Wool-Price Schedules and the Qualities of English Wools in the Later Middle Ages c. 1270–1499¹

by J. H. MUNRO

ALTHOUGH MEDIEVAL England — and Wales — were justly famous for producing Europe's finest wools, they exported a wide variety of other wools as well, indeed some of quite mediocre quality. Variations in the quality of medieval wools have been attributed to differing combinations of flock management, sheep breeding, and environmental conditions — chiefly climate, temperature range, and type of pasture — that together fashioned the essential determinants of fineness: length of staple, serrations of the fibre, and diameter. In general, *ceteris paribus*, the conditions that most effectively fostered the growth of short, thin, highly serrated, and thus of the finest wools in the better breeds were relatively sparse feeding and chilly, moist, yet moderate climates. But even the wools of an individual fleece varied in their staple lengths and degrees of fineness; and even though the sheep of medieval England were predominantly short to medium woolled, probably less than a majority had wools of truly first-class, luxury quality.²

The very wide variations in medieval English wool prices and qualities, from the gold to the dross, can now be appreciated from the tables and histograms of Terence H. Lloyd's brilliant and invaluable *Movement of Wool Prices in Medieval England* (1973). The main set of tables contains price-means for eighteen English regions from 1209 to 1500; and they are a vast improvement over J. E. Thorold Rogers' 'homogenized' prices, and more useful than Peter Bowden's Durham-based price-means.³ In an appendix Lloyd has also presented six wool-price schedules, dating from 1294 to about 1475. They contain from 36 to 51 regional wool types, listed in the first two schedules by religious houses and in the following four by county and district. His appendix provides, however, only a selection of prices from the longest schedule (by Pegolotti) and omits at least three other pre-1500 schedules.

Historians have long known about the first of these lists (c. 1270), but have not utilized it because of several difficulties that its manuscripts pose, particularly the interpretation of the prices. The second (1357), though published in 1905, has suffered a curious and quite undeserved neglect, receiving only a brief mention by Unwin, Power, and most recently Lloyd (in a subsequent publication). The third (1499) is a list that I myself found quite by chance in a collection of miscellaneous documents deposited in the Chambre de Comptes (Rekenkamer) of the Archives Générales du Royaume, in Brussels, Belgium. To the best of my knowledge, this document has never been discussed, let alone published.⁴

Once deciphered, this last list appears to be a representation of actual wool prices at the Calais Staple. I therefore decided to make statistical comparisons with the other two fifteenth-century schedules, utilizing linear (Pearson) and rank (Spearman, Kendall) correlation techniques and regression analyses. Greatly encouraged by the results, I then proceeded to make similar statistical comparisons of the earlier schedules. The results

J. H. MUNRO 119

varied considerably, but only one of the schedules (1343) failed to meet the tests of reliability established by these correlation techniques.⁵ As illuminating as these statistical analyses proved to be, I saw no point in publishing these findings — which now must await another article — until the historical circumstances and purposes of all nine schedules had been fully investigated.

A comprehensive, detailed examination of the schedules had clearly been beyond the scope of Lloyd's study. Certainly nobody else had yet attempted this onerous task. In fact explanations have been provided for only a few of these schedules. Even these merit a fresh examination because historians still disagree strongly about the purpose of these schedules, and their relative usefulness in representing the true range of English wool prices, the ranking of wool qualities, and the importance of the various counties or districts as wool producers. Historians still dispute, furthermore, whether the obvious differences in the rankings of wool prices reflect changes in the nature of wool production from the thirteenth to fifteenth centuries or defects - perhaps deliberate deceit — in the schedules themselves. To accept the schedules uncritically or to reject them all out of hand would be equally unfortunate in view of their potentially great significance for England's commercial, industrial, fiscal, and constitutional histories. This study cannot promise to resolve all questions about the nine schedules, but it may provide a more objective assessment of their relative merits and shortcomings. Limitations of time and space preclude any examination of the sixteenth-century schedules (1536, 1582) or of any subsequent lists, which also involve a different set of problems, in modern economic history.6

I. The Douai Schedule, c. 1270

The earliest known price schedule, and the first of those not included in Lloyd's appendix, is a Walloon-Flemish document entitled 'Che Sunt Chi les Abeies d'Engletiere et Ke Leur Lainnes Valent au Mains', which historians have variously dated from about 1250 to 1300.7 It contains 104 names that, by eliminating probable duplications, may be reduced to 95 wool-selling abbeys and hospitals: 83 in England, 7 in Wales, and 5 in Scotland. Of the six religious orders represented, the Cistercians predominate decisively, with 64 or just over two-thirds of the houses. A distant second are the Gilbertines, accounting for 10; the Augustinian Canons are represented by 8; the Premonstratensians by 7; the Benedictines by 4; and the Carthusians by just I. The one house without an identifiable order is possibly a Salisbury hospital.⁸ All but six of these institutions reappear in one or both of the two subsequent schedules, dating from the late thirteenth and possibly the early fourteenth centuries, suggesting a considerable continuity of producers for the wool market.⁹ The fact that the Carthusian order is represented by only one house in this list and by no house at all in the two subsequent lists may cast doubts upon the identification of *Chartrouse* as Witham Charterhouse. But Witham is well documented as a sheep-raising, wool-selling abbey; and only one other Carthusian house (Hinton, also in Somerset) was founded before the next two schedules were drawn up.10

Lloyd's reason for omitting this schedule is that 'it gives prices for only a few houses' of those listed.¹¹ Furthermore, the authorship and purpose of the list are as uncertain as the dating; and the prices are given in an unspecified money-of-account. Nevertheless,

while prices are given for only 54% of the monasteries, the 54 prices for 51 houses in 28 counties still represent a very respectable total and geographic coverage.¹² The monastic representation itself, however, is very highly skewed. As Table 3 indicates, the Cistercians account for 80% of the prices listed.

Secondly, the unique location of the schedule's two copies in the Douai municipal archives and its Picard-Walloon dialect leave little doubt that it was composed by or for merchants of that town, which was perhaps the leading textile producer in thirteenthcentury Flanders. As a co-founder with Ypres in 1261 of a five-town 'hanse' or commercial alliance at the Northampton Fairs - a precursor of the famous Flemish Hanse of London — Douai also exercised a strong influence over those Flemish merchants who collectively dominated the English wool trade up to the 1270s.¹³ The early 1270s is also the most likely period in which this schedule was composed, even though its definitive editor, Georges Espinas, and others have assigned the earlier date of 1250.¹⁴ If the abbey named Dorenhalline in the schedule is in fact the Cistercian house of Darnhall in Cheshire, the earliest possible date is 1266, when the abbey received its founding grant, and the latest is 1281, when it was transferred to Vale Royal in Cheshire. Even more precise limits are provided by the lack of any recorded activity at Darnhall until 1270-1 and by the termination of both the Douai registers containing this schedule 'about 1270-5'.¹⁵ As luck would have it, the Close Rolls have preserved an indenture that attests to Darnhall's immediate importance as a wool-seller to the Low Countries: a *lettre cirographe* of 8 November 1275, verifying abbot John's agreement to sell 12 sacks of 'good prepared wools', at £6 sterling a sack, to merchants of Cambrai, a Walloon town 25 kilometres from Douai.16

If the schedule was composed in this period, it may have been related to the Anglo-Flemish conflict that began in August 1270, when Countess Margaret confiscated the goods of English merchants in Flanders. Though the English may well have provoked the conflict by failing to pay a promised fief-rente to Margaret for several years and by various harassments of Flemish merchants, King Henry III responded as the injured party. He ordered the seizure of Flemish goods, banned wool exports to Flanders, and encouraged a piracy war that lasted until July 1274, when their sons Edward I (now king) and Guy de Dampierre agreed upon a truce at Montrueil-sur-Mer.¹⁷ It stipulated compensation for all merchants whose goods were seized or stolen, and established an Anglo-Flemish commission to assess the damages on both sides.¹⁸ The detailed documentation that has survived from the inquest of October 1274 — June 1275 shows that Douai wool merchants — such as the famous Jean Boinebroke, Wautier Pied d'Argent, and Bernard Pilate — figured prominently in these damage claims, some of them against their countess.¹⁹ Thus the Douai wool-price schedule may have been drawn up as an aide-memoire for this inquest.

Finally, the money-of-account problem can be resolved by a notarial chirograph in the Douai archives, dated December 1259, that records a draper's debt of '76 lb. de parisis pour deus sas de Begelande' wool.²⁰ Precisely that same price of 38 lb. a sack for 'Bekelande' or Byland abbey wool is given in the Douai schedule, as presented in Table 1. That 1259 chirograph does not in any way, however, discredit the thesis that the Douai schedule dates from about 1270. For the mean price of wools in 1270 from the one district that supplied Lloyd with data for both years (Hampshire-Wiltshire) was TABLE 1. PRICES OF WOOLS FROM ENGLISH, WELSH, AND SCOTTISH ABBEYS IN LIVRES PARISISAND POUNDS STERLING, LISTED IN THE DOUAI SCHEDULE, AND PRICES OF CORRESPONDINGWOOLS FROM THE EXCHEQUER (1294) AND PEGOLOTTI SCHEDULES, IN POUNDS STERLING

Country and County	Name of Religious House	No. *	Rel. Order +	Douai £ par.	Schedule £, ster.	Exchequer Schedule £, ster.	Pegolotti Schedule £ ster.
ENGLAND							
Bedford	Warden	58	С	34.0	10.625	10.667	10.667
	Woburn	59	С	35.0	10.938	5.333	12.000
Cheshire	Chester,	51		55		0 000	
	S. Werburgh	93	В	35.0	10.938	10.667	—
	Stanlaw	95	С	36.0	11.250	9.333	12.000
Cumberland	Holmcultram	8	С	[38.0 ^a	11.875	11.667	12.000]
Dorset	Forde	73	С	34.0	10.625	11.333	10.000
Essex	Coggeshall	54	С	36.0	11.250	10.333	12.000
	Stratford	55	С	34.0	10.625	9.333	10.000
		99	С	33.0	10.313	[9.333	10.000]
	Tilty	52	С	36.0	11.250	9.000	11.667
	Waltham	100	A	28.0	8.750	6.000	7.333
Hampshire	Beaulieu	30	C	42.0	13.125	13.333	16.000
	Quarr	71	C	31.0	9.688	10.667	13.333
Hereford	Abbey Dore	104	C	39.0 ⁰	12.188	12.000	18.667
	0	86	C	38.0	11.875	[12.000	18.667]
Huntingdon	Sawtrey	91	C	36.0	11.250		10.000
Lancashire	Furness	6	C	34.0	10.625	10.000	12.333
Leicester	Garendon	69	C	36.0	11.250	10.667	12.000
Lincolns.	Bullington	33	G	39.0	12.188	12.000	14.667
	Lincoln, S.		C	. (.			
	Catherines	92	U D	30.0	11.250	12.000	15.000
	Newbo	103	P	33.0	10.313	10.167	10.667
NTa ush ana haa	Revesby	51	C	32.0	10.000	10.007	13.333
lond	Normainstan	-	C				
Nottingham	Dufford	5	Č	33.0	10.313	9.333	11.007
Nottingham	Welbeck	20	D D	33.0	10.313	0.503	7 222
Ovfords	Bruern	2 66	· C	31.0	9.000	TT 222	/•333
Shronshire	Buildwas	70	č	30.0	11.0/5	11.333	10.007
Somerset	Witham	/0	C	33.0	10.930		10.000
Somerser	Charterhouse	78	Ca	24.0	10 625		
Staffords	Dieulacres	64	C	22.0	10.212	0.222	10.667
Surrey	Waverley	56	č	40.0	12.500	12.222	16.667
Warwicks	Stoneleigh	06	č	25.0	10.028	10.333	12.000
Worcester	Bordesley	80	č	26.0	11.250	10.000	12.667
Wiltshire	Stanley	07	č	25.0	10.038	_	12.667
Yorkshire	Bridlington	7/ 18	Ă	31.0	9.688	8.000	9.000
2 STROIME	Byland	16	ĉ	38.0	11.875	8.000	11.667
	Fountains	15	č	40.0	12.500	10.000	14.000
	Guisborough	- J I I	Ă	35.0	10.938	6.333	8.333
	Jervaulx	13	Ċ	34.0	10.625	8.833	11.333
	-	-		~ .	-		

Table 1 continued

County	Name	No.	Ord.	Douai	Schedule	Exchequ	er Pegolotti
	Kirkstall	21	С	38.0	11.875		13.333
	Meaux	23	Ċ	36.0	11.250	8.000	10.000
	Rievaulx	14	С	38.0	11.875	8.667	11.667
	Roche	26	С	38.0	11.875	8.667	11.333
	Sawley	17	С	34.0	10.625	8.333	10.000
	Watton	22	G	34.0	10.625	9.333	11.000
WALES							e.
Flint	Basingwerk	72	С	32.0	10.000	8.667	11.333
Glamorgan	Margam	75	Č	50.0	15.625		11.333
U	Neath	76	С	45.0 ^d	14.063	11.333	11.333 ^e
Monmouth	Grace Dieu	63	С	33.0	10.313		10.667
	Tintern	102	С	45.0 ^f	14.063	13.333	18.667
		83	С	40.0	12.500	[13.333	18.667]
SCOTLAND							
Fife	Culross ^g	I	С	28.0	8.750		10.000
Kirkcudbright	Dundrennan	3	Č	33.0	10.313		12.000
Perth	Coupar Angus	4	С	35.0	10.938		12.333
Roxburgh	Melrose	2	С	35.0	10.938		10.667
Wigtown	Glenluce	10	С	35.0	10.938		12.000
			Number of Prices	Me in £	ean ster.	Standard Deviation	Coefficient of Variation
Douai Sche Exchequer	edule Schedule		54 38	11. 9.	152 822	1.227 1.873	11.01 19.07

* Number of the listing in the Espinas edition

Pegolotti Schedule

	and a set the mounty		aspinas cantion		
+	Religious Order:	A =	Augustinian Canon	B =	Benedictine
	-	C =	Cistercian	Ca =	Carthusian
		G =	Gilbertine	$\mathbf{P} =$	Premonstratensian

49

12.007

2.417

20.13

Notes:

This price was taken from a Douai chirograph of a debt registered in February 1270 (n.s.), since the a. abbey alone was listed in the Douai schedule, without a wool price. For the source, see Table 2, note c. In this table, the Holmcultram prices have not been included in the computations of the means and the standard deviations of the three schedules.

Price omitted from the Dehaisnes' edition (schedule B), and thus from all the other editions based on b. Dehaisnes.

Price taken from the Dehaisnes' edition; omitted from the Espinas edition. A price of $f_{.45}$ was given for both *Neet* (no. 76) and *Niete* (no. 101). Since this was an obvious d. duplication, only one price listing is included in this table.

Pegolotti gave the price of Neath wool as 'quasi vale altrettanto' as the Margam price, 17 marks e. (p. 261).

f. Price omitted from the Dehaisnes' edition (schedule B) and thus from all editions based on Dehaisnes. The Dehaisnes' edition, and all those based on it, gave this price as $f_{.38}$. g.

SOURCE: See Table 4.

only 2.7% higher than the 1259 mean.²¹ In any event the prices in Douai schedule could not possibly be in any other money-of-account than *livres parisis*, which served as the predominant if not exclusive monetary system of reckoning in the northern French provinces. That monetary region included the county of Flanders, until the Flemish asserted their independence after 1297. The rest of France employed the much better known system of *livres tournois*, to which the parisis system was tied by the fixed ratio of $\pounds 4$ parisis: $\pounds 5$ tournois.²² Prices in these two livres, tournois and parisis, may also be converted into English pounds sterling prices, the money-of-account used in all the subsequent schedules, by taking the ratio of the fine silver contents of the two national coinages. From perhaps the twelfth century to 1279, the pound sterling (240*d*.) contained 321.00 grams fine silver; from then to 1335, 319.67 grams. From about 1223 to 1266, the livre parisis contained 101.00 grams fine silver; and from then until Philip IV's debasement of 1295, 99.58 grams. Thus for most of the thirteenth century, the following monetary equivalences may be accepted as the effective exchange rates:²³

I pound sterling = 3.2 livres parisis = 4.0 livres tournois.

1 livre parisis = 1.25 livre tournois = 0.3125 pound sterling.

The prices of wool per sack-weight of 364 lb. in both livres parisis and the equivalent pounds sterling, as given for those 51 religious houses in the Douai schedule, are presented in Table I. Since Espinas' edition of the schedule did not identify the houses, and since all the previous editions were inaccurate and incomplete in their identifications, a complete list of the 95 abbeys and hospitals is provided in the appendix, containing their Walloon, Italian, and modern English names, religious orders, and locations by county. To facilitate an evaluation of this schedule and the subsequent comparisons, the sterling prices of the same first-quality abbey wools contained in the next two schedules are also presented in Table I. The weight units from those schedules are indeed equivalent, since another document of this period, in the same Douai archival registers, affirms that English wools were then sold in Flanders by the same standard sack weight of 364 lb., 'au pois de Londres'.²⁴

Unfortunately the Douai schedule lists only a single wool price for each abbey, except for some evidently unintentional duplications. In this respect the schedule probably represents only a portion of the wools sold by some, perhaps even a majority, of the abbeys listed. For, as the next two schedules and various other documents show, English abbey wools were frequently priced by three grades: good (*bona* or *parata*), medium (*mediana* or *mediocris*), and 'locks' (*loketti*, *locchi*, *lokes*: clippings).²⁵ Some documents in the Douai archives, however, do record prices of these three grades of wools produced or sold by several of the abbeys in the Douai schedule. These prices and the prices of corresponding wools in the two subsequent schedules are presented in Table 2. From that table, one may deduce that the 'minimum' prices of the Douai schedule are most likely just those for the 'good' or best quality wools.

Both Tables I and 2 indicate, furthermore, that the Douai prices correspond reasonably closely to the prices listed in the Exchequer (1294) and Pegolotti schedules. That suggests at least the possibility that all three schedules date from about the same general era, the pre-1295 era of monetary and economic stability. The two schedules corresponding the most closely in price levels are the Douai and Pegolotti. The mean of the former

Abbey and County	Date, or Name of Schedule	Place of Sale	Prices o Unstated	of English W Good	oolsacks by (Medium	Grades Locks
<i>Byland</i> Yorkshire (Cist.)	1259 ^a Douai Exchequer Pegolotti	Fl. Fl. Eng. Fl.	11.875 11.875	8.000 11.667	5.333	4.667 6.000
Flaxley Gloucester (Cist.)	1274–5 ^b Pegolotti	F1. F1.		10.000 10.000	 6.667	 5.667
<i>Holmcultram</i> Cumberland (Cist.)	1270 ^c c.1270 ^d Exchequer Pegolotti	Fl. Fl. Eng. Fl.		11.875 11.667 12.000	10.000 7.500	 7.500 6.333
<i>Melrose</i> Roxburgh (Cist.)	1279 ^e Douai Pegolotti	Fl. Fl. Fl.	10.938	16.875 10.667	— 6.667	 5.667
<i>Neath</i> Glamorgan (Cist.)	1274 ^f Douai Exchequer Pegolotti	Eng. Fl. Eng. Fl.	8.750 14.063	11.333 11.333 ^g		
<i>Newbo</i> Lincolns. (Premon.)	c.1270 ^h Douai Exchequer Pegolotti	Fl. Fl. Eng. Fl.	10.313 10.167 10.667		9.375	
Newminster Northumberland (Cist.)	c.1270 ⁱ 1274 ^j Douai Exchequer ^k Exchequer ¹ Pegolotti	Eng. Eng. Fl. Eng. Eng. Fl.	10.313	7.000 8.000 9.333 9.333 11.667	5-333 5.717 6.000 5-333 7-333	4.000 4.888 6.000 5.333 6.333
<i>Notley</i> Buckingham (Aug. Can.)	1274–5 ^m Pegolotti	F1. F1.		8.000 8.000	_	

TABLE 2. PRICES OF GOOD, MEDIUM, AND 'LOCKS' WOOLS OF VARIOUS ABBEYS, IN POUNDS STERLING, AS SOLD IN ENGLAND AND FLANDERS, 1259-c. 1300

NOTES AND SOURCES:

Douai chirograph of debt for £,76 par. for two sacks of 'Begelande' wool. Georges Espinas and Henri Pirenne, eds. Recueil de documents relatifs à l'histoire de l'industrie drapiere en Flandre, Ire partie, II (Brussels, 1909), 100-1, no. 254. At Bruges: 15 marks per sack 'de boine laine del abeie de Fleyxelei'. P.R.O., Miscellanea of the Exchequer, E. 163/5/17. I owe this reference to Prof. R. H. Bowers. Douai chirograph of debt for £,38 for a sack of 'boinne laine de Hokentron'. Espinas and Pirenne, Recueil U. LU-2. pp. 261. a.

b.

c. Recueil, 11, 111-12, no. 261

- d.
- Record of Boinebroke's estate, c. 1300, in reference to claims for the 1270 confiscations: £32 par. for 'un sac de moiienne de Hokenterre'. Espinas and Pirenne, *Recueil*, II, 191, no. 328:7e; also in Georges Espinas, 'Jehan Boine Broke: bourgeois et drapier douaisien', *Vierteljahrschrift für Sozial-und Wirtschaftsgeschichte*, II (1904), 411. Douai chirograph of debt for £108 par. for '2 sas de pelis de le boine laine de Miaure'. That is possibly Meaux in Yorkshire; but the Douai schedule lists that as *Meaus* (at £36 par.) and Melrose as *Mauros* (at £35 par.), which seems closer to this document. (Cf. Pegolotti: *Miesa* and *Mirososso*, respectively. The prices for the three grades of Meaux wools in the *Pratica* are: £10.000, £6.000, and $f_5 000$). Espinas and Pirenne, *Recueil*, U, 138-0, no. 285. e.
- La pratica della mercatura (ed. A. Evans, 1936), p. 261: 'quasi vale altertanto' as first-quality Margam f.
- g. wools at 17 marks.
- Record of Boinebroke's estate, c. 1300, in reference to the 1270 confiscations: £30 par. for a sack of 'le moiene laine de Nicbote'. Espinas and Pirenne, *Recueil*, 11. 202, no. 328:31a. h.
- i. List of Boinebroke's wools confiscated in 1270: 'de le boine laine, ... le moiene laine, ... de lokes de Noef Moustier', at 10¹/₂, 8, and 6 marks sterling. Espinas, *Douai*, 111, 644–5, no. 860:2–4; also in Espinas, 'Jehan Boine Broke', pp. 222–3, no. 11:2–4. Inquest on the 1270 confiscations, in London: wools of 'Neofmostre'. Espinas, *Douai*, 111, 460, no.
- j. 613:5.
- Purchases by the Riccardi of Lucca. T. H. Lloyd, Movement of Wool Prices in Medieval England k. (1973), Table I, p. 57. Purchases by the Frescobaldi Bianchi of Florence. Ibid., p. 57. At Bruges: 12 marks per sack 'de boine laine del abeie de Notelei'. P.R.O., Miscellanea of the
- 1.
- m. Exchequer, E. 163/5/17.

is only 7.7% less than the latter's, a small difference in view of the often substantial annual fluctuations in Lloyd's wool-price means. That close correspondence is not in fact surprising; for, contrary to some historians' assertions, both schedules represent sales prices abroad, in Flanders. For the latter, that fact is explicitly stated in both the introduction and conclusion to Pegolotti's price list; for the former, a Flemish locale is indicated by the pricing in livres parisis and the documents' unique location in the Douai archives.²⁶ The mean value of the remaining schedule, the 1294 Exchequer price list of wools purchased within England and Wales, is considerably lower: 13.5% and 22.2% less than the Douai and Pegolotti price-means, respectively. Table 2 indicates similar differences between the 'English' and 'Flemish' prices paid and received by Douai merchants in the 1270s. Certainly price differentials of at least this general magnitude would have been necessary to account for the costs of transportation, marketing, and taxes. As will be noted in the later schedules, however, such differentials were considerably smaller than those prevailing in the fifteenth century, when the English crown had subjected the wool trade to far higher export taxes, onerous bullion regulations, and monopolistic control by the Calais Staple.²⁷

Two further similarities and one difference remain to be noted in the schedules of Table 1. First, the mean price of Welsh wools in all three schedules is considerably higher than the mean English and Scottish prices. Second, while no Scottish prices are given in the Exchequer schedule, the mean Scottish prices in the other two are the lowest of the three countries — though only by a small margin. Third, the most significant difference is the fact that the 'coefficient of variation' of the Douai prices is only half that of the other two schedules.²⁸ The greater uniformity in the Douai prices hardly constitutes sufficient grounds for condemning the whole schedule. But whether its 54 prices, so predominantly Cistercian in origin, fairly represent contemporary English wool values, especially when 44 abbey wools were not priced, must for the present remain a moot question.

II. The Exchequer Schedule of 1294

The second wool-price schedule, which Dr Lloyd has published in full for the first time, from Exchequer documents in the London Public Record Office,²⁹ has its origins in Edward I's seizure of wool stocks and his export embargo of 2 June 1294. Requiring funds 'hastivement' for his coming war with Philip IV of France, Edward initially planned to extort a forced loan in wools and then reap large profits from monopolizing their sale abroad.³⁰ Thus on 18 June he ordered his sheriffs across England to assemble all the confiscated wools in the nearest ports; to weigh, price, and pack them; to record their values and ownership; and to send those records to the Exchequer.³¹ In all likelihood that royal command was ultimately responsible for the documents constituting the wool-price schedule. But these circumstances fail to explain why these documents were not deposited in the Exchequer until the autumn, why they concern only ten Italian merchant banking firms, and why one of these firms had its wool stocks recorded differently (in Latin) from those of the other firms (in French).³² Although the Italians had displaced the Flemish from their domination of the wool trade, from the 1270s, they had by no means monopolized it.³³

The crown's subsequent treatment of the Italians may help to resolve the mysteries about the Exchequer schedule. First, the strong opposition of domestic merchants soon forced Edward to revise his fiscal policy. On 26 July, after securing consent to an exorbitant export tax of 66s. 8d. per sack of 'prepared wools' and of 40s. od. per sack of other wools, he restored both the wools and export privileges to all but the French and Italian merchants.³⁴ Then in September he summoned representatives of the Italian firms to the Exchequer. On Michaelmas nine firms from Florence and Lucca pledged a total of $f_{14,200}$ in loans to the crown.³⁵ As Table 5 shows, eight of these were firms listed in the Exchequer schedule; and the size of their loans correspond closely to the number of wool sacks recorded (except for the Bardi). The other two firms fell, or had already fallen, into bankruptcy. In October, Edward confiscated the assets of the Riccardi, the firm that had hitherto been the crown's chief creditor, and the one that received the separate and detailed accounting in the Exchequer wool lists. Subsequently the king exported some Riccardi wools on his own account. The royal justification for this confiscation was that the Riccardi owed the crown such a large sum — about $f_{30,000}$ in undelivered taxes — 'that their resources are insufficient for payment thereof', perhaps because Philip IV had already ruined their credit by seizing their French assets. The other Lucchese firm, the Bettori, collapsed because of their close ties with the Riccardi,³⁶ They were evidently replaced by the Ballardi of Lucca. In extorting the loans, Edward had very likely threatened to keep the wools of the other firms listed in the schedule, or at least to take his loans in these wools. When they complied, he rewarded them with wool-export licences and with control over the customs, from which they later recovered their loans.³⁷ In 1295, Edward did indeed issue orders to seize wools from several of these firms. But they — and two new Italian firms — were again permitted to export wools on licences in return for more loans that totalled $f_{.14,767}$ by Easter 1298.³⁸

Since the 1294 Exchequer schedule is the only one that documents actual wool purchases or contracted purchases, by named merchants from specific producers, it promises to be the most important of these earlier price lists. Indeed the number of wool prices and their geographic range are considerably more extensive than in the Douai schedule: from 125 English monastic houses in 25 counties, and from three Welsh houses in as many counties. Of these houses, 67 or 52.3% sold more than one grade of wool.³⁹ As Table 3 indicates, the Cistercians are once again the predominant suppliers, if not so decisively as in the Douai schedule. The Augustinians this time rank second in the number of houses listed, followed by the Benedictines, Gilbertines, Premonstratensians, and (with one listing each) the Templar and St Lazarus of Jerusalem Orders. Although the 1294 schedule presented here (and by Lloyd) lists only religious institutions — monasteries, nunneries, cathedral priories, and hospitals — the Exchequer documents show that at least two Italian firms had purchased wools from a total of 50 lay producers and secular clergy: the Riccardi (48) and the Mozzi (2).⁴⁰

Furthermore, the four abbeys of Waverley, Byland, Roche, and Bridlington are specifically recorded in this schedule as having supplied wools called collecta (lane cogliette, laines de quiloite or coillette): wools collected from various small producers, usually lay, who were scattered across the countryside. Such wools were also collected by agents of the great Flemish and Italian merchant firms, and by English middlemen called woolmen or broggers.⁴¹ But in this period large lay and monastic estates, especially the Cistercians, may have overshadowed them in supplying *collecta* to the exporters. Their incentive to do so was simply the fact that they could raise larger loans from Italian merchant bankers — the very ones in this schedule — by contracting to make larger deliveries of wool.⁴² For those monasteries with heavily wool-oriented economies, which generally lacked a steady cash flow, the temptation to borrow heavily on this basis was great. So great indeed that the Cistercian General Chapter sternly prohibited 'future sales' and *collecta* contracts in 1157, 1181, 1206, and 1277.43 In 1262 and 1302, furthermore, the crown and Parliament responded to the petitions of woolmen against the evidently monopsonistic power of these monasteries — the power to act as 'single buyers' in their own districts — by similarly forbidding them to purchase collecta.⁴⁴ The very number of the prohibitions suggests that the monastic purchases of *collecta* probably continued unabated.

Nevertheless, these prohibitions were at least effective, in all likelihood, in disguising such *collecta* transactions in official documents, so that we may never know to what extent the first three schedules reflect just monastic wool production. In submissions appended to the 1294 price lists, the Pulci, Frescobaldi Bianchi, Cerchi Bianchi, and the Bardi admitted that their agents were engaged in buying 'leynes de coillette par le pays en plusors leus'. But their factors claimed to have no knowledge about the quantities and prices of these purchases.⁴⁵ The peasant wool production that formed most of the *collecta* probably well exceeded the combined output of both monastic and lay estates, in Eileen Power's view, even at the apogee of estate-farming and 'even though the more scientific farming of the latter may have produced the better wool'.⁴⁶

That monastic wool sales were possibly unrepresentative of total English production is only one reason why the first three price schedules may be no more than a distorted mirror of the actual wool market. A more serious problem is the manner in which the abbeys priced their wools for foreign merchants. Thus Whitwell, Postan, Denholm-Young, and most recently Richard Kaeuper, in his splendid account of the Riccardi, have very persuasively argued that a combination of taxation, sheep murrain, and rising costs in general during the late thirteenth century forced many monasteries to borrow

		AVERAGE VA	LUES OF THE	ir Wools,	in Pounds S	TERLING			
		Douai Schedt	ile	Ë	xchequer Sche	dule	F	egolotti Schee	dule
Religious Order	No. of Houses	Percentage of Total	Average Value of Good Wools (Flanders)	No. of Houses	Percentage of Total	Average Value of Good Wools (England)	No. of Houses	Percentage of Total	Average Value of Good Wools (Flanders)
Cistercians	41*	80.4	11.300	54	42.2	9.856	82	42.3	11.386
Augustinians	ŝ	5.9	9.792	29	22.7	7.385	34	17.5	8.451
Benedictines	I	2.0	10.938	Γī	13.3	7.618	34	17.5	8.265
Premonstratensians	17	3.9	100.01	12	9.4	8.236	22	11.3	8.636
Gilbertines	ŝ	5.9	11.354	14	10.9	10.310	17	8.8	11.745
Cluniacs	0	0.0	I	0	0.0	-	æ	1.5	7.778
Carthusians	I	2.0	10.625	o	0.0	I	ο	0.0	I
Other	ο	0.0	I	6	1.6	10.333	6	1.0	7.000
Totals and Means	51*	100.0	11.152	128	100.0	8.904	194	100.0	9.943
Standard Deviations			0.426			1.194			1.554
Coefficient of Variation			3.820			13.410			15.629

NUMBER OF RELIGIOUS HOUSES REPRESENTED IN THE DOUAL, EXCHEQUER (1294), AND PEGOLOTTI SCHEDULES, AND THE TABLE 3.

128 TEXTILE HISTORY

* There were 44 prices for 41 Cistercian houses (and thus a total of 54 prices) in the Douai schedule. The average value has been computed on the basis of these 44 prices, and the mean of the total on the basis of 54 prices. See Table 4.

larger and larger sums from such merchants, especially the Italians. As security for these loans, the Italians required them to pledge 'at an *undervalue* the entire produce of the estates of the house for years in advance'.⁴⁷ Such price discounting not only reflected distress sales but also disguised the necessary interest charges.

Dr Lloyd, on the other hand, argues that 'the Italians were desirous of exporting the best wools and were prepared to pay high prices and to make long-term contracts to get them'. He further maintains, as did Knowles and Donkin, that the Cistercian wools in particular were generally 'prepared' rather than raw, and thus were considerably higher in price.⁴⁸ A large amount of evidence to substantiate this view can be found in contracts preserved in the Close Rolls, in the 1294 Exchequer documents themselves, and indeed in the previously mentioned tax that Edward I imposed on such wools.⁴⁹ As Table 3 shows, Cistercian wool prices in all three schedules were certainly higher on average than the overall means. The highest price on average in all three lists was in fact charged by the Gilbertines, but they had modelled their estate economies closely after the Cistercians'.⁵⁰ The degree of preparation, therefore, may explain the wide range in prices among monastic houses and also the wide range in prices among various grades sold by a single house. Unfortunately, these price ranges may also reflect local or regional variations in wool types, especially when an abbey's manorial holdings or *collecta* clients were often scattered over wide areas. In 1275, for example, Darnhall abbey in Cheshire contracted to supply *collecta* wools from Herefordshire.⁵¹

Finally, some may doubt that the Exchequer schedule represents true purchase prices on the grounds that the Italian merchants might have inflated them in assessing the values of their seized wool stocks. Such suspicions are heightened by the fact that Lloyd's mean wool price for 1294, £5.023 per sack, is only 57.1% of the mean English abbey wool price in the Exchequer schedule, as presented in Table 4 (£8.800, by counties). But Lloyd's mean for that year is considerably biased: based on only 5 districts, it is unduly weighted by prices from Surrey-Kent and Norfolk-Suffolk, which produced inferior wools.⁵² The Exchequer prices in Table 4, on the other hand, do not include those for 'medium' wools and 'locks', recorded for just half the abbeys, in order to maintain consistency in comparing the three schedules. The Exchequer schedule is undoubtedly further biased by the inclusion of many prices for 'prepared' wools. But even if this schedule is biased, there is no reason to believe that any attempt by the Italians to falsify their price data would have succeeded in duping the Exchequer officials. In short, we have no grounds for rejecting these singularly valuable wool prices.

III. The Pegolotti Schedule

The third schedule is the very famous price list that appears in Francesco Balducci Pegolotti's *La pratica della mercatura*.⁵³ By far the most extensive of the three, it contains wool prices from 194 abbeys: 171 English, 15 Scottish, and 8 Welsh. Of these, 92 or just under half sold more than one grade of wool. The schedule also contains prices of those presumably secular *collecta* wools, from 11 districts: three in Yorkshire, three in Lincolnshire, four in the adjacent east-central Midlands, and one in the Cotswolds.⁵⁴ In the monastic representation, as Table 3 shows, the Cistercians continue to maintain their lead with almost precisely the same percentage of the total as in the 1294 list; but

TABLE 4. THE DOUAL, EXCHEQUER (1294), AND PEGOLOTTI SCHEDULES: MEAN VALUES OF WOOLS BY COUNTY, IN POUNDS STERLING, AND THE NUMBER OF RELIGIOUS HOUSES SELLING WOOL PER COUNTY, IN ENGLAND, WALES, AND SCOTLAND.

Codes:

III: Pegolotti list I: Douai list II: Exchequer list

A: religious houses common to the Douai, Exchequer, and Pegolotti lists
B: religious houses common to the Exchequer and Pegolotti lists
C: total houses and collecta districts in Exchequer and Pegolotti lists

County	Code	Mean Values	s of Wools	s by County	Num Hou	ber of R ses per (eligious County
-		I.	II.	III.	I.	ÍI.	IIĬ.
ENGLAND							
Bedford	Α	10.782	8.000	11.333	2	2	2
	В	,	8.000	11.333		2	2
	С		7.111	10.334		3	4
Berkshire	С		•	6.000		2	i
Buckingham	С		7.333	11.000		I	2
Cambridge	С			6.667			I
Cheshire	Α	11.094	10.000	12.000	2	2	I
	В		8.333	13.000		2	2
	С		8.333	13.000		4	2
Cumberland	B/C		9.667	10.000		2	2
Derbyshire	B		7.500	8.917		4	4
-	С		7.500	8.533		4	5
Devon	C			9.500			2
Dorset	Α	10.625	11.333	10.000	I	I	I
	B/C		10.167	10.000		2	2
Essex	Α	10.438	8.667	10.250	5	4	4
	В		7.933	10.200		5	5
	С		7.933	9.278		5	6
Gloucester	В		11.667	15.000		2	2
	С		10.444	10.667		3	6
Hampshire	Α	11.407	12.000	14.667	2	2	2
	В		10.667	12.444		3	3
	С		8.267	10.833		5	4
Hereford	A/C	12.032	12.000	18.667	2	I	I
Huntingdon	A	11.250		10.000	I	0	I
	C			8.000			2
Kent	C			7.556			3
Lancashire	A/B	10.625	10.000	12.333	I	I	I
	C		7.222	12.333		3	I
Leicester	A	11.250	10.667	12.000	I	I	I
	B		9.167	10.500		2	2
	C		8.556	10.167		3	6
Lincolns.	A	10.938	11.209	13.417	4	4	4
	B		10.080	12.081		29	29
	C		10.242	11.179		33	41
Middlesex	C			5.333			I

Table 4 continued

County	Code	Mean V	/alues of	Wools	Nur	nber of l	Houses
		I.	II.	III.	. I.	II.	III.
Norfolk	В		8.000	8.333		I	I
	С		6.334	6.500		2	2
Northampton	В		7.333	10.667		I	I
	C		7.333	9.048		I	7
Northumberland	A/B	10.313	9.333	11.667	I	I	I
NT	C		9.333	9.167		I	2
Nottingham	A	10.000	8.583	9.167	2	I	2
	В		8.896	10.333		4	4
Outond		TT 977	8.890	9.000	Ŧ	4	9
Oxford	A P	11.8/5	11.333	10.007	1	1	1
	D D		12.000	13.333		3	3
Rutland	C		10.007	8 000		4	2
Shropshire	Ă/C	10.028		12 222	т	0	T
Somerset	A A	10.625		-3-333	T	õ	Ô
Somersee	ĉ	10:02)	8.000		-	T	ő
Staffords.	Ă	10.313	0.222	10.667	т	Ť	T
	B		8.867	10.267		5	5
	С		8.867	10.111		5	6
Suffolk	С		,	9.333		5	I
Surrey	A/B	12.500	13.333	16.667	I	I	I
	C		13.333	8.667		I	3
Sussex	В		5.167	5.667		2	2
	C	_	5.167	5.778		2	3
Warwickshire	A	10.938	10.333	12.000	I	I	I
	В		10.167	11.167		4	4
XV 7	C		9.600	11.167		5	4
Westmoriand				6.000	_		I
Wiltsnire		10.938		12.667	1	0	I
worcester	А/Б С	11.250	10.000	12.007	1	1	I
Vorkshire		11.260	8 417	9.550		1	3
1 OI KSIIII C	R	11.230	7 702	0.272	11	25	25
	C C		7 707	9.3/3		∠) 20	25 41
ENGLAND Total	U		/./0/	0.970		29	41
By Houses	А	11.018	0.712	12.000	12	25	20
and <i>collecta</i>	B	11.010	9.124	11.010	43	103	103
districts	Ē		8.851	9.857		125	182
By Counties	A	11.018	10.267	12.562	21	17	20
J –	В		9.394	11.592		23	23
	С		8.800	9.682		25	35
WALES							
Cardigan	C			6 667			т
Carmarthen	č			7.000			т
Sarmai men	U U			/.000			T

Table 4 continued

County	Code	Mean V I.	alues of II.	Wools III.	Num I.	iber of I II.	Houses III.
Flint Glamorgan Merioneth	A/C A/C C	10.000 14.844	8.667 11.333	11.333 11.333 10.000	I 2	I I	I 2 I
Monmouth	A B C	12.292	13.333 13.333 13.333	14.667 18.667 14.667	3	I I I	2 I 2
WALES Total							
By Houses	A B C	12.761	11.111 11.111 11.111	12.667 13.778 10.875	6	3 3 3	5 3 8
WALES							
By county	A B C	12.379	11.111 11.111 11.111	12.444 13.778 10.167	3	3 3 3	3 3 6
SCOTLAND							
Berwick East Lothian Fife	C C A	8.750		7.000 7.000 10.000	I	0	2 I I
Kirkcudbright Midlothian	C A/C C	10.313		8.445 12.000 8.334	I	ο	3 1 2
Perth Roxburgh	A/C A C	10.938 10.938		12.333 10.667 7.917	I	0 0	I I 4
Wigtown	A/C	10.938		12.000	Ι	0	I
SCOTLAND Total							
By Houses	A C	10.375		11.400	5	0	5
By Counties	A C	10.375		9.379	5	o	13 5 8

SOURCES:

Georges Espinas, La vie urbaine de Douai au moyen age, III, 232-4, no. 287 T. H. Lloyd, The Movement of Wool Prices in Medieval England (Cambridge, 1973), table 5, pp. 52-61. P.R.O., K. R. Exchequer E.101/126/7 [an examination of which shows that four of Lloyd's abbey wool prices must be amended: Calder (Cist.) in Cumberland — 11½ marks; Hailes (Cist.) in Gloucs. — 17 marks; Tupholme (Prem.) in Lincs. — 15½ marks; and Shouldham (Gilb.) in Norfolk (not Lincs.) — 12 marks.] Francesco Balducci Pegolotti, La pratica della mercatura (ed. Allan Evans, Cambridge, Massachussetts, 1936), pp. 258–70, 392–6.

the Augustinians this time must share second place with the Benedictines, followed by the Premonstratensians, the Gilbertines, the Cluniacs (appearing for the first time), and two Scottish houses of uncertain affiliation.⁵⁵

These abbey and *collecta* wool prices are distributed over 35 English, 8 Scottish, and 6 Welsh counties, as shown in Table 4, which compares the prices of the first three schedules by expressing them as mean values per county. The price averages grouped under subheading A are those for abbeys common to all three schedules; the price averages under B are those for abbeys listed in both the Exchequer and Pegolotti schedules; and the price averages under C represent the complete listings in the latter two schedules. The most striking feature of Table 4 is the very large concentration of price listings in Yorkshire and Lincolnshire. Together they account for over a third of the Douai prices, and just under half of both the Exchequer and Pegolotti prices.⁵⁶ Undoubtedly terrain, climate, the nature of land tenure, and estate organization had been important factors influencing the establishment of so many wool-producing abbeys in these two counties. In Yorkshire especially, the sparseness of the population had certainly encouraged the growth of large sheep-raising estates in the earlier heyday of the demesne economy. Also to be counted as significant influences, as Donkin argues, were the close, easy access to good ports, such as Newcastle, Hull, and Boston; and the impressive development of the Boston fairs, serving the Flemish and Italian markets.⁵⁷ But no Cistercian predilection to settle in those two counties can be cited to explain this regional concentration. For only 13 of the Cistercians' 75 English abbeys — just 17.3%- were located there; and they were thus also a distinct minority among the 82 Yorkshire and Lincolnshire religious houses listed in the Pegolotti schedule. Lincolnshire, as will be seen, remained one of the very major wool-exporting regions up to the sixteenth century; but Yorkshire fades in importance from the mid-fourteenth century.

Although Table 4's arrangement of prices by counties may seem artificial, it is quite necessary to permit any comparisons with the six subsequent schedules, whose wools are all priced by county or district. That difference in pricing represents, so to speak, the displacement of the abbey wools by the *collecta* of small producers, thanks to some considerable state interference in the wool trade.

Since Pegolotti's schedule is the last to list wools by religious houses, its dating is of considerable importance. Dr Lloyd believes that Pegolotti compiled it while serving in England as a Bardi factor, from the current prices of 1318–21. Noting that the *Pratica's* prices are generally higher than those of the other schedules, Lloyd bases his argument on the fact that English wool prices reached their medieval peak in those very years.⁵⁸ The internal evidence of the manuscript, however, does not lend support for any such dating. Since Pegolotti's own firm, the Bardi, was not a customer of all the religious houses listed, it is unlikely (if not impossible) that the Bardi would have had direct access to current prices contracted by competing firms.⁵⁹ Pegolotti could just as well have constructed this schedule from some ancient or contemporary sources far from England at the time he actually composed the *Pratica*: between 1338 and 1343. He himself evidently did not know the date of his source, stating merely l''anno del ...' in his manuscript.⁶⁰ As previously noted, moreover, his 'high prices' pertain to sales in Flanders; and are clearly explained by his warning that in England merchants must offer a much lower price in order to cover their marketing costs and so produce a profit.⁶¹

Merchant	Town*	Number of Woolsacks listed	Percentage of total	Loans Pledged Mich. 1294	Percentage of total	Total Loans Pledged to 6 April (Easter) 1298
Riccardi	L	412.68	17.3			
Bionchi	Б	260.00	т <i>с</i> т	4 000 00	28.2	1 666 67
Cerchi Neri	г Б	300.00	15.1	4,000.00	20.2	4,000.07
Cerchi Bianchi	F	330.00	14./	2,457.00	1/.3	3,817.00
Mozzi	F	301.00	12.0	2,132.00	13.0	3,292.00
Pulci-	T,	201.42	11.0	1,184.00	0.3	3,/44.00
Rimbertini	F	257 50	to 8	1.020.00	7 2	2 522 22
Frescobaldi	-	237.30	10.0	1,050.00	7.5	2,525.55
Neri	F	154.40	6.5	876.00	6.2	1.080.22
Spini	F	153.50	6.4	745.00	5.2	3.005.00
Bardi	Ē	99.00	4.2	1,576.00	<u>ј.</u> П.Т	2.736.00
Bettori-	-	· · · · ·	4	-,,,,		_,, j = , e e
Ballardi	L	35.00	1.5	200.00	I.4	533.33
Ammannati	P					1,993.33
Brabazon	S					666.67
Totals	<u> </u>	2,384.50	100.00	14,200.00	100.0	28,966.67
					······································	

TABLE 5. NUMBER OF WOOLSACKS BELONGING TO VARIOUS ITALIAN MERCHANT BANKING FIRMS LISTED IN THE EXCHEQUER SCHEDULE (1294), AND THE AMOUNT OF LOANS TO THE CROWN PLEDGED BY ITALIAN FIRMS, IN POUNDS STERLING, FROM MICHAELMAS 1294 TO EASTER 1298

* L = Lucca F = Florence P = Pisa S = Siena

Sources:

Georges Bigwood, 'Un marché de matières premières: laines d'Angleterre et marchands italiens vers la fin du XIIIe siècle', Annales d'histoire économique et sociale, II (1930), 193-211, 201-2; Richard Kaeuper, Bankers to the Crown: The Riccardi of Lucca and Edward I (Princeton, 1973), p. 44; E. A. Bond, 'Extracts from the Liberate Rolls Relative to Loans Supplied by Italian Merchants to the Kings of England', Archaeologia, XXVIII (1840), 284-90, nos. xcvi-cvi; P.R.O. E.101/126/7.

Nevertheless, Pegolotti's modern editor, Allan Evans (1936), also favoured a contemporary dating, concluding — without any proof — that the price list 'seems to have been done by an Italian who had local and first-hand acquaintance with the monasteries concerned'.⁶²

Other historians, however, have assigned a much earlier origin to Pegolotti's woolprice schedule. W. C. Cunningham, the first modern writer to utilize these prices, argued that some rather more complete version of the Douai list, or some similar Flemish document, probably served as the source, on the grounds that Pegolotti's renditions of the monastic names seem to be generally closer to the Walloon-Flemish than to the English spellings.⁶³ Furthermore, the presence of Balantrodoch Temple (*Il Tenpo di Bratendocca*, Midlothian) in the schedule convinced Cunningham that Pegolotti's source predated the dissolution of the Templar Order in 1312. But even after this house was transferred to the Hospitallers of St John of Jerusalem, it apparently continued to be known as 'the Tempill of Balantrodoch'.⁶⁴ Yet Table 2 lends some support to Cunningham's theory: for it shows that in Flanders during 1274–5 the values of wools from Flaxley and Notley abbeys (the only ones so priced) were precisely the same as those in Pegolotti's list. Donkin has an even stronger case in contending, more recently, that Pegolotti's source should be dated between the founding of Vale Royal (*Vareale in Gualesi*) in 1281 and the effective dissolution of Stanlaw in Cheshire (*Stalleo in Zestri*) in 1296, when its monastic community was transferred to Whalley in Lancashire. But Stanlaw, despite ravages of the sea, survived for some time as a monastic cell; and Donkin himself admits the possibility that the name continued to be used by the community after the transfer.⁶⁵

Although the problem of dating Pegolotti's wool-price schedule cannot be fully resolved, clearly either he or his source must have had some acquaintance with the Flemish market as well. Even if it could be proved that Pegolotti had such first-hand knowledge, one may still lodge the same objections that were raised against the previous two lists of abbey wool prices.⁶⁶ Perhaps the strongest argument against accepting the Pegolotti schedule as an accurate reflection of market prices is the fact that the original manuscript of the *Pratica* did not survive his era. The oldest extant copy was written well over a century later, in March 1472, 'at two removes from the original — and corruptions have inevitably crept in. The manuscript is not wholly reliable'.⁶⁷ If his prices must be treated with great caution, they may nevertheless serve as a valuable guide to regional wool differences in the late thirteenth or early fourteenth centuries.

IV. The 'Nottingham Prices' of 1336-7

The next three price lists, presented in Table 7, may be grouped together as the 'parliamentary schedules' of the fourteenth century. None of these lists even pretends to represent actual market values of the day, but at least their dating, authorship, and transcriptions of prices and locations of the wools — no mean considerations — may be accepted without question. The first of these schedules is a doubly-documented royal indenture, made with 'the merchants of the realm' on 26 July 1337, for a royal purveyance of 30,000 sacks of wool at fixed prices in 38 counties and districts in England and one in Wales.⁶⁸ Only the price of the 'best' wool in each county or district was fixed, so that 'other gross wool which shall be bought in England for the king's use shall be bought by agreement between the buyer and seller'.⁶⁹ Willingly or not, the merchants had almost certainly given their assent to these fixed prices at the 'Great Council' held at Nottingham on 23 September 1336; for the subsequent documents refer to this schedule as the list of 'Nottingham Prices'.⁷⁰

The origins and nature of this royal purveyance certainly suggest that the wool prices were set well below the current market values, as Lloyd and others have main-tained.⁷¹ Edward III, emulating his grandfather's policies, had sought to make the still lucrative wool trade pay for his coming war with France. First, on 12 August 1336, on the eve of the Nottingham assembly, Edward had imposed a wool-export embargo that was evidently designed to produce large profits for a crown-sponsored 'cartel'.⁷² Within a year the embargo evidently did create a severe wool scarcity and thus high prices in the Low Countries, while conversely producing a glut and low purchase prices in England.

At the same time Edward's embargo undoubtedly also served to coerce the Low Countries, Flanders above all, into joining his alliance. It also secured the Nottingham Assembly's consent to this purveyance and to an additional tax or 'subsidy' of 20s. a sack exported, above the traditional customs of 6s. 8d.⁷³ The wool cartel itself, initially a consortium of 95 merchants, led by William de la Pole of Hull and Reginald Conduit of London, was finally established by that royal indenture of July 1337. In return for a loan of £200,000 and half the profits from wool sales, the crown granted the consortium a monopoly on the wool trade until the 30,000 sacks of the purveyance had been sold abroad.⁷⁴ The merchants were to obtain repayment of the loan from a farm of the customs and subsidies, raised to 40s. a sack in May 1338.⁷⁵ Not until the loan was repaid in full were the merchants required to redeem their 'letters obligatory' or pay any other debts owing to the wool growers.

Despite these arrangements, so evidently designed to augment monopoly profits, and despite Edward III's rapacious reputation, the well-esteemed authority on his fiscal policies, Prof. E. B. Fryde, very surprisingly contends that the royal purveyance set minimum, not maximum, wool prices. His logic is nevertheless impeccable in arguing that such prices had to be set in order 'to prevent undue exploitation of wool owners, ... which could lead to resistance that might ruin the whole project'. Indeed Lloyd, in his most recent account of the wool trade (1977), was much more inclined to agree with him.⁷⁶ Clearly the cartel had been given monopsony powers that could have permitted its merchants to pass part of the tax burden onto the wool growers in lower prices. The need to do so grew the next year when the export taxes were raised and strong resistance to high sales prices developed in Flanders.⁷⁷ Since the wool growers as landholders clearly exercised more power in Parliament than did merchants, Edward could hardly have afforded to ignore their reactions to his scheme. Nevertheless the indenture of July 1337 remains indisputably a purveyance that fixed the prices of only the best wools, without any indication that they were to serve as a 'floor'. As Table 6 shows, the prices actually paid by the cartel leaders, while closely corresponding to the 'Nottingham Prices', were somewhat below those stipulated prices in virtually every instance in nine counties.78

The 'Nottingham' schedule remained the official list of wool prices for another six years, certainly for the parliamentary wool grants of 1338, 1340, 1341, and other crown-sponsored purchases.⁷⁹ Whether or not this schedule had originally been designed to protect the growers with floor prices, demands for such protection mounted during these years.⁸⁰ Lloyd's statistics indicate that domestic wool prices were indeed falling in this period: from an average of $\pounds 5$. 4s. 1d. per sack of better quality wools in 1335–7 to one of $\pounds 4$. 3s. 2d. in 1339–41.⁸¹ Perhaps the tax-burdened merchants had succeeded in forcing lower prices onto the wool growers; but certain deflationary forces in this period, to be discussed shortly, also explain part of this price decline.⁸² In July 1342, Edward responded to pleas for minimum wool prices in an agreement reached with a new consortium of 142 merchants. In return for revoking the remainder of the 1341 purveyance and freeing the export trade, he forbade the merchants to purchase wools 'at a price below that ordained at Nottingham', required them to ship all wools to the recently established Bruges staple, and imposed on them a subsidy of 40s. per sack, beyond the Old Custom.⁸³

J. H. MUNRO 137

TABLE 6. PRICES OF ENGLISH WOOLS, BY COUNTY, IN POUNDS STERLING PER SACK: AS STIPULATED IN THE 'NOTTINGHAM PRICES' OF 1336-7 AND AS ACTUALLY PURCHASED IN ENGLAND AND SOLD IN THE LOW COUNTRIES BY LEADERS OF THE ENGLISH 'WOOL COMPANY' IN 1337

Wool: County of Origin	Price Stipulated in the July 1337 Indenture	Actual Purchase Price in England	Percentage of the Official Price	Total Cost: Purchase + Marketing Expenses ^a	Sales Price in the Low Countries
Herefordshire ^b	8.000	7.800	97.5	9.898	12.667
Shropshireb	7.000	6.283	89.8	8.381	12.667
Lincolnshire:					
Lindseyc	6.667	6.192	92.9	8.438	11.667
Gloucester:	6	6 - 0 -		0	
Cotswolds ⁶	6.333	6.283	99.2	8.044	11.000
Cotswolds ^b	6 222	6 282	00.2	8 0 1 4	11.000
Vorkshire ^c	6 000	5 200	99.2 86 7	8.044 7.278	11.000
Nottinghamshire ^c	5.667	5.200	00.7 01.8	7.421	11.322
Buckinghamshired	5.000	4.667	93.3	n.a.	6.667
	5.000	[to 5.663]	113.3		[to 8.063]
Hertfordshireb	5.000	4.983	99.7	n.a.	8.667
Mean Price	6.222	5.877	94.5		10.815
Stand. Deviation	0.957	0.966			1.952

Exclusive of customs and subsidy (26s. 8d.), from which these 'royal wools' were exempt.

Wools of Reginald Conduit of London. Wools of William de la Pole of Hull. b.

c.

đ. Wools of John Molyns.

SOURCES:

Calendar of Patent Rolls, 1334-38, pp. 480-2. E. B. Fryde, The Wool Accounts of William de la Pole (St Anthony Hall's Publication no. 25, York: 1964), p. 9 and appendix.

The Parliamentary Wool-Price Ordinance of 1343 V.

That agreement, and the controversy it provoked, explain the immediate origins of the fifth schedule. First, in petitions presented on the eve of a new Parliament, in April 1343, a group of merchants complained inter alia that they had suffered 'great losses and damages' from the Nottingham price list, which, they maintained, had received their approval 'for one time only, without any consideration of the future'. They thus requested the right 'to purchase wools as freely as other goods, by agreement between buyer and seller'. They also declared that they would support the restrictive Bruges staple and the 40s. a sack subsidy only if the export trade were indeed opened to all and if half the subsidy were applied to royal wool debts⁸⁴. When Parliament did meet shortly afterward, some members, evidently growers, also vociferously attacked the 1342 agreement, though for different reasons. In particular they condemned the merchants'

grant of the 40s. subsidy, which was indeed a blatant violation of the 1340 stature requiring parliamentary consent to any changes in the wool duties. Edward retorted that so long as the growers were protected by his ban on wool purchases below the Nottingham prices, the subsidy should not concern them.⁸⁵ That was hardly a convincing defence, especially in view of the merchants' just declared position and several complaints about violations of the wool-price ordinance, which Parliament was then investigating.⁸⁶ Finally, a compromise was reached. In return for parliamentary renewal of the 40s. subsidy to Michaelmas 1346 and support for the Bruges staple, the king assented to Parliament's own schedule of minimum wool prices that were on the average 32% higher than the corresponding Nottingham prices. A royal proclamation of the new prices and of the statute's provisions was issued on 20 May 1343.⁸⁷

As Table 7 indicates, the 1343 schedule was the first to contain no Welsh wools, but it does list twelve more types of English wools than were priced at Nottingham, for a total of 50. In order to set effective minimums, quality variations within some counties necessarily had to be taken into account. Thus prices were also stipulated for 'lesser' wools in eight of the 37 counties listed, and for distinct regional types in another five counties. Durham and Cheshire are the only counties missing. Reflecting its obvious political origins, the statute explicitly permitted the grower 'to sell for as high a price as he can', and imposed penalties of forfeiture for any infractions solely on the buyer. On 7–8 July, Edward incorporated these provisions in a revised indenture with the 'community' of English wool merchants, who were placed under the command of the Bruges staple mayor, so that all would be 'of one condition and agreement to keep the wool at a high price'.⁸⁸

The officially stated reason for this statute, ignored by virtually all historians, was 'to increase the amount of good money in this land'.⁸⁹ That objective should not be dismissed as a mere dissimulation of the part of the growers in parliament. For English coinage output had fallen sharply in the 1320s and 1330s, suffering the most severe slump ever recorded in the English mint accounts.⁹⁰ Possibly continental debasements and counterfeiting had been attracting bullion away from the English mints. But Edward III's defensive debasement of May 1335, the first significant coinage alteration since the chaotic reign of Stephen (1135–54), one that reduced the silver content in both fineness and weight by 13.1%, did very little to restore mint output.⁹¹ Subsequently, furthermore, Edward's financing of his French war, with large subsidies to several continental allies, evidently led to a very large drainage of specie, while his manipulation of the wool trade seriously diminished export revenues.⁹² After 1338 especially, complaints about the 'scarcity of money' and falling prices became very frequent. Indeed recent statistical analyses by Edward Ames suggest that England experienced severe 'sterling crises' in 1337–9 and again in 1343–5.⁹³

In 1340, Parliament responded to petitions demanding remedies for 'the great dearth of money' by requiring merchants to bring two marks (26s. 8d.) in foreign silver plate to the mint for each woolsack exported.⁹⁴ The first in a long series of bullionist laws, this statute was reconfirmed the following year and then re-enacted, with its bullion requirements extended 'to all other custumable merchandises' in late 1343. That revised statute was part of a complex, concerted parliamentary programme designed to strengthen and expand the English coinage. The other chief monetary measures enacted at the same time were:⁹⁵ (1) the establishment of a gold coinage (the double florin and then the noble, from August 1344); (2) the restoration of the silver penny 'to the weight and fineness of the former Sterlings' (restored in fineness, but in fact further reduced in weight in January 1344); (3) a renewed ban on the export of all forms of silver, with stricter means of enforcement; (4) a renewed ban on the importation of counterfeit and 'false' coins; (5) permission to circulate new Flemish silver coins, provided that their fineness be made equal to the English Sterling; — and (6) the wool price ordinance, designed to increase the revenues from England's chief export.

The wool-price ordinance had a very short life. In the next parliament of June 1344, after the truce of Malestroit had alleviated the crown's immediate fiscal problems, Edward readily assented to a petition that this ordinance and any prosecutions arising from it 'be wholly annulled and defeated'. In its place a new statute declared that all were free to export wools and to buy them in England 'according as they may agree with the seller, as they were wont to do before the said Ordinance'.⁹⁶ That suggests at least an intention to retain the former Nottingham price schedule.

The 1343 statue may have failed not only because it set the wool prices impossibly high, but also because it biased some prices, especially those in favour of counties generally reputed to produce inferior wools. Growers in these counties may have hoped in particular that higher prices for their wools would correspondingly reduce the number of sacks demanded to meet their assessments in purveyances and taxes.⁹⁷ Thus, as Table 7 shows, the 'minimum' prices of Cumberland and Westmorland wools were set 100%higher, and the wool prices for Craven in Yorkshire and Northumberland 64% and 60%higher, respectively, than the Nottingham prices. Awarded values just above the mean in this ordinance, they had ranked at the very bottom of the Nottingham schedule, and were well below the mean in the preceeding three. Similarly, the prices of Bedfordshire, Buckinghamshire, Kent, Middlesex, and Sussex wools, whose values were all below the mean in virtually all the earlier lists, were increased by one-half in the 1343 statute. Conversely, the price of Herefordshire wool was given no increase at all, so that it fell from first place, in both the Pegolotti and Nottingham schedules, to rank fifth after the Shropshire, Lincolnshire, Oxfordshire, and better Staffordshire wools, tying with the Gloucestershire, Leicestershire, and lesser Staffordshire wools. Surrey wools, some of which were once highly prized, were also unchanged in price.98 In general, the pattern of price increases for other wools is erratic and wide-ranging. It is thus difficult to accept Robert Trow-Smith's verdict, implicitly accepted by Lloyd, that there is 'no reason to doubt the substantial accuracy, impartiality, and comprehensiveness' of the 1343 schedule.⁹⁹ At the same time, it should be noted that its 'high prices' were in fact lower than the average prices for all but four counties in the 1294 Exchequer schedule. But that price decline may reflect in part the disappearance of those monastic 'prepared wools', as well as the other factors that had depressed domestic wool prices by the 1340s.¹⁰⁰

VI. The Abortive Parliamentary Schedule of 1357

In the next decade members of the Commons, evidently growers, made two more attempts to establish a new floor for their wool prices. The first such petition, in the Parliament of September 1353, was in response to the crown's Ordinance of the Staple,

TABLE 7. A COMPARISON OF W Schedules, the 'Nottingham	700L PRICES, IN P PRICES' OF 1337,	ounds Sterli the Parliam Schedule	ING PER SACK, I LENTARY PRICE S OF 1357 AND	sy County: F Ordinance oi 1454	rom the Exch f 1343, and te	equer (1294) . ie Proposed F	and Pegolotti arliamentary
County or District	Exchequer Schedule (1294)	Pegolotti Schedule (Pratica)	Nottingham Price List of 1337	Parl. Ordinance of 1343	Percentage Increase over 1343	Parl. Schedule of 1357	Parl. Schedule of 1454
Bedford Berkshire Buckingham Cambridge Cumbridge Cornwall Cornwall Cornwall Cornwall Cornwall Cornwall Cornwall Conset Devon Dorset Devon Dorset Devon Essex Gloucester Hampshire Isser Essex Gloucester Hampshire Isser Hereford lesser Hereford Huntingdon Konr	7.111 7.333 7.333 9.667 7.500 10.444 10.444 10.444 12.000 12.000	10.334 6.000 6.000 6.667 13.000 10.000 8.533 9.500 10.667 10.667 10.667 10.667 10.667 10.667 10.833 18.667 8.000 8.000	5.000 5.0000 5.0000 5.0000 5.0000 5.0000 5.0000 5.0000 5.00000 5.00000 5.00000 5.00000000	7.333 6.000 6.000 6.667 6.667 6.333 7.333 6.667 6.667 6.667 6.667 6.667 6.667 6.667 6.667 6.667 6.667	46.7 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20	5:333 5:333 5:333 5:333 5:333 5:333 5:333 5:333 5:0000 5:0000 5:000 5:000 5:000 5:000 5:000 5:000 5:000 5:000 5:000 5:00	4.000 4.667 3.333 3.333 4.000 5.000 9.333 9.333 4.000 13.000 5.333 4.000 13.000 5.333 4.000 1.3.0000 1.3.000 1.3.0000 1.3.0000 1.3.0000 1.3.0000 1.3.0000 1.3.00000 1.3.0000000000
Lancashire Lancashire Leicestershire	7.222 8.556		6.000	5.000 5.333 8.000	33.3 33.3	4.000 6.333	6000 3.0005 −1 4.333

~							
County	Exchequer	Pegolotti	1337	1343	Perc.	1357	1454
Lincolnshire Holland Holland lesser Lincs. Norfolk Northumberland Northumberland Nottinghamshire Oxfordshire Chilterns Rutland Shropshire Somersetshire Staffordshire lesser Staffords.	IO.242 I.0.242 6.334 9.333 9.333 8.896 8.867 8.867 8.867	11.179 5.333 6.500 9.048 9.067 9.067 9.000 13.333 10.111 10.111	6.667 6.667 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.0000 6.00000 6.00000 6.00000 6.0000000 6.0000000000	9.333 9.333 7.333 7.333 5.000 6.667 6.667 6.667 6.667 7.333 7.333 8.667 8.667 8.667 7.333 5.000 8.000	2 2 2 2 2 2 2 2 2 2 2 2 2 2	7.000 7.000 7.000 6.000 6.000 6.333 6.333 6.333 6.333 6.333 6.333 6.333 6.333 6.333 6.333	5.667 ^h 5.667 ^h 5.667 ^h 5.000 ^k 1
Surrey Sussex lesser Sussex Warwickshire Westmorland Wiltshire Worcestershire lesser Worcester Vorkshire Craven WALES Flintshire	13.333 5.167 9.600 10.000 1.7.707 8.667	8.667 5.778 6.000 9.556 8.976 	4.000 4.000 5.333 5.000 6.333 6.333 6.333 6.333 6.333 6.333	4.000 6.000 5.000 6.667 7.000 7.333 6.000 6.000	0.0 31.3 13.3 10.5 10.5 63.6 63.6	4.000 4.000 5.333 6.667 6.667 4.000 [4.000]	5.000 ⁰ 3.000 ⁰ 2.500 4.000 4.000 1 4.000
	•	1 1 1	2				

J. H. MUNRO 141

a. Cotswolds b. Quarr abbey (whose value is included in the mean value of Hampshire wools for the Exchequer and Pegolotti schedules). c. Leominster d. March wool of Leominster soke e. 'Herefordshire, except Leominster' f. Berawm Downs, Kent g. Kent h. High Lindsey i. North Holland j. Kesteven k. Newark l. Nottinghamshire m. Moorland (compare *N.E.D.*, vr, 647) n. Banstead Down, Surrey o. 'Surrey' p. Yorkshire Wolds ('Yorkshire' at £3.000).

Table 7 continued

continued
5
Table

		Α	в	C	D		Щ	ц
	Z	Exchequer	Pegolotti	1337	1343	Percentage	1357	1454
Statistic	(Number)	$\mathbf{N}=25$	N = 35	N = 38	$\mathbf{N}=50$	Increase	N = 38	$N = 51^{*}$
Mean of Total English Listings		8.800	9.682	5.053	6.407	26.80	5.246	4.613*
Standard Deviation		1.801	2.621	1.127	1.411	25.20	1.207	1.825
Coefficient of Variation		20.461	27.071	22.303	22.023	I	23.008	39.562
Means of Prices Common to A-F	19	9006	10.289	5.561	7.123	28.09	5.702	4.863
Means of Prices Common to A-E	22	8.930	10.053	5.288	6.924	30.94	5.394	1
Means of Prices Common to C-E	36	I	I	5.065	6.685	31.98	5.259	l
Means of Prices Common to C and E	37	ł	I	5.018	I	I	5.225	I
Means of Prices Common to D and E	39	ļ	1	I	6.632	I	5.231	I
Means of Prices Common to C-F	30	I	I	5.356	6.867	28.21	5.567	4.700
* The state of the second s		مم اسام ما بنام	t innt of the .	minoo liotod in	this table			

The total listings in the 1454 schedule and not just of the prices listed in this table

SOURCES:

For the Exchequer and Pegolotti tables, see the sources for Table 4; for the 1337 schedule, Cal. Close Rolls 1337-39, pp. 148-50 and Cal. Pat. Rolls 1334-38, pp. 480-2; for the 1343 schedule, Rot. Parl., II, 138: no. 17 and Rymer, Foedera, II, ii. 1225-6 (Rec. ed.); for the 1357 schedule, R. Sharpe, ed. Calendar of the Letter Books of London, Letter Book G, p. 87; for the 1454 schedule, Rot. Parl., v, 275, no. 5.

.

142 TEXTILE HISTORY

which reserved the entire wool trade to foreign merchants and thus subjected all exports to the higher alien duty of 50s. a sack. Edward promised only to discuss a new schedule with his Council, and no more was heard of it.¹⁰¹ The next petition, however, almost succeeded. When Edward decided to permit domestic merchants to resume wool exports, if they would agree to pay the higher alien duty, the Parliament of April-May 1357 granted its consent to this tax, for a six-year period, apparently on condition that a new schedule of minimum wool prices be enacted.¹⁰² Such a schedule (also omitted from Lloyd's appendix) was indeed proclaimed by the crown in London on 8 May 1357.¹⁰³ Perhaps, as Unwin has argued, the Commons had demanded this protection for fear that the crown, in having convoked another merchant assembly, would revive those monopsony-monopoly syndicates that could more effectively pass the tax burden onto the growers.¹⁰⁴ But the growers would see neither their worst fears nor best hopes realized. On the one hand, the monopsony syndicates, acting as single-buyers, were not revived; on the other, the crown effectively quashed the new price schedule. On 5 June Edward decreed that 'recent ordinances forbidding the buying of wool under a certain price were not to prevent the free export of wool'.¹⁰⁵ Then, when the statutes on the wool trade were finally issued, they contained no reference to the price ordinance, except to forbid any collusion by merchants 'to abate the price of wools'.¹⁰⁶

In framing that abortive schedule of 1357, Parliament (or the crown) had totally ignored the 1343 statute and instead had based the wool prices, as Table 7 shows, upon the earlier Nottingham list. Thus, of the 38 wools listed, for 36 English counties, seven were given the very same price, including the Cumberland, Northumberland, and Westmorland wools, which thus resumed their former station at the bottom of the list. Twenty prices were set precisely 6s. 8d. or a half-mark higher than those in the Nottingham schedule, including the prices for the three leaders: Herefordshire, Shropshire, and Lincolnshire, respectively. Another four wools were given even higher prices: Buckingham, Durham, and Middlesex a mark more; and Rutland a pound more. Conversely, four others were given lower prices: Essex, Norfolk, and Suffolk a half-mark less; and Yorkshire (including Craven) a full two pounds less. The remaining three wools had not been priced at Nottingham: Lancashire, Holland (Lincolnshire), and Halfshire- 'Dodyngtre' in Worcestershire.¹⁰⁷ Overall, the mean value of the 1357 list was 21.1% lower than that of the 1343 schedule and only 4.1% higher than the mean of the Nottingham prices. Finally, although the 1357 ordinance was evidently a dead letter, some similar schedule may have been imposed upon the wool merchants at the new Calais Staple, when it was established in March 1363. For that October some merchants petitioned Parliament to grant them the right 'to sell their wools freely, without [fixed] prices being set upon them . . . by ordinances of the said Company' of the Calais Staple.¹⁰⁸

VII. The Parliamentary Petition for Minimum Wool-Export Prices of 1454

Almost a century passed before the next official schedule of minimum wool prices was proposed, in the Parliament of February-March 1454. With some bullionist overtones of the 1343 statute, this schedule was the product of commercial depression and factional strife in the Staple trade. Thus wool exports, which had maintained a stable average of 14,200 sacks a year from 1400 to 1430, had fallen by 40% to an annual average of just

8,610 sacks in the 1450s. The once booming cloth trade now failed to provide compensation. It too suffered a severe decline, of 30%: from an annual average of 53,200 cloths in the 1440s to one of 37,460 cloths in the 1450s.¹⁰⁹ Not surprisingly domestic wool prices had tumbled in turn by 20%: from an average of £5. 7s. 8d. a sack of better quality wools in the 1440s to one of £4. 6s. od. a sack in the 1450s, the lowest level of the century.¹¹⁰

In the petitioner's view, the essential reason why wool prices had 'so gretly decayed' and why cloth-making had become 'so anyentysed and negh destroied' was the export of so much wool free of the Calais Staple, by smuggling or by improper royal licences, to places that had once been major cloth markets.¹¹¹ Presumably that argument could be called upon to explain the evident decline in official, stapled wool exports; and indeed another petitioner demanded that severe measures be taken against illegal wool shipments.¹¹² Thus to check competition abroad and economic decay at home, the petitioner requested that no wools be exported at prices below those established in the accompanying schedule. Wools purchased for domestic cloth manufacturing, however, were specifically excluded from the proposed ordinance, and thus presumably would have been cheaper. For this reason particularly, and those just suggested, Eileen Power, Lloyd, and other historians quite logically believed that this price schedule had been sponsored by the native clothiers rather than by the growers, though promising to benefit them as well.¹¹³

But the true authors of the petition, with its hostile references to licences and smuggling, were more likely a monopoly-minded faction of wool merchants, known as the Partitionists, who had recently lost power in the Calais Staple. Appealing for broad support from the crown and as many economic interests as possible, this faction now also petitioned the same Parliament to restore, in essence, the legislation that had permitted it previously to control the wool trade: the Staple Partition and Bullion Ordinances (1429).¹¹⁴ Specifically this faction requested that wool prices be 'augmented and put to more encresse', presumably according to the proposed schedule; that at least half the payment be made in specie on delivery of the wool; that a third of the price be delivered to the mint as bullion; and that all such moneys received be 'partitioned' among the merchants in proportion to their wool stocks at the Staple. That last provision would, in effect, have permitted the larger merchants to squeeze out the smaller.¹¹⁵ While the crown's longstanding bullionist concerns would themselves explain the payment regulations — and the increased wool prices, the King's Council then had two quite valid monetary concerns: the very successful Burgundian debasement of gold coinage, begun the previous month; and the need for ready cash to pay the rebellious Calais garrison.¹¹⁶ The Partitionists indeed seemed to have secured the Council's support when, in April, officers of the current Staple government mounted a strong counterattack in that Parliament. What particularly ensured their success in quashing the Partitionist legislation was a Staple loan to finance the garrison. As part of their agreement for a loan, the Council (now headed by Richard Duke of York) and Parliament accepted the Staplers' demand that the wool-price schedule 'take noon effect ne be auctorised, considered the grete inconvenientz and damages that shuld ensewe therof'.117

The 1454 schedule nevertheless remains historically important as the most complete listing of wool prices for the fifteenth century. It also serves as a most illuminating link

between the three preceding parliamentary schedules of the fourteenth century and the two succeeding Staple schedules. For this reason, its prices have been presented both in Table 7, according to the counties represented in the earlier schedules, and in full in Table 8, according to the wools listed in this and the two succeeding Staple schedules. As the tables indicate, the 1454 schedule contains prices for more regional types of wools than any other — 51, but from fewer counties than the earlier parliamentary lists — just 30. There is just one county whose omission remains quite inexplicable: Norfolk (unless represented by 'Cley'), which appears in all the other schedules listed in Tables 7 and 8. The omission of Devon and Cornwall, in the south-west, is the least surprising. Their wools had been listed only once before, in that curious 1343 price ordinance, and there at the very bottom. Indeed the latter's wools were disparagingly known as 'Cornish hair'.¹¹⁸ In the north-west, the wools of Cheshire had not been listed since the 'Notting-ham Prices' of 1336–7; and neighbouring Lancashire wools, omitted from the Nottingham list, are again omitted. Both are also excluded from the two subsequent Staple schedules.

More surprisingly, wools of the four northernmost counties — Northumberland, Cumberland, Westmorland, and Durham — are also absent from the three fifteenthcentury schedules. All but the last had been faithfully listed in the thirteenth- and fourteenth-century schedules; but their absence was now fully justified. Being, or having become, coarse 'sleight' wools, their values were too low, according to fifteenth-century merchants, to bear the Calais Staple's heavy charges.¹¹⁹ Even the Partitionists in the 1454 parliament, when demanding a stricter enforcement of the Staple's monopoly rights, recognized that the wools from these four counties were legally exempt from the Staple.¹²⁰ The first wools to receive this exemption, from Richard II, were those grown in Northumberland between the rivers Tweed (on the Scottish border) and Coquet, and shipped from Berwick-on-Tweed alone. Parliament confirmed this Staple exemption only in October 1399 (I Hen. IV); but the enrolled customs accounts show that Berwick-on-Tweed had been exporting these wools, along with Scottish wools, from June 1377, at a duty of 26s. 8d. (two marks) a sack, rather than the then standard 46s. 8d.¹²¹ In May 1410, 'in consideration of the burning and destruction of Berwick-on-Tweed' by the Scots, these duties were halved to one mark (13s. 4d.) a sack, a rate that remained unchanged until the termination of the Berwick accounts on 30 December 1457.¹²² Whether or not Berwick's export privilege was ever expanded is not clear. In 1425, Berwick merchants had petitioned Parliament to include within their export privilege all Northumberland wools grown north of the river Blyth, on the grounds that the king of Scotland was denying them access to Scottish wools. The crown made no reply; and a licence to Berwick merchants dated 18 January 1440 refers only to wools grown between the Tweed and Coquet.¹²³ But parliamentary rolls of 1449 and 1454, in discussing Berwick's export privilege, do include wools from all four northern counties.¹²⁴

Merchants from Northumberland's other major port and chief city, Newcastle on Tyne, first received a similar if limited ad hoc exemption from the Calais Staple on 3 August 1379: a licence to ship 1,000 woolsacks 'of English growth' directly to Flanders.¹²⁵ This licence was evidently the king's response to a petition presented in parliament the preceding April complaining that for the past two years Newcastle had been unable to ship wools because most of the northern wools (including Yorkshire wools) were being smuggled into Scotland, without payment of customs and subsidies, 'except

for a small amount shipped from Berwick-on-Tweed, on payment of two marks a sack'.126 The licences periodically granted thereafter to Newcastle merchants to ship wools free of the Staple made no concessions on the rates of duty; and none mentioned the types of wool until the licence of 24 July 1410. It specified 2,000 sacks from Westmorland, Northumberland, Cumberland, 'Richmondshire' (Richmond, North Riding of Yorkshire, near the river Tees), and the bishopric of Durham.¹²⁷ These export licences were really in contravention of several acts of parliament that required all English wools to be shipped to Calais except the afore-mentioned Northumberland wools exported from Berwick and wools that Italian and Spanish merchants shipped directly from Southampton to the Mediterranean.¹²⁸ But finally, in October 1423, by statue 2 Hen. VI, c. 4, Parliament formally authorized licences to export wools from Northumberland, Westmorland, Cumberland, and Durham exclusively, free of the Staple.¹²⁹ The enrolled customs accounts show that from Michaelmas 1423 these very wools were shipped fairly regularly on licence from Newcastle directly to either Bruges in Flanders or Middelburg in Zeeland.¹³⁰ From about that time, possibly earlier (c. 1415-1424), Leyden's drapery guild specifically banned the use of 'Newcastle' wools, along with Scottish, Flemish, domestic, and all other wools 'not belonging to the English Staple'.¹³¹ The one type of northern wools specifically excluded from the licensing provisions in the 1423 statute, with the command that they be stapled at Calais, was Yorkshire wool. But forty years later, in 1463, when Parliament formally confirmed Newcastle's privilege to ship the northern wools free of the Staple, it also agreed to include north Yorkshire wools from not only Richmond but also Northallerton in this exemption.¹³². As Tables 7 and 8 show, wools from the rest of Yorkshire rank only in the bottom third of the 1454 schedule, in striking contrast to their prominence in earlier lists.

There are several other striking features of the 1454 price list that deserve to be compared with the other schedules.¹³³ First, the premier position continued to be held by Herefordshire wools, particularly the 'Lemster Ore' (Leominster), which enjoyed an even more decisive supremacy than before. Its price of f_{13} , os. od. a sack was 56% higher than in its 1357 listing, and 39% more than the current price of Shropshire March wools, which similarly maintained their traditional second place rank. Possibly included with 'March' wools as the most costly variety in the first Calais Staple schedule, Leominister wool was also the highest priced, by virtually the same margin over Shropshire March, in the second Staple schedule (1499). Both the March and the next ranking wools are also much more costly in 1454 than in 1357. Effectively third in the fifteenth-century schedules, the latter wools were Cotswolds, a term used only once previously in these lists, for one of Pegolotti's *cogliette* wools.¹³⁴ But their corresponding fourteenth-century values can be judged from the prices of Gloucestershire wools, and perhaps also of Oxfordshire and Worcestershire wools, which had generally ranked together as a close fourth after Lincolnshire wools, as Table 6 also clearly shows. The best Lincolnshire wools in the 1454 schedule, the High Lindsey, had not only fallen behind the Cotswolds to fourth place — fifth, if lesser March wools are included — but had dropped 19% in value from the 1357 listing. The vast majority of the remaining wools common to both of these lists were also cheaper in 1454: 25 out of 31. Even though the northern wools have been excluded, the cheapest wool, from Sussex, is only $f_{2.10s. od.}$ a sack, just 62.5% of its 1357 price.

J. H. MUNRO 147

TABLE 8. PRICES OF ENGLISH WOOLS, IN POUNDS STERLING PER SACK, AND THEIR RELATIVEVALUES, ACCORDING TO A PARLIAMENTARY PETITION OF 1454, THE 'NOUMBRE OF WEYGHTES'HANDBOOK FOR THE CALAIS STAPLE OF c. 1475, AND THE CALAIS STAPLE PRICE SCHEDULE FOR
THE ANGLO-HABSBURG TREATY OF MAY 1499

English Wools	Parliam List of	entary 1454 Percentage	Staple List	of 1475 (?) Percentage	Staple Li	st of 1499 Percentage
by Name or County of Origin	Price in £ ster.	March wools	Price* in £ ster.	March wools	Price* in £ ster.	March wools
Leominster, Hereford March Wools, Shropshire	13.000	139.3	_	_	25.807	131.4
[& Hereford] March Wools of	9.333	100.0	15.407	100.0	19.644	100.0
Leominster Soke Cotswolds,	9.333	100.0	[15.407	100.0]	18.104	92.2
Gloucester Leominster refuse Middle March	8.333 —	89.3 —	13.867 —	90.0 —	15.022 12.711	76.5 64.7
Wools, Shropshire High Lindsey,	—				12.711	64.7
Lincs.	5.667	60.7	12.711	82.5	10.785	54.9
Young Cotswold	5.333	57.1			11.941	60.8
Middle Cotswold Low Lindsey,	_				10.400	52.9
Lincs. Herefordshire,	5.333	57.1		_	10.400	52.9
except Leominster	5.333	57.1				
Clay Wolds ^a Newark,	5.000	53.6	11.556	75.0	_	
Nottinghams. Lindsey Marsh,	5.000	53.6	11.556	75.0	_	
Lincs. North Holland,	5.000	53.6	11.363	73.8	—	
Lincs. Marsh Wools refuse Banstead Down,	5.000	53.6		73.8	9.630 9.630	49.0 49.0
Surrey	5.000	53.6				
Gloucestershire	5.000	53.6				
Berkshire	4.667	50.0	12.711	82.5	13.481	68.6
Kesteven, Lincs.	4.667	50.0	11.941	77.5	10.015	51.0
Wiltshire	4.667	50.0	11.941	77.5		—
Oxfordshire Henley,	4.667	50.0	[11.941]	77.5		
Oxfordshire	[4.667]	50.0	11.941	77.5		_
Nottinghamshire	4.667	50.0	11.556	75.0	_	

Table 8 continued.

Name	1454		1475		1499	
South Holland,						
Lincs.	4.667	50.0	11.363	73.8	[9.630]	49.0
Hampshire	4.667	50.0	10.593	68.8		
Nottingham-	4)	J				
Hatfield	1.333	16.1	11.363	73.8		
Warwickshire	1.222	46.4	11.362	73.8		_
Rutland	4.222	46.4	11.170	72.5	0 620	40.0
Middle Berkshire	4.335	40.4		<u></u>	0.620	49.0
I eicestershire	1 222	16 1	11.170	72 5	<u> </u>	49.0
Huntingdonshire	4.222	40.4	10.785	72.5		
Bergum Downs	4.222	40.4	10.703	/0.0		
Vont	4 2 2 2	16.1			· · · ·	
Wudown Vont	4.333	40.4				
Staffordahira	4.333	40.4		 2		
Manthananahina	4.000	42.9	10.978	71.3		
Northamptonshire	4.000	42.9	10.785	70.0		
Buckinghamshire	4.000	42.9	10.785	70.0	_	—
Bedfordshire	4.000	42.9	10.785	70.0		
Hertfordshire	4.000	42.9	10.593	68.8		
Worcestershire	4.000	42.9	—		_	—
Somerset	4.000	42.9			—	
Yorkshire Wolds	4.000	42.9	10.207	66.2		
Isle of Wight,						
Hants.	4.000	42.9			—	-
Derbyshire	3.900	41.8	10.593	68.8	—	·
Moorland ^b	3.467	37.1	10.207	66.2		
Peak District,			-			
Derby	3.467	37.1	10.207	66.2		
Cambridgeshire	3.333	35.7	10.593	68.8		—
Dorset	3.333	35.7	10.015	65.0		_
Essex	3.333	35.7	9.630	62.5		
Sherburn in Elmet, Yorkshire		557		5		
(W. Riding)	3.333	35.7			_	
Lindrick, Yorkshire	0 000	55 1				
(West Riding)	3.333	35.7				
Surrey	3.000	32.1	10.207	66.2	8.474	43.1
Kent	3.000	32.T	9.244	60.0	8.859	45.T
Middlesex	3.000	32.1		_	<u> </u>	
Norfolk			8.850	57.5	8.171	12 T
Vorkshire	2 000	22 T	8 080	525		43.1
Suffolk	2 600	27.0				
Sussey	2.000	2/.9	0.620	62 5	_	
Middle Voung	2.300	20.0	9.030	02.5		
Cotewold					8 080	47.2
Cotowold refuse					0.009	41.2
Middle Lindeau				—	7.319	37.3
Middle Kesterren				—	7.319	37.3
Middle Kesteven				—	0.933	35.3
Wildle Holland					0.548	33.3
middle Kutland				_	0.548	33.3

Statistic	N	N = 51	% of March	N = 36 N = 36	% of March	1499 N = 25	% of March
Mean: all prices Standard Deviation Coefficient of Var. Mean of prices common to 1454		4.613 1.825 39.562	49.4	11.031 1.331 12.066	71.6	11.124 4.525 40.678	56.6
and 1475 Mean of prices	35	4.400	47.1	11.093	72.0		
and 1499 Mean of prices	13	6.231	66.8			13.215	67.3
and 1499	10			11.748	76.3	11.401	58.0

Table 8 continued.

NOTES:

The original prices, given in terms of the Calais sack of 315 lb., have been multiplied by 1.555. to accord with the English sack of 364 lb. 'Cley' in the 1454 list is obviously the same as 'Clay Wolds' in the 1475 Staple list. Thus Cley-next-

a. the-Sea in Norfolk and Clee in Lincolnshire (near Great Grimsby) seem to be unlikely identifications. More likely, but still uncertain, are the Clee Hills of Shropshire, or possibly the Weald of Kent, Sussex, and Hampshire (compare weald-clay). Compare N.E.D. vi, 647: 'The northern part of Staffordshire, bordering on Derbyshire, contains a

b. great portion of waste, devoted to feeding sheep, . . . denominated the Moorlands'. Both the location in the 1454 and 1475 lists and the relative prices would fit this identification. No place-names dictionary provided any assistance.

SOURCES:

1454: Rotuli Parliamentorum, v, 275: no. 5. 1475: 'Noumbre of Weyghtes' in British Library, Cotton Vespasian E. IX, fo. 106r – 7r.

1499: Algemeen Rijksarchief (België), Rekenkamer no. 1158, fo. 226.

Thus the 1454 price distribution is characterized by a lower average, a much wider range, and a higher coefficient of variation (39.6) than those in the fourteenth-century lists. The drop in prices, however, may not be quite so great as Dr Lloyd maintains.¹³⁵ For it is hardly fair to compare the 1454 list with the 1343 ordinance, in view of the circumstances of the latter's enactment and repeal. If the prices in the 1454 list are compared instead with those for the same wools in the 'Nottingham' list of 1336-7, the average value of the former is only 12.2% less; and, on the same basis, 15.6% less than the 1357 price average. The 1454 prices, to be sure, were probably set above the prevailing market prices; but it must be remembered that wool prices in the 1450s had just dropped a precipitous 20% and that they thereafter recovered. Furthermore Dr Lloyd's tables and graphs exaggerate the extent of the fifteenth-century price decline because his series for that period are so predominantly weighted by prices for the cheap Northumberland and Durham wools.¹³⁶ Finally, one may also take issue with his contention, in discussing the 1454 price distribution, that 'the very large gap between the prices of the best and middling wools is probably in part artificial' because 'the intention of the petition was to prevent the export of the finest wools, which were desired by both the

English and foreign cloth manufacturers'.¹³⁷ Thus such wools were supposedly given prohibitively high export prices. Table 8 does indeed indicate a proportionately smaller gap between Cotswold and Lindsey wool prices in the next schedule, the first Staple list (c. 1461–83). But that Staple schedule also sets very high prices on March and Cotswold wools; and, as Lloyd himself in effect noted, the inclusion of the 40s. a sack customs duty and other *fixed* marketing costs would have reduced the percentage differences in prices between the cheaper and costlier wools. Even so, the second Staple schedule (1499), which was unavailable to Dr Lloyd, has a price distribution and coefficient of variation (40.2) that are very close to those of the 1454 schedule. Thus, to the extent that fixed Staple charges did reduce wool-price differences, the range of domestic or f.o.b. export prices may have further widened in the second half of the fifteenth century. Finally, a sixteenth-century Stapler memorandum (c. 1527) records domestic prices for Leominster, March, and Cotswold wools, reproduced in Table 10, that are also very similar to those in the 1454 list, except that the price differentials are again slightly wider.

VIII. The Calais Staple Wool-Price Schedule tempore Edward IV (1461–83)

The second of the fifteenth-century price schedules, composed in the reign of Edward IV, is contained in a Stapler's handbook on accounting entitled 'The Noumbre of Weyghtes'. This schedule is much shorter than the 1454 list, with only 36 or 15 fewer prices; but it has about the same geographic coverage, with prices from 27 counties. The only counties that do not reappear are Somerset, Suffolk, Middlesex, and Worcestershire, though possibly the last is included under the term 'Cotswolds'. The only county to be added — or restored — is Norfolk.

Surprisingly there is no satisfactory edition of this important schedule. It was regrettably omitted when H. Hall and F. J. Nicholas published the 'Noumbre of Weyghtes' treatise in 1929.¹³⁸ Finally, in 1969, the price list did appear in print, ensconced in a collection of historical documents; but 70% of the prices given are erroneous because the editor, A. R. Myers, did not note or did not understand the MS symbols for fractions of a mark (13s. 4d.). Some of his identifications of the wools are, moreover, questionable.¹³⁹ Dr Lloyd's rendition of this schedule, on the other hand contains only one minor fault: too high a price for the March wools. But he has presented the schedule as a very smallscale histogram or bar-chart whose values are hard to decipher; furthermore, he has constructed it by using 'equivalent prices for the English sack'.¹⁴⁰

Indeed the weight of the sack serving as the price unit constitutes one of the major problems in interpreting this Staple schedule. The treatise itself does not define the weight except to state ambiguously that 'aftre Caleys weyght a sacke woll conteynythe iiii^{xx}x clawys [90 nails]'.¹⁴¹ Presumably the unspecified source for the ratio that Lloyd used to convert the prices was a passage defining the English and Calais sack weights in that sixteenth-century Stapler memorandum referred to earlier:¹⁴²

A sack of wooll conteyneth 52 nayles heere in England, and a sacke at Cales conteyneth 90 nayles and every nayle 4 li. and every pounde 14 ounces, so that 2 nayles of Cales weight conteyneth 112 ounces; and a nayle of the weight of England is 7 li. and every pound 16 ounces, so that it maketh 112 ounces; so that one nayle of Englande maketh two of Cales, so that 45 nayles in England maketh a sacke in Cales, wherein their is 7 nayles advantage in every sack.

Thus I Calais sack = 5040 oz. $(90 \times 4 \times 14) = 315$ lb. avoirdupois, or 86.54% of the English sack weight of 364 lb. Similarly the above ratio of 45:52 equals 0.8654; and its reciprocal, 1.1555, was the ratio evidently used in Lloyd's histogram. There certainly can be no doubt at all about the Stapler's arithmetic; and a fifteenth-century Calais sack weight of 360 'pounds', containing 90 nails of 4 lb. each, is verified by the Cely correspondence and records of the Leyden drapers.¹⁴³ The Burgundian Low Countries, by far the chief customers of the Staple, also employed a woolsack of 360 lb. that similarly contained 90 nails (*nagelen*) weighing 4 lb. each. But what is both curious and really quite anomalous is that their sack-weight — like the thirteenth-century Douai sack — closely approximated not the Calais but the English sack: 168.387 kg. = 371.23 lb. avoirdupois = 1.02 English sacks. The explanation lies in the fact that their various local pounds averaged 467.743 grams or 16.50 ounces, and thus weighed just slightly more than the English pound, while the pound of Calais (or of Artois) weighed 12.5% less.¹⁴⁴

For all the reasons just discussed, therefore, and to facilitate comparisons, while preserving an authentic record, I have presented a new edition of this Staple priceschedule in two tables: in terms of the English sack-weight in Table 8, which lists the prices for the three schedules by the rankings given in the 1454 petition; and in terms of the Calais sack-weight in Table 9, which utilizes the rank order given in the MS for both this and the 1499 Staple schedules. In Table 8, the prices have been converted by the 52:45 ratio given above, on the assumption that both Staple schedules did indeed use the sack-weight described in that sixteenth-century memorandum.

Finally, the other major problem posed by this first Staple schedule is that the 'Noumbre of Weyghtes' treatise provides no explanation of when, why, or how the price list was compiled. The treatise itself is generally attributed to the reign of Edward IV (1461-83); and Myers has arbitrarily assigned a date of $c.1475.^{145}$ Normally a precise date for such a schedule would matter little. But Edward IV's reign was marked by not only civil war and economic dislocation, but also by the first coinage alterations in over fifty years: a 20% debasement of the silver coinage in August 1464 and a 26% debasement-devaluation of the gold coinage in 1464–5.¹⁴⁶ Undoubtedly these debasements played a considerable role in the sudden inflation of wool prices after 1465, as shown in the following statistics extracted from Lloyd's remarkable data:¹⁴⁷

Quinquennium	Mean Domestic Wool Price per Sack in Pounds Sterling	Index 1460–4 = 100
1450-4	4.514	102.7
1455-9	4.132	94.0
1460-4	4.394	100.0
1465-9	5.906	134.4
1470-4	5.285	120.3
1475-9	*	*
1480-4	7.779	177.0
1485-9	*	*
1490–4	5.742	130.7
1495-9	5.308	120.8

*insufficient data to compute a mean

Thus if the Stapler price list was composed after the 1464-5 debasements, the differences in real values between the domestic wool prices in the 1454 schedule (f.o.b.) and the Staple prices in this list (c.i.f.) would not be quite so great as they appear to be in Table 8. If the schedule was composed before 1464, on the other hand, we would expect its prices to be much lower than those in the 1499 schedule. Although a number of its prices are certainly well below those of 1499, the overall mean of the prices common to both schedules is in fact 3.0% higher than the 1499 mean price. Since the domestic woolprice statistics just presented indicate that the mean of the 1490s was about the same as that of the decade 1465-74 (1.3% lower), a post-1465 date for the schedule seems the more reasonable choice. The domestic wool-price statistics would not support a dating of the 1480s; and Myers' date of about 1475 is as good as any. Yet the schedule may not reflect the prices of any specific date. The author might possibly have retired from the wool trade when he wrote the handbook; and the schedule may be no more than his or somebody else's recollection of Staple prices. In short, the schedule presents the same problems of credibility as Pegolotti's Pratica. On the other hand, we have no valid grounds for rejecting it.

IX. The Calais Staple Schedule of May 1499

As noted in the introduction, the other Staple schedule, the ninth and final list to be considered here, was discovered in the course of my research in Brussels (in 1963). Although the shortest of all the schedules, it may be the most important, as the only one that indisputably presents actual sales prices for wools. Those prices were not determined, however, by 'free market' forces, but rather by a combination of princely fiat and the Staplers' still entrenched monopolism. The document itself indicates that the price schedule was drawn up and officially decreed ('ghemaect ende gheordonneert') as part of the commercial treaty between England and the Habsburg Low Countries ratified by Henry VII and Archduke Philip the Fair on 18 May 1499.¹⁴⁸ That treaty finally completed the restoration of trade relations only partially achieved by the famous but quite misnamed Magnus Intercursus of February 1496. Although the current Habsburg restrictions on the English cloth trade had been the most contentious issue impairing trade relations, high wool prices at the Staple had also been for years a major grievance of the Low Countries.¹⁴⁹ The two issues were, of course, economically linked insofar as a large gap between the domestic English wool prices and those at the Staple made the English cloth trade competition a more severe threat to the Low Countries' drapery industries. Indeed, Table 8 indicates that, even if we deflate the late fifteenth-century prices by 30%, say, to account for the 1464-5 debasements and other factors raising wool prices, the two means of Staple prices are almost *double* the mean of the domestic wool prices. Similarly the mean of the five Staple wool prices for 1527 listed in Table 10 is 80% higher than the domestic mean of those prices for 1527. Those price differentials are vastly larger than those indicated for the thirteenth-century schedules.¹⁵⁰ Only about a third of the difference between domestic and Staple prices of the best wools, as listed in Table 10, can be accounted for by the customs duty of 40s. a sack; but, as previously suggested, that specific duty constituted a proportionately smaller cost burden for the most expensive wools.

Furthermore, a comparison of the two Staple schedules in Tables 8 and 9 shows that, although the 1499 schedule had a slightly lower average price, its best wools were priced considerably higher. Possibly the very high prices of such wools reflect a diminished supply available for the export market, but also a relatively increased demand on the part of the traditional urban draperies of the Low Countries. Those urban draperies that still relied wholly upon the now heavily taxed English wools had suffered, to be sure, a sharp decline, as they lost more and more customers to the much lower-priced — and lightly taxed — English cloth trade, and even to the Low Countries' own nouvelles draperies, which had switched to the much cheaper Spanish wools. Indeed these very circumstances, especially the differential in export taxes, help to explain the serious decline in English wool exports by the mid fifteenth century. But some of the traditional urban draperies, recognizing the futility of competing on price alone, had managed to survive by stressing their comparative advantages — in quality competition. Along with fine craftsmanship and resplendent dyes, the essential determinant of luxury quality was high grade English wool, and thus the costliest wools (for which the tax burden was less).151

In Brabant the leading drapery, perhaps now the leader of the Low Countries, at Mechelen, stipulated that its Gulden Aeren (golden eagle) cloths were to be made from Leominster wools alone. The other major Brabantine luxury drapery, in Brussels, required the best March wools (Herefordshire and Shropshire), or the best Cotswolds, or, at the very least, the best Lindsey (Lincolnshire) wools for its lakenen van de drie staten and scaerlakenen. In Flanders, the leading urban drapery, at Ghent, would allow only Fine March, Fine Cotswold, Fine Berkshire, or Middle March wools to be used in its Dickedinnen cloths; and nothing cheaper than Fine Rutland or Middle Berkshire for its second-quality Hellemans. Similarly the leading Dutch industry, at Leyden, demanded Fine March or Fine Cotswolds for its Puiklakens and at least Lincolnshire wools (High Lindsey, Kesteven, Holland) for its other cloths. Even Armentières (Flanders), the star of the rising nouvelles draperies, permitted no more than two-thirds of the wools in its draps oultreffins to be Spanish, and required that the other third be Cotswolds, Berkshire, and/or Lindsey wools.¹⁵² For these draperies, the cost of securing English wools had been further increased by a series of Burgundian-Habsburg coinage debasements that had raised their exchange rate on the pound sterling from 17s. 8d. groot Flemish in May 1466 to 29s. 7d. groot by October 1497.¹⁵³

Attempts by Archduke Philip's ambassadors to secure a reduction in the Staple's wool prices in the 1496 *Magnus Intercursus* and subsequently in the negotiations of 1497 and 1498 had all failed.¹⁵⁴ Then, in the treaty negotiations of March 1499, the archduke's ambassadors at Calais obdurately demanded, as the first article for the revised trade treaty, an agreement from the Staplers to reduce the prices of all their wools by one mark (13s. 4d. sterling) a sack for the next twenty years. Although the English ambassadors this time did make concessions on the price issue, they proudly reported to Henry VII that 'we have driven theym to be contentid with the di. marc oonly [6s. 8d. = 1 gold angel-noble], to be debatid on every sak of every kyend of woole, which nowe been yn Calis'.¹⁵⁵

The finally ratified version of the Anglo-Habsburg trade treaty established that same price reduction of 6s. 8d. a sack, but only for a period of twelve years. In return for restoring the English cloth trade to its traditional markets in the Low Countries, the

Name of Wool, or County of Origin	List of <i>c</i> . 1475	List of 1499	
Leominster, Herefordshire		£22. 6s. 8d.	
March Wools of Shropshire		-	
[and Herefordshire]	£13. 6s. 8d.	17. os. od.	
Middle Leominster		15. 138. 4d.	
Fine Cotswold	12. os. od.	13. os. od.	
High Lindsey, Lincolnshire	11. os. od.	9. 6s. 8d.	
Fine Berkshire	11. os. od.	11. 13s. 4d.	
Leominster Refuse		11. 0s. od.	
Middle March	—	11. os. od.	
Fine Young Cotswold		10. 6s. 8d.	
Middle Cotswold	—	9. os. od.	
Low Lindsey, Lincolnshire	—	9. os. od.	
Kesteven, Lincs.	10. 6s. 8d.	8. 13s. 4d.	
Wiltshire	10. 6s. 8d.		
Henley, Oxfordshire	10. 6s. 8d.	· · · · · · · · · · · · · · · · · · ·	
Nottinghamshire	10. os. od.		
Clay Wolds ^a	10. os. od.	<u> </u>	
Newark, Nottinghamshire	10. os. od.		
Nottingham [-Hatfield]	9. 16s. 8d.		
Warwickshire	9. 16s. 8d.		
Lindsey Marsh, Lincs.	9. 16s. 8d.		
North Holland, Lincs.	9. 16s. 8d.	8. 6s. 8d.	
South Holland, Lincs.	9. 16s. 8d.	[8. 6s. 8d.]	
Leicestershire	9. 13s. 4d.		
Rutland	9. 138. 4d.	8. 6s. 8d.	
March Refuse	—	8. 6s. 8d.	
Middle Berkshire		8. 6s. 8d.	
Staffordshire	9. 10s. od.		
Buckinghamshire	9. 6s. 8d.		
Northamptonshire	9. 6s. 8d.		
Bedfordshire	9. 6s. 8d.		
Huntingdonshire	9. 6s. 8d.		
Hertfordshire	9. 3s. 4d.	—	
Cambridgeshire	9. 3s. 4d.		
Derbyshire	9. 3s. 4d.	—	
Hampshire	9. 3s. 4d.	_	
Surrey	8. 16s. 8d.	7. 6s. 8d.	
Yorkshire Wolds	8. 16s. 8d.		
Moorland	8. 16s. 8d.	—	
Peak District, Derbyshire	8. 16s. 8d.		
Dorset	8. 13s. 4d.	—	
Essex	8. 6s. 8d.	<u> </u>	
Sussex	8. 6s. 8d.	_	
Kent	8. os. od.	7. 138. 4d.	

TABLE 9. PRICES OF ENGLISH WOOL, IN POUNDS STERLING PER CALAIS SACK (315 lb.), AT THESTAPLE, ACCORDING TO THE 'NOUMBRE OF WEYGHTES' HANDBOOK OF c. 1475, AND THE PRICESCHEDULE FOR THE ANGLO-HABSBURG TREATY OF MAY 1499

Name	c. 1475	1499	
Norfolk	7. 138. 4d.	7. 6s. 8d.	
Yorkshire	7. os. od.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Middle Young Cotswold	,	7. os. od.	
Cotswold Refuse		6. 6s. 8d.	
Middle Lindsev		6. 6s. 8d.	
Middle Kesteven	_	6. os. od.	
Middle Holland		5. 138. 4d.	
Middle Rutland	_	5. 138. 4d.	

Table 9 continued

For notes and sources, see Table 8.

archduke's subjects received complete satisfaction on all the other Staple issues. Thus the specific quality of the wools and their place of origin, by county or district, were to be clearly indicated on each wool sarpler as 'GOOD MARCHE, MIDDLE MARCHE, GOODE COTTISWOLDE' etc.; provisions were made for the buyers to inspect all wool sarplers freely; and a fine of £20 sterling was to be levied on anyone convicted of mixing or otherwise fraudulently packing the wools. Finally the English, who in the past had long striven (1363–1473) to make English coin or bullion the sole legal tender at the Staple, explicitly confirmed the right to make payment there in 'omnia genera Pecuniarum, tam aurearum quam argentearum, in terris et dominis Domini Archducis cursus habentium . . . et ad Valorem sterlingorum juxta Ratam Tabulae jam factae'.¹⁵⁶ Indeed, attached to the Flemish version of the Staple's wool-price schedule is a table, 'naer de tafel van Calis', listing the English sterling values of 23 Burgundian-Habsburg and foreign gold coins to be accepted as legal tender at the Staple. By the relative values accorded the various gold coins, this monetary agreement permitted a very reasonable exchange rate of 275. 9d. groot Flemish to the pound sterling in purchasing wools.¹⁵⁷

The wool price schedule itself, despite its great value, is not devoid of interpretative difficulties, which may explain why it had not been previously utilized. In the first place, the document at hand is not the original of 1499, but a Flemish copy ratified at Calais on 17 January 1523 (n.s.) for the current treaty negotiations. Evidently the schedule was still in force; and presumably, if not demonstrably, the prices so recorded received the stamp of approval, including one obviously corrected by another hand. But secondly some of the wool designations are Flemish corruptions of English names that the scribe did not fully understand. When written in a transitional hand mixing medieval and sixteenth-century forms, they are not easily decipherable. Thus Leominster is first given as 'limister', probably in accordance with the current English 'Lemster'; but later, Middle Leominster appears to be 'neder luaster'. March wool-clippings are rendered 'reffuus marce' and Low Lindsey as 'laulinseele'; Kent, as 'knect'; Surrey, as 'sudree' — presumably from the current English 'Suthray'; Norfolk, apparently as 'Nor'.¹⁵⁸.

Thirdly, the very shortness of the schedule and an apparently capricious geographic range of wools could raise questions about its validity. Only nine counties are represented, with 25 wools. As in the thirteenth-century lists, some of these wools are priced by three

grades: fine, middle, and refuse ('locks' or clippings). The best wools of each grade came from four adjacent western counties: Herefordshire (with 3 listings); Shropshire (3 also); Gloucestershire (Cotswolds, possibly including Oxfordshire, with 5 listings); and Berkshire (2 listings), respectively. Under the heading 'Clijt Wolle' — wools of clay or alluvial terrain — were the listings of the other five counties: Lincolnshire (7), Rutland (2), Kent (1), Surrey (1), and Norfolk (1), respectively. The wools of the last three counties ranked near the bottom, just above the northern wools, in virtually all the other lists. Thus the absence of the generally better wools from most of the Midlands, Home Counties, and the south is rather puzzling. Possibly they were not really absent but represented by 'Cotswolds', which M. M. Postan maintains became the 'generic name' for wools from many of these counties.¹⁵⁹ But clearly this usage was not true of the first Staple schedule, in which most of these Midland and southern counties were specifically listed, with a wide variation in their wool prices. In the *Cely Papers* of the late fifteenth century, furthermore, the term Cotswold refers in almost all instances to Gloucestershire wools.¹⁶⁰

A better explanation for the absence of wools from so many Midland and southern counties may be found in a combination of changing economic conditions. The most important of these was not necessarily the previously advanced argument that the Low Countries' traditional draperies, in responding to English competition and the wool taxes, were using just the best wools to produce 'superfine' cloths. Equally responsible for the absence of the lesser grade wools were, undoubtedly, the Tudor enclosures, which were certainly well under way in the Midlands and Home Counties by 1500. For in these regions some combination of richer pastures, year-round feeding, and crossbreedings may have already produced larger, meatier sheep whose wools became too long, too coarse, too inferior for the Low Countries' draperies, or even for the nouvelles draperies.¹⁶¹ At the same time, by the late fifteenth century, the quality of the shortstapled Spanish merino wools had evidently improved enough to rival or even to surpass the middle-grade English wools, as the aforementioned Armentières ordinance would suggest. Unburdened with high taxes and monopolistic stapling charges, the merino wools were very likely underselling and displacing the middle and lesser grade English wools. Even some of the traditional luxury draperies were finally taking up Spanish wools.¹⁶² Thus in the 1520s a Stapler complained that:¹⁶³

Spanish woolls increase as well in fynes as in quantite, and bine brought into Flaunders in great aboundaunce more in one yeare now, then hath bine heertofore in three . . . because they [the Flemish] have a better pennyworth theirof, then the staplers can afforde them of English woolles.

Supporting these charges, a subsequent Tudor critic of enclosures, Clement Armstrong, reported the now common view that 'Spaynysh woll is almost as good as English woll, which may well be soo, by that Spayn hath husbondid ther wolle from wurse to better, and England from better to wurse'.¹⁶⁴

The presence of the Kent, Surrey, and Norfolk wools is, however, more difficult to explain. Possibly they had improved in quality. As Tables 8–9 show, they were somewhat more expensive than the 'middle' Lincolnshire wools sold at the Staple; but their relative value, compared to the most costly wools, was about the same as in the 1454 list, after export duties are deducted. In view of Norfolk's importance as the long-established

home of England's worsted industry, and of Kent's renown for its long-stapled Romney Marsh wools, possibly these counties were supplying warp-wools for the *sayetteries* of Hondschoote, Lille, Arras, Amiens, Mechelen, and other towns, which were now achieving international fame.¹⁶⁵

The other puzzling feature of the 1499 schedule is the much elevated status of Berkshire wools. Earlier, in the 1454 list, they had ranked just slightly above the mean; and in all the preceding lists, below the mean. But, as Tables 8 and 10 indicate, Berkshire wools ranked just as high, just after the Cotswolds wools, in both the first Staple schedule and the sixteenth-century Stapler memorandum. The previously cited drapery ordinances of the Low Countries, furthermore, accord these wools an equally high status, at least in the late fifteenth and sixteenth centuries. Unless the 1454 parliamentary schedule was then grossly out of date, the Berkshire wools must have recently undergone some significant transformation, possibly from the introduction of Cotswold sheep into that county.

A much more perplexing problem, however, indeed the greatest mystery to emerge from examining the nine schedules together, is the fate of the once proud Welsh wools. As was briefly noted in discussing the first three schedules, Wales supplied either the best, most costly wools, or at least those that equalled the best English wools, during the thirteenth and (possibly) the early fourteenth centuries. In the Douai schedule, the three highest priced wools came from Margam, Neath, and Tintern abbeys, respectively (Glamorgan and Monmouthshire); and in both the Exchequer and Pegolotti schedules, Tintern wools tied for first place. But in the next list, the 'Nottingham Prices' of 1336-7, the only Welsh wools to appear were from Flintshire. Thereafter, none of the remaining schedules makes any reference to Welsh wools; nor, significantly, do any drapery ordinances or other records from the Low Countries. One cannot reasonably conjecture that some unplotted climatic change was responsible for the disappearance of the Welsh wools. For wools from the directly adjacent 'Welsh Marches' of Herefordshire and Shropshire ranked first and second respectively in all the subsequent schedules, except in that very dubious 1343 parliamentary ordinance, which, as previously noted, placed Shropshire (and Lincolnshire) wools first and Herefordshire wools fifth. In the Pegolotti schedule, furthermore, Herefordshire wools from Abbey Dore tied for first place with Tintern Abbey wools. A more likely hypothesis is that the disappearance of the Welsh wools is directly connected with the decline of the Cistercian estate economies - only the Cistercians supplied Welsh wools in those first three schedules - from the early fourteenth century. That decline in turn was partly related to the general decay of demesne farming in the British Isles from that era. Thus it is significant that, while English and Flemish records of the thirteenth and early fourteenth centuries abound in references to abbey wools, few if any wool-trade documents discuss them thereafter. Furthermore, as the nine schedules suggest, some counties whose religious houses had once supplied high grade or at least respectable wools came to be regarded as growers of coarse 'sleight' wools from the later fourteenth century: in particular Northumberland, Cumberland, Lancashire, Cheshire, Yorkshire, and various counties in Scotland - and Wales.¹⁶⁶ Possibly the great lay and ecclesiastical estates in those regions had been able to produce higher quality wools than the peasant husbandry that came to displace most of their demesne production. If a peasant's sheep were largely left, intermixed on the

ENTURY STAPLER	LE SCHEDULES OF	
SIXTEENTH-C	E CALAIS STAF	
IN A	D TH	
LISTED	EDULE AN	
SACK,	RY SCH	
PER	ENTA	•
STERLING	4 PARLIAM	5 AND 1499
Pounds	THE 145	<i>c</i> . 1475
ZI	ES IN	
Wools,	OL PRIC	
ENGLISH	WITH WO	
Good	MPARED	
OF	ပိ	
PRICES	UM, AND	
TABLE IO.	MEMORAND	

	Domestic W	ool Prices	Staple Wo	ol Prices		
Wools: Name or Place of Origin	1454 English sack	c. 1527 English sack	с. 1527 English sack*	c. 1527 Calais sack	1499 Calais sack	c. 1475 Calais sack
Leominster,						
Herefordshire	13.000	13.500	24.652	21.333	22.333	1
March Wools: Shropshire [and Herefordshire]	9.333	9.000	17.333	15.000	17.000	13.333
Cotswolds: Gloucester [and Oxfordshire]	8.333	8.000	13.867	12.000	13.000	12.000
Berkshire Wools	4.667	7.000	12.711	11.000	11.667	11.000
Young Cotswold Wools	5-333	6 . 333	9.822	8.500	10.333	I

SOURCES:

Georg Schanz, ed. Englische Handelspolitik gegen Endedes Mittelalters, 11: Urkunden und Beilagen (Leipzig, 1881), 569–70, no. 130. For the schedules of 1454, 1475, and 1499, see Table 8.

* English sack price = Calais sack price \times 1.1555.

J. H. MUNRO 159

commons or open fields with those of his neighbours, to fend for themselves, the great estates had had at their disposal more capital and skilled labour to provide better flock management and — with segregated flocks on the demesne — sheep breeding. They also had greater economies of scale in production and marketing to make the export of wools from more distant or less accessible regions economically viable. But the disappearance of Welsh wools in particular and of the 'abbey wools' in general from the export markets is a subject that deserves an article in its own right, one I intend to write in the near future.

Appendix

Religious Houses Appearing in the Douai Schedule of *c*. 1275, with their Corresponding Names in Pegolotti's Pratica

County	No. in Espinas Edition	Name in Douai Schedule	Name in Pegolotti Schedule	Modern English Name	Religious Order
ENGLAND			·		
Bedford	60 61	Sicsant Sixsant	Sisante	Chicksands	Gilbertine
	58 59	Wardone Woubourne	Guardona Uborno	Warden Woburn	Cistercian Cistercian
Buckingham	79 88	Betelsclane Messedene	Bettesdellana	Biddlesden Missenden	Cistercian Augustinian Can.
Cheshire	93 94	Cestre Sistre		Chester, St Werburgh	Benedictine
	67 89	Commermere Dorenhalline	Conbrumera [Vareale in Gualesi]	Combermere Darnhall [Vale Royal]	Cistercian Cistercian
	95	Stanlaw en Cestesire	Stalleo in Zestri	Stanlaw	Cistercian
Cumberland	. 7	Caldre	Calderea in Coppolanda	Calder	Cistercian
	8	Ocketran	Olcoltramo	Holmcultram	Cistercian
Dorset	85	Bendone	Binendona	Bindon	Cistercian
	73	Forghes	Forde	Forde	Cistercian
Essex	54	Cokesale	Conchisala	Coggeshall	Cistercian
	55	Strafort	Stanforte	Stratford	Cistercian
	99	Estrafort			
	52	Tylletey	Tilitea	Tilty	Cistercian
	100	Wattham	Gualtamo	Waltham	Augustinian Can.
Gloucester	82	Kinswede	Chinchesulda	Kingswood	Cistercian
Hampshire	30 71	Biauleu Cariere	Bellaugolera Quarriera dell'Isola di Gucco	Beaulieu Quarr (Quarrer)	Cistercian Cistercian

Appendix continued

County	No.	Douai	Pegolotti	English	Order
Hereford	86	Bore	Dora	Abbey Dore	Cistercian
TT	104	Dore Saint Auban		St Albana	Donadiatina
Hertiora	57	Same Auban	Saltarrag	St Albans	Cistoroion
Huntingdon	91	Daulia	Deschaselle	Dawley	Cistercian
Kent	98	Doukeselee	in Chenti	Бохіеу	Cistercian
Lancashire	6	Fornais	Fornace in Norto bellanda	Furness	Cistercian
Leicesters.	48	Crostone	Croncestona	Croxton	Premonstratensian
	69	Grandone	Gierondona	Garendon	Cistercian
Lincolns.	35	Alverghem	Alvingamo	Alvingham	Gilbertine
	38	Bardenay	Bardinaia	Bardney	Benedictine
	87	Berlinghe	Berlinghe	Barlings	Premonstratensian
	20	Boslentone	Bollintona	Bullington	Gilbertine
	22	Borentone	Dominicom	Dumgton	Gubbrumb
	22	Cartelay	Catellea	Catley	Gilbertine
	45	Karlzostada	Chiricohistodo	Kirkstand	Cistoraian
	42	Sainta	Santa Catanina	Kirksteau	Cilhortino
	92	Same-	Santa Caterina	Cathenin st	Gilbertine
		Chatelinne	di Niccola	Catherines	
		de Lincole			
	43	L'ospital de		Lincoln, St	Gilbertine
		Lincole		Sepulchre	
	36	Ludepare	Parco di Liuia	Louth Park	Cistercian
	(B)103	Nieubote	Ottubo	Newbo	Premonstratensian
	(A)103	Stienbote		(Neuboth)	
	44	Nocketone-	Noccona Parco	Nocton Park	Augustinian Can.
		parc			-
	32	Nonnecoton	Nonocotono	Nun Cotham	Cistercian Nun.
	34	Ormesby	Ormesbi	North Ormsby	Gilbertine
	37	Bevesby	Revesbi	Revesby	Cistercian
	51	Barvesby		5	
	/T	Stainfelt	Stanfeltro	Stainfield	Benedictine Nun
Lincolns	62	Sixwalt	Sticchisi-gualdo	Stivwould	Cistercian Nun
Lincoms.	02	Suvla	Sicchieille	Sizhille	Gilbertine
	31	Syric	Suinoivodo	Swinashaad	Cistonoian
	40	Symens-	Sumsiveue	Swillesheau	Cistercian
		novuede	T 1	(Swynesneved)	D
	40	Utoline	1 oppoimo	Tupnoime	Premonstratensian
	47	Waudien	La Valdio	Vaudey	Cisterican
Norfolk	90	Dorenham		West Dereham	Premonstratensian
Northampton	65	Pipewelle	Pippuelle	Pipewell	Cistercian
Northumberland	1 5	Nofmostier	Nio Mostriere in Nortobellanda	Newminster	Cistercian
Nottingham	29	Niewestede	Novelluogo in Scireuda	Newstead in Sherwood	Augustinian Can.
	28	Rusfort	Rufforte	Rufford	Cistercian
	20	Welleheke	Lavualderia	Welbeck	Premonstratension
Ovfordehira	2 66	Brujere	Briniero di	Bruern in	Cistorcion
Oxforushine	00	Didicic	Gontiegualdo	the Cotomoldo	Cisterciali
	84	Tame	Tamo	Thame	Cistercian

J. H. MUNRO 161

Appendix continued

County	No.	Douai	Pegolotti	English	Order	
Shropshire	70	Billewals	Biliguassi	Buildwas	Cistercian	
Somerset	78	Chartouse		Witham Abbey	Carthusian	
		Chartrouse (B))	Charterhouse		
Staffords.	64	Dieulecroise	Diolaccresca	Dieulacres	Cistercian	
Suffolk	53	Sylbetone	Scippitona	Sibton	Cistercian	
Surrey	56	Wauclai Wavelai (B)	Guarverlea	Waverley	Cistercian	
Warwicks.	49	Comme	Conbo	Combe	Cistercian	
	68	Mireval	Miravelle	Merevale	Cistercian	
	96	Estanlee en	Stalleo in	Stoneleigh	Cistercian	
	-	Ewruic	Guaruicche	U		
Wiltshire	97	Estanlee en Wittesire	Stallea in Gildisire	Stanley	Cistercian	
	50	Sailli en		[Salisbury hospital: St Nicholas or		
	2	Wildesire		St John the Baptist]		
Worcester	80	Bordelay (B)	Brondislea	Bordeslev	Cistercian	
	81	Wordelay		J		
Yorkshire	т8	Bellintone	Brindellintona	Bridlington	Augustinian Can	
	16	Bekelande	Biolanda	Byland (Begeland)	Cistercian	
	12	Sainte-	Santa Agata	Easby, Abbey	Premonstratensian	
	15	Fontainnes	Fontana	Fountains	Cistercian	
	1 J 1 T	Guisebourne	Chisiborno	Guisborough	Augustinian Can	
	25	Hanepol	Anipola	Hampole	Cistercian Nun	
	-5	Girvals	Giervalese	Iervaulx	Cistercian	
	20	Kercham	Chircamo	Kirkham	Augustinian Can	
	21	Kerkestal	Chirchistallo	Kirkstall	Cistercian	
	24	Maltone	Maltona	Malton	Gilbertine	
	22	Means	Miesa	Meany	Cistercian	
	~5 26	Roche	Roccea	Roche	Cistercian	
	10 1/	Risvals	Rivalse	Rievauly	Cistercian	
	14	Sailli en	Salleo in	Sawley in	Cistercian	
	-/	Grane	Cravenna	Craven	Choterenan	
	22	Wathone	Guantona	Watton	Gilbertine	
	10	Wycham	Vicamo	Wykeham	Cistercian Nun	
	19	I 'ospital	v Icalilo	Vork St	Augustinian Can	
	9	de Ewnric		Leonard's	(hospital)	
WALES						
Carmarthen	77	Wittelande	Biancilanda	Whitland	Cistercian	
Flint	72	Basinghewerc	Basinguecche	Basingwerk	Cistercian	
Glamorgan	75	Morgane	Morgana	Margam	Cistercian	
Glamorgan	75	Neet	Nietta	Neath	Cistercian	
	70	Niete	2 110ttu	2 YOULII	Chotoroidin	
Monmouth	62	Grassedieu	Graziadio	Grace Dieu	Cistercian	
manninutii	80 80	Tynterne	Tanterna	Tintern	Cistercian	
	102	Tintierne	- 411001114	* *******	CIDECI CIULI	
Montgomery	74	Strameghel	_	Strata Marcella	Cistercian	

11

County	No.	Douai	Pegolotti	English	Order
SCOTLAND					
Fife	I	Killos	Chilosola	Culross	Cistercian
Kirkcudbright	3	Boudernam	Dondarnane	Dundrennan	Cistercian
Perth	4	Cupre	Cupero	Coupar Angus	Cistercian
Roxburgh	2	Mauros	Mirososso	Melrose	Cistercian
Wigtown	10	Cleenlus	Grenellusso	Glenluce	Cistercian

Appendix continued

SOURCES:

Georges Espinas, La vie urbaine de Douai, III, 232-4, no. 287.

Francesco Balducci Pegolotti, La pratica della mercatura (ed. Allan Evans, Cambridge, Massachussetts, 1936), pp. 258-70, 392-6.

REFERENCES

⁴ I am greatly indebted to the following scholars for their generous advice and assistance in writing this article: Professors Leonard Boyle, Ambrose Raftis, Andrew Watson, Elliott Rose, Michael Prestwich, Herman Van der Wee, Raymond Van Uytven, David Nicholas, and Jan Titow. The errors that remain are, of course, my own responsibility.

Herman van der wee, Raymond van Oytven, David Richolas, and jan Friow. The errors that remain are, of course, my own responsibility. ² Peter Bowden, 'Wool Supply and the Woollen Industry', *Economic History Review*, 2nd ser., IX (1956), pp. 44-50; Bowden, *The Wool Trade in Tudor and Stuart England* (London, 1962), pp. 25-37; Robert Trow-Smith, *A History of British Livestock Husbandry to 1700* (London, 1957), pp. 131-71; W. Youatt, *Sheep: Their Breeds, Management, and Diseases* (London, 1837), pp. 65-100; Michael Ryder, 'The History of Sheep Breeds in Britain', *Agricultural History Review*, XII (1964), pp. 1-12, 65-82; Ryder, 'Wools from Antiquity', *Textile History*, V (1974), pp. 105-10. See also n. 161 *infra.*

⁴ The History of Sheep Breeds in Britain', Agricultural History Review, Sil (1964), pp. 1–12, 65–82; Ryder, ⁵ Wools from Antiquity', Textile History, v (1974), pp. 105–10. See also n. 161 infra. ³ J. E. Thorold Rogers, A History of Agriculture and Prices in England, 1259–1793 (7 vols, Oxford, 1866–92), I, p. 365; IV, p. 328; Peter Bowden, 'Movements in Wool Prices, 1490–1610', Yorkshire Bulletin of Economic and Social Research, IV (1952), pp. 109–24; Bowden, Wool Trade, pp. 219–20; Bowden, 'Agricultural Prices, Farm Profits, and Rents', in Joan Thirsk (ed.), The Agrarian History of England and Wales, IV: 1500–1640 (Cambridge, 1967), pp. 593–695, 839–46, 861. Lloyd's book was published as Economic History Review Supplement, no. 6 (Cambridge University Press, 1973). ⁴ Lloyd's recently published and most impressive sequel. The English Wool Trade in the Middle Ares

⁴ Lloyd's recently published and most impressive sequel, *The English Wool Trade in the Middle Ages* (Cambridge, 1977), contains no new lists, apart from brief references to the c. 1270 and 1357 schedules. See the discussion of Schedules I, VI, and IX *infra*, pp. 119, 139 and 152. ⁵ These statistical tests cannot determine whether the prices in the various schedules are actual market

⁵ These statistical tests cannot determine whether the prices in the various schedules are actual market values or not. But they can indicate the extent to which these lists are correlated, using various pairings, in terms of (a) rankings of the wools by value (ordinal), and (b) range of differences among the prices (cardinal). A close correlation or correspondence between two lists that were independently constructed would suggest that they were at least accurate in their rankings and assessments of relative wool values.

⁶ These two schedules may be found in Calendar of Letters and Papers, Foreign and Domestic, of Henry VIII, IX, p. 409; Historical MSS Commission, Calendar of the Manuscripts of the Marquis of Salisbury, XIII: Addenda (London, 1915), pp. 54–7; Public Record Office, State Papers, 1/102, fo. 1–2 and 12/154/30 (cited in Bowden, Wool Trade, p. 32, n. 2).

⁷ The two copies in the Archives de la ville de Douai, registre AA 92, fo. 43r-4 (A) and registre AA 89, fo. 44r-5 (B) were definitively edited by Georges Espinas in La vie urbaine de Douai au moyen âge (3 vols Paris, 1913), III, pp. 232-4, no. 287. Previous editions were by Chrétien A. Dehaisnes, Essai sur les relations commerciales de la ville de Douai avec l'Angleterre au moyen âge (Memoires lus à la Sorbonne: histoire et philologie, Paris, 1866), pp. 113-16, no. 14 (based chiefly on B, with errors and omissions); Emile Varenbergh, Histoire des relations diplomatiques entre le comté de Flandre et l'Angleterre au moyen âge (Brussels, 1874), pp. 214-17, doc. no. 6 (after Dehaisnes); Konstantin Höhlbaum (ed.), Hansisches Urkundenbuch, III (Halle, 1886), p. 407, no. 15 (after Varenbergh); William Cunningham, Growth of English Industry and Commerce, 1: Middle Ages (2nd edn, London, 1890), pp. 545-55 (after Varenbergh). All these editions are defective.

⁸ 'Sailli en Wildesire', no. 50, obviously listed in opposition to 'Sailli en Grane', no. 17 (Sawley in Craven, Yorks). The spelling was probably influenced by that of Sailly-en-Ostrevant, the Benedictine priory of Marchiennes, in the diocese of Arras. Salisbury in Wiltshire seems the most likely identification, with two hospitals that could have been wool sellers: St Nicholas (founded 1227) and St John the Baptist (founded 1244). The only religious order then resident there, the Franciscan Friars (from 1230), did not engage in the wool trade. Compare David Knowles and R. Neville Hadcock, Medieval Religious Houses:

England and Wales (2nd edn, London, 1971), pp. 214, 223, 331. ⁹ Those that do not reappear are Missenden (Aug. Can., Bucks); St Alban's (Ben., Herts); West Dereham (Prem., Norfolk); Witham Charterhouse (Carth., Somerset); Strata Marcella (Cist., Mont-gomery); and 'Sailli en Wildesire' (cf. n. 8 supra). Compare Tables 1, 3, and Appendix. ¹⁰ E. Margaret Thompson, *The Carthusian Order in England* (London, 1930), pp. 123, 133-47; Knowles and Hadcock, *Religious Houses*, pp. 133-6. In early documents, Witham was referred to as 'Chartuse in

Selwode'

¹¹ Lloyd, *Wool Prices* (1973), pp. 8, 31. He cites only the very imperfect Cunningham edition. ¹² There are in fact fifty-five prices listed in both schedules combined (though Espinas omitted the price for Buern abbey). But since Neath is twice listed (Neet, Niete) at the same price of f_{45} , the second listing has been excluded from the computations.

¹³ Espinas, Douai, II, pp. 714-21; III, pp. 42-3, no. 56 (Mar. 1240); pp. 313-14, no. 408 (1261); Espinas, Les origines du capitalisme: Sire Jehan Boinebroke, patricien et drapier douaisien (Lille, 1933); Dehaisnes, Relations commerciales, pp. 79-96, 106-8 (doc. no. 7); Edouard Perroy, 'Le commerce anglo-flamande au XIIIe siècle: la hanse flamande de Londres', Revue historique, CCLII (1974), pp. 3-18; Lloyd, Wool Trade

(1977), pp. 1-59. ¹⁴ Espinas, *Douai*, 111, p. 233. Cunningham dates it about 1280 (op. cit., p. 546); and Lloyd assigns a date of c. 1260 or earlier (Wool Trade, p. 290). Höhlbaum proposed a date of c. 1300 (Hans. Urkund., III,

p. 407). ¹⁵ Espinas, Douai, III, p. 234, no. 287:89; Dehaisnes, Relations commerciales, p. 115, no. 14; Cunningham, ¹⁶ Espinas, Douai, III, p. 234, no. 287:89; Dehaisnes, Relations commerciales, p. 115, no. 14; Cunningham, English Industry, I (2nd edn, 1890), p. 555, n. 203; Knowles and Hadcock, Religious Houses, pp. 112, 118; Calendar of Patent Rolls, 1266-72 [hereafter CPR], p. 505 (Jan. 1271). Darnhall was settled by monks from Abbey Dore (Heref.), a prominent wool producer.

Abbey Dore (Heref.), a prominent wool producer. ¹⁶ Calendar of Close Rolls, 1272-79 [hereafter CCR], pp. 254-5, Compare also ibid., pp. 140, 220, 255, 292, 297, 320, 342, for references to Darnhall in 1274-6. ¹⁷ CPR 1266-72, p. 462 (24 Sept. 1270); Henri Berben, 'Une guerre économique au moyen âge: l'embargo sur l'exportation des laines anglaises (1270-74)', in F. L. Ganshof (ed.), Etudes d'histoire dédiées à la memoire de Henri Pirenne (Brussels, 1937), pp. 1-17; Berben, 'Het verdrag van Montrueil, 1274: de Engelsche-Vlaamsche handelspolitiek, 1266-87', Belgische tijdschrift voor filologie en geschiedenis, XXIII (1944), pp. 97-104; Espinas, Douai, II, pp. 660-2; J. de Sturler, Les relations politiques et les échanges commerciaux entre le duché de Brabant et l'Angleterre au moyen âge (Paris, 1936), pp. 123-7; Lloyd, Wool Trade (1977), pp. 28-36.

Trade (1977), pp. 28–36. ¹⁸ Thomas Rymer (ed.), *Foedera, conventiones, litterae, et acta publica* (Record Commission ed. London, 18 Thomas Rymer (ed.), *Foedera, conventiones, litterae, et acta publica* (Record Commission ed. London, 18 Thomas Rymer (ed.), *Foedera, conventiones, litterae, et acta publica* (Record Commission ed. London, 18 Thomas Rymer (ed.), *Foedera, conventiones, litterae, et acta publica* (Record Commission ed. London, 18 Thomas Rymer (ed.), *Foedera, conventiones, litterae, et acta publica* (Record Commission ed. London, 19 Espinas, *Douai*, 111, pp. 459–63, no. 613 (Oct. 1274 – June 1275): pp. 465–6, no. 618 (May 1275); pp. 644–5, no. 860 (c. 1300); Espinas, 'Jehan Boine Broke: bourgeois et drapier douaisien', *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte*, 11 (1904), pp. 221–4 (compare also *Boinebroke*, pp. 7–10); *CPR 1272–81*, p. 60 (Oct. 1274); *CPR 1266–72*, p. 526 (Mar. 1271); *CCR 1272–79*, pp. 307–8 (Aug. 1276); Perroy, 'Hanse flamande', pp. 12–15; Berben, 'Verdrag van Montrueil', pp. 97–102; Lloyd, *Wool Trade*, pp. 25–60.

pp. 35-9. ²⁰ Georges Espinas and Henri Pirenne (eds), Recueil de documents relatifs à l'histoire de l'industrie drapière en Flandre: Ire partie, II (Brussels, 1909), p. 100, no. 254.

 ²¹ Lloyd, Wool Prices (1973), p. 39, col. 2.
 ²² Compare A. Blanchet and A. Dieudonné, Manuel de numismatique française, II (Paris, 1916), pp. 79, 113, 146; Hans Van Werveke, 'Munt en politiek: de Frans-Vlaamse verhoudingen vóór en na 1300', in his Miscellanea Medievalia (Ghent, 1968), pp. 209-26.

²³ Sir John Craig, The Mint: A History of the London Mint from A.D. 287 to 1948 (Cambridge, 1953), pp. 25, 410-11; Charles Johnson, The De Moneta of Nicholas Oresme and English Mint Documents (London, 1956), pp. xxii-xli; Blanchet and Dieudonné, Manuel, pp. 223, 225, 230, 233; Jean Lafaurie, Les monnaies des rois de France, I (Paris, 1951), pp. 23-5. Several thirteenth-century documents also ascribe a value of £4 tournois to the English pound sterling: F. de Saulcy (ed.), Recueil de documents relatifs à l'histoire des monnaies frappées par les rois de France, I (Paris, 1879), pp. 131-2 (1265); Victor Gaillard (ed.), Recherches sur les monnaies des comtes de Flandre, I (Ghent, 1852), p. 7, no. 3 (1282); CPR 1292-1301, p. 231 (2 Feb. 1297)

²⁴ Espinas, Douai, III, p. 234, no. 288 (A. V. Douai, reg. AA 92, fo. 45; AA 89, fo. 49: c. 1270-5). I English wool sack = 28 'pieres de Londres' at 13 lb. the stone, instead of 26 stones at 14 lb. the stone =²⁵ Jocks were 'the lowest class of remnants after the removal of the fleece, consisting of short wool from

the legs and belly'. Eileen Power, 'The English Wool Trade in the Reign of Edward IV', Cambridge Historical Journal, 11 (1926-8), pp. 23-4. See infra p. 129.

²⁶ Compare the sources cited in no. 7 supra; and Francesco Balducci Pegolotti, La pratica della mercatura (ed. Allan Evans, Cambridge, Massachussetts, 1936), pp. 258, 259, 269: 'Li pregi contenuti alle scritte di sopra e a drieto sono quello che furono vendute in Fiandra'; compare also Evans's introduction, pp. xxviii-xxix and J. P. Bischoff, 'Pegolotti: An Honest Merchant?', Journal of European Economic History, VI (1977), pp. 104, 107. For an opposing view, see Lloyd, *Wool Prices* (1973), p. 10. ²⁷ The first wool-export tax was imposed in 1275 as the Old Custom of 6s. 8d. per sack. By the *carta*

mercatorum of 1303 this amount was raised to 10s. od. a sack for aliens (New Custom). From 1336, these duties were raised to 26s. 8d. then to 46s. 8d. a sack for denizens and 6os. od. and more a sack for aliens. Compare N. S. B. Gras, The Early English Customs System (Cambridge, Massachussetts, 1918), pp. 76-80; and infra, pp. 136.

²⁸ The coefficient of variation is the standard deviation divided by the mean and then multiplied by 100. ²⁹ Lloyd, Wool Prices (1973), Table V, pp. 52-61; from P.R.O., King's Remembrancer Exchaquer, Accounts Miscellaneous, E. 101/126/7. (I wish to thank the P.R.O. for supplying me with a microfilm of this valuable document). A most unsatisfactory synopsis of the prices, with minimums and maximums only for each county and religious order, was published earlier by George Bigwood, 'Un marché de matières premières: laines d'Angleterre et marchands italiens vers la fin du XIIIe siècle', Annales d'histoire économique et sociale 11 (1930), pp. 196-211.

³⁰ Compare Michael Prestwich, War, Politics, and Finance Under Edward I (London, 1972), pp. 196-9; Richard Kaeuper, Bankers to the Crown: The Riccardi of Lucca and Edward I (Princeton, 1973), pp. 33-8, 44-5, 213-20; de Sturler, Relations politiques, pp. 181-9; E. B. Fryde, 'Financial Resources of Edward I in the Netherlands, 1294-98', Revue belge de philologie et d'histoire, xL (1962), pp. 1178-82; Bigwood, 'Laines d'Angeleterre', pp. 196-7; Lloyd, Wool Trade (1977), pp. 75-9.

 ³¹ Charles Bémont (ed.), Rôles gascons (Paris, 1885–1905), III: 1290–1307, pp. 140–1, nos. 2675–6
 (letters of 28 June 1294 citing patents of 18 June). See also nos 2683–4 (16 July 1294), pp. 148–9.
 ³² Compare P.R.O., E. 101/126/7; Kaeuper, *Riccardi*, pp. 33, 44–5; Bigwood, 'Laines d'Angleterre', pp. 201–2. Lloyd also cites other separate and differently formulated records of the June 'prise' in Bedfordshire, Buckinghamshire, and Gloucestershire (*Wool Trade*, p. 76). Prof. Michael Prestwich has kindly informed me, from his own research notes, that E. 159/68, mm. 87–8, dated 23 September 1294, lists the wools of the Riccardi, Frescobaldi Bianchi and Neri, the Cerchi Bianchi and Neri, and Bardi that royal officials collected in Yorkshire, Nottinghamshire, Derby, Northumberland, Lincolnshire, Bedfordshire, Northamptonshire, Surrey, Sussex, Oxfordshire, Hampshire, Devon, Kent, Essex, Lancashire, Cheshire, Staffordshire, Herefordshire, Cambridgeshire, Warwickshire, Leicestershire, and Gloucestershire. The quantities listed (no prices were given) tally precisely with those of Lloyd.

quantities instea (no prices were given) taily precisely with those of Lloyd. ³³ Compare Lloyd, Wool Trade (1977), pp. 39-40, 60-98; de Sturler, Relations politiques, pp. 126-9. ³⁴ Calendar of Fine Rolls, 1272-1307 [hereafter CFR], p. 347; CPR 1292-1301, pp. 100-1 (Oct. 1294); Prestwich, Edward I, pp. 196-7, 208; de Sturler, Relations politiques, p. 182; Fryde, 'Financial Resources', pp. 1178-9; Lloyd, Wool Trade, pp. 76-7. ³⁵ Lloyd states that eight companies lent £ 10,000, but his own figures add up to £ 12,970 from only seven firms (Wool Trade, p. 83). See also Prestwich, Edward I, p. 208. Two weeks earlier, on 16 September 1294, the crown had prohibited wool exports by these Italian firms. E. 159/68, m. 86 (kindly communicated to me by Michael Prestwich). to me by Michael Prestwich).

³⁶ *CFR* 1272-1307, p. 347 (28 Oct. 1294); Kaeuper, *Riccardi*, pp. 22, 41-5, 209-10, 219-27; Prestwich, *Edward I*, pp. 197-8, 205-8; Fryde, 'Financial Resources', pp. 1180-2; Bigwood, 'Laines d'Angleterre', pp. 201-8; Lloyd, *Wool Trade*, pp. 78-9, 82-6. ³⁷ E. A. Bond, 'Extracts from the Liberate Rolls Relative to Loans Supplies by Italian Merchants to the

Kings of England', Archaeologia, XXVIII (1840), p. 285, no. xcvi (May 1298). Compare Prestwich, Edward I, p. 208; Lloyd, Wool Trade, p. 72 (Table 7: wool exports), pp. 82-3.

³⁸ See Table 3 and n. 37 supra; Prestwich, Edward I, p. 208; Bigwood, 'Laines d'Angleterre', pp. 198, n. 1, 206-6; Fryde, 'Financial Resources' pp. 1181-2; Lloyd, Wool Trade, pp. 83-4. ³⁹ Lloyd, Wool Prices (1973), pp. 52-61 (Table 5). The schedule also lists four other abbeys for whom no

wool prices but only sacks were recorded: Sawtrey in Hunts (Cist.), Alvingham in Lincs (Gilb.), Worksop in Notts (Aug.), and Kirkstall in Yorks (Cist.).

⁴⁰ E. 101/126/7; Bigwood, 'Laines d'Angleterre', p. 222; Lloyd, Wool Prices (1973), p. 9.

⁴¹ For examples of Flemish purchases of collecta, compare Espinas, Douai, II, pp. 719-20; III, p. 459, no. 613:5d (Oct. 1274): p. 645, no. 860:5 (c. 1300); Espinas, 'Jehan Boine Broke', p. 22, no. II:5 (c. 1300). ³² Compare Robert Whitwell, 'English Monasteries and the Wool Trade in the 13th Century', Viertel-

Compare Robert Wintwein, English Monasteries and the Wool Trade in the Tsin Century, Vieter-jahrschrift für Sozial- und Wintschaftsgeschichte II (1904), pp. 8-11, 24-30; Noel Denholm-Young, Seignorial Administration in England (London, 1937), pp. 53-62; David Knowles, The Religious Orders in England (3 vols, Cambridge, 1948-61), I, pp. 67-9; Eileen Power, The Wool Trade in English Medieval History (Oxford, 1941), pp. 44-6; Lloyd, Wool Trade (1977), pp. 284-8.
 ⁴³ Whitwell, 'English Monasteries', pp. 8-11; Lloyd, Wool Trade, p. 295.
 ⁴⁴ Whitwell, 'English London Yofe, and Yofe,

44 Rotuli Parliamentorum (6 vols, London, 1767-77), 1, pp. 156-7: no. 14 (28 Feb. 40 Hen. III; 30 Ed. I). Compare Whitwell, 'English Monasteries', pp. 9–10. For the concept of monopsony and analyses of pricing with a single buyer, see Joan Robinson, The Economics of Imperfect Competition (London, 1933), Book vi, ⁴⁵ E. 101/126/7; cited in Bigwood, 'Laines d'Angleterre', pp. 206–7.
 ⁴⁶ Power, *Wool Trade*, p. 29. Compare also R. A. Pelham, 'Fourteenth-Century England', in H. C. Darby

(ed.), An Historical Geography of England Before A.D. 1800 (Cambridge, 1951), p. 242; Trow-Smith, Livestock Husbandry, pp. 138-42; Knowles, Religious Orders, I, pp. 64-9. ⁴⁷ Kaeuper, Riccardi, pp. 38-9 (italics added); Whitwell, 'English Monasteries', pp. 24-6; Michael Postan, 'Credit in Medieval Trade', Economic History Review, 1st ser. I (1928), reprinted in his Medieval Trade and Finance (Cambridge, 1973), pp. 8, 10-11, 23-6; Denholm-Young, Administration, pp. 53-62; Knowles, Religious Orders, I, pp. 68-9.

⁴⁸ Lloyd, Wool Prices (1973), pp. 9–10, 31 n. 2; and Wool Trade (1977), pp. 296–7; Knowles, Religious Orders, I, pp. 66–8; R. A. Donkin, 'Cistercian Sheep Farming and Wool Sales in the Thirteenth Century',

Agricultural History Review, VI (1958), pp. 2–8; Denholm-Young, Administration, p. 57. ⁴⁹ CCR 1272–79, pp. 254–5 (Darnhall, Nov. 1275); 321–2 (Louth Park, Nov. 1275); 354 (Fountains, Oct. 1276); CCR 1288–96, pp. 192–5 (Pipewell, Feb. 1291); E. 101/126/7, cited in Bigwood, 'Laines d'Angleterre', p. 208 ('pur briser et apariller ceste leine'); supra, p. 126 and n. 34. The wools so taxed in 1294 at *Constant of the series of the* breken and briser (brisier) meant precisely the same as the Latin frangere (past part. = fracta): to break into pieces, to shatter. Compare Guy de Poerck, La draperie médiévale en Flandre et en Artois: technique et terminologie (3 vols, Bruges, 1951), I, pp. 38-43; II, p. 27, nos 121-2; III, pp. 192-3, nos 913-14. Compare also Pegolotti, *Pratica*, p. 16: . . . della lana poi che è brisciata e apparecchiatosi . . . ; Evans comments (n. 1): 'The verb brisare is obviously related to OF briser, ME brisen to break . . . ; here by no very difficult shift it comes to mean "break up" and so "sort"'. ⁵⁰ Compare Knowles, *Religious Orders*, I, pp. 67-8; Donkin, 'Cistercian Sheep Farming', pp. 6-8.

⁵¹ CCR 1272-79, p. 254. In the same period Meaux abbey similarly agreed to supply wools from an area bounded by Bridlington on the Yorkshire coast, York, and Holderness. Denholm-Young, Administra-

tion, pp. 56-7. ⁵² Lloyd, Wool Prices (1973), pp. 35-7, 39. (But for some high-priced Surrey wools, see n. 98 infra). In 1293, the last complete year before the wool seizure, Lloyd's mean wool price per sack for 11 districts was $\pounds 5.713$. Prestwich believes that the prices cited in the Exchequer schedule may have been below those for a normal year. Edward I, pp. 198-9.

⁵³ In the Riccardian Library of Florence, MS 2441 (1472), edited by Allan Evans (Cambridge, Massachusetts, 1936), pp. 258-69, 392-6 (glossary). A complete edition of the wool-price schedule itself previously appeared in W. C. Cunningham, *The Growth of English Industry and Commerce*, I (5th edn, Cambridge, 1910), pp. 628-41 (Appendix D); and a geographic listing of the wool-producing houses, but without prices, was published in Edward Friedmann, 'Der mittelalterlichen Welthandel von Florenz in seiner geographischen Ausdehnung', Abhandlungen der K. K. geographischen Gesellschaft in Wien, x (1912), pp. 81-9. ⁵⁴ Pegolotti also lists the names of eight other religious houses, without prices, for a total of 202. Lloyd's

synoptic Table V in *Wool Prices* (1973), pp. 52–61, provides prices for just 105 houses whose names also appear in the Exchequer schedule (omitting five that do in fact appear there, but including the four without prices in the Exchequer schedule, as noted *supra*, n. 39). ⁵⁵ Balledirucco (hospital of Maison Dieu or of St John at Roxburgh; or possibly Arbroath, formerly

Aberbrothock, Order of Tiron, in county Angus); and il Tenpo di Bratendocca (Balantrodoch Temple in Midlothian). I have verified the names, orders, and locations of all the religious houses in the first three schedules from: D. Knowles and R. Hadcock, Medieval Religious Houses: England and Wales (2nd edn, London, 1971); Ian Cowan and David Easson, Medieval Religious Houses: Scotland (2nd edn, London, 1976); L. J. Cottineau, Répertoire topo-bibliographique des abbayes et prieurés (3 vols, Maçon, 1935-70) and P. Léopold Janauschek, Originum Cisterciensium, I (1877). With the commendable exception of Lloyd, who made very few slips, all of the editors of these schedules were often quite inaccurate.

⁵⁶ Yorkshire accounted for 25.6% of the total English prices in the Douai schedule; 23.2% of those in the Exchequer schedule; and 22.5% of those in Pegolotti. Lincolnshire accounted for 9.3% of those prices in

the Doulai schedule; 26.4% in the Exchequer schedule; and 22.5% in the Pegolotti list. ⁵⁷ Knowles and Hadcock, *Religious Houses*, pp. 112–15; R. A. Donkin, 'The Disposal of Cistercian Wool in England and Wales during the Twelfth and Thirteenth Centuries', *Citeaux in de Nederlanden*, VIII (1959), pp. 186–9. Compare H. E. Wroot, 'Yorkshire Abbeys and the Wool Trade', *Thoresby Society*, ⁵⁸ Lloyd, Wool Prices (1973), pp. 10, 62-9 (Figs 1-4).
 ⁵⁹ Compare Bischoff, 'Pegolotti', p. 104 (cf. n. 26 supra).

60 Pratica, p. 258. Compare Evans's introduction, pp. xi-xv, xvii-xviii, xxviii-xxix.

⁶¹ Compare n. 26 supra.

62 Pratica, pp. xxviii-xxiv (Evans).

⁶³ Cunningham, English Industry, I (5th edn 1910), p. 630, n. 4. The reader may judge for himself by comparing the Italian, Walloon, and English spellings in the Appendix, infra, pp. 159-162. Eileen Power has also argued that this list 'certainly goes back to the last quarter of the thirteenth century', but she gave no reasons for this assertion. Wool Trade (1941), p. 22.

⁶⁴ Cowan and Easson, *Religious Houses: Scotland*, p. 158; Clarence Perkins, 'The Knights Templars in the British Isles', English Historical Review, XXV (1910), pp. 209-30. Balantrodoch Temple was seized from the Templars in 1309. Evans rejected Cunningham's first argument but ignored his second.

⁶⁵ Donkin, 'Cistercian Sheep Farming', p. 2; Knowles and Hadcock, Religious Houses, pp. 114-15, 125,

127-8. ⁶⁶ Trow-Smith further argues that Pegolotti's prices are biased by the needs of the Bardi firm for specific the houses listed. Livestock Husbandry, p. 162.

⁶⁷ Pratica, pp. xi-xv (Evans).

⁶⁸ CCR 1337-39, pp. 148-50; CPR 1334-38, pp. 480-2. Compare the histogram in Lloyd, Wool Prices ⁶⁹ CCR 1337-39, pp. 148-50; CPR 1334-38, pp. 480-2. Compare the histogram in Lloyd, Wool Prices ⁶⁹ CCR 1337-39, p. 149. Compare Rot. Parl., II, 143: no. 58: 'ils furent somons a Notyngham d'enfour-mer le pris du sak de mier Leyne du sort des contees ...' (1343). ⁷⁰ Rymer, Foedera (Rec. Com. edn), II. ii, p. 944 (24 Aug. 1336). Compare Rot. Parl., II, pp. 118-19:

 In J. (1997)
 In J. Financial Resources of Edward III in the Netherlands, 1337, History, new set. XXVI (1952), pp. 6-24, Flyde, 'Financial Resources of Edward III in the Netherlands, 1337-40', *Revue belge de philologie et d'histoire*, XLV (1967), pp. 1142-1216; Fryde, 'Parliament and the French War, 1336-40', in T. A. Sandquist and M. R. Powicke (eds), *Essays in Medieval History Presented to Bertie Wilkinson* (Toronto, 1969), pp. 250-69; F. R. Barnes, 'The Taxation of Wool, 1327-48' and George Unwin, 'The Estates of the Merchants, 1336-1365', in Unwin (ed.), Finance and Trade under Edward III (London, 1918), pp. 143-6, 179-97; de Sturler, Relations politiques, pp. 321-76, 390-3; Lloyd, Wool Trade (1977), pp. 144-7. ⁷⁸ CCR 1337-39, pp. 97, 195, 313, 317-18; Fryde, 'Parliament', pp. 252-8.

⁷⁴ CCR 1337–39, pp. 97, 148–50 (26 July 1337); Rymer, *Foedera* (Rec. Com. edn), II. ii, pp. 988 (1 Aug. 1337), 989 (16 Aug. 1337: la moité du gaigne . . . de la vente des avantditz trent mille sacs'); Fryde, 'Wool',

p. 13. ⁷⁵ Fryde, 'Parliament', pp. 257-8. In 1340 the subsidy was raised again, from 33s. 4d. to 40s. 0d. for a total duty of 46s. 8d. a sack. Statutes of the Realm (11 vols, London, 1810-28), I, p. 289 (14 Ed. III stat. I c. 20–1).

⁷⁶ Fryde, 'Wool', p. 12; Lloyd, Wool Trade (1977), p. 145.

77 E. B. Fryde, The Wool Accounts of William de la Pole (York, 1964), pp. 12, 15, and n. 74; Unwin, 'Estates of the Merchants', pp. 201-2.

⁷⁸ An exceptionally high correlation is indicated by $r^2 = 0.9103$ (with a significance level = 0.0000652). ⁷⁹ A tax of 20,000 sacks in Feb. 1338; a ninth of fleeces in Mar. 1340; a loan of 20,000 sacks in July ¹³⁴⁰; a tax of 20,000 sacks in Apr. 1341. Rot. Parl, 11, p. 112: no. 6, pp. 118–19: no. 10; pp. 120–1: nos 20–6; pp. 131–2: no. 48; p. 137: no. 12; CCR 1339–41, pp. 614–16; CPR 1340–42, pp. 243, 248, 358–69; Fryde, 'Parliament', pp. 260–1; Barnes, 'Taxation', pp. 154–9; Lloyd, Wool Trade, pp. 153–60. ⁸⁰ Barnes, 'Taxation', pp. 158–65; Lloyd, Wool Trade, pp. 153, 163–4. ⁸¹ Lloyd, Wool Prices (1973), pp. 35–7, 40–1 (Table I: cols 2–5, 10–13). ⁸² Compare Unwin, 'Estates of the Merchants', pp. 201–2; Lloyd, Wool Trade (1977), p. 315. See infra

p. 138. ⁸³ CCR 1341-43, pp. 553 (15 July 1342), 640; CPR 1340-43, p. 415. Compare also Barnes, 'Taxation', pp. 165-6; Unwin, 'Estates of the Merchants', pp. 209-10; Lloyd, Wool Trade, pp. 171-2, 184-5.

⁵⁴ Rot. Parl., II, p. 143: no. 58b. For the 1343 Parliament, compare Unwin, 'Estates of the Merchants', pp. 213-14; Barnes, 'Taxation', pp. 166-7; Lloyd, Wool Trade, pp. 193-4. (None discusses this wool-price issue).

⁸⁵ Rot. Parl., II, p. 140: no. 28.

86 CPR 1340-43, pp. 586-7 (commission of over and terminer in Gloucestershire, Nov. 1342); Rot. Parl., 11, pp. 137: no. 12.

⁸⁷ Rot. Parl., II, p. 138: no. 17; Rymer, Foedera (2nd edn, London, 1727), v, p. 369; and also 3rd edn (The Hague, 1739), II. iv, pp. 145-6; and the Rec. Com. edn (London, 1821), II. ii, pp. 1225-6. The 2nd and 3rd editions of Foedera erroneously give 10 marks as the price of Craven, Yorks wools, but the Record Com. edition correctly states 9 marks. Compare the table in Trow-Smith, Livestock Husbandry, pp.

⁸⁸ CCR 1343-46, pp. 217-18, 266. From this group was formed the 'English Company' of 33 merchants.
 ⁸⁹ Rot. Parl., II, pp. 138: no. 17. Unwin did refer to the monetary aspects of this price ordinance in

'Estates of the Merchants', p. 124; but his contention that wool prices were raised 'in accordance with the subsequent depreciation of the currency' is simply untrue, because the silver coinage was in fact strengthened by 3.63% in January 1344 (from 1.157 g. fine silver to the penny to 1.199 g.). Compare the following discussion and the sources cited in n. 90-1, 95. ⁹⁰ C. G. Crump and C. Johnson, 'Tables of Bullion Coined Under Edward I, II, and III', *The Numis*-

matic Chronicle, 4th ser. XIII (1913), pp. 212-16, 231-12; Craig, The Mint, pp. 410-22. The average annual mint output of London and Canterbury fell from 7,809.9 kg. fine silver in 1315-19 to just 97.5 kg. fine silver in 1325-9, and was just 199.1 kg. a year in 1330-4. Compare n. 93 infra.

⁹¹ The average annual mint output in 1335–9 had risen to only 483.1 kg. fine silver. Compare Crump and Johnson, 'Tables of Bullion', pp. 216–17; R. Cazelles, 'Quelques reflexions à propos des mutations de la monnaie royale française (1295–1360), *Le moyen âge*, LXXII (1966), pp. 83–105; 251–78; Michael Prestwich, 'Currency and the Economy of Early Fourteenth-Century England', in N. J. Mayhew (ed.), *Edwardian* Monetary Affairs, 1279-1344 (Oxford, 1977), pp. 45-58.

Monetary Affairs, 1279-1344 (Oxford, 1977), pp. 45-58. ⁹² Wool exports had fallen from an average of 32,687 sacks in 1330-4 to one of 19,732 sacks in 1340-3. Compare E. M. Carus-Wilson and Olive Coleman, England's Export Trade, 1275-1547 (Oxford, 1963), tables, pp. 44-6; Fryde, 'Financial Resources', pp. 1142-1216; Lloyd, Wool Trade (1977), pp. 183-4 Prestwich, 'Currency', pp. 46-53; Albert Feavearyear, The Pound Sterling: A History of English Money (2nd edn, revised by E. V. Morgan, Oxford, 1963), pp. 14-19, 27-8. ⁹³ Edward Ames, 'The Sterling Crisis of 1337-1339', Journal of Economic History, XXV (1965), pp. 496-522; Rot. Parl., II, pp. 103-5; Fryde, 'Parliament', pp. 264-5. From 1330-4 to 1340-4, the average annual 'consumables price index' (100 = 1451-75) fell from 119.0 to 89.6: 'Seven Centuries of the Prices of Consumables', in E. M. Carus-Wilson (ed.), Essays in Economic History (3 vols, London, 1954-62), II, p. 193. More recently N. J. Mayhew has estimated that total English coinage in circulation fell from £1,146,000 in 1324 to just £433,000 in 1348: 'Numismatic Evidence and Falling Prices in the Fourteenth Century', Economic History Review, 2nd ser. XXVII (1974), pp. 7-15. Compare n. 90 supra. ⁹⁴ Rot. Parl., II, pp. 105: no. 14 (requesting 40s. in bullion per sack, 1339); S.R., 1, p. 289 (14 Ed. III stat. 1, c. 21). Compare John H. Munro, Wool, Cloth, and Gold: The Struggle for Bullion in Anglo-Burgundian Trade, c. 1340-1478 (Brussels and Toronto, 1973), pp. 33-7, 39-41; Lloyd, Wool Trade,

Burgundian Trade, c. 1340-1478 (Brussels and Toronto, 1973), pp. 33-7, 39-41; Lloyd, Wool Trade,

pp. 183-5. ⁹⁵ Rot. Parl., 11, pp. 137-8: nos 14-18. Compare also S.R., 1, p. 291 (14 Ed. III stat, 2, c. 4: 1341),

p. 299 (17 Ed. III c. 1). ⁹⁶ Rot. Parl., II, pp. 148–9: no. 12:2; S.R., I, pp. 300–1 (18 Ed. III stat. 2 c. 3); CCR 1343–46, pp. 451–2 (proclamation of 15 July 1334). See also Barnes, 'Taxation', pp. 167–8.

⁹⁷ Compare Lloyd's perceptive discussion of the 1341 parliamentary tax in wools, in Wool Trade, p. 160;

see also Rot. Parl., 11, pp. 131-2: no. 48. ⁹⁸ Wools from Waverley abbey (Cistercian) in Surrey were priced at £12. 10s. od. a sack in the Douai schedule; at £13. 6s. 8d. a sack in the Pegolotti schedule. Later, in the 1454 parliamentary schedule, wools from Banstead Down in Surrey also received a high price, £5. os. od. Compare Tables 1 and 8.

99 Trow-Smith, Livestock Husbandry, p. 162; Lloyd, Wool Prices, pp. 10-11.

¹⁰⁰ The decennial mean price of better quality English wools had been £5.506 per sack in the 1290s, rose to a high of £7.542 in the 1320s, and then fell sharply to one of £4.785 in the 1340s. (From Lloyd, Wool

to a high of (7.542 in the 15205) and then relatingly to be on (24, 105) in the 15405. (11011 2004), we have (7.542 in the 15205) and (7.542 in the 15205) and (7.542 in the 15205) and (7.542 in the 15405) and (7.54

sat from 10 April to 16 May 1357. ¹⁰³ Reginald Sharpe (ed.), Calendar of the Letter Books of the City of London at the Guildhall (11 vols, London, 1899-1912), Letter Book G: A.D. 1352-1374, p. 87: signed at Westminster 5 May 1357. It was amended on 15 May 'to the effect that no refusal or rejection of wool by merchants buying wool should be allowed except as in time past . . .

¹⁰⁴ Unwin, 'Estates of the Merchants', pp. 242-3; see Lloyd, Wool Trade, pp. 208-9.

¹⁰⁵ Sharp, Letter Book G, p. 89 (Parliament had then recessed).
¹⁰⁶ Stat. 13 Ed. III, c. 2, 8, in S.R., 1, pp. 350-1. Compare n. 101 supra.
¹⁰⁷ Lloyd does briefly note this schedule in his subsequent Wool Trade (1977), p. 209; but his comments are at variance with my interpretation of the price changes. Eileen Power is evidently referring to this schedule in Wool Trade, p. 23.

¹⁰⁸ Rot. Parl., II, p. 276: no. 11; see Lloyd, Wool Trade, p. 212.

109 Carus-Wilson and Coleman, England's Export Trade, pp. 55-64, 95-100; Munro, Wool, Cloth, and Gold, pp. 135-41. ¹¹⁰ Lloyd, Wool Prices, pp. 42-4 (Table I, cols 4, 10-13).

¹¹¹ Rot. Parl., v, pp. 274-5: no. 5.

¹¹² Rot. Parl., v, p. 275: no. 6.

¹¹³ Power, 'Wool Trade in the Reign of Edward IV', pp. 22-3; Power, 'The Wool Trade in the Fifteenth Century', in E. Power and M. Postan (eds), Studies in English Trade in the Fifteenth Century (London, 1933), p. 49; Lloyd, Wool Prices (1973), p. 11. But compare a modified version in his subsequent Wool Trade (1977), p. 274, which seems to be more in accordance with the views expressed here and in my Wool, Cloth, and Gold (1973), pp. 147-9.

¹¹⁴ Compare Munro, Wool, Cloth, and Gold, pp. 84-92, 121-8, 144-9; Power, 'Wool Trade in the Fifteenth Century', pp. 49–72. ¹¹⁵ Rot. Parl., v, 276: no. 6. Compare Munro, Wool, Cloth, and Gold, pp. 85–6, 131, 147–8.

¹¹⁶ Munro, Wool, Cloth, and Gold, pp. 149-50, Graph V (p. 129), and Appendix I, pp. 188, 191. ¹¹⁷ Rot. Parl., v, p. 256: nos 2-3; Munro, Wool, Cloth, and Gold, pp. 148-9; see Lloyd, Wool Trade, pp. 274-5. ¹¹⁸ Power, 'Wool Trade in the Reign of Edward IV', p. 23; and 'Wool Trade in the Fifteenth Century',

p. 49.

¹¹⁹ Compare N. H. Nicolas (ed.), Proceedings and Ordinances of the Privy Council of England (6 vols, London, 1834–7), III, pp. 355–6 ('qils sount de cy petite value qils ne poient estre venduz a le staple de Caleys: 5 July 1427): vI, pp. 117–18 ('whereas the wolles, hides, and wollefelles growing in our countees of Northumberland, Westmerland, and Cumbreland and in the bisshopryke of Duresme were no staple ware ne might bere the charges and costes of our staple of Caleis.' 8 March 1452); *Rot. Parl.*, IV, p. 379: no. 37 (Jan. 1431). Compare also Power, 'Wool Trade in the Reign of Edward IV', pp. 18–19; 'Wool Trade in the Fifteenth Century', p. 43. ¹²⁰ Rot. Parl., v, p. 276: no. 6.

¹²¹ Rot. Parl., V, p. 270. no. 0. ¹²¹ Rot. Parl., III, p. 429: no. 87 (Oct. 1399: reconfirmation of Berwick's privilege 'fait l'an primer le dit nadgairs Roy Richard'); P.R.O., Lord Treasurer's Remembrancer Exchequer, E. 356/8, m. 47v. (Berwick-on-Tweed enrolled customs: 22 June–13 Nov. 1377); CPR 1389–92, p. 465 (30 May 1392); CFR 1399–1405, pp. 7–8 (22 Oct. 1399). Berwick's export privilege was reconfirmed by Parliament in 1414

and 1423. Rot. Parl., 1V, pp. 53-4; no. 43, pp. 250-1: no. 39. ¹²² CPR 1408-13, p. 194 (8 May 1410); P.R.O., E. 356/18 (m. 46)-19-10 (m. 59); Lloyd, Wool Trade, p. 228. In April 1461 Berwick was ceded to James III of Scotland; Edward IV reacquired the town in Aug. 1482.

¹⁴³ Rot. Parl., IV, pp. 309–10: no. 2; CPR 1436–41, pp. 379–80.
 ¹²⁴ Rot. Parl., V, pp. 144–5: no. 15 (Feb. 1449: at 13s. 4d. per sack), confirmed by letter patent of 15 Nov.
 1449 in CPR 1445–52, p. 136; Rot. Parl., V, p. 276: no. 6 (April 1454).
 ¹²⁵ CPR 1377–81, p. 378. Compare Lloyd, Wool Trade, p. 227.
 ¹²⁶ Derd. W. p. 626 (Grar as April 1270).

¹²⁶ Rot Parl., 111, p. 63: no. 36 (after 25 April 1379). ¹²⁷ CPR 1408-13, p. 216 (24 July 1410); CPR 1399-1401, p. 358 (8 Aug. 1400); CPR 1405-8, p. 456 (2 June 1408): CPR 1408-13, p. 39 (29 Nov. 1408). In Nov. 1406 and May 1407, by demand of the Staplers, Henry IV ordered the Customers at Newcastle to ensure that wools of Northumberland, Cumberland, and

Westmorland were shipped directly to the Staple. *CCR* 1405-9, pp. 169-70, 196. ¹²⁸ *Rot. Parl.*, III, p. 48: no. 76 (1378); *S.R.*, II, p. 8 (2 Ric. II *c.* 3, 1378); *Rot. Parl.*, III, p. 429: no. 87 (Oct. 1399); IV, pp. 53-4: no. 43 (Nov. 1414). In general, compare Lloyd, *Wool Trade*, chapter 7. ¹²⁹ *Rot. Parl.*, IV, pp. 250-1: no. 39; *S.R.*, II, pp. 217-19. Berwick's export privilege was confirmed at the same time. (Compare Nicolas, *P.P.C.*, III, p. 39: 19 Feb. 1423). ¹³⁰ P.R.O., E. 356/18-23 (Newcastle enrolled customs: Mich. 1423 – Mich. 1424; Mich. 1426-7; Nov.

1433 - Mich. 1435; Mich. 1445-9; Mich. 1452 - Dec. 1452; Aug. 1453 - Mar. 1454; June 1455 - Mar. 1435, etc. Newcastle in fact received the first licence with the statutory provisions on 25 Feb. 1423. *CPR* 1422-29, p. 82; see also Nicolas, *P.P.C.*, 11, p. 115 (11 July 1423). ¹³¹ N. W. Posthumus (ed.), *Bronnen tot de geschiedenis van de Leidsche textielnijverheid* (6 vols, The

Hague, 1910–22), 1; 1333–1480, p. 74, no. 74:17:1 (Draperie Keurboek sec. VII: Mar. 1415–1424), pp. 133–4, no. 117 (Oct. 1424); pp. 131–5, no. 115–19 (Oct. 1434); pp. 148–9, no. 132:II:10 (1436–7), etc. ¹³² Rot. Parl., v, p. 503: no. 11 (after 29 April 1463); S.R., II, pp. 392–3 (3 Ed. Iv, c. 1); compare Rot. Parl., IV, pp. 250–1: no. 39 (1423); v, p. 564: no. 51 (Jan. 1465); S.R., II, pp. 407–8 (4 Ed. Iv, c. 2, Jan.

1465); p. 437 (12 Ed. IV, c. 5, 1472). ¹³³ This schedule has also been reproduced in Trow-Smith, *Livestock Husbandry*, pp. 162–3; Rogers,

History of Agriculture, II, p. 704; and Lloyd, Wool Prices (1973), p. 71, Fig. 8. ¹³⁴ Pegolotti, Pratica, p. 259 (Condisgualdo). But wools from Kingswood in Gloucestershire (Cist.) and Bruern-in-the-Cotswolds and Thame in Oxfordshire were very high priced in the Pratica and earlier lists. ¹³⁵ Lloyd, *Wool Prices* (1973), p. 11. ¹³⁶ Ibid., pp. 40–4, col. 18 (Table I).

¹³⁷ Ibid., pp. 11–12.

¹³⁸ H. Hall and F. J. Nicholas (eds), 'Select Tracts and Table Books Relating to English Weights and Measures, 1100-1742', Camden Miscellany, XV (Camden Third Series, Vol. XII, London, 1929), pp. 12-20.

Measures, 1100-1742, Canada Miscellady, XV (Canada Inna Series, Vol. XII, London, 1929), pp. 12-20.
 A few prices were cited in Power, 'Wool Trade of the Fifteenth Century', pp. 49-50.
 ¹³⁹ A. R. Myers (ed.), English Historical Documents, IV: 1327-1485 (London, 1969), pp. 1028-9, no.
 590: e.g. Claywood, North Land, South Land, Morland.
 ¹⁴⁰ Lloyd, Wool Prices (1973), pp. 11-12, 71, Fig. 9.
 ¹⁴¹ British Library, Cotton MS Vespasian E. IX, fo. 106r.

142 Georg Schanz (ed.), Englische Handelspolitik gegen Ende des Mittelalters (2 vols, Leipzig, 1881), II: Urkunden und Beilagen, pp. 569-70, no. 130. Schanz dated this document c. 1527, but Eileen Power, who cites several variants, believes that 1547 is a more likely date. 'Wool Trade of the Fifteenth Century', pp. 72,

371 n. 150. For yet another variant, c. 1560, compare Hist. MSS Comm., Salisbury MSS, XIII, p. 54.
 ¹⁴³ H. E. Malden (ed.), The Cely Papers, 1475–1488 (Camden Third Series, Vol. I, London, 1900), pp. 1–3, no. 2 and passim; Nicolaas Posthumus, De geschiedenis van de Leidsche lakenindustrie (3 vols, The Hague

¹⁴³ Sack weights in Stadsarchief te Leuven, Stadsrekeningen no. 5058, fo. 34r. (1434-5); no. 5072, fo. 40-1r. (1442-3); compare also Herman Van der Wee, Growth of the Antwerp Market and the European Economy, Fourteenth to Sixteenth Centuries (3 vols, The Hague, 1963), I, pp. 71-9 (on weights); Munro, 'Industrial Protectionism in Medieval Flanders: Urban or National?', in Harry Miskimin and David Herlihy (eds), The Medieval City (New Haven, 1977), p. 256 (Table 13.2).

'Wool Trade in the Fifteenth Century', p. 49.

146 Craig, The Mint, pp. 91-2, 413; Munro, Wool, Cloth, and Gold, pp. 160-2, 200. The next debasement was not until November 1526.

147 Lloyd, Wool Prices (1973), pp. 43-4, cols 4, 10-11, 13 (excluding cols 9, 15, 18) of Table I.

148 Rymer, Foedera (2nd edn, 1727), XII, pp. 713-20; Schanz, Englische Handelspolitik, II, pp. 195-8, 201-2, nos. 7-11, 14; Algemeen Rijksarchief (België), Rekenkamer no. 1158, fo. 226.

¹⁴⁹ For this and the following, compare John Munro, 'Bruges and the Abortive Staple in English Cloth', Revue belge de philologie et d'histoire, XLIV (1966), pp. 1150-5; Munro, 'Industrial Protectionism', pp. 251-5,

264-7 (Tables 13.1, 4, 5). ¹⁵⁰ Compare supra, pp. 119-35. ¹⁵¹ Compare Munro, 'Industrial Protectionism', pp. 229-32, 248-68; Wool, Cloth, and Gold, pp. 1-9,

181-5. ¹⁵² Compare respectively M. G. Willemsen, 'Le règlement général de la draperie malinoise de 1544', Bulletin du cercle archéologique de Malines, XX (1910), pp. 17-18, 156-60; Stadsarchief te Brussel, Het Wit Correctieboek no. xv1, fo. 193r. (Mar. 1444); no. 1435, fo. 30v. (Nov. 1467: no more than four fine cloths to be made from each of such wools); no. 1436, fo. 13r. (June 1497); no. 1437, fo. 30r. (Oct. 1540); M. J. Lameere (ed.), Recueil des ordonnances des Pays Bas: 2me série, 1506-1700, V (Brussels, 1910), pp. 272-3 (Ghent, May 1546); Stadsarchief te Gent, Stadsrekeningen nos 400:32-55 (1495-1548): Posthumus, Bronnen Leidsche textielnijverheid, I, p. 150, no. 132:II:16 (1441); p. 156, no. 130:III:28 (1442); p. 191, no. 166:11:13 (1446-51); p. 195, no. 166:11:25 (1448); pp. 300-1, no. 263 (1453-72): pp. 508-9, no. 440 (1472-1541); II, p. 453, no. 1034 (1541-64); Henri de Sagher (ed.), Recueil de documents relatifs à l'histoire de l'industrie drapière en Flandre: 2me partie (3 vols, Brussels, 1951-66), I, pp. 102-17, no. 36 (Armentières,

1510). ¹⁵³ Calculated from Van der Wee, Antwerp Market, I, pp. 127-8 (Table xv), and Craig, The Mint, p. 413. ¹⁵⁴ Rymer, Foedera (2nd edn, 1727), XII, p. 578-9 (Feb. 1496); Rijksarchief van Oost Vlaanderen te Gent, ¹⁵⁴ Rymer, Foedera (2nd edn, 1727), XII, p. 578-9 (Feb. 1496); Rijksarchief van Oost Vlaanderen te Gent, ¹⁵⁴ Rymer, Foedera (2nd edn, 1727), XII, p. 578-9 (Feb. 1496); Rijksarchief van Oost Vlaanderen te Gent, heid, 11, p. 184, no. 751; pp. 186-7, no. 753; pp. 188-9, no. 756.

155 Schanz, Englische Handelspolitik, 11, p. 195, no. 8; p. 198, no. 11; pp. 201-2, no. 14.

156 Rymer, Foedera (2nd edn), XII, 713-16. Compare Munro, 'Bruges', pp. 1152-5; and Wool, Cloth, and Gold, pp. 39-40, 175-8. ¹⁵⁷ A.R.A., Rekenkamer, no. 1158, fo. 226-7; see n. 153 supra.

¹⁵⁸ Several of the colleagues thanked in n. I supra gave me useful but conflicting advice in deciphering this

MS; again I bear final responsibility for the transcriptions. ¹⁵⁹ Michael Postan, 'The Medieval Wool Trade', *Medieval Trade* (1973), p. 346. His theory would not explain the presence of Rutland wools in this schedule. But see the following note.

¹⁶⁰ Malden, Cely Papers, pp. xxxviii–xxxix, and in particular nos 11 (Gloucs.), 21 (Gloucs.), 27 (Oxford.), and Huntingdonshires and in the east part of Northamptonshire'. Depending on the punctuation, this MS might suggest that the terms 'Berks', 'Kesteven', and 'Lindsey' accounted for wools of a number of the 'missing' Midland counties. But clearly the term 'Cotswold' has a very restricted application.

¹⁶¹ Compare Maurice Beresford, The Lost Villages of England (London, 1954), pp. 148-51, 161-72, 182-210, 217-46; I. S. Leadam (ed.), The Domesday of Inclosures, 1517-1518 (2 vols, London, 1897) (for Berks, Bucks, Cheshire, Essex, Leics, Lincs, Northants, Oxon, Warwicks, Bedfords.); and the sources cited in n. 2 supra.

¹⁶² Munro, Wool, Cloth, and Gold, pp. 4-5, 182-4; Bowden, Wool Trade, pp. 26-7, 46-8; Julius Klein, The Mesta: A Study in Spanish Economic History, 1273-1836 (Cambridge, Massachusetts, 1920), pp. 3-9, 12-15, 17-30, 316-30; Felicien Favresse, Etudes sur les métiers bruxellois au moyen âge (Brussels, 196), pp. 59-74; E. E. Rich, Ordinance Book of the Merchants of the Staple (Cambridge, 1937), pp. 13-15.
 ¹⁶³ Schanz, Englische Handelspolitik, II, p. 568, no. 129 (c. 1527-47).
 ¹⁶⁴ A Treatise Concerninge the Staple', in R. H. Tawney and E. Power (eds), Tudor Economic Documents

(3 vols, London, 1924), III, p. 102, no. II. 2. ¹⁶⁵ Compare Youatt, Sheep, pp. 239, 334-7; Herbert Heaton, The Yorkshire Woollen and Worsted Indust-ries from the Earliest Times (2nd edn, Oxford, 1965), pp. 259-64; Emile Coornaert, La draperie-sayetterie d'Hondschoote, XIVe-XVIIIe siècles (Paris, 1931), pp. 17-26, 189-93; Maurice van Haeck, Histoire de la sayetterie à Lille (2 vols, Lille, 1910); Willemsen, 'Draperie malinoise', pp. 51-9, 127-35, 163-71. Coornaert maintains that Hondschoote never used English wools; but the Mechelen sayetterie did.

¹⁶⁶ And also Surrey wools, as discussed in n. 98 supra. In Jan. 1394, a Commons petition classed even Berkshire wools, and those of Wiltshire, Hampshire, Somerset, and Dorset as 'sleght wolle' that ought to be exempt from the Calais Staple. Rot. Parl., III, pp. 322-3: no. 51. Compare also ibid., IV, p. 251: no. 40 (1423); and n. 119, 129 supra; and perceptive comments in Trow-Smith, Livestock Husbandry, pp. 147-53.