

# The Clothiers' Century, 1450–1550

JOHN OLDLAND

*JohnO@hatley.com*

**Abstract:** In the hundred years from 1450 to 1550, the great success enjoyed by the English woollen industry in continental markets was a result of clothiers organising the rural cloth industry in the West Country, Suffolk/Essex, the Kentish Weald and Newbury and its surrounds, to produce cloth that London merchants required. To do this they allocated extensive capital to cloth production: buying wools, sorting and dyeing them, organising their carding and spinning, putting the yarn out for weaving, and then in some cases owning the mills that fulled the cloth and finally shearing it in-house. The leading clothiers carried wool and cloth inventories, developed strong buying networks and offered merchants credit. Clothiers' control over production declined after 1550 as the government exercised greater control over cloth quality and clothiers' freedoms, and as price competition intensified from coarser cloths and new draperies.

In the fifteenth century, quality woollens production moved decisively from towns to the countryside, and increased dramatically as both export and home demand increased.<sup>1</sup> Bruce Campbell has suggested that 'non-agricultural employment may have contributed roughly a tenth of rural incomes by 1300. Two centuries later this proportion had probably doubled, as manufacturing fastened more vigorously onto rural labour.'<sup>2</sup> By 1540, perhaps as many as 18 per cent of the adult population, 264,000 people, were involved in making cloth; most of them women who prepared the yarn in the countryside, and wives who sat by their husbands' side at the broadloom.<sup>3</sup> This explosion of rural industry was largely orchestrated by clothiers who, in the hundred years from 1450 to 1550, transformed English clothmaking, and therefore helped to make English woollens the juggernaut in the continental textile trade it had become by the mid-sixteenth century. Rural clothiers' contribution to English clothmaking has been noted, but the manner of this achievement has not been fully explained.<sup>4</sup> Why and how did they innovate, harness rural skills and organise clothmakers to make a range of high-quality woollens? This article considers their importance to industry development and the economy; outlines the skills, capital and organisation that transformed clothmaking; shows how they specialised regionally in terms of both product and organisation to broaden the range of quality woollens by the mid-sixteenth century; and why their strategic influence then declined.

Clothiers' and graziers' contribution to this century's economy has been far greater than many historians have conceded. Recent projections for economic growth have per capita textiles/leather output and sheep numbers declining from 1450 to 1550, based on very low estimates for the size of the domestic market, and its decline along with

population after the Black Death.<sup>5</sup> Richard Britnell went so far as to conclude that 'it requires a strong prior commitment to academic convention to find any unprecedented development of commerce in the period 1450–1550'.<sup>6</sup> Further, it has been suggested that increases in standards of living have been exaggerated; that the growth in wages after the Black Death were far lower than the rise in harvest wages might indicate, that tenant farmers burdened with rent and tithes had great difficulty to make agriculture pay in the face of falling prices, and that any additional income had little impact on the standard of living since it was spent mainly on food.<sup>7</sup>

A recent review of all the research on wages and the cost of living provides a more optimistic perspective as it has confirmed that unskilled labourers' standard of living improved until the end of the fifteenth century.<sup>8</sup> This article provides additional evidence for a rising standard of living and suggests that, in clothmaking areas, additional household income may well have offset the rising cost of living in the first half of the sixteenth century. The growth and productivity of pastoral farming together with rapidly growing cloth production and rising cloth quality stimulated the economy once population decline ended in the fifteenth century, and economic growth returned after the mid-fifteenth century depression. Domestic cloth consumption and exports, as well as the weight and quality of woollen cloth, rose.<sup>9</sup> Peasants and their wives wore more expensive, colourful cloth, rapidly accepting new fashions that included doublet and hose, and probably used linings more extensively as cheaper woollens became more readily available.<sup>10</sup> My projections suggest that cloth production rose by over 100,000 cloths from the early 1440s to the early 1540s, and sheep numbers may have increased by three million.<sup>11</sup> The value of exported cloth from London in the depressed 1460s was an estimated £33,400 annually, and in the 1530s £314,700, almost a tenfold increase.<sup>12</sup> These estimates, of course, are based on many assumptions, but they have been developed from a detailed analysis of trends in both pastoral farming and cloth production, and the estimates for domestic consumption in 1541–5 of 190,000 cloths are far lower than Craig Muldrew's estimate of 299,000 cloths in the 1590s, so my projections may be conservative.<sup>13</sup>

This rapid growth in textile production between 1470 and 1550 must have impacted the total economy, especially since sheep and cloth production combined probably accounted for close to a third of total national output, and levels of annual economic growth were so low.<sup>14</sup> It has been estimated that the per capita output increase from the 1340s to the 1470s, a period when rising wages and falling prices would suggest reasonably strong economic performance, only resulted in an annual increase of 0.20 per cent, and it was even lower at 0.04 per cent from the 1470s to the 1650s.<sup>15</sup> Given this stagnant economy, the flourishing cloth industry and high productivity sheep farming that sustained it, must have increased economic growth from 1450 to 1550.

Clothiers, working with merchant adventurers and other overseas cloth merchants, made this growth possible. They were the architects of the rising quality and value of English broadcloth, and of kersey as an important secondary cloth for export. Clothiers had to reorganise the business system to make it more efficient, while at the same time raise the skill level of rural clothmakers. In contrast to urban drapers they allocated capital to streamline production. Clothmaking became more specialised as each region produced only the cloths for which they could develop a competitive advantage.

From around 1450 it is useful to identify two types of clothier: merchant clothier and complete clothier.<sup>16</sup> The merchant clothier bought cloth from the weaver or fuller, perhaps had it piece-dyed, sheared and packed, and then sold it to a merchant in a distant market. This was the role that the merchant draper had performed in larger urban clothmaking towns. Clothiers' marketing role made sense because someone had to assemble rural cloth, leaving weavers, fullers and shearmen free to weave, full, shear and sometimes sell their cloth locally. The complete clothier controlled cloth production. He started by buying wool and then either supervised or brought in-house all production processes until the cloth was ready for sale. There was a further distinction between wealthy leading complete clothiers who sold the cloth mostly in London and the smaller, less capitalised complete clothiers who might be no wealthier than successful weavers, and who sold their cloth to better capitalised clothiers with superior distribution networks.<sup>17</sup>

The complete clothier is the central figure because he transformed the industry during the critical period from 1460 to 1530, but there were always independent clothmakers with whom he co-existed: weavers, fullers, dyers and shearmen with varying degrees of dependence on clothiers. This article concentrates on full broadcloth made in the West Country counties of Somerset, Wiltshire and Gloucestershire; the East Anglian clothmaking region of southern Suffolk and northern Essex, and the Kentish Weald; and on fine kersey centred on Newbury – all areas in which complete clothiers had a significant impact. As a rough generalisation the complete clothier made high-quality broadcloth and kersey that he sold in London; the merchant clothier handled price-sensitive coarse broadcloth, kersey and straits, much of which was sold domestically.<sup>18</sup>

Urban drapers, mercers and other merchants sold the cloth overseas, and redistributed cloth across the country. The different categories of cloths for sale at the end of the clothiers' century is well illustrated in the Salisbury draper David Lewis's 1548 woollens inventory. He spread his inventory across three shops.<sup>19</sup> His 'great shop' carried quality broadcloth and kersey worth £90 4s 1.5d. As a prosperous draper he was primarily interested to sell fine broadcloth valued, on average, at 52.8d/yd and narrow kersey at 16.3d/yd. The 'shop next to the courtyard' held northern broad dozens, osettes (straits), some quality frieze, and some black kersey valued in total at £16 10s 11.5d. The northern dozens were worth 23d/yd while the coloured narrow cloths were worth 12d/yd. Lastly there was 'the little store' with £13 15s 8d in goods. This contained cottons, frieze, and rugs three quarters of a yard wide priced between 2–15d/yd but most around 6d/yd. The export market was even more focused on quality broadcloth and kersey.<sup>20</sup> There was, therefore, a broad quality range for sale. Quality coloured broadcloth earned a price more than double that of coarse cloth, and quality kersey was a third more expensive than coarse kersey or straits. Cottons could be bought for less than a tenth of a quality coloured broadcloth.

## I

In England, rural cloth had always been able to tap into a regional and even national market because urban clothworkers never had the political clout to restrict free trade. In 1300, expensive greased woollens were a minor part of the market, and Flemish

imports had severely restricted English urban production of these fine cloths.<sup>21</sup> Urban clothmaking also faced competition from rural clothmakers that could easily make coarse worsted and serge (cloth with a worsted warp and woollen weft) that they often sold in towns.<sup>22</sup> Free trade was given the force of law in 1535 when the Statute of York allowed domestic and alien merchants to trade throughout the country.<sup>23</sup> In the early fourteenth century, rural clothmakers were quick to take advantage of the carding and wheel spinning of weft thread using cheaper wools that provided perhaps a 50 per cent improvement in productivity over combing and spinning with a distaff and spindle.<sup>24</sup> This transformed greased woollens from a niche to a mass market. As early as 1326 the small priory at Maiden Bradley in Wiltshire, for example, was buying narrow and broad blanket, pannus and russet from neighbouring small towns as well as at Salisbury.<sup>25</sup> London burellers, who had successfully made coarse worsteds and serges since the early thirteenth century, had disappeared by mid-century.<sup>26</sup> The greater complexity of making greased woollens, especially in the finishing processes, led urban drapers to buy rural cloth and then finished it in towns. By the end of the century many rural clothmakers from Somerset, Wiltshire, Kent, Surrey/Sussex and Suffolk/Essex had adopted the broadloom and were selling broad dozens (cloth half the length of a standard broadcloth) and straits/kersey (cloth a foot wide and 12 yards long) to London merchants looking for cheaper cloth for export.<sup>27</sup> In Somerset from December 1396 to October 1397 19,411 dozens and 4,461 narrow straits paid the alnage subsidy: in Kent from July 1394 to November 1395, dozens alnaged were equivalent to 1,385.5 assize cloths, far more than the 456 full-size broadcloths recorded: in adjacent Surrey and Sussex, from 1391 to 1394, all cloths were dozens.<sup>28</sup> Much of this production must have found its way to London since these quantities far exceeded local demand.

Rural cloth's growing access to national and international markets is reflected in the establishment of cloth halls, many of which were set up at the end of the fourteenth century. London's establishment of a covered market in 1396, Blackwell Hall, permitted closer supervision of provincial cloth, but it also made it easier for rural clothmakers to market their cloth, and for alien and other merchants to buy it.<sup>29</sup> Other towns, Bury St Edmunds, Colchester, Coventry, Bristol and Norwich are known to have regulated the sale of rural cloth at around the same time.<sup>30</sup> At the end of the fifteenth century, York made arrangements for the sale of different cloth types. Its drapers and tailors were able to restrict the sale of foreign cloths in 1492 to the Thursday market when they could exercise their right-of-search. Inexpensive Kendal cloth could be sold wholesale at the inns.<sup>31</sup> Southern merchants sold their cloth wholesale to be retailed by tailors, hosiers and drapers. In 1501 West Riding cloth was to be sold on the street from the Common Hall towards Stayngate, while Northern Riding and Kendal cloth was to be sold on the street from the Common Hall towards Conyngstreet.<sup>32</sup>

Free trade in England contrasted with greater protectionism in the Low Countries.<sup>33</sup> Worcester was the one exception that perhaps proved the rule, since it successfully secured passage of an act in 1533 that limited production to the county's boroughs, probably because there was limited parliamentary opposition, and it simply reflected the status quo.<sup>34</sup> What weighed in its favour was that half its citizens were involved in the industry, there was very little rural Worcestershire production to displace, the town specialised in

high-quality short, and particularly long white cloths that were not produced in significant quantities elsewhere in the region, and strict regulation was deemed necessary to maintain consistent quality.<sup>35</sup>

Clothiers therefore benefited from the weaknesses of urban clothmaking, high labour costs and the rigidity and protectionism of artisan guilds, as well as from the growing pre-eminence of London that allowed rural clothmakers to bypass provincial towns.<sup>36</sup> In towns, weavers and fullers had to sell their cloth to merchants, and clothworking guilds had strict rules on the number of apprentices and servants, which limited business size.<sup>37</sup> In London, weavers were in decline before the end of the fourteenth century as overseas merchants purchased mainly lower quality provincial cloth that they then finished.<sup>38</sup> In contrast, a clothier enjoyed the relative freedom to evolve his business and attract the skills and labour he needed. A weaver or fuller could become a merchant, a merchant might organise cloth production, and a sheep farmer could also be a yarnmaster, and then a clothmaker.<sup>39</sup> Capital determined both the organisation and its size, and the business tended to consolidate over time as the largest clothiers came to dominate distribution.<sup>40</sup> It took at least three generations of Springs to make them the richest clothiers in the land, and two generations of Winchcombes and Stumpes to acquire great wealth.

By the 1470s a national market concentrated on London had emerged, as merchant adventurers dominated the cloth trade with the Low Countries, and London merchants were far better capitalised than their provincial competitors.<sup>41</sup> Successful clothiers in each region exploited their advantages to meet the specialised needs for both export and domestic markets, in wool and other raw materials, lower labour costs, and proximity to markets. Some villages, regions, and one family (Winchcombe), were able to develop a valuable international reputation for distinctive, high-quality cloth, among them Winchcombes, Glemsfords, Coggeshalls, Castlecombes, Stroudwaters, Suffolks and Kents. For a hundred years the export market expanded with few setbacks, which provided a continuous stream of opportunity that enterprising clothiers strove to grasp.<sup>42</sup> Further, the domestic market, which was larger than the export market, also grew as standards of living rose. More people were buying commercially-made cloth rather than making homespun, while changes in fashion and eventually population growth stimulated consumption.<sup>43</sup> Improvement in the overall quality and reputation of English exported cloth from 1400 to 1550 is unmistakable.<sup>44</sup> In the 1390s the Hanse had turned to rural clothmakers to find cheap narrow straits, and exported broadcloth from eastern ports was of relatively low quality.<sup>45</sup> In the 1440s Italians were still mostly buying cheap westerns at 26s a cloth and far fewer bastards, probably white broadcloths, at 38s 2d from the western counties.<sup>46</sup> Forty-five years later, aliens exporting through London in 1488–9, were buying coloured broadcloths priced around 60s, and then, in far fewer quantities white broadcloths at 40s, coloured westerns at 40s, white westerns at 30s and bastards at 26s 8d.<sup>47</sup> English woollens became more attractive in Antwerp when the currency was debased in 1464. By then, English wool accounted for as much as 70 per cent of pre-finished manufacturing costs for the finest Flemish woollens.<sup>48</sup> In order to remain competitive many Flemish draperies replaced English with lesser quality Spanish wools.<sup>49</sup> The English response seems to have been to increase standard broadcloth weight and quality to widen its competitive advantage.<sup>50</sup> In the next century quality cloth included

fine kersey and superfine long cloth from Worcester, Glemsford, Coggeshall, Reading and the Kentish Weald that challenged the finest cloth from Bruges, Leiden or Armentières.<sup>51</sup>

## II

The decision to become a complete clothier was not an easy one. Strategically, it made sense because it was the best way to ensure consistent high quality, particularly if wool dyeing was required, but it did mean that he had to divert scarce capital from financing trade to production that urban merchants had almost always avoided. Cloth production therefore had to have been at least as profitable as trade. Clothiers were funded with mostly rural capital, and credit availability was under pressure in the fifteenth but rising in the sixteenth century, if we are to believe that credit moved in step with the money supply.<sup>52</sup> London merchants in 1535 had three-and-a-half times as much tied up in credit as they did in business inventory, while clothiers had 26 per cent more capital tied up in their business goods than in their hopeful debts, ones they had a reasonably certain chance of recovery.<sup>53</sup> For example, John Bawden of Horsemonden, Kent's 1564 inventory indicated that two thirds of his business investment was in raw materials, wages owed and cloth, and a third in financing trade.<sup>54</sup>

Historians have assumed that the clothiers' advantage was cheap labour and firewood, but this was only partly true, because clothiers were competing by the mid-fifteenth century, not primarily with urban cloth but with rural unfinished cloth that was finished and dyed in towns. Drapers were typically purchasing rural cloth of variable quality that had been mechanically fulled, tenterd and taken to the alnager to pay the subsidy, but not burled (impurities in the cloth removed), wet sheared, dry sheared, or in-the-piece dyed.<sup>55</sup> He therefore gave the cloth to the urban fuller to check quality and start the finishing process. The fuller placed it over a perch close to the waterfront and inspected that the cloth had been evenly fulled, beat the cloth again if necessary, burled and wet sheared the cloth, and re-tenterd the cloth to dry it.<sup>56</sup> It was then given to the shearmen and dyer to colour and finish the cloth. Urban finishing was grossly inefficient; cloth had to be moved from place to place in towns, the urban fullers' work included additional work that arose from fixing quality problems that the rural clothier might avoid if he studiously supervised the process from end-to-end. Work at the perch was lower paid than fulling so probably women in the countryside did much of this work.<sup>57</sup>

Many clothiers were based in small towns but their fulling operations were often beside rural streams and they depended on carders, spinners, weavers and fullers in the countryside. Once one clothier had become successful other clothiers would be attracted, so that a cluster of clothiers developed along river systems creating some economies of scale and healthy competition that lowered prices and raised quality.<sup>58</sup> Complete clothiers were able to adjust their business operation to fit market needs: they had to supervise each stage but they rarely needed to conduct all production processes in-house. It was a mixture of the putting out system where all processes were subcontracted, and the domestic system in which work was done in-house.<sup>59</sup> There were isolated examples of a factory system, but these were unusual as the capital investment and operational inflexibility usually offset any economies of scale.<sup>60</sup>

Leading complete clothiers making quality cloth had one thing in common: they operated a wool warehouse, and tightly-controlled yarn preparation.<sup>61</sup> Skills in weaving, fulling and finishing were of little value if yarn quality was poor. Clothiers purchased quality wools and sorted them for fine or coarse cloths, for warp and weft yarn, organised a network of spinners, and then carried a yarn inventory. A large clothier might have to organise over a hundred, mostly part-time, women – a few working in his woolhouse, but most spread across rural villages. Some showed appreciation in their wills. In 1486 Thomas Spring II left the substantial sum of £66 13s 4d to his spinners, fullers and weavers and in 1539 the Cranbrook clothier Stephen Draner, left £30 to his spinners and weavers.<sup>62</sup> Half the hours to make the standard finished broadcloth was in yarn preparation, and most of the work was by spinsters or wives who combined spinning with household and agricultural duties.<sup>63</sup> Of the sixty people employed to make a Yorkshire broadcloth in 1588, forty-two were sorters, carders and spinners; and for a similar kersey output, forty-eight were involved in this preliminary work.<sup>64</sup> The best-documented example for the organisation of spinners was a Newbury workhouse in the 1620s and 1630s, with an output of four broadcloths a week. The wool was sorted, washed, dyed, carded and oiled in the workhouse and then delivered every two weeks to six spinning houses in the surrounding villages up to twenty miles from Newbury, as well as in Newbury itself.<sup>65</sup> Approximately seventy spinners were paid between 2d and 4d/lb depending on thread quality to feed weavers at the workhouse and produce additional yarn for sale.

While the primary benefit from controlling an army of spinners was to achieve consistent quality, an inventory to feed the looms, and to sell leftover yarn to others, there may also have been cost savings as spinners were trained to produce a carded, wheel-spun warp to produce an all-carded woollen. Carding and wheel spinning of wefts on the Great Wheel had largely replaced combing and spinning with a distaff and spindle in the fourteenth century. It is likely that all warps with the exception of superior cloths were carded and wheel spun by the mid-sixteenth century.<sup>66</sup> The 1552 cloth act specifically identifies Coggeshalls and Glainsfords handiwarpes, fine white cloths from western Suffolk and Essex whose warp was still spun with a distaff and spindle. However the pace of diffusion of carded and wheel spun warps is unknown.<sup>67</sup> A new spinning wheel, the Saxony wheel that permitted the continuous drafting, twisting and winding-on of the yarns can be traced back to 1475, and was clearly used for woollen warps and wefts in the early sixteenth century.<sup>68</sup> *Armentières* in western Flanders had mastered how to make an all-carded fine woollen towards the end of the fifteenth century.<sup>69</sup> The first direct reference to an all-carded English woollen is at Norwich in 1502, where woollen weavers' ordinances declared that low warp threadcount narrow cloths (350 warp threads per yard) were all wheel-spun.<sup>70</sup> The Saxony wheel provided substantial improvements in productivity but it was used more extensively in the linen industry, and it may have been that spinners had been trained to produce warp thread using the Great Wheel.<sup>71</sup> Clothiers therefore involved themselves in yarn preparation at a time when there were substantial opportunities to not only improve quality and consistency of the yarn, but also improve spinning productivity, whether it was on the Great or Saxony wheel.



Leading clothiers making coloured cloth operated dyehouses, and almost all the surviving clothier inventories before 1550 included dyeing operations. Clothiers had a comparative advantage over urban dyers because they could dye in-the-wool, whereas merchants buying unfinished cloth would dye-in-the-piece. By the mid-sixteenth century most Suffolk and Kent broadcloth and much Newbury kersey was dyed blue with woad in-the-wool and then some of it would be redyed in-the-piece locally, in London or on the continent. Wool dyeing provided a more consistent colour as different batches of wool could be intertwined. Clothier dyehouses were to be expected in Suffolk, Kent and Berkshire where coloured cloth predominated, but is surprising to find them in the West Country where most production was white unfinished broadcloth. In 1472 Walter and Joan Mayhew of Croscombe, Somerset were woad and madder-dyeing their wool; in 1480 Richard Rychards of Dursley, Gloucestershire specialised in red cloth as he had madder and alum in his dyehouse as well as red cloth in his warehouse; in 1495 John Chew from Somerset ran a dyehouse.<sup>72</sup> Castlecombes and Stroudwaters had a reputation for reds, and there was some cloth dyeing to meet domestic demand. Of all rural clothmaking areas it was Kent that built its reputation on the quality of its coloured broadcloth. Stephen Draner, the Cranbrook clothier who died in 1539, had woad, madder and alum worth £25 3s 4d and blue wool worth £6.<sup>73</sup> As almost all kerseys were sold dyed and finished, sixteenth-century Newbury fine kersey clothiers also based their reputation, at least in part, on the quality of their dyeing.<sup>74</sup> John Winchcombe bought up most of the Southampton woad in 1539/40, reducing his excise duties in return for shipping his kersey there.<sup>75</sup>

The other process that clothiers selling coloured cloth often brought in-house was shearing and dressing in order to standardise quality prior to sale. The quality of raising the nap and shearing it, and the number of times this was done, determined the final feel of the cloth.<sup>76</sup> Thomas Ravyn, from Needham Market Suffolk, for example, had four pairs of shears and hooks required to secure the cloth on the shearing board in his 1538 inventory.<sup>77</sup>

There is no evidence that clothiers had any difficulty attracting weavers to weave their cloth. In Suffolk we can see the decline in independent weavers in debt actions recorded in the plea rolls in the second half of the fifteenth century as clothiers now financed cloth production.<sup>78</sup> Some weavers remained independent while others became clothiers' outworkers. Clothiers had to have played an important management role in the conversion from narrow to broadcloth, and this may have led some clothiers to weave their own cloth. John Scoten of Naylond, Suffolk for example had his own weaving shop with three broadlooms in 1539.<sup>79</sup> John Winchcombe was reputed to have run a weaving shed with two hundred looms, and William Stumpe to have employed as many as 3,000, but these figures are obviously inflated.<sup>80</sup>

Over time there might be consolidation as clothiers' growing market power, capital, and ability to divert production to dependent clothworkers put great pressure on the independent artisan who was often forced to work for clothiers to make a living.<sup>81</sup> Suffolk and Essex weavers complained in 1539 that clothiers had looms in their own homes, employed their own weavers and fullers, and were pricing their cloths so low that it forced weavers to become clothiers' servants.<sup>82</sup> In 1555 clothiers were restricted to a



single loom, and weavers to two looms, which prevented any further development of a rural factory system and favoured the small independent weaver.<sup>83</sup>

### III

The advantage of all the leading clothiers was their reputation, network of buyers, and the capital needed to deliver cloth to London and extend credit. Perhaps the best example is the relationship between Newbury clothiers and the London mercer Thomas Gresham as he was prepared to buy 6,000 kerseys annually from a small number of clothiers.<sup>84</sup> The cloth mark was the clothiers' brand name, and could have considerable value.<sup>85</sup> In 1536 all clothiers and weavers had to mark their cloths, although this had become common practice before then.<sup>86</sup> Capital for investment and managing the business separated the large from small clothiers. Working capital accounted for around half the movable goods of eight surviving clothier probate inventories deposited at the Prerogative Court of Canterbury between 1480 and 1539, valued on average at £541.<sup>87</sup>

Leading clothiers had direct relationships with London merchants, thereby avoiding Blackwell Hall. William Stumpe had his own factor in London.<sup>88</sup> Some clothiers went as far as to join London companies. John Greneway of Tiverton, Devon, joined the London Drapers and the Merchant Adventurers companies while he also shipped cloths from Devon ports, some in his own ship.<sup>89</sup> At least one clothier is known to have personally sold his cloth in European markets. John Sandford, of Stonehouse, Gloucestershire was an exporter of cloth to Germany and had a residence and agency in that city, where he died in 1560 during one of his periodic visits.<sup>90</sup> The accounts of the London draper Thomas Howell in the 1520s and the London mercer Thomas Kytson in the 1530s show that London merchants were buying from a large number of clothiers. Thomas Howell purchased both finished and unfinished broadcloth from Colchester and Denham in Essex, and Hadleigh and Stoke Nayland in Suffolk, as well as cheaper vesses and fine white Glemsfords and Coggeshalls. Thomas Kytson purchased unfinished broadcloths from 109 different clothmen in the small towns and villages of western Wiltshire and eastern Somerset during the 1530s (Table 1).<sup>91</sup> Many suppliers were clothiers he dealt with over a number of years. His largest supplier was John Clevelod of Beckington, a small village in Somerset between Westbury and Trowbridge from whom he bought, on average, 371 cloths a year. Ten clothiers sold him more than one hundred cloths. At the other extreme there were forty-one from whom he bought a pack of ten cloths or less.

The coarser the cloth, the more likely that clothiers would be merchant clothiers instead of complete clothiers. Coarse cloth production had migrated during the fifteenth century to Devon and Cornwall, Wales and northern England, where labour was cheaper and the cloth mostly woven by independent weavers. Merchant clothiers were needed to finish and market the cloth. Late sixteenth century Yorkshire produced coloured dozens and kersey, heavily concentrated in a few key towns, Halifax, Leeds and Wakefield. There were some complete clothiers, but also independent wool dyers and yarnmasters who supplied yarn to weavers, who then sold cloth to merchant clothiers.<sup>92</sup> The business system for cottons and frieze, was different in that clothiers were excluded. Poor weavers, working cloth-by-cloth, week-by-week, sold their cloths to urban drapers who contracted

Table 1  
*Thomas Kytson's purchases of unfinished broadcloths in Somerset and Wiltshire, 1529–39.*

Number of cloths purchased per year	Number of clothmen	Average purchase per year	Total purchases	Per cent of total purchased
More than 101	10	156	1,565	39.8
51–100	15	61	914	23.3
21–50	25	35	865	22.0
11–20	18	17	299	7.6
10 or less	41	7	280	7.1
Total	109	36	3,923	100.0

Sources: C. Brett, 'Thomas Kytson and Wiltshire clothmen, 1529–1539', *Wiltshire Archaeology and Natural History Magazine*, 97 (2004), 29–52 (39–40); C. Brett, 'Thomas Kytson and Somerset clothmen, 1529–1539', *Somerset Archaeology and Natural History*, 143 (1999), 35–62 (38–9).

for the specialised finishing they required, and then bought wool for next week's work. Welsh cottons were taken to March towns, especially Shrewsbury, while in the sixteenth century Manchester and Bolton became finishing centres for Cheshire and Lancashire cottons and frieze. An act in 1565 regulated Shrewsbury's drapers and cloth finishers.<sup>93</sup> Shrewsbury specialised in cottons, 'plains bought on Monday being cottoned and on the road to London by Wednesday'.<sup>94</sup>

#### IV

Clothiers' rise was staggered as individual regions responded to the need for specific cloths. It began in the West Country, which by the end of the fourteenth century accounted for half of the country's quality cloth production, followed by Suffolk/Essex in the later fifteenth, and Kent and Newbury in the early sixteenth centuries.<sup>95</sup> West Country success was probably a function of several factors: proximity to Bristol, which exported, on average, higher quality cloth than eastern ports; fine Cotswolds wool; early dispersion of the broadloom; small-scale agriculture that provided low cost labour; and its rural fulling mills.<sup>96</sup> Among the first complete clothiers may have been Thomas and John Prysshton, from Pensford, Somerset who took 795 and 570 dozens respectively to the alnager in 1395–6 to pay the subsidy, which was 20 per cent of Somerset's production.<sup>97</sup> We do not know for sure whether they organised the manufacture of all that cloth, or whether they were local merchants assembling the cloth. However, Pensford was a 'new' village since it was not a taxation unit early in the century and seems to have grown around fulling mills close to a ford on the road to Bristol. Somerset clothmaking was now organized along capitalistic lines, producing broadcloth rather than narrow cloth, and clothiers or local merchants were no longer dependent on Bristol, but were also serving a wider market that included Salisbury, Southampton and London. It may have been that the entrepreneurial Prysshtons, with good mercantile contacts, introduced the broadloom to Pensford, organised spinning, and built a mill. Once the Prysshtons had

passed away, production declined. At this time most rural cloth woven in the countryside was finished in towns. Sussex and Surrey clothmakers, for example, complained in 1391 that fullers were buying Guilford cloth to be fulled elsewhere, which helped urban dyeing and finishing industries, but undermined local fullers.<sup>98</sup>

The best-documented fifteenth-century development of a rural textile industry was at Castle Combe in northern Wiltshire.<sup>99</sup> It was not until Sir John Fastolf inherited the manor in 1409 that a significant cloth industry developed based on his annual purchase of around forty red and white cloths a year for his troops fighting in France. His steward William Worcester, whose notebooks have given us the best description of rural clothmaking in late medieval England, put the manor's industrial success down to Fastolf's half-century tenure. His contributions were not only his cloth purchases, but also the revival of its market, and creation of an annual fair. But above all the greatest benefit was his *laissez-faire* attitude to his tenants, and his maintenance of peace on the manor. Tenants leased land along the By Brook stream, building fulling mills. The clothier William Haynes owned four, one of which cost £30 to rebuild, and his wife's brother, Richard Halwey, three. The clothiers' business was rooted in their fulling mills and dyehouses turning out the red cloth for which the area soon earned a national reputation. Success attracted labour. Richard Halwey had nine employees working for him in 1450, both apprentices and servants. It was possible for Walter Power to come to the area from Ireland, find work as a journeyman, then to establish his own business, employ his own servants and apprentices, buy property and rebuild his house for £100.

Expansion of late fifteenth century West Country clothmaking was closely related to the rapid growth of demand for unfinished cloth at the four annual Brabant fairs at Antwerp and Bergen-op-Zoom, which, by the end of the fifteenth century, may have accounted for 70 per cent of English cloth exports. There is evidence of rising prosperity in Wiltshire by the 1460s, even when exports were depressed.<sup>100</sup> The lynchpin of the clothier's operation was the fulling mill, which he frequently rented on a long-term lease in the sixteenth century, because fulling and tenting were the last processes in the production of white, unfinished cloth.<sup>101</sup> Rents for fulling mills were falling in the first half of the sixteenth century, and at least in Gloucestershire clothiers mostly controlled them.<sup>102</sup> Wiltshire remained the centre of the industry in the sixteenth century followed by Gloucestershire and then Somerset.<sup>103</sup>

Clothiers in Suffolk/Essex, Kent and Newbury capitalised on the opportunity to produce coloured quality cloth, as both trade to southern Europe and the home demand expanded.<sup>104</sup> The low cost of labour and firewood favoured rural dyeing, but the most important advantage was probably woad-dyeing in-the-wool. Proximity to London was critical to gauge the fashion for specific colours. The most successful region was along the Stour and its tributaries that formed the border between Suffolk and Essex; and the Essex rivers Colne, Blackwater and Brain. Suffolk had successfully developed a market for its narrow cloths since the fourteenth century, many of which were dyed. The clothier's accomplishment was to speed up the transition from cheap straits and kersey to high-quality coloured broadcloth, which required better wools, mostly from Lincolnshire, an investment in dyeworks, and upgrading technical skills. The number of independent dyers declined just as Suffolk clothmaking drastically expanded in the second half of

the fifteenth century, suggesting that the leading clothiers brought dyeing in-house.<sup>105</sup> Suffolk seems to be the only area where some urban capital was invested in clothmaking and London merchants themselves became clothiers.<sup>106</sup> Thomas Howell was able to buy blue, yellow, green, red, tawny, violet, russet and blue-brown cloth from Suffolk clothiers in 1527, often in exchange for wool, but he was also buying white cloth that he had dyed and finished in London.<sup>107</sup> It may have been that Suffolk clothiers were able to offer coloured cloth for almost the price of quality unfinished western whites by using cheaper wools, mainly from Lincolnshire.<sup>108</sup> Many coloured broadcloths were priced around £3 in the later 1520s, and vesses around £2 15s, which was close to the £2 18s 10d that Sir Thomas Kytson paid for his Wiltshire unfinished whites in 1529–30.<sup>109</sup> A 1565 act required that all exported Suffolk and Kentish cloth was to be finished, and therefore dyed.<sup>110</sup> In practice Suffolk cloth was mostly dyed blue and then redyed on the continent.<sup>111</sup>

There were two other Suffolk/Essex cloths that further illustrate clothiers' ability to specialise. The first was coloured cloths called vesses, originally of much lower quality and produced to less exacting standards, but by the 1520s priced just below standard broadcloth.<sup>112</sup> While coloured cloth dominated, fine white cloth was made in the western villages of Glemsford, Cavendish, Coggeshall, Bocking and Braintree. In terms of quality these were superfine cloths with rock-spun warps, comparable in quality to those made in Worcester and the Kentish Weald.<sup>113</sup>

Kentish clothiers specialised in higher quality coloured long cloth up to forty yards, while also producing some standard cloths and vesses. Long cloths in Stephen Draner's 1539 inventory were three times as expensive than the £3 3s 10d paid by Thomas Kytson for standard white cloths in 1538–9: there were two brown-blues at £10 a cloth and another two fine brown-blues at £15.<sup>114</sup> The strategy seems to have been to produce coloured cloth equivalent in quality to long white Worcesters, but to offer a wide and expanding range of colours as the breadth of the colour palette broadened with subtle shade differences in greys and browns.<sup>115</sup> Wealden production is estimated to have been around 13–14,000 cloths, equivalent to almost 10 per cent of the export market by the 1560s, so they found a market for dyed finished cloth at Antwerp.<sup>116</sup> Clothiers totally dominated clothmaking because they had the capital to dye wools.<sup>117</sup> Eighty of the 241 dyeing fines resulting from the 1549 cloth act that regulated fraudulent dyeing practices, and exacted in London from 1554 to 1585, were paid by Kent clothiers.<sup>118</sup> Another distinction of Kent clothiers was that they, only occasionally, owned fulling mills. It has been estimated that ten to fifteen mills were sufficient to full all the cloths, so cloth was taken to a few large-scale mills, probably overshot mills.<sup>119</sup> As a result much of the finest cloth was sheared and pressed in London.<sup>120</sup>

Lastly there was a cluster of Newbury clothiers making coloured kersey early in the sixteenth century: they were innovators because kersey was, exclusively, a rural cloth.<sup>121</sup> It was probably John Winchcombe I who established the town's reputation, although we know little about him. He died in 1519 but it must have been his success that accounted for his son's great wealth assessed in 1522.<sup>122</sup> John Winchcombe II and Thomas Dolman built on their fathers' work, as they and several others produced an estimated 9,000 high-quality coloured kerses annually in the late 1540s.<sup>123</sup> They used wool from their

own sheep, as well as wool purchased mostly in Berkshire, owned dyehouses, fulling mills and tenter grounds. They dyed and combed the wool in their own warehouses, put the wool out for spinning, probably wove some of the kerseys in-house as well as put the wool out to weavers whose production they dominated, fulled the cloth either in their own mills or those they controlled, and then finished the kerseys themselves. Such were the reputation of Winchcombe and Dolman kerseys that their production seems to have been mostly bought by a few domestic and alien merchants, among them Thomas Gresham in the 1540s, for sale in Antwerp, and they were sometimes paid in advance.<sup>124</sup> Thomas Cromwell purchased 1,000 Winchcombe kerseys in 1539.<sup>125</sup> From 1538 to 1544 the Antwerp commission agents, van der Molen, paid 38–48s for Winchcombe kerseys from around Newbury, 36–8s for 'broom and two keys' marked kerseys, and 6–8s less for northern kerseys.<sup>126</sup> As in Suffolk many kerseys were dyed blue to be redyed on the continent, but there were also many reds.<sup>127</sup>

Clothiers that sold cheaper cloths were less wealthy and were rarely complete clothiers as they sold less distinctive cloth that required lower level skills. In Yorkshire there were a few large complete clothiers who operated in much the same way as those in the West Country or Suffolk, but most were small farmers who also made a dozen every week, purchased the wool from wooldrivers, spun it with family members and then took the woven cloth to fairs and markets.<sup>128</sup> Merchant clothiers then sent the cloth to London, either to Blackwell Hall or at a booth they rented at the annual St Bartholemew's fair.<sup>129</sup> However, as the exports of coloured northern dozens and kersey rose, clothiers probably increased their control over production, investing in dyehouses as did the Leeds clothier John Pawsome in 1576.<sup>130</sup> Similarly Devon clothiers purchased narrow cloths from small-scale independent weavers and fullers.<sup>131</sup> Welsh cotton weavers mostly bought their wool in local markets, spun it and wove it themselves and then returned to the same markets to sell their inconsistent lengths of cloth and buy more wool.<sup>132</sup> Kersey clothiers in the Weald were both dyeing their own wool, weaving the cloth, taking it to the local mill, and then having it finished by shearmen.<sup>133</sup>

The success of rural clothiers was not lost on clothmakers in towns who could see the benefits of controlling the total production system.<sup>134</sup> In both Reading and Worcester, the two most successful sixteenth-century cloth towns, clothiers were operating side-by-side with independent clothworkers. At York there are references to mercers and drapers who left money to their dyers, fullers, spinners and weavers.<sup>135</sup> In 1439, the York merchant, Thomas Clynt left money to fullers in both York and Tadcaster, and to spinners and dyers, both in York and its suburbs, and Thomas Curtas remembered fullers and weavers at Stamford Bridge in 1461.<sup>136</sup> The Salisbury weaver William Cuff in 1500 had a wool house, spinning house, yarn house, weaving house and warehouse for finished cloth.<sup>137</sup> At Colchester by the end of the fifteenth century production was in the hands of a few clothmakers who appeared to be involved at all stages of the production process.<sup>138</sup>

## V

After 1550, clothiers' investment in production became less attractive as a result of government regulation to control clothiers, and increased price competition from cheaper

broadcloth, kersey and new draperies. Success attracted regulation. The first clothier act was in 1512, which set rules for clothiers as they dealt with spinners, weavers and fullers, and this was expanded in the 1514 cloth act.<sup>139</sup> There was evidence of concentration in the industry as early as the 1520s. In 1525, when the proposed Amicable Grant taxation met with stirrings of rebellion at a time when many clothworkers were unemployed, the Dukes of Norfolk and Suffolk summoned the leading Suffolk clothiers, including Thomas Spring, to pacify clothworkers.<sup>140</sup> Three years later, when the slowdown in the cloth trade created unemployment in March 1528, the Duke of Norfolk met with forty leading clothiers at Nayland, Suffolk to see if they would continue production.<sup>141</sup> In May, clothiers complained that they could not sell their cloth, nor could they find the oil necessary to spin their wools.<sup>142</sup> In 1536, Kent weavers, obviously under pressure from encroaching clothiers, petitioned that clothiers be limited to one loom to make coloured cloth, and that justices of the peace should settle grievances between weavers and clothiers.<sup>143</sup>

Collapse of the Antwerp market in 1550 cemented opposition to clothiers' increasing influence as towns complained about their loss of industry, independent clothworkers their loss of work and independence, and government was convinced that pasture should be returned to arable to feed a growing population and avoid civil strife when harvests failed. The 1552 cloth act, revised in 1557–8, set stricter weight and size standards that could be more effectively enforced. The act also stated that drapers or clothiers could only practice if they were licensed by justices of the peace, or their cloths would be forfeit.<sup>144</sup> Another act from the same parliamentary session restricted the weaving of woollen cloth to those who had been apprenticed to making or weaving broadcloth for seven years.<sup>145</sup> In 1553, legislation removed any impediments to urban clothmaking, perhaps an inducement for clothiers to move to towns.<sup>146</sup> The following year clothiers operating outside a city, borough or market town were prevented from owning more than one loom, or benefit from looms set up elsewhere; and weavers were restricted to two looms and apprentices.<sup>147</sup> Those wanting to be clothiers had to set up in towns, unless they lived in Yorkshire, Cumberland, Northumberland and Westmoreland.

The second half of the century was far more difficult for clothiers than the first as they found it more difficult to make the high profits that innovation and rapid growth had made possible a century before.<sup>148</sup> English cloth became more expensive in overseas markets as export duties rose in 1558 and the currency was strengthened.<sup>149</sup> Exports remained below mid-century peak levels for the remainder of the century. Clothiers could no longer play off the Hanse and other alien merchants against merchant venturers, complete clothiers were under pressure from cheaper Yorkshire dozens, and fashion was moving to lighter, cheaper new draperies. Searching clothiers' cloth under the cloth acts produced considerable fines of clothiers' fraudulent cloth.<sup>150</sup> As of 1565, Suffolk and Kentish cloth for export had to be finished.<sup>151</sup> Perhaps the only change that favoured clothiers, at least those making coloured cloth, was that local woad production, almost negligible at mid-century, had replaced imports by the end of the century.<sup>152</sup>

A comparison can be made between the textile trades in two highly-developed clothworking areas: Suffolk's Babergh Hundred in 1522, which included Lavenham, Long Melford and Nayland at the height of their prosperity, and Gloucestershire's clothmaking

Table 2

*Clothworking employment in the woollen industry: Suffolk Babergh Hundred in 1522, Gloucestershire in 1608, and Cranbrook in 1653–61.*

	Clothiers	Weavers	Dyers	Fullers	Shearmen	Total
1522 Suffolk, Babergh Hundred	119 (38)	112 (36)	13 (4)	41 (13)	27 (9)	312 (100)
1608 Glouc. Stroudwater	64 (9)	492 (67)	15 (2)	168 (23)		739 (100)
1608, Glouc. Dursley	37 (11)	237(72)	5 (2)	49 (15)		328 (100)
1608, Glouc. Little Avon	48 (10)	351 (75)	6 (1)	62 (13)	2 (1)	468 (100)
1653–61 Cranbrook	50 (38)	77 (58)	3 (2)	1 (1)		131 (100)

Sources: J. Pound, *The Military Survey of 1522 for Babergh Hundred*, Suffolk Record Society (1986), App. E; J. Tann, *Wool and Water: The Gloucestershire Woollen Industry and its Mills* (Stroud, 2012), pp. 1–5; M. Zell, *Industry in the Countryside: Wealden Society in the Sixteenth Century* (Cambridge, 1995), p. 121.

regions over eighty years later (Table 2). In both districts, we have occupational statistics for the bulk of the adult male working population, the Suffolk survey of all those with goods worth £4 plus all those paid wages, the Gloucestershire returns are for those deemed fit to fight in the wars.<sup>153</sup> Suffolk clothiers clearly controlled production as their average moveable wealth was £97 16s 9d, compared with weavers at £2 14s 2d. For comparison, a list of mid-seventeenth-century Cranbrook occupations taken from the marriage register show the continued dominance of clothiers, and the low number of fullers.

West Country unfinished broadcloth had been evolving from the late fourteenth century, the great expansion along the Stroudwater had taken place in the late fifteenth century, and it had become a generic product with well-established distribution networks.<sup>154</sup> There was still some value for clothiers' control over the whole production process in terms of consistency and reputation, and the capital they could employ, but less than a century before. Weavers could buy wool from woolbrogers or yarn from yarnmasters as well as from clothiers.<sup>155</sup> It seems that many West Country clothiers no longer found it worthwhile to make unfinished cloth as clothiers in Gloucestershire in 1608 were only around 10 per cent of clothworkers. It became more typical for the clothier who dealt in unfinished cloth to buy cloth from the weaver and full it at their own mills. Kerridge has noted that clothiers put much of the spinning out to capital farmers rather than organise it themselves.<sup>156</sup> There continued to be a few complete clothiers but many in effect reverted to become merchant clothiers using their capital to expand the number of cloths they sold, using factors to sell cloths at Blackwell Hall.<sup>157</sup> For the quality kersey and coloured broadcloth clothier who worked with dyed wool, there remained an advantage to control yarn preparation.<sup>158</sup> Rural clothmaking continued to respond to changes in consumer demand and technology and merchant clothiers continued to market rural cloth, but the profits from investment in production processes diminished after 1550.

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## Notes

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12. J. Oldland, 'The Expansion of London's Overseas Trade from 1475 to 1520', in C. M. Barron and A. F. Sutton, eds, *The Medieval Merchant* (Donington, 2014), p. 87.
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14. Broadberry et al., *British Economic Growth*, pp. 117, 132, 194. This estimate is based on assuming the agricultural sector to have accounted in 1381 for 45.5 per cent of output, industry 28.8 per cent and services 25.7 per cent. Mutton and wool in 1350 accounted for

- 30.9 per cent of agricultural output, or 15.8 per cent of the economy. Textiles were 40 per cent of industry in the early eighteenth century. Using this figure, textiles would have made up 11.6 per cent of the economy. Distribution and transport is estimated to have been 15 per cent of the service economy, or 4 per cent of the total economy. Raising sheep and production, distribution and sale of textiles therefore accounts for 31.8 per cent of the economy. Given the rapid expansion of early sixteenth century, sheep farming and cloth production may well have been more than a third of the economy.
15. Ibid., p. 404.
  16. This terminology has been adopted from Kerridge. See Kerridge, *Textile Manufactures*, pp. 176–96.
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  18. Dozens were half-broadcloths, kersey and straits were a yard wide, broadcloth was 1¼ yards wide, frieze and cottons were ¾ yards wide. The northern counties were expressly excluded from the 1555 act that aimed to regulate and limit clothiers, *Statutes of the Realm* (hereafter Statutes), 2&3 Ph. & Mary, c. 11. For clothiers in Yorkshire, see Heaton, *Yorkshire*, pp. 88–101.
  19. The National Archives, Kew (TNA) E 154/2/22.
  20. British Library, Lansdowne (BL), Ms., 114/27; TNA SP 253/122. There is an estimate for the 1570s or 1580s that 200,000 broadcloths, 40,000 kerseys, 10,000 dozens and 20,000 bayes were produced. In 1594–5 London exports included 168,065 cottons.
  21. J. Munro, 'The "Industrial Crisis" of the English Textile Towns, c. 1290–c. 1330', in J. Prestwich, R. Britnell and R. Frame, eds, *Thirteenth Century England, Vol. VII* (Woodbridge, 1999), pp. 103–42 (pp. 119–21, 131–3); E. Miller and J. Hatcher, *Medieval England: Towns, Commerce and Crafts 1086–1348* (London, 1995), pp. 212–15.
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46. Carus-Wilson, *Woollen Industry before 1550*, p. 139; H. Bradley, ed., *The Views of the Hosts of Alien Merchants 1440–1444*, London Record Society (2012); Oldland 'Variety and quality', 248.
47. Oldland, 'Variety and quality', 249.
48. J. Munro, 'Spanish merino wools and the *nouvelles* draperies: an industrial transformation in the late medieval Low Countries', *Economic History Review*, 58 (2005), 453.
49. *Ibid.*, 466–70.
50. Oldland, 'Wool and cloth production', 35–8.
51. Munro, 'Medieval Woollens: Struggles', pp. 288–91.
52. M. Zell, 'Credit in the pre-industrial English woollen industry', *Economic History Review*, 49 (1996), 670–2; C. Briggs, 'The availability of credit in the English countryside, 1400–1480', *Agricultural History Review*, 56 (2008), 129–41; J. Bolton, 'Was there a "crisis of credit" in fifteenth-century England?', *British Numismatic Journal*, 81 (2011), 160–2; M. C. Allen, *Mints and Money in Medieval England* (Cambridge, 2012), 336–43; C. Briggs, 'Money and

- rural credit in the later Middle Ages revisited', in Allen and Coffman, eds, *Money, Prices and Wages*, pp. 129–41. The latest estimates of currency in circulation are £1.42–2.39 million in 1377, falling to £0.75–0.95 million in 1470, and then rising to £1–1.5 million in 1544.
53. J. Oldland, 'The allocation of merchant capital in early Tudor London', *Economic History Review*, 63 (2010), p. 1062.
  54. Zell, 'Credit', 672–3.
  55. If the cloth was foot fulled, burling was carried out after the cloth had been cleansed but before it was fulled. Mechanical fulling both cleansed and compressed the cloth, with burling after fulling.
  56. The perch was a wooden bar, or frame of two parallel bars. If there were any unevenness in the fulling, then the cloth was probably beaten while on the perch. Wet shearing with teasels could probably be done either over the perch or when the cloth was on the tenter.
  57. Bickley, ed., *Little Red Book*, pp. 10–16.
  58. Carus-Wilson, 'Evidences of industrial growth', 189–205; Carus-Wilson, *Woollen Industry before 1550*, pp. 133–7; J. E. Pilgrim, 'The Cloth Industry in East Anglia', in J. Graint Jenkins, ed., *The Wool Textile Industry in Great Britain* (London, 1972), p. 255; J. Langdon, *Mills in the Medieval Economy, England 1300–1540* (Oxford, 2004), p. 233.
  59. D. Peacock, 'The Winchcombe Family and the Woollen Industry in Sixteenth-Century Newbury' (unpublished PhD thesis, University of Reading, 2003), pp. 270–5.
  60. G. D. Ramsay, *The English Woollen Industry, 1500–1750* (London, 1982), pp. 24–5.
  61. Several clothiers' inventories include wool inventories: Robert Rychards of Dursley, Gloucester in 1480 (TNA PCC, Prob.2/9); John Reygnam of Nayland, Suffolk (TNA PCC, Prob.2/87); Walter Coopar of Boxford, Suffolk in 1497 (TNA PCC, Prob.2/94); John Scoten of Nayland, Suffolk in 1539 (TNA PCC, Prob.2/233); Robert Reynold of Glemsford, Suffolk in 1557 (TNA PCC, Prob.2/288).
  62. D. Dymond and A. Betterton, *Lavenham: 700 Years of Textile Making* (Bury St Edmunds, 1982), p. 68; TNA PCC, Prob. 2/525.
  63. Muldrew, 'Th' ancient distaff', 502–4.
  64. Historical Manuscripts Commission (HMC), *Manuscripts of Lord Kenyon*, 14<sup>th</sup> Report, Appendix Part 4 (1894), pp. 572–3.
  65. C. Jackson, ed., *Newbury Kendrick Workhouse Records 1627–1641*, Berkshire Record Society, 8 (2004), pp. xxxiii–xxxiv, lx.
  66. Kerridge assumes that all sixteenth-century West Country broadcloth was wheel spun. See Kerridge, *Textile Manufactures*, p. 14.
  67. Chorley, 'Evolution of the Woollen', pp. 22–3.
  68. Munro, 'Medieval woollens: Textiles', pp. 202–3.
  69. H. Van der Wee, 'The Western European Woollen Industries, 1500–1750', in Jenkins, ed., *The Cambridge History of Western textiles, Vol. I* (Cambridge, 2003), p. 405.
  70. Hudson and Tingay, eds, *Records of the City of Norwich*, pp. 105–6.
  71. Issue discussed in John Munro's presentation at the International Medieval Congress, Leeds, 2013.
  72. TNA PCC, Prob. 2/10, 57, 97
  73. TNA PCC, Prob. 2/525.
  74. D. Peacock, 'Dyeing Winchcombe kersies and other kersey cloth in sixteenth-century Newbury', *Textile History*, 37 (2006), 187–202. By the mid-sixteenth century, much of the dyed cloth sold was blue, to be redyed later. Lavenham was known for its blue cloth. Of all the 10,855 dyed kersies bought by Thomas Gresham from 1546 to 1549 from clothiers John Winchcombe II, his son Henry Winchcombe, Thomas Dolman I and William Bennet, 77 per cent was in various shades of blue (4,552 watchet, 2,259 blue, 1,350 azure and 192 plunket). The only other colour in any quantity was red (1,241).
  75. J. Hare, 'Commodities: the cloth industry', in M. Hicks, ed., *English Inland Trade, 1430–1540* (Oxford, 2015), pp. 155–6.

76. J. Munro, 'The Medieval Scarlet and the Economics of Sartorial Splendour', in N. B. Harte and K. G. Ponting, eds, *Cloth and Clothing in Medieval Europe* (London, 1983), pp. 33–9; Oldland, 'Finishing of English Woollens', pp. 98–100.
77. TNA PCC, Prob. 2/212.
78. Amor, *From Wool to Cloth*, pp. 142, 197.
79. TNA PCC, Prob. 2/333.
80. Ramsay, *Wiltshire Woollen Industry*, pp. 31–2; Kerridge, *Textile Manufactures*, p. 196; Jackson, 'Boom-time freaks', 149.
81. J. S. Lee, 'Crises in the Late Medieval English Cloth Trade', in A. T. Burns, A. Burn and T. Doherty, eds, *Crises in Economic and Social History* (Woodbridge, 2015), p. 7.
82. J. S. Brewer, J. Gairdner and R. H. Brodie, eds, *Letters and Papers: Foreign and Domestic, of the Reign of Henry VIII (L&P), Vol. XIV* (London, 1862–1932), part 1, # 874; G. Unwin, 'Woollen Cloth – The Old Draperies', in W. Page, ed., VCH: Suffolk, Vol. I (London, 1911), p. 259.
83. *Statutes*, 2&3 Ph. & Mary, c. 11.
84. Mercers Hall, Thomas Gresham Day Book.
85. Ramsay, *Wiltshire Woollen Industry*, pp. 50–2; C. Brett, 'Thomas Kytson and Wiltshire clothmen, 1529–1539', *Wiltshire Archaeology and Natural History Magazine*, 97 (2004), 60–2.
86. *Statutes*, 27 Henry VIII, c. 12.
87. TNA PCC, Prob. 2/10, 57, 87, 94, 174, 220, 233, 525; Oldland, 'Allocation', 1062.
88. Ramsay, *Wiltshire Woollen Industry*, p. 25.
89. E. M. Carus-Wilson, 'The significance of the secular sculptures in the Lane Chapel, Cul-lompton', *Medieval Archaeology*, 1 (1957), 115–16.
90. Perry, 'Gloucestershire', 112.
91. C. Brett, 'Thomas Kytson and Somerset clothmen, 1529–1539', *Somerset Archaeology and Natural History*, 143 (1999), 29–56; Brett, 'Thomas Kytson and Wiltshire clothmen', 35–62.
92. Heaton refers to Yorkshire's poor weavers as clothiers, but their role seems to have been limited to weaving, rather than management of cloth production.
93. *Statutes*, 8 Elizabeth, c. 7.
94. Kerridge, *Textile Manufactures*, p. 177.
95. H. L. Gray, 'The production and exportation of English woollens in the fourteenth century', *English Historical Review*, 39 (1924), 34.
96. J. Thirsk, 'Industries in the Countryside', in F. J. Fisher, ed., *Essays in the Economic and Social History of Tudor and Stuart England* (Cambridge, 1961), pp. 70–88; E. M. Carus-Wilson, 'The Overseas Trade of Bristol in the Fifteenth Century', in Carus-Wilson, *Medieval Merchant Venturers* (London, 1954), pp. 180–9; E. B. Fryde, *Peasants and Landlords in Later Medieval England* (New York, 1996), pp. 87–105; J. Hare, 'Growth and recession in the fifteenth-century economy: the Wiltshire textile industry and the countryside', *Economic History Review*, 52 (1999), 3–5.
97. J. Hare, 'Pensford and the growth of the cloth industry in late medieval Somerset', *Somerset Archaeology and Natural History*, 147 (2004), 174–7.
98. A. R. Bridbury, *Medieval English Clothmaking* (London, 1982), p. 77.
99. Carus-Wilson, 'Evidences of industrial growth', 195–205.
100. Carus-Wilson, *Woollen Industry before 1550*, pp. 133–4.
101. *Ibid.*, p. 116; Langdon, *Mills*, pp. 40–56, 220; Tann, *Wool and Water*, pp. 23–6.
102. Langdon, *Mills*, p. 224; Tann, *Wool and Water*, p. 21.
103. Fines levied in London from 1550 to 1585 for faults under the cloth acts may be an indication of relative county production. There were 702 infractions from Wiltshire, 626 in Suffolk, 429 in Gloucestershire and 116 in Somerset.
104. The catalyst for growth was both the increase in London tailoring and drapery, and the growth in the Spanish trade, as Spanish merchants were taxed as denizens between 1466 and 1489.

105. Amor, *From Wool to Cloth*, p. 179.
106. N. R. Amor, 'Merchant adventurer or jack of all trades? The Suffolk clothier in the 1460s', *Proceedings of the Suffolk Institute of Archaeology*, 20 (2004), 425–7.
107. Drapers Hall, London, Thomas Howell ledger, fols 39v–64v.
108. In the 1552 act short Suffolks were 23–5 yards long and weighed 1.48 lb/per sq. yd, compared with Wiltshire whites at 26–8 yards and weighed 1.32 lb/sq. yd, but they both weighed 64 lb; see *Statutes*, 5&6 Edward VI, c. 6.
109. Drapers Hall, Thomas Howell ledger; Brett, 'Thomas Kytson and Wiltshire clothmen', 42.
110. *Statutes*, 8 Eliz. c. 6.
111. BL, Cotton Ms. Titus B V, fol. 314; Unwin, 'Woollen Cloth', p. 279.
112. Kerridge, *Textile Manufactures*, p. 17. The 1483 cloth act specifically excluded all cloths valued at forty shillings or less, including vesses, and were therefore not subject to the same finishing standards set for quality broadcloth and kersey. In 1522, Suffolk vesses were specifically exempted from the 1514 law that finished broadcloth was not to shrink more than a yard. In 1535, vesses were exempted from the law that required weavers to weave their mark into the cloth.
113. Pilgrim, 'East Anglia', p. 255; *Statutes*, 4&5 Ph. & Mary, c. 5.
114. Brett, 'Thomas Kytson and Wiltshire clothmen', 42; TNA, Prob. 2/525. In 1548, Thomas Gresham was buying long, white Worcesters for between £6 and £10 in 1548; see Mercers Hall, London, Thomas Gresham Day Book.
115. *Ibid.*, p. 163. There were twenty-one colour shades approved in the 1552 act; see *Statutes*, 5&6 Ed. VI, c. 6.
116. Zell, *Industry in the Countryside*, p. 158. John Broke, the London mercer's 1532 inventory included fine, dyed Kent cloths at Antwerp; see Devon Record Office, 312M, FY/64.
117. Zell, *Industry in the Countryside*, pp. 165, 209.
118. *Statutes*, 3&4 Ed. VI, c. 2; TNA E 159/329, 330, 331, 335, 337, 338, 339, 350, 355, 357, 359, 360, 361, 363, 366, 368, 370, 371, 375, 376, 378, 380, 381, 384, 387, 389, 390.
119. Zell, *Industry in the Countryside*, pp. 179–81.
120. *Ibid.*, pp. 182–3.
121. Newbury had been an important clothmaking town producing dyed kersey from at least 1460s, and some of its most important citizens were involved in clothmaking. See M. Yates, *Town and Countryside in Western Berkshire, c. 1327–c. 1600* (Woodbridge, 2007), pp. 83–7. There were a small interwoven group of clothiers, fullers and dyers that supervised others' wills, and their apprentices became clothiers when their masters died.
122. *Ibid.*, p. 91.
123. Peacock, 'Winchcombe Family', p. 26.
124. *Ibid.*, pp. 29–68, 91, 151–85.
125. TNA SP/1, p. 143.
126. F. Edler, 'Winchcombe kerseys in Antwerp (1538–44)', *Economic History Review*, 7 (1936), 58
127. Peacock, 'Winchcombe Family', pp. 187–202.
128. *Statutes*, 2&3 Ph. & Mary, c. 13; Heaton, *Yorkshire*, pp. 93–101; Lee, 'Crises', pp. 333–4.
129. Heaton, *Yorkshire*, pp. 146–8.
130. *Ibid.*, pp. 97–8.
131. M. R. Gay, 'Aspects of Elizabethan Apprenticeship', in A. H. Cole, A. L. Dunham and H. S. B. Gras, eds, *Facts and Factors in Economic History: Articles by Former students of Edwin Francis Gay* (New York, 1932), pp. 145–7.
132. BL, Cotton Ms, Titus B, v, fol. 242.
133. Zell, *Industry in the Countryside*, pp. 169, 183–8.
134. C. Jackson, 'The Berkshire Woollen Industry, 1500–1650' (unpublished PhD thesis, University of Reading, 1993), pp. 40–1; Dyer, *Worcester*, pp. 99–100.



135. D. Palliser, *Tudor York* (Oxford, 1979), p. 149; H. Swanson, *Medieval Artisans* (Oxford, 1989), p. 31.
136. J. Kermodé, 'Merchants, overseas trade, and urban decline: York, Beverley and Hull c. 1380–1500', *Northern History*, 23 (1987), 59.
137. TNA PCC, Prob. 2/174.
138. Britnell, *Growth and Decline in Colchester*, pp. 184–5.
139. *Statutes*, 3 Henry VIII, c. 6; *Statutes*, 6 Henry VIII, c. 9.
140. E. Hall, *The Union of the Two Noble and Illustre Families of Lancastre and Yorke* (London, 1809), pp. 699–700; *L&P, Vol. IV*, pt. 1, # 1323, 1329, 1343.
141. *L&P, Vol. IV*, pt. 2, # 4044.
142. *L&P, Vol. IV*, pt. 2, #, 4239.
143. *L&P, Vol. XI*, # 520; BL, Cotton Ms. Titus B 1, fol. 197.
144. *Statutes*, 5&6 Ed. VI, c. 6.
145. *Statutes*, 5&6 Ed. VI, c. 8. This was repealed early in Mary's reign, *Statutes*, 1 Mary, c. 7.
146. *Statutes*, 1 Mary, c. 7.
147. *Statutes*, 2&3 Ph. & Mary, c. 11.
148. Ramsay, *Wiltshire Woollen Industry*, pp. 24–5.
149. Rates were raised for denizens from 14d to 80d.
150. G. D. Ramsay, 'The distribution of the cloth industry in 1561–2', *English Historical Review*, 57 (1942), 361–9.
151. *Statutes*, 8 Elizabeth, c. 7.
152. L. Stone, 'Elizabethan overseas trade', *Economic History Review*, 2<sup>nd</sup> ser., 2 (1949), 46–7.
153. J. Pound, *The Military Survey of 1522 for Babergh Hundred*, Suffolk Record Society (1986); Perry, 'Gloucestershire', 81.
154. Carus-Wilson, 'Evidences of industrial growth', 191–7.
155. K. G. Ponting, *The Woollen Industry of South-West England* (London, 1957), p. 26; Ramsay, *English Woollen Industry*, p. 21.
156. Kerridge, *Textile Manufactures*, pp. 202–3.
157. G. D. Ramsay, *The City of London in International Politics at the Accession of Elizabeth Tudor* (Manchester, 1975), pp. 39–40.
158. Kerridge, *Textile Manufactures*, pp. 198, 203.