

# Regional agricultural wage variations in early nineteenth-century England<sup>\*</sup>

by Margaret Lyle

## *Abstract*

This paper provides a detailed mapping of the agricultural wage in England based on responses to a wages question in the 'Rural Queries', sent to selected parishes in 1832. It shows clearly the regional nature of the wage and the relative amounts given by region. It reveals hitherto unreported detail, with two centres of high wages and a gradual falling away with distance from these centres. Wage profiles within each region are discussed in the text and give confidence that the regions are real and not an artifice. These newly mapped wage regions are then used to demonstrate that magistrates awarded 'maintenance payments' to mothers of bastard children in direct proportion to the basic agricultural wage.

In 1832 the commissioners established to investigate the Old Poor Law, and who were charged with making recommendations for its reform, circulated a questionnaire to rural parishes asking for information.<sup>1</sup> The individual returns from 1152 parishes, the so-called 'Rural Queries', were printed as an Appendix to the 1834 Report of the commission.<sup>2</sup> It has been argued on a number of occasions that the wealth of information contained in the Rural Queries was largely ignored in the report, or at most, used selectively to demonstrate the correctness of policies which the commissioners had already decided to recommend. It may however be argued that the data contained in the Rural Queries remained largely unusable until modern computing technology allowed it to be quickly and effectively analysed and mapped. This was done in a previous paper for the data collected on the treatment of illegitimate children under the Old Poor Law regime.<sup>3</sup>

Rural queries asked parishes to supply information about the prevailing weekly agricultural wage, winter and summer. This is not the first time that these replies to the wage question have been used in the pursuit of both chronological and spatial trends. In 1898 Bowley used them to prepare a table of 1833 agricultural wages by county. In 1986 Hunt used Bowley's table to

<sup>\*</sup> I thank Professor Richard Hoyle for his encouragement and sound advice during the writing of this paper and Dr. Nicola Verdon for kindling my initial enthusiasm for Rural Queries. I also thank the two anonymous referees for taking the time to give such helpful comments and advice.

<sup>1</sup> *Report from his Majesty's Commissioners for Inquiring into the Administration and Practical Application of the Poor Laws*, Appendix (B.1), *Answers to the Rural Queries*, pt 1 (BPP, 1834, XXX), p. 2 *a*.

analysis was restricted to replies from Rural Queries and replies to the Town Queries were excluded.

<sup>3</sup> M. A. Lyle, 'Regionality in the late Old Poor Law: the treatment of chargeable bastards from Rural Queries', *AgHR* 53 (2005), pp. 141–57.

map, *inter alia*, the pattern of agricultural wages for 1833–45. In 2001 Clark published a national agricultural wage index from 1670 to 1850 and used the amounts recorded in the answers to the Rural Queries as a benchmark.<sup>4</sup> Why then go over old ground? In the first place, Bowley's amounts were averages: he gave the results of three different calculations in the table, the average of the summer rates, the average of the summer and winter rates and 'the average total annual earnings divided by 52'.<sup>5</sup> Secondly, Hunt averaged two of Bowley's averages to obtain an amount for the period 1833–45. Finally, these averaged amounts were further averaged for each county. The effect of this cumulative averaging is to lose so much detail that the end result is a very blurred picture of how agricultural wages varied over the country. By going back to the original answers to the Rural Queries it has been possible to prepare a detailed parish by parish picture of the regional differences in agricultural wages in 1832.

Very few of the parishes that answered the questionnaire returned a reply to every question, but 879 parishes replied to question eight which asked parish officials 'Weekly wages, with and without Beer or Cyder, in Summer and in Winter?' These answers provide a reliable distribution of wages because the question required an objective, quantified response: individual inaccuracies, whether accidental or deliberate, become less important given the number of data points returned. This provides a unique sample in terms of size, and can be contrasted with Clark's enforced reliance on a sample of 45 for his work on the decade 1830–9.<sup>6</sup>

Responses contained information on winter wage, summer wage and benefits. The basic winter daily wage was chosen for this study as the best indicator because the objective was to detect regional patterns, if they existed: it was not to determine an agricultural labourer's true annual income. The basic winter wage required neither adjustment for bed and board (part of the annual remuneration of live-in farm servants) nor adjustment for food or drink (which some parishes included in hay and harvest remuneration). Very few parishes included beer and cider with the winter wage, so deciding whether or not to attach a monetary value to this allowance was not necessary. Also, the winter wage made up the major part of a labourer's income – it was paid for nine or ten months of the year – so the winter wage was the core of an agricultural labourer's income, summer wages being a variable add-on.<sup>7</sup> A formula proposed by Clark lends support to the use of the winter wage as an indicator of relative remuneration. He demonstrated that the total annual earnings of an agricultural labourer would move proportionately with the winter wage as long as the ratio of hay wage to winter wage and harvest wage to winter wage remained constant and the total number of days worked at hay and harvest did not change.<sup>8</sup> These conditions would apply to the whole country in any single year as well as the 150-year period covered by Clark. On that basis, the winter wages would track total annual earnings.

<sup>4</sup> G. Clark, 'Farm wages and living standards in the Industrial Revolution: England, 1670–1869', *EcHR* 54 (2001), p. 486.

<sup>5</sup> A. L. Bowley, 'The statistics of wages in the United Kingdom during the last hundred years: Parts I, II, IV, Agricultural Wages', *J. Roy. Stat. Soc.*, 61, 62 (Dec., 1898, Mar., Sept., 1899), p. 707.

<sup>6</sup> Clark, 'Farm wages and living standards', Table 3,

p. 482.

<sup>7</sup> BPP, 1834, XXX, p. 10a, Binfield, Berkshire, '10s., except for about 5 weeks in hay-time and harvest'; p. 200a, Upper Slaughter, Gloucestershire, 'During four weeks in harvest, 13s. per week'; p. 288a, Waltham, Leicestershire, 'Summer for eight weeks, 14s. per week'.

<sup>8</sup> Clark, 'Farm wages and living standards', p. 487.

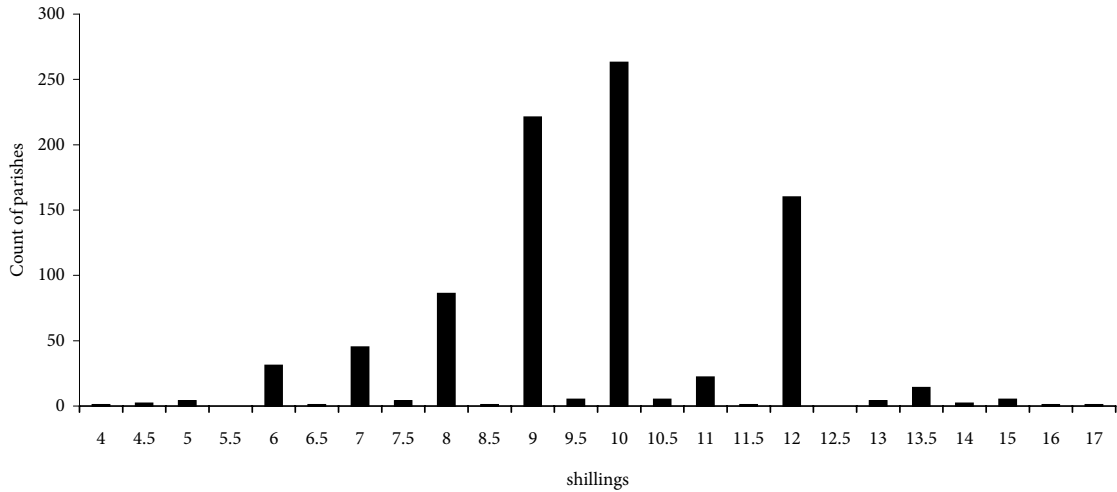


FIGURE 1. Weekly winter wages, only or minimum amounts reported, by parish in 1832.

Source: BPP, 1834, XXX. Data compiled from responses to Question 8.

Some parish answers gave only a single amount for the winter wage but other parishes gave a range.<sup>9</sup> Mapping was therefore carried out, and boundaries compared, for two sets of circumstances. In the first, single wage amounts were used with the lower value from those replies that gave a range. In the second, the lower value of a range was replaced by the higher value. The identified regions proved robust, the boundaries moving only slightly between the two versions, and the mapping from the first has been used throughout the paper.

The mapping demonstrated a clear picture of regional differences in the amounts given to agricultural labourers. These regions do not follow county boundaries, but are distinct and unmistakable.

## I

For the whole sample, the spread and frequency of the winter wage for all single amounts reported together with the minimum where a range was reported are shown in Table 1 and in Figure 1. Although the wage spread was large, three amounts predominated; 9s., 10s. and 12s. per week. Almost three-quarters of the parish wages fell into one of these amounts.<sup>10</sup> To facilitate analysis, the parish wage levels were grouped into four bands: the first contained low waged returns of 8.5s. or less; the second centred on 9s.; the third on 10s.; and the fourth contained all returns above 11.5s. The resulting spatial pattern allowed seven distinct regions of similar wages to be identified as shown in Figure 2.

<sup>9</sup> 630 of the 879 parishes (72%) reported single amounts; 28% reported a wage range.

<sup>10</sup> 263 (30%) of the 879 parishes replied that they paid

10s. per week in winter to agricultural labourers, 221 (25%) that they paid 9s. per week and 160 (18%) that they paid 12s.

TABLE 1. Weekly winter wage by number of parishes, by region, in 1832.

<i>Region</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>4a</i>	<i>4b</i>	<i>Total</i>
<i>Wage</i>	<i>NE</i>	<i>NW</i>	<i>EM</i>	<i>W</i>	<i>Y</i>	<i>V</i>	<i>SE</i>	<i>L</i>	<i>SW</i>	
4.0s.							1			1
4.5s.		2								2
5.0s.		2	1		1					4
6.0s.	3	8	3	11	3	3				31
6.5s.									1	1
7.0s.	2	2	2	28	8	1			2	45
7.5s.		2		1		1				4
8.0s.	4	5	3	34	25	10	3		2	86
8.5s.				1						1
9.0s.	23	14	7	30	95	30	4	3	15	221
9.5s.	2				1	1			1	5
10.0s.	14	8	22	7	32	140	29	6	5	263
10.5s.				1		2			2	5
11.0s.		3			1	11	5	1	1	22
11.5s.					1					1
12.0s.	5	6	49		3	5	84	8		160
13.0s.			1				3			4
13.5s.							14			14
14.0s.	1		1							2
15.0s.			1			2	2			5
16.0s.							1			1
17.0s.				1						1
Parishes	54	52	90	114	170	206	146	18	29	879
Average (s.)	9.3	8.6	10.8.	8.0.	9.0.	9.8.	11.6.	10.8	9.1.	

*Notes:*

(i) The region number corresponds to the number in Figure 2.

(ii) The average wage is reported in shillings per week.

(iii) The horizontal lines delineate the banding used in Figure 2.

*Source:* BPP, 1834, XXX. Data compiled from responses to Question 8.

These regions are labelled for subsequent discussion and analysis as the North-East, Region 1; the North-West, Region 2; the East Midlands, Region 3; the West, Region 4; a Y-shaped area, Region 5; a V-shaped area, Region 6 and the South-East, Region 7.<sup>11</sup> There are also two sub-regions within Region 4: the first around Liverpool, Region 4a, and the second in the South-West corner made up of most of Cornwall and a small part of Devon, Region 4b, which both gave higher wages than was usual in Region 4.

<sup>11</sup> Regions 5 and 6 are called the Y Region and the V Region because they are vaguely shaped as a 'Y' and 'V', and this avoids the need to reproduce long lists of counties and parts of counties.

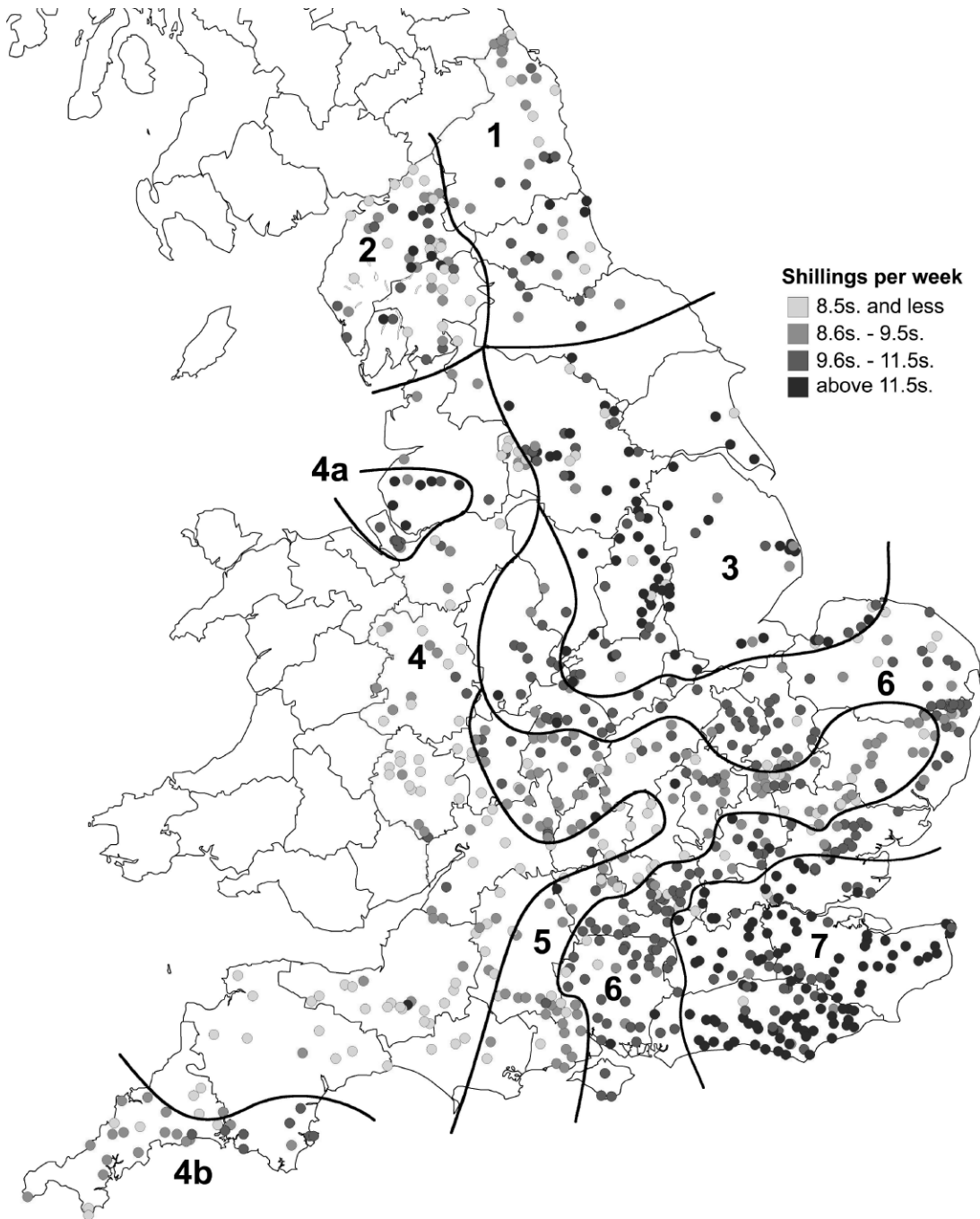


FIGURE 2. Regional divisions based on the amounts that parishes gave for agricultural wages in winter (only or minimum).

*Note:* In those cases where a range was reported, the lower value of the range has been used.

*Source:* BPP, 1834, XXX. Data compiled from responses to Question 8.

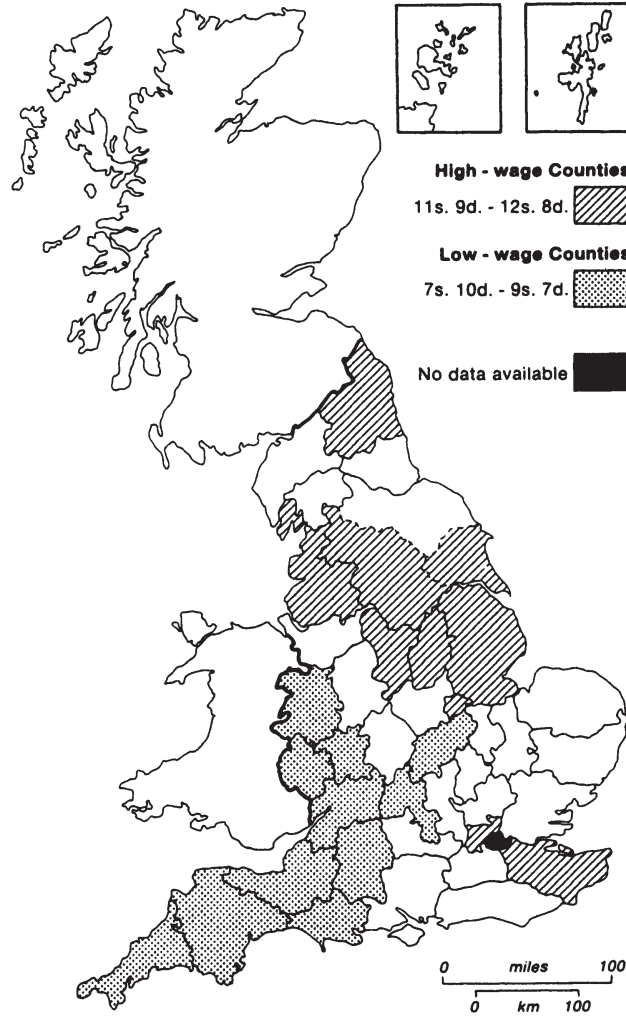


FIGURE 3. Pattern of agricultural wages, 1833-45

Source: E.H. Hunt, 'Industrialization and Regional Inequality. Wages in Britain, 1760-1914', *J. Econ. Hist.*, 46 (1986), p.943.

Hunt published the most comprehensive analysis prior to this study, in which he identified high and low wage counties. His map for the period 1833-45 has been reproduced in Figure 3. Although there is some superficial similarity, the regions that appear when the averages are unbundled differ significantly to those proposed by his study.

Figure 2 shows that the region of high wages in the south-east is much more extensive than Hunt proposed, while that in the Midlands is less so; when mapped at parish level there is no evidence that the West Midlands was an area of high wages. The most marked difference between the two studies can be seen in Northumberland. Hunt reported it as a county of high wages for agricultural labourers but at parish level the replies to the Rural Queries show this

was not the case. For low waged regions there is some overlap with Hunt's findings, mainly in the south-west and west of the country. Other regions identified from this study as low waged he reported as either middle or high waged.

## II

The distribution of wage amounts within the identified regions is shown in Table 1 and discussed, essentially in order of descending wage, in the following section which should be read as a commentary on Figure 2. In overview, most regions are characterised by a predominance of one wage amount, with two exceptions. Parishes in Region 4, the West, reported three different, but all low, amounts in almost equal proportions and Region 2, the North-West, showed no pattern in the amounts given by the parishes.

Region 7, the South-East, was clearly differentiated by its average of 11.6s. per week and a high density of parish returns, with 146 parishes in a tight geographical area. It comprises Kent, Sussex, Surrey, Middlesex and parts of Essex and Hertfordshire. While there were extremes in reported wage levels, the distribution is dominated by 12s. (84 parishes, 58 per cent). Region 3, the East Midlands, the second highest wage area, had an average wage of about 1s. per week less than Region 7. It is made up of Lincolnshire, Nottinghamshire, the East Riding of Yorkshire, part of the West Riding of Yorkshire together with parts of Derbyshire, Leicestershire and Rutland and the northern tip of Norfolk. The lower average is attributable to a reduction in the incidence of the 12s. relative to the 10s. wage. It had a lower parish density than Region 7; 90 parishes made a return over a geographically larger area.

Separating these two regions of high winter wage was a band of 206 parishes in a V-shape, Region 6, which ran from north Derbyshire following the boundary with Region 3 into north Norfolk then turning south and forming the boundary with Region 7 to Hampshire and the Isle of Wight, Figure 2. This region demonstrated a further shilling decrease in average wages by the virtual disappearance of the 12s. wage, but was a surprisingly homogenous region with a strong single-peak profile, 70 per cent reporting a wage of 10s. per week.

Bordering the V-shaped region was a Y-shaped region, Region 5, of 107 parishes where wage levels were almost a shilling per week lower again. The strong single-peak profile was retained, but moved from 10s. to 9s. per week (95 parishes, 58 per cent).

The lowest winter wage was given by the 114 parishes that made up Region 4, the West, where the average was only 8s. per week. It comprised Cornwall, Devon, Somerset and most of Dorset and continued both northwards around the Bristol Channel into Herefordshire, Shropshire and Cheshire with an eastward band running through Wiltshire, Oxfordshire and Buckinghamshire. The spread of wages was wide, from 6s. to 17s. per week. No single amount predominated, but the wage envelope has broadened and shifted significantly to lower levels as clearly shown in Table 1.

Two areas within this region were identified as separate sub-regions because they reported much higher amounts; Region 4a, a very small area of 18 parishes around Liverpool, had an average of 10.8s. per week and Region 4b, made up of 29 parishes in mostly Cornwall and a small part of Devon, had an average of 9.1s.

Region 1, the North-East, was made up of 54 parishes from Northumberland and Durham

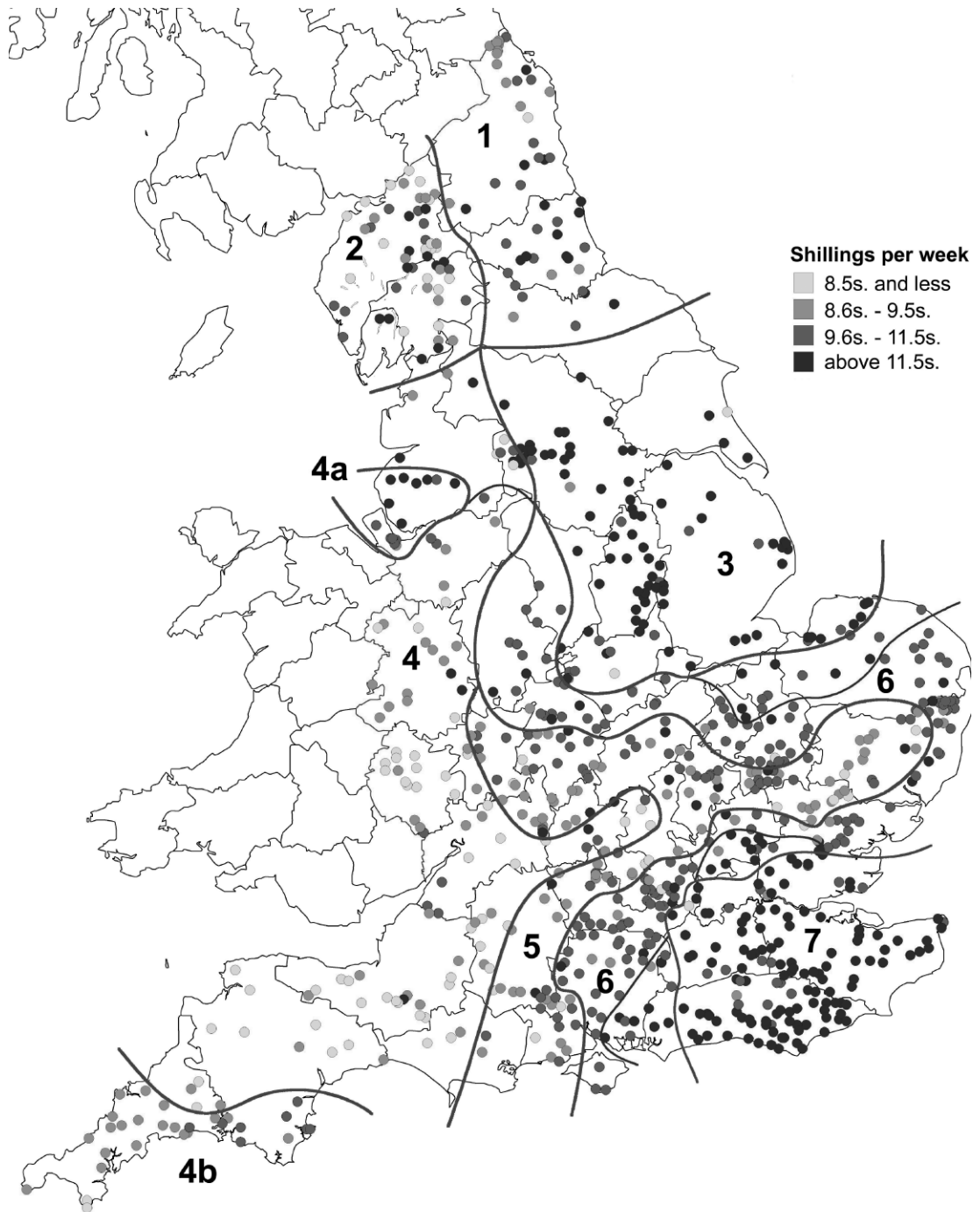


FIGURE 4. Regional divisions based on the amounts that parishes gave for agricultural wages in winter (only or maximum).

*Note:* In those cases where a range was reported, the higher value of the range has been used.

*Source:* BPP, 1834, XXX. Data compiled from responses to Question 8.



together with some from the North Riding of Yorkshire. Here the average winter wage was 9.3s. per week. The distribution showed a strong peak at 9s. (43 per cent of parishes) and a weaker one at 10s. (26 per cent). Region 2, the North-West (effectively Cumberland and Westmorland) reported the greatest variety in amounts given. In its 52 parish returns there was no strong predominance of any single amount. In summary, the wage pattern clearly shows two high wage poles, one in the South East and the other in the East Midlands, with wage levels decreasing as a function of distance from these poles.

### III

Wages were reported as either a single value or as a range. In Figure 2, the single value given and the lower value where a range was reported were used. To examine the robustness in the mapping of the basic winter wage, the other extreme, the single value and the higher value where a range was given, were used with the results shown in Figure 4 where original boundaries are shown in heavy grey and the revised boundaries in light grey. The mapping was modified, but not significantly. Changes where regions of high wage push into the adjacent regions of lower wage occur in a few places only. Region 7 pushes west and north into Region 6 while Region 3 pushes south into Region 6. Also Regions 3 and 4a appear to be merging, although the very low number of returns from parishes in Lancashire and Cheshire make such a diagnosis somewhat problematical. The parishes around Halifax, Bradford and Leeds reported a low minimum and high maximum range and therefore move from low to high wage category. Assuming that the maximum of any range reported would be given to the most able and willing workers, the wide range of wages here could be explained because the agricultural employers needed to compete with industry for the best workers.

These variations do not distort the overall countrywide pattern which remains robust whether the minimum or maximum reported amount is used to prepare the map.

### IV

These newly mapped agricultural wage regions were used to examine the hypothesis that, in regions of higher agricultural wages, magistrates would set higher maintenance payments for the mothers of bastard children. This was tested using data from the responses to question 47 in Rural Queries, which asked, *inter alia*, 'What is the allowance received by a Woman for a Bastard?'.<sup>12</sup> The allowances to the mothers at parish level were grouped into the agricultural wage regions, with the results shown in Table 2. Graphing the average amount given to the mothers of bastard children against the average agricultural wage for each region revealed a direct linear relationship, Figure 5. It transpires that parishes generally paid about 18 per cent or a little over a day's wage for an agricultural worker as an allowance to the mothers of bastards.

Four regions did lie off the trend line, but only two contained a significant number of parishes. Region 3, the East Midlands, gave the second highest average winter wage and the third

<sup>12</sup> The answers to Question 47 have been analysed in a previous paper, and regions of relative generosity to the mothers of chargeable bastards proposed. Lyle, 'Regionality'.

TABLE 2. Amounts awarded to the mothers of bastard children, by agricultural wage region, in 1832.

<i>Region</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>4a</i>	<i>4b</i>	<i>7a</i>	<i>Total</i>
<i>Amount</i>	<i>NE</i>	<i>NW</i>	<i>EM</i>	<i>W</i>	<i>Y</i>	<i>V</i>	<i>SE</i>	<i>L</i>	<i>SW</i>	<i>H</i>	
12 <i>d.</i>		3	4	8		5		1			21
14 <i>d.</i>					1						1
15 <i>d.</i>	1	2	1	15	2	1		1			23
16 <i>d.</i>		1		3	1	1	1				7
18 <i>d.</i>	8	21	43	88	99	70	8	13	12	15	377
20 <i>d.</i>	6	10	1	9	9	8		1	12	1	57
21 <i>d.</i>	4	7	6	1	1	8		1			28
22 <i>d.</i>		1		1	3						5
24 <i>d.</i>	17	4	37	10	31	52	75	2	2	1	231
27 <i>d.</i>	1			2	2						5
30 <i>d.</i>	6		4	1	2	11	29		1		54
36 <i>d.</i>	2		1				3		1		7
42 <i>d.</i>	1					1					2
Parishes	46	49	97	138	151	157	116	19	28	17	818
Award, av., ( <i>d.</i> )	23.7	18.9	20.9	18.1	19.6	21	25.3	18.4	20.4	18.5	20.8
Wage, av., ( <i>s.</i> )	9.3	8.6	10.8	8.0	9.0	9.8	11.6	10.8	9.1	11.6	
Award as per cent of wage	21	18	16	19	18	18	18	14	19	13	

*Notes:*

(i) The region number corresponds to the number on Figure 2, except for Region 7a which is a small region around Hastings.

(ii) The region description is as for Table 1, except for H, a small region around Hastings.

(iii) The award is the amount given to the women and is the average amount given by all the parishes in the region in pence, *d.*, per week.

(iv) The average wage is the average winter wage in shillings per week and is taken from Table 1.

(v) The ratio is the amount awarded to the mothers as a percentage of the average winter wage.

*Source:* BPP, 1834, XXX. Data compiled from responses to Question 47.

highest average amount to the mothers, but the latter fell below that expected from the trend line by a few pence. Region 1, the North-East, gave the mothers about 20 per cent (*4d.* per week) more than would have been predicted from its average wage level. This region did not show the usual strong single peak profile in the agricultural wages, indicating some distinct difference from other regions, but this has not been investigated further here. The remaining two non-trend regions – 4a (the area around Liverpool) and 7a (the area around Hastings) – were extremely small in both area and number of parishes. In the area around Liverpool, the mothers were awarded the same low amount as others in the West but here the agricultural wage level was higher than the rest of that region. The anomaly here is not significant as it applies only to 19 of the 818 parishes. Hastings' agricultural wages were in line with the rest of Region 7, but the mothers were awarded less than was usual for that part of the country,

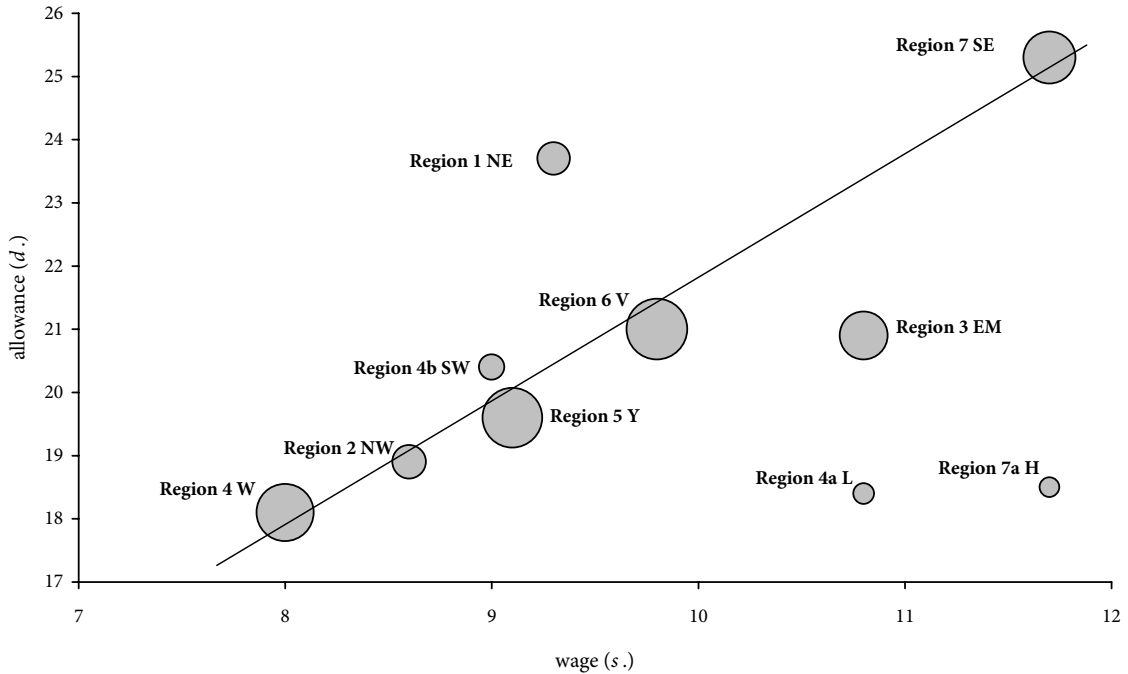


FIGURE 5. Relationship between the average winter agricultural wage and the amounts given to the mothers of bastard children, by region, in 1832

*Notes:*

- (i) The region number corresponds to the number on Figure 2, except for Region 7a which is a small area region around Hastings
- (ii) The region description is as for Table 1 except for 7a which is a small area around Hastings;
- (iii) The average winter agricultural wage is in shillings per week and the average amount given to the women is in pence per week;
- (iv) The circle size shows the relative number of parishes in each region;
- (v) The trend line is the least mean squares line for the regions excluding NE, EM, L and H; this represents 78% of the parishes.

Source: BPP, 1834, XXX. Data compiled from responses to Questions 8 and 47.

about 18*d.* or 19*d.* where we would expect 24*d.* or 25*d.*<sup>13</sup> Comments in the answers to the Rural Queries suggest that the low payment to the mothers was the result of the local policy of the magistrate's bench. The Rape of Hastings reported, 'In this District it has, for some years past, been lowered to 1*s.* 6*d.* per week.'<sup>14</sup> Ewhurst reported that the amount awarded was set by the Battle bench and was inadequate, so the financial burden of the bastard children often fell on the parish:

1*s.* 6*d.* per week is the sum ordered by the Magistrates at the Battle Bench, without regard to

<sup>13</sup> The area around Hastings, 7a, is peculiar to the allowances given to women for their bastard children and is not mapped in this paper. Details can be found in Lyle,

'Regionality'.

<sup>14</sup> BPP, XXX, p. 510e (Richard Davenport, Salehurst).

the Father's circumstances, which is a great hardship on parishes, as the Children are often left for the parish to support in the Poorhouse.<sup>15</sup>

Again as this region contained only 17 of the 818 parishes it may be considered a local curiosity of little overall significance to the relationship of wages to allowance.

It may be concluded that the amounts awarded by magistrates to the mothers of bastard children depended to a great extent on the regional average agricultural winter wage with a chargeable bastard's weekly allowance set at slightly more than one day's basic agricultural wage. The primary driver of amounts given to the mothers of bastard children for each region therefore appears to have been financial rather than cultural.

## V

This study is not concerned with, and provides no information on, the total family income of agricultural workers in the different regions: it takes no account of the contribution made by women or children and no account of the additional income from hay or grain harvest work nor any other higher earning activity such as threshing.

It does provide for the first time a quantified countrywide wage map at a single point in time, 1832. The regions do not follow county boundaries but are well defined giving a 'wages map' with easily recognisable contour lines, which elegantly demonstrates the regional nature of the basic agricultural wage. It shows a definite distance effect where wage rates diminish as the point of employment moves away from the two high wage areas.

The wage map, in combination with data on amounts awarded by magistrates to a parish's chargeable bastards, reveals a linear relationship. The 'generosity' of magistrates towards the mothers was in direct proportion to the average regional winter wage, and approximately one day's wage was provided for one week's support. While such a correlation is not surprising, this is the first time that it has been demonstrated to exist on a countrywide scale.

<sup>15</sup> BPP, XXX, p.503e (William Beck, Assistant Overseer).