AGRARIAN SOCIETY AND WEALTH IN MID-WHARFEDALE, 1664-1743[1]

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I

Much that has been said about English village communities in the pre-industrial period stems indirectly from a study of towns. Studies such as Dr. Wrigley's of London in the period 1650-1750 and Professor Chambers's of Nottingham in *c*1664-1800 leave us in little doubt that large numbers of country people found fresh forms of employment in the developing centres.[2] Since this happened during a period when total population was either stagnant or growing but slowly, it follows that many village communities were severely reduced in size.[3] These depletions, it has been argued, in no way jeopardized the nation's supply of food since farming innovation introduced or extended in the period ensured a substantial rise in agricultural out-put per head.[4] Such agricultural development surely suggests a modicum of rural prosperity, yet it is sometimes commented that town migration was due to a 'worsening of rural conditions involving a depression of the standard of living of those forced to remain.'[5] Work directly on the abandoned rural settlements has been slight, largely due to poorer quality documents at source. Consequently the position of the abandoned settlement in what was a period of undoubted national prosperity is obscure. Accordingly the present essay will attempt to analyse the changing economic and social conditions of several rural communities within the region of mid-Wharfedale in the West Riding of Yorkshire between 1664 and 1743 and to relate these findings to patterns of migration history over the same period of time.

Basically what follows is a study of contrasts. On the one hand we shall be looking at a rural hinterland represented by eight ecclesiastical parishes and chapelries, Conistone, Linton, Burnsall, Rylstone, Bolton Abbey, Addingham, Ilkley and Weston, and on the other a marketing centre co-terminous with a single parish, Otley.

Sources available chiefly consist of probate inventories,[6] parish registers[7] and two

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1 I am deeply indebted to Dr. Wendy R. Childs for reading earlier drafts of the present essay and for generously helping me with its presentation and style. For advice and encouragement during the intitial and final stages of research my thanks are due to Mr. G. C. F. Forster. I also thank Mr. and Mrs. T. Mason for helping me to interpret the agricultural content of probate inventories and Mr. L. B. Eagle for checking some of the inventorial figures used in the text. The responsibility for the final version of course is mine alone.

2 E. A. Wrigley 'A simple model of London's importance in changing English society and economy, 1650-1750', *Past and Present* 37 (1967), pp.44-70, hereafter Wrigley, 1967. J. D. Chambers, 'The Vale of Trent, 1670-1800', *Economic History Review* supplement 3 (1957), pp.20-1. For an excellent review of existing work on town-migration in England see John Patten, *Rural-Urban migration in pre-industrial England* (Oxford, 1973), School of Geography, research paper 6.

3 E. A. Wrigley, *Population and History* (London, 1969), p.78, fig. 3.3.

4 Wrigley, 1967, pp.56-8.

5 R. A. Pelham, 'The immigrant population of Birmingham, 1686-1726', *Transactions of Birmingham Archaeological Society* 61 (1937), pp.52-3.

6 Borthwick Institute of Historical Research, University of York, inventories located in the deaneries of Ainstie and Craven.

7 All registers are in print, details of which can be found in the index to parish registers at the Yorkshire Archaeological Society, Leeds, hereafter YAS.

contemporary surveys, that of the hearth tax listing of 1664[8] and that of the visitation return of Archbishop Herring of 1743.[9] In addition limited use is made of the business and household accounts of two northern estates, Farnley Hall in Wharfedale[10] and Temple Newsam near Leeds.[11]

Several of these sources prove defective at some point. First, documents survive for the parishes with which this study is concerned only after 1686. There is therefore a gap of some twenty-two years for which economic data relevant to our problem is unavailable. Neither do probate inventories and their associated wills regularly record the occupation followed by the deceased during his lifetime and all that can be said with certainty is that approximately three-quarters of the documents indicate agricultural interest. Moreover, although some Wharfedale will-makers seem very poor indeed, the possibility that probate inventories survive in unequal proportions for different social classes cannot be ignored.[12] Secondly, few parish registers give reliable information before 1672 and one, that of Bolton Abbey, does not start until 1689. No attempt has been made to bridge the gap caused by this failure of evidence except in the case of Bolton Abbey for which figures covering the years 1672 to 1689 were inserted into the material so as to permit each aggregation to commence at the same time.[13] Thirdly, contemporary surveys inevitably give population in terms of families or household units. In order therefore to convert this data into terms consistent with that of parish registers we have assumed an average of 4.5 persons per family or household unit.[14]

These defects notwithstanding, the general trends of the period are clear enough: economic and demographic change within the region of mid-Wharfedale was sharply contrasted. Farming activity drastically declined in the rural regions, emigration tended always to be high and real incomes fell to a very low level indeed; conversely, in the marketing area farming activity dropped less sharply, population totals remained more or less stable and living standards improved out of all recognition.

II

Changes in levels of personal wealth and changes in the structure of wealth are made abundantly clear from an examination of 220 probate inventories, half of which date to the period 1686-92 and half to 1731-40. In each period the sample is also sub-divided into 70 from rural regions and 40 from Otley.[15] Probate inventories from rural regions

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8 P.R.O. E179/210/393, mm 25-35, mm 71-80 and mm 1-24. I am grateful to Mr. D. Purdy who kindly made these figures available to me. The return for 1664 generally is the most complete for this region, but for a few villages the return of 1672 contains more detail, P.R.O. E179/210/400, E179/210/417, E179/210/418.

9 S. L. Ollard and P. C. Walker, eds., 'Archbishop Herring's visitation returns, 1743', 2 vols., *Yorkshire Archaeological Society Record Series* 71 (1927) and 72 (1928), hereafter *YASRS*.

10 YAS, DD 146, box 13.

11 Leeds City Archives, TN EA/12, EA/14.

12 Five per cent of Wharfedale probate inventories give a total of £5 or less.

13 The number of events in Bolton Abbey register in 1689 represents 10 per cent of the total of all recorded events in rural parish registers for that year. Accordingly figures for the period 1672-88 have been inflated to that extent.

14 A multiplier of 4.75 has been suggested in P. Laslett and R. Wall, eds., *Household and Family in past time* (Cambridge, 1972), pp.130-2. The lower multiplier of 4.5 was chosen in order to conform with figures in an earlier publication, M. F. Pickles, 'Mid-Wharfedale, 1721-1812: economic and demographic change in a Pennine Dale'. *Local Publication Studies* 16 (1976), p.32, table 12, hereafter, Pickles, 1976. The choice is quite arbitrary; had it been fractionally different it would not damage the study's aims in any way.

15 Probate inventories at the Borthwick Institute are filed chronologically; book indexes run chronologically in 1686-92 but alphabetically by period, 1731-40, and the period 1731-40 represents one book, *c*1731-7 and part of another, *c*1738-40. The samples comprise the first 70 rural inventories and the first 40 Otley inventories in each period. Only one inventory was discarded on the grounds of illegibility. Some three dozen inventories were transcribed by students of W.E.A. classes at Ilkley and Otley.

represent between 20 and 22 per cent of total family heads recorded in burial registers and in Otley, between 12 and 14 per cent, in the relevant periods.[16]

In the period 1686-92 will-makers in rural regions left property worth on average (median) £38 but in the period 1731-40, £18.[17] In Otley by contrast, people in the first period left goods totalling on average £39 but in the second, £57. The distribution of this wealth changed markedly. During the seventeenth century 46 per cent of the sample from rural regions included items of bonds, bills and mortgages, compared with 21 per cent in the eighteenth century. At the same time the median value of the items increased from £18 to £21, suggesting perhaps that small people were being squeezed out of the picture. In Otley on the other hand the proportion of will-makers leaving bonds, bills and mortgages increased from 40 per cent in the seventeenth century to 50 per cent in the eighteenth century, the median figure in this case advancing from £29½ to £55. Among the farmers, the domestic wealth proportion of the combined total of household and farm goods rose from 36 to 42 per cent between the seventeenth and eighteenth centuries in rural regions and from 37 to 44 per cent in Otley. At the same time the median value of the goods fell from £10 to £8½ in rural regions but rose from £10 to £14 in Otley. In each district the agricultural percentage fell in the same proportions with the median figure in rural regions dropping from £26 to £12 and in Otley from £19½ to £16½. The most important factor influencing changes in levels of personal wealth and changes in the structure of wealth was undoubtedly private savings.

From these changes in inventorial values it is reasonable to suppose there were corresponding changes in standards of living. The 'goods and chattels' recorded in probate inventories tell us exactly what these standards were.

III

The probate inventories show that throughout the period of our enquiry the agrarian economy of mid-Wharfedale was predominantly pastoral with perhaps 92 per cent of all farming wealth in rural regions devoted to pastoral activities and in Otley approximately 76 per cent (Table V). They also show that on individual farms the amount of farming activity declined, with livestock declining by more than 33 per cent in rural regions and 10 per cent in Otley; at the same time the extent of the sown arable was severely reduced on most holdings. The inventories provide us moreover with the details to fill out this general picture.

Cattle keeping was the most important element in pastoral farming in each part of the dale. Approximately 73 per cent of rural parish inventories and between 68 and 75 per cent of Otley inventories carry evidence of cattle keeping in these centuries but the median size of individual herds was declining (Table I).

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16 These figures are extremely conservative, for the count includes all widows, though widows in Wharfedale seldom left inventories, and also all persons who might conceivably be family heads, though no family status was given. for comparison see, V. H. T. Skipp, 'Economic and social change in the Forest of Arden, 1530-1649', *Agricultural History Review* 18 supplement (1970), p.86 and n.3 W. G. Hoskins, *Essays in Leicestershire history* (Liverpool, 1950), p.135. J. A. Johnston, 'The Probate inventories and wills of a Worcestershire parish, 1676-1775', *Midland History* 1 (1971), p.21, table 1, hereafter Johnston, 1971. R. Fieldhouse and B. Jennings, *A History of Richmond and Swaledale* (London, 1978), p.320, n.9.

17 For comparison, 37 probate inventories from Swaledale villages in the North Riding dated to the 1680s produce a median figure of £30 and 34 inventories dated to the 1730's produce a median of £19. These figures were calculated from raw inventory totals kindly supplied by Mr. R. Fieldhouse. In Wharfedale the drop of inventory values is supported on the evidence of recorded pauper burials at Linton, the only parish which regularly records this information in these decades. The figures are as follows: 1664-80, nil: 1681-1700, nil: 1701-20, 2: 1721-40, 82: 1741-60, 46: 1761-80, 12.

Table I
Size and distribution of herds (excluding working beasts)[18]

Herd size	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22+	median	no. of rec'ds	total animals
Rural regions											
17th century	11	4	11	9	6	4	1	5	9	51	570
18th century	24	11	1	5	3	2	4	2	4	52	365
Otley											
17th century	11	4	4	4	3	0	1	3	7	30	250
18th century	13	6	2	2	3	0	1	0	4	27	160

Cattle herds in the seventeenth and eighteenth centuries were primarily kept for dairying. Out of a total of 567 animals mentioned in seventeenth century rural parish records 59 per cent rising to 71 per cent were listed as kine, cows, whys, calves and one year old heifers, and in Otley out of a total of 247, 77 per cent rising to 87 per cent. Particularly noticeable also is the decline in fat stock, dropping altogether 57 per cent as against dairy, 25 per cent.

Bulls are rarely encountered in probate inventories, being mentioned six times in the seventeenth century and five in the eighteenth, yet one bull could adequately serve no more than about 30 cows.[19] Possibly many Wharfedale bulls escaped notice in the inventories because privately owned herds were served by town bulls. Certainly earlier we find (in Ilkley) that 'every husbandman in Ilkley in his due course shall take the towne bull into ther custodie and meate him well in winter time'.[20]

The keeping of cattle had another importance in Wharfedale's domestic economy: John Taylor of Denton (Otley parish) whose total estate in 1686 was appraised at £552 6*s* 0*d* left 'leather and bark' to the value of £185 while the rest of his estate was comprised of household goods valued at £56, farm goods worth £221 and bonds for £90. From these figures it would appear that a considerable proportion of John Taylor's fortune was derived from the sale of tanned hides to local craftsmen.

The conventional view that sheep farming provided the main source of revenue of Pennine Dales farmers two or three centuries ago is not borne out by the evidence of these contemporary records (Table II).

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18 The style of this and subsequent tables referring to livestock is largely modelled on Johnston, 1971, p.27, table 5.

19 Ian Kershaw, *Bolton Priory: the economy of a northern monastery 1286-1325* (Oxford, 1973), p.99.

20 Ilkley court roll, 37 Eliz., YAS, MD 59/12.

Table II

Size and distribution of flocks

Flock size	1-10	11-20	21-50	51-100	101+	median	no. of records	total animals
Rural regions								
17th century	7	7	13	6	2	25	35	1794
18th century	9	5	8	5	2	25	29	1200
Otley parish								
17th century	10	6	6	1	1	15	24	506
18th century	3	2	7	3	1	24½	16	555

Flocks of sheep were kept by 69 per cent of farmers who left inventories in the seventeenth century and 54 per cent in the eighteenth. The changes in median flock size indicate a tendency for small sized flocks to disappear over time.

Flocks of sheep in mid-Wharfedale seem not to have been highly valued as a source of wool since few probate inventories in these centuries carry items of raw wool or alternatively items of household goods which might conceivably be connected with the spinning of raw wool into yarn or the weaving of spun yarn into cloth. Articles such as looms, spinning wheels, wool combs and parcels of raw wool appear in 28 probate inventories (25 per cent) dated to the seventeenth century and 15 (14 per cent) to the eighteenth.[21] This means that less than half the inventories which provide evidence of sheep farming give any indication that the deceased or members of his family had occupied themselves with spinning and weaving in the winter months. Moreover, amounts of raw wool found in stock at the time of death are generally rather small when compared with what has been found in other places, suggesting that people were not even interested in producing for sale. Even allowing for seasonal variations one or two stones of wool, the produce of six to eleven sheep, seems to have been all that was left by the average Wharfedale farmer two or three centuries ago.[22] In marked contrast wool weights of 18 stones, 24 stones and about 30 stones were apparently not uncommon in the upland regions of sixteenth-century Lincolnshire.[23] Exceptionally three farmers left amounts of raw wool totalling between 4 and 6 stones and one, Thomas Pearson of Draughton who died in 1686, left wool in his parlour to the value of £20, that is 60 stones.[24] Each of these four farmers had owned sheep flocks of above average size, the largest being that of Thomas Pearson with 655 sheep and 20 lambs. This dearth of textile activity is confirmed by employment patterns in the period 1721-40 when only 6 per cent of all adult males in mid-Wharfedale were actively engaged in manufacturing cloth.[25]

The fall in the number of horses both in rural regions and Otley can reasonably be

21 Compare, H. Thwaite, 'Abstracts of Abbotside Wills, 1552-1688', *YASRS* 130 (1967), pp.65-130, in which 30 inventories out of a total of 56 (54 per cent) provide evidence of wool textiles, often stocking making, between 1658 and 1688.

22 A figure of 2½lbs. a fleece seems likely. See, J. D. Marshall, 'The domestic economy of the Lakeland yeoman, 1660-1749', *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society* 73 (1973), p.193 and n.7, hereafter Marshall, 1973. C. B. Robinson, ed., 'Rural economy in Yorkshire in 1641, being the farming and account books of Henry Best, of Elmswell in the East Riding of the County of York', *Surtees Society* 33 (1857), pp.24, 27.

23 J. Thirsk, *English Peasant Farming* (London, 1957), pp.85-6.

24 6*s*8*d* is the value of a pound of raw wool in probate inventories in the seventeenth century; unfortunately no amount can accurately be calculated for the eighteenth century.

25 This figure is based on 197 references to wool workers out of a total of 3231 occupations listed in seven baptismal registers in the period 1721-40. For a discussion on the use of occupational recordings from parish registers see, Pickles, 1976, pp.14-5.

ascribed to a declining interest in growing crops (Table III). Otherwise horses for essential transport were likely to remain at a fairly high level. Articles such as carts, coups, saddles (including pack saddles) and several items connected with equestrian travel frequently appear in the inventories. Noticeably, there are very few large size studs and those that exist were probably developed for carrying, as for instance John Carrick's stud of 17 horses at Conistone used perhaps for transporting lead.[26] More usually farmers kept one or two mares with foals, indicating breeding solely in the interests of the farm itself.

Table III
Size and distribution of studs

Stud size	1	2	3	4	5	6	7	8	9	10+	median	no. of records	total animals
Rural regions													
17th cent.	23	13	7	4	1	1	1	1	—	—	2	51	112
18th cent.	21	11	2	4	—	1	—	—	—	1	2	40	85
Otley Parish													
17th cent.	10	7	3	2	3	1	2	—	1	—	2	29	85
18th cent.	5	6	3	2	3	1	—	—	—	1	2	21	70

Pig-keeping, never a speciality of the district, also declined. In the rural regions the number of farmers keeping pigs dropped from 16 to 3 and in Otley from 11 to 8. The average number of pigs per farm was low being 1.8 rising slightly to 2.3 in rural regions and stable at about 4.5 in Otley.

To round off this description of animal farming in mid-Wharfedale we have extracted from the inventories such information as they contain on animal values (Table IV). These show a persistently upward trend between the late seventeenth and early eighteenth centuries, which is what we should expect to find in view of price trends over the same period (see below fig. 1).

Table IV
Mean average value of animals

	sheep	cattle	pigs	horses	oxen
	s. d.	£ s. d.	s. d.	£ s. d.	£ s. d.
17th century	5 5	1 14 7	7 0	2 1 8	3 1 7
18th century	6 4	1 19 0	12 1	2 12 2	3 15 0
net increase	11	4 5	5 1	10 6	13 5

The nature and extent of arable farming cannot be even so roughly estimated as pastoral. As Dr. Marshall found in his survey of Lakeland inventories any 'calculation of quantities and acreage is much hindered by the prizers' habit of lumping together "corn and hay" in the same entry',[27] and in Wharfedale even when 'quantitites and acreages' are separately distinguished the terminology is often ambiguous; 'a day's work', 'a load' or 'a mough' are some of the colloquialisms that occur. In attempting to resolve this problem we have produced alternative sets of figures. Table V indicates the frequency with which given crop values occur in the inventories, and Table VI the frequency of different types of crops.

[26] See, A. Raistrick, *Old Yorkshire Dales* (London, 1967), pp.114–5, hereafter Raistrick, 1967.
[27] Marshall, 1973, p.200.

Table V
Value of arable crops separately distinguished

	£ 1-5	£ 6-10	£ 11-20	£ 21-50	£ 51+	no. of records	£ total crop value (1)	£ total farm goods value (2)	(1) as % of (2)
Rural regions									
17th cent.	12	3	4	—	—	19	101	2200	5
18th cent.	3	—	2	3	1	9	251	1986	13
Otley Parish									
17th cent.	8	7	3	3	1	22	276	1353	20
18th cent.	3	1	2	4	2	12	344	1257	27

Table VI
Arable crop frequency by type and hay

Crops:	barley	oats	wheat	unsp. corn	beans	peas	rye	maslin	rape	no. arable crop recs.	no. hay records
Rural regions											
17th cent.	12	9	2	23	3	1	—	—	—	50	29
18th cent.	4	6	5	12	6	—	—	1	1	35	22
Otley parish											
17th cent.	11	15	10	12	9	1	1	—	—	59	22
18th cent.	3	5	7	8	4	1	—	3	—	31	13

From both sets of figures it appears that the acreage of sown arable on most small sized farms was declining. Conversely, on a handful of large-sized farms it increased. The decline in fodder and hay crops is closely linked with the decline in animal numbers. More importantly the decline in arable farming as a whole reflects the period's tendency towards regional agricultural specialization. In such circumstances it would be natural for farmers on less-well-endowed soils such as these in mid-Wharfedale to abandon corn cultivation entirely and rely on grain imports. The pressure in this direction might be reinforced by the agricultural depression in the 1730s.[28]

In view of the decline in the size of the sown arable on individual farms it is hardly surprising that teams of working oxen declined too. In Otley these were kept by 28 per cent of farmers who made wills in the seventeenth century compared with 7 per cent in the eighteenth. The corresponding figures from rural regions were 17 per cent and 11 per cent. Teams of working oxen are usually found on large-sized farms. For example men like Joseph Maude of Lindley (Otley parish) whose total farming assets, valued in 1737 at around £80, of which no less than 25 per cent was tied up in land crops owned four beasts.

Finally, mention should be made of the poultry. Hens, geese, ducks and goslings appear in probate inventories less frequently than might be expected. In rural regions poultry is encountered in documents twice in each century and in Otley 12 times in the seventeenth century and 4 in the eighteenth.[29] The value of a hen was approximately 5*d* and a goose 8*d*. Few farmers owned more than 16 birds though John Mawd of Burley (Otley parish) had 'pullana, geese, ducks and hens' to the value of £1 indicating some three dozen birds in all.

The foregoing survey of the agrarian content of probate inventories indicates a farming decline on individual Wharfedale farms already suggested by the decline in total wealth on these farms, as shown in section II of the present study. What is still obscure, however, is how far these probate inventories reflect a general farming decline. It could be argued for example that, while the average size of herds in probate inventories had

[28] G. E. Mingay, 'The Agricultural depression 1730-50', *Economic History Review* second series 8 (1956), pp.323–38.

[29] The situation is similar in every respect to that found by J. H. Bettey and D. S. Wilde, 'The probate inventories of Dorset farmers, 1573–1670', *The Local Historian* 12, 5, (1977), pp.233–4.

declined, a far greater proportion might be being held by a growing group of small people who do not figure in probate inventories, so that the total amount of dairy farming and stock breeding in the region may not have changed at all. This would happen if farm holdings had diminished in size because of inheritance customs ruling at the time. But in fact we see no evidence of this. The rule of primogeniture, which protects larger holdings, was much favoured by Wharfedale will-makers two or three centuries ago. Partible inheritance, favoured in any case by only a few, is a disintegrating factor only if the population is growing, which, as we shall show, it was not. Where population was stable or in decline, as in mid-Wharfedale, then surplus sons disinherited in some families could simply take up holdings of those families for whom no sons survived.[30] We conclude therefore, that even allowing for some margin of error caused by uneven sampling the probate inventories do indicate a farming decline in general.

IV

One of the obstacles encountered in using these probate inventories as indicators of domestic change is the lower recording of individual items in the later documents. In Wharfedale for example the number of household goods separately recorded in documents dated to the seventeenth century is 22 per cent higher than in the eighteenth. This in itself is not evidence of a decline, it simply means that appraisers in later periods lumped more items together and called them 'huslement of the house'. The comments that follow therefore, are based on figures which indicate the relative importance of different classes of goods in the different periods (Table VII).

These figures show that throughout the period of our enquiry living standards in Otley households consistently ruled higher than in rural regions, but also, and this is the important point, living standards generally did slightly improve. This is particularly marked in methods of seating. Stools and forms, commonly used in seventeenth-century houses gave way to wooden chairs which even in cottage-sized houses were later found in regular use. Coincident with the disappearance of stools and forms was the disappearance of cushions, most of which were straw-filled pieces of cloth,[31] valued in coppers. In the later period too, four-legged tables had practically taken over from simple planks on stands that formerly served. Similarly, antique pieces such as arks and coffers were rapidly going out of fashion while dressers, chests of drawers and clothes presses were coming in. Beds were on the increase, especially in the rural regions where, as section V will show, the population was declining; thus an increase in bed numbers would constitute a significant improvement in standards of living. Yet a very obvious example of poverty here is the complete absence of blankets, sheets, pillows and bed hangings from the later records. This seems to suggest a deterioration in bedding quality to such an extent that these items were simply included under 'beds and bedding', a phrase which occurs in the documents some hundred times in each sample. At the same time eighteenth-century houses were decidedly warmer, since more downstairs rooms had fire hearths, though the luxury of an upstairs hearth was comparatively rare. As regards the more sophisticated items such as clocks, seeing glasses and close stools, improvement was very slow indeed.

With small items in everyday use we find the picture is much the same. For instance in rural parish households pewter tableware was in general use throughout the period even by relatively poor persons. But in Otley, although pewter tableware in the seventeenth century was very popular indeed, its popularity did not continue into the later period. Nor can it be shown that the more utilitarian claywares were replacing

[30] I am grateful to Dr. R. S. Schofield for this suggestion.
[31] I owe this suggestion to Mr. J. Cooper, Ilkley.

pewter. Indeed, considering the amount of seventeenth and eighteenth-century pottery found in the town fields of the district the marked absence in probate inventories of ceramics generally is extremely puzzling.[32] Predictably silverware declined in the rural regions but rose where wealth was greatest, as in Otley. Woodenwares seem to have been going out of fashion, though the evidence here is not entirely convincing. Articles of brass on the other hand remained in constant use throughout the period. As might be expected, items of copper, tin and gold were comparatively rare at any time. Most significantly ironwares made substantial gains, reflecting not only general experiments in cheap iron making but more particularly those at Kirkstall, then an industrial village 2½ miles north-west of Leeds. A new slitting mill was built at Kirkstall about 1690 and from 1704 to 1710, when continuous records become available, the sales averaged £2,400 a year, but for the next 12 years the figure rose to £4,000 and over a period of 21 years, averaged £3,500.[33] Undoubtedly such innovations at the Kirkstall forge were responsible for cheap iron goods in the district.

Table VII Frequency and Distribution of Household Goods.

	Rural regions				Otley Parish			
Article	17th cent no. of items	%	18th cent no. of items	%	17th cent no. of items	%	18th cent no. of items	%
stools	88	6	43	4	95	9	40	4
forms	63	4	23	2	57	5	19	2
chairs	283	20	330	32	230	21	303	33
long settles	25	2	23	2	6	1	15	2
cushions+	31	2	1	<1	30	3	3	<1
tables	130	9	119	11	105	10	103	11
stands	28	2	5	<1	24	2	5	1
boards & shelves	60	4	9	1	50	5	20	2
beds	157	11	149	14	122	12	122	13
blankets, sheets pillows etc.	155	11	—	-	55	5	32	4
arks	54	4	27	3	32	3	10	1
coffers	22	2	4	<1	13	1	—	—
chests	163	11	120	12	105	10	68	8
cupboards	58	4	37	4	37	4	29	3
desks & boxes	38	3	37	4	33	3	27	3
dressers	2	<1	20	2	4	<1	11	1
chests of draws.	2	<1	7	1	1	<1	14	1
clothes presses	7	<1	11	1	10	1	17	2
fire ranges	35	2	42	4	39	4	43	5
clocks, various	14	1	15	1	4	<1	13	1
seeing glass	6	<1	7	1	7	1	8	1
close stool	1	<1	6	1	—	—	4	<1
Total	1422	100	1035	100	1059	100	906	100
average no. items per inventory	20		15		26		23	

+frequency of mention, elsewhere actual numbers.
Note 100% = Total number of these articles in each period.

[32] For a similar situation though at a much earlier date, see, H. E. Jean Le Patourel, 'Pottery as evidence for Social and economic change', in P. H. Sawyer, ed., *Medieval Settlement* (London, 1976), p.170.
[33] Rodney Butler, *The History of Kirkstall Forge through seven centuries, 1200-1945* (York, 1945), pp.3-4.

Table VIII
Mean average value of household goods

Article	chairs s. d.	ranges s. d.	arks s. d.	tables s. d.	chests s. d.	tables & forms s. d.	long settles s. d.
Rural Regions							
17th cent.	2 2 (21)+	9 0 (24)	7 4 (13)	8 0 (9)	5 6 (16)	9 0 (6)	8 0 (2)
18th cent.	1 11 (22)+	7 0 (19)	6 4 (7)	7 4 (15)	7 0 (21)	8 6 (2)	4 2 (7)
Otley parish							
17th cent.	1 9 (8)+	7 2 (19)	4 3 (4)	3 6 (3)	5 7 (8)	8 9 (3)	not available
18th cent.	2 2 (13)+	13 6 (21)	not. av.	12 4 (11)	7 5 (9)	9 7 (7)	13 7 (4)

Note: + frequency of mention, elsewhere actual numbers.

Values of household goods, which unfortunately can be secured for very few items indeed, show trends which are different in rural regions and Otley (Table VIII). With one exception values in rural regions moved downwards but in Otley upward. If the value trends indicated by these few examples apply to the whole range of household goods, then the situation is a very telling one. The value of these goods was not their manufacturing cost but a notional local second-hand value depending not only on the condition of the goods but also on the relative demand for them. Thus, although the goods being left in rural regions might be older and in worse condition than those in Otley, it might also be true that there was less demand for such articles in the rural regions, partly because of emigration and partly because of the much lower priority for household comforts than obtained in the town.

Nothing very much can be said about houses. Recording techniques in rural regions and Otley were too different to make comparisons at all meaningful.[34] Nevertheless a numerical increase in houses with upper-floor rooms seems clear. In rural regions it occurred to the extent of 7 per cent and in Otley, 8 per cent. One reason for the apparent dearth of building activity is that most Wharfedale houses had been re-built once already.[35] In rural regions this happened in the period *c*1650-90, but in Otley there were two re-builds, one in the period *c*1650-90 and a second (town only) between *c*1720 and 1760.[36]

In sum, the rural regions consistently lagged behind Otley in matters of convenience and comfort. Both in quality and quantity of goods Otley was always ahead but in each district living standards did improve.[37]

V

Evidence of population movement, which in mid-Wharfedale is primarily emigration, can be ascertained from a study of census totals based on parochial districts for the years 1664 and 1743 in conjunction with excess baptisms over burials from the registers. If one adds the number of excess baptisms recorded in the period 1664-1743 to the number of resident persons listed in 1664 and then compares this figure with that of the estimate of 1743 the resultant shortage must be approximately equal to the number of emigrant persons over the same period.

These calculations show that, although baptisms exceeded burials by 1280 and 1129 in the rural regions and Otley respectively, total populations fell from 4658 to 3987 in the former but rose slightly from 2520 to 2700 in the latter. Totals of inferred emigration

[34] Appraisers working in the upper part of the dale frequently omitted to mention rooms. This might mean either a one-room house or an omission of detail.
[35] See, W. G. Hoskins, 'The re-building of rural England, 1570-1640', *Past and Present* 4 (1954), pp.44-57.
[36] Pickles, 1976, p.38.
[37] Pickles, 1976; at the time of writing my first article on mid-Wharfedale this information was not available and it was not therefore included among the possible factors leading to a fall in the death rate.

therefore were thought to be 1951 in the rural regions and 949 in Otley. Moreover, since one should probably be inflating baptisms more than burials and both more in the 1740s than the 1660s, in order to correct for non-conformity and other missing events, these figures are likely to be understated.

If one sense the foregoing discussion attaches much importance to the accuracy of the census totals of 1664 and 1743 and in view of their known uncertainty this may be considered unwise. Confirmation was therefore sought by plotting annual baptism, burial and marriage frequencies in the form of nine-year moving averages on a semi-logarithmic scale. The downward trends displayed provided convincing evidence of substantial out-migration in the period *c*1680-1710. Although the burial line fell slightly earlier than the marriage one, which was unexpected in a period of out-migration, the difference was slight; the fact that mariages then fell very fast indeed with burials and baptisms following, together with the fact that the decline in burials lasted longer than the decline in baptisms was considered presumptive evidence of selective emigration of young people looking perhaps for non-agricultural employment in places outside the region.[38]

It is unlikely that the destination of Wharfedale emigrants will ever be known in detail. Parochial records up to 20 miles from Wharfedale show very few instances of a Wharfedale person moving in to marry or live, but in general the ultimate destination was the town. In Leeds the death rate exceeded the birth rate for most of the period 1650-1750,[39] yet the town grew, and the population in Leeds in-township rose from between 4,600 and 6,000 in 1664 to 14,000 in 1754.[40] In the words of Professor Ashton 'they [the towns] must have refreshed themselves with people from the countryside'.[41] We have, therefore, no hesitation in postulating that many Wharfedale people in our period emigrated into developing northern centres though some of the more adventurous went further afield, perhaps to London or Norwich.[42]

VI

Factors influencing rural emigration in the period 1650-1750 were extremely complex in England and varied very much from region to region. In mid-Wharfedale a careful scrutiny of the available detail reveals land profitability, land use and country wage rates as being essential factors of the period. A fourth factor, that of poor harvest years between 1692 and 1698, which it might be supposed accentuated out-migration, cannot be positively identified with the Wharfedale pattern.

One of the fundamental causes of out-migration two or three centuries ago was the marginal quality of land. A survey of Yorkshire farming wealth based on a sample of over 1,000 probate inventories reveals that Wharfedale's rural region was the poorest

38 Due to economic restraints a table and two charts illustrating this passage have had to be omitted; readers are referred to Pickles, 1976, pp.32-4.

39 Minoru Yasumoto, 'Urbanization and population in an English town', *Keio Economic Studies* 10 (1973), pp.63-7 and figs. 1 and 2. M. Drake, 'An elementary exercise in parish register demography', *Economic History Review* second series 14 (1962), pp.440-1, tables. Figures for Leeds in-township are not separately distinguished in either of the above mentioned studies until *c*1730 but from such information as is available it is abundantly clear that burials exceeded baptisms for most of the period 1650-1750.

40 M. W. Beresford and G. R. J. Jones, eds., *Leeds and its region* (Leeds, 1967), pp.144, 189.

41 T. S. Ashton, *An economic history of England: the eighteenth century* (London, 1969), p.15.

42 Northern apprentices in London are noted in L. Stone, 'Social mobility in England, 1500-1700', *Past and Present* 33 (1966), p.31. Yorkshire apprentices especially West Riding ones are noted in J. Patten, 'Patterns of migration and movement of labour to three pre-industrial East Anglian towns', *Journal of Historical Geography* 2 (1976), pp.121-2 and table 1.

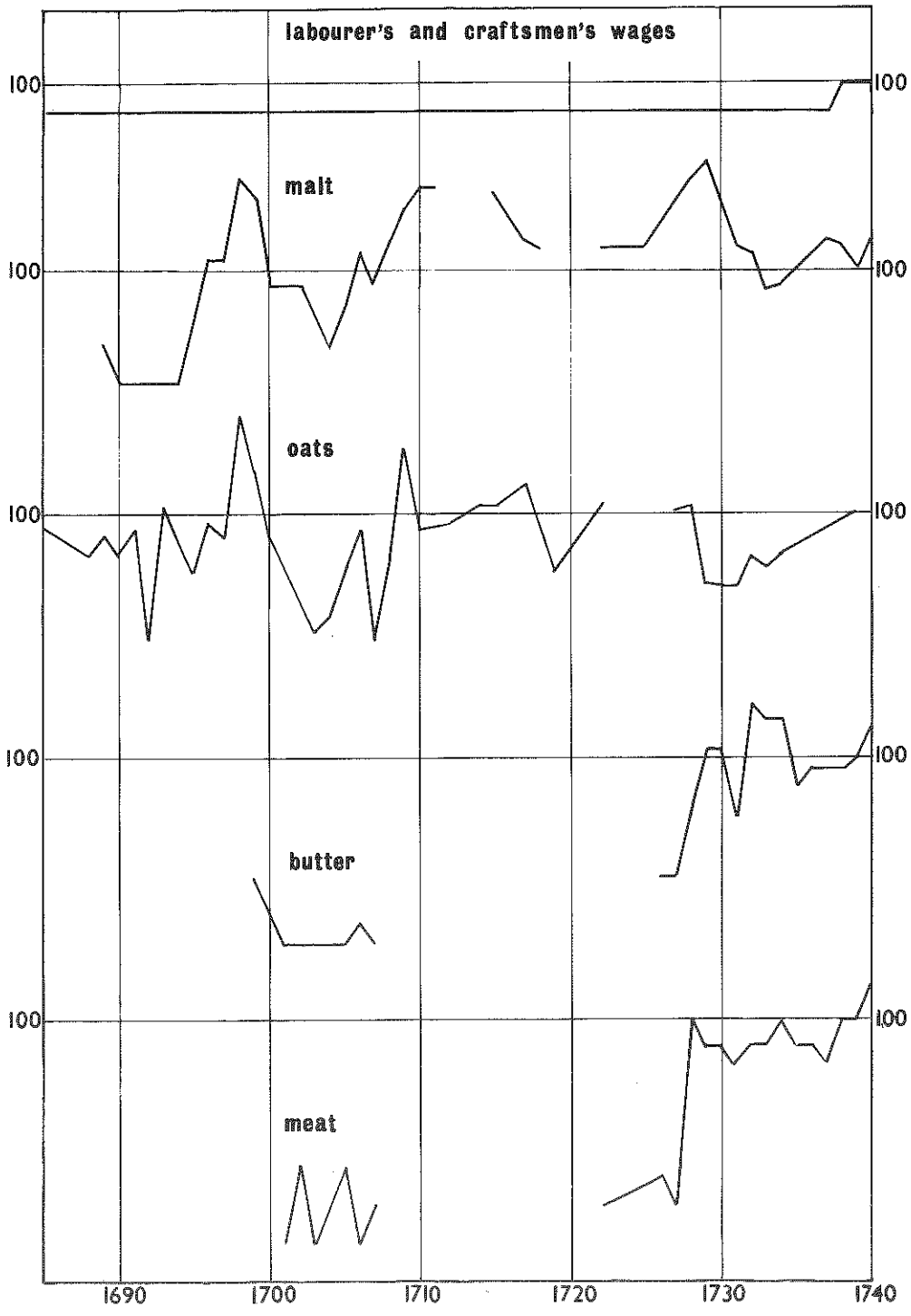

Fig. 1. Indices of wages and prices. Base: 1739. Logarithmic vertical scale.

of several agriculturally unremunerative regions in the county (Table IX).

Table IX[43]
Eight Yorkshire farming groups, 1688-9 and two Wharfedale groups 1686-92, valuations per farm

	Dales	Craven	Cleve-land	North Yorks.-Moors	Wolds	Holder-ness	West Riding Indus'l	Plain of York	W'fedale Rural regions	Otley parish
Records	116	95	31	49	38	79	33	430	39	22
Average farm value	£45	£55	£67	£47	£119	£83½	£50	£72	£41	£58

Moreover, it has long been recognized that pastoral farming tended to stimulate movement from country to town whereas arable farming in general did not, and significantly the size of the sown arable in Otley was noticeably larger than in the rural regions. In sum, 'conditions of agriculture' particularly in rural regions offered few incentives to permanent settlement.

On a more general note, money wage rates constituted a factor no less powerful in influencing decisions to settle. Real wages, it is sometimes argued, went up for most classes of workers in the period *c*1680-1740.[44] But such arguments tend to be based on figures mainly drawn from the records of institutions and government departments which because of their contractual nature have only a limited bearing on the experience of working folk of the day. More importantly, these arguments do not relate to particular localities. On the contrary, they relate to large regions, as for example the whole of Lancashire, the North and West Ridings of Yorkshire.[45] The accounts of two northern estates, Farnley Hall near Otley and Temple Newsam some 13 miles from Otley, offer good local data and taken together provide information on money wages in respect of husbandry (men and women), gardening (men and women) and building in the period *c*1680 to 1740. Moreover, from Temple Newsam we have information on retail prices of oats, malt, butter and meat, though with some missing years mostly for meat and butter prices between *c*1707 and *c*1726. As a rule entries of wages occur in the bills and books at a rate of eight or more times a year and commodity prices at a rate of seven or more times a year.

The surviving sources are not sufficiently detailed to permit a full study of the standard of living in the early eighteenth century: we have only four discontinuous food price series, but know nothing about clothing, fuel and rent; we have money wage rates only for three types of employment, and virtually nothing is known about unemployment, nor of supplementary wages from women and children. therefore, our investigations can do no more than attempt to show trends in money wages and in four specific commodities for which intermittent retail prices are available, but bearing in mind that in 1789 some poor persons in the West Riding of Yorkshire expended between 69 and 73 per cent of their total outgoings on food and drink, the figures summarised in the accompanying chart (Fig. 1) are of considerable interest.[46]

The long-term movements in retail prices computed from available data seem to be fairly consistent with those provided from other indices of the period. High-level prices

[43] Figures for Yorkshire groups other than Wharfedale, taken from W. Harwood Long, 'Regional farming in seventeenth century Yorkshire', *Agricultural History Review* 8 (1960), p.105, table 1. Figures in the table represent farms in which total valuation falls within the limits of £13 and £400; the mean figure was used and in our view this has inflated the position at Otley. Using the same totals but the median instead of the mean the results are as follows, rural regions £33, Otley £36.

[44] See for example, E. H. Phelps Brown and S. V. Hopkins, 'Seven centuries of the prices of consumables, compared with builders' wage rates', *Economica* new series 23 (1956), p.301. fig. 2.

[45] E. W. Gilboy, *Wages in eighteenth century England* (Cambridge, Mass., 1934), pp.191-215, hereafter, Gilboy, 1934.

[46] David Davies, *The case of the labourers in Husbandry* (Bath, 1795), cited by Gilboy, 1934, p.204, tables.

noted in 1698, 1709, 1728 and 1740 and low-level prices between 1701 and 1707 and again between 1729 and 1733 conform very well with Professor Hoskins's statements on good and bad harvests.[47] Moreover, the exceptionally low grain prices noted in the later period were the subject of contemporary comment in the East Riding of Yorkshire. John Potts, writing to Sir Marmaduke Constable about the latter's estates at Everingham, frequently commented on the low grain prices and the consequent difficulty of tithe lets in these years.[48] On the other hand the advance in meat and butter prices between 1728 and 1740, both of which years admittedly produced 'bad' harvests, does not tally with any price series known to us. Moreover, this seems to be happening even though the number of cattle in the inventories was declining, thereby indicating that supplies could be the cause of such a local movement. In sum, grain prices in this district slightly fell over time but prices of animal products went up.

By contrast money wages remained remarkably steady for most classes of workers in the period. Day rates for gardening generally ruled at 8*d*, 9*d* or 10*d* unless some element of construction were involved as for example 'work on the ponds' in which case rates of 1*s*, 1*s* 2*d* and 1*s*4*d* were being paid at Temple Newsam. Day rates for men at husbandry were never in excess of 10*d*, except at harvest time when the rate was 1*s*; respective husbandry rates for women were 8*d* and 10*d*. Day rates of building labourers remained fixed at 8*d*, 10*d* and 1*s* and building craftsmen at 1*s* 2*d* and 1*s* 4*d* until at least 1738 when a 1*s* 6*d* rate was more usual at Temple Newsam. Money wages of the true master remained stationary at 1*s* 6*d* in Wharfedale but may have been rising at Temple Newsam from around 1718, though in this period quotations are often associated with engagements involving above average skills or alternatively an allowance for travel.

Recommended rates appear in the books from time to time and they lend credence to our figures. Building rates in 1690 are said to be 10*d*, 1*s* 2*d*, 1*s* 4*d* and 1*s* 6*d* and in 1733, 10*d*, 1*s* 2*d* and 1*s* 6*d*. In 1738–40 a note which probably refers to bricklayers gives rates of 10*d*, 1*s*, 1*s* 6*d* and 1*s* 8*d*. Gardening rates in 1741–2 are said to be 8*d* and 10*d*, and husbandry rates in 1733, 8*d* and 9*d* but for a girl or woman, 4*d*.

The wage stability summarised in Fig. 1 is at complete variance with every other printed series we have seen save one; this is from Oxford where money wages of building labour remained stable at approximately 1*s* 2*d* from 1700 to 1770.[49] In every other published series wages are seen to rise.

This brings us to the question of real wages. Real wages, as we have said, reputedly went up for most classes of workers in the period *c*1680 to *c*1740. Moreover all contemporary evidence testifies that wage rates in towns consistently ruled higher than in the country.[50] And if it were also true that wage rates generally had a tendency to rise and at the same time living costs tended to fall, then the incentive to emigrate from mid-Wharfedale, where money wages remained stable and food costs fairly stable, would be doubly great.

The preceding paragraphs have identified some of the main causes of out-migration in the valley settlements during the seventeenth and eighteenth centuries. But there were one or two attractions to settlement in Otley. First, there is the fact that employment opportunities in terms of alternatives to agriculture were appreciably higher there than in the rural regions, 66 per cent of total employments in Otley were non-agricultural

47 W. G. Hoskins, 'Harvest fluctuations and English economic history 1620-1759', *Agricultural History Review* 16 (1968), pp.30-1 table. The price level of oats in 1692 looks freakish and could be explained by delivery of goods at Beal and Knottingley. At this time the river Aire, on which these settlements stand, was a navigable waterway.

48 Peter Roebuck, ed., 'Constable of Everingham estate correspondence, 1726–43', *YASRS* 136 (1974), pp.58, 60, 63.

49 Gilboy, 1934, p.220, chart 39.

50 Gilboy, 1934, pp.186-7 for examples of differential wage rates in town and country.

as against 52 per cent in the rural regions in the period 1721-40.[51] This would mean that some disinherited farmers' sons in Otley, where the population was growing, could enter other forms of employment without leaving home.

Secondly, Otley and its dependent settlements enjoyed two advantages over the rural regions. They had good communications and, most important, they had easy access to both general and cattle markets. These two amenities together provided an immediate outlet not only for dairy produce and cattle but also for animal by-products of all kinds. One has only to consider that during the period 1721-40 fifteen per cent of all adult males in Otley town were engaged in tanning and the associated leather trades, as against 5 per cent or less in the rural regions[52] and the rural part of the town parish, to appreciate just what this might mean in terms of profitable transactions.

On the basis of the foregoing discussion the possibility that Otley was in itself stimulating immigration cannot be ignored. If this were so, then the Redford hypothesis produced as long ago as 1926, that town migration was not a one-step movement but on the contrary took place in stages with country people concentrating first on the small towns and thereafter moving into the larger units, might well be true.[53]

VII

It is an easy assumption that the decline in farming activity observed in section III of the present study was due in no small measure to a transfer of labour to other forms of employment. It can also be assumed, in the light of later discussion, that the majority of original land workers found alternative employment in places outside the region, though a few within the locality.

The departure of primary populations at first sight seems ominous but could be partly offset by an acceptance of agrarian innovation by those who remained. Enclosure of the open fields, which in this district began some time in the early Middle Ages, continued throughout the early modern period and in some villages was virtually complete by *c*1730.[54] Another innovation dated to the late seventeenth century was liming of the pastures, evidence of which is found in valued and unvalued limestones in probate inventories.[55] Also a primitive form of underground drainage undertaken on many farms added a further benefit to the cold clay soils of the district.[56]

How far these limited improvements compensated for labour losses we have no means at present of knowing. In Otley, on less marginal land, it is tempting to argue that compensation was in full.[57] This would then explain the curious and apparently contradictory situation of a decline in farming activity occurring contemporaneously with an increase in farming wealth, although another explanation could be that farmers in Otley had supplemented their income in other ways. Quarrying, for example,

51 These figures represent 1111 baptismal entries out of a total of 1679 at Otley and 1097 entries out of a total of 2117 in rural regions. See Pickles, 1976, pp. 16, 17.

52 These figures represent 86 baptismal entries out of a total of 571 at Otley town; 43 out of a total of 1108 at Otley's dependent settlements and 71 out of a total of 1552 at six rural parishes. See Pickles, 1976, pp. 15, 16 for explanation of number of parishes.

53 A. Redford, *Labour migration in England, 1800-1850* (Manchester, 1926), pp. 158-61.

54 Embsay pasture (Bolton Abey parish) for example was enclosed in the late seventeenth century. YAS DD 104. From internal evidence the date, 1660, written on the back of the document is much too early. *Personal communication* from Mrs. Mason.

55 See also, Raistrick, 1967, pp. 74-80.

56 *Personal communication* from Mrs. Mason.

57 Before such a notion is dismissed as too fanciful it is worth considering the unpublished results of a survey of regional farming in Yorkshire. These show that a decline in farming activity had occurred in most of the eight farming regions of Yorkshire between 1688-9 and 1720-2 though farm valuations often went up. I am grateful to Professor Bernard Jennings for allowing me to cite the work of his Leeds class on regional farming in Yorkshire.

provided a lucrative investment for anyone with capital to spare. But in rural regions this could hardly be true since here there is no discrepancy between patterns of farming wealth and patterns of farming activity. Any increase in yields that might have occurred was too inadequate to compensate fully for the labour losses that were involved.

Progress on the side of non-agrarian interests is much more difficult to assess, though it is an easy assumption that secondary and tertiary developments followed in the wake of agriculture. The decline in farming activity and wealth in the rural regions would hit hard all secondary and tertiary developments, not only those based on agriculture. But in Otley with rising wealth and slightly rising population secondary and tertiary occupations would fall into line and flourish. It is therefore difficult to escape the conclusion that in the rural regions on what was fairly marginal land, depopulation brought poverty in its train as surely as over-population would otherwise have done.

VIII

The records at our disposal for the study of the population, living standards and economic change in rural Yorkshire are not as comprehensive as we could wish, but despite their occasional inadequacies and problems they do provide a basis for some general conclusions to be drawn.

It is well known that the period of English history marked by the dates 1650 to 1750 witnessed a re-distribution of labour on a scale of quite unprecedented proportions. Essentially it was a transition of labour from village to town. It paved the way for England's debut on the stage as the first industrialised nation in the world; but in the process there were some casualties. The rural regions of mid-Wharfedale were clearly among them as the draining of population caused farming activity to drop and poverty to rise. Such areas of out-migration have been as yet poorly studied but hopefully examination of similar documents by researchers in other areas will illuminate the affects of migration there and make possible comparisons with Wharfedale's bleak experience.