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GROWTH AND WELFARE PROVISIONING: LESSONS FROM THE ENGLISH POOR LAWS?

SONIA BHALOTRA*
University of Cambridge and University of Bristol, UK

1 INTRODUCTION

A majority of individuals in poor countries have volatile incomes and are often unable to maintain adequate levels of consumption.[1] There has nevertheless been limited interest in academic and government circles in state-guided provision of social security in these countries. This is, likely, because it is thought unaffordable at prevailing levels of income per capita. In addition, the administration of welfare is thought to be outside the scope of governments in poor countries, where the presence of a large informal sector in the economy poses severe information problems. Yet, from as early as the 17th century and well before the sharp rise in incomes associated with the industrial revolution, the state in England operated a fairly sophisticated system of welfare provisioning that was responsive to economic and demographic shocks such as harvest failure, unemployment, illness, widowhood, orphanhood and old age. Preliminary work by historians suggests that welfare funds raised by a compulsory parish rate yielded resources in England that were unmatched both in level and rate of growth in other parts of Europe before the late 19th century. Might a closer look at the English poor laws offer insights in to the feasibility and design of welfare in today's developing countries? Might poor relief in England have encouraged demographic change and economic growth in ways that would be merited in poor countries today? Might it have contributed to building institutional capacity, starting at the community level? These questions do not appear to have been considered before. Historians and historical demographers have created an exciting literature on the manner in which the poor laws operated and, independently, on changes in fertility and mortality rates in pre-industrial England. However, the two have not been brought together, partly because of data constraints. This paper argues that there is a research agenda here with considerable unexploited potential.[2]

*Correspondence to: S. Bhalotra, Department of Economics, University of Bristol, 8 Woodland Road, Bristol BS8 1TN, UK.

[1]For case studies of poverty dynamics and income volatility in developing countries, see Hoddinott and Baulch (2000).

[2]Research in to some of the questions posed is currently ongoing with the help of funding obtained by Richard Smith and Sonia Bhalotra at the University of Cambridge from the UK Department for International Development under its Pro-Poor Growth programme. This paper presents a preview of the issues, intended to stimulate complementary research.

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The paper is organized as follows. Section 2 is intended to introduce to the development economist features of the data available for historical England. It also briefly summarizes the nature of relevant data for developing countries. In Section 3, it is argued that the evidence from England offers no support to the growth-first paradigm. This is consistent with contemporary research which provides microeconomic foundations for a policy of redistribution before growth. While raising the well-being of the poor is an objective of intrinsic value, the political feasibility of interventions guided by this objective is strengthened if it can be shown to be growth-producing. Section 4 describes the evidence on the inequality-growth relation and discusses some mechanisms by which poor relief can stimulate growth. Against this backdrop, Section 5 provides an illustrative description of the Poor Laws in England. Section 6 argues that there is a hitherto neglected case for introducing in today's low-income countries event-related insurance payments and pensions for widows and the elderly. Selected aspects of design of a system of welfare provisioning are considered in Section 7.

2 A NOTE ON RELEVANT DATA

2.1 Microdata for Pre-Industrial England

There is now a wealth of microdata that permit a close analysis of poor relief in England and its effects on economic behaviour and political processes in village and small-town communities before the early nineteenth century. These data consist of pauper censuses and listings and account books kept by the overseers of the poor at the parish level. Information on births, deaths and marriages obtained from the parish registers has been used to reconstitute families so that it is now possible to follow the fortunes of a family over a century or more, and, in the aggregate, to chart demographic change. The overseers' accounts record rates levied on the well-off and amounts paid out as poor relief, with the reason for the payment often explicit. These data permit identification of recipients in terms of age, gender, legal settlements and migratory attributes. We can therefore make statements about the proportion of poor relief given to women as opposed to men, or to the elderly as opposed to the sick. We can also monitor changes over time in the generosity of poor relief and in its composition, against a background of known price and wage trends. While the demographic data have generated path-breaking work by historians and historical demographers (see Wrigley and Schofield (1981) and Wrigley, Davies, Oeppen and Schofield (1997), who also describe the methodology of reconstitution), linkage of the demographic data with the economic data in the overseers' accounts is still in process. This will allow us to relate fertility, infant mortality, widowhood and orphanhood to economic circumstances at the levels of both the individual and the economy. Analysis of these combined data has begun, primarily at the Cambridge Group for the Study of the History of Population and Social Structure (e.g. Williams, 1999). However there remains considerable scope to extend these data and to attempt to address questions posed by economic theory and economic policy.

2.2 Data for Developing Countries

Microdata for developing countries have become increasingly available since about the mid-1980s. The ICRISAT village surveys for India (see Walker and Ryan, 1990) and

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Burkina Faso (see Fafchamps, 1993) offer rare panel data, though for fairly small samples. A great deal of research in development economics has analysed these, partly because they were available early on. The World Bank Living Standards Measurement Surveys (LSMS, see www.worldbank.org/lsms/) and similar integrated household survey data collected by RAND (www.rand.org) and the International Food Policy Research Institute (IFPRI, see www.cgiar.org) are now available for about 30 countries in all (including transitional economies in the case of the LSMS). A handful of these are panels (e.g. Pakistan data from IFPRI, the Cote d'Ivoire LSMS), the majority being single cross-sections collected in the 1990s or the late 1980s. In addition, richly detailed Demographic and Health Surveys are now available for about 40 developing countries (see www.macroint.com). Many countries also have their own household surveys, some interesting ones being India, Thailand, Taiwan, Indonesia and Brazil. Compared with the microdata available for pre-industrial England that offer very few control variables, these data contain a wealth of socio-economic characteristics of the households and the communities in which individuals live, and information on individual education, health, fertility and employment. Their weakness is that a five-year panel for a developing country is a luxury whereas, in contrast, the English data allow individuals and their families to be followed for a century or more. This is especially important for studying the rather slow process of demographic change. Also, by virtue of crossing generations, these long-range data permit tests of hypotheses pertaining to family effects.

Aggregative statistics on growth, inequality and a range of indicators of education, health, democracy, media coverage and the like are available from the World Development Indicators database of the World Bank that spans the four decades from the 1960s forwards. Specialized databases on country-level poverty and inequality are held at the World Bank (see Chen and Ravallion, 2000) and UNU/WIDER-UNDP (2000) (see www.wider.unu/wiid/wiid.htm).

3 THE PAIN OF WAITING FOR GROWTH: IS THIS NECESSARY?

Looking across parishes, as well as across time within a parish, a striking observation is that there was no clear relation between prosperity and the extent of generosity of the welfare system in England during the Old Poor Laws. This fact commands renewed attention in the context of today's developing countries. In developing countries today, insurance is provided primarily by the family or the village community, with the state having little or no role to play (see Morduch, 1999).[3] It is expected that economic growth will result in a disintegration of family support systems and that it will, at the same time, spontaneously generate a welfare state. This is not what English history suggests. In England, welfare provisioning through the parish complemented family support from as early as the 17th century and this continued throughout the industrial revolution period without any striking transformation. When the formal welfare state was set up,[4] it was no

[3]There are exceptions and these are effective to varying degrees. A National Policy on Elderly Persons was proposed in 1998 in India, though with several anomalies (see Alam and Agarwal (1998)). The South African government has recently introduced a state pension scheme, which has performed much better (see Case and Deaton, 1998). Several countries have public works programmes which offer workfare rather than welfare (Ravallion, 1991, 1999).

[4]It is generally thought that a formal welfare state starts with the introduction of the National Health Service by the Labour government after 1945, but pensions for the elderly appeared in 1908 and a system of national insurance after 1911, funded from the central government rather than from local parish rates.

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more than the transfer to a centralized administrative system of methods of discharging a range of functions that had previously been discharged by the parish. Thus growth was not a necessary condition for welfare provision. Indeed, a hypothesis central to this paper, and as yet controversial amongst economic historians (see Boyer, 1990; Slack, 1990; Solar, 1995), is that rising levels of poor relief in England (*c*.1600–1850) facilitated economic change and institutional development (see Humphries, 2000; Innes, 1994; and also refer to Poynter, 1969). If this is correct and redistribution is a critical ingredient to economic development rather than a delayed outcome of the growth process, then there are radical implications for the design of pro-poor policies today.

The contrary views that inequality promotes growth (by virtue of the rich saving more than the poor) and that growth is necessary for and therefore prior to poverty alleviation have held sway for decades and had a profound influence on traditional development policy. In the 1980s, an alternative model of development was suggested by endogenous growth theory, in which increasing returns to human capital (health and education) play a central role (for example, see Bardhan, 1995). This is therefore a model that favours investment in people. The fact that social returns to investments in health and education exceed private returns makes a case for government provision of these services. At the same time, the notion of vicious circles that create poverty traps has been formalised (see Dasgupta (1997) and Dasgupta and Ray (1986, 1987) for example).[5] Examples of poverty traps include the circularity of poverty, high child mortality and high fertility; and of poverty, borrowing constraints and low levels of productive investment. By their nature, individuals caught in poverty traps can do little to break out of them and forms of government intervention that directly address poverty are called for. Recent median voter models argue that inequality depresses growth via political demands for redistribution (e.g. Alesina and Rodrik, 1994). Confronted with its many failures, especially in sub-Saharan Africa, development policy has responded to these new perspectives on development, informed by consideration of both externalities and hystereses effects. Overall, the belief that policies should be designed to encourage the participation of the poor in the growth process (redistribution *with* growth) is gaining strength.[6]

4 MIGHT POOR RELIEF STIMULATE GROWTH?

It has been argued that the lead England had in its agrarian economy and associated industrialization may be related to its having had a better system for the delivery of welfare than its competitors in Europe, though there is no hard evidence. This sections considers some of the mechanisms through which welfare provisioning may stimulate growth with a

[5]Also see the discussions of multiple equilibria in fertility (Dasgupta (1993), chapter 12) and in the labour market (Basu and Van, 1998), which suggest the possibility that welfare may flip the economy from an undesirable to a desirable equilibrium.

[6]There is plenty of evidence of a new outlook in the last decade or so. The UNDP introduced the Human Development Index in 1990 and the Human Poverty Index in 1997, marking an attempt to modify the emphasis on income by introducing literacy, longevity and, in the case of the HPI, access to safe drinking water and child malnutrition in to an index of human development that can be used to meter the effects of economic development in comparisons across countries and over time (see the annual Human Development Reports, www.undp.org). Both research and operations in the World Bank increasingly reflect an attempt to take on board the fact that human development is an input to growth (see World Bank (2001a,b)). The UK Department for International Development has committed a substantial budget to a five-year programme of applied research on pro-poor growth in South Asia and sub-Saharan Africa (see www.dfid.gov.uk) and its commitment to pro-poor growth is reflected in DFID (2000).

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view to providing an analytical basis for the preceding discussion of redistribution before growth. Although we are primarily interested in consumption *risks* (variance) faced by the poor, it is relevant to consider changes in mean incomes since a given level of risk is more easily borne at a higher level of income.

4.1 Human Capital Investment

To the extent that welfare payments buffer people against shocks, they directly entail health expenditures (as did the English Poor Laws). An indirect effect of welfare on educational attainment arises if, in the absence of welfare payments, children would have been at risk of being removed from school, either to work or simply because the direct costs of schooling become unaffordable.[7] For these reasons, insurance may be expected to raise the level of investment in health and education and, thereby, to stimulate growth.

4.2 Intergenerational Transmission of Poverty

Intergenerational transmission of poverty in the absence of welfare payments undermines the growth potential of the economy in the longer run. In developing countries, where the family performs many of the functions performed by the state in richer countries, 'family background effects' on children are likely to be particularly acute. Even in OECD countries where the children of the poor have reasonable access to publicly provided education and health care, there is evidence that their future income and wellbeing are affected by the incomes of their parents. This is a basis for offering welfare to single mothers and for providing child benefit in today's rich countries. Although it may take a generation to yield payoffs, income support of this sort is a productive investment that, by virtue of being targeted at children, has a potentially high marginal benefit.[8]

4.3 Demographic Change

Infant mortality is a function of socio-economic status. Welfare targeted at poor women who are pregnant or with infants may be expected to yield reductions in infant mortality. This, in turn, will tend to reduce fertility (e.g., Schultz, 1993): Demographers and economists have found considerable evidence that parents tend to 'hoard' children when faced with the risk of infant mortality. Lower fertility is, in turn, associated with larger investments by parents in the health and education of children.[9] The final link in the

[7]There is some evidence that Indian children in the ICRISAT villages are withdrawn from school when the household suffers an income shock (Jacoby and Skoufias, 1992).
[8]There is a recent and rapidly expanding US literature in economics on the effects of early childhood poverty, family background and youth behaviour (drug taking, drinking) on the future productivity and social stability of individuals (e.g. Burgess and Propper, 1998). Education is clearly best acquired in childhood, and there is evidence from studies by nutritionists and epidemiologists that nutritional deficiencies in childhood are very difficult to make up for later in life, leaving malnourished children with higher morbidity and mortality risks, even after allowing for variation in their adult incomes (e.g., Micklewright and Ismail, 2001).
[9]This idea goes back to Becker and Lewis (1973) who suggested that parents operate a trade-off between the quantity and the quality of their children. For a recent discussion of theories and evidence on the relation of population and economic development, see Bardhan and Udry (2000).

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chain is that a healthy and well-educated population is an important stimulus to economic growth. This is the substance of the new theories of economic growth referred to earlier, and it has generated renewed interest in the macroeconomic consequences of investments made in children by the family and the state.

4.4 Credit Constraints

A negative effect of inequality on growth can be shown to arise under credit market imperfections, which generate a concave relationship between the current and the future wealth of an individual (see Aghion, Caroli and Garcia-Penalosa (1999) and Banerjee and Duflo (1999)). The intuition underlying these theoretical models is that the poor under-invest because they are credit constrained. As a result, they earn higher average returns on their wealth than the rich, assuming the rich invest more. Given concavity, a mean-preserving spread in the distribution of current wealth (a change in inequality) reduces future mean wealth, which implies a slower rate of growth. In fact, non-convexities in the investment technology may reverse this relationship over a range, for example, on account of a minimum scale for investment (see Galor and Zeira, 1993). Allowing factor prices to be determined within the model further complicates matters, resulting in the possibility of discontinuities in the relation of inequality and growth, so that small changes in inequality can lead to large changes in the growth rate (for example, Banerjee and Newman, 1993). Overall, these models serve to demonstrate that there is no necessary trade-off between equity and efficiency. This appears consistent with two recent empirical findings, namely, the negative impact of inequality and the positive effect of redistribution upon growth (Aghion *et al*, 1999). Most of the empirical studies investigating the inequality-growth relation have used cross-country data.[10] However, this evidence is not conclusive, given that there are a range of problems of data and specification. For example, the results appear not to be robust to allowing for country fixed effects (e.g. Forbes, 1997; Li and Zou, 1998) or to allowing non-linearities in the relationship between growth and inequality (Banerjee and Duflo, 1999; Ravallion, 2001). The way forward seems to be to investigate this relation at the microeconomic level or, at least, at low levels of regional aggregation.

4.5 Risk and Investment

The variability of income that characterizes the poor is costly. It can constrain optimization on the part of the poor, deepening their poverty at the same time as generating economic inefficiencies. For example, while new agricultural technologies hold the promise of higher yields, they are often associated with higher risk as well.[11] Since a negative realisation of the risk will impose a relatively heavy cost on a poor farmer—possibly pushing his family below a subsistence level of consumption, poor farmers will tend to exhibit greater reluctance in the adoption of new technologies than richer farmers. Similarly, the poor tend to choose occupations and asset portfolios that combine low risk and low return (see Rosenzweig and Binswanger, 1993 and Morduch (1994)). Indeed,

[10]See Persson and Tabellini (1994); Alesina and Rodrik (1994); Clarke (1995); Perotti (1996); Deininger and Squire (1998); and Deininger and Olinto (2000).
[11]For example, the output of high-yielding variety (HYV) seeds is sensitive to having the correct mix of water and fertilizer. The output from traditional seeds is relatively robust to minor variations in other inputs.

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although analyses of low levels of education demand amongst the poor have typically been associated with their facing tighter credit constraints and having higher discount rates (e.g. Behrman and Knowles, 1999), any uncertainty associated with education returns is likely to be a further cause of low demand—a case of the poor avoiding a high-return high-risk activity. Social insurance will, by buffering the poor against the risk of bad outcomes, encourage their investment in productive activities, yielding economic gains that may justify the costs of social insurance.

5 EXCURSION ON THE POOR LAW

This section comments on some of the features of poor relief in England that are relevant to the preceding discussion of the potentially beneficial effects of relief on growth. This discussion is not complete, only illustrative. Expenditures on medical provisions accounted for up to 25 per cent of total poor relief expenditure in the 18th century. Substantial poor relief was given to women and their offspring in their own homes, creating favourable conditions for the successful rearing of children. Under the Old Poor Laws (pre-1834), the majority of elderly persons received pensions. In the 18th century, out-relief for the elderly, expressed as a fraction of the daily adult wage was not much different from the scale of old age pensions today, similarly expressed. While welfare for the elderly is important in itself, it also has implications for fertility and the quality of life of children since it leaves young families free to direct more of their resources towards younger generations. Related, recent evidence from the pension reform in South Africa indicates that children living with their grandparents (which is common) stand to benefit (see Case and Deaton (1998) and Duflo (2000)).

An interesting hypothesis, yet to be systematically explored, is that poor relief contributed to making infant and child mortality in England at the time lower than anywhere on the continent (for relevant discussions, see Snell and Miller, 1987; Lesthaeghe, 1980; and Smith, 1981, 1986, 1988, 1996). An opposing view arises from Malthus (reprinted, 1992), who regarded welfare as inducing early and reckless marriage on the part of landless agricultural labourers. If correct, this would tend to raise fertility rates and, thereby, to raise childhood mortality.[12] Economic theory has rather more in common with the first view (e.g., Becker, 1991; Bardhan and Udry, 2000), although this may simply reflect the fact that we have not given sufficient attention to modeling the time of marriage together with fertility and mortality. Hard evidence is severely limited by the fact that demographic change occurs over long time periods, for which data are typically unavailable. England is an exception. More is known about demographic trends and structures in England for a period stretching from the 16th century to the present day than in any other society. In this critical period, England managed to sustain a relatively favourable relationship between demographic and economic growth rates and possessed what is termed a 'low pressure' economic-demographic regime (see Wrigley and Schofield, 1981). More generally, England had a population growth rate of about 1 per cent during the late 18th and 19th centuries and, in contrast, today's poor countries exhibit population growth rates of about 2 per cent p.a. This is because fertility rates have not declined as quickly as mortality rates. Further research on 'excessive' fertility in today's

[12]Malthus' concern was not so much with childhood mortality as with negative consequences for wage rates and for welfare resources available to the genuinely needy.

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developing countries is needed and, in particular, a role for welfare provisioning bears emphasis.

6 THE NEGLECTED CASE OF POOR RELIEF

The preceding sections have discussed some of the reasons why reducing income (or consumption) risk amongst the poor will yield productive benefits not only for them but also for the economy. This is, of course, on top of the intrinsic importance of creating a society in which it is unacceptable that a large fraction of people live continuously in the terrible fear generated by income variability at low levels. It cannot be emphasized enough that ill-being rests not only in the actual occurrence of economic or demographic shocks but in the quality of uncertainty that people experience when they know that they will bear the full consequences of a bad outcome.

The emphasis of pro-poor growth policy in today's developing countries has been on increasing the supply and quality of primary education and primary health clinics. While income volatility amongst the poor has been an active subject of recent research in development economics, this research has not generated a discussion of state-led insurance. One leg of this research has concentrated on testing economic theory, in particular, the permanent income hypothesis and, by corollary, the question of whether people save from transitory income (e.g. Paxson, 1992) or in anticipation of future shocks (Deaton, 1992). Another set of papers investigates informal insurance amongst members of a village community (e.g. Townsend, 1994; Lim, 1990; Ravallion and Chaudhri, 1991; Morduch 1990; Ligon, 1994; all of whom use the ICRISAT data for Indian villages). They conclude that there is incomplete but considerable risk sharing, estimates of the degree of which differ across authors. There has been a relative neglect of discussion of poor relief or event-related insurance provision by the state. The unemployed, the disabled, the widowed, the orphaned, the old and the transitionally poor[13] have thus, so far, not benefited from the new tendencies in development policy. This may be set to change as international organisations are exhibiting an interest in social protection (see World Bank (2001b), for example). In contrast, under the poor laws in England, pensions were provided for widows and for people unable to work or unable to find work. A system of payments to vulnerable individuals was in place alongside the provision of medical services (on which, see Williams, 1999). As discussed, further research directed at understanding how this system financed itself and whether it carries lessons transferable to developing countries today is merited.

6.1 The Viability of Poor Relief

A fundamental concern of conventional programmes of poverty alleviation is the difficulty of targeting or of identifying the poor. In favour of event-related insurance, events such as widowhood or illness are relatively easy to observe. Another appealing feature of event-

[13]By the transitionally poor, I refer to individuals who earn enough on average but who, for example, suffer a bad harvest and have no reserves on which to carry a family through the resulting temporary poverty. Without insurance, the effects of temporary poverty can be permanent. Adult illness may be assisted by provision of health clinics but, in addition to this, compensation to the family for the earnings lost while illness keeps the adult out of work is a further example of dealing with transitional poverty.

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related insurance is that its financing looks more feasible than it might have in the absence of recent analyses of poverty dynamics. The traditional view of rural poverty was that it was chronic or 'structural', with asset-poor individuals such as landless labourers having no escape from it. The recent availability of panel data has called this view in to question. There is a small but growing body of evidence that shows that there is a lot of movement in the data as people enter and exit from spells of poverty (as they do spells of unemployment) and that this is not inconsistent with indicators of poverty such as the headcount moving fairly sluggishly. This is the case in the US (e.g. Bane and Ellwood, 1986) and the UK (e.g. Burgess *et al.*, 2000) and, as is recently evident, it is also the case in low-income economies (see Baulch and Hoddinott, 2000). Transient poverty is easier for policy to cope with than chronic poverty to the extent that helping people smooth consumption over time is easier than asset redistribution.[14] Social assistance to households directed at enabling them to smooth their consumption and avoid falling in to poverty in hard times can take the form of, for example, micro-credit or unemployment benefit. Microcredit has, in the last decade and a half, expanded rapidly through the activities of a network of NGOs, international government organisations and, in some cases, governments. Assessments of its impact have not been unambiguously good (see Morduch, 1999); a weakness being that this is an instrument more useful for the middle-poor than for the very poor, who may not have the capacity to take a loan. The evidence of churning in poverty raises the possibility of devising insurance schemes that will include the very poor.

7 ASPECTS OF DESIGN

This section considers selected aspects of the political economy of policy design, in particular, incentives faced by recipients, incentives of rate-payers, decentralisation and the question of whether welfare effects are neutral with respect to the gender of the recipient.

The loosely related set of statutes in force from the early 17th century are referred to as the Old Poor Laws. In this time, all vulnerable people were entitled to receive welfare payments and there were no apparent incentives to encourage them to get off welfare. Decentralization of administration of poor relief to the parish level will have limited incentive problems by virtue of reducing the costs of information: an able-bodied man would not attempt to claim welfare as he would be seen and known to be able-bodied. Around 1834, the character of these statutes was significantly altered and, under the New Poor Laws, there was a greater emphasis on workfare than on welfare (see Besley, Coate and Guinnane (1993) for a discussion of an informational basis for this change). This is the time that is associated with some dreadful workhouses, although this should not distract from the relatively generous regime of the old poor laws.

How did welfare provisioning tackle risk and uncertainty, both over the course of the life-cycle e.g., maternity, widowhood, orphanhood, old age, illness and unemployment (see Smith, 2001), and in periods of economic difficulty, such as associated with high prices, harvest failures, trade-cycles, wars and structural economic change? How were tax-payers induced to contribute, how were beneficiaries identified, how were free-rider, adverse selection, moral hazard and risk co-variance problems handled in this system?

[14]This is not to suggest that asset redistribution is less important a priority. The point is to bring recent evidence to bear on the discussion of whether forms of social security are feasible at low income levels, pending major changes in the endowments of individuals.

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There are some valuable contributions to the political economy of the poor laws (see O'Brien, 1991; Swaan, 1988; Smith, 1988, 2001) but there is scope for much further research.

Consider the question of what induced the relatively wealthy to comply with the statutory rates. Solar (1995) presents an argument that seeks to establish the coherency of poor relief and economic growth. He argues that it was politically feasible to tax landlords to finance poor relief because they had an interest in retaining, quieting, and nourishing a very local labour force. Since the early work of Leibenstein (1957), economists have made a similar observation regarding the determination of wages of manual (mostly agricultural) workers. They have argued that, even in the absence of a statutory tax and benefit regime, employers may volunteer wage rates in excess of the supply price of labour in cases where workers are poor enough to be nutritionally deficient. The idea is that the higher wage will purchase higher nutrition and pay for itself by generating higher productivity on the part of the worker.[15] An alternative to the productivity argument rests on the sway of religion and, associated, charitable giving. One view is that there was a much longer history of giving and that this was merely formalised by the state (e.g., Smith (1996), and van Leeuwen (1994)). Charitable giving appears very small in most developing countries today, even in countries like Brazil and India that support high levels of inequality.

The issue of gender patterns in the allocation of welfare payments is complex. For instance, though there was some direct targeting of women, women were more likely to receive relief through men and this may have been an incentive for them to marry in the face of a decline in labour market opportunities. The data suggest that the gender split of relief allocations alters over time. In the seventeenth century, it was 3:1, in favour of women. This shifts closer to parity in the 18th century (e.g., Smith, 1998). This is interesting because there is considerable contemporary evidence from across a range of countries at different levels of economic development, that incremental income, if controlled by women, has greater benefits for the health and education of children than when the same income is controlled by men (see Strauss and Thomas (1995), and Duflo (2000), for example). Women and men are also known to have different desired levels of fertility (Mason and Smith, 2000) as a result of which empowering women may be expected to spontaneously generate a reduction in fertility. Economists are increasingly finding that the unitary model of household decision is too restrictive a simplification and policy makers are exhibiting awareness that the identity of the program recipient is relevant.[16]

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[15]This is the earliest version of the efficiency wage hypothesis. The evidence on the strength of the nutrition-productivity relation is mixed (see Swamy (1993) for a critical review), although a direct effect of higher real wages on productivity has been identified for industrial workers in India (Bhalotra, 1995). In a more recent development of the theory, Dasgupta and Ray (1986, 1987) argue that the fact that poverty and malnutrition lower worker productivity lowers the economic cost of interventions designed to alleviate poverty and mitigate its health consequences.

[16]This is evident, for example, in many micro-credit schemes, including the pioneering Grameen Bank in Bangladesh that favour women in the distribution of loans, as well as in the change in the UK child benefit which is now paid to mothers and not fathers.

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