

# Inequality and Poor Law Policy in Late Victorian England

Jonathan Chapman\*

August 25, 2018

PRELIMINARY: PLEASE DO NOT CITE.

## Abstract

This paper tests the relationship between inequality and the generosity of poor relief in England and Wales between 1860 and 1900. Poor relief served as the main form of social insurance at that time and, in contrast to modern day welfare programs, was provided by elected local governments. As a result, policy varied substantially across the country in terms of both the magnitude and nature of the support provided. The paper uses a new dataset of poor law policy at district level to analyze that variation, including information on the amount of spending and the type of support provided. The results show a strong negative relationship between wage inequality and the extent of conditionality—the insistence on relief being provided inside the workhouse—attached to poor relief. Inequality within the elite, in contrast, is associated with more conditionality and less generous welfare expenditure. Removing institutional advantages that benefited the elite does not appear to have reduced the effect of elite inequality, suggesting that the results are not explained by a classic median voter model.

---

\*Division of Social Science, New York University Abu Dhabi. I thank Samantha Myers for helpful comments. I also thank participants in seminars at Caltech, the University of Essex, and the Annual Meetings of the European Political Science Association and the Economic Business History Society. e-mail: jchapman@nyu.edu.

# 1 Introduction

Classic models of redistribution within political science suggest that higher inequality will be associated with higher tax revenue and greater redistribution (Benabou and Ok, 2001; Meltzer and Richard, 1981). Yet empirically testing this relationship is complicated by the fact that most policy is undertaken at a national level. As a result many studies are limited to cross-country regressions which struggle to distinguish different institutional factors that may effect support for welfare policy (Milanovic, 2000).

A solution is offered by the fact that in the past redistributive policy was decided by local governments operating under a common national framework. In this study I take such an approach by analyzing the growth of the welfare state—the New Poor Law—in Britain between 1860 and 1900. Prior to the advent of unemployment insurance in 1911, the Poor Law was the main method through which government provided support for the destitute, including the sick, the old-aged and the unemployed. But in contrast to the later interventions by national government, poor law policy was determined at a local level. Poor law spending and attitudes were governed by locally elected bodies which, while constrained by national legislation, held a great degree of discretion over how to implement poor law policy in their district. As a result the generosity of poor law spending varied considerably across the country.

The British context provides an empirical setting in which both cultural factors and political structures can be considered as common across observational units, allowing the effect between inequality and redistribution to be distinguished from the effects on other types of government spending. To do so, I construct a new dataset to measure poor law policy across England and Wales at local level. I then link the poor law data to 100% census samples and use those samples to construct two new measures of inequality. The first is a measure of wage inequality, and is constructed using estimates of occupational wages

from Williamson (1985). The second measures inequality within the elite using the number of servants in households—a characteristic used by contemporaries to identify social class (Booth, 1903).

I carry out panel regressions to analyze the relationship between inequality and two measures of poor law policy. First I consider the relationship between inequality and policy conditionality—the extent to which conditions were attached to the receipt of relief. This element of policy is measured by the insistence on sending welfare recipients to the workhouse to receive support. Second, I consider the effect on the generosity of expenditure—measured as the average level of spending on each pauper relieved outside the workhouse. In both cases, I find that higher wage inequality is associated with more generous welfare policy—consistent with the predictions of the Meltzer-Richard model (Meltzer and Richard, 1981). Inequality within the elite, on the other hand, is associated with harsher policy along both dimensions.

One possible explanation for the latter result is that the very wealthy were able to affect policy through two institutional advantages: the presence of unelected officials on the boards determining policy, and the presence of a graduated voting system. To test this hypothesis, I examine whether the relationship with the inequality variables changed when these undemocratic features were removed in 1894 reforms. However, I find no evidence of a dwindling of elite influence after this date. More work remains, therefore, to pin down the mechanism through which the elite were able to influence policy decisions.

## 1.1 Related Literature

A large historical literature has examined the Poor Law, but most has focused on studies of a small sample of Poor Law Unions or parishes, with emphasis on understanding local practices and particularly the degree of continuity (or otherwise) between the 1834 New Poor Law and the previous Old Poor Law. The most consequential work within the economic history

literature is Boyer (2006), who explains the system of out-relief before 1850 as a method through which employers could maintain a surplus labor force in off seasons or industrial downturns.

Small portions of the dataset used in this paper have been used in prior work. MacKinnon (1987) uses spending and pauperism data from the 1868/69 cross-section to analyze the effect of the workhouse test on pauperism and poor relief costs. She finds evidence that the workhouse test did reduce the extent of pauperism as a percentage of the population in all regions except the North-West. MacKinnon (1986) uses annual data at the level of census division, finding that economic factors were important in driving the level of indoor pauperism. Southall (1991) analyzes trends in the level of pauperism at county-level and at the level of union-level within a selection of counties between 1860 and 1872. More recently, Boyer and Schmidle (2009) examine the correlates of elderly pauperism rates using a dataset of 585 unions in 1892 collected by Charles Booth. Boyer and Hatton (2002) use national level poor law statistics for able-bodied males to construct a measure of unemployment rates of unskilled laborers between 1870 and 1913.

## 2 Historical Background

In this section I introduce the key features of the operation of the Poor Law in the second half of the nineteenth century. In doing so, I focus on the degree to which the median voter model is appropriate to this historical context, taking into account both the institutional framework and the interests of voters.

The first sub-section introduces the type of support provided through the Poor Law and discusses the citizens who would be likely to benefit from poor relief. Next I discuss the governance and institutional framework of the authorities that controlled poor relief in the nineteenth century, before moving onto the funding of poor relief and, finally, the

key dimensions of poor law policy that will form the dependent variables in the empirical analysis.

## 2.1 Poor Relief as Social Insurance

The Poor Law provided the main form of social insurance in Britain for several centuries and, as I argue in this section, would have affected a broad part of the population. Established in the Elizabethan era, the law introduced the requirement that the local parish provided for any citizens that were unable to work (the old, sick and children) and work for those that could not find it. While the rich would not need this support, most other families would have limited savings and hence could easily fall into needing relief due to temporary employment or sickness. Further, before 1900 poor relief provided the main support for those too old to work—meaning that over the lifetime the likelihood of a citizen requiring support was high.

The requirement that support be provided to all destitute citizens meant that poor relief served a broad range of social functions. While often thought of as a form of unemployment benefit, poor relief was also used to support the temporarily sick, the mentally ill, the permanently disabled, pregnant women, the elderly and orphaned children. In fact, the available evidence suggests that relatively few paupers were able to work. Less than a third of paupers were men—the clearest group of wage earners—while one-third were classified as children. Even within the adult categories, most paupers were classified as “not-able-bodied” indicating some form of temporary or permanent physical affliction. Further, many of those classified as “able-bodied” were also temporarily in ill health (MacKinnon, 1988).<sup>1</sup>

The breadth of support provided beyond relief for the unemployed is illustrated in Figure 1. The top line in the figure shows the proportion of the entire adult population on poor relief in each year, while the bottom shows the number of able-bodied men as a percentage

---

<sup>1</sup>See Appendix A for more discussion of these categories and a detailed breakdown of the classification of paupers in 1865 and 1895.

of the male population aged 15-64. This latter category should be seen as an upper bound on the percentage of men receiving unemployment support since many of this category were temporarily sick.<sup>2</sup> It is clear that support to mitigate temporary spells of unemployment was only a relatively small part of the role of poor relief—in fact, able-bodied males accounted for only around 5% of the total stock of paupers.

Although the number of people receiving poor relief at any one time was relatively small, over a life time a significant proportion of the population would require support. The share of adults receiving any support on January 1 was around 5% of the adult male population in 1860.<sup>3</sup> This proportion fell to around 3% in 1900 following renewed attempts to reduce the provision of poor relief outside the workhouse in the early 1870s (the “Crusade against Outrelief”).<sup>4</sup> These figures imply that, actually, a substantial proportion of the population received support across the year. MacKinnon (1988) presents estimates from the 1890s indicating that actually the proportion of paupers receiving relief was between 1.33 (for female outdoor paupers over 65) and 4.78 (for male outdoor paupers under 65) times higher than these stock figures. The overall proportion then receiving poor relief in each year was likely to have been over 10%. Further, she argues, these ratios are likely to be an underestimate for the early part of our period, when poor relief was more seasonal.

The share of the population receiving poor relief at some point in their life would be even larger than these figures, because poor relief was a crucial form of support for elderly citizens that were no longer able to work. On a single date in 1890, 13.4% of those 60 and older received poor relief, increasing to 30% for those 80 and over. Over a 1 year period, 30% of those over 60 were in receipt of poor relief (Boyer and Schmidle, 2009). Voters taking a

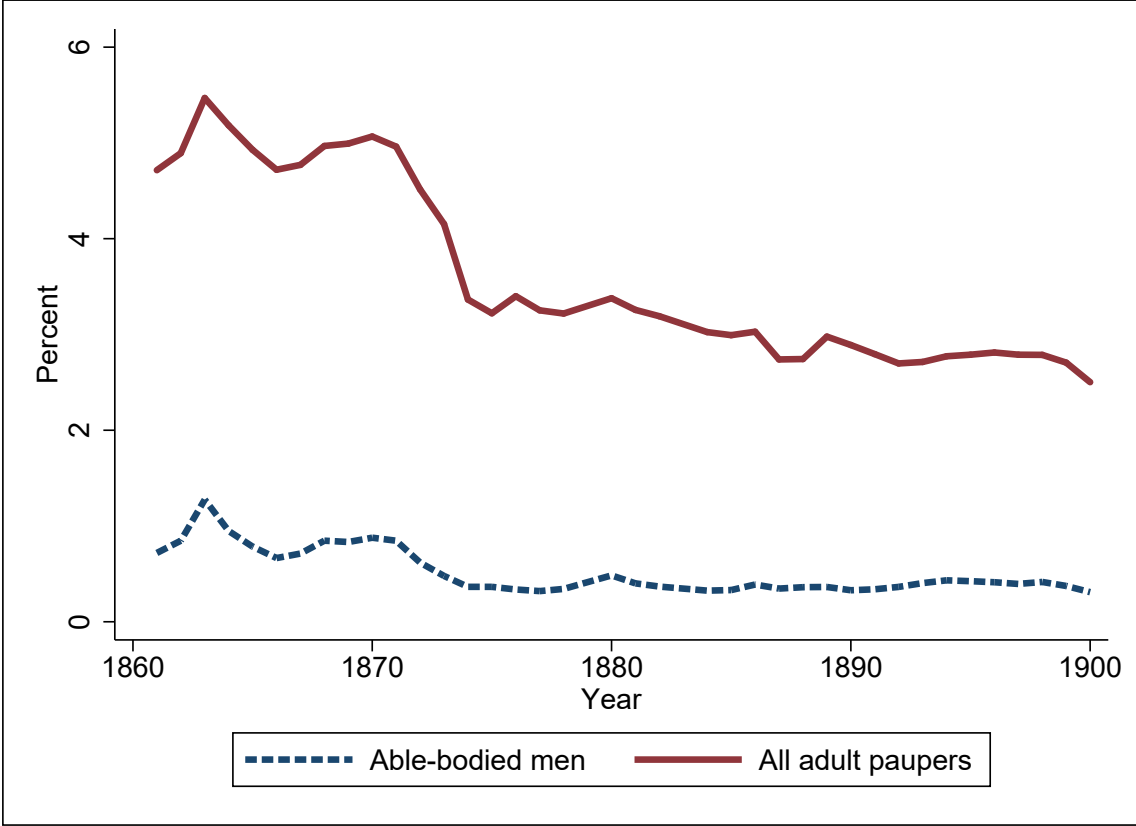
---

<sup>2</sup>Another category of pauper, “vagrants” may also reflect unemployed citizens. However, these were a very small portion of the pauper body as explained in Appendix A.

<sup>3</sup>As discussed in Section 3, the number of paupers was reported on two days a year: January 1 and July 1.

<sup>4</sup>In addition, the figures for the 1860s are inflated by widespread destitution in textile areas due to the cotton famine resulting from the U.S. Civil War.

Figure 1: Trends in population receiving support through poor relief 1860-1900.



Note: Figures relate to the stock of paupers on January 1 of each year. The series “All adult paupers” are measured as a percentage of the adult population. “All able-bodied men” is measured as a share of men aged 15 to 64. See following section for data sources.

longer term view of their financial prospects would have reason to support a more generous poor law policy.

In practice, the effects of the poor relief system would stretch beyond direct recipients. Although no data exists allowing us to quantify the effect, many people would have had family or friends receiving relief even if they did not do themselves. Nor would concern for these individuals have necessarily been altruistic: magistrates had the power to compel relatives to provide monetary support to their destitute family members before relief could be received (King, 2000, p20). The extent to which the system of relief encouraged citizens to seek support could thus even affect those in no danger of destitution themselves.

## 2.2 Governance of Poor Law Unions

A major advantage of the nineteenth century British context is that Poor Law policy was decided and implemented by locally elected officials. Under the provisions of the 1834 New Poor Law decisions over poor law policy were made by a system of local authorities known as the “Guardians of the Poor” or the “Poor Law Guardians”.<sup>5</sup> Each Board of Guardians made policy decisions for a “Poor Law Union” (PLU), of which there were approximately 630 in England and Wales.<sup>6</sup>

The Guardians controlled expenditure on poor relief, but not other major expenditure items, allowing us to isolate the effect of inequality on social insurance. In particular, they did not have responsibility for spending on infrastructure, local public services (provided by

---

<sup>5</sup>Prior to 1834 decisions were made at the level of individual parishes. While parish authorities continued to play a role in collecting taxes, under the New Poor Law they lost nearly all their policy making power.

<sup>6</sup>While policy was set at the level of the Poor Law Union after 1834, until early 1860s the burden of relief could vary considerably across parishes within a PLU because the cost of relief was assigned to parishes based on the number of paupers they were responsible for. Consequently, richer parishes would pay less than poorer parishes since they tended to have fewer paupers (Wood, 1985). However, this system changed in the 1860s through the implementation of three Acts. The 1861 Irremovable Poor Act changed the location for settlement from the parish to the Union and also changed assessment of contributions to be based on rateable value rather than the level of spending on poor relief. The 1862 Union Assessment Committee Act and 1865 Union Chargeability Act then forced Unions to place the cost of relief on the whole union and established committees to ensure that rateable value was accurately and uniformly assessed each union.



town councils) or education (provided by local school boards). They did however, determine the level of taxation used to fund relief, as well as the way in which relief was provided (inside or outside the workhouse)—points to which I return in Sections 2.3 and 2.4.

Revenues for the poor law relied on local taxation and Poor Law Unions were expected to support their own paupers; hence voters bore the cost of more generous policy in their Union.<sup>7</sup> Further, all voters had to pay taxes: revenue was collected through a tax levied on owners and occupiers of property in each parish.<sup>8</sup> Taxes were assessed on land, houses and buildings but not either profits or stock in trade, and were limited by national legislation to be proportional. As a result a large share of the poor rate was levied on domestic households (Boyer, 2004).<sup>9</sup>

The way in which the Guardians were elected was relatively democratic by nineteenth century standards, but until 1894 important institutional provisions protected the interests of landed elites. Under the 1834 New Poor Law the majority of the Guardians of the Poor were elected in local elections, held every one to three years.<sup>10</sup> Votes for the Guardians were given to all property occupiers (essentially owners and renters) who had paid the local taxes and not received poor relief for one year. However, while all property occupiers could vote, the number of votes varied depending on the value of property owned or occupied. In the highest category individuals received 6 votes as either an owner or an occupier, and individuals could vote separately as both occupiers and owners. As a result, an owner-occupier could thus receive up to 12 votes.

---

<sup>7</sup>The history of the poor law is marked by ongoing disputes related to which parish was responsible for paying for paupers: the parish of residence or that of birth. Under the Settlement Act of 1662 parishes only had to relieve those proving entitlement by settlement. However, the legal basis under which settlement was established was disputed and changed over time due to a mixture of legislation and case law. The 1846 reform of the law of settlement removed the ability to remove individuals that had resided in a parish for five years continuously significantly increased the burden on many urban parishes (Wood, 1985).

<sup>8</sup>The tax was known as the “poor rate”.

<sup>9</sup>More specifically, the burden fell on occupiers of property defined as “dwelling houses”.

<sup>10</sup>Under the system created in 1834, Guardians were elected for a period of only one year but this was often extended to three years by the Poor Law Commissioners. By 1894 this had been done, at the request of the Guardians in over 100 unions including all the largest (Keith-Lucas, 1952, 137-138).

In addition to the graduated voting system, two other provisions limited the extent to which policy was democratically determined. There was also no secret ballot in place, potentially providing the ability for elites to pressure or bribe poorer citizens. Further, to ensure that the interests of the gentry were represented, the elected Guardians were supplemented by unelected *ex officio* Guardians including all magistrates resident in the Poor Law Union. The actual importance of these unelected officials in actually determining policy is unclear—both their number and involvement varied considerably across unions, and after the initial implementation of the New Poor Law the management was generally performed by the elected officials (Keith-Lucas, 1952, p184). In principle, however, they strengthened the control of elites over policy.

In 1894 these protections for the elites were removed in reforms, providing an exogenous change that I exploit in the empirical analysis. As a result of the 1894 Local Government Act, the graduated voting system was changed so that each voter held only one vote. At the same time, the secret ballot was implemented for Poor Law elections and *ex officio* Guardians were removed. In addition, an triennial system of elections with one-third retiring each year was standardized across the country.

This discussion demonstrates that most Guardians were subject to regular elections, but it does not necessarily follow that such elections were truly democratic. In particular, it does indicate whether elections were regularly contested, how many citizens took part in them, or the basis on which they were fought. Unfortunately, as with many elections in Britain at this time, it is difficult to assess the degree of contestation in the elections for the Poor Law Unions. Electoral results for Unions were not, unfortunately, recorded widely but it is clear that many elections were uncontested (as was the case for all institutions, including Parliament). However, historical evidence has shown that where elections did occur they could be fiercely contested particularly in urban areas. At least according to one observer, out-relief was particularly popular amongst the electorate, and it was “was only by

mutual agreement that the appeal to the delights of out-door pauperism could be avoided.” (Thomas McKay, quoted in Keith-Lucas (1952), p37). These contests often took a partisan contest; however there were not standardized policy positions within parties: in some areas the Tories could be anti the New Poor Law, while in others they could be strong proponents of it (Fraser, 1976).

## 2.3 Dimensions of Poor Law Policy

The empirical analysis investigates the relationship between inequality and two aspects of poor law policy: the level of *conditionality* and the *generosity* of support. Before moving on to a detailed description of the data sources and the construction of these variables, I explain the meaning of these terms in the nineteenth century context.

To measure the *conditionality* of poor law support I use the percentage of paupers relieved in a workhouse (“indoors”) or in the community (“outdoors”). This measure relates to the most contentious aspect of poor law policy in the nineteenth century: the infamous “workhouse test” imposed by the 1834 New Poor Law. Under this test able-bodied male workers were, in principle, only allowed to receive poor relief within a workhouse. Workhouses were designed to be unpleasant places: the standard of living in a workhouse was expected to be lower than the lowest paying job outside, with the unpleasantness exacerbated by separating families within the workhouse. The purpose of this requirement was clearly stated to be to reduce the tax burden: a clear parallel with more modern notions of conditionality.<sup>11</sup>

There was a clear trend towards higher conditionality over time, as documented in Figure 2. There is a clear increasing trend (measured on the left axis) in the share of both able-bodied male paupers and all adult paupers receiving indoor relief over the period. In 1861 less than 15% of paupers in either category were relieved indoors; by the end of the

---

<sup>11</sup>A similar measure (with a different name)—percentage of male able-bodied paupers served indoors—has been used previously the has been used as a measure of the strictness of poor law policy both in the modern academic literature and also by contemporaries (Boyer and Schmidle, 2009; MacKinnon, 1987).

century the proportion was approaching 50% for able-bodied men and 20% for all adult paupers. It is, however, notable, that support in the workhouse was far from the only form of support for either group of paupers—a point we return to shortly.

Increasing conditionality was accompanied by a decline in the pauper population, also displayed in Figure 2. The period between 1870 and 1880 was characterized by the “Crusade against Outrelief”, as renewed attempts were made to force paupers into the workhouse. Over this period the share of able-bodied men on outdoor relief fell from by almost two thirds from around 0.6% to 0.2% of the population. This period demonstrates particularly clearly the deterrent effect of the workhouse in reducing the total demand for relief (see MacKinnon (1987) for an empirical test of this deterrent effect).

Focusing on the overall increase in conditionality can however lead to the continued variation being overlooked. Figure 3 displays density plots of the degree of conditionality in four cross-sections from 1861 to 1901. There is a clear upward shift in the distribution from 1861 to 1871, and from 1871 to 1881. However, after that point the distribution stabilizes, with a considerable number of unions still relieving only a small proportion of adult paupers indoors.<sup>12</sup>

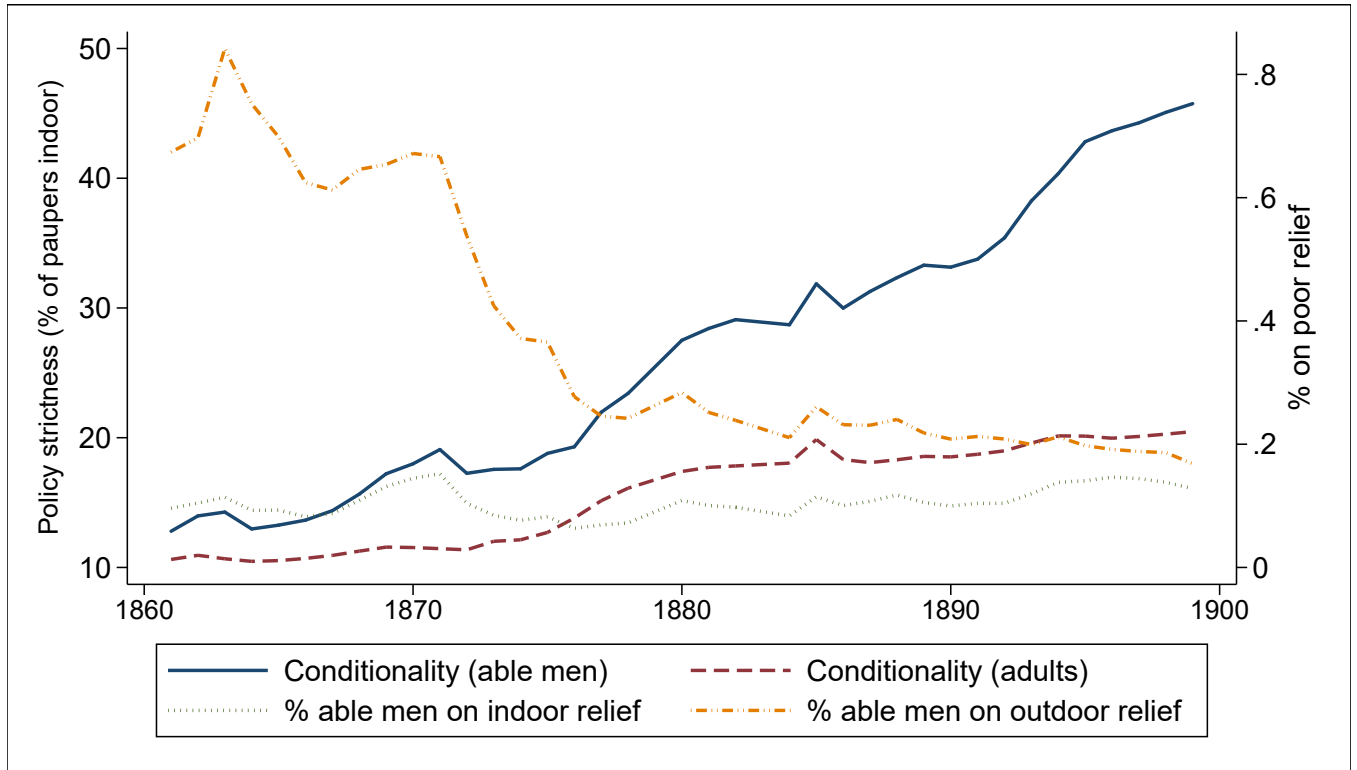
The other measure of poor law policy used in this paper is the *generosity* of support provided to paupers once they were granted relief. Unions could vary in the quality and quantity of support provided to paupers since national legislation did not provide a lot of guidance on what form support could take. Outside the workhouse, relief could involve any or all of food, medicine, or monetary payments.

The amount spent on each pauper increased considerably between 1861 and 1899, despite a decline in the overall cost per capita of poor relief, as shown in Figure 4. This overall increase occurs reflects the shift from outrelief to the more expensive in-maintenance documented above: it occurred despite the fact that the amount spending on out-relief fell, and

---

<sup>12</sup>There was even more variation in conditionality for able-bodied men, as shown in Appendix Figure 5.

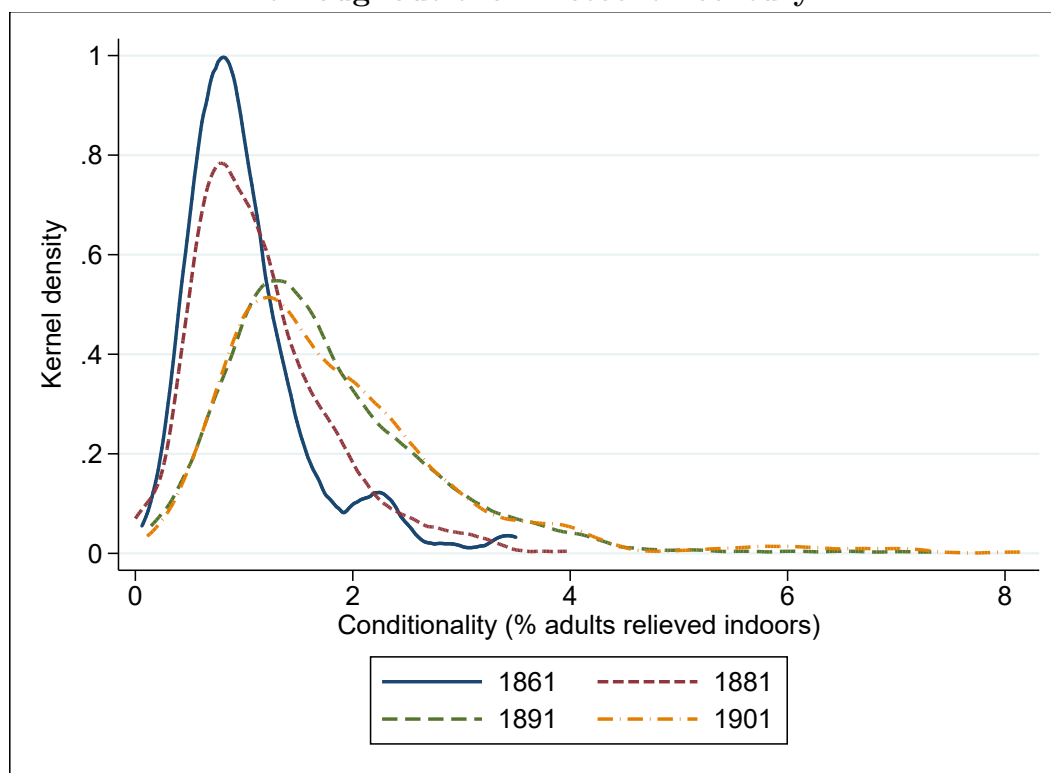
**Figure 2: The proportion of able-bodied men receiving outdoor relief fell considerably as policy became stricter after 1875.**



“Conditionality” refers to the proportion of poor relief recipients relieved indoors (among able-bodied men or all adults respectively) and is displayed on the left hand axis. “% men on indoor” or “on outdoor relief” is the proportion of the male population between 15 and 64 receiving the relevant form of relief, and is displayed on the right hand axis.

spending on in-maintenance remained constant. In-maintenance required greater support as well as the capital costs involved in building poor houses. Increased conditionality was more expensive at the margin. However, the reduction in the number of paupers was great enough that the overall per capita cost of support declined, suggesting that the deterrent effect was great enough that the increased spending was justified. Greater conditionality was, in other words, rational for a voter caring about their tax burden.

**Figure 3: Poor law conditionality varied considerably across Poor Law Unions throughout the nineteenth century.**



Source: see Section 3.

### 3 Data Sources and Empirical Specifications

This section introduces the three main data sources that are used in the empirical analysis. Two of these sources relate to the operation of the Poor Law, with one including information on the number of paupers, and the other providing information on the spending by Poor Law Unions. These datasets are then matched with census information that I use to construct local area inequality measures.

#### 3.1 Poor Law Data

The empirical analysis is based on a new comprehensive dataset of Poor Law activity for the period 1861–1899. This dataset was collected from a long series of Parliamentary reports on

Figure 4: Despite stable cost per pauper, nominal per capita spending on poor relief declined after 1870.

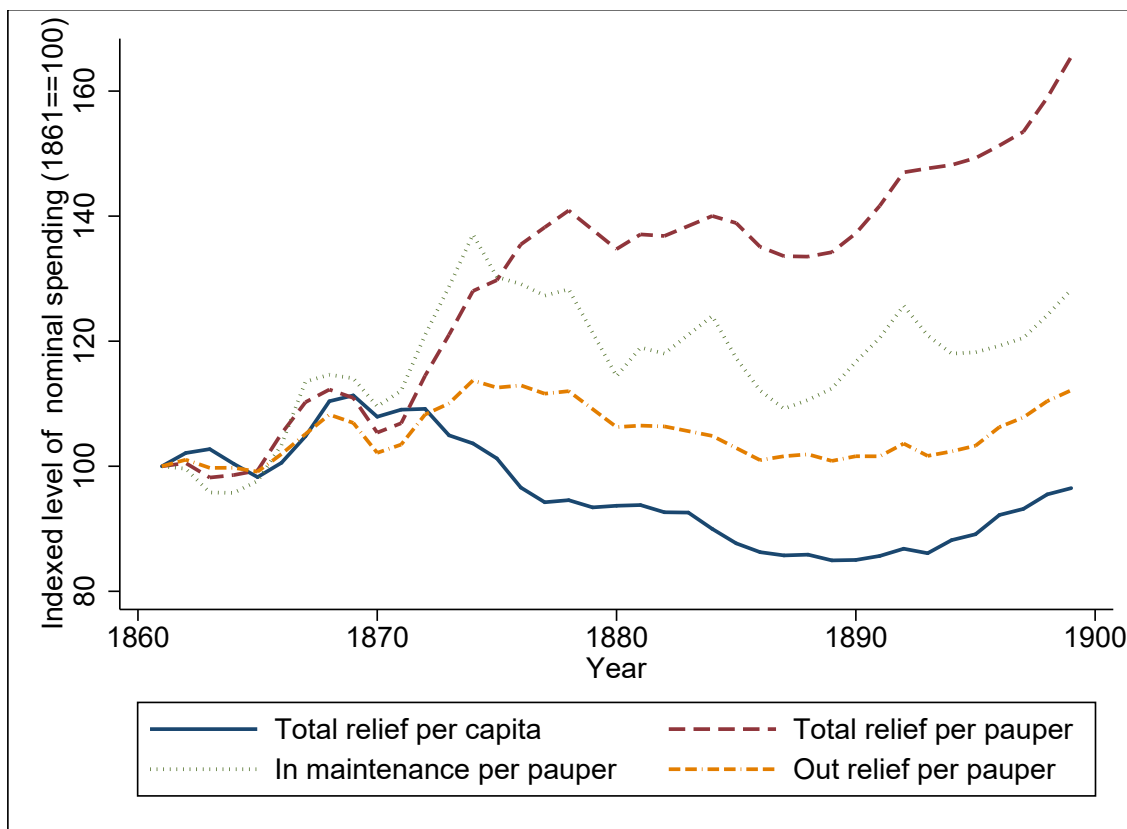


Figure displays average nominal spending per capita or per pauper at financial year end.

the Poor Law which contained a range of information on the workings of the Poor Law in each of the c.630 Poor Law Union. Reports summarizing the financial accounts of each Poor Law were produced each year while, in addition, the stock of paupers in Poor Law Unions was reported biannually. Together, these two series contain data regarding the number of paupers received inside and outside the workhouse, as well as a breakdown of the types of expenditure and revenue for each Poor Law Union.<sup>13</sup>

<sup>13</sup>The reports state the number of paupers relieved on reported on January 1 and July 1: I average the two to create an annual figure. The financial year end for the spending reports is the end of March; as such for each year I construct the annual number of paupers by averaging the figure for January of the present year and July of the previous year. Data for January 1879 is not available, as such the value for 1879 is missing. While, there could be some concern that these dates may not accurately reflect the stock of paupers through the year, MacKinnon (1988) argues that in fact the January and July figures are good approximations to the respective six month averages.

I use this data to construct variables that capture the conditionality and generosity of Poor Law policy. To measure the extent of conditionality, I use the share of adult paupers relieved in the workhouse, rather than outside. As discussed in Section 2, provision of support within the workhouse was intended as a deterrent since it was substantially less attractive than receiving relief in the community. So that the two measures of Poor Law policy operate in the same direction (higher=less harsh), for the purposes of the regressions, I reverse the measure—to be the share of adult paupers relieved *outside* the workhouse—and label it *Unconditionality*.

To measure generosity, I use the data on the extent of spending on outdoor paupers in each Poor Law Union. The extent of outrelief provides a good measure of support since, in contrast to spending on indoor paupers (“in-maintenance”), the measure is not distorted by the large fixed costs associated with building workhouses. For similar reasons, in some respects it provides a better comparison across Poor Law Unions than the *conditionality* measure, which could be distorted by the fact not all Poor Law Unions had workhouses.

The Poor Law Union data is also used as the basis for two other variables in the regression analysis. First, the rateable value of each district—the value of property on which taxes were raised—forms the basis of a tax base per capita. Second, the information on the number of paupers in each Poor Law Union can also be used to construct a measure of volatility in the local labor market. In particular, I measure volatility as the standard deviation in the annual number of paupers per capita in each decade, within each Poor Law Union.

One advantage of the Poor Law Union data is that the boundaries of the districts were the same as those used for registration purposes. This latter fact allows me to link the Poor Law Union data to the census data—and hence the inequality measures—reported below. It also allows the data to be connected to the information on local mortality reported in the decadal *Supplements to the Reports of the Registrar General* and digitized by Woods (1997). These reports identify the decadal number of deaths across a decade in each of the



registration districts, disaggregated by cause and age group. I use this data to construct mortality rates for each Poor Law Union.

A further benefit of using data at Poor Law Union level is that the boundaries were relatively stable across the second half of the nineteenth century—particularly when compared to most British local government areas at this time. However, there were some merges and splits of Unions: to account for this I construct a set of standardized districts that account for major boundary changes between 1861 and 1900.

### 3.2 Measures of Inequality

I now detail the construction of the two measures of inequality data that are the key independent variables in the regression analysis. The first variable measures wage inequality within each Poor Law Union—estimated by matching occupation data with the wage series of Williamson (1985). Wage inequality provides an indicator of inequality across a large part of the population. However, it suffers from the drawback that important groups may be excluded from the analysis. The wealthiest citizens—such as landowners or rentier capitalists—probably did not earn a wage and so will be excluded from the dataset. Further, these groups are of particular interest in considering the political economy of poor law policy—they may have had an outsized influence on policy decisions, particularly given the graduated voting system discussed in Section 2. As such, I use the distribution of servants across households to construct a measure of Elite Inequality in each Poor Law Union.

Both variables are constructed based on occupation data using 100% census samples for 1861, 1881, 1891 and 1901.<sup>14</sup> For each of these four years I estimate wage and elite inequality in each Poor Law Union—see the details below. Finally, I linearly interpolate between census years to create an annual series that matches the poor law data.

---

<sup>14</sup>The data were downloaded from the North Atlantic Population Project. Unfortunately no such dataset exists for 1871.

Crucially, I can construct inequality variables that are consistent over time and place because of the way in which occupation coded in these datasets. The elite inequality measure is based on the number of servants in a household which are clearly reported in each dataset. Moreover, occupation in each sample is coded according to the HISCO occupational classification. This system expands the ISCO classification scheme to historical contexts, and provides a classification scheme that is standardized across the period of analysis. Further, the datasets report the Registration District in which each individual was on the night of the census. Since, as mentioned above, these boundaries matched those of Poor Law Unions it is straightforward to directly connect the inequality measures with the poor law data

I now detail the construction of each variable.

**Wage Inequality** I use the occupational data to construct a measure of wage inequality in each Poor Law Union. To do so, I match the occupational categories to the wage series for male workers constructed by Williamson (1985). The Williamson series identifies wages in 18 different occupational categories—six low-skilled, and twelve high-skilled—for each census year.

This data was used to create wage inequality measures in four steps.

1. Occupations in the 1891 census were linked to the wage series based on an example categorization provided in Williamson (1985).
2. The occupational categories in the 1891 census document were then linked to 5-digit occhisco codes<sup>15</sup>, creating a time series for each occupational code.
3. The wage series was then matched to men aged over 10 in the 100% census samples described above.<sup>16</sup>

---

<sup>15</sup>This matching was performed using an occupational matrix provided by ICeM team at the University of Essex.

<sup>16</sup>In total, 77% of males aged above 10 were assigned a wage. Of those missing, 18% had occupation

4. The resulting wage series in each district was then used to construct Gini coefficients for each area.

There are a number of drawbacks to this wage data that it is important to bear in mind. Any classification into 18 categories is necessarily imperfect and overlooks the wage dispersion within each category. Further, the matching between the census categories and these 18 categories is also imperfect, particularly due to the fact that the census categories do not cleanly distinguish between skilled and unskilled workers. The series is limited to male wages and excludes male domestic servants (a relatively large category at the time). The use of national wage figures may also overlook important regional level variation. The reliability of some aspects of the wage data have also been questioned (Feinstein, 1988). Further, there is no account made of frequency in employment.

However, while these caveats are important, there is no clear reason to suspect that they will bias the estimates here. Many of the aspects controlled for here are common across Poor Law Unions. Since our focus is on inequality rather than the level of income, the fact that there may be regional differences in, for instance, costs of living is less of a concern (and to the extent that factors such as regional differences are fixed over time, we can control for them using Poor Law Union fixed effects). In addition, it is important to recall that the data used in large sample studies of inequality are invariably imperfect. By directly seeking to estimate wage inequality, this paper provides a measure that is directly linked to individual incomes rather than relying on proxies such as the share of capital in income.

**Elite Inequality** I construct the elite inequality measure using the number of servants per household. The number of servants was used by contemporaries as a measure of class; Charles Booth, in his classic surveys of London identified the “middle class” as those with up to two servants, and the “upper class” as those with more than two servants (Booth, “unknown” in the census data and 28% were “scholars”. No other single occupation accounted for more than 10% of the missing occupations.

1903). The distribution of number of servants within the servant-keeping class can therefore measure the distribution of wealth within the elite.

I thus construct a Gini coefficient of the number of servants per household, *among houses with at least one servant*. This measure then serves as a measure of the extent to which the financial resources of the elite were skewed towards a small number of households, or whether they were distributed more widely.

## 4 Empirical Specification

This section discusses the empirical framework used to test the relationship between income inequality and Poor Law policy. I start by discussing the predictions of the Median Voter Theorem apply to this historical setting, and then present the empirical specification used to test those predictions.

### 4.1 Hypotheses

The discussion in Section 2 has highlighted the ways in which the nineteenth century poor relief system meets many of the assumptions of a standard median voter model. Unlike national governments, the Guardians of the Poor were focused only on the provision of poor relief—the primary form of social insurance available at the time. Further, not only did the Guardians control spending in their districts, they had to pay for that spending using revenue raised from a local proportional tax rate. The way in which voting rights were defined meant that the electorate was comprised only of tax payers. Further, I have argued, a large proportion of the population would use poor law support at some point in their life—and an even larger proportion could potentially do so—and so would value the social safety net that it provided.

However, the predictions of the median voter model in this case are complicated by the

nuances of the voting system. In particular, we face the concerns that for much of the period the median voter may not have been the citizen with the median income because before this point, wealthier citizens held multiple votes. Further, the elite also had other ways of altering poor law policy before 1894 both directly through the unelected Guardians and through offering inducements to voters in the absence of the secret ballot. The median voter may thus not have been the sole determiner of policy. As a result identifying the voter with the median income may be insufficient to identify the effective decision makers over poor relief.

The two inequality measures introduced above are designed to tackle this conflict. The measure of wage inequality is designed to capture changes that would affect the “ordinary” voter: that is, those with only one vote. An increase in wage inequality would be expected to reduce the relative tax burden of the median voter unless the median voter is a high level wage earner. As such an increase in this measure is expected to be correlated with more generous policy.

The second inequality measure, in contrast, captures the relative power of those at the top of the wealth distribution. A highly skewed elite inequality measure implies a relatively large group of very wealthy households who would be likely to have several votes, and connections with the unelected Guardians. As such an increase in this measure is expected to lead to stricter policy.

An additional hypothesis is provided by the reforms of 1894 which removed the advantages of the elite voters. After this point, the median voter and the citizen with the median income should be the same (if preferences are ordered in terms of income). As such, after this point in time we would expect that wage inequality would still be associated with more generous policy but the elite inequality measure should either no longer be an important factor in determining policy or, if it captures overall inequality in society, should be associated with more generous policy.

## 4.2 Specification

To test the first two of these hypotheses I estimate the following specification:

$$y_{it} = \beta_1 giniWage + \beta_2 giniElite + \gamma_0 X'_{it} + T_t + \alpha_i + \epsilon_{it} \quad (1)$$

where  $i$  indexes Poor Law Unions and  $t$  indexes years.  $y$  refers to the two measures of policy discussed above: conditionality and the expenditure per outdoor pauper.  $X$  is a vector of control variables,  $T$  are year fixed effects and  $\alpha$  are Poor Law Union (district) fixed effects.  $\epsilon$  is an error term.

To test the effects of the 1894 reform to the governance of Poor Law Unions, I also estimate the following specification:

$$y_{it} = \beta_1 giniWage + \beta_2 giniElite + \beta_3 post1894\_x\_giniWage + \beta_4 post1894\_x\_giniElite + \gamma_0 X'_{it} + T_t + \alpha_i + \epsilon_{it} \quad (2)$$

The interaction terms in this specification test whether the relationship between the inequality measures and poor law policy changed after 1894—the year when the governance of PLUs was reformed to reduce the power of the elite.

I use two dependent variables in the main analysis. The first is the unconditionality measure for all adults—defined as the share of adult paupers relieved outside the workhouse, rather than inside. As discussed in Section 2, provision of support within the workhouse was intended as a deterrent since it was substantially less attractive than receiving relief in the community. I use conditionality towards all adults—rather than just able-bodied males—since by the end of the century able-bodied males were a very small portion of paupers. I then supplement this measure with a second, spending-based measure—the generosity of out-

relief expenditure per pauper. I use outrelief—rather than in-maintenance or total relief—as the measure since the large fixed costs associated with workhouses could mean that average spending per indoor pauper could be misleading.

I include a number of control variables relating to the characteristics of Poor Law Unions. Given that the wage inequality measure is constructed using occupational data, a major concern could be that the inequality measures are simply capturing differences in occupational structure across Poor Law Unions. As such, I control for the share of the population in agriculture or fishing. I also include controls for population density and population growth as alternative measures of the urban structure of the district.

Policy towards poor relief would also be likely to be affected by the financial resources of the each Poor Law Union. I include two measures of these resources. First, I use the average male wage calculated using the estimates underlying wage inequality measure above. Second, I use the tax base (rateable value) per capita.

Finally, I include three additional variables relating to the need for poor relief in a district. The percentage of the population aged 15–64 measures the presence of working age individuals who would have less need for relief. I also include a measure of the variation in the number of paupers per capita in each decade to control for the likelihood of a member of the population being at risk of needing poor relief. Third, I also include the decadal mortality rate in the district.

## 5 Results

This section presents the results of our analysis of the relationship between inequality and poor law policy. First, I discuss the correlations between the measures of inequality and each of the two policy measures—conditionality and generosity of relief. There is clear evidence that higher elite inequality led to harsher poor law policy. I then turn to the difference-in-

difference analysis, using the 1894 democratic reforms to identify whether the median voter theorem can explain that relationship.

## 5.1 Inequality and Poor Law Policy

Table 1 presents the results with poor law *Unconditionality* as the dependent variable, while Table 2 presents the results of estimating the same specifications, but with the *Generosity* of outdoor relief as the main dependent variable. In each table, specification (1) includes just the two inequality variables. Specification (2) adds the first control for financial resources (the tax base per capita), while specification (3) adds controls for occupational structure. Specifications (4) and (5) then add alternative controls for both financial resources and the demand for poor relief in the district. All variables are standardized, and so the coefficients should be interpreted as the effect of a one standard deviation change in the independent variable on a standard deviation change in the dependent variable.

Inequality is strongly associated with both measures of poor law policy. A one standard deviation increase in wage inequality is associated with less conditionality and more expenditure per pauper (although the latter coefficient is not statistically distinguishable from zero at conventional levels). Elite inequality, in contrast, is associated with more conditionality and lower expenditure.<sup>17</sup>

There is also evidence that the need for social insurance affected poor law policy. The variation in the number of paupers—a proxy for district-level unemployment—led to more provision outside the workhouse, and lower expenditure. It appears that areas with volatile employment provided low levels of temporary relief outdoors. One potential channel for this effect is that industrial employers would use poor relief to maintain a surplus labor force

---

<sup>17</sup>To mitigate concerns that this relationship is a result of high correlation between the two variables, in the Appendix Table 7 I present the results from estimating the specifications (1) and (5) but including the variables separately. The results are similar, although wage inequality becomes narrowly statistically insignificant when all controls are included.



during economic downturns (see, for an earlier period, Boyer, 2006). Similarly, there is also evidence that agricultural areas spent less on relief, which is consistent with short-spells of relief due to seasonal variation—although the fact that they did not relieve more people in the workhouse remains a puzzle.

Both the percentage of the population of working age and mortality are correlated with poor law policy, providing further evidence that policy was driven partly by need. Mortality is associated with higher expenditure on paupers, a relationship perhaps explained by more support being required by those in high mortality (and hence high morbidity) environments. Importantly, however, mortality is not associated with how much support was provided in the workhouse, providing evidence for the assumption that the conditionality measure is not capturing the provision of medical relief. A higher working age population is associated with more conditionality—consistent with the workhouse being used for those out of work, rather than sick. It is also associated with higher expenditure per outdoor pauper, which could capture the relatively high cost of supporting a working age adult.

There is little support for social insurance being provided as a “normal good”. The mean wage is not significantly different from zero in either specification, and the tax base is not associated with higher spending. A higher tax base was, however, associated with more conditionality—wealthier districts had harsher policy. One potential explanation for this finding could be that a valuable tax base is capturing something about the structure of land ownership and hence the presence of an elite. Alternatively, the positive relationship could capture the fact that a wealthier area is more able to bear the costs of building a workhouse.

## **5.2 Effect of 1894 Reforms**

The next analysis examines whether the 1894 reforms to the governance structure of the Poor Law Unions changed the relationship between inequality and poor relief policy. The previous results have identified that elite inequality was associated with harsher policy both

**Table 1: Wage inequality was associated with more generous poor law policy, but elite inequality was associated with harsher policy.**

	DV=Unconditionality (Adults)				
	(1)	(2)	(3)	(4)	(5)
Wage inequality	0.111** (0.050)	0.124** (0.049)	0.104** (0.048)	0.128*** (0.047)	0.159** (0.064)
Elite inequality	-0.112** (0.048)	-0.103** (0.047)	-0.107** (0.047)	-0.094** (0.045)	-0.126** (0.050)
Tax base p.c.		-0.147*** (0.041)	-0.134*** (0.042)	-0.136*** (0.041)	
% agriculture			0.064 (0.100)	0.085 (0.098)	-0.049 (0.130)
Population growth			0.021 (0.019)	0.030 (0.019)	0.034* (0.018)
Population density			-0.234 (0.155)	-0.213 (0.141)	-0.202 (0.148)
Paupers variation				0.119*** (0.019)	0.117*** (0.020)
Mean wage					-0.120 (0.094)
% population aged 15–64					-0.035* (0.021)
Mortality rate					0.031 (0.038)
No. obs	17334	17334	17334	17334	17334
Year Fixed Effects	Y	Y	Y	Y	Y
PLU Fixed Effects	Y	Y	Y	Y	Y

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . All variables are standardized. See Section 3 for variable definitions. Standard errors are clustered by Poor Law Union and presented in parentheses.

in terms of spending and in terms of forcing paupers into the workhouse. If this finding is a result of the political advantages the elite had under the original governance structure, then we would expect the relationship to disappear after these reforms.

However, there is no evidence of such a change, as shown in Table 3. For conditionality, neither interaction term is statistically significant, and the coefficients are close to zero.

**Table 2: Elite inequality was associated with lower per pauper spending on out-relief.**

	DV=Generosity of out relief				
	(1)	(2)	(3)	(4)	(5)
Wage inequality	0.072 (0.051)	0.065 (0.052)	0.089* (0.053)	0.099* (0.053)	0.093 (0.061)
Elite inequality	-0.123** (0.051)	-0.127** (0.054)	-0.120** (0.054)	-0.115** (0.054)	-0.110** (0.053)
Tax base p.c.		0.070 (0.063)	0.058 (0.068)	0.057 (0.067)	
% agriculture			0.228** (0.100)	0.237** (0.100)	0.283** (0.122)
Population growth			0.021 (0.024)	0.025 (0.025)	0.046** (0.022)
Population density			0.047 (0.062)	0.055 (0.061)	0.086 (0.064)
Paupers variation				0.048*** (0.012)	0.051*** (0.012)
Mean wage					-0.017 (0.088)
% population aged 15–64					0.096*** (0.028)
Mortality rate					0.082** (0.038)
No. obs	17334	17334	17334	17334	17334
Year Fixed Effects	Y	Y	Y	Y	Y
PLU Fixed Effects	Y	Y	Y	Y	Y

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . All variables are standardized. See Section 3 for variable definitions. Standard errors are clustered by Poor Law Union and presented in parentheses.

Similarly, the interaction term related to wage inequality is close to 0 and statistically insignificant when looking at out relief per pauper. However there is, surprisingly a stronger *negative* relationship between elite inequality and the generosity of poor relief after 1894. In other words, areas with a stronger elite reduced spending (relatively) after the 1894 reforms: the opposite effect to that predicted.

**Table 3: No evidence that reforms to Poor Law governance in 1894 reduced the power of elites over policy.**

	DV=Unconditionality (Adults)			DV=Generosity of out relief		
	(1)	(2)	(3)	(4)	(5)	(6)
Wage inequality	0.119** (0.051)	0.128** (0.050)	0.133*** (0.048)	0.082 (0.053)	0.078 (0.053)	0.099* (0.054)
Elite inequality	-0.113** (0.048)	-0.100** (0.047)	-0.082* (0.045)	-0.084 (0.053)	-0.089 (0.056)	-0.081 (0.056)
Wage inequality x post1894	-0.026 (0.023)	-0.009 (0.023)	0.001 (0.023)	0.013 (0.028)	0.005 (0.026)	-0.001 (0.027)
Elite inequality x post1894	0.003 (0.026)	-0.005 (0.026)	-0.035 (0.025)	-0.099*** (0.024)	-0.096*** (0.025)	-0.078*** (0.024)
No. obs	17334	17334	17334	17334	17334	17334
Tax base	N	Y	Y	N	Y	Y
Urban controls	N	N	Y	N	N	Y
Year Fixed Effects	Y	Y	Y	Y	Y	Y
PLU Fixed Effects	Y	Y	Y	Y	Y	Y

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . All variables are standardized. See Section 3 for variable definitions. Standard errors are clustered by Poor Law Union and presented in parentheses.

How can we interpret these results? To some extent we should, perhaps, not be surprised to see a limited effect on conditionality given that, in the short run, the infrastructure associated with providing poor relief may be difficult to change. Adjusting to provide support outside the workhouse may have taken time, meaning that we see limited effect over the period considered here.

The results for generosity are harder to explain, however, given that the level of expenditure on relief would be easier to change quickly. The negative coefficient implies, if we believe that the interaction term is capturing the effect of democracy, that a poorer median voter was more opposed to expenditure than the wealthy. One potential explanation for that relationship could be that the elite in these areas were using outrelief for their own purposes, such as allowing them to keep wages, rather than as true social insurance. More mundanely, it could be that the result captures different sectoral trends in the need for relief which are

in some way correlated with elite inequality.<sup>18</sup> Disentangling these effects will be the subject of future research.

## 6 Conclusion

This paper has presented a new test of the relationship between inequality and redistribution in nineteenth century England and Wales. This context offers a valuable setting to test theories about redistribution since responsibility for welfare policy, in the shape of poor relief, was held by a system of locally elected government bodies. These bodies were tasked only with administering the poor relief system, meaning that demand for redistribution can be isolated from the demand for other government policies.

The results show that greater wage inequality was associated with more generous welfare policy, in the sense of reducing the requirement for recipients to enter the workhouse—in modern day terms, less insistence on attaching conditions to welfare support. Wage inequality is also weakly associated with more generous levels of provision. Both of these results follow the predictions of the Meltzer-Richard model.

I also examine the effects of inequality within the elite on poor law policy. This analysis is motivated by the fact that the voting system in Britain was tilted towards the elite suggesting that a classic median voter set-up may be inappropriate. The elite could influence policy both through a graduated voting system and through direct connections with unelected Guardians.

I find that, in fact, the presence of a powerful elite is associated with both harsher policy and lower spending on out relief. As a result, in an additional analysis I test whether reforms removing the institutional bias towards the elite mitigated this relationship. However, there is no evidence of such an effect. As a result, the mechanism through which the elite's power

---

<sup>18</sup>However, additional regressions allowing for an interaction between the share in agriculture and post 1894 do not remove the negative relationship.

influenced policy remains an open question.

Overall, these findings suggest that inequality played a role in shaping poor law policy in the nineteenth century. The results provide some empirical support for the Meltzer-Richard framework, but with important caveats. In particular, more work remains to identify the relationship between inequality and the choices of the median voter and also to better understand the processes through which elite inequality affected policy outcomes.

## References

- Benabou, R. and E. A. Ok (2001). Social mobility and the demand for redistribution: the poum hypothesis. *The Quarterly Journal of Economics* 116(2), 447–487.
- Booth, C. (1903). *Life and Labour of the People in London: First series*. Macmillan and Company.
- Boyer, G. R. (2004). The evolution of unemployment relief in great britain. *Journal of Interdisciplinary History* 34(3), 393–433.
- Boyer, G. R. (2006). *An economic history of the English poor law, 1750-1850*. Cambridge University Press.
- Boyer, G. R. and T. J. Hatton (2002). New estimates of british unemployment, 1870–1913. *The Journal of Economic History* 62(03), 643–675.
- Boyer, G. R. and T. P. Schmidle (2009). Poverty among the elderly in late victorian england. *The Economic History Review* 62(2), 249–278.
- Feinstein, C. (1988). The rise and fall of the williamson curve: Review of did british capitalism breed inequality? by jeffrey g. williamson. 48(3), 699–729.
- Fraser, D. (1976). *The new poor law in the nineteenth century*. New York: St. Martin's Press.
- Keith-Lucas, B. (1952). *The English local government franchise: a short history*. Blackwell.
- King, S. (2000). *Poverty and welfare in England, 1700-1850*. Manchester University Press.
- MacKinnon, M. (1986). Poor law policy, unemployment, and pauperism. *Explorations in Economic History* 23(3), 299–336.

- MacKinnon, M. (1987). English poor law policy and the crusade against outrelief. *The Journal of Economic History* 47(03), 603–625.
- MacKinnon, M. (1988). The use and misuse of poor law statistics, 1857 to 1912. *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 21(1), 5–19.
- Meltzer, A. and S. Richard (1981). A rational theory of the size of government. *Journal of Political Economy* 89(5), 914–927.
- Milanovic, B. (2000). The median-voter hypothesis, income inequality, and income redistribution: an empirical test with the required data. *European Journal of Political Economy* 16(3), 367–410.
- Southall, H. (1991). *Poor law statistics and the geography of economic distress*. Cambridge University Press.
- Williamson, J. G. (1985). *Did British capitalism breed inequality?* Routledge.
- Wood, P. (1985). *Finance and the Urban Poor Law: Sunderland Union, 1836–1914*, pp. 20–56. St Martin’s Press: New York.
- Woods, R. (March 1997). *Causes of death in England and Wales, 1851-60 to 1891-1900 : The Decennial Supplements [computer file]*. Colchester, Essex: UK Data Archive [distributor] SN: 3552, <http://dx.doi.org/10.5255/UKDA-SN-3552-1>.



# A Descriptive Statistics of Poor Law Support

## A.0.1 Classification of Paupers

The Poor Law reports split paupers into a number of different pauper “types”, as well as identifying adults, children and men and women separately. The two major categories were “able-bodied” and “non-able-bodied” paupers. The distinction between these categories is not, unfortunately, as obvious as it may seem particularly because these terms had no legal definition—and so the classification between the two could vary both across areas and over time. In fact, “able-bodied” did not necessarily imply good health: many able-bodied paupers were acutely ill. Over half of able-bodied men relieved outdoors towards the end of the century were classified as “sick” (MacKinnon, 1988).<sup>19</sup> In fact, non-able-bodied largely refers to elderly paupers, with nearly all paupers over 60 classified as non-able-bodied in 1890.(MacKinnon, 1988, p.9).

There were also two other smaller categories of paupers. “Lunatics” refers to those treated in asylums managed under the poor law. “Vagrants” refers (roughly speaking) to the homeless poor.<sup>20</sup>

## A.0.2 Disaggregating the Pauper Numbers

Table 4 presents the breakdown of paupers into different categories at the start of the analysis period (January 1865).

We can see that the able-bodied and not-able-bodied are by far the largest categories; both “lunatics” and “vagrants” are very small percentages of the total. The latter category largely captures unemployed males , and so the small proportion provides evidence that

---

<sup>19</sup>MacKinnon (1988) explains that the able-bodied and non-able-bodied categories were largely distinguished by diet. As a result, even those with disabilities could be categorized as able-bodied if they ate the same diet as the able-bodied paupers.

<sup>20</sup>This category was particularly affected by economic conditions and so has been used as a measure of male unemployment by (Boyer, 2004).

unemployment relief was a relatively small part of the role of poor relief. The broader role of relief is also indicated by the large share of paupers that were women and particularly children—both in the workhouse and outside. Overall, these groups accounted for almost 80% of paupers.

The table demonstrates how the vast majority (over 85%) paupers received poor relief outside of the workhouse at this date—30 years after the New Poor Law was enacted. Notably this is true for every sub-group, including even able-bodied men, the category most clearly targeted by the workhouse test under the New Poor Law.

Table 5 presents the same breakdown for 1895. At this point the share of paupers has increased, but again is significantly lower than 100% in all categories. The share of able-bodied paupers fell compared to thirty years earlier, with the share of paupers classified as “lunatics” increasing by a similar amount.

**Table 4: Composition of paupers in January 1865**

		Able-bodied	Not able-bodied	Lunatics	Vagrants	Total
<b>Indoor</b>	Men	0.8%	3.4%	0.4%	n.a.	4.6%
	Women	1.6%	2.4%	0.6%	n.a.	4.5%
	Children	1.9%	3.1%	0.0%	n.a.	5.5%
	Total	4.3%	8.9%	1.0%	0.2%	14.3%
<b>Outdoor</b>	Men	3.9%	11.3%	1.3%	n.a.	16.5%
	Women	11.1%	25.3%	1.6%	n.a.	38.0%
	Children	25.4%	5.5%	0.0%	n.a.	31.0%
	Total	40.5%	42.0%	2.9%	0.1%	85.7%
<b>Total</b>	<b>44.7%</b>	<b>50.9%</b>	<b>3.9%</b>	<b>0.34%</b>	<b>100%</b>	

Note: Table displays the breakdown of the population receiving poor relief on January 1 1865.

**Table 5: Composition of paupers in January 1895**

		Able-bodied	Not able-bodied	Lunatics	Vagrants	Total
<b>Indoor</b>	Men	2.6%	7.5%	0.8%	n.a.	11.0%
	Women	2.2%	4.8%	1.1%	n.a.	8.1%
	Children	2.0%	4.7%	0.16%	n.a.	7.7%
	Total	6.8%	17.0%	2.0%	1.1%	26.7%
<b>Outdoor</b>	Men	1.9%	9.4%	3.5%	n.a.	14.8%
	Women	6.9%	23.4%	4.4%	n.a.	33.9%
	Children	18.9%	3.7%	0.1%	n.a.	22.7%
	Total	28.0%	36.5%	7.9%	0.1%	72.0%
<b>Total</b>	<b>34.6%</b>	<b>53.6%</b>	<b>10.0%</b>	<b>1.2%</b>	<b>100%</b>	

Note: Table displays the breakdown of the population receiving poor relief on January 1 1895.

## A.1 Conditionality for Adults and Able-bodied Men

## B Wage and Elite Inequality 1861–1901

This section contains density plots of wage and elite inequality over the course of the nineteenth century. Both plots show considerable variation across Poor Law Unions.

## C Robustness Tests

Table 6 presents the results from re-estimating the main specifications but including the inequality measures separately. The results are very similar, indicating that the significant coefficients are not simply an artefact of multicollinearity.

**Table 6: Results are robust to including inequality measures separately.**

	DV=Unconditionality (Adults)				DV=Generosity of Outrelief			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wage inequality	0.099** (0.049)	0.121** (0.061)			0.059 (0.051)	0.060 (0.061)		
Elite inequality			-0.102** (0.048)	-0.096** (0.047)			-0.116** (0.052)	-0.092* (0.053)
No. obs	17334	17334	17334	17334	17334	17334	17334	17334
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y
PLU Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y
Controls	N	Y	N	Y	N	Y	N	Y

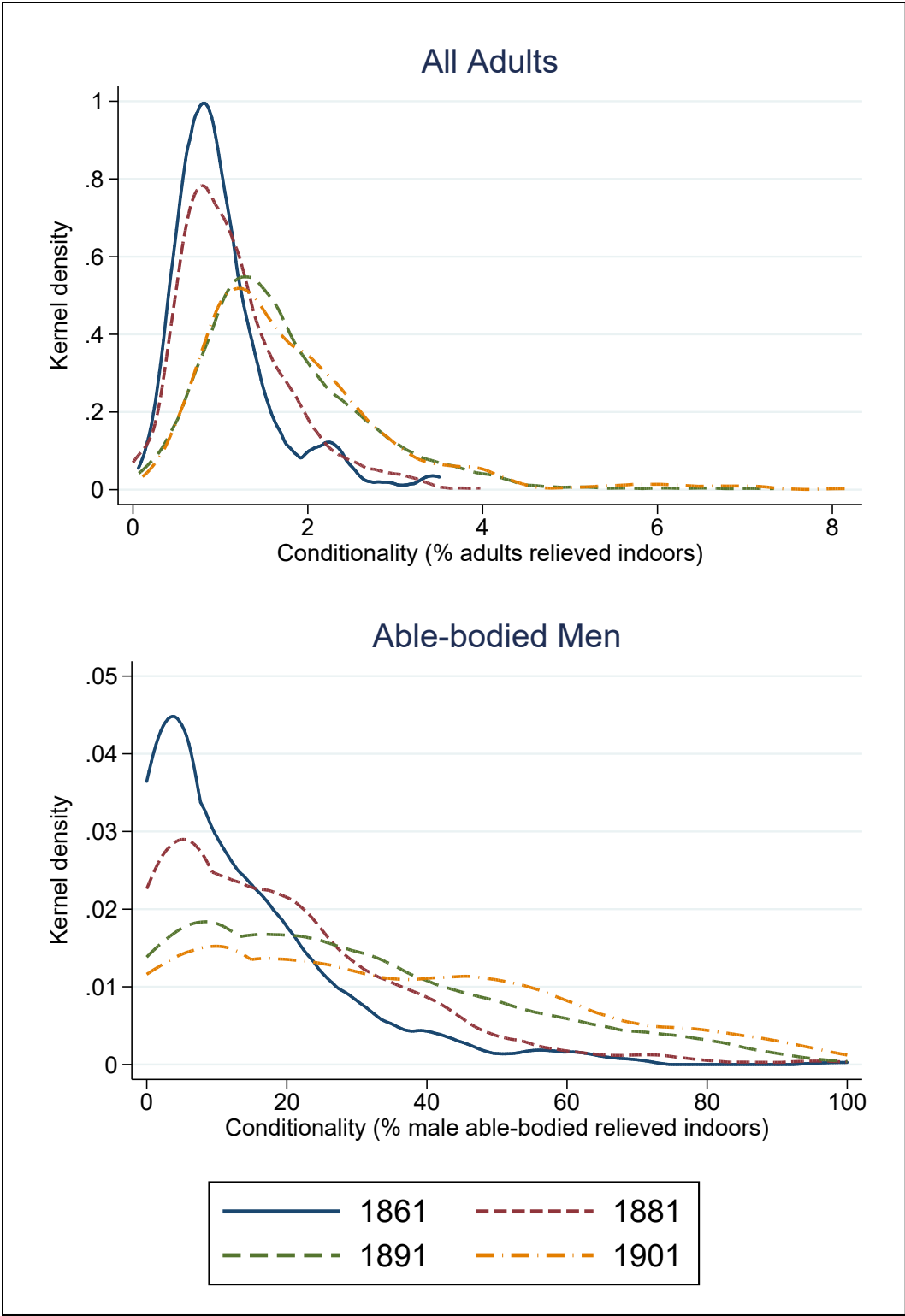
\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . All variables are standardized. “Controls” refer to the control variables in Specification (5) of Table 1. See Section 3 for variable definitions. Standard errors are clustered by Poor Law Union and presented in parentheses.

**Table 7: Results are similar when analyzing the effect of inequality on policy regarding able-bodied men.**

	DV=Unconditionality (Adults)				
	(1)	(2)	(3)	(4)	(5)
Wage inequality	0.100 (0.061)	0.109* (0.061)	0.101 (0.063)	0.113* (0.063)	0.170** (0.075)
Elite inequality	-0.132** (0.052)	-0.126** (0.051)	-0.127** (0.052)	-0.121** (0.051)	-0.158*** (0.056)
Tax base p.c.		-0.092** (0.036)	-0.092** (0.038)	-0.093** (0.037)	
% agriculture			0.023 (0.098)	0.034 (0.098)	-0.125 (0.123)
Population growth			-0.009 (0.021)	-0.004 (0.021)	-0.015 (0.022)
Population density			-0.089 (0.119)	-0.078 (0.113)	-0.054 (0.117)
Paupers variation				0.060*** (0.017)	0.058*** (0.017)
Mean wage					-0.166 (0.103)
% population aged 15–64					-0.065** (0.026)
Mortality rate					0.030 (0.042)
No. obs	17334	17334	17334	17334	17334
Year Fixed Effects	Y	Y	Y	Y	Y
PLU Fixed Effects	Y	Y	Y	Y	Y

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . All variables are standardized. See Section 3 for variable definitions. Standard errors are clustered by Poor Law Union and presented in parentheses.

Figure 5: Poor law conditionality varied considerably across Poor Law Unions throughout the nineteenth century.



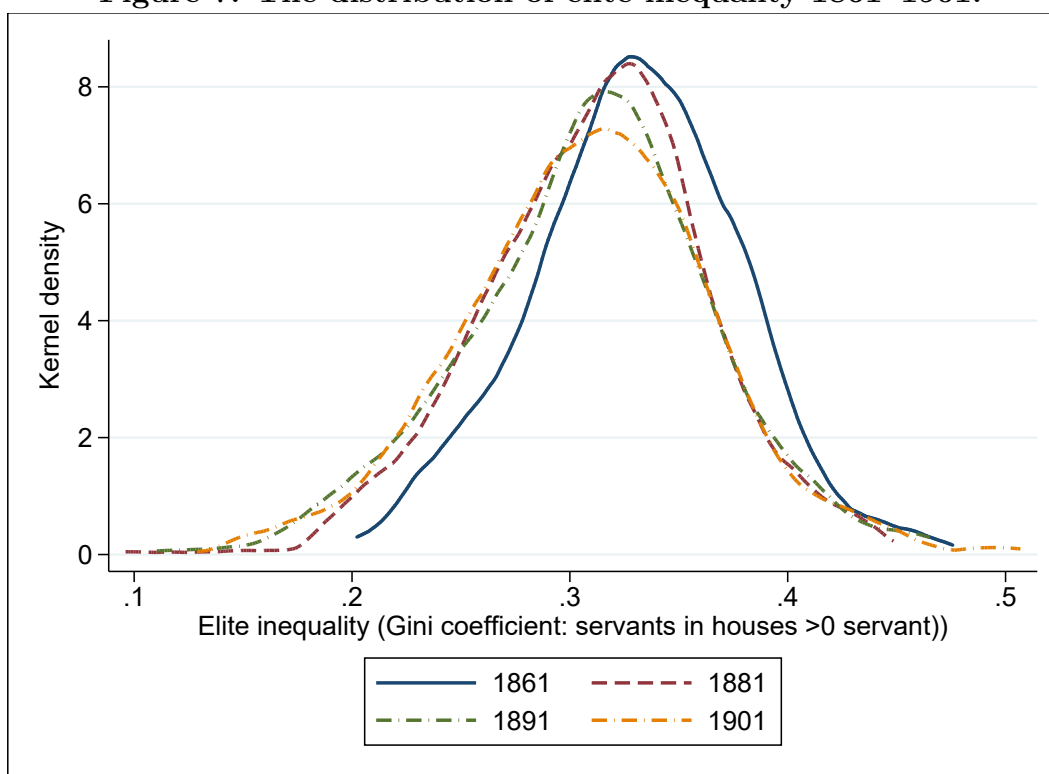
Source: see Section 3.

Figure 6: The distribution of wage inequality 1861–1901.



Source: see Section 3.

Figure 7: The distribution of elite inequality 1861–1901.



Source: see Section 3.