Men’s unemployment and job opportunities for women: an analysis of the 1834 Poor Law Report

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Introduction

It has been well recognised that English agriculture in the first half of the nineteenth century was characterised by the ‘high-wage North and low-wage South’ pattern. It was in 1852 that a contemporary commentator, James Caird, drew a famous map showing the north-south wage differences and the east-west differences in agricultural practice.¹ It has also been widely accepted that rural unemployment was a serious problem in the southern part of England.² Then, why did agricultural labourers keep on staying in the south, rather than moving to the ‘high-wage north’?

In order to answer this question, this paper attempts to quantify regional real wages and unemployment. The quantification will be made towards two directions. One is an attempt to include income in kind in real wage estimates, and the other to estimate unemployment level in percentage terms. It is unfortunate that the first ‘modern’ census, which allows historians to investigate into England’s economy nationally as well as regionally, was available only after 1841 and the first agricultural census was taken in as late as the 1860s. As a result, previous studies on regional diversity have tended to be either of case studies focussing on a couple of farms, or those starting from 1841. The former is not necessarily representative, and the latter cannot explore the classical Industrial Revolution period. This paper utilises the 1834 Poor Law Report, which is a nationwide survey covering more than 1,000 parishes and asks 53 questions about parishioners’ living conditions, to examine the regional diversity of rural workers. Thus, the paper also intends to extend nationwide as well as regionally detailed analysis to the pre-1841 period.

Estimating how much people earned in the past is one of the central issues of economic history, and great efforts have been devoted to construct real wage series. Partly because of the limitation of source materials, most of earlier works attempted to calculate adult male wages, and

¹ Caird (1852), frontispiece, which is reproduced in Figure 2 below. Recent historians have also followed this image. See, for instance, Hunt (1973, 1986), Horrell and Humphries (1992), Boyer (1997), Boyer and Hatton (1997), and Shaw-Taylor (2005).

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when discussing male wages, attention was directed to monetised wages only. However, the immobility of southern agricultural labourers must have been regulated by decision making within household. They considered not only male cash earnings but also all other supplementary sources such as in-kind income, poor law allowances and customary rights, regional unemployment patterns for breadwinners, and job opportunities for wives and children.

Recently, development has been made in this area. For example, Horrell and Humphries (1995) included the contributions by female and child labour in family income estimates, and King and Temin (2001) showed that gleaning as customary rights contributed about 5 to 10 per cent to family income in the 1830s. Humphries (1990) estimated that net annual profit of keeping a cow was between three and seven pounds around 1800. Lindert and Williamson (1983) and Feinstein (1998) incorporated unemployment and short-time work into their national wage series, though attention was paid more to the trend than to quantification.

Relatively neglected in the debate, however, is regional variation of these factors. Important exceptions are E. H. Hunt’s works (Hunt (1973) and Hunt (1986)). His serious effort to collect spatial as well as chronological wage data has made it possible to draw wage maps between 1760 and 1914. Nevertheless, the former deals with the period of 1850-1914 only, and the latter does not pay much attention to in-kind income. Clark (2001) also discussed regional variations in farm wages, but regional differences in unemployment level remain ignored.

Regionally different practices in in-kind allowances – especially survival of live-in servants in the north, whose income consisted of almost entirely in-kind provision – has been given more attention, but, again, measuring how important they were regionally is not an easy task. Even when estimates were made, in-kind income of agricultural labourers in the form of beer or cider has been largely understated. Horrell and Humphries (1992) noted that ‘in general such payments constituted a very small percentage of family incomes (less than 1 percent).’ Similarly, Gregory Clark’s national time-series data of male agricultural wage, has excluded cases with beer from his

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4 King and Temmin (2001), Table 1, p. 463.

5 Humphries (1990), Table 1, p. 26.

6 As for agricultural unemployment, Lindert and Williamson (1983) used estimated unemployment rates for engineering, metals, and shipbuilding sectors based on union records for the latter half of the nineteenth century, to infer the trend of agricultural unemployment over the three decades between 1820 and 1850 (pp. 12-16). Feinstein (1998) assumed that the excess of winter unemployment over the prevailing summer rate was 10 per cent (based on Boyer (1990) showing the actual unemployment rate as 17 per cent), and applied this figure for the five months from November to March in each year between 1815 and 1850. It was assumed that this additional higher rates during the winter months gradually disappeared by 1870.

7 Horrell and Humphries (1992), footnote 12, p. 851. Jane Humphries has asserted the importance of other forms of income resources derived from common rights such as cowkeep and gathering firewood and peat in common land and gleaning after harvest. See Humphries (1990).
dataset. Based on the 1834 Poor Law Report, he asserted:

[W]here beer was provided it was worth about 10 per cent of wages in winter and summer, and less than this in harvest. Thus changes in the degree of beer provision will have some effect on wages, but not an especially dramatic one.\(^8\)

The results of our analysis, however, will show a somewhat different view from theirs. Most importantly, the chronological changes in the degree of food/drink differed from place to place, and had a dramatic effect on regional wages.

The paper is structured as follows: Section 1 briefly explains the source material utilised here. Section 2 offers new estimates of unemployment rates by region. The traditional north-south gap of unemployment will be reconfirmed. In section 3, revision of the conventional wage patterns is attempted. It will be argued that the inclusion of food/drink allowance into the calculation leads us to modify the traditional ‘high-wage North and low-wage South’ pattern of farm wages. Section 4 examines regional differences in female job opportunities. It is difficult to reconcile male real figures with evidence on job opportunities of women, because the North enjoyed more plentiful opportunities than in the south. This point will be discussed in terms of agricultural practices in Conclusion.

1. The 1834 Poor Law Report

Before going to the detailed analysis, it is necessary to explain the data sources utilised here briefly. The main source of this paper is the Rural Query of the 1834 poor law report. According to Blaug (1964), the Royal Commission of Enquiry into the Poor Law was appointed in 1832, and it is likely that England and Wales were divided into 26 districts. Each district was investigated by one assistant commissioner, and they were supposed to visit as many parishes as they could. Although we do not know how many parishes were actually visited by the assistant commissioners, the Rural Query was sent out by them in the middle of August 1832 and most of them were returned by January next year. Responses were returned from about 1,200 parishes or places in England, which covers roughly 10 % of parishes and about 20 % of the population.\(^9\)

Figure 1 shows geographical distribution of observations. The number in each county shows how many parishes returned replies. Sussex is well represented, and Westmorland, the West

\(^8\) Clark (2001), p. 480. Although the samples are excluded for the national series, he shows the benchmark figures based on the 1834 report by converting beer into equivalent money wages. Table 2, p. 481.

Riding, East Anglian counties, Kent, and Hampshire have more than 40 returns. On the other hand, the returns from Middlesex, Rutland, the East Riding, Derbyshire, and Monmouthshire are less than 10.

It is worth commenting on the unit of observation used here. Previous studies using the same source tend to summarise figures by county. Verdon (2002b), for instance, ranked Middlesex as a county where the incidence of women’s and children’s involvement in haymaking is observed more frequently than Sussex, because 50 per cent of parishes in Middlesex returned their involvement, while it is observed in 49 per cent of parishes in Sussex. However, the numbers of observations are only 2 in the former – *i.e.*, one parish reported the incidence of haymaking and the other did not – and 76 in the latter, so that it is difficult to say that Middlesex people actually enjoyed more work in haymaking than those in Sussex.

To avoid this problem, this paper uses wider observation units. Figure 2 is the map proposed by James Caird in 1852. The horizontal line divides England and Wales into the high-wage North and the low-wage South, and the vertical line is between the arable East and the pastoral West. Following his classification, the four regions of the high-wage arable North East, the high-wage pastoral North West, the low-wage arable South East, and the low-wage pastoral South West, will be the main units of analysis.

The Rural Query asks 53 questions, apart from the number of population and the expenditure on the poor. Among them, answers to the following five questions are the main source here:

- **Question 6:** Number of Labourers generally out of Employment, and how maintained in Summer and in Winter?
- **Question 8:** Weekly Wages, with and without Beer or Cyder, in Summer and in Winter?
- **Question 10:** What in the whole might an average Labourer, obtaining an average amount of employment, both in Day-wok and Piece-work, expect to earn in the year, including Harvest-work and the value of all his other advantages and means of living except Parish Relief?
- **Question 11:** Have you any and what Employment for Women and Children? And
- **Question 12:** What can Women and Children under 16, earn per week, in Summer, in Winter and Harvest, and how employed?

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10 Verdon (2002b), Table 1, p. 313. Although the sample size of Middlesex shown in Figure 1 is three, one of them did not respond to Question 11, which is about female job opportunities.
11 Caird (1852), frontispiece.
12 There are three editions of questions, and wordings in each edition are slightly different from others. The questions of the third edition are presented here.
While the source is well known and has been frequently mentioned by historians, their qualitative nature raises some difficulties for quantitative analysis. Moreover, the amount of information varies significantly from place to place. The following are some examples on the wage levels at Great Faringdon (Bedfordshire), and Wootton (Oxfordshire).

Summer, in the hay month, 12s. per week, including beer; in the harvest, from 12s. to 20s. per week. Winter, 8s. to 9s. per week, without beer.  

From 9s. to 12s.

As for the case of Great Faringdon, the statement contains the information about (1) summer wage, (2) availability of in-kind allowance in summer (beer in this case), (3) wage rate in the harvest, (4) wage rate in winter, and (5) availability of in-kind allowance in winter. On the other hand, the description about Wootton is very simple. Therefore, great care is needed for any quantification. At the same time, however, by carefully processing the information contained in the Rural Query, it is possible to present reasonable estimates concerning economic circumstances at parish level, which allow us to draw a national picture with regional details.

2. Unemployment in the countryside

As mentioned above, serious unemployment in the south after the Napoleonic War is well known, but the perception has been mainly based on somewhat indirect evidence such as the expenditures on poor relief, which skyrocketed after the introduction of the Speenhamland system, and impressionistic commentaries by contemporaries. However, the amount of poor law expenditure is likely to have been affected by the actual practice of poor relief in the local context, and it is almost impossible to use contemporary remarks for systematic regional comparison.

Figure 3 shows weighted averages of per capita poor law expenditure by county based on the Report. As we have seen in the previous map of geographical distribution, some counties have only a couple of parishes that produced information. This leads us to doubt the representativeness, but even so, it is possible to find a broad tendency: the counties where the per capita expenditure exceeds 15 shillings are all in the south and east. The heaviest burden is observed in Sussex, followed by East Anglia, and Midland counties.

What is intended in this section is to substantiate this tendency with a more direct

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13 See, for example, Boyer (1990), King (1991), and Verdon (2002a, b).
indicator: unemployment rate. The Rural Query of the 1834 Poor Law Report asks the ‘Number of Labourers generally out of Employment, and how maintained in Summer and in Winter’ (Question 6). As exemplified in the following examples, the information is descriptive and the amount of information varies from place to place.

In Summer about 6, chiefly old and infirm Men, employed in repairing the Parish Roads; in Winter about 12 or 14 employed on the Parish Roads when out of work;\(^\text{16}\)

In summer very few willing and able-bodied men are ever out of employment. Some few drunkards and idle persons, whom no one is willing to employ, are put to less productive labour, such as stone-picking, and in part supported from the Poor’s Rate.\(^\text{17}\)

In Summer, in general none out of employment. In Winter, none.\(^\text{18}\)

In order to estimate parish unemployment rates, I took the following procedure.

1. The descriptions shown in Appendix are given 0.
2. Information for General, Summer, Winter, Harvest, and Spring is classified.
3. If the number of the unemployed is given by a range (\textit{i.e.}, ‘10 to 12’, and so on), a simple mean value is given.
4. If only one figure is given, NA (not available) is given except the case in which the given figure is a general description.
5. Where two figures are given,
   - if they are of summer and winter, the simple mean figure of them is adopted.
   - if they are of summer and harvest, NA is given.
   - if they are of summer and spring, NA is given.
   - if they are of winter and harvest, 48/52 for the unemployed in winter and 4/52 for them in harvest are adopted for the weight.
6. Where three figures are given,
   - if they are summer, winter, and harvest (spring), the weight is 22/52 for summer, 26/52 for winter, and 4/52 for harvest (spring).
   - if they are general, harvest, and spring, the weight is 44/52 for general, 4/52 for harvest, and 4/52 for spring.
7. In some parishes, more than one report is made. In this case, a representing figure for each

\(^{16}\) Iddesleigh, Devonshire, BPP 1834, vol. xxx, p. 129a.
report is calculated in accordance with the above rules, and then the simple mean is computed. If the amount of information is different in each report (for instance, there are two reports for Ford, Northumberland, and one reports the number of unemployed workers in summer, and the other contains the figures of summer and winter), the one containing more information is adopted.

8. The denominator to calculate the unemployment rate is the male populations aged 20 and above in the 1831 census.¹⁹

Parish-level data are aggregated to Caird’s four regions, not to counties, because some of the counties have too small numbers of observations, as we have seen in Figure 1.

Table 1 shows the results. Unemployment was the most serious in the South, and within the South, the rate was higher in the East than in the West. In contrast, agricultural labourers in the North enjoyed almost full employment. This is consistent with the traditional view. In the 1830s, northern farmers had to compete with factory owners for unskilled labourers. This probably tightened the labour market in the North, so that the unemployment rates were kept low. In the South, on the other hand, labour surplus was prevailing, mainly because there was no prominent industrial town other than London.²⁰ Furthermore, many rural industries in textiles, which had been important sources of income for rural labouring families, were swept away by the 1830s. According to Caird’s or Hunt’s assertion, agricultural labourers in the South, by and large, suffered from serious unemployment and low wages. But, did they really suffer from low wages?

3. Decline and Survival of Income in kind

(1) Evaluating income in kind in monetary terms

In order to explore the chronological changes, this section turns to another contemporary survey. The State of the Poor published by Sir Frederic Morton Eden in 1797 contains information similar to the one available from the 1834 Poor Law Report. Eden’s investigation was conducted in 1794 and 1795. The crop failure in these years, which caused steep rises in corn prices, led him to explore 134 parishes with twenty questions, such as parish areas, population of the parish, occupations of parishioners, their earnings and expenditure, and so on.²¹ The result of the exploration is assembled in Volume II, ‘parochial reports’. Eden gathered information chiefly by asking local clergymen. In

¹⁹ BPP. 1832, vols. xxx-xxxi.
²⁰ “…late eighteenth-century London had more steam engines with more horse power than Lancashire; mid nineteenth-century London remained by far the largest manufacturing city in the country”. Schwarz (1992), p. 1.
²¹ However, the information about individual parishes is selective. It is usual that only a couple of points were mentioned in each parish.
the case of no such assistance available, he himself visited the parish or sent ‘a remarkably faithful and intelligent person; who has spent more than a year in travelling from place to place’. 22 Along with 99 family budgets, the State of the Poor contains general observation of wage levels in 134 parishes.

It should be noted that neither the State of the Poor nor the 1834 Reports mentioned exact amounts of food/drink provision in monetary terms but simply stated if it existed or not, as shown in the followings examples:

The common wages of labour, in husbandry, are, 1s. a day, without board; 23 (Dunstable, Bedfordshire)

Common labourers receive 9s. a week, and beer; in hay harvest, 10s. a week, and beer; in corn harvest, 2s. a day, and dinner. 24 (New Windsor, Berkshire)

The wages of labourers are, in harvest, 10d. 1s. and 14d. a day, with victuals; at other times of the year, 10d. a day, with victuals. 25 (Gilcrux, Cumberland)

In addition, of the 134 parishes surveyed, the number of parishes that provided common wage rates applicable throughout the year as Dunstable did is only 36. Most of parishes like New Windsor and Gilcrux reported some seasonal differences in wage levels. The former case is straightforward. The common wage of 1 s. a day in Dunstable can be assumed to apply throughout the year. Constructing a dataset with the data provided in this way could be safer. However, in order to identify the seasonal effects explicitly (and also maximise the sample size), I have conducted regression analysis by assuming the following wage function.

\[
WAGE = \alpha_1 + \alpha_2 \text{PRINX} + \alpha_3 \text{SSUM} + \alpha_4 \text{SWIN} + \alpha_5 \text{SHAR} + \alpha_6 \text{SHAY} + \alpha_7 \text{VICDUM}
\]

The variable, WAGE, is nominal wage rates described in the sources. PRINX is price index proposed by Saito (1981). Following Arthur Young’s proposition, he set up three price zones according to the distance from London. 26 The same price index is applied to all parishes in the zone, and the index takes 100, 88, or 81. The variables starting with S- are season dummies with ‘common’

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22 Eden (1797), vol. I, p. ii.
24 Eden (1797), vol. II, p. 23.
25 Eden (1797), vol. II, p. 76.
or ‘general’ wages as a reference. S SUM stands for summer, SWIN for winter, SHAR for harvest, and SHAY for hay harvest, respectively. Thus, New Windsor and Gilcrux produce more than one observation. While 10 d. a day in Gilcrux is included into the dataset with no season dummy, 1 s. a day (which is a simple mean of 10 d., 1 s., and 14 d.) in harvest is also put in with SHAR=1. VICDUM is a 0/1 victual dummy. If the wage information is with beer, cider, or any other victuals, VICDUM takes 1. Therefore, the coefficient $a_7$ will be the estimated amount of victuals in monetary terms.

(2) Declining victuals and drinks: 1795 and 1832
The estimation results are set out below. Equation 2 is for the end of the eighteenth century, and Equation 3 is for the 1830s.  

\[
WAGE = .255 +.103 PRINX + .493 S SUM – 1.903 SWIN
\]
\[
\begin{align*}
(0.08) & \quad (2.89)** \quad (0.70) \quad (-2.56)* \\
+ 2.827 SHAR – 2.408 VICDUM \\
(3.62)** & \quad (-4.06)**
\end{align*}
\]

adjusted $R^2 = .253 \quad N=110.$

\[
WAGE = 5.916 +.050 PRINX + 1.223 S SUM – .412 SWIN
\]
\[
\begin{align*}
(9.11)** & \quad (7.51)** \quad (6.52)** \quad (-2.20)* \\
+ 5.025 SHAR + 3.091 SHAY – 1.565 VICDUM \\
(18.59)** & \quad (8.07)** \quad (-13.45)**
\end{align*}
\]

adjusted $R^2 = .286 \quad N=1,932$

According to Equation 2, labourer’s wage increased by 0.493 shillings during the summer time, and during harvest, it rose further by 2.827 shillings, but reduced by 1.903 shillings in winter. On the other hand, if food or drink was offered, the wage level was reduced by about 2.4 shillings. Similarly, victuals in 1832 are estimated as 1.6 shillings. This suggests that agricultural labourers experienced great reduction of food/drink allowance over the four decades. Ignoring seasonal difference and food/drink allowances, nominal wage rates averaged 8.3 shillings per week in 1795 and 11.0 shillings in 1832. Thus, the importance of income in kind dropped from 28.9 per cent to 14.2 per cent.

27 Because the dataset from the State of the Poor contains very few data for hay harvest, I combined hay and harvest wages for 1795 and SHAY is applied only to the estimation for the 1830s.

28 T-values are in parentheses. ‘***’ shows that the figure is statistically significant at 1 % level, and ‘*’ at 5 % level, respectively. This applies to Equations (4) and (5) below.
It is somewhat surprising that income in kind accounted for about 30 per cent of farm workers’ income at the end of the eighteenth century. As mentioned above, Horrell and Humphries (1992) stated that the percentage of income in kind contributed less than 1 per cent to family income. This seems to be too modest. Furthermore, the proportion to cash income changed considerably. Therefore, doubt would be cast on Clark (2001)’s assertion that the degree of beer provision would not have dramatic effects on wages.

Food/drink provision seems to have declined not only in monetary terms, but also in its frequency. Table 2 shows the geographical distribution of the observations. The decline in the percentage of observations ‘with victuals’ is remarkable: from 62.7 per cent to 33.1 per cent. This is consistent with the conventional view of declining in-kind income during the period. In the sixth volume of the Agrarian History of England and Wales, Armstrong (1989) summarised the situation as ‘[I]n any case, with rising prices during the second half of the [eighteenth] century they [payments in kind] became more costly to provide in real term’.29 Thus farm workers in 1832 were offered food or drink less frequently, and even when offered, it could be more modest; perhaps drink, not food.

(3) Regional differences
Table 2 provides some insight on geographical diversity of in-kind income, which seems to have been widespread in the southwest, such as in Devonshire and Somersetshire. However, before proceeding, we have to consider two problems for sophistication. One is distinction between food allowance and drinks, and the other is re-tabulation of Table 2 by place instead of frequency of observations.

It is very likely that the cost of food allowance was much more expensive than drink provision. Clark (2001) presents a case in an estate in Cumberland in 1732, where ‘the same person was paid both 9 d. per day and 4 d. per day for threshing’.30 On the other hand, in the course of his farm wage estimation between 1670 and 1869, he utilised the 1834 Poor Law Report as a benchmark, and converted beer allowance into money wage equivalent. The average difference between wages with and without beer in specific parishes in each season is used, and the calculated figures are 1.94 d. per day for winter, 2.13 d. for summer, and 2.67 d. for hay and harvest.31 While the Cumberland worker had received 5 d. less than the amount without allowance 100 years before, beer allowance in 1832 was about half of it even in hay and harvest seasons. Following Clark’s assumption of a six-day week, the current estimation (1,565 shillings per week) equals to 3.130 d. per day, which is slightly higher than Clark’s maximum figure. This is mainly because food and drinks are not distinguished in Equations 2 and 3.

31 See the notes for his Table 2, Clark (2001), p. 481.
Separating beer allowance from food provision, the following is derived:

\[
WAGE = 6.877 + 0.040\ PRINX + 1.234\ SSUM - 0.405\ SWIN + 5.549\ SHAR \\
\hspace{1cm} (10.689)** (6.016)** (6.747)** (-2.217)* (20.654)** \\
\hspace{1cm} + 3.170\ SHAY - 1.367\ BEERDUM - 3.411\ FOODDUM \hspace{1cm} (4) \\
\hspace{1cm} (8.481)** (-11.841)** (-11.5546)** \\
\hspace{1cm} \text{adjusted } R^2 = 0.321 \hspace{1cm} N=1,932
\]

The equation reads that beer allowance is 1.367 shillings per week, and the cost of food provision was twice as high as the drinks. 1.367 shillings per week equal to 2.73 d. per day, which is consistent with Clark’s figure.

Table 3 shows spatial distribution of the existence of food and drink allowances by county. The number of parishes, not observations, where any form of in-kind allowance was reported is counted. For example, Table 2 shows that there are 34 observations for Bedfordshire, but the number of parishes where wage data are available is 15 parishes according to Table 3. It should be borne in mind that although the sample size as a whole seems to be big enough, breakdown into 42 counties makes some of the sub-sets too small: Middlesex and Rutland percentages can be meaningless.

Figures 4 and 5 map the regional patterns of income in kind presented in Table 3. Figure 4 shows the counties in which at least one parish reported the existence of food provision. The pattern looks conventional. Counties in the north and southwest had a couple of parishes reporting the existence. Sussex has one case, and Bedfordshire has three. These parishes in the southern counties may be exceptional. However, in Cumberland, food allowance does not seem to have been rare. It was available in 7 out of 35 parishes.

As hinted in Table 2, drink allowance was prevailing in the southwest. In Devonshire, 17 out of 18 parishes reported that some form of drink was provided to farm workers. Herefordshire and adjacent counties also show higher percentages. What is rather different from the traditional view is that the survival of allowance in the Midlands and East Anglia. Especially, the higher percentages for Cambridgeshire and Essex, 55.9 per cent and 55.8 per cent, catch our eyes. As the sample sizes for the counties are 34 and 43, the results should be relatively reliable. On the other hand, northern counties of Northumberland, Cumberland, Westmorland, and Durham are surprisingly cash-dependent. Notably unique is Durham, in which no parish reported the existence of drink provision.

(4) Revising regional wage estimates
The literature on the regional differences in farm wages in the mid-nineteenth century has, in general, followed the contemporary findings presented in Caird’s *English Agriculture* originally published in
1852, which defines high- and low-wage regions as we have seen in Figure 2.\textsuperscript{32} In fact, although nominal wage rates are used, the image has been reinforced by Hunt (1986), which is one of the most prominent contributions to the debate. Figure 6 shows his calculation about farm wages in 1833-45. Apart from the exception of London and adjacent counties, the general pattern is consistent with Caird’s map.

Whether it is time-series or cross-sectional, however, comparison of wages always faces one big problem: differences in the cost of living. As for farm wages in the second half of the nineteenth century, it seems to be safe to conclude that the purchasing power of farm wages in various places was almost the same. Comparing the prices of bread, flour, butter, tea, sugar, bacon, and cheese between 1860-1 and 1912-13, Hunt (1973) concluded that ‘the cost of living of rural workers did not vary significantly in different parts of the country: differences in real wages paralleled differences in money wages’.\textsuperscript{33} In other words, he claims that nominal money wages can read as real wage rates. Even if this were the case in the early nineteenth century, the regional differences in the survival of food/drink allowance imply that real wage rates could be biased if they were ignored. Therefore, our next task is to utilise the results of the estimation of food/drink allowance to draw a new regional wage map.

While the 1834 Rural Query contains useful information concerning wages, it is not a simple task to construct wage figures representing each parish. As mentioned above, information given in the report is not always numeric but more or less exemplary. Moreover, the amount of information varies from place to place. Sometimes they give a single general figure for throughout the year, and in another occasion, several seasonal figures are provided. In order to take into account seasonal wage differences and the inclusion of food and drink allowances, the following procedure is employed. Steps 3 and 4 represent adjustments made for food and drink allowances, while steps 5 to 8 relate to seasonal adjustments.

1. Wage data in each parish was classified into five categories; general (throughout the year), summer, winter, harvest, and hay time.
2. Where a range of wage rates such as ‘from 10 s. to 12 s.’ is given, the simple mean value is adopted (11 s. in this case).
3. Where wage rates with and without beer (victuals / board / meat / etc.) are given separately, those without in-kind allowance are taken.
4. Where the wage rate is that with beer (or victuals), 1.37 (or 3.41) shillings are added.
5. Where one wage rate is given, if it is a general wage rate, then the figure is adopted. In other cases, ‘NA (not available)’ is given for the parish.


\textsuperscript{33} Hunt (1973), p. 87.
6. Where two seasonal wage rates are given,
   - if they are summer and winter wages, the simple mean figure of them is adopted.
   - if they are general and harvest wages, a weighted average is calculated with weights of 48/52 for general and 4/52 for harvest.
   - if they are general and summer wages, a weighted average is again taken, using the same weightings, i.e., the weight for general is 48/52, 4/52 for summer.
   - if they are winter and harvest wages, 48/52 for winter wage and 4/52 for harvest wage are adopted for the weight.
   - if the combination of the two figures are not as above, ‘NA’ is given.

7. Where three figures are given,
   - if they are general, harvest, and hay-time wages, the weights are 44/52 for general, 4/52 for harvest, and 4/52 for hay harvest.
   - if they are summer, winter, and harvest wages, the weights are 22/52 for summer, 26/52 for winter, and 4/52 for harvest.
   - if they are summer, winter, and hay-time wages, the weights are 22/52 for summer, 26/52 for winter, and 4/52 for hay harvest.
   - if they are winter, harvest, and hay-time wages, the weights are 44/52 for winter, 4/52 for harvest, and 4/52 for hay harvest.
   - In other cases, ‘NA’ is given.

8. There is only one kind of combination for four figures given (summer / winter / harvest / hay).
The weights of 18/52, 26/52, 4/52, and 4/52 are applied to the respective wage rates

Since it is parish-level data that are derived from this procedure, the adult male population in each parish (20 years old and above) is taken as the weight to calculate the corresponding county level figure.

Figure 7 indicates a different pattern from Figure 6. Overall impression is that a downward revision in the north and an upward revision in the south. The downward revisions are found for nine counties, i.e., Cheshire, Cumberland, Derbyshire, Lancashire, Northumberland, Westmorland, and the North and West Ridings of Yorkshire. Most of them are in the high-wage north defined by Caird. The most notable among them is Cheshire, where the wage level in Figure 6, 11.4 s., is reduced to 9.9 s. in Figure 7. On the other hand, upward revisions with more than one shilling are made in Berkshire, Buckinghamshire, Cambridgeshire, Dorsetshire, Essex, Hampshire, Hertfordshire, Huntingdonshire, Kent, Middlesex, Northamptonshire, Staffordshire, Surrey, Sussex, Warwickshire, Wiltshire, Worcestershire, and East Riding of Yorkshire: most of them, apart from Staffordshire and the East Riding of Yorkshire, are south of Caird line. The wage level of Huntingdonshire is most remarkably revised upward, although the number of sample here casts doubt on the reliability. It
should be noted that, as shown in Equation 4, regional price differences are taken into account, which has made our figures more reliable than Hunt’s nominal wages.

(5) Male wages and unemployment
Inclusion of income in kind into the calculation of real wage rates has revealed the following three points. Firstly, as previous studies have suggested, the importance of food/drink allowance declined in the course of the Industrial Revolution. The proportion of in-kind income to the average of male nominal wage rates fell from 28.9 per cent at the end of the eighteenth century to 14.2 per cent in the 1830s. The frequency of provision declined as well. While food/drink allowance was observed in 62.7 per cent of the sample parishes in 1795, the percentage dropped to 33.1 per cent in 1832. Secondly, the extent to which food/drink allowance survived differed from county to county. Food provision remained in the north, but drink allowance survived in the south. Drink allowance was available in many parishes in midland and East Anglian counties such as Northamptonshire, Leicestershire, Warwickshire, Worcestershire, Herefordshire, Cambridgeshire, and Essex. Thirdly, the actual wage level in the south was higher than previously thought. In other words, conventional ‘high-wage north and low-wage south’ view should be revised. As pointed out above, even in the 1830s, drink allowance was fairly common in the south. As a result, the real wage rates in most of the southern counties have been estimated higher. Thus, the clear-cut pattern of ‘high-wage north and low-wage south’, which Caird suggested, has disappeared.

The last point is a very interesting finding, because it suggests that the effect of industrialisation on male wage rates may not have been significant. Comparing farm labourers’ wages in Lancashire (12.4 s.) and Buckinghamshire (9.8 s.) in 1833-45, Hunt (1986) concluded that:

Few would deny that industrialization was a main cause of the relative improvement in Lancashire wages in the eighteenth century and of the wage advantages Lancastrians enjoyed throughout the following century. And most would agree that Buckinghamshire exemplifies the plight of peripheral regions that experienced population increase unaccompanied by industrialization.34

However, my estimates are 11.9 s. and 10.9 s. respectively. In other words, ‘the advantage Lancastrians enjoyed’ is reduced from 26.5 per cent to only 9.2 per cent.

This revision allows us to solve the conundrum that low wage rates and high unemployment coexisted in the South. Hunt’s observation of the large Lancashire-Buckinghamshire wage gap strongly points to a labour market segregation in the first half of the nineteenth century, as Pollard indicated three decades ago. However, as far as male wages are concerned, we can solve the problem even when regional labour markets were integrated. Figure 8 shows our estimates of the

34 Hunt (1986), p. 961. See also his Table 4 at the same page.
regional male wages together with unemployment rates according to Caird’s regions. It is striking to find the wage rate in the South East slightly higher than the North West, where factory production was most flourishing. This finding leads us to suppose that South Eastern agricultural labourers stayed on there, because farms paid wages that were above the equilibrium.

4. Family income
As far as male weekly wage rates are concerned, the ‘high-wage north / low-wage south’ divide is now blurred. This suggests that southern agricultural labourers did not move because the wage level of them was high enough to take a risk of leaving familiar villages. However, it is difficult to reconcile this hypothesis with evidence on annual household income. In this section, we will discuss this from the following three points of view: 1) how to convert the weekly male wages into annual income, 2) inclusion of female earnings to consider household decision-making, and 3) the effect of job opportunities for women on female annual incomes.

Apart from Question 8 which asks about weekly wages, the Rural Query contains a question about annual income. Question 10 asks “what in the whole might an average Labourer, obtaining an average amount of employment, both in Day-wok and Piece-work, expect to earn in the year, including Harvest-work and the value of all his other advantages and means of living except Parish Relief?” The answers here are again impressionistic to some extent, but I assume that they reflected some information on seasonal fluctuation in job opportunities and short-time working hours.

Column (b) of Table 4 summarises the answers to Question 10, and Column (c) shows the annual income derived from weekly wages based on Question 8. I simply multiplied each figure in Column (a) by 52 (weeks). We can expect the weekly-wage based incomes should be larger than those based on Question 10, because weekly wages implicitly assume full employment. This does not apply to the South West, but the overall picture seems to be consistent. I took simple mean figures of the two as best guesses, which are shown in Column (e).

This exercise does not change the order of income level ranking. The annual income in the South East, 29.9 pounds, is more than 29.3 pounds in the North West. However, if we consider female wage rates and job opportunities, this order changes, because weekly wage rates for females

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35 The Rural Query also asks wage rates that children could earn. However, I discuss earnings of wives only, because it is very difficult to confirm typical household structure in each parish or region. It should be noted, however, that children’s contribution to household income in the period was considerable. Horrell and Humphries (1995) estimated that their contribution between 1817 and 1839 was 20.1 per cent in high-wage agricultural (Caird’s North region) and 4.6 per cent in low-wage agriculture (Caird’s South). Horrell and Humphries (1995), Table 1, p. 491.

36 While the question clearly asks ‘annual’ earnings, some answered daily or weekly wages. For the tabulation of Table 4, the parishes that returned these remarks are discarded and only annual figures are included.
were higher in the north.

The 1834 Poor Law Report also asks about female wages (Question 12). As did in the evaluation of food/drink allowance with male wages in the previous section, we can derive the following equation with female wages:

\[
\text{female wage} = 8.320 - 0.049 \text{PRINX} + 0.522 \text{SSUM} - 1.606 \text{SWIN} + 3.742 \text{SHAR}
\]

\[
\]

\[
+ 2.314 \text{SHAY} - 1.355 \text{BEERDUM} - 1.512 \text{VICDUM}
\]

\[
(4.326)** (-3.868)** (-3.104)**
\]

\[
\text{adjusted } R^2 = 0.429 \quad N=2,007
\]

In order to obtain representative female wage rates for each parish (i.e., wage rates with seasonality and drink/food allowances controlled for), the same procedure as for male representative wages is applied. It should be noted that, for the adjustment of income in kind, we use 1.36 s. for beer and 1.51 s. for food, and that, instead of that of 20 years and above, total female population is used for weight to calculate regional figures.

Table 5 shows the results. Here the north-south wage gap is clear. Weekly wage rate was highest in the North East, followed by the North West. On the other hand, the wage rate in the South East was very low. Consequently, the contribution of women to household income is the lowest in the South East. While the annual earnings of women in the North East accounted for 39 per cent of male annual income, that of South Eastern women was below 30 per cent.

Furthermore, the figures shown in Table 5 must be overstated, for the same reason as to male weekly wages. Unfortunately, we cannot obtain direct information about female unemployment. Instead, I used female job opportunity as a denominator to control this problem.

The Rural Query asks ‘Have you any and what Employment for Women and Children?’ (Question 11). The descriptive nature of answers is the same as for other questions, and again this makes any generalisation difficult. It is possible to divide the information contained in the answers into two types: One is about the contents of job opportunities and the other is about its frequency. In some cases, the both kinds of information are given. In Cople, Bedfordshire, ‘lace-making, and gleaning in time of harvest’ were women’s jobs, and the job opportunities in Little Marlow, Buckinghamshire, were, ‘Very little: weeding, lace-making, reaping and raking in Harvest.’ To put it simply, I have omitted the information on the frequency and classified the contents of job opportunities into agricultural and manufacturing jobs. Thus, it is put that manufacturing as well as agricultural jobs were available in Cople. Buryan Deanery in Cornwall, where ‘The cultivation of

37 BPP 1834, vol. xxx, p. 4a.
potatoes, weeding the crops, harvesting hay and corn, straw hat weaving, and curing fish’ were mentioned, is also interpreted as a parish with agricultural and manufacturing jobs available. In South Bedburn in Durham, there was ‘Nothing, but in Husbandry, no manufactories’. Therefore, available jobs in the parish are agricultural only.

Table 6 summarises the result. It looks that job opportunities for women were not very few, as shown that the percentage for England as a whole, 80 per cent. It must be noted, however, that nothing was available in 171 out of 851 parishes in England. Regional variation in manufacturing opportunities was larger than that in agricultural ones. While 38 per cent of North Eastern parishes enjoyed manufacturing jobs, the percentage in the North East was only 7 per cent. According to the descriptions in the Rural Query, water-powered mills were built in the northern countryside and women were directly employed there. In other cases, jobs are likely to have been supplementary to factory production. In the Ovenden township, which is in the outskirts of Halifax, for instance, women were ‘employed chiefly in cotton and worsted weaving, cotton and worsted mills, and other manufactures’, where there seem to have been some factories. In Brampton, Cumberland, which is about seventeen miles east of Carlisle, ‘There is field-work for Women and Children during the Summer and Autumn months; and spinning, knitting, sewing, winding of bobbins [italics added], and weaving, at other times of the year’. On the other hand, rural industries in the South East seem to have been disastrous. Even if it existed, it is very likely that they were declining. The reply from Sherborne in Dorsetshire reads ‘the silk-throwing business generally; ... the silk business, however, of late years, has been much depressed’. In Rodborne tithing, Wiltshire, available jobs were ‘very little, and that only in Summer. Lace-making in the Winter; but that is declining very fast’.

The overall pattern of female job opportunities was very similar to that of male unemployment. The percentages of parishes where neither of agricultural nor manufacturing jobs was available were very high in the South East and lower in the North. I used these percentages to discount the female incomes, and the ‘Adjusted female annual income’ in Table 7 shows the results. The level of female income in the North East was 42 per cent higher than England as a whole, and that of South West remained as small as 89 per cent.

Attention should be paid to the annual family income index shown in the right end column

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39 BPP 1834, vol. xxx, p. 82a.  
45 This should not be taken for granted, because sexual division of labour was the norm in the period. For example, lace-making and straw plaiting were almost exclusively female jobs. In agriculture, stone picking, weeding, and milking were practiced mainly by women. Wheat was harvested by male mowers with scythes that women gatherers as well as children followed.  
46 Thus female annual income of England as a whole, 9.2 s., is multiplied by 0.80, for either or both of manufactual and agricultural jobs were available in 680 out of 851 parishes (or 80 % (Table 9)).
in Table 7. While the male annual income in the North West was lower than that in the South East, low female wages and less job opportunities in the South East made the annual family income slightly lower than the North West, so that the ‘high-north and low-south’ pattern has reappeared.

Although the difference between the two is small, that the lower income coincided with the higher unemployment rate in the South leads us to go back to the first question: why did the southern agricultural labourers not move to high-wage areas, but stay unemployed? One might argue that even if the job situation for women was more favourable in the North, male wage rates should have mattered most. Perhaps this was true. Southern agricultural labourers did not move probably because the male income level was more or less sufficient if in-kind income is taken into account.

In addition, regional agricultural practices must have affected the structure of labour supply and demand. While cottage industries in the south were declining sharply, most of southern farmers still needed hands of their employees’ wives and children in harvest time. In fact, the availability of agricultural job opportunities were almost identical in the North and South. If the North West and North East are combined, the number of parishes where agricultural jobs were available accounts for 63.6 per cent, while the percentage in the South as a whole is 63.7 per cent.

Arable farmers faced greater seasonal fluctuation in labour requirement. During winter, there was almost no particular job other than threshing. In summer, however, haymaking and harvest required a significant amount of labour. Furthermore, the peak period in the harvest of main cereals, especially wheat, is relatively short. It was essential for arable farmers to keep the sufficient number of mowers and reapers in the crucial period. If he failed and the wheat overripened before harvest, his loss could be enormous.

Figure 9 shows the percentages of arable and pastoral parishes in each region. The Rural Query also reports the land use of each parish. The total acreage of the parish as well as those of arable, pastoral, commons, gardens, woods, and so on, were reported. The reports are, again, imperfect here. Comparison of the parish acreages reported in the 1834 Report with those shown in the 1831 census reveals that the number of entries where the two figures completely agree with each other is only 14 out of over 1,000 entries. In some cases, even the total acreage is not given. Therefore, I defined an ‘arable parish’ if the ratio of arable to pastoral acreage in the parish is more than 1.560 (or arable acreage divided by the sum of arable and pastoral acreages (arable / (arable + pastoral) is equal to or more than 60.8 per cent), which is the average for England as a whole. If the percentage is less than this, the parish is defined as ‘pastoral’. The map fits well with the division by Caird (Figure 2). The North East and the South East are very arable; in the west, pastoral parishes are more than a half.

It must be noted that the significant number of arable parishes did exist in the South West as well, though the percentage is slightly less than a half. This particular feature of agricultural practice in the south in general must have been related to the immobility of southern labourers. It is
very likely that southern cereal farmers, facing seasonal fluctuation in labour demand, had a strong incentive to keep the labour surplus in the region. Because the dismissal of a male worker meant that the farmer might also lose the labour of his wife and children, this could have strengthened the bargaining power of male agricultural labourers. Thus, the higher level of unemployment and its consequence, *i.e.*, the heavy burden of poor rates, in the south were institutionalised through this peculiar kind of bargaining structure, which manifested itself in relatively higher male real wages of the region.

**Conclusion**

Pollard (1978) listed reasons why urban industry failed to utilise labourers in the countryside and, therefore, the labour pool continued to exist during the first third of the nineteenth century. His list includes: 1) the technical difficulty of transport, 2) labourers’ reluctance to face a new occupation and new environment, 3) the Poor Law and the Settlement Acts, and 4) the interest of landlords and farmers to keep the labour reserve for harvest weeks.\(^{47}\) We should add relative high wages in the South to his list, although it was related to the fourth point. Because of the regionally different pattern of decline and survival of drink allowances, southern agricultural labourers enjoyed relatively higher income than previously thought. As a result, the wage level in the South remained above the equilibrium level.

The seasonal fluctuation in arable farming gave strong incentive to keep a labour reservoir to cereal farmers. This incentive must have existed in the North East too, which was another high male wage region. As we have seen in Table 6, there were relatively plentiful jobs for women in the region. This could be applied to male workers as well, because of the proximity of fast-growing industrial areas. Figure 10 shows the net migration rate in each county. The North East region is comprised of Northumberland, Durham, the North Riding, the East Riding, and Lincolnshire. Attention should be drawn to a serious population drain from the North Riding, surrounded by counties in which net immigration was enormous. It appears that Durham mines and industrial towns in the West Riding, Lancashire, and Nottinghamshire offered wage labour and attracted people from the North Riding as well as the East Riding and Lincolnshire. In consequence, the bargaining power of farmers in the North East could have been eroded.

Compared with northern counties, labour mobility in the south was rather modest. Although the net immigration in and around London, Birmingham, and of Monmouthshire was apparent, the population flow to and from other southern counties was not obvious. This could be partly because of the rather higher male wage rates, as we have seen above. However, this should be interpreted as farmers in the South East operated drink allowance to reduce the incentive of

agricultural labourers to emigrate.

Of course, other traditional explanations such as labourers’ reluctance to leave their home villages and farmers’ anxiety about social disturbance also played a role for the endurance of this labour reservoir. Other parts of the Rural Query provide some information on these points. A vicar of Westoning, Bedfordshire, mentioned; ‘In this parish and neighbourhood, the strongest prejudices prevail against emigration, among the poor, owing in part to want of sufficient information on the subject’. For the second half of the nineteenth century, Boyer and Hatton (1997) explored determinants of migration, by conducting some regressions to determine the effects of wage gaps, distance, and the stock of previous migrants on male migration flows. It is worth noting that the elasticity of the stock of previous migrants they estimated was substantial and comparable to that of wage gap. In other words, a 10 per cent increase of migration stock offset a 10 per cent increase in the wage gap, which can be interpreted that people did not move unless a substantial number of people had already out-migrated before them. Prior to the railway age, most of rural workers could not expect their acquaintances living in large towns.

If rural farm workers, reluctant to leave their parishes, were not satisfied with the whole income derived from cash wages, in-kind allowance, and out-door relief, the consequence was disturbance. Just before the enquiry for the 1834 Poor Law Report was undertaken, agricultural riots raged in southern counties. The Swing Riots, which began in 1830, took forms of arson, threatening (‘Swing’) letters, machine breaking, and so on, demanding higher wages, more job opportunities, rent and tithe reduction, and improving the conditions of poor relief. The 1834 Poor Law Report also asks: ‘Can you give the Commissioners any information respecting the causes and consequences of the Agricultural Riots and Burning of 1830 and 1831?’ (Question 53). William Mount, an overseer and JP in Wasing, Berkshire, attributed the causes to ‘evil-disposed persons worked upon an ill-paid discontented peasantry, who, for want of regular employment during the Winter months, were in the habit of spending their time in those rural pest, the beer-shop’, and described the consequence as follows:

‘great destruction of property, heavy pecuniary charges on Counties, Parishes and individuals; and for a time unprecedented misery in the families of the rioters. The best and steadied Labourers were unsettled; mutual confidence destroyed, and alarm prevailed through this and the six adjoining Counties. The wages of a Labourer with a family were in most instances raised from 9 s. to 10 s. per week, and those of a single man in proportion.’

48 BPP 1834, vol. xxxiv, p. 9e. In Westoning, the unemployment rate was the highest: 33.1 per cent. The figure is my own calculation reflected in Table 6 and Figure 12.
49 Hobsbawm and Rudé (1969)
50 BPP 1834, vol. xxxiv, p. 28e.
And the answer by another JP from Steeple Claydon, Buckinghamshire was:

‘Causes: discontent, disturbance in France, private revenge, idleness. Consequences have been, raising the unmarried Man’s pay from 3 s. 6 d. to 5 s. weekly, which made the Farmer far more angry and discontented than the Labourer had been.’

Concerning mechanisation in agriculture, Collins (1987) found that southern arable farmers found it very difficult to adopt any kind of labour-saving scheme. He maintained that the ‘social cost of mechanisation, expressed in terms of wage rates, levels of employment and labour relations, might outweigh the economic benefits’. Indeed, agricultural labourers quite often burnt reapers and binders in the middle of night as late as 1890s.

It is worth noting that, at least in these two parishes, labourers did raise wages successfully. This must have increased their incentive to keep on staying in the parish. Corn-producing farmers in arable parishes required a labour pool for harvest, and this made wage rates and income level negotiable. As a result, the income level in the region remained higher. This is the mechanism behind the immobility of agricultural labourers in the South East. It may have been unstable, but was in a kind of equilibria until the mid nineteenth century.

Footnote reference
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Armstrong, R. E.,
Berg, M., and P. Hudson,
Burnett, J.,
Blaug, M.,
Boyer, G. R.,
Boyer, G. R., and T. J. Hatton,

51 BPP 1834, vol. xxxiv, p. 33e.
52 Collins (1987), p. 36.


Eden, F. M., (1797) *The State of the Poor*, London.


**British Parliamentary Papers (BPP)**


- *Report from His Majesty’s Commissioners for Inquiring into the Administration and Practical Operation of the Poor Laws*, Rural Queries, session 1834, vols. xxx-xxxiv.
Appendix

Descriptions listed below are regarded that there was no unemployment in the parish/township.

- all are employed in Summer and Winter
- All are generally kept in employ although all are not wanted.
- all are in full employment
- All are, generally speaking, employed in Summer.
- all employed
- all employed
- ample employment
- but few
- But very few Labourers are out of employ in this parish.
- Employment generally good
- few or none
- generally employed
- generally in employment
- Labourers are generally employed.
- Mines at present employing all.
- never
- never any
- no
- No Labourers entirely out of Employment.
- none
- none but those that are idle
- none except some old men employed on the Roads.
- none under the name of Labourers.
- not any
- not frequently any
- not one
- scarcely any
- seldom unemployed
- Should any be out of employment they are either taken by the farmers, or sent to the roads.
- The working class in the hundred of Amounderness needs never to be unemployed, as weaving is carried on throughout the hundred.
- There are no Labourers out of employ
- There is generally good employment all the year round.
- they are generally employed
They are generally employed.
very few
very seldom
We have no Labourers out of employment at any part of the year.
We have very few out of employment.
We have very few out of employment; we take care to find work for all; there are some bad characters in most parishes who will not work if they can avoid it.
Table 1 Unemployment rates in Caird’s regions

<table>
<thead>
<tr>
<th>Region</th>
<th>Unemployed</th>
<th>Male 20+</th>
<th>Unemployment Rate</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>8,035</td>
<td>210,150</td>
<td>3.8%</td>
<td>643</td>
</tr>
<tr>
<td>North East</td>
<td>171</td>
<td>17,653</td>
<td>1.0%</td>
<td>54</td>
</tr>
<tr>
<td>North West</td>
<td>712</td>
<td>36,642</td>
<td>1.9%</td>
<td>98</td>
</tr>
<tr>
<td>South East</td>
<td>5,574</td>
<td>109,524</td>
<td>5.1%</td>
<td>318</td>
</tr>
<tr>
<td>South West</td>
<td>1,577</td>
<td>46,331</td>
<td>3.4%</td>
<td>173</td>
</tr>
</tbody>
</table>

Source: BPP 1834, vols. xxx-xxxiv.
### Table 2 Geographical distribution of wage data observations, 1795 and 1832.

<table>
<thead>
<tr>
<th>County</th>
<th>1795 (the State of the Poor)</th>
<th>1832 (the Poor Law Report)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>without victuals</td>
<td>with victuals</td>
</tr>
<tr>
<td>Bedfordshire</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Berkshire</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Buckinghamshire</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Cambridgeshire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheshire</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Cornwall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumberland</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Derbyshire</td>
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<td></td>
</tr>
<tr>
<td>Devonshire</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Dorsetshire</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Durham</td>
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<td>0</td>
</tr>
<tr>
<td>Essex</td>
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<td></td>
</tr>
<tr>
<td>Gloucestershire</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Hampshire</td>
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<td></td>
</tr>
<tr>
<td>Herefordshire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hertfordshire</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Huntingdonshire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kent</td>
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<td></td>
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<tr>
<td>Lancashire</td>
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</tr>
<tr>
<td>Leicestershire</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Lincolnshire</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Middlesex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monmouthshire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norfolk</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Northamptonshire</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Northumberland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nottinghamshire</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Oxfordshire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rutland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shropshire</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Somersetshire</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Staffordshire</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Suffolk</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Surrey</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sussex</td>
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<td></td>
</tr>
<tr>
<td>Warwickshire</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Westmorland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wiltsire</td>
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<td></td>
</tr>
<tr>
<td>Worcestershire</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Yorkshire, East Riding</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Yorkshire, North Riding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yorkshire, West Riding</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>41</td>
<td>69</td>
</tr>
</tbody>
</table>

Source: Eden (1797); BPP, 1834, vols. xxx-xxxiv.
Table 3 Existence of food/drink allowance, 1832

<table>
<thead>
<tr>
<th>County</th>
<th>Beer/Cider</th>
<th>Food</th>
<th>N</th>
</tr>
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<tbody>
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<td>4</td>
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<tr>
<td>Yorkshire, North Riding</td>
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<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Yorkshire, West Riding</td>
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<td>4</td>
<td>36</td>
</tr>
<tr>
<td>England</td>
<td>384</td>
<td>51</td>
<td>883</td>
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</table>

Source: BPP, 1834, vols. xxx-xxxiv.
Table 4 Male wage rates and annual income

<table>
<thead>
<tr>
<th>Region</th>
<th>Weekly male wages based on Question 8</th>
<th>Male annual income based on Question 10</th>
<th>Male annual income based on weekly wage</th>
<th>(b)/(c)</th>
<th>Annual income (best guesses)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(shilling) (a)</td>
<td>(pound) (b)</td>
<td>(c)=(a)*52 (pound)</td>
<td>N (pound)</td>
<td>N (%)</td>
</tr>
<tr>
<td>England</td>
<td>11.39</td>
<td>490</td>
<td>28.3</td>
<td>622</td>
<td>29.6</td>
</tr>
<tr>
<td>North East</td>
<td>12.19</td>
<td>32</td>
<td>29.7</td>
<td>52</td>
<td>31.7</td>
</tr>
<tr>
<td>North West</td>
<td>11.70</td>
<td>72</td>
<td>28.2</td>
<td>114</td>
<td>30.4</td>
</tr>
<tr>
<td>South East</td>
<td>11.74</td>
<td>236</td>
<td>29.3</td>
<td>290</td>
<td>30.5</td>
</tr>
<tr>
<td>South West</td>
<td>10.01</td>
<td>150</td>
<td>26.6</td>
<td>166</td>
<td>26.0</td>
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</table>

Source: BPP, 1834, vols. xxx.

Table 5 Female weekly wages and annual income

<table>
<thead>
<tr>
<th>Region</th>
<th>Weekly female wages based on Question 12</th>
<th>Female annual income (weekly wage * 52)</th>
<th>Male annual income (best guesses)</th>
<th>Female annual income as % of male earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(shilling) (a)</td>
<td>(pound) (b)</td>
<td>(c)=(a)*52 (pound)</td>
<td></td>
</tr>
<tr>
<td>England</td>
<td>3.5</td>
<td>745</td>
<td>9.2</td>
<td>28.9</td>
</tr>
<tr>
<td>North East</td>
<td>4.5</td>
<td>71</td>
<td>11.8</td>
<td>30.7</td>
</tr>
<tr>
<td>North West</td>
<td>3.6</td>
<td>130</td>
<td>9.4</td>
<td>29.3</td>
</tr>
<tr>
<td>South East</td>
<td>3.3</td>
<td>329</td>
<td>8.6</td>
<td>29.9</td>
</tr>
<tr>
<td>South West</td>
<td>3.5</td>
<td>215</td>
<td>9.0</td>
<td>26.3</td>
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</table>

Source: BPP, 1834, vols. xxx.

Table 6 Job opportunity for women

<table>
<thead>
<tr>
<th>Region</th>
<th>N</th>
<th>Agricultural</th>
<th>Manufacture</th>
<th>either or both</th>
<th>none</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>851</td>
<td>100%</td>
<td>542</td>
<td>64%</td>
<td>219</td>
</tr>
<tr>
<td>North East</td>
<td>68</td>
<td>100%</td>
<td>58</td>
<td>85%</td>
<td>5</td>
</tr>
<tr>
<td>North West</td>
<td>152</td>
<td>100%</td>
<td>82</td>
<td>54%</td>
<td>57</td>
</tr>
<tr>
<td>South East</td>
<td>386</td>
<td>100%</td>
<td>250</td>
<td>65%</td>
<td>66</td>
</tr>
<tr>
<td>South West</td>
<td>245</td>
<td>100%</td>
<td>152</td>
<td>62%</td>
<td>91</td>
</tr>
</tbody>
</table>

Source: BPP, 1834, vols. xxx.
Table 7 Annual family income (in pound)

<table>
<thead>
<tr>
<th>Region</th>
<th>Male annual income (best guesses)</th>
<th>Female annual income (weekly wage*52)</th>
<th>Adjusted female annual income (*job availability)</th>
<th>Adjusted annual family income</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>28.9 (100)</td>
<td>9.2 (100)</td>
<td>7.3 (100)</td>
<td>36.2 (100)</td>
</tr>
<tr>
<td>North East</td>
<td>30.7 (106)</td>
<td>11.8 (129)</td>
<td>10.4 (142)</td>
<td>41.2 (114)</td>
</tr>
<tr>
<td>North West</td>
<td>29.3 (101)</td>
<td>9.4 (102)</td>
<td>7.6 (104)</td>
<td>36.9 (102)</td>
</tr>
<tr>
<td>South East</td>
<td>29.9 (104)</td>
<td>8.6 (94)</td>
<td>6.5 (89)</td>
<td>36.4 (101)</td>
</tr>
<tr>
<td>South West</td>
<td>26.3 (91)</td>
<td>9.0 (98)</td>
<td>7.6 (103)</td>
<td>33.9 (94)</td>
</tr>
</tbody>
</table>

Source: Tables 5 and 6 above.

Note: Indices are normalised to England (=100), and shown in the parenthesis.
Figure 1 Geographical distribution of observations; the 1834 Poor Law Reports

Figure 2 Wage level and agricultural practice in England and Wales proposed by Caird

Source: Caird (1852), frontispiece.

Note: The horizontal line shows the division between the high-wage north and low-wage south. The vertical line divides the arable east and pastoral west.
Figure 3 Per capita poor law expenditure, 1833

Figure 4 Survival of food provision, 1832

Figure 5 Percentage of parishes where drink allowance was available, 1832

Figure 6 Agricultural labourers’ wages in England (1833-45), estimated by Hunt (s. / week)

Source: Hunt (1986), Table 6, p. 965.
Note: Scotland and Wales are excluded. Wages are given in shilling per week.
Figure 7 Agricultural labourers’ wages in England (1832), based on the Poor Law Report (s./week)


Note: The sample size is shown in parenthesis.
Figure 8 Regional differences in wages and unemployment rates

Source: BPP 1834, vols. xxx-xxxiv.

Note: Wages are shown in shilling per week. Unemployment rates are presented in parenthesis.
Figure 9 Agricultural practice (arable and pastoral farming)

Source: BPP 1834, vols. xxx-xxxiv.
Figure 10 Social increase of county population, 1821-1831 (per 1000)\(^{53}\)


\(^{53}\) It is unfortunate that we do not have direct information about migration, which bears nation-wide as well as regionally detailed analysis in this period. Since census enumerators’ books provide birthplace data, we can trace migration history of individuals after 1841 to some extent. However, CEBs for the 1841 Census only provide ‘whether born in the same county’ or not. After the 1851 Census, home parishes are identifiable. Instead, Figure 3.2 shows net-migration rates based on baptism and burial registers. Parish Register Abstract of the 1831 Census Reports gives the numbers of baptisms, burials, and marriages in each parish. See BPP 1833, vol. xxxviii. The rates of social increase are calculated as follows;

\[
\frac{(Population_{1831} - Population_{1821}) - \sum_{i=1821}^{1830} (Baptism_i - Burial_i)}{(Population_{1831} - Population_{1821})/2} \times 1,000
\]