

Livestock Prices in Britain, 1851-93

By EDITH H. WHETHAM

IN assessing the fortunes of the different branches of British farming in the nineteenth century, historians have had to rely on the trends in prices collected mainly in urban areas for products often much altered from those sold by farmers. Beef and mutton at wholesale markets have undergone much processing and incurred many costs compared with the fatstock for which farmers were paid at country auction sales. And in selling fatstock, farmers also sold hides and tallow and skin wool as well as meat; further, their profits depended as much on the price of the store animals bought for fattening as on the price of meat in the ultimate market. Unfortunately, we have no regular series of fatstock prices for the nineteenth century, but some unofficial information on store stock prices can be used, in conjunction with meat and wool prices, to assess changes in profit trends for the mountain, hill, and upland farms devoted primarily to stock rearing, and for the lowland farms which fattened sheep and cattle for the meat market.

Three price series are here used: that published by the Teviotdale Farmers' Club, that published in the *Transactions of the Highland and Agricultural Society* from 1886 onwards, and that published by R. M. Barrington in the *Journal of the Royal Agricultural Society of England* in 1893. The first is presumably based on local prices recorded at the main autumn sales in each year, and was published for the years from 1859 to 1893 in Wilson Fox's report on Cumberland to the 1894 Royal Commission on Agriculture (*Report on Counties*, II, p. 47). These prices refer to draft ewes from Cheviot flocks and their progeny either by Cheviot or by Border-Leicester rams; to the wool from these flocks; and to shorthorn store cattle. The second series, which goes back to 1818, is derived from the records of the Inverness market;¹ it includes wethers, lambs, and draft ewes of both Cheviot and Blackface breeds, and the wool derived therefrom. The third series is taken from the autumn fair at Ballinasloe, in Ireland, described as being held mainly for store stock; as Ireland was a major exporter of sheep and cattle to Britain in the last half of the nineteenth century, it is not unreasonable to assume that prices here would reflect fairly closely price trends in store markets in other parts of Britain. When the prices derived from these different sources were converted to index numbers, with the decade 1865-74 as a base, both the trends and the fluctuations round the trends were seen to be remarkably similar.

¹ *Trans. High. & Agric. Soc.*, XVIII, Fourth Series, 1886, p. 297.

Yet the reliability of these prices is clearly no greater than the reliability of the original observations from which they were derived. It was customary to quote prices as a range, with no indication of the volume of business done at each end of the range, whose size varied greatly from year to year. The average taken of the quoted range inevitably ignores the greater variability of prices in some years than in others, a variability which reflects partly the skill of stockmen and farmers from whose holdings these beasts were sold; partly the conditions of soil and climate; and partly the influence of weather on the general condition of the flocks and herds. A single figure quoted for each year for each market is inevitably a highly condensed summary of a general trend in prices as recorded by one observer. Nor are these records attributed to any particular author, but it is probable that they were derived from the books or memories of the auctioneers functioning in each market. The departmental Committee on Agricultural Prices in Scotland (1902) commented on the imperfections of prices collected from this source, for auctioneers were unwilling to publicize low prices in the markets with which they were concerned, and might quote only a range of the higher prices.¹ Nevertheless, the close conjunction of these sets of prices, derived from such different sources, suggests that they can be used, with caution, to indicate trends over the forty years from 1851. Table I gives the price index for wool and for each class of stock, taking a straight average of available records for each class, with the average of 1865-74 as a base for each series.

WOOL

It will be seen that after the general rise in all prices in the 1850's, wool prices followed a pattern of their own. After a peak in 1864, six years of falling prices were followed by a short upward movement in 1871 and 1872; then the fall was again resumed until wool prices attained stability at some 60 per cent of the base period, and somewhat below the level of the earliest years. Prices of the fine Cheviot wool from Inverness fell less after 1871-2 than the prices of the Blackface wools or the Cheviot wools from Teviotdale, but nevertheless the fall was drastic and severe for all types of wool from 1872 to the end of the period here included. The growing imports of this product brought a permanent fall in its value from the 1860's onward, which especially affected the mountain farms with their wether flocks.

STORE SHEEP

Table I shows that a new pattern in sheep prices developed in the middle of the 1860's, a pattern of far wider fluctuations from a markedly higher level

¹ Cd. 805, p. xiv.

TABLE I
PRICE INDICES FOR WOOL, STORE STOCK, MUTTON, AND BEEF, 1851-93
(Average of 1865-74=100)

	Wool	Store Lambs	Store Wethers	Ewes	Store Cattle	Mutton (a)		Beef (a)	
						Prime	Middling	Prime	Middling
1851	63½	66½	64	61	55	72	69	65	62
2	63	60	68	64	63	72	69	65	64
3	89½	82	82	78	75½	89	86	80	80
4	59½	79	79	72	84½	89	86	88	88
5	69½	85½	81	72	86	87	84	88	90
6	86	76	77	73	92½	87	84	85	84
7	100½	82	85	72	96½	89	84	85	86
8	70½	78	82	75	87½	84	80	83	84
9	92	78	78	76	82	87	86	85	84
1860	120	85	83	77	84	92	91	88	86
1	91	80	83	79	85	90	91	87	86
2	100	81	80	79	85	87	87	81	80
3	117½	90	81	79	92	89	87	83	84
4	149	116	89	89	92½	90	93	88	90
5	119	134	96	114	98	105	106	94	94
6	117½	122½	111	118	96	100	100	94	97
7	88	70	91	83	95½	90	91	92	92
8	85½	62	80	67	92½	84	86	88	88
9	85½	78½	89	82	95	95	93	97	94
1870	82	87	102	93	99	95	95	99	99
1	115	119	108	114	112	103	107	106	109
2	115½	134	121	126	107	110	111	104	107
3	94	120	118	111	105½	116	115	115	115
4	103	78	95	92	99	102	97	110	105
5	102½	113	105	108	102½	116	107	113	113
6	86	114	115	105	94	118	106	110	107
7	86	120	117	109	95	113	98	108	101
8	77	121½	109	115	105	111	100	108	101
9	65½	93	98	82	93	105	95	97	92
1880	74½	102	103	99	108	108	98	103	101
1	67	106½	109	100	101	113	104	99	99
2	60	139	120	128	119	118	109	106	105
3	56½	140	123	130	118½	120	111	108	105
4	56	107	109	110	104	105	97	103	101
5	54½	87	91	81	86	92	86	92	90
6	59½	94	93	91	83	102	91	87	82
7	65	92	86	82	73	85	77	76	74
8	59	126	89	94	93	95	86	85	80
9	60	137	102	114	97	103	91	83	80
1890	59½	121	93	101	89	97	82	83	78
1	59	87	86	78	81½	87	77	83	82
2	55½	65	76	62	69½	87	77	83	78
3	55½	89	86½	69	75½	87	77	85	80

(a) Sauerbeck's meat prices from the London market, published in the *Journal of the Royal Statistical Society*, and converted to the base of 1865-74.

than was known in the previous decade. It seems likely that the change was brought about not only by the growing demand for meat from the towns, but also by the influence of the railways which in the 1860's effectively linked the great store stock markets in the remote areas to the arable farms in the east, south, and midlands, with their pastures for summer grazing and their fields of turnips and swedes for winter feeding. If the agricultural census of Scotland taken by the Highland and Agricultural Society in the years 1854-7 is compared with the official census begun in 1866, it will be seen that in Scotland the number of cattle on farms in June rose sharply in the north and west, the most remote districts, but fell in the east; and that though the number of sheep rose in all regions, the rise was greatest in the northern counties. More draft ewes, more wethers and lambs became available for fattening in the lowlands as the falling costs of sending them south or east raised prices to rearing farms, but much of this increased supply could only be fattened from the turnip crop which was at intervals seriously affected by drought and the 'fly'. Drought in 1867 and the really disastrous drought of 1868 brought down prices for store sheep for three successive years by one-third of the 1865-74 level; the dry year 1874 left a similar but smaller mark, as did that phenomenally wet year 1879, when many turnip fields were too wet to carry sheep in the autumn. Spells of dry weather in 1885 and 1887 brought already low prices lower still, as did a similar spell in 1892. Lamb prices fluctuated most, since lambs needed more and longer feeding than wethers, before being sold fat at 12-15 months; but ewes were often bought to be crossed again with a Border-Leicester or Down ram before being fattened for the butcher, and a poor turnip crop affected their prices almost as much as those for lambs.

The general trend in these sheep prices, and the timing, though not the size, of the fluctuations, follows pretty well the general trends in Sauerbeck's mutton prices, though the peak in 1865-6 must reflect the indirect result of the epidemics of rinderpest and pleuro-pneumonia of those years which disrupted the markets for cattle and for beef. But from 1851 to 1863 mutton prices were higher in relation to sheep prices than at any other period, indicating a high level of profitability for sheep fatteners; a similar difference on a smaller scale developed for six or seven years after 1873. The peak both in mutton and in sheep prices over these decades was reached in 1882-3, and it was not until 1891-2 that prices fell substantially below the level of the base years. After the epidemic of sheep rot in 1879-80, many farmers in the lowlands were restocking, and this demand kept up store sheep prices, whose supply had been drastically reduced by the two severe winters of 1879-80 and 1880-1. The losses then experienced on hill farms meant that a higher proportion of a smaller crop of lambs was required as replacements and

smaller numbers were thus available for sale at a time when demand was exceptionally high. A similar conjunction followed the long winter of 1887-8 when lamb and ewe prices rose very sharply and to a far greater extent than the small rise in mutton prices. Such high prices did not therefore necessarily bring high profits for hill farms, but only mitigated the results of a reduced output, while they added to the costs of lowland farms.

Except for the immediate effects of severe winters, the number of sheep recorded annually in June increased generally in Scotland and in Wales over this period, starting with the first census in 1854 and 1866 respectively. But in England the highest numbers were recorded in 1867 and in 1874 at 19·8 millions; there was then a slight fall until the wet year of 1879 brought an epidemic of liver rot that swept away many lowland flocks and reduced the numbers year by year to just under 15 million in 1884. In the grassland counties there was then some recovery in numbers, but not in the five eastern counties of Cambridge, Essex, Huntingdon, Norfolk, and Suffolk, where the fall continued remorselessly throughout the depression years. Some of this fall was clearly due to the quicker fattening of sheep at earlier ages, for it was the number of sheep over one year in age which fell most from 1874 onwards; the numbers under one year old in June (which indicate breeding flocks) showed much less change, apart from those ill-favoured years of 1879-84. The larger number of hill lambs bought at autumn fairs must have been more frequently sold in their second spring before the June census was taken, partly because the fall in wool prices diminished the profits to be obtained from keeping them over a second summer to be sold fat and shorn at 15-18 months; wethers were similarly got away earlier and at lighter weights. In the north, too, there was a profitable trade in taking ewe lambs from the mountain farms for wintering on pasture or turnips; as the numbers of ewes rose in the hills, so did the pressure to find suitable wintering on which the young stock could build the constitutions required to face future winters on their own ground. This trade brought a steadier return with less capital outlay to lowland farms than the outright purchase of hoggetts or ewes for winter fattening.

STORE CATTLE

The prices of store cattle reflect pretty closely the trends in Sauerbeck's beef prices derived from the London market. But the cattle prices appear to have risen rather faster than beef prices up to 1871 and to have fallen slightly more in the subsequent decade; they were appreciably higher than beef prices from 1880 to 1884 and again from 1888 to 1891, when the feeders' margin must have been severely squeezed. All classes of meat producers, however, must have benefited from the long rise in prices over the first twenty

years included in these statistics; again, it is noteworthy that cattle prices reached their highest point in 1882-3, thereafter falling sharply in 1887 and again after 1889. The peak in 1882-3 presumably reflects the high prices of store sheep in those years, for sheep and cattle were alternative enterprises for some farmers with pastures to be grazed or with turnips to be turned into manure. Others might be restricted to sheep through lack of buildings, while farmers with a surplus of straw, or with wet fields on heavy soils, necessarily relied on cattle for their muck-making.

In the lowland belt of arable farms running north of the Border, cattle fattened on oat straw and turnips, with a supplement of home-grown corn or, increasingly, of purchased cattle cake; sheep likewise consumed turnips with some trough feeding, while the ewes and their lambs would be run over the temporary leys in the summer. South of the Border, oat straw had less feeding value, and cattle used the straw as litter, while they fattened on turnips and hay, with, again, a growing consumption of cattle cake or maize. Stirks might be wintered cheaply on straw and turnips, before being fattened on summer pastures to the point where two or three months in the stalls or yards brought them out for the Christmas markets. But some fodder could usually be found for the cattle, even if turnips were scarce; the chaff-cutters and the turnip-slicers could be supplemented by green crops or by the wares of the provender merchants. Hence the demand for store cattle was less variable than that for store sheep, just as the supply was also less affected by seasonal variations in weather; prices did not show those huge fluctuations from year to year which were so marked a feature of the store sheep market.

PROFIT TRENDS IN HILL FARMING

In order to show the effect of these price trends on the profits of stock-rearing farms, three indices (base 1865-74) were compiled from the price data, referring to (a) Scottish mountain farms selling wool, two- or three-year-old wethers, and draft ewes from a Blackface flock; it has been assumed that these products provided over the period one-half, one-third, and one-sixth of the gross receipts; (b) hill farms in Sutherland or on the Borders which sold Cheviot wool, wethers, and draft ewes, together with some Cheviot or half-bred (Cheviot $\times$ Border-Leicester) lambs; the proportions are taken to be one-third for the wool and one-sixth each for the other four products; (c) upland farms selling half- or three-quarter-bred lambs, Cheviot wool, draft ewes, and store cattle, in the proportions 5:2:1:2.¹ These indices

¹ These weights are largely arbitrary, but originate in contemporary accounts, e.g. James Macdonald, 'Agriculture of Sutherland', *Trans. High. & Agric. Soc.*, XII, Fourth Series, 1880, pp. 76-8.

are shown in Table II. The distinction between these types of farming lies in the proportion of wethers to lambs. Mountain farms in a severe climate maintained flocks of wethers for the higher ground where ewes did not thrive; they sold each year their draft ewes and a proportion of two- or three-year-old wethers, keeping the greater part of their lambs to replace the drafts from the older sheep. They therefore had a high proportion of mature animals from which they sold several clips of wool; and a principal item of expense was that of wintering their lambs on the turnip fields or pastures of lowland farms. Border farms in a more kindly climate could keep all-ewe flocks and therefore sold primarily their surplus lambs, together with the draft ewes and the annual clip of wool from the ewes. According to the altitude and the feeding value of the pastures, such farms kept pure Cheviot flocks, selling either Cheviot lambs or the half-breds got by Border-Leicester rams; or half-bred ewes crossed again with the Border-Leicester to produce three-quarter-bred or 'park' lambs. These hill and upland farms might also run a certain number of breeding cows whose trampling helped to keep down the bracken and whose progeny by shorthorn bulls found a ready sale as yearlings or two-year-olds at the autumn markets.

The rising prices for the first twenty years of the period justify the remark made in 1878 that "there is perhaps no class of farming in Scotland that will at the present time give the same return of profits as that derived from Highland sheep farming;"¹ only the dry years from 1867-8 and the simultaneous check to wool prices disturbed the profits and rents of farms selling wool and store sheep. Nor was it only prices that rose over these years; the annual census showed that many farms were gradually increasing their flocks, and contemporary comment also shows that wire fencing, better drainage, and the application of lime had enabled many upland farms to change their breeding policy, so as to produce more highly priced animals. Writing in 1862, Sanderson commented that "all upland improvements tend to make the Cheviot breed supplant the Blackface; and again, the half-Leicester supplants the Cheviot and the full-bred Leicester goes on extending its range."² Another writer almost contemporary with Sanderson noted that in south-west Scotland there were "many farms from which a few years ago the Blackface lambs averaged 10s. per head that are now selling the produce of the same ewe by a Leicester ram at 24s."³ These cross-breds or 'mules' were almost as

¹ James Mollison, 'Farming in the Central and North Western Districts' in *Report on the Present State of Agriculture of Scotland*, High. & Agric. Soc., 1878, p. 103.

² James Sanderson, 'Agriculture of Berwick and Roxburghshire', *Trans. High. & Agric. Soc.*, 1862, p. 354.

³ G. Murray, 'Improved Value of Scotch Sheep', *J.R.A.S.E.*, Second Series, III, 1867, p. 575.

THE AGRICULTURAL HISTORY REVIEW

TABLE II

PRICE INDICES FOR LIVESTOCK REARING FARMS
(Average of 1865-74=100)

	A Mountain	B Hill	C Upland
1851	59½	66	66
2	65	66½	67
3	87	85	83
4	68½	72	77
5	75	78	83
6	78½	80	83
7	91	84	86
8	75½	73	78
9	78	82	82
1860	118	98	93
1	—	87	81
2	85	87	88
3	104	95	92
4	117½	116	113
5	106	97	117
6	137	119	105
7	—	83	77
8	70	77	68
9	75	84	90
1870	100½	90	90
1	124	106	115
2	105	132	129½
3	100	110	116
4	103	96	93
5	93	117	115
6	101	104	106½
7	99	115	108
8	81½	108	113
9	94	90	83
1880	79	96	97
1	87	98	94
2	94	103½	114
3	103	110	113
4	88	97½	94
5	77	83	80
6	79	86	88
7	73	84	81
8	77½	87½	95
9	90	96	106
1890	83	90	98
1	76	77	83
2	67	66	71
3	77	76	79

popular as the half-breds with lowland farmers buying sheep for their turnip fields. The fall in wool prices from 1864 onwards checked the upward movement in the composite indices and was the chief reason for the fact that between 1871 and 1884 they fluctuated across a downward trend, while stock prices tended to rise. It was the mountain farms whose profits were presumably most affected; they drew a high proportion of their receipts from Black-face wool whose price fell most in this period, bringing their composite index down by 1885 to less than 80 per cent of the base. The hill and upland farms suffered less, since a higher proportion of their income was derived from selling store animals, and their composite indices only fell below 80 per cent of the base level in the early 1890's.

The fact that store sheep and cattle prices fell between 1884 and 1888 and after 1890 in rough proportion to the general trend in meat prices implies that lowland farmers were then able to buy their raw materials at falling costs, while the price of feeding-stuffs had fallen earlier and further. There was thus a double economy to set against the shrinking receipts from the sale of livestock and against the adverse trend in prices in the store markets in the years 1880 to 1884 and 1888 to 1890. This advantage was no doubt only a small mercy in comparison with the general fall in prices, and especially in beef prices after 1884. It is curious, though, that English lowland farmers tended to increase their cattle stocks throughout the depression, but somewhat reduced their sheep numbers, while Scottish lowland farmers increased their sheep flocks more than their cattle herds; the explanation may lie in the greater growth of the dairy trade south of the Border. On the other hand, the mountain, hill, and upland farmers who reared animals for the store markets took the full brunt of falling prices after 1884 with no countervailing economies, for they bought few animals (except rams) and no significant quantity of the cheaper imported cereals. Yet they also increased their stocking of both sheep and cattle, presumably because they thus added little to their costs but considerably to their gross receipts.

NOTES ON CONTRIBUTORS

S. Applebaum, B.Litt., D.Phil.(Oxon), has had practical experience of agricultural work in Kent, Samaria, Galilee, and the Sharon. He has also carried out excavations and published articles in a number of archaeological journals. Since 1956 he has been a research fellow at the Hebrew University of Jerusalem.

W. Harwood Long, M.A., is Provincial

Agricultural Economist in the department of agriculture, University of Leeds, and chairman of the executive committee of the British Agricultural History Society.

Miss Edith H. Whetham, M.A., is a lecturer in the school of agriculture, University of Cambridge.