influential set of hypotheses, known as the 'theory of proto-industrialisation'. While this theory has been enormously fruitful, its conclusions about European economic and social development are no longer tenable. This paper offers an alternative interpretation of the evidence now available about proto-industrialisation in different European societies, and explores its implications by investigating one region of Central Europe between 1580 and about 1800.

'Proto-industrialisation' is the term used to describe the rise and growth of export-oriented domestic industries, which took place all over Europe during the early modern period. Long before the first factories, Europe had ceased to be a homogeneous 'less developed economy', producing largely for subsistence and trading only in luxuries. Instead, it had become a differentiated patchwork of interdependent regions, specialising in a wide array of agricultural and industrial activities, and trading in mass commodities through a network of towns and cities. This is something of which specialists have long been aware.² But in

¹I should like to thank Jeremy Edwards, Emma Rothschild, Paul Seabright, Keith Wrightson and Tony Wrigley, who were so kind as to read and comment upon the manuscript of this paper; and André Carus, who read several drafts and made a large number of very stimulating suggestions.

²J. de Vries, *The economy of Europe in an age of crisis, 1600-1750* (Cambridge, 1976) [hereafter de Vries, *Economy*], esp. 32-47. The growth of cottage industries in the early modern period had received special attention from the German Historical School of Political Economy in the late nineteenth and early twentieth centuries, e.g. in W. Stieda, *Litteratur, heutige Zustände und Entstehung der deutschen Hausindustrie* (Leipzig, 1889).

the 1970s a series of publications appeared which focussed on the *industrial* aspect of regional specialisation, christened it 'proto-industrialisation', and claimed that this was the cause of industrialisation. Proto-industries, it was argued, caused population growth, commercialisation of agriculture, capital accumulation, labour surplus, proletarianisation, and the replacement of traditional social institutions by markets—all the prerequisites, in short, for capitalism and industrialisation.³

The ensuing explosion of case studies on early modern export industries showed wide acceptance of these views, but also gradually generated important criticisms.⁴ Local and regional studies have revealed that proto-industrialisation was neither necessary nor sufficient for demographic change: in some proto-industrial regions marriage- and birth-rates increased, in others they decreased, and the same was true of agrarian regions.⁵ The link with agriculture also varied hugely:

³The first published use of the term was in C. Tilly and R. Tilly, 'Agenda for European economic history in the 1970s', *Journal of economic history* 31 (1971), 184–98, citing the doctoral thesis of F. F. Mendels, 'Industrialization and population pressure in eighteenth century Flanders' (Ph.D. dissertation, University of Wisconsin, 1970), subsequently published as F. F. Mendels, *Industrialization and population pressure in eighteenth-century Flanders* (New York, 1981) [hereafter Mendels, *Industrialization*]. The concept was first extensively discussed in a now-classic article, F. F. Mendels, 'Proto-industrialization: the first phase of the industrialization process', *Journal of economic history* 32 (1972), 241–61 [hereafter Mendels, 'Proto-industrialization']. Over the ensuing five years the concept was extended in different directions by J. Mokyr, 'Growing-up and the industrial revolution in Europe', *Explorations in economic history*, 31 (1976), 371–96 [hereafter Mokyr, 'Growing-up'], who was sceptical about capital accumulation, but agreed that proto-industry led to population growth and labour surplus; P. Kriedte, H. Medick and J. Schlumbohm, *Industrialisierung vor der Industrialisierung. Gewerbliche Warenproduktion auf dem Land in der Formationsperiode des Kapitalismus* (Göttingen, 1977), English translation P. Kriedte, H. Medick and J. Schlumbohm, *Industrialization before industrialization: Rural industry in the genesis of capitalism* (Cambridge, 1981) [hereafter Kriedte, Medick and Schlumbohm, *Industrialization*]; and D. Levine, *Family formation in an age of nascent capitalism* (London, 1977) [hereafter Levine, *Family formation*].

⁴Thus the tenets of the theory were accepted by the vast majority of the 46 case-studies prepared for the Eighth International Economic History Congress in Budapest in 1982, collected in *VIII Congrès Internationale d'Histoire Economique, Budapest 16–22 août 1982, Section A2: La protoindustrialisation: Théorie et réalité, Rapports* 2 vols. eds. P. Deyon and F. Mendels (ms., Université des Arts, Lettres et Sciences Humaines, Lille, 1982) [hereafter *VIII Congrès*, eds. Deyon & Mendels]. However, important criticisms were already emerging: in particular, D. C. Coleman, 'Proto-industrialization: A concept too many?', *Economic history review*, (2nd series) 36 (1983) 435–48 [hereafter Coleman, 'Proto-industrialization']; and R. A. Houston and K. D. M. Snell, 'Proto-industrialization? Cottage industry, social change, and industrial revolution', *Historical journal* 1984, 473–92 [hereafter Houston and Snell, 'Proto-industrialization?'].

⁵This is pointed out by Houston and Snell, 'Proto-industrialization?', 480–8. P. Kriedte, H. Medick and J. Schlumbohm, 'Proto-industrialization revisited: Demography, social structure, and modern domestic industry', *Continuity and change* 8 (1993), 182–217, recently acknowledged that 'In sum, the empirical studies show that it is impossible

proto-industries were associated not just with commercial farming, but also with peasant smallholdings, cottager systems, subsistence cultivation, and even feudal domains worked with serf labour.⁶ Furthermore, proto-industries were neither the exclusive nor even the chief sources of capital, entrepreneurship, or labour for later factory industries.⁷ Nor did proto-industry always lead to falling living standards, growing landlessness, or proletarianisation, while these could often be found in purely agrarian regions.⁸ Finally, proto-industrialisation was neither necessary nor sufficient for factory industrialisation: some proto-industrial regions developed factories, others remained proto-industrial, and still others returned to agriculture, while factory industries arose in many regions which never had any proto-industries.⁹

Important differences have thus emerged among proto-industries in different parts of Europe. While not encouraging for the original theories of proto-industrialisation, these findings do open new perspectives on what may be a more promising approach to explaining European economic development. This is to ask what might have caused such enormous economic variation across societies in the same continent. While not altogether new, such variation became much more pronounced in the early modern period, and its legacy—particularly the gap between eastern and western Europe—is evident to this day. Perhaps the greatest service performed by the concept of proto-industrialisation is to have generated so many studies of the same economic sector in such a wide variety of contexts, enabling more fruitful comparisons across societies. On the basis of such comparisons,

to establish a single behaviour pattern for all proto-industrial populations, and that we must take into account a whole array of differentiating factors' (225).

⁶Houston and Snell, 'Proto-industrialization?' 477–8; further shortcomings of theories about proto-industrialization as they relate to agriculture are discussed in G. L. Gullickson, 'Agriculture and cottage industry: Redefining the causes of proto-industrialization', *Journal of economic history*, 43 (1983), 832–50.

⁷As pointed out in Mokyr, 'Growing-up', 377–9; Houston and Snell, 'Proto-industrialization?', 488–92; and P. Hudson, 'Proto-industrialisation', *ReFresh* 10 (1990), 1–4 [hereafter Hudson, 'Proto-industrialisation'].

⁸Houston and Snell, 'Proto-industrialization?' 478–9; Hudson, 'Proto-industrialisation', 3. Recent surveys confirm this for particular countries: P. Deyon, 'Proto-industrialization in France', in *Proto-industrialization in Europe: An introductory handbook*, eds. S. C. Ogilvie and M. Cerman (Cambridge, 1995) [hereafter *Proto-industrialization in Europe*, eds. Ogilvie and M. Cerman], 38–48, concludes that 'the impoverishment of households has not been proved for all the very diverse models and all the successive phases of proto-industrialization'; the same conclusion emerges from U. Pfister, 'Proto-industrialization in Switzerland', in *ibid.*, 137–154 [hereafter Pfister, 'Proto-industrialization in Switzerland']; and C. Vandenbroecke, 'Proto-industry in Flanders: A critical review', in *ibid.*, 102–117.

⁹Coleman, 'Proto-industrialization', 442–3; Houston and Snell, 'Proto-industrialization?', 490–2; Hudson, 'Proto-industrialisation', 3. De-industrialisation was already recognised as a possible outcome of proto-industrialisation in Mendels, 'Proto-industrialization'; and in Kriedte, Medick and Schlumbohm, *Industrialization*, 145–54.

I will suggest that a major cause of the variation among economies in early modern Europe was the—widening—variation in their *social institutions*.¹⁰

A very clear story about social institutions is told by the original theorists. Before proto-industrialisation, they argue, Europe was a 'peasant' society in the sense used by Alexander Chayanov. Production, consumption and reproduction were strictly controlled by the strong peasant family. Families in turn were rooted in self-subsistent and highly-regulated communities. Taxation and regulation by landlords and princes were the only outside contacts. Markets were largely irrelevant. In towns, life was strictly regulated by strong patriarchal craft and merchant families. Urban privileges, craft guilds and merchant companies controlled every aspect of industry and commerce. Both the peasant economy and the guild economy were governed by non-market mentalities.¹¹

Proto-industries, they say, changed all this. Family controls broke down: men lost control over women and parents over children. Village communities ceased to regulate settlement, marriage, inheritance, work, credit, and land. Landlords, too, lost their powers, as proto-industrialisation helped to break down feudalism. Urban domination over the countryside, and guild control over industry and commerce, broke down under cheap rural competition. The early modern state was largely irrelevant. It simply guaranteed market transactions, and occasionally helped merchants coerce proto-industrial producers. Soon production, consumption, and reproduction 'came to be entirely determined by the market'.¹² In short, wherever and whenever proto-

¹⁰ The economic divergence among European regions during the early modern period is explored by J. Topolski, *Narodziny kapitalizmu w Europie XIV–XVII wieku* (Warsaw, 1965); the economic and institutional divergence is discussed in de Vries, *Economy*, 47–83, and in S. C. Ogilvie, 'Germany and the seventeenth-century crisis', *Historical journal* 35 (1992), 417–441, here esp. 420, 432–4.

¹¹ These views are summarized in F. Mendels, 'Proto-industrialization: Theory and reality. General report', in *Eighth International Economic History Congress, Budapest 1982*, 'A' Themes (Budapest, 1982), 69–107 [hereafter Mendels, 'General report'], here esp. 80; Mendels, *Industrialization*, here esp. 16, 22–3, 26, 47–8, 210, 239–43, 245–7, 270; Kriedte, Medick and Schlumbohm, *Industrialization*, here esp. 12–13, 22, 38–9, 40–1, 51–2; Mokyr, 'Growing-up', 374. For Chayanov's original model of peasant society, see A. Chayanov, *The theory of peasant economy*, ed. D. Thorner, B. Kerblay and R. E. F. Smith (Homewood (Illinois), 1966). The reliance of proto-industrialization theories on the theories of Chayanov is explicit: Mendels, *Industrialization*, 239–41; Kriedte, Medick, and Schlumbohm, *Industrialization*, 43–4.

¹² See Mendels, 'General report', 80 (on the breakdown of village and landlord controls); Mendels, *Industrialization*, 16, 26 (on the breakdown of urban privileges and guild controls); Kriedte, Medick and Schlumbohm, *Industrialization*, 38–73 (on the breakdown of traditional family controls); 8, 16–17, 40 (on the breakdown of village and landlord controls); 13, 22, 51–2, 128 (on the breakdown of urban privileges and guild controls); 128–9 (on the

industries arose, so too did markets, displacing and destroying older social institutions. Proto-industry diminished social variations, which therefore played little role in subsequent economic development.

This story sounds so plausible that it has entered the historian's working vocabulary; it has almost become part of common sense. The facts, however, tell a very different tale. Trying to make sense of this tale can help us to explain why different European proto-industries developed in such divergent ways.

II. The worsted industry of the Württemberg Black Forest

What first alerted me to shortcomings in the prevailing story about social institutions and proto-industry was a particular empirical example. Later I discovered many parallels elsewhere in Europe, but their significance can best be shown by beginning where I did, in one small region of southwest Germany.

In the 1560s, the inhabitants of the Swabian Black Forest, a hilly and wooded region of the Duchy of Württemberg, found a new way of making a living. They began to weave light worsted cloths, and sell them to markets throughout central and southern Europe.¹³ Swiftly this new industry became the most important single livelihood in many villages and small towns in the region, surpassing the older weaving of heavy woollens for local and regional consumption. For the next 240 years, the production of light, low-quality worsted cloths for export would remain one of the two most important industries in Württemberg, and the economic mainstay of a region of 1,000 square kilometres, one-ninth of the total land area of the duchy.¹⁴ The history of this industry is not an economic success-story. Although it endured for more than nine generations, it stagnated after the first remarkable expansion, and its workers' struggle for survival became very grim. Yet it was probably the most important German worsted industry until about 1700 and, despite the rise of competitors, retained a significant presence on south German, Swiss and Italian markets until the late 1790s.¹⁵

The Württemberg worsted industry was identified as a proto-industry by the original theorists.¹⁶ It produced mainly for export, selling tens

role of the state); 40 (on the market; quoted passage); and Mokyr, 'Growing-up', 374 (on the breakdown of urban privileges and guild controls).

¹³A distinguished early study of this industry, although based wholly on merchant and state documents, is W. Troeltsch, *Die Calver Zeughandlungskompagnie und ihre Arbeiter: Studien zur Gewerbe- und Sozialgeschichte Altwürttembergs* (Jena, 1897) [hereafter Troeltsch, *Zeughandlungskompagnie*]; for a different perspective, based on community and guild documentation as well, see S. C. Ogilvie, *State corporation and proto-industry: The Württemberg Black Forest, 1580-1797* (Cambridge, 1995) [hereafter Ogilvie, *Württemberg*].

¹⁴Troeltsch, *Zeughandlungskompagnie*, 81.

¹⁵Troeltsch, *Zeughandlungskompagnie*, esp. 172-3, 177, 181-2, 186, 194-9.

¹⁶Kriedte, Medick and Schlumbohm, *Industrialization*, 2, 5, 49, 50, 54.

of thousands of worsteds every year to markets in Italy, Poland, Silesia, Switzerland, Austria, Bavaria, and the southern Empire.¹⁷ It was dense, concentrated into six small administrative districts in the Black Forest, and employing up to half the families in some communities. It was rural, practised in villages and very small agrarian towns of 1,500–2,000 inhabitants.¹⁸ It was carried out alongside farming: in 1736, 80 per cent of village weavers in the most important industrial district still lived partly from their own land.¹⁹ It thus satisfies all the conditions for a classic proto-industry. But closer scrutiny reveals a number of features which throw doubt on basic assumptions about European proto-industrialisation.

III. Landholding institutions

One basic assumption is that proto-industry both resulted from and furthered a breakdown in the feudal powers of landlords.²⁰ But in Württemberg, the powers of landlords had all but disappeared long before proto-industries arose in the sixteenth century. Landlords began to abandon demesne cultivation and lease land out to peasants shortly after 1300. By 1450 at latest, most peasants enjoyed secure tenures and the right to sell, sub-divide and bequeath their holdings. Restrictions on settlement, marriage and mobility disappeared or were commuted to small cash payments. In 1519, the nobility of the region declared themselves to be Free Imperial Knights, leaving the prince, the state church, and various public foundations as the only remaining landlords in the Duchy of Württemberg. These collected a rent of about ten per cent of output, and some minor cash payments in lieu of other former feudal dues, but exercised almost no control over peasant decisions.²¹ The few vestigial powers of Württemberg landlords show no relationship

¹⁷ Troeltsch, *Zeughandlungskompagnie*, esp. 172–3, 177, 181–2, 186, 194–9.

¹⁸ For numbers of practising weavers and their distribution across communities, see Troeltsch, *Zeughandlungskompagnie*, 107 (table), 10, 17, 22, 40–1, 78, 103–5, 107–8, 176, 183, 209–10, 253–5, 282, 293–4, 298, 306, 310, 314, 334, 336–8, 383, 387, 392; and Ogilvie, *Württemberg*, chapter 7.

¹⁹ Württembergische Hauptstaatsarchiv Stuttgart [hereafter WHSA] A573 Bü 6967 Seelentabelle 1736 ('soul-table' of the ten communities of the district of Wildberg in 1736).

²⁰ Mendels, 'General report', 80; Kriedte, Medick and Schlumbohm, *Industrialization*, 8, 16–17, 40.

²¹ W. von Hippel, *Die Bauernbefreiung im Königreich Württemberg*, 2 vols. (Boppard am Rhein, 1977), vol. 1, 76ff, 94–105, 120–4; W. A. Boelcke, *Wirtschaftsgeschichte Baden-Württembergs von den Römern bis heute* (Stuttgart, 1987), 64–5, 113; D. W. Sabean, *Property, production and family in Neckarhausen, 1700–1870* (Cambridge, 1990), [hereafter Sabean, *Property*] 43–4; J. A. Vann, *The making of a state: Württemberg, 1593–1793* (Ithaca/London, 1984), [hereafter Vann, *Württemberg*, 41, 45–51; W. Grube, 'Württembergische Verfassungskämpfe im Zeitalter Herzog Ulrichs', in *Neue Beiträge zu südwestdeutschen Landesgeschichte* Festschrift M. Miller (Stuttgart, 1962), 144–60.

with either the timing or the location of proto-industry in the region.²²

But was Württemberg simply an exception? Not at all. In most areas of England, the Low Countries, and in parts of Switzerland and the Rhineland, the institutional powers of landlords had already disappeared long before proto-industries arose. The causes of this breakdown are a matter of debate, but proto-industrialisation cannot have been essential, since landlords had also lost their institutional powers in many agrarian regions.²³

²² Even the relationship between rural industry and partible inheritance (which in some European regions reflected weak landlord control, but also depended on an array of other factors including physical geography, local agrarian practice (e.g. viticulture), community institutions, legislation, and state policy) is still disputed. Thus H. Hoffmann, *Landwirtschaft und Industrie in Württemberg, insbesondere im Industriegebiet der Schwäbischen Alb* (Berlin, 1935), for instance, argues that rural industry was more successful in the Duchy of Württemberg than in neighbouring Free Imperial territories because its rulers permitted partible inheritance, see esp. 19–44. On the other hand, R. Flik, *Die Textilindustrie in Calw und in Heidenheim 1705–1870. Eine regional vergleichende Untersuchung zur Geschichte der Frühindustrialisierung und Industriepolitik in Württemberg* (Stuttgart, 1990), 55–61, contends that within Württemberg the Heidenheim linen proto-industry in eastern Württemberg was more successful than the Calw worsted proto-industry in the Black Forest region partly because of the unusual strength of local tenurial restrictions on land fragmentation in the district of Heidenheim. In turn, the empirical basis for Flik's argument is disputed in P. Kriedte, H. Medick & J. Schlumbohm, 'Sozialgeschichte in der Erweiterung—Proto-Industrialisierung in der Verengung? Demographie, Sozialstruktur, moderne Hausindustrie: eine Zwischenbilanz der Proto-Industrialisierungs-Forschung (Teil I u. II)', *Geschichte und Gesellschaft* 18 (1992), 70–87, 231–255, here footnote 12.

²³ On England, see K. Wrightson, *English society 1580–1680* (New York/London, 1982) [hereafter Wrightson, *English society*], 24–5, 47–9, 130–3; J. A. Sharpe, *Early modern England: A social history, 1550–1760* (London, 1987) [hereafter Sharpe, *Early modern England*], 127–36; de Vries, *Economy*, 75–82; Levine, *Family formation*, 4–6. On the Netherlands, see J. de Vries, *The Dutch rural economy in the golden age, 1500–1700* (Berkeley, 1974) [hereafter de Vries, *Dutch rural economy*], 25–8, 35–41; de Vries, *Economy*, 69–75. On the Rhineland, see H. Kisch, 'From monopoly to laissez-faire: The early growth of the Wupper Valley textile trades', *Journal of European economic history* 1:2 (1972) 298–407 [hereafter Kisch, 'Monopoly'], here 301, 303, 304; H. Kisch, 'Preußischer Merkantilismus und der Aufstieg des Krefelder Seidengewerbes: Variationen über ein Thema des 18. Jahrhunderts', in *Die Hausindustriellen Textilgewerbe am Niederrhein vor der Industriellen Revolution: Von der ursprünglichen zur kapitalistischen Akkumulation* ed. H. Kisch (Göttingen, 1981) [hereafter Kisch, 'Merkantilismus'], 94, 96; P. Kriedte, 'Proto-Industrialisierung und großes Kapital. Das Seidengewerbe in Krefeld und seinem Umland bis zum Ende des Ancien Regime', *Archiv für Sozialgeschichte* 23 (1983) [hereafter Kriedte, 'Großes Kapital'], 219–266, here 225. On Switzerland, see R. Braun, 'Early industrialization and demographic change in the Canton of Zürich', in *Historical studies of changing fertility* ed. C. Tilly (Princeton, 1978), 289–334 [hereafter Braun, 'Early industrialization'], here 299, 307; A. Tanner, *Spulen—Weben—Sticken: Die Industrialisierung in Appenzell Ausserrhoden* (Zürich, 1982), esp. 418–19; A. Tanner, 'Arbeit, Haushalt und Familie in Appenzell-Außerrhoden. Veränderungen in einem ländlichen Industriegebiet im 18. und 19. Jahrhundert', in *Familienstruktur und Arbeitsorganisation in ländlichen Gesellschaften* eds. J. Ehmer & M. Mitterauer (Vienna etc., 1986), 449–494 [hereafter Tanner, 'Arbeit'], here 451; A. Mirabdolbaghi, 'Population and landownership in the Baillage Commune of Grandson in the early eighteenth century' (Ph.D. dissertation, London School of Economics, 1994) [hereafter Mirabdolbaghi, 'Population'].

Moreover, there were many parts of central, eastern and southern Europe where landlords remained very strong despite widespread proto-industry. Originally, it was claimed that such 'feudal proto-industries' arose only in areas where feudalism had begun to weaken, and that they furthered this breakdown.²⁴ But Rudolph's research has shown that proto-industries arose throughout Russia in areas of classic feudal production on large estates, and neither caused nor required the abolition of labour services or their commutation to cash.²⁵ Similarly, proto-industries expanded rapidly in Bohemia, Moravia and Silesia after 1650, precisely when the 'second serfdom' began to strengthen landlords' powers. Landlords positively encouraged peasants to engage in proto-industry, for this increased their revenues from feudal dues on weavers and looms, concession fees for monopolies to yarn factors and merchants, and raw material sales from the demesne. Landlords forcibly reduced proto-industrial costs through 'forced wage labour', forced sales at fixed prices, restricting peasants' alternative options, and even sometimes using or selling peasants' labour services for proto-industrial tasks.²⁶ Strong feudal landlords also encouraged proto-industry by creating guild-free enclaves, a pattern also observed in parts of northern Italy.²⁷ Elsewhere, as in the Bulgarian province of Eastern Rumelia, landlords and graziers used their far-reaching institutional powers to restrict access to farmland, which pushed the population into proto-industry as the next-best option.²⁸ In eighteenth-century Lombardy, powerful sharecropping landlords used their institutional powers to benefit from the silk proto-industry, worsening the terms of lease contracts, restricting the options of the rural population, and themselves

²⁴ Kriedte, Medick and Schlumbohm, *Industrialization*, 18–19, 77, 98, 111.

²⁵ R. L. Rudolph, 'Agricultural structure and proto-industrialization in Russia: Economic development with unfree labour', *Journal of economic history* 45 (1985), 47–69, here 48, 54, 57–61, 63; R. L. Rudolph, 'Family structure and proto-industrialization in Russia', *Journal of economic history* 40 (1980), 111–118, here 111.

²⁶ A. Klíma, 'English merchant capital in Bohemia in the eighteenth century,' *Economic history review* 2nd ser., 12 (1959), 34–48 [hereafter Klíma, 'English merchant capital'], here 35, 38; A. Klíma, 'The role of rural domestic industry in Bohemia in the eighteenth century', *Economic history review* 2nd ser., 27 (1974), 48–56, here 51, 53; M. Myška, 'Pre-industrial iron-making in the Czech lands: The labour force and production relations circa 1350—circa 1840,' *Past and present* 82 (1979), 44–72, here 59–63; M. Myška, 'Proto-industrialization in Bohemia, Moravia and Silesia', in *Proto-industrialization in Europe* eds. Ogilvie & Cerman, 188–207 [hereafter Myška, 'Proto-industrialization'].

²⁷ Klíma, 'English merchant capital', 34–5; Myška, 'Proto-industrialization'; A. Klíma, 'The industrial development in Bohemia 1648–1781,' *Past and present* 11 (1957), here 89; C. M. Belfanti, 'Rural manufactures and rural proto-industries in the "Italy of the Cities" from the sixteenth through the eighteenth century', *Continuity and change* 8 (1993), 253–80 [hereafter Belfanti, 'Rural manufactures'], 259.

²⁸ M. R. Palairat, 'Woollen textile manufacturing in the Balkans 1850–1911: A study of protoindustrial failure', in *VIIIe Congrès* eds. Deyon & Mendels, contribution no. 34 [hereafter Palairat, 'Woollen textile manufacture'], here 1–3, 8–11.

operating proto-industrial enterprises.²⁹ In many European regions, therefore, powerful landlords not only survived but positively profited from proto-industry, which they therefore encouraged. There is no evidence that proto-industry broke down feudalism in eastern and southern Europe: this was ultimately accomplished, in agrarian and proto-industrial regions alike, only after centuries of bitter social and political struggle.

The relationship between proto-industry and the powers of landlords must therefore be different from that proposed by the original theory. What mattered for proto-industry was not the 'strength' or 'weakness' of landlords, but the precise effects of their institutional powers on industrial costs in the particular local context. Very *strong* landlords could encourage proto-industry, if their institutional powers enabled them to weaken guilds, prevent peasants from earning a living in agriculture, extort raw materials and labour inputs at low or zero cost, or dictate low output prices. This is what happened in proto-industries in Russia, Bohemia, Moravia, Silesia, Bulgaria, and parts of northern Italy. Very *weak* landlords could *also* encourage proto-industry, if they were so weak that they could not intervene in markets. This is what happened in England, the Low Countries, Switzerland, the Rhineland, and Württemberg. Low costs enabled a proto-industry to arise and endure, but the precise social institutions which created these low costs made an enormous difference to whether this proto-industry prospered, and what effect it had on people's well-being—as is shown by the divergent economic development of eastern and southern Europe, where low costs resulted from landlord strength, compared to western and northern Europe, where low costs resulted from landlord weakness. Institutional privileges for landlords were not incompatible with proto-industry (any more than with commercial agriculture); but they were incompatible with sustained economic growth.

IV. Communities

The same pattern emerges when we look at a second important social institution, the local community. Proto-industrialisation is supposed to have required, and furthered, the breakdown of community controls over economic, social and demographic behaviour.³⁰ In Württemberg, however, every local study confirms the extensive powers of local communities well into the nineteenth century. My own study of the

²⁹ C. M. Belfanti, 'The proto-industrial heritage: Forms of rural proto-industry in northern Italy in the eighteenth and nineteenth centuries', in *Proto-industrialization in Europe* eds. Ogilvie & German, 155–170.

³⁰ Mendels, 'General report', 80; Kriedte, Medick and Schlumbohm, *Industrialization*, 8, 16–17, 40.

Black Forest district of Wildberg found that community regulation permeated every aspect of local life—including proto-industry. Communities permitted settlement, marriage and work only to citizens and their children; outside applicants were generally rejected, and the few non-citizen residents were restricted to the poorest occupations. Community officials, who made up as many as one-fifth of all male householders, closely supervised the three-field crop rotation, controlled the use of common lands, inspected the output and prices of every craft and service, and regulated markets in foodstuffs and raw materials. Every loan and land transaction had to be approved by the community court. Communities enforced the regulations of rural guilds, and penalised independent work by journeymen and unmarried women. Familial, marital and inheritance conflicts were resolved in a church court manned by the pastor and community officials. Poor relief was the responsibility of the community more than the family, and to prevent behaviour which might burden the poor-rate, communities closely regulated work, schooling, religion, sexuality, and even games and celebrations.³¹

This pervasive communal regulation showed no signs of breaking down, either during the initial proto-industrial boom of the 1580s, or at any point over the next two centuries, as the district of Wildberg developed into the largest and densest centre of worsted production in the Black Forest. It is hard to imagine that agrarian communities can have been any stronger than these proto-industrial communities. Available studies suggest that communities were strong everywhere in Württemberg until long past 1800, sustained by their symbiotic relationship with the state, which relied on them for tax-gathering and conscription, and in turn enforced their internal regulations.³²

³¹ These conclusions are based on detailed local research on the small town and 10–15 villages of the *Amt* (administrative district) of Wildberg, one of the ca. 60 *Ämter* of the duchy of Württemberg, between the late sixteenth and the late eighteenth century, whose results are presented in Ogilvie, *Württemberg*, here esp. chapter 4; S. C. Ogilvie, 'Coming of age in a corporate society: Capitalism, Pietism and family authority in rural Württemberg 1590–1740', *Continuity and change* 1 (1986), 279–331 [hereafter Ogilvie, 'Coming of age'], here 282–4, 286–91; S. C. Ogilvie, 'Women and proto-industrialisation in a corporate society: Württemberg woollen weaving 1590–1760', in *Women's work and the family economy in historical perspective* eds. P. Hudson & W. R. Lee (Manchester, 1990), 76–103 [hereafter Ogilvie, 'Women and proto-industrialization']; S. C. Ogilvie, 'Women's work in a developing economy: A German industrial countryside, 1580–1740 (MA diss., University of Chicago, 1993).

³² On the powers of Württemberg communities, see also Vann, *Making of a state*, 38–43, 46–7, 51–2, 65, 99–109, 180–4, 187–8, 225, 237–44, 247–50, 278–9, 287–8; D. W. Sabean, *Power in the blood: Popular culture and village discourse in early modern Germany* (Cambridge, 1984), 1–36; Sabean, *Property*, 26–27, 38–57; H. Medick, 'Village spinning bees, sexual culture and free time among rural youth in early modern Germany', *Interest and emotion: Essays on the study of family and kinship* eds. H. Medick and D. Sabean (Cambridge/Paris,

But was Württemberg, with its important proto-industries and its strong communities simply an exception? By no means. It is certainly true that in Flanders, England, and parts of the Rhineland and Switzerland, many communities were very weak, while others were still quite strong, and proto-industry gravitated toward the weaker ones. Given heterogeneity in community strength, this was understandable: fewer community restrictions could indeed mean lower costs for proto-industries, and greater flexibility. However, it had not been proto-industry which dissolved these restrictions: in these societies communities had already become weak before proto-industry, and in regions which were purely agrarian.³³

Moreover, there were many parts of Europe where, as in Württemberg, proto-industries co-existed with strong communities. In some, this was because other factors outweighed the disadvantages of strong communities. In Scotland, for instance, proto-industries arose in arable regions where communities were strong, rather than in pastoral regions where they were weak. This was because in arable areas another institutional feature, the 'cottar system', created a source of cheap proto-industrial labour: farmers sublet small plots to 'cottars' in return for part-time farm-work, and many cottars turned to proto-industry to supplement their earnings. In Scottish pastoral areas, by contrast, joint-ownership property rights created disincentives for landowners to permit a proto-industrial workforce to settle.³⁴ Similarly, in the Württemberg Black Forest other factors—weak seigneurial restrictions, an early start, favourable location—outweighed the disadvantages of community restrictions until at least 1700. Even then, the segmentation of early modern European worsted markets by transactions costs and warfare permitted the Württemberg worsted industry to survive for a century

1984); V. Trugenberg, *Zwischen Schloss und Vorstadt: Sozialgeschichte der Stadt Leonberg im 16. Jahrhundert* (Vaihingen/Enz, 1984); J. Mantel, *Wildberg: Eine Studie zur wirtschaftlichen und sozialen Entwicklung der Stadt von der Mitte des sechzehnten bis zur mitte des achtzehnten Jahrhunderts* (Stuttgart, 1974).

³³ On England, see Wrightson, *English society*, 40–60, 155–72; Sharpe, *Early modern England*, 90–98; de Vries, *Economy*, 75–82; A. Macfarlane, *The origins of English individualism: The family, property and social transition* (Oxford, 1978), 4–5, 68–9, 78–9, 119, 162–3; Levine, *Family formation*, 4–6. On the Netherlands, see J. de Vries, *The Dutch rural economy in the golden age, 1500–1700* (Berkeley, 1974) [hereafter de Vries, *Dutch rural economy*], 26–35, 49–67; de Vries, *Economy*, 53–67; H. A. Enno van Gelder, 'Nederlandse dorpen in de 16e eeuw' *Verhandelingen der Koninklijke nederlandse Akademie van Wetenschappen, Afdeling Letterkunde*, 59 (1953), 40–41, 110. On the Rhineland, see Kisch, 'Monopoly', 301–4; Kisch, 'Merkantilismus', 94–6; Kriedte, 'Großes kapital', 225. On Switzerland, see Braun, 'Early industrialization', 299, 307; Tanner, 'Arbeit', 451; Mirabdolbaghi, 'Population'.

³⁴ I. D. Whyte, 'Proto-industrialization in Scotland,' *Regions and industries: A perspective on the industrial revolution in Britain* ed. P. Hudson (Cambridge, 1989), 228–251, here 231, 237–8, 243–5.

longer, despite the visible costs imposed by its communities.³⁵

And again, the precise impact of institutions on production costs determined the outcome in each case; particular community rules in particular circumstances could actually *lower* proto-industrial costs. Thus in Twente, in the Netherlands, the communal *marken* system restricted access to common land (essential for farming) to a group of established peasant families, excluding the rest of the population, which therefore turned to proto-industry.³⁶ In Cento, in northern Italy, the communal *partecipanza* system distributed land according to family size. Rather than emigrating (which involved losing land rights), people stayed in the community but turned to proto-industry to supplement earnings from an insufficient land-share.³⁷ Just as with landlords, so too with communities, it was not 'strength' or 'weakness' that mattered, but the precise effects of institutional arrangements on costs.

What this shows, as with landlord powers, is not that community restrictions had no relationship with proto-industry, but that this relationship must be different and more complex than originally proposed. In Württemberg, as we have seen, local communities regulated almost every aspect of behaviour. By controlling settlement, they limited population growth and expansion of the workforce, reduced labour mobility, maintained high marriage ages and small families, and prevented young men without land or guild licenses from setting up households, thereby compelling them to emigrate or take military service. The large numbers of women who therefore never married were prohibited from working in mainstream occupations, often through active harassment by male citizens in the community courts. Excluded from alternative options, these women became a cheap source of spinning labour for the worsted industry. By registering servants, compelling unmarried women to live in households headed by parents or employers, monitoring popular recreations, and severely prosecuting sexual offences, Black Forest communities all but stamped out illegitimacy, and reduced the incidence of early marriages caused by pre-marital sexual activity. By appointing guild foremen and cloth inspectors, supervising the keeping of guild accounts, and prosecuting offenders against guild regulations, communities played a vital role in enforcing guild privileges—not just in traditional crafts, but also (as we will see shortly) in proto-industry. Through their thoroughgoing regulation of markets in land, labour, capital, foodstuffs, and industrial products, Württemberg communities affected the cost of almost every decision

³⁵ Troeltsch, *Zeughandlungskompagnie*, esp. 172–3, 177, 181–2, 186, 194–9.

³⁶ F. M. M. Hendrickx, 'From weavers to workers: Demographic implications of an economic transformation in Twente (the Netherlands) in the nineteenth century', *Continuity and change* 8:2 (1993), 321–55, here 330–1.

³⁷ Belfanti, 'Rural manufactures', 265–6.

anyone made.³⁸ Indeed, communities still had so much economic influence in the nineteenth century that, according to Tipton, they clearly retarded industrialisation, not only in Württemberg but throughout the German south.³⁹

V. Guilds and companies

A further set of social institutions important for the early modern economy were craft guilds and merchant companies. According to the original theories, proto-industries arose in the countryside precisely to avoid guilds and companies, which then collapsed because of rural competition.⁴⁰ For the historians of England and the Low Countries who carried out the first proto-industrial case studies, and those who focussed on the period after about 1750, this seemed self-evident. But Württemberg shows the dangers of generalising the English and Flemish experience, and that of the nineteenth century, to the bulk of early modern Europe.

No sooner did worsted-weaving arise in the Württemberg Black Forest than the weavers began to lobby for guild privileges from the state. Between 1589 and 1611, each Black Forest district obtained its own guild. Anyone weaving worsteds, in either town or countryside, had to gain admission to the district guild and submit to its regulation. These exclusive guild privileges over this proto-industry endured until 1864.⁴¹

It is sometimes argued that guilds were ineffectual, that their negative impact is exaggerated, or even that they were positively beneficial.⁴² So it is important to find out what they actually did. A priceless documentary discovery, the yearly account-books of the worsted weavers' guild of the district of Wildberg, which survive from 1598 to 1760, made it possible for me to do this. This guild, I discovered, strictly regulated entry to the worsted industry in both town and villages: incoming and outgoing apprentices, as well as new masters, paid fees and were

³⁸The detailed research results behind these conclusions are presented in Ogilvie, 'Coming of age'; Ogilvie, 'Women and proto-industrialisation'; Ogilvie, *Württemberg*, chapters 4, 7, 8 and 9; and Ogilvie, 'Women's work in a developing economy'.

³⁹F. B. Tipton, *Regional variations in the economic development of Germany during the nineteenth century* (Middletown (Connecticut), 1976) [hereafter Tipton, *Regional variations*], 23, 46, 52–3, 58–9, 68, 71.

⁴⁰Mendels, *Industrialization*, 16, 26; Mokyr, 'Growing-up', 374; Kriedte, Medick and Schlumbohm, *Industrialization*, 7, 13, 22, 106, 115, 128.

⁴¹Troeltsch, *Zeughandlungskompagnie*, 10–14; Ogilvie, 'Coming of age', 281–2, 284–5; Ogilvie, *Württemberg*, chapter 5.

⁴²This is argued specifically for proto-industry by M. Cerman, 'Proto-industrialization in an urban environment: Vienna, 1750–1857', *Continuity and change* 8:2 (1993), 281–320, here 282. For a more general argument to the effect that guilds were beneficial, see C. R. Hickson & E. A. Thompson, 'A new theory of guilds and European economic development', *Explorations in economic history* 28 (1991), 127–68.

registered by name, community of origin, and whether they were masters' sons; practising masters and widows paid quarterly dues, and were listed each year in a new register; unlicensed practitioners were reported and penalised. Admission rates declined over time, non-citizens and non-weavers' sons were excluded, and master numbers reached a plateau in most communities by about 1740. The record of fines and officers' activities show an unremitting and thoroughgoing effort to monitor output volume, loom numbers, employment of journeymen and apprentices, women's work, piece-rates and outside employment for spinners, technology, cloth quality, permissible worsted varieties, output prices, and even certain forms of social behaviour; offenders were fined by the guild and often again by the civil authorities. A mass gathering of the guild was held at least once a year; attendance was compulsory, and ranged between 90 and 100 per cent. From 1666 on, all practising masters paid guild dues equivalent to a day's wages each year. The guild's revenues amounted to the value of a modest house annually, and were expended largely on an unremitting lobbying campaign to secure and maintain the guild's privileges.⁴³

Not only did the producers form guilds, but so too did the merchants. In 1650, a group of merchants and dyers in the small town of Calw a few miles from Wildberg set up a guild-like company, which secured extensive privileges from the state. For the next century and a half, all weavers in the Württemberg Black Forest were compelled to sell all their cloths to the company, at prices and quantities fixed by law; the company had the exclusive right to dye and export them, and in return was obliged to buy a fixed quota from each weaver. Like a guild, this merchant company restricted entry almost exclusively to sons of existing members. Cloth prices, wool prices, and output quotas were set through collective bargaining between company and guilds: the district bureaucrats supervised the negotiations and enforced the outcome. To protect its monopoly, the company inspected workshops, kept lists of licensed masters, collated its purchase registers every month with guild sealing registers, and confiscated smuggled cloths. Like the guilds, the company invested vast resources in lobbying the state to enforce and extend its privileges. It was not until 1797, when the costs of its obligation to buy cloths from the weavers began to outweigh its monopoly profits from selling them, that the company dissolved itself, against the resistance of the Württemberg state.⁴⁴

⁴³ The activities of the worsted weavers' guild of the district of Wildberg between 1598 and 1760 are examined in detail in Ogilvie, *Württemberg*, chapters 5–12.

⁴⁴ A detailed account of this company is provided in Troeltsch, *Zeughandlungskompagnie*; further analysis of its activities and effects on the Württemberg Black Forest worsted industry is provided in Flik, *Textilindustrie*, 220–254; see also Ogilvie, *Württemberg*, chapters 5 and 8.

But were the guilds and merchant company of the Württemberg Black Forest simply an interesting local exception? Quite the contrary. It is true that in England, the Low Countries, and a few other institutional enclaves (parts of the Rhineland, parts of Saxony), the powers of guilds and companies did decline in the sixteenth century. But proto-industry was not necessary for this decline, since in these societies guilds and companies weakened even within the city walls, and even in traditional crafts.⁴⁵ Proto-industry was certainly not sufficient for this decline, since almost everywhere else in Europe proto-industries themselves were regulated by merchant companies, urban guilds, and often also rural guilds, long into the eighteenth century.

Merchant guilds and merchant companies were the rule, not the exception, in European proto-industries. Proto-industrial merchants wholly lacked institutional privileges only in England, the Low Countries, and Krefeld in the Rhineland (and there only until the 1730s).⁴⁶ Merchants enjoyed legal monopolies and other state privileges, but did not form companies, in the Swedish iron industry at Eskilstuna, the Westphalian linen proto-industries of Ravensberg and Osnabrück, the Silesian linen industry, the Bohemian woollen and linen industries, the Barcelona calico-printing industry, and the Krefeld linen industry (after about 1730).⁴⁷ Everywhere else, proto-industrial merchants were

⁴⁵ On England, see P. Clark & P. Slack, *English towns in transition 1500-1700* (Oxford, 1976), 97-110; J. R. Kellett, 'The breakdown of gild and corporation control of the handicraft and retail trades in London', *Economic history review* (1958) 381-94, here 381-82; P. Hudson, 'Proto-industrialization in England', in *Proto-industrialization* eds. Ogilvie and Cerman, 49-66; D. C. Coleman, *The economy of England 1450-1750* (Oxford, 1977), 73-5. On the Low Countries, see de Vries, *Dutch rural economy*, 48-49; K. Glamann, 'European trade, 1500-1750', in *The Fontana economic history of Europe* vol. II *The sixteenth and seventeenth centuries* ed. C. M. Cipolla, 427-526, here 519; H. Kellenbenz, 'The organization of industrial production', in *The Cambridge economic history of Europe* vol. V *The economic organization of early modern Europe* eds. E. E. Rich & C. H. Wilson (Cambridge, 1977), 462-547, here 566; H. Schmal, 'Patterns of de-urbanization in the Netherlands between 1650 and 1850', in *The rise and decline of urban industries* ed. H. Van der Wee (Leuven, 1988); H. Van der Wee, 'Industrial dynamics and the process of urbanization and de-urbanization in the Low Countries from the Late Middle Ages to the eighteenth century', in *Ibid.* On the Rhineland, see Kisch, 'Merkantilismus', 100-3, 116, 130-1, 140; Kriedte, 'Großes Kapital', 221, 225, 241, 246, 249, 258. On Saxony, see K. H. Wolff, 'Guildmaster into millhand: The industrialization of linen and cotton in Germany to 1850', *Textile history* 10 (1979), 7-74, here 33-5; K. Blaschke, 'Grundzüge der sächsischen Stadtgeschichte im 17. und 18. Jahrhundert', *Die Städte Mitteleuropas im 17. und 18. Jahrhundert* (Linz/Donau, 1981), 173-80, here 177.

⁴⁶ Hudson, 'Proto-industrialization in England', 52-3; de Vries, *Dutch rural economy*, 48-9; Kisch, 'Merkantilismus', 100-3, 116, 130-1, 140; Kriedte, 'Großes Kapital', 221, 225, 241, 246, 249, 258.

⁴⁷ On Eskilstuna, in Sweden, where a small number of putters-out enjoyed privileges over the producers as late as 1822, see L. Magnusson & M. Isacson, 'Proto-industrialization in Sweden: Smithcraft in Eskilstuna and southern Dalecarlia', *Scandinavian economic history review* 30:1 (1982), 73-99, here 78, 80-1. On Westphalia, see J. Schlumbohm, 'Agrarische

formally organised into guilds or companies: in the Bologna silk industry, the Igualada woollen industry in Catalonia, the Lyon silk industry, the Clermont-de-Lodève woollen industry, the Nîmes silk industry, the Rouen linen and cotton industries, the textile industries of the Cambrésis and the Valenciennois, the Saint-Quentin fine linen industry, the linen and cotton industries of Zürich, St Gallen and many other Swiss cantons, the linen, cotton, and stocking-knitting industries of Linz, Schwechat, Ponegg and other centres in Austria, the Vogtland woollen and cotton industries and the Upper Lusatian linen industry in Saxony, the Wupper Valley linen proto-industry in the Rhineland, and the linen proto-industries of Urach, Heidenheim and Blaubeuren in eastern Württemberg—to mention only those that have been closely studied by historians.⁴⁸

Besitzklassen und gewerbliche Produktionsverhältnisse: Großbauern, Kleinbesitzer und Landlose als Leinenproduzenten im Umland von Osnabrück und Bielefeld während des frühen 19. Jahrhunderts', *Mentalitäten und Lebensverhältnisse. Rudolf Vierhaus zum 60. Geburtstag* Festschrift R. Vierhaus (Göttingen, 1982), 315–34, here 331; W. Mager, 'Die Rolle des Staates bei der gewerblichen Entwicklung Ravensbergs in vorindustrieller Zeit', in *Rheinland-Westfalen im Industriezeitalter*, vol. I: *Von der Entstehung der Provinzen bis zur Reichsgründung* eds. K. Düwell and W. Köllmann, (Wuppertal, 1983), 61–72, here 67. On Silesia, see H. Kisch, 'The textile industries of Silesia and the Rhineland: A comparative study of industrialization', *Journal of economic history* 19 (1959), 186. On Bohemia, see Myška, 'Proto-industrialization'; Klima, 'English merchant capital', passim. On Barcelona in Catalonia, see J. K. J. Thomson, 'State intervention in the Catalan calico-printing industry in the eighteenth century', in *Markets and manufacture in early industrial Europe* ed. M. Berg (Cambridge, 1991), 79–82. On Krefeld, see Kisch, 'Merkantilismus', 100–3, 116, 130–1, 140; Kriedte, 'Großes Kapital', 221, 225, 241, 246, 249, 258.

⁴⁸ On the Bologna silk industry, see C. Poni, 'A proto-industrial city: Bologna: XVI–XVIII century', in *VIIIème Congrès* eds. Deyon and Mendels [hereafter Poni, 'Proto-industrial city'], 5, 7–9, 17. On the Igualada woollen industry in Catalonia, see J. Torras, 'From masters to *fabricants*. Guild organization and economic growth in eighteenth-century Catalonia: A case-study', *European University Institute colloquium papers* 30 (1986) [= papers presented to conference on 'Work and family in pre-industrial Europe', Badia Fiesolana, 11–13 February 1986] [hereafter Torras, 'From masters to *fabricants*']; J. Torras, 'The old and the new. Marketing networks and textile growth in eighteenth-century Spain', in *Markets and manufacture in early industrial Europe* ed. M. Berg (Cambridge, 1991), 93–113 [hereafter Torras, 'The old and the new']. On the Lyon silk industry, see C. Poni, 'Proto-industrialization, rural and urban', *Review* 9 (1985) [hereafter Poni, 'Rural and urban'], here 313. On the Nîmes silk industry in the Bas-Languedoc, see G. Lewis, *The advent of modern capitalism in France, 1770–1840: The contribution of Pierre-François Tubeuf* (Oxford, 1993) [hereafter Lewis, *Modern capitalism*]. On the Clermont-de-Lodève woollen industry in the Languedoc, see J. K. J. Thomson, *Clermont-de-Lodève 1633–1789: Fluctuations in the prosperity of a Languedocian cloth-making town* (Cambridge, 1982) [hereafter Thomson, *Clermont-de-Lodève*]; C. H. Johnson, 'De-industrialization: The case of the Languedoc woollens industry', in *VIIIème Congrès* eds. Deyon & Mendels [hereafter Johnson, 'De-industrialization']. On the Rouen linen and cotton industries in Normandy, see G. L. Gullickson, *Spinners and weavers of Auffay. Rural industry and the sexual division of labor in a French village, 1750–1850* (Cambridge, 1986); J. Bottin, 'Structures and mutations of a proto-industrial space: Rouen and its region at the end of the sixteenth century', *Annales ESC* 43:4 (1988), 975–995. On the textile industries of the Cambrésis and the Valenciennois,

Guilds, too, were widespread in proto-industries. It is often forgotten that in almost all textile proto-industries, the finishing stages were carried out in towns; in many silk proto-industries, almost all stages were urban.⁴⁹ In most European towns, guilds retained power to a much later date than in England and the Low Countries: in Scotland and Switzerland, guilds weakened only in the late seventeenth century, in France and parts of Saxony only in the early eighteenth century, and in most other parts of Europe not until the later eighteenth or even the early nineteenth century.⁵⁰ An effective guild in an *urban* stage

see P. Guignet, 'Adaptations, mutations et survivances proto-industrielles dans le textile du Cambrésis et du Valenciennais du XVIIIe au début du XXe siècle', *Revue du Nord* 61 (1979), 27–59 [hereafter Guignet, 'Adaptations']. On the Saint-Quentin fine linen industry in northern France, see D. Terrier, 'Mulquiniens et gaziers: les deux phases de la proto-industrie textile dans la région de Saint-Quentin, 1730–1850', *Revue du Nord* 65 (1983), see 535–53. On the linen and cotton proto-industries of Zürich, St. Gallen and other Swiss cantons, see Braun, 'Early industrialization'; and Pfister, 'Proto-industrialization'. On the linen, cotton, and stocking-knitting proto-industries of Linz, Schwechat, Poneggen and other centres in Austria, see Cerman, 'Proto-industrialization in Vienna', 289; H. Freudenberger, 'Three mercantilist protofactories', *Business history review* 40 (1966), 167–189; H. Freudenberger, 'Zur Linzer Wollzeugfabrik', in H. Knittler (ed.), *Wirtschafts- und sozialhistorische Beiträge. Festschrift für Alfred Hoffmann zum 75. Geburtstag* (Wien, 1979), 220–235; V. Hofmann, 'Beiträge zur neueren Wirtschaftsgeschichte. Die Wollenzeugfabrik zu Linz an der Donau', *Archiv für österreichische Geschichte* 108 (1920); G. Grüll, 'The Poneggen hosiery enterprise, 1763–1818: A study of Austrian mercantilism', *Textile history* 5 (1974), 38–79. On the Vogtland woollen and cotton industries and the Upper Lusatian linen industry in Saxony, see Wolff, 'Guildmaster', 38. On the Wuppertal linen proto-industry in the Rhineland, see Kisch, 'From monopoly to laissez-faire'. On the linen proto-industries of Urach, Heidenheim and Blaubeuren in eastern Württemberg, see Flik, *Textilindustrie, Troeltsch, Zeughandlungskompagnie*; H. Medick, '"Freihandel für die Zunft": Ein Kapitel aus der Geschichte der Preiskämpfe im württembergischen Leinengewerbe des 18. Jahrhunderts', in *Mentalitäten und Lebensverhältnisse: Rudolph Vierhaus zum 60. Geburtstag* Festschrift R. Vierhaus (Göttingen, 1983); H. Medick, 'Privilegiertes Handelskapital und "kleine Industrie". Produktion und Produktionsverhältnisse im Leinengewerbe des alt-württembergischen Oberamts Urach im 18. Jahrhundert', *Archiv für Sozialgeschichte*, 23 (1983), 267–310.

⁴⁹ Cerman, 'Proto-industrialization in Vienna', 290–91; Poni, 'Proto-industrial city', 16–17; Poni, 'Proto-industrialization, rural and urban', 312–13; P. Kriedte, 'Die Stadt im Prozeß der europäischen Proto-industrialisierung', *Die alte Stadt* 9 (1982), 19–51, here 48; Lewis, *Modern capitalism*, 63–4.

⁵⁰ On Scotland, see Whyte, 'Proto-industrialization in Scotland', here esp. 233–4 on the 'considerable control over rural manufacturing' exercised by the craft guilds of the royal burghs until 1672, and the urban orientation of Scottish proto-industry well into the eighteenth century. On Switzerland, see Pfister, 'Proto-industrialization in Switzerland'; Braun, 'Early industrialization', 296. On France, see Guignet, 'Adaptations', 29–30; Lewis, *Modern capitalism*, 10, 63–4; G. Gayot, 'La longue insolence des tondeurs de draps dans la manufacture de Sedan au XVIIIème siècle', *Revue du Nord* 63 (1981), 105–34, here 108, 116, 122; Poni, 'Rural and urban'; Kriedte, 'Stadt', 48; Johnson, 'De-industrialization', 5–6. On Saxony, see Wolff, 'Guildmaster'. On societies in which guilds survived into the late eighteenth or early nineteenth century, see on Austria: Cerman, 'Proto-industrialization in Vienna', 290–1; Cerman, 'Proto-industrial development in Austria' in *Proto-industrialization in Europe* eds. Ogilvie & Cerman, 171–187; Freudenberger, 'Proto-factories',

of a proto-industry inevitably affected the costs faced by merchants and rural workers, since guilds invariably sought to keep down the prices their members paid to suppliers and keep up the prices they could charge to customers.

Rural proto-industrial producers were also organised into guilds. Rural guilds were particularly widespread in German territories, but were also found in Bohemia, Austria, Spain, and central and northern Italy. Thus new proto-industrial guilds, which included rural workers, were set up not only in the Black Forest worsted industry, but also in the linen industries of the East-Swabian micro-states, the trimmings and lace industry of the Erzgebirge-Vogtland in Saxony, the small iron goods industry of Berg, the scythe-industry of Remscheid in the Rhineland, the linen industry of the Wupper Valley in the Rhineland, the linen industries of Urach, Heidenheim and Blaubeuren in eastern Württemberg, the woollen and linen industries of the Württemberg possession of Mömpelgard in present-day Alsace, the linen-weaving, cotton-production, scythe-making, and iron-processing in various regions of Austria, the woollen and linen industries of northern and northeastern Bohemia, the textile industries of Castile, the gun-barrel industry of the north Italian valleys of Brescia, and the Prato woollen industry in Tuscany—again, to name only those which have been closely studied by historians. New rural guilds continued to be formed in proto-industries well into the eighteenth century, often to defend against privileged merchant companies, and often with the explicit support of the state.⁵¹

184; H. Freudenberger, 'An industrial momentum achieved in the Habsburg monarchy,' *Journal of European economic history* 12 (1983), 339–50, here 342–3; on Spain: Thomson, 'Proto-industrialization in Spain'; on Catalonia in particular: Torras, 'From masters to fabricants', 3, 6–9; Torras, 'The old and the new', 99, 105–6, 108, 113 notes 56–7; on Italy: Belfanti, 'Rural manufactures', 262, 266–7; Poni, 'Proto-industrial city', 16–17; on Scandinavia: M. Isacson & L. Magnusson, *Proto-industrialization in Scandinavia. Craft skills in the industrial revolution* (Leamington Spa/Hamburg/New York, 1987), 35, 37, 93; L. Magnusson, 'Markets in context: Artisans, putting out and social drinking in Eskiltuna, Sweden 1800–50', in *Markets and manufacture in early industrial Europe* ed. M. Berg (London, 1991), 292–320, here 304; on the survival of guild privileges in proto-industries in Bohemia and Moravia, despite countervailing privileges from feudal landlords, see H. Freudenberger, 'The woollen-goods industry of the Habsburg monarchy in the eighteenth century,' *Journal of economic history* 20 (1960), 383–406, here 385–8, 400; H. Freudenberger, 'Industrialization in Bohemia and Moravia in the eighteenth century,' *Journal of Central European affairs* 19 (1960), 347–56, here 351; Freudenberger, 'Proto-factories', 184; Klima, 'English merchant capital', 34–5, 40; Klima, 'Industrial development', 89; A. Klima, 'The role of rural domestic industry in Bohemia in the eighteenth century', *Economic history review* 2nd ser., 27 (1974), 48–56, here 52.

⁵¹ On Heidenheim, see Flik, *Textilindustrie*. On Urach, see Medick, 'Freihandel für die Zunft'. On Mömpelgard, see J.-P. Dormois, 'L'expérience protoindustrielle dans la principauté de Montbéliard 1740–1820: Aux origines de la révolution industrielle', (Mémoire de D. E. A., University of Paris-Sorbonne, 1984), here esp. 16–18, 24–5, 39;

Guilds and companies neither precluded proto-industry, nor were broken down by it. But they clearly affected how it developed. It is sometimes claimed that guilds actually often admitted outsiders, and thus did not exercise effective monopolies; but in the Württemberg Black Forest, both guilds and company effectively limited the number

further detail on these guilds is provided in C. Faivre, 'Les chonffes de la principauté de Montbéliard' (Thèse de droit, University of Paris, 1949); for an exploration of the demographic and social-structural ramifications of proto-industry in Mömpelgard, see J. P. Dormois, 'Entwicklungsmuster der Protoindustrialisierung im Mömpelgarder Lande während des 18. Jahrhunderts', *Zeitschrift für württembergische Landesgeschichte* 53 (1994), 179–204. On the East Swabian micro-states, see R. Kiessling, 'Entwicklungstendenzen im ostschwäbischen Textilrevier während der Frühen Neuzeit', in *Gewerbe und Handel vor der Industrialisierung. Regionale und überregionale Verflechtungen im 17. und 18. Jahrhundert* eds. J. Jahn & W. Hartung (Sigmaringendorf, 1991), 27–48, here 44–5. On Berg see A. Thun, *Die Industrie am Niederrhein und ihre Arbeiter* (2 parts, Leipzig, 1897), here Part 2, *Die Industrie des Bergischen Landes*; also Mager, 'Proto-industrialization and proto-industry', 188. On the Erzgebirge-Vogtland, see B. Schöne, 'Kultur und Lebensweise Lausitzer und erzgebirgischer Textilproduzenten sowie von Keramikproduzenten im Manufakturkapitalismus und in der Periode der Industriellen Revolution', in *Die Konstituierung der deutschen Arbeiterklasse von den dreißiger bis zu den siebziger Jahren des 19. Jahrhunderts* ed. H. Zwahr (Berlin, 1981), 446–67; B. Schöne, 'Posamentierer—Strumpfwirker—Spitzenklöpplerinnen. Zu Kultur und Lebensweise von Textilproduzenten im Erzgebirge und im Vogtland während der Periode des Übergangs vom Feudalismus zum Kapitalismus (1750–1850)', in *Volksleben zwischen Zunft und Fabrik. Studien zu Kultur und Lebensweise werktätiger Klassen und Schichten während des Übergangs vom Feudalismus zum Kapitalismus* ed. R. Weibhold (Berlin/DDR, 1982), 107–164; Mager, 'Proto-industrialization and proto-industry', 188. On Remscheid, see Kriedte, Medick and Schlumbohm, *Industrialization*, 115. On the Wuppertal, see Kisch, 'From monopoly to laissez-faire', 351–2, 400, 403–4, 406; the guild was granted a state charter in 1738, in an attempt by local bureaucrats to introduce a new player into their corporate rivalry against the merchant company for control of local politics. On Austria, for linen-weaving see A. Hoffmann, *Wirtschaftsgeschichte des Landes Oberösterreich*, (Salzburg, 1952) vol. I, 103ff; C. Halmdienst, *Die Entwicklung der Leinenindustrie in Oberösterreich (unter besonderer Berücksichtigung des Mühlviertels)* (Linz, 1993), 30–40; for cotton-production see L. K. Berkner, 'Family, social structure and rural industry: A comparative study of the Waldviertel and the Pays de Caux in the eighteenth century' (Ph.D. thesis, Harvard University, 1973), 123ff; A. Komlosy, *An den Rand gedrängt. Wirtschafts- und Sozialgeschichte des oberen Waldviertels* (Vienna, 1988); A. Komlosy, 'Stube und Websaal. Waldviertler Textilindustrie im Spannungsfeld zwischen Verlagswesen Heim- und Fabrikarbeit', in *Spinnen—Spulen—Weben* ed. A. Komlosy (Krems/Horn, 1991), 119–138; H. Matis, 'Protoindustrialisierung und "Industrielle Revolution" am Beispiel der Baumwollindustrie Niederösterreichs', in *ibid.*, 15–48; for scythe-making, see F. Fischer, *Die blauen Sensen. Sozial- und Wirtschaftsgeschichte der Sensenschmiedezunft zu Kirchdorf-Micheldorf bis zur Mitte des 18. Jahrhunderts* (Graz, 1966), esp. xv–xvi, 19ff, 86–9, 93, 101–3; on iron-processing, see H. Hassinger, 'Die althabsburgischen Länder und Salzburg 1350–1650', in *Handbuch der europäischen Wirtschafts- und Sozialgeschichte*, (Stuttgart, 1986) vol. 3, 927–967, here 950. On northern and northeastern Bohemia, see Klima, 'English merchant capital', 37, 39–40. On Castile, see A.-G. Enciso, 'Economic structure of Cameros' dispersed industry: A case study in eighteenth century Castilian textile industry', in *VIIIème Congrès* eds. Deyon & Mendels, 1–3; J. K. J. Thomson, 'Proto-industrialization in Spain', in *Proto-industrialization in Europe* eds. Ogilvie and Cerman, 85–101. On the valleys of Brescia, see Belfanti, 'Rural manufactures and rural proto-industries', 262. On Prato, see *ibid.*, 266.

of people allowed to practise the industry, how many employees they could keep, and how much they could produce. After the late seventeenth century, sons of non-masters or non-citizens were almost completely excluded by the weavers' guild, and even masters could apprentice only one of their sons.⁵² The merchant company was even more exclusive: in 147 years, it never exceeded forty members and admitted only one outsider. Output quotas far below the desired and technically feasible level of production were fixed and enforced by both guilds and company.⁵³ Widows of masters could produce at half quota and without employees; other women were forbidden any industrial task but spinning, which was paid at below-market rates set by the guild.⁵⁴ The demographic incentives these restrictions created can be observed in the later marriage ages of weaving couples, their smaller family and household size, and the enormous excess of unmarried women.⁵⁵ In 1736, three-quarters of these women lived wholly or partly from spinning, and almost all the rest from poor relief or begging.⁵⁶ Even the occasional desperate attempts by spinners and poorer weavers to evade guild and company restrictions confronted such enormous risks and penalties that they hardly amounted to an 'informal' or 'black-market' sector, let alone to the emergence of a 'market society'.⁵⁷

⁵² See the quantitative results presented in Ogilvie, *Württemberg*, chapter 7.

⁵³ The setting and enforcement of output quotas, and evidence of compliance with them, is discussed in detail in Ogilvie, *Württemberg*, chapter 8.

⁵⁴ The position of widows (and other women) in the Black Forest worsted industry is investigated in detail in Ogilvie, 'Women's work'; for an overview of the issues, see Ogilvie, 'Women and proto-industrialisation'.

⁵⁵ See the detailed demographic results presented in Ogilvie, *Württemberg*, chapter 9; for a preliminary overview of some of these, see Ogilvie, 'Coming of age'; Ogilvie, 'Women and proto-industrialisation'.

⁵⁶ Piece-rate ceilings for the spinners were set in all the worsted weavers' ordinances and much ancillary legislation from 1589 onward: 'Engelsatt-Weberordnung, vfericht in Ao 1589', reprinted in Troeltsch, *Zeughandlungskompagnie*, 431-4, here 433; 'Engelsattweberordnung in A. 1608 [actually 1611] vferichtet', reprinted in Troeltsch, *Zeughandlungskompagnie*, 435-53, here 446; 'Engelsattweberordnung in A. 1608 [actually 1611] vferichtet', emendations of 1654, reprinted in Troeltsch, *Zeughandlungskompagnie*, 435-53, here 446 footnote 2; 'Zeugmacher-Ordnung von 24 März 1686', in *Vollständige, historisch und kritisch bearbeitete Sammlung der württembergische Gesetze* 19 vols. (Stuttgart, 1828-51) ed. A. L. Reyscher [hereafter *Sammlung*, ed. Reyscher], vol. 13, 615-40, here 626; 'Rescript in Betreff des Zeugmachergewerbs' (8 Sep 1736), in *ibid.*, vol. 14, 178ff.

⁵⁷ Economists studying modern less developed societies draw a distinction between 'formal' (or 'regulated') markets, in which transactions are open, legal and enforceable by the state or other social institutions; and 'informal' (or 'black') markets, in which transactions do take place, but are secret, illegal and unenforceable because they are not endorsed (or are explicitly prohibited) by the legitimate institutions of the society. As many studies of less developed economies show, the development potential of the 'informal sector' derives from its ability to evade costly formal-sector regulations. However, the 'informal sector' is ultimately constricted by high transactions costs, high information costs, high risks, low worker protection, and high costs of capital (resulting in sub-optimal

It is also sometimes claimed that guilds were beneficial because they overcame capital market imperfections, maintained quality standards, or defended intellectual property rights. However, the only capital provided by the Wildberg weavers' guild was a lobbying fund and two funeral palls; raw wool, looms, stretching-frames, and fulling-mills were all provided privately.⁵⁸ The guilds and the company certainly justified their privileges partly in terms of quality control and protecting technical mysteries, but in reality the local worsteds were poor and primitive, never remotely approached the quality normal in the Low Countries or England, and lost ground even to German competitors as time passed.⁵⁹

In fact, efforts to improve quality, variety, technology and the organisation of production repeatedly foundered on the rock of corporate privilege. After about 1600, rigid guild demarcations prohibited worsted- and woollen-weaving in tandem, despite technical complementarities and lower market risks.⁶⁰ In 1619–21, an Italian expert, brought in by a local dyer to introduce new techniques from the Low Countries and France, and supported by the ducal government, encountered such vehement opposition from a cartel of Calw merchants and from the weavers' guilds that he departed and refused all invitations to return.⁶¹ From 1650 on, the merchants were obliged to supply raw wool to the weavers and the weavers to supply cloths to the company, at prices fixed by law; unable to adjust prices upwards, both merchants and weavers adjusted quality downwards, and Württemberg worsteds remained coarse and poor.⁶² From 1665 on, the guilds prohibited

levels of investment), all of which result from its lack of legitimacy and its inability to enforce contracts. On this, see, for instance, M. P. Todaro, *Economic development in the Third World* (Harlow, 1989), 270–1.

⁵⁸The worsted-weavers' guild was joint-owner (with the woollen-weavers' guild) of a fulling-mill in the town of Wildberg in the early seventeenth century; on this, see WHSA A573 Bü 219–948 1612–44 (account-books of the woollen-weavers' guild of the district of Wildberg). That capital-market imperfections governed the fulling sector is questionable, given that both previously and subsequently this mill was owned by professional fullers, and that in 1736 the Wildberg fulling mill was being operated by a woman (on this, see WHSA A573 Bü 6967 Seelentabelle 1736 ('soul table' for the town and villages of the district of Wildberg); and the discussion in Ogilvie, 'Women's work and economic development', 37).

⁵⁹It was widely recognized, even by contemporaries, that Württemberg worsteds were low in quality and were failing to adapt to international improvements in technology and variety; see Troeltsch, *Zeughandlungskompagnie*, 163–5.

⁶⁰Troeltsch, *Zeughandlungskompagnie*, 12–13, 110.

⁶¹See the discussion in Troeltsch, *Zeughandlungskompagnie*, 35–8.

⁶²Troeltsch, *Zeughandlungskompagnie*, 101, 125–31; the effects of the rigid negotiations of the 'Moderation' (the regime of prices and quotas for raw wool and cloths periodically re-negotiated between company and guilds, under the supervision of the district-level ducal bureaucrats, and subsequently enforced by law) are discussed in detail in Ogilvie, *Württemberg*, chapter 8.

specialised wool-combers, although this reduced costs.⁶³ Spinning piece-rates were so low that spinners lacked the capital and the incentive to adopt the technically superior spool-spinning. Even for finer spinning, it was forbidden to pay higher rates; so the spinners simply would not produce the finer yarn required for better cloths. Higher and more differentiated spinning rates were repeatedly recommended by technical observers and state commissions, but were bitterly and successfully opposed by the guild to the end of the eighteenth century.⁶⁴ The introduction of new cloth varieties was always delayed by the merchant company until it could extend its state privileges to cover them: this took place in the 1660s, the 1690s, the 1720s, the 1750s, and the 1770s. Even then, the new company privileges generally involved such risks, and such threats to existing prices and quotas, that the weavers refused to produce the new varieties of cloth.⁶⁵ To the very end of the eighteenth century, both company and guilds opposed state concessions for any other textile manufactory in the area, successfully excluding new enterprises, new techniques, and new practices.⁶⁶ In this proto-industry, therefore, corporate privileges had economic effects which were not only real, but ruinous.

But was Württemberg just an isolated and unfortunate case? Without this sort of detailed analysis of more proto-industries, it is hard to say. There was certainly nothing atypical about the privileges, aims or visible activities of the guilds or the company in the Black Forest

⁶³Troeltsch, *Zeughandlungskompagnie*, 8, 72, 110; the restriction was introduced in *Rezesse* of 1665 and 1674, and incorporated into the ordinance for the industry in 1686: 'Recess zwischen denen Färbern vnd Knappen zu Callw de dato 17. Augusti 1665', reprinted in Troeltsch, *Zeughandlungskompagnie*, 465–71; 'Recess Zwischen der Färbern Compagnie und Knappshaft d. Stuttgart d. 23.ten Apr. A. 1674', reprinted in Troeltsch, *Zeughandlungskompagnie*, 471–8; 'Zeugmacher-Ordnung' (24 Mar 1686), in *Sammlung*, ed. Reyscher, vol. 13, 615ff.

⁶⁴For a detailed discussion of the spinning regulations, the failure to improve piece-rates, and the effects of this on the quality of spun yarn and of finished worsteds, see Troeltsch, *Zeughandlungskompagnie*, 125–30, 171; Ogilvie, 'Women's work', 62–4; Ogilvie, *Württemberg*, chapter 9.

⁶⁵For a detailed discussion of this pattern of behaviour on the part of company and guilds, see Troeltsch, *Zeughandlungskompagnie*, 119, 161–9; Ogilvie, *Württemberg*, chapter 9. For an example of guild opposition to the introduction of new cloth varieties, see WHSA A573 Bü 851, account-book of the worsted weavers' guild of the district of Wildberg, Jan. 1698–Jan. 1699, fol 25v, where the guild undertakes a lobbying campaign against 'etlicher Compagnie Verwannten zu Callw, alß welche Neüe Sortten von Schlickh Cadiß anfangen Zumachen, und zuweben geben, dessen Sie aber nicht befuegt gewesen' ('several Company members in Calw, who have begun to make, and put-out for weaving, new sorts of *Schlick Cadis*, which however they are not entitled to do'); *Cadis* was a narrow variety of worsted.

⁶⁶For an example from 1709, see WHSA A573 Bü 862, account-book of the worsted weavers' guild of the district of Wildberg for the year Apr. 1709–Apr. 1710, fol 26r–26v; for an example from the 1770s, see Troeltsch, *Zeughandlungskompagnie*, 130–1.

industry. Costly lobbying activities and violent socio-political struggles surrounded guild and company privileges in almost every European proto-industry.⁶⁷ Since people do not invest resources to defend or attack valueless privileges, we may presume that most proto-industrial guilds and companies secured real economic benefits for their members, and inflicted real economic costs on others. Furthermore, the abolition of guild and company privileges was often followed by an industrial boom, as with the dissolution of the Prato rural weavers' guild in northern Italy in 1770, that of the Schwechat company in Austria in 1762, or that of the Catalanian guilds in the 1830s.⁶⁸ These booms

⁶⁷ For examples of such corporate struggles in proto-industries throughout Europe: on Catalonia, see Thomson, 'Proto-industrialization in Spain'; on Igualada in Catalonia in particular, see Torras, 'The old and the new', 105–6, 108, 113 notes 56–57; Torras, 'From masters to *fabricants*', 9; on Sedan in northern France, see Gayot, 'Tondeurs', 108; on the Nîmes region in France, see Lewis, *Modern capitalism*, 63–4; on the Lodève region in Languedoc, see Johnson, 'De-industrialization', 5ff; Thomson, *Clermont-de-Lodève*, 12; on Vienna in Austria, see German, 'Proto-industrialization in Vienna', 290–1; on Kirchdorf-Micheldorf in Austria, see Fischer, *Blauen Sensen*, 86–9, 93, 101–3; on the Wupper Valley in the Rhineland, see Kisch, 'From Monopoly to laissez-faire', 309, 351, 400, 403–4, 406; on the Vogtland in Saxony, see Wolff, 'Guildmaster', 39–41.

⁶⁸ On Prato, see Belfanti, 'Rural manufactures', 266; on Schwechat, see German, 'Proto-industrialization in Vienna', 289; on Catalonia, see Thomson, 'Proto-industrialization in Spain'. Additional examples abound. Thomson, 'Proto-industrialization in Spain', ascribes the early decline of many Castilian proto-industries to guilds which 'created structures opposed to innovation in cloth types and to cutting costs'. Belfanti, 'Rural manufactures', 267, argues that the rural privileges the Florence guild retained after 1739 helped to retard the growth of proto-industry in Tuscany. Poni, 'Proto-industrial city', 5, 7–9, 16–8, shows how the inflexible corporate structure in which the Bologna silk industry became fixed prevented its adapting to changing market conditions, and led to a loss of international competitiveness. Poni, 'Proto-industrialization, rural or urban', 312–3, and Kriedte, 'Stadt', 48, both emphasize how the Lyon silk-merchants' guild 'strongly restricted the industry's room for manoeuvre'. Deyon, 'Roubaix', 64, argues that the corporate regulations governing relations between the privileged urban merchants and their proto-industrial workforce in the Roubaix region near Lille constituted a serious obstacle to nineteenth-century industrialization. Kriedte, Medick and Schlumbohm, *Industrialization*, 15, mention that the scythe-smiths' guild in Remscheid in the Rhineland successfully resisted the introduction of water-driven scythe-hammers. Kisch, 'From monopoly to laissez-faire', 400–1, recounts how the Wupper Valley linen weavers' guild, in unusual alliance with the merchant company, successfully opposed the introduction of English spinning machines in the 1780s; see also 308–9, 325, 352, and 392, where he describes the 'exclusive rights', entry restrictions, output and price regulation, and monopsony power exercised by the merchant company. Gutkas, 'Österreichs Städte', recounts how the Linzer Wollfabrik in Austria enjoyed a monopoly over production and markets, and legislation giving it first claim on raw materials. Wolff, 'Guildmaster', 39, describes how the merchant guilds of the Vogtland in Saxony were able to limit admission, levy license fees, and restrict internal competition. According to the evidence presented in Schlumbohm, 'Besitzklassen', 330–1, and Mager, 'Rolle', 67, it seems unlikely that the merchants would have taken the trouble to enforce the 'Legge-Zwang' (compulsory delivery to the urban staple) from the 1770s on, and to resist its abolition in the early nineteenth century, had it not enabled them to secure important economic advantages.

strongly suggest that these guilds and companies had been constraining growth.⁶⁹

VI. *The state*

Why were they able to do this? Why did guilds, companies, communities and landlords retain economic power in so many parts of Europe, while in a few they broke down much earlier? The case of Württemberg and, when one looks more deeply, many other European proto-industries, suggests that part of the answer may lie in a hitherto neglected factor, the role of the state. Theories about proto-industrialisation have restricted the economic role of the state to guaranteeing market transactions, and occasionally helping the 'capitalists' coerce the 'workers'.⁷⁰ Closer examination of many European proto-industries suggests that this is partly an unjustified generalisation of the English and Flemish pattern to the rest of Europe, and partly a projection of nineteenth-century developments back onto the very different experience of the early modern period.

In Württemberg, until 1800 at least, the economic role of the state was not to create a framework for voluntary market transactions between individuals, but rather to provide legal enforcement for the monopolies and privileges of corporate groups. Far from seeking to dissolve guilds and companies, the Württemberg state continued to confirm and enforce their privileges, and to benefit from the bribes, concession fees, loans, fiscal assistance, and economic regulation they rendered in return.⁷¹ When, in the 1790s, the three main proto-industrial

⁶⁹ According to Tipton, *Regional variations*, 26–7, 30, 52–3, 59, 71, 72–6, they continued to constrain growth in many parts of nineteenth-century Germany during industrialization.

⁷⁰ Kriedte, Medick and Schlumbohm, *Industrialization*, 128–9.

⁷¹ The importance of fiscal and regulatory assistance from corporate groups to the Württemberg state is stressed by Flik, *Textilindustrie*, 91, and illustrated on the basis of the merchant company with privileges over the linen proto-industry of the district of Heidenheim in the eighteenth century on 94. The intimate relationship between guilds and the state in Württemberg, which continued into the late eighteenth century, emerges from L. Hoffmann, *Das Württembergische Zunftwesen und die Politik der herzoglichen Regierung gegenüber den Zünften im 18. Jahrhundert* (Tübingen, 1905) [hereafter Hoffman, *Zunftwesen*], and G. Raiser, *Die Zünfte in Württemberg: Entstehung und Definition, interne Organisation und deren Entwicklung, dargestellt anhand der Zunftartikel und der übrigen Normativbestimmungen seit dem Jahre 1489* (Tübingen, 1978). An overview over the enormous number of state concessions to 'manufactories' and associated merchant companies, which were granted in almost every sector of the Württemberg economy from the mid-eighteenth to the early nineteenth century, is provided in J. Gysin, 'Fabriken und Manufakturen' in *Württemberg während des ersten Drittels des 19. Jahrhunderts* (St. Katharinen, 1989), esp. 30, 43–7, 76–83, 125–6, 130, 139–140, 164–5, 170–1, 223, 225, 227. The ubiquity of state privileges in the Württemberg economy was remarked upon in 1793 by the Göttingen professor Christoph Meiners in the following terms: in Württemberg 'external trade . . . is constantly made more difficult by the form which it has taken for a long time. Trade and manufactures are for the most

merchant companies in Württemberg sought to dissolve themselves because their legal obligations to the weavers' guilds outweighed their monopoly profits, they encountered enormous state opposition.⁷² The proto-industrial guilds endured long into the nineteenth century. Nor did the state only support merchants against producers. Both the merchant companies and the weavers' guilds invested enormous resources in lobbying against each other's privileges. Had the state not granted the weavers some support, the guilds would surely have ceased to invest, and the companies to lobby against them.⁷³

Even if the Württemberg *state* had wanted to create a framework for free market transactions, the power of local *communities* were too entrenched. Although the Württemberg princes maintained a paid bureaucracy on the district level, these officials were not numerous and they had no say in the appointment of community councils and community officials. It was this local office-holding *Ehrbarkeit*, or 'notability', which allocated and collected taxes, and determined and implemented community regulation of markets in land, labour, credit, foodstuffs, raw materials, and industrial products.⁷⁴ Communal arrangements were supported by powerful allies in the parliament and the bureaucracy, both of which were recruited from the same local 'notability' as the community officials in the district towns.⁷⁵ When the

part in the hands of closed and for the most part privileged associations' (C. Meiners, 'Bemerkungen auf einer Herbstreise nach Schwaben. Geschrieben im November 1793', in *Kleinere Länder- und Reisebeschreibungen* ed. C. Meiners, (Berlin, 1794) vol. 2, 235-380, here 292; cited in Medick, 'Privilegiertes Handelskapital', 271).

⁷² On the Calwer Zeughandlungskompagnie, see Troeltsch, *Zeughandlungskompagnie*, 326-30; on the Uracher Leinwandhandlungskompagnie, see *Ibid.*, 326, and Medick, 'Privilegiertes Handelskapital', 271, 275; on the Heidenheimer Leinwandhandlungskompagnie, see Flik, *Die Textilindustrie in Calw und in Heidenheim*, 100-7, esp. 106.

⁷³ For a detailed analysis of the lobbying campaigns of the worsted weavers' guild of the district of Wildberg against the Calw merchant company, and their outcomes, see Ogilvie, *Württemberg*, chapter 12. The same conclusion emerges from detailed study of the other main proto-industry in Württemberg, the linen industry of Urach, which was also monopolized by guilds and a merchant company with very similar privileges to those of the Black Forest worsted industry: according to Medick, 'Privilegiertes Handelskapital', 276, in the 'monopoly privileges of the Uracher Leinwandhandlungskompagnie, which were repeatedly renewed in the course of the seventeenth and eighteenth centuries, almost always a middle way was followed'.

⁷⁴ As is argued above in Section IV; see also Vann, *Making of a state*, 41, 52, 180-4, 187-8; W. Grube, *Vogteien, Ämter, Landkreise in der Geschichte Südwestdeutschlands* 2nd ed. (Stuttgart, 1960), 19-20; F. Winterlin, *Geschichte der Behördenorganisation in Württemberg* (Stuttgart, 1902), vol. I, 3-10.

⁷⁵ On the Württemberg *Ehrbarkeit*, see H. Decker-Hauff, 'Die Entstehung der altwürttembergischen Ehrbarkeit, 1250-1534' (Ph.D. dissertation, University of Erlangen, 1946); Vann, *Making of a state*, 38-9, 41-6, 53, 56, 98-100, 103-7, 121-3, 178-82, 187-8, 245, 256, 278, 280, 284-5, 288-91; K. Marcus, 'A question of privilege: Elites and central government in Württemberg, 1495-1593' (Ph.D. dissertation, University of Cambridge, 1991).

central state did encroach on the economic prerogatives of communities, it was not by opening markets but by issuing countervailing privileges to its own concession-holders; even then, many such undertakings foundered against entrenched community resistance.⁷⁶ Both state and communities could generally derive more benefit from cooperation than from confrontation, and this gave rise to a tacit arrangement by which, as James Allen Vann puts it, in Württemberg 'the central government stopped at the gates of the towns'.⁷⁷

This pattern was not unique to Württemberg. In every European proto-industry in which landlords, communities, guilds, or companies retained power—and, as we have seen, these were the majority—they did so because their privileges were legitimised and enforced, however reluctantly, by the state. Sometimes the state was simply not strong enough to break them down, but in many cases it actively opted to sustain them, in return for their indispensable fiscal and political support.

The powers of landlords increasingly depended on state enforcement, as emerges from many proto-industrial case studies. The establishment and control of proto-industries by feudal landlords in Russia, Bohemia, Moravia and Silesia was only possible because the state and the landlords supported one another, and indeed on the local level were effectively identical. In Silesia, the Hohenzollern state went so far as to prohibit linen mechanisation after 1780, to protect the profits of feudal landlords from serf weaving.⁷⁸ In the Bulgarian province of Eastern Rumelia, fiscal and political considerations led the Ottoman state to support the powers of landowners to restrict land access, pushing the population into proto-industry.⁷⁹ In the French Bas-Languedoc in the

⁷⁶ For examples of state concessions, and the often successful local resistance they evoked, see W. Söll, 'Die staatliche Wirtschaftspolitik in Württemberg im 17. und 18. Jahrhundert' (Ph.D. diss., University of Tübingen, 1934), 97–100; H. Liebel-Weckowicz, 'The politics of poverty and reform: Modernization and reform in eighteenth-century Württemberg', *The Consortium on Revolutionary Europe Proceedings* (Athens, Ga., 1981); S. Stern, *Jud Süß: ein Beitrag zur deutschen und zur jüdischen Geschichte* (Berlin, 1929); O. Linckh, 'Das Tabakmonopolie in Württemberg', *Württembergische Jahrbuch* (1893); A. Schott, 'Merkantilpolitisches aus Württembergs herzogzeit', *Württembergische Jahrbuch* (1900); W. Boelcke, 'Ein Herzoglich-Württembergischer Regiebetrieb des ausgehenden 18. Jahrhunderts', *Jahrbücher für Nationalökonomie und Statistik* 175 (1963); K.-G. Krauter, 'Die Manufakturen im Herzogtum Württemberg und ihre Förderung durch die württembergische Regierung in der zweiten Hälfte des 18. Jahrhunderts' (Ph.D. diss., University of Tübingen, 1951); K. Weidner, *Die Anfänge einer staatlichen Wirtschaftspolitik in Württemberg* (Stuttgart, 1931), 112–21; P. Wiedenmann, 'Zur Geschichte der gewerblichen Bierbrauerei in Altwürttemberg', *Württembergische Jahrbuch* (1934/5), 47–58; Vann, *Making of a state*, 108–9; Grube, *Stuttgarter Landtag*, 323–4. See also the long and ultimately successful resistance of the Württemberg guilds to attempts to increase state control, in Hoffmann, *Zunftwesen*, 38–43.

⁷⁷ Vann, *Making of a state*, 295.

⁷⁸ Kisch, 'The textile industries in Silesia and the Rhineland', 185.

⁷⁹ Palairet, 'Woollen textile manufacturing', 2–3.

1780s, the political influence of local seigneurs compelled the state to withdraw support from its own concession-holders when they tried to mechanise proto-industrial coal extraction.⁸⁰

Community institutions, too, depended on state support. In the Netherlands province of Twente, the communal *marken* system which, by excluding part of the population from essential access to common lands, had generated a cheap proto-industrial labour force, was enforced by the state until the nineteenth century, and broke down only through state action around 1810 and 1830.⁸¹ In the Prussian territory of Ravensberg, the linen proto-industry was not sufficient to break down the communal 'Acker-Marken-Wirtschaft'; only Hohenzollern state legislation enabled its gradual dissolution after about 1710 and its abolition in 1780. In the neighbouring prince-bishopric of Osnabrück, the state sustained the 'Acker-Marken-Wirtschaft' until 1810. Thus it was state action, not proto-industry, which led to the divergent development of communal institutions in Ravensberg and Osnabrück, and this in turn had enormous repercussions on proto-industry in both regions.⁸²

State support was also crucial for guilds and companies. In the Wupper Valley, for instance, the proto-industrial merchant company only maintained its privileges through constant appeals to the government; the establishment of the rural weavers' guild in 1738 was positively encouraged by local government officials, and its abolition in 1783 was only accomplished by sending in the army.⁸³ The merchant company of Clermont-de-Lodève in Languedoc, and the various guilds which monopolised the different stages of woollen production, relied on state inspectors to help enforce their privileges; the company invested hugely in Paris connections to maintain its monopoly.⁸⁴ Indeed, it is rare to find a guild or a merchant company anywhere in Europe which effectively regulated markets without state enforcement.⁸⁵

⁸⁰ Lewis, *Modern capitalism*, I, 21, 54, 79–80, 89–91, 97.

⁸¹ Hendrickx, 'From weavers to workers', 330–1.

⁸² W. Mager, 'Protoindustrialisierung und agrarisch-heimgewerbliche Verflechtung in Ravensberg während der Frühen Neuzeit. Studien zu einer Gesellschaftsformation im Übergang', *Geschichte und Gesellschaft* 8 (1982), 435–74, here 443–4, 466–7; W. Mager, 'Gesellschaftsformation im Übergang: Agrarisch-heimgewerbliche Verflechtung und ökonomisch-Soziale Dynamik in Ravensberg während der Frühen Neuzeit und im Vormärz (16. Jahrhundert bis Mitte 19. Jahrhundert)', in *VIIIème Congrès* eds. Deyon & Mendels, here 6, 15–16, 20–1, 26; J. Schlumbohm, 'From peasant society to class society: Some aspects of family and class in a northwest German proto-industrial parish, 17th–19th centuries', *Journal of family history* 17:2 (1992), 183–99, here 187, 197; Schlumbohm, 'Besitzklassen', 334.

⁸³ Kisch, 'From monopoly to laissez-faire', 307–8, 316, 323, 345, 355, 372, 386.

⁸⁴ Johnson, 'De-industrialization', 5ff; Thomson, *Clermont-de-Lodève*, 3–13, 37, 91, 146–7, 233–5, 247–8, 322–31, 336–50, 353–60, 364–84, 389, 423, 427–30, 448, 459.

⁸⁵ State support for corporate groups in proto-industries was ubiquitous; for a selection of particularly explicit examples, see, for instance, in Switzerland: Pfister, 'Proto-

Not until the later eighteenth century did most European states become powerful enough to begin to dispense with support from landlords, communities, guilds and merchant companies. Even then, they did not necessarily replace them with markets, but rather created countervailing state privileges. Thus in the Habsburg lands it was the 'growth of central state power' which made possible the 'Theresian reforms' after about 1750, whereby the state gradually withdrew support for proto-industrial regulation by guilds and landlords; it did so by granting guild-free 'Fabrik' privileges to associations of merchants, and by increasing state regulations and subsidies for favoured industries.⁸⁶ The same pattern can be observed in proto-industries in Spain, France, Sweden, Italy, Bohemia, and the vast majority of German territories.⁸⁷ In more cases than not, industrial producers merely exchanged the privileges and regulations of traditional institutions for a different set of non-market institutions, operated in favour of new interest-groups, and enjoying even more effective enforcement from the political authorities.⁸⁸

VII. Conclusion

To what extent does the Black Forest of Württemberg, and the many other industrial regions of early modern Europe, help us trace the links between social institutions and economic well-being?

The men and women of the Württemberg Black Forest worked hard,

industrialization in Switzerland', 150-2; Braun, 'Early industrialization', 296; in France: Gayot, 'Tondeurs', 116; Johnson, 'De-industrialization', 7; in Austria: Freudenberger, 'Bohemia and Moravia', 351; Freudenberger, 'Industrial momentum', 32-3; Freudenberger, 'Woolen-goods industry', 384, 386-7; Fischer, *Blauen Sensen* xv-xvi, 101-3; Cerman, 'Proto-industrial development in Austria'; in the Wupper Valley, see Kisch, 'From monopoly to laissez-faire', 398, 406; in the Vogtland in Saxony, see Wolff, 'Guildmaster', 38-9; in Ravensberg and Osnabrück in Westphalia, see Schlumbohm, 'Besitzklassen', 330-1; Mager, 'Rolle', 67.

⁸⁶ Cerman, 'Proto-industrial development in Austria'.

⁸⁷ On Spain: Thomson, 'Catalan calico-printing', 74; Torras, 'The old and the new', 99; Torras, 'From masters to *fabricants*', 7-9. On France: Johnson, 'De-industrialization', 5ff; Gayot, 'Tondeurs', 122. On Sweden: Isacson & Magnusson, *Proto-industrialization in Scandinavia*, 93; Magnusson, 'Proto-industrialization in Sweden', 210, 220-3. On Italy: Poni, 'Proto-industrial city', 16-17. On Bohemia and Moravia, where the feudal lords, as local authorities, replaced guild privileges with concessions from themselves: Klíma, 'English merchant capital', 34-5; Klíma, 'Industrial development', 86; Klíma, 'Role of rural domestic industry', 52; Myška, 'Proto-industrialization in Bohemia'. On the conflict between guild privileges and state attempts at abolishing them in Germany, which continued in most territories into the nineteenth century, see Tipton, *Regional variations*, 26-7, 30, 52-3, 59, 71, 72-6.

⁸⁸ As is shown, for example, in Tipton, *Regional variations*, 30, 59, 69, 71, which shows how ubiquitous and characteristic a feature of German industrialization in the nineteenth century were state monopolies and privileges issued to favoured interest groups.

and made the best living they could given the constraints of their society. But these constraints limited economic growth. Output levels and producer numbers stopped growing by about 1750, quality failed to improve, new techniques were rejected, new enterprises were excluded, competitors' products were not even copied, and markets were lost. Even the forty company merchants, despite their monopoly profits, achieved only modest prosperity. The hundreds of weavers lived frugally, married late, and struggled bitterly to retain some monopoly profits of their own; they did not become the entrepreneurs (or even the workers) of successful factory industries. Thousands of young men, lacking land and denied guild licenses, left for America or the swollen armies of Central Europe. Thousands of young women, unable to marry and forbidden many kinds of work, had the choice of begging, or spinning at rates the weavers set. By 1800, even proto-industry was languishing, and emigration had reached epidemic proportions; factory industrialisation was late and slow. This industry was no economic success-story.

But in early modern Europe successful economies were the exception, not the rule.⁸⁹ Württemberg was no anomaly. Although the precise institutions might vary, the underlying pattern recurred throughout Europe: in proto-industry, as in other sectors, overall economic well-being was constrained by the institutional privileges of corporate groups. Markets did not emerge in every proto-industry; they emerged in a few proto-industries in societies where they were already emerging in agriculture: in England and Flanders; in parts of Switzerland, Saxony and the Rhineland, and a few other institutional enclaves. Everywhere else, resources continued to be allocated not through markets, but according to the corporate institutional privileges of landlords, communities, guilds and merchant companies. These did not wither away under the onslaught of proto-industrialisation; they co-opted it, turning proto-industry into yet another source of monopoly profits for powerful social groups.

Corporate privileges gave their beneficiaries the incentive—and the power—to resist change. New practices which promised to increase wealth also threatened to alter its distribution. This made adjustment to change (whether opportunity or threat) very difficult. An initial opportunity was usually the source of proto-industrial growth, but few proto-industries could sustain this growth: the institutional framework in which they arose did not permit the initial distribution of its benefits to be altered without a prohibitively slow and expensive process of inter-group bargaining and state action. This institutional rigidity made it impossible for most proto-industries to adjust flexibly to changes in

⁸⁹ As is remarked by de Vries, *Economy*, 25–6.

the economic environment. For economic growth was caused not by proto-industry itself, but by the ability of producers—in whatever sector—to keep costs low, learn by doing, and respond to change in an uncertain world.

The crucial variable that determined whether producers could do this, and thus whether a given industry grew or stagnated, was the structure of its social institutions. In some European societies, institutions were so restrictive that proto-industry could never arise. This was quite rare: proto-industries arose almost everywhere in early modern Europe.

In other societies, no social groups obtained institutional privileges over input and product markets: costs were low because of genuine efficiencies, producers could respond flexibly to changing circumstances, and economic growth could be sustained. Sadly, this too was rare. By far the commonest pattern was for social institutions to permit proto-industry but constrain its growth, keeping some costs low by force, protecting other high-cost practices by excluding competitors, and creating a network of interlocking privileges and obligations inimical to change.

Why a 'corporate society' failed to develop in England, the Low Countries, and a few other fortunate enclaves of early modern Europe is a fundamental but still unresolved question. One way of addressing it, though, may be to look at why corporate societies *did* develop in the rest of Europe. The role of politics in this development cannot be under-estimated. Corporate privileges—whether of landlords, communities, guilds or merchant companies—could only be maintained with state support. Most of the states of early modern Europe grew much faster than the economies that sustained them, creating a mutual military menace so serious that they were willing to issue almost any institutional privileges to corporate groups, in order to obtain the resources and cooperation needed for survival. The resulting military entanglements and ruinous indebtedness kept most European states in thrall to these groups and institutions until the late eighteenth century, if not beyond. And what replaced these traditional institutions was often not markets, but new non-market institutions that continued to impose deadweight costs and distort economic activity in favour of privileged groups. The resulting costs, long borne by many European societies, are to be measured not just in economic terms—grinding poverty and foregone growth—but above all in terms of the deep resentments and bitter conflicts among social groups caused by allocating resources by institutional privilege and political force.