

Is There Profit in Reforming the Poor?

The English Poor Law 1830-1842

Gregory Clark and Marianne Page
Department of Economics
UC-Davis
gclark@ucdavis.edu, mepage@ucdavis.edu)
December 24, 2000

The first great debate on the effects of welfare on the poor was in England in the years 1795-1834, when the Old Poor Law was criticized by Malthus and his followers as encouraging sloth and taxing industry. The English poor had a legal right to subsistence, and by the early nineteenth century about 10% of the population was in receipt of some public relief. After 1834 a new Poor Law regime was adopted with harsher treatment of claimants and a decline in payments to the poor. This paper tests whether the claims of the critics of generous poor relief before 1834, that it reduced labor efficiency and labor mobility and discouraged investment, were correct. We look at the effect reductions in poor relief payments had on land rents in a large set of rural parishes. If the system was as pernicious as contemporaries claimed then each £1 reduction in payments to the poor consequent on the reforms will increase land rents by much more than £1. If the system was merely a transfer of income from landowners to the poor then a £1 reduction in payments to the poor will increase land rents by only £1. If poor relief was widely used because it was largely just a subsidy to wages that aided large land owners then a £1 reduction in payments to the poor will increase land rents by less than £1.¹

Introduction

This paper is a preliminary attempt to estimate the efficiency costs of the welfare system that operated in England prior to 1834, often referred to as the Old Poor Law. Per £1 transferred to the poor, what was the full social cost? The Poor Law Commission of 1833, the first modern social science enquiry, famously concluded that the Old Poor Law created great economic losses by reducing the incentive to work, by limiting labor mobility, and by discouraging investment of

¹ The nineteenth century English currency consisted of pounds (£), shillings (s. or /-) and pence (d.) £1 = 20s. = 20/-, 1s. = 1/- = 12 d.

capital in land improvement. The Commission's Report prompted a radical reform of the welfare system in 1834. The legal right to subsistence was retained, but the form of welfare payments was changed to make them much less attractive. In principle, welfare could now only be received under strict supervision in a workhouse. We aim to measure whether the 1834 reforms did produce efficiency gains by comparing rent and population changes in parishes before and after the reform according to the severity of the application of the reforms.

Academics and policymakers have long debated the degree to which providing for the poor adversely effects their employment, fertility and mobility. The criticisms of the Old Poor Law echo those of the critics of welfare provision in modern America, and indeed the reforms of 1834 are similar in character to some of the reforms of recent years. Although there are numerous, conflicting, estimates of the degree to which the current U.S. welfare system affects individual behavior, there are no estimates for earlier periods or programs. We would like to know whether the American experience is representative of a more fundamental problem underlying any attempt to guarantee the poor with a subsistence income. A nice feature is that there is potentially data for over 15,000 parishes organized in 490 or more unions in England in 1834. Until the United States' recent welfare reform, poor relief levels in this country varied only at the state level limiting the amount of potential information.

Our preliminary results below suggest that in fact the Old Poor Law served mainly as a transfer of income from land owners to the poor with little efficiency costs in the form of reduced labor inputs, labor effort, or labor mobility. The reforms of 1834 could not be justified on the grounds that the Old Poor Law was imposing significant social costs.

The Old Poor Law

Under the Old Poor Law, each of the 15,535 parishes and townships in England was required to provide support for their poor through taxes on property occupiers. Local magistrates, who had jurisdiction over groups of parishes, set the level of subsistence.² While the administration of relief in each parish was controlled by the parish vestry, composed of the occupiers of land and housing who paid the poor rates,³ those who were denied support by the parish Overseer of the Poor (or offered inadequate support) could appeal the decision to these magistrates.⁴ The magistrates were also responsible for approving the accounts of the overseers at the end of each year.

Workers thus received support when they were too old to work, when they were ill, when they were unable to find work, but also when their earnings fell below the adjudged subsistence level for their family. Thus in the parish of Toddenham in Gloucester in 1832-3 those in receipt of poor relief were:

“eight efficient Labourers with four Children and upwards, 14s. 8d.; three infirm old Men, 9s. 6d.; three Bastards, 5s. 8d.; eleven Widows, £1. 8. 5.; three with Families, £1. 0. 9.” (Parliamentary Papers, 1834c, p. 202b).

The allowance paid to the working laborers in Toddenham was calculated as the difference between their winter wage and their family need, where this was measured as 1s. 3d. for each person in the family, plus 2s. 6d. extra for the husband and wife. Thus the need of a family of husband, wife and 4 children was estimated as 10s. The allowance from the parish was the

² Evidence from the Poor Law Report and other sources suggests that the same subsistence levels were set for all parishes within the magistrate’s jurisdiction. These levels of subsistence did vary from district to district. Thus in 1832-3 the payment guaranteed to a family of a husband, wife and three children varied from 5.6 s. per week to 13.8 s. per week across 337 parishes.

³ Land and housing owners had no vote in the vestry unless they also occupied property and paid rates.

⁴ Thus in the parish of Ardleigh, in Essex, in 1795 the overseer’s account book notes “Relieved John Lilly on complaint by order, 5 s.” (Essex Record Office)

difference between the wage of the husband and this amount. In some cases the parish themselves decided on the scale of relief, in others the local magistrates fixed the norms. Thus in the parish of Little Rissington in 1832-3 the Rector notes that “The Magistrates scale of relief in this division is thus regulated:...”⁵ The need to meet the subsistence wage for each parish meant that the parish officers would encourage employers to hire married men with families in preference to single men or married men without children. They would also encourage employers to allocate extra earning opportunities to married workers.

By the early nineteenth century, large numbers of workers in many parishes were receiving some wage subsidy under the poor law. Thus in 81 out of 261 rural parishes surveyed in 1832-3 the subsistence level set for a family with three young children was greater than or equal to the non-harvest wage level for farm laborers. In Stradbrooke in Suffolk, for example, a man with a family of 3 children was entitled to 12.25 s. per week, while the weekly wage of farm workers was 8 s.⁶ Workers with families in many parishes thus effectively faced a 100% marginal tax rate. For these workers the gains from extra effort at work were small, as were the costs of being fired for not performing well.

Although parishes were required to provide subsistence, they had flexibility in how this was provided. Some of the poor, typically the old, the infirm, and children, were accommodated in Poor Houses. But the great majority were supported in their own homes with weekly stipends and rent and clothing subsidies.

By the early nineteenth century a substantial fraction of the population was in receipt of relief at some point in the year. Official statistics suggest that 8.8% of the population in 1813-15

⁵ Similarly in Wellesbourn Mountford in Warwick the overseer noted that “The Magistrates order each family 2s. per head a week; consequently character is not considered.” PP, 1834c, p. 554b.

⁶ At other localities the prevailing wage was much above the subsistence level. Thus in Ash next Sandwich in Kent a family of 5 was entitled to 9 s. per week, while the prevailing wage was 14.25 s. per week.

received some poor relief. But in the rural areas of the south the fraction of the population receiving relief was higher: 13% or more in these years. And these official figures may themselves underestimate the fraction of families who benefited in some way from the relief system. Thus in Ardleigh in Essex where we have detailed poor relief expenditures and population figures for 1821-1823 377 people, 28% of the population were in families in regular receipt of relief in 1823. In addition at least 103 able bodied men out of a total of 460 males aged 15-59, or 22%, received unemployment payments at some point in the year 1821.⁷

The old poor law was argued by the Poor Law Commission to have three pernicious effects.

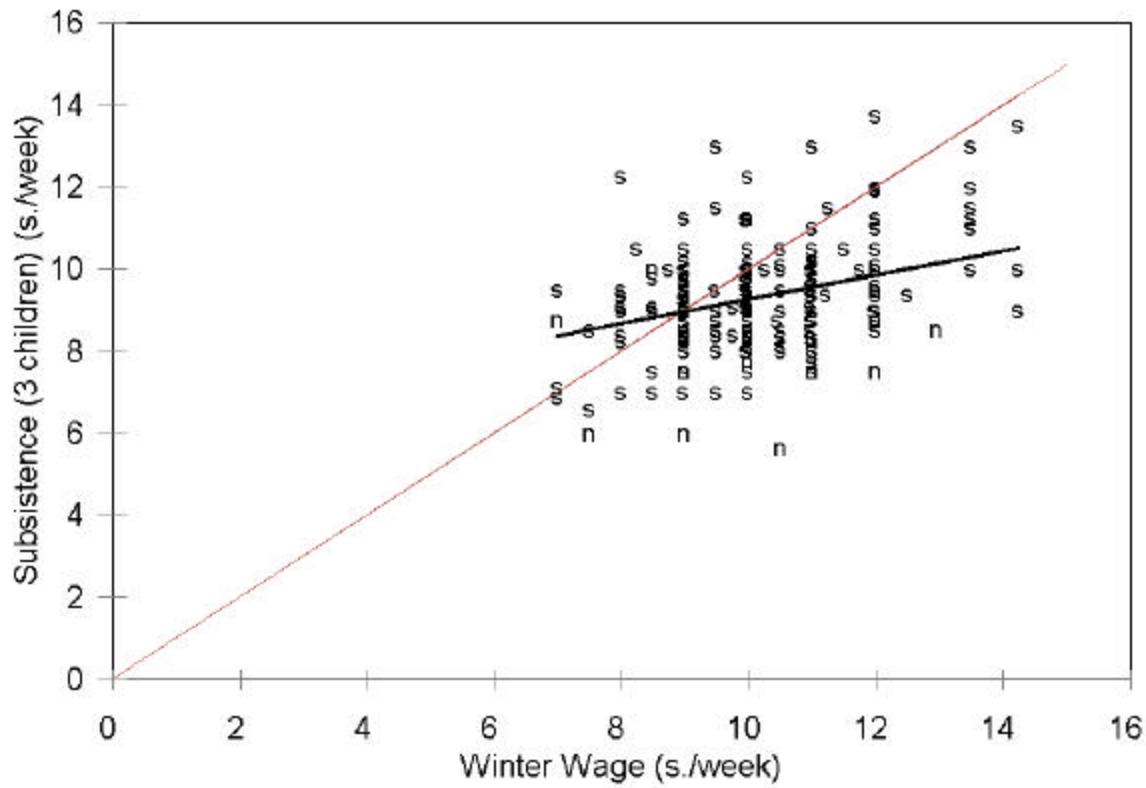
Reduced Work Incentives

By setting a subsistence level of income through magistrates in a way that covered a whole group of parishes, the poor law allegedly destroyed the incentive of workers to work hard at work, and to seek out employment if they were unemployed. In a parish where the market wage rate for a worker was below the guaranteed minimum, the worker faced effectively a 100% marginal tax rate.

Figure 1 shows for 261 parishes or townships in 1832-3 both the reported weekly wage in winter for an adult male in agriculture, and the level of income at which the parish would start supporting a family of husband, wife and 3 young children. Parishes and townships in the south of England are indicated by an “s” those in the north by an “n.” As can be seen in a large number of parishes, roughly a quarter of the sample, a father of 3 would have his wage subsidized out of the poor rates in winter.

⁷ Essex Record Office, D/P 263/12/7-8.

Figure 1: Winter Wages versus the Subsistence Allowance, 1832-3



Note: “s” indicates a parish in the south of England, “n” a parish in the north. As can be seen at a given wage level parishes in the south set a higher subsistence standard than those in the North.

The finding that in some parishes the subsistence minimum was much higher than the wage paid to workers in the market in the winter is surprising. If incentive problems were significant farmers setting wages would not just blindly set them below the mandated level. Thus we would expect that in a parish where the market clearing wage was below subsistence, the farmers would have to set the wage enough above subsistence for most of the year as to restore incentives for the majority of workers.

But consider a parish where labor demand in the winter was such that the marginal product of labor was 7/-, which was the market wage rate. If the magistrates defined subsistence as 8/- for a family of 5, then some of the workers now have little incentive to labor well. But single workers, or those with older children, or few children will still have some incentive. Suppose a farmer employs N workers and some fraction of them θ receive the subsidy of 1/-. If he or she raises the wage to all workers to 9/- to restore incentives the cost will be $2N$. If instead the farmer keeps the wage as before then this imposes an indirect cost through higher poor rates to the farmer of $2t\theta N$, where t is the fraction of the poor rate bill paid by the farmer. The net monetary cost of raising wages to restore incentives per worker is $(1-t\theta)$ times the additional wage bill. As long as the efficiency cost from reduced labor incentives is less than this the farmer will not find it profitable to raise wages for the work force as a whole. Thus a transfer of £1 to workers in poor relief payments can result in a cost that greatly exceeds £1 in reduced labor efficiency without inducing farmers to raise wages. Thus even though paying low wages implies that many workers have little incentive to perform well, it saves on the farmer's labor costs.⁸ Farmers may find it individually more profitable not to respond with higher wages, even though

⁸ George Boyer in a somewhat similar spirit has argued that farmers will choose to lay off workers in the slack season and have them maintained by the poor rate as a way of minimizing the cost of providing workers a given level of income per year. He assumes, however, that there is only one labor hiring farmer in each parish, that employed workers receive no relief, and that the local parish chooses the level of relief.

collectively it might be in their interests to raise the wages. The level of t will depend on how many farmers hire labor in the parish, and on what fraction of poor rates are paid by non labor hiring property owners such as the owners of the tithe and the occupiers of the housing stock. In some parishes in 1842 the tithe represented as much as 25-40% of the property income. But the tithe owner generally did not employ labor. Thus in such a parish for every \$1 of subsidy paid to his workers by the poor rate the farmers as a whole would only have to pay \$0.75 to \$0.60. Similarly in some parishes house property also represented a significant share of property income, where again house owners would employ little of the adult male labor. Thus each farmer in a parish deciding what level to set wages given the outside forces setting the subsistence wage would have to balance the incentive effects of setting wages below the subsistence level with the gains from getting others to then share the burden of wages.

Reduced Labor Mobility

Second, since workers were guaranteed a subsistence income in their place of birth they had reduced incentives to bear the costs and hazards of moving in response to wage differentials. Thus, the poor relief system was alleged to create a misallocation of labor in the economy – slowing migration from the low wage rural parishes to the higher wage urban areas, and consequently driving down rural wages.

Reduced Investment

Finally, the Old Poor Law should have reduced landowners' incentive to invest capital in land improvement. Although the poor relief levels were set by the magistrates, they were paid out of parish taxes that were assessed on occupiers of housing and farmland according to the estimated rental value of the property. While land value was partly determined by soil fertility, it was also affected by investments in farmhouses, buildings, roads, fences and drainage systems.

The tax rate on property under the Old Poor Law was sometimes as high as 40% in rural parishes. In these parishes the required return on investments in land improvement would be correspondingly greater.⁹ Thus the Old Poor Law reduced labor demand by discouraging investment.

The 1834 Reform

Poor Law Amendment Act of 1834 sought to radically reform the system. The safety net, the legal right to relief, was maintained, but now able-bodied applicants for relief were expected to enter a workhouse to receive it. In the workhouse, the conditions were deliberately planned to be wholesome but monotonous and confining. This was the so-called “Workhouse Test.” There was to be no payment to relief to those living independently or as a subsidy to wages, except on a temporary basis in the case of illness. It was known that indoor relief was more expensive than outdoor, but the hope was that the new regime would discourage all but the truly needy from applying. Workers would instead migrate in search of work, limit fertility (through later age of marriage), or just make do with what the market offered.

To ensure compliance with the reform objectives at the local level parishes were organized into unions, where the decision about who was entitled to relief, and how much relief to provide, was now to lie with the Board of Guardians of the union. The Board of Guardians was composed on the magistrates resident in the Union, along with an elected representative from each parish. In the election for the guardians, however, large occupiers and large landowners were given more votes. Table 1 summarizes the formal characteristics of the Old Poor Law and New Poor Law regimes.

⁹ Another cost that contemporaries focused on was the alleged effects of the system in increasing the fertility of the poor. Since each additional child increased the poor relief allocation to the family the costs of fertility to poor

Table 1: Characteristics of the Unreformed and Reformed System

Characteristic	Old Poor Law (1796-1834)	New Poor Law (1834-1864)
Who gets relief?	Everyone is legally entitled to subsistence.	Everyone is legally entitled to subsistence.
Who pays for the poor?	Land and house occupiers in the parish of residence	Land and house occupiers in the parish of residence.
Who sets the subsistence rates?	Magistrates for a group of parishes in a petty session or for the whole county in the quarter session.	Board of Guardians for parishes grouped into a union.
Who controls local administration of relief?	Land and house occupiers.	Land and house owners . Land and house occupiers.
What are the allowed forms of relief to the able bodied?	Relief in poor house or workhouse. Unemployment pay. Wage subsidies to the employed. Parish employment.	Relief in workhouse.

households were thereby reduced.

The Effects of the 1834 Reforms on Poor Relief Expenditures

Though the 1834 reform was supposed to end all outdoor relief, there has been debate about how strictly it was actually applied. Local administration of poor relief still lay with the ratepayers and land owners of each parish. While very few able bodied males were listed as receiving unemployment relief or allowances in aid of wages in the early 1840s the numbers of adult males relieved outdoors on account of “illness” was significant, and Digby (1975) argued that this was just a disguised way of continuing outdoor unemployment relief. Apfel and Dunkley (1985), however, argue that in at least some counties such as Bedford the reforms were vigorously applied so that expenditures and particularly payments to the able-bodied fell sharply.

To check that the reforms did lead to cuts, and to examine the pattern of cuts, we have assembled for a sample of 1,873 parishes and townships data on poor payments per person in the population in the five years 1829-33, just before the reform, and in the four years 1838-41 just after the reform. This data is summarized in figure 2 by the average level of payments per head in 1831-3. We looked at what happens to payments per person in 1838-41 and 1829-30 as a function of how much was being paid per head in the base year.

In the years before the reform there is a strong correlation between the places with high payments in 1831-3 and those with high payments on average in the two preceding years. The payment pattern across parishes is stable. After the reform the payment pattern is unchanged for parishes with payments per head of population of less than £0.60. For these parishes average payments per head went from £0.406 to £0.411. But in the higher paying parishes there is a clear pattern of cuts. The higher the payment the greater the proportionate cut. In our sample parishes paying more than £0.60 per year saw a decline in average payments per head from £0.972 to £0.684. Thus the reforms were imposing real cuts, and they were imposing them in the areas of

the higher relief payments per head.¹⁰ Our interpretation is that in areas of low payments the relief payments before 1834 were principally to the elderly and orphans, and were not affected by the strictures of the New Poor Law. The areas of high payments per capita were those where the payments were subsidies to wages, and thus were cut. The effects found in aggregate also show up if we divide the data into three regions, the North, the South West and the South East.

We can explain 58% of the variance in the change in poor payments per head by parish or township between 1831-3 and 1838-41 (*DPPN*) with the simple regression specification

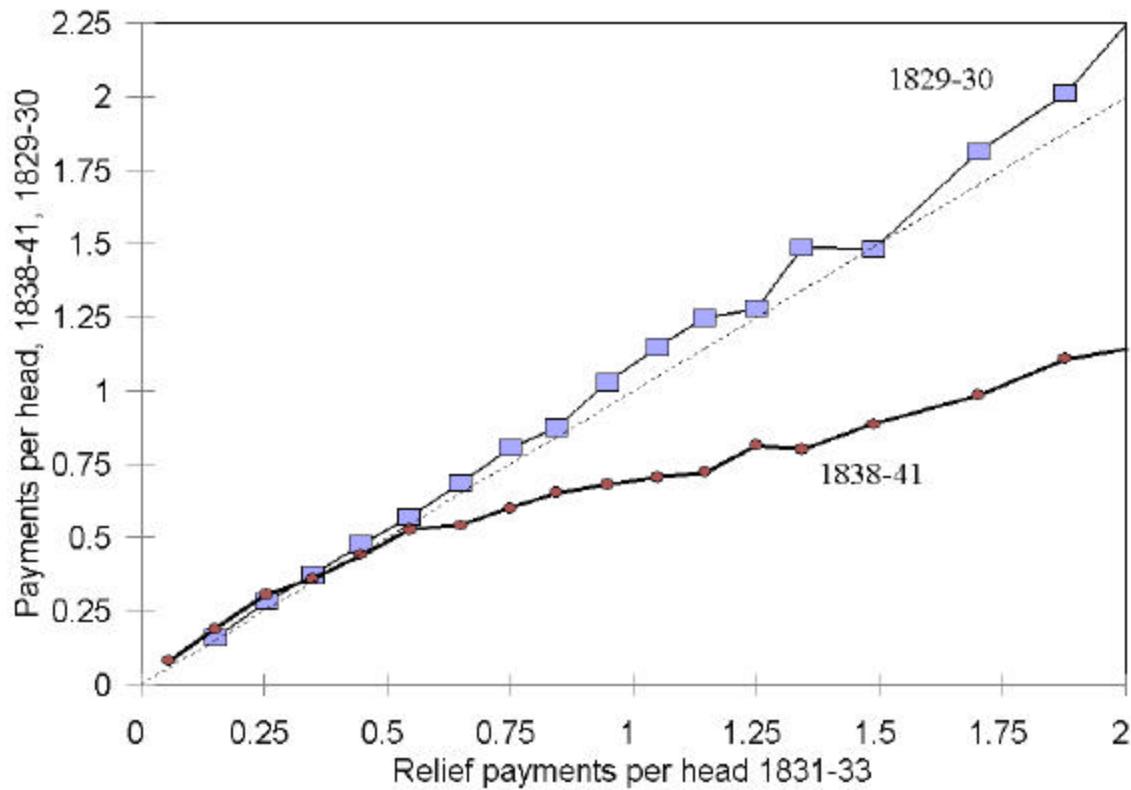
$$\Delta PPN = \mathbf{a} + \mathbf{b}_1 PPN_{31-33} + \mathbf{b}_2 DHIGH \bullet (PPN_{31-33} - 0.6) + \mathbf{e} ,$$

where $PPN_{1831-33}$ is the poor relief payments per resident in 1831-33, and $DHIGH$ is an indicator variable which is 1 when $PPN_{1831-33} = 0.6$. In contrast if we look at the changes under the old poor law regime between 1829-30 and 1831-33, then the same specification explains just 8% of the variance. Thus the regime change alone explains at least half of the changes in poor payments per head between 1831-3 and 1838-41.¹¹

¹⁰ We include the 1829-30 data to show that the relationship between the payments in 1831-3 and 1838-41 cannot be just the result of larger random components in the higher paying parishes in 1831-3. If so the curve relating 1829-30 payments to 1838-41 would have the same shape.

¹¹ Addition of other variables such as indicator variables for local effects, for urban versus rural parishes, and for the poor law the parish belongs to can raise the R^2 to 0.64. But this implies that these other elements explain only a very small share of the variance.

Figure 2: The effects of the New Poor Law by the earlier level of payments per head



In the tests of the effects of the poor law reform below we will be using as a dependent variable poor payments per acre in rural parishes, defined as those with the majority of workers employed in agriculture. Changes in poor payments per acre in rural parishes are even more predictable than changes in poor payments per head. If we translate the equation above into poor payments per acre by multiplying every term by people per acre in 1831 then we can explain 70% of the variance in changes in poor payments per acre between 1831-3 and 1838-41.¹²

In recent years there has been dissent from the Poor Law Commission's analysis that the Old Poor Law caused significant social costs. The earlier one led by Mark Blaug (Blaug 1963, 1964) argued that poor relief payments under the Old Poor Law were too small to induce change workers' incentives. The relief payments mainly supported the elderly, and the infirm with little effect on work effort, migration, employment participation or fertility for workers. The Poor Law did involve a transfer from landowners to the poor, but without additional efficiency costs.

The second criticism, developed by George Boyer, has argued further that the Old Poor Law did not even transfer income from property owners to the poor. It persisted because rural landlords were gaining from the payments. Boyer pointed out the surprising geographic variation in relief payments under the Old Poor Law. Payments per head of population were greater in rural parishes than in urban, and they were greater in the grain growing South East than in the equally poor but pastoral South West. The reason for this, argues Boyer, was that labor-hiring farmers used poor relief to supplement wages. Such farmers operated within a competitive labor market, and needed to pay enough to retain adequate labor in the countryside. By laying off workers when labor demand was low in winter, and having them supported by the parish, they reduced net labor costs since the occupiers of the houses and the tithe owners paid some of the poor relief. This device is only profitable if there is a period where the marginal

¹² Again looking at the change from 1829-30 to 1831-33 the same variables explain only 2% of the variance.

product of farm workers is very low. This explains more extensive poor relief payments in the grain areas where labor demand was much more peaked in the summer.

Since poor relief payments were being used largely to substitute for wages they would also have no effect on labor migration between country and town. Boyer did find that the poor law enhanced fertility, however.

Boyer's primary empirical support for his theory are data from the Poor Law Commission on a cross section of parishes in 1832-3. He shows that parishes with higher poor law payments were those with more seasonal labor demands, and also those with a larger proportion of ratepayers who were farmers. However, as is shown below in Table 1 even entirely urban parishes in the South East paid more per person in poor payments in 1831-3 than urban parishes in the west and north. Poor payments per head in the most urban parishes, those with fewer than one male in 10 employed in agriculture in 1831 followed the same regional pattern as those in the most rural parishes, those with more than 8 in 10 males employed in agriculture. This evidence starkly conflicts with Boyer's particular political economy story.

Table 2: Urban and Rural Relief Payments by Region

Region	Most Urban	Most Urban	Most Rural	Most Rural
	Number of Parishes	Poor Payments per head	Number of Parishes	Poor Payments per head
South East	24	£0.54	401	£0.98
South West	34	£0.28	116	£0.48
North	21	£0.16	146	£0.53

Relief Reform and Land Rents

The basic idea of the project is to measure the social cost of the poor law by the effect of poor law reforms on land rents in rural parishes. The basic equation we will estimate is:

$$\Delta rent_i = \Delta \mathbf{a} + \mathbf{b} \Delta \frac{tax_i}{acre_i} + \sum_j \mathbf{g}_j CONTROLS_{ji} + \Delta \mathbf{e}_i \quad (1)$$

where $Drent$ is the change in rent per acre in rural parishes between 1824-34 and 1842, $D(tax/acre)$ is the change in poor rate taxes per acre in the same interval, and $CONTROLS_j$ are a set of j control variables. The estimated value of β will tell us for every £1 of relief payments avoided by the reform what was the private gain to land owners. Each of the three theories of the effects of the poor relief system has a different implication for the value of β . To see this note that the reduced form above omits two other variables that are important in determining rural rents, the wages paid to workers, and the amount of capital invested in land improvement. Thus the full specification would be

$$\Delta rent_i = \Delta \mathbf{a} + \Delta \frac{tax_i}{acre_i} + \mathbf{b}_1 \Delta wage_i + \mathbf{b}_2 \Delta K_i + \sum_j \mathbf{g}_j CONTROLS_{ji} + \Delta \mathbf{e}_i \quad (2)$$

where K is the capital invested per acre, and $wage$ the wage cost per effective unit of labor. If poor payments are just a transfer to the needy from landowners, with no effects on investment, wages, or labor efficiency, then $Dwage$ and DK will be zero, and the estimate of β from the reduced form will be -1 . This is the result implied by Blaug's views.

The Poor Law Commission interpretation, however, was that poor relief was reducing investment in land improvement by driving up the cost of capital, and raising the effective cost of labor. In this case when we estimate the reduced form we will find $\beta < -1$. For in the reduced form it will pick up also gains in rent after reform from the lower real labor cost and the greater investment in land improvement.¹³

On Boyer's interpretation, where poor relief payments were mainly a replacement for wages, the reduced form estimate of β will actually be positive. For if we assume that wages in each rural parish are set by the wage level in the nearest urban community, then the total of poor relief plus wage payments in each parish will not change after the reform. Thus for every £1 of relief payments avoided wages have to be supplemented by a £1. But since others were paying some of the taxes landowners end up paying an increased wage bill, and hence land rents fall. The system persisted for so long, argues Boyer, because it was in landowners' interests in rural areas where they controlled poor relief policy.

The reduced form estimation above will give a biased estimate of the total effects of poor relief reforms on land rents if the changes in poor relief payments were partially endogenous. Suppose, for example, poor relief payments were cut more in 1831-33 to 1838-41 in parishes close to growing urban areas because of a more buoyant demand for labor. The growing urban areas would also increase land rents. In this case the estimated value of β will be biased downwards from the true value. We can control for this by including in the estimation controls for the nature of parishes in 1833. But there is always the fear of some unknown endogenous source of changes in poor rates per acre. To rule out this possibility we will also use

¹³ If the Poor Law reform led farmers to change the day wage for workers it will complicate the interpretation of β . Suppose day wages fell when poor relief was cut, because they were kept artificially high by the need to provide workers with incentives to labor well. Then some of the rent gain from the reform would just be a transfer from workers. In this case β will set an upper bound on the social cost.

instrumental variables where, based on the results above, we use as an instrument for cuts in poor payments per acre:

$$DHIGH \bullet (PPN_{31-33} - 0.6) \bullet DEN_{31}$$

The correlation of this instrument with $\Delta(\text{tax/acre})$ is 0.83, which is very good. Since the instrument depends only on features of the parish before the cuts in welfare payments it is purged of any endogenous connection between changes in rents and changes in poor rate payments in a parish after 1831-3.

Reform and Labor Allocation

The estimation above does not deal with the second cost of the Old Poor Law alleged by the Poor Law Commission, delaying migration from country to city. Boyer and Blaug, of course, both argue that the system had no effects on migration. In Boyer's view the payment cuts after 1834 were replaced by farmers offering more winter employment. Boyer (1990) following the method of Williamson (1987) also shows that even if poor relief did raise incomes in rural parishes above the market clearing level, the net loss to the economy from this misallocation of labor would have been modest.¹⁴

If the Poor Law Report is correct, however, there should have been a decline in the relative population of rural parishes which had the largest cuts in poor relief payments between 1831 and 1841. To test for this we estimate the parameters of the expression

¹⁴ Though the loss as a fraction of poor payments would have been greater.

$$\left(\frac{N_{41} - N_{31}}{N_{31}} \right)_i = a + b\Delta PPN_i + \sum_j c_j \text{CONTROLS}_{ji} + e_i \quad (3)$$

where N_{31} and N_{41} are the parish populations in 1831 and 1841, and PPN are poor payments per head of population. If Boyer or Blaug are correct b should be zero. If, however, the Old Poor Law was supplementing the wages of the able bodied above the market wage rate in the countryside, rural parishes where the Poor Law Reform saw large payment reductions will experience population losses. In the *CONTROL* variables will be included soil type, the percentage growth of population from 1821 to 1831, the population density in 1831, the fraction of labor in 1831 in agricultural employment and measures of parish location relative to urban centers.

As with the change in rents the issue of the exogeneity of ΔPPN again arises. Suppose parishes are subject to shocks in labor demand in a way not controlled for by the *CONTROL* variables. Then a parish which experienced a positive labor demand shock between 1833 and 1841 could see both a decline in relief payments per head and a larger than expected population relative to 1831. We will deal with this again by using an instrument for ΔPPN . In this case it is

$$DHIGH \bullet (PPN_{31-3} - 0.6)$$

The correlation of this instrument with ΔPPN is 0.71, which is again very good. Again since the instrument depends only on features of the parish before the cuts in welfare payments it is purged of any endogenous connection between changes in poor rate payments in a parish after 1831-3 and changes in population.

Data

Because of the intense public debate about reforming the poor law, the English collected a great deal of information about poor payments, population and occupations by parish in the years 1803-1855. Table 3 summarizes the printed data sources for 1820-1855.

For the tests outlined above we will measure farmland rents in 1842 from the tax valuations for this year. The rental value for properties let within 7 years of the assessment (i.e. 1835-42) was the contracted value. For properties on longer leases it was the assessed market value. Thus the land rents measured in 1842 all stem from the post reform period. To get rental values in the years before the reform we use data collected by Clark on newly formed rents on individual holdings. Table 4 summarizes the number of observations on these plots available by year from 1820 to 1834 and the number of parishes or townships the data is drawn from. For the years 1824-33 we also know poor payments per acre in all parishes. Though this information is for individual holdings it does correlate with the later 1842 estimates of the rental value of land in general in each parish. Thus if we regress the average rental value per acre of holdings in the years 1817-1835 ($rent_{17-35}$) in a sample of 538 rural parishes on the rental value per acre of the parish as a whole in 1842 ($rent_{42}$) the estimate is

$$rent_{17-35} = 0.894 + 0.667 rent_{42}$$
$$(.091) \quad (.064) \quad R^2 = 0.17$$

Hence we have information on poor rates and land rents for rural parishes for just after the reform, in 1841-1842, and for just before the reform in 1824-1833.

The 1831 census supplies information for each parish on the population, the number of resident farmers hiring labor, the number of resident farmers not hiring labor, and the numbers of agricultural laborers. We can thus identify rural parishes where most employment in 1831 was in agriculture. Clark formed a database for all the parishes of England giving the location of the parish, the soil and subsoil characteristics, and the enclosure history (based on Tate's work). This database can be augmented by the information on land use in the years 1838-45 from the Tithe Survey of England and Wales that has been coded by Kain and Prince. Thus we have a fairly rich set of variables to draw from to control for influences on rent movements other than taxes to pay for poor rates. We also have additional information for a subset of parishes. For example, the Poor Law Commission of 1832-4 sent out detailed questionnaires to parishes, and received about 1,000 responses detailing parish wages, numbers of poor and amounts allowed to the poor.

Table 3: The Available Published Data, 1821-1855

Information	Years	Places	Source
Total poor payments	1824-33, 1838-41, 1846, 1852, 1855	15,000	Parliamentary Papers
Rental Value of All Property	1815, 1842, 1855	15,000	Parliamentary Papers
Rental Value Land, Tithe etc	1842	15,000	Parliamentary Papers
Land Rents*	1820-1834	3,795	Charity Commission
Population, % female, % under 20	1821, 1831, 1841, 1851	15,000	1851 Census
Numbers of farmers, agricultural laborers	1831	15,000	1831 Census
Parish Area*	1841	15,000	1851 Census
Land Use	1838-45	5,078	Tithe Reports
Soil Type*	-	9,760	Kelly's Directories
Parish Location*	-	15,000	Ordnance Survey
Enclosure History*	1800-1842	15,000	Tate
Farm Wages, Subsistence Allowances	1832-3	940	Poor Law Report

Notes: The data marked * is available at www.ucdavis.econ.edu/~gclark.

Table 4: The Plot Rental Data from the Charity Commission Sources, 1820-1834

Year	Number of plots observed	Number of parishes observed	Total Poor Relief Payments, England (£. m.)
1820-3	3,019	891	6.18
1824-33	7,334	2,909	6.46
1834	324	82	5.53

Note: Bold indicates that for these years we also know total poor relief payments for each parish in this same year.

Preliminary Results

Table 5 shows the results of estimating equation (1) using Ordinary Least Squares and Instrumental Variables for a sample of about 10% of the available parishes with a variety of control variables. The dependent variable is the difference in rent per acre between farmland as a whole in a sample of rural parishes in seven counties and the average rental value per acre of plots of land in the same parishes in the years 1824-1834¹⁵. The point estimates are always that a cut in poor relief payments per acre are associated with a rise in rents. But when control variables are included the result is not statistically significant from 0. Since we only use a small sample of the available data here, however, the standard error of the estimated effect is what is important. Our results suggest that with all the data we should be able to estimate β to within 0.4 with 95% confidence. Thus we will be able to discriminate between the hypotheses that $\beta > 0$ (Boyer), $\beta = -1$ (Blaug) or $\beta > -1$ (Poor Law Commission).

¹⁵ On average the plots observed from before the reform cover 85 acres.

Table 5: Fixed Effects Estimate of the Effects of Poor Payments on Land Rental Values

Independent Variables	OLS	OLS	IV	IV
ΔPoor Expense/Acre (1838-41-1831-33)	-1.348 (.438)	-0.787 (.530)	-1.407 (.512)	-0.795 (.653)
Population per acre, 1831	-	0.369 (.365)	-	0.367 (.375)
Fraction of farm workers, 1831	-	0.280 (.334)	-	.279 (.338)
Six County dummies?	No	Yes	No	Yes
Number of parishes	268	268	268	268

In table 6 we report OLS and IV estimates of the parameters of equation (3). Population rose in the 1,498 predominantly rural parishes in our sample by an average of 8.5% in the 1830s, which is much less than for England as a whole so that most of them were experiencing significant out migration.¹⁶ The average poor payment per head in 1831-33 was £0.76, which represents more than 10% of the income of rural laboring families. With the OLS estimation there is a significant negative association between the change in poor relief payments per head and the population change. This is because parishes where poor payments per head fell saw

¹⁶ We excluded parishes where less than 50% of males were employed in agriculture in 1831, and where the population in 1831 was less than 50 people.

greater population growth. Thus the 15% of parishes which saw poor payments per head fall £0.50 or more had a population growth of 12% on average between 1831 and 1841, while the others had an average population growth of only 8%. But this association seems to come mainly from unobserved shocks on labor demand that both increase population and reduce poor relief payments. For with the instrumental variable estimation this association disappears. Poor payment cuts seem to have no association with population growth.

The standard error of the instrumental variables estimate is 0.0237. This implies that we can from this sample say with 95% confidence that a £0.5 cut in poor payments per head (about 7% of family incomes) caused less than a 1.7% decline in population. With the full set of data we will be able to reduce this standard error to about 0.008. At this level of precision we will be able to estimate the effects of a substantial cut in poor payments per head such as £0.50 on population change to within a 0.8% change with 95% confidence.

But on the basis of our limited sample we can report that the population movements after the reform of the Old Poor Law are inconsistent with the law having large efficiency effects through misallocation of labor. This result is consistent with Boyer's theory of the law, and also with the idea that poor relief was a transfer mainly to the truly indigent.

Table 6: Estimate of the Effects of Poor Payments on Population Changes, 1831-41

Independent Variables	OLS	OLS	IV	IV
ΔPoor Expense/Person	-0.1056** (.0137)	-0.1347** (.0152)	0.0037 (.0197)	-.0046 (.0237)
Population Density, 1831	-	-.093** (.038)	-	-.067 (.040)
Fraction agricultural, 1831	-	-.075* (.037)	-	-.052 (.038)
Population Growth, 1801-1831 ($N_{31} - N_{01}$)/ N_{01}	-	-.024 (.016)	-	-.034* (.016)
Six county dummies?	No	Yes	No	Yes
Number of Parishes	1,498	1,494	1,498	1,494

Note: * Statistically significant at the 5% level. ** Statistically significant at the 1% level.

The Political Economy of Poor Law Reform

It is early days yet. But our preliminary results indicate that both the Poor Law Commission analysis and that of Boyer are likely to be rejected. The Old Poor Law seems to have involved mainly a transfer of income to the indigent with little wider repercussions on labor performance, investment or labor mobility.

This raises a number of issues about the Political Economy of institutions and institutional change. The persistence of institutions such as the Old Poor Law, common field agriculture, usury laws, absolute monarchy, and the corn laws for hundreds of years despite their obvious inefficiency to later economists has been a key premise of the New Institutional Economics of Douglass North and others. They argue that economic growth depends on getting good institutions, but good institutions do not evolve quickly or naturally (see for example, North and Weingast (1988)). But it is much more difficult to find persistent institutional inefficiencies in England in the years before the Industrial Revolution than North and others would assume. The reason these institutions had little social cost even though their formal rules seemed ripe to create inefficiencies was that there was enough flexibility within the institution that they evolved spontaneously in the direction of greater efficiency. Thus truly common fields in agriculture would have led to all kinds of problems. But all across England these common rights evolved into rights of access to common fields that were fixed in quantity, and a tradable commodity. The land that retained truly common access was that which was so infertile that it had little economic value (Clark (1998b)). By the eighteenth century common rights in England were largely private rights that the poor had sold to the propertied classes in villages.

We suspect that a similar process occurred under the Old Poor Law where within the legal framework forms emerged that mitigated the efficiency costs. The right to a subsistence

income that exceeded the market wage for married workers, for example, would have been destructive of labor incentives. But we know that in at least some parishes the overseers correctly perceived that to avoid this problem child and other family allowances had to be paid to laborers independent of their actual earnings. Similarly the creation of a subsistence guarantee would have impeded migration to towns. But we know overseers were often in the business of paying people to migrate to towns, or even to other countries. They could easily capitalize the future burden a family was likely to impose and calculate how much it would save to encourage them to leave. So if we do indeed find that the larger results bear out our preliminary findings that the Old Poor Law was not an inefficient institution we plan to explore further with the archival sources the adaptations that avoided inefficiencies.

We will still be left with one puzzle, however. If the system was not inefficient why was there forty years of intense debate on the operation of the Old Poor Laws, and why was there the social convulsion of the Poor Law Reform Act? Why also did the reform mandate what individual parishes could themselves have imposed – relief only in a work-house? As we saw even before poor law reform many parishes like Ardleigh had workhouses, though these were reserved mainly for the elderly and for infants. Indeed the *Gilbert Act* of 1782 allowed parishes to voluntarily form together into unions that were very similar in form to those mandated by the 1834 Act. Other parishes combined by virtue of special Acts of Parliament. Yet by 1834 only 10% of the population was covered by such earlier unions (Driver (1993), 42-46).

Our results suggest that the beneficiaries from the reform were largely rural landowners in the South East of England. Rural land in Britain in the nineteenth century was heavily concentrated within a small property owning class. Yet the Reform Act of 1832 which preceded the Poor Law Reform of 1834 involved some erosion of the political power of this class in favor

of the urban interests of the North (Quinault (1993)). Why would the newly empowered urban interests push through a reform that mainly served, as far as we can estimate, to benefit the declining rural interests? This a matter for further exploration, but if we can establish here that contrary to Boyer the landowning class actually gained from the reform, we shall frame this Political Economy question in a very different way.

BIBLIOGRAPHY

Official Sources

Parliamentary Papers (1803-4), Returns Relative to the Expense and Maintenance of the Poor in England Vol. XIII.

Parliamentary Papers (1818), Returns Relative to the Expense and Maintenance of the Poor in England Vol. XIX.

Parliamentary Papers (1830-1), Money Expended for the Relief of the Poor, 1825-9. Vol. XI, p. 217.

Parliamentary Papers (1834), Report of the Poor Law Commission. Appendix B. 1. Part II. Vol. XXXI.

Parliamentary Papers (1835), Money Expended for the Maintenance of the Poor, 1830-4. Vol. XLVII, pp. 185-400.

Parliamentary Papers (1847-8), Amount Expended for the Relief and Maintenance of the Poor Vol. LIII, p. 181.

Parliamentary Papers (1852-3), Number of Inhabitants, 1801-51. Volume 1 with Census Report. Vol. LXXXV.

Parliamentary Papers (1852-3), Number of Inhabitants, 1801-51. Volume 2. Vol. LXXXVI.

Parliamentary Papers (1854), Return of the Rateable Value of Property Assessed to the Poor Rate in 1851-2 etc. Vol. LVI, p. 1.

Parliamentary Papers (1861), Return of the Gross Estimated Rental of Property etc. Vol. LIV, p. 1.

Other Sources

Apfel, William and Peter Dunkley. 1985. "English Rural Society and the New Poor Law: Bedfordshire, 1834-1847." *Social History*, 10 (1): 37-68.

Blaug, Mark. 1963. "The Myth of the Old Poor Law and the Making of the New" *Journal of Economic History*, 23: 151-184.

Blaug, Mark. 1964. "The Poor Law Report Reexamined" *Journal of Economic History*, 24: 229-245.

Boyer, George R. 1990. *An Economic History of the English Poor Law, 1750-1850*. Cambridge: Cambridge University Press.

Clark, Gregory. 1999. "Farm Wages and Living Standards in the Industrial Revolution. England, 1670-1850."

Digby, Ann. 1975. "The Labour Market and the Continuity of Social Policy after 1834: The Case of the Eastern Counties." *Economic History Review*, 28 (1): 69-83.

Eastwood, David. *Governing Rural England: Tradition and Transformation in Local Government, 1780-1840*. Oxford: Clarendon Press, 1994.

Evans, Eric. 1976. *The Contentious Tithe: the Tithe Problem and English Agriculture, 1750-1850*. London: Routledge and Kegan Paul.

Kain, Roger J. P. and Hugh C. Prince. 1985. *The Tithe Surveys of England and Wales*. Cambridge: Cambridge University Press.

McCloskey, Donald. 1973. "New Perspectives on the Old Poor Law." *Explorations in Economic History* 10: 419-436.

Moffit, Robert. 1992. "Incentive Effects of the U.S. Welfare System: A Review," *Journal of Economic Literature*, 30 (March, 1992), 1-61.

Song, Byung Khun. 1998. "Landed Interest, Local Government, and the Labour Market in England, 1750-1850." *Economic History Review*, 51(3): 465-488

Tate, W. E. 1978. *A Domesday of English Enclosure Acts and Awards*. Ed. Michael Turner. Reading: The Library, University of Reading.

Williamson, Jeffrey. 1987. "Did English Factor Markets Fail During the Industrial Revolution?" *Oxford Economic Papers*, 39: 641-678