Social Security in Developing Countries
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Print publication date: 1991
Print ISBN-13: 9780198233008
Published to Oxford Scholarship Online: Oct-11
DOI: 10.1093/acprof:oso/9780198233008.001.0001

Social Security in Developing Countries: What, Why, Who, and How?

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DOI: 10.1093/acprof:oso/9780198233008.003.0002

Abstract and Keywords

This chapter aims to help clarify some of the problems and issues raised by attempts to understand and alleviate the deprivation and fragility associated with the lives of so many people. It explains what social security means and defines the term with respect to objectives for developing countries. The chapter determines why the State should be involved in social security and investigates various general reasons for intervention that may be relevant to entities other than government. It examines arguments concerning market failure and income distribution that arise within the standard economic theory of policy and then looks more widely at questions concerning rights of individuals, at notions of State obligations, and at the concept of standard of living and the role of the State in improving it. The chapter further poses the question of who should carry responsibility for social security.

Keywords: social security, market failure, income distribution, policy, rights of individuals, State obligations, responsibility

1. Introduction

Millions in developing countries suffer severe and chronic deprivation. This is compounded by general uncertainty with respect to livelihood and life which threatens an even wider section of the population. Short-term, often acute downward fluctuations in living standards are superimposed upon longer-term, persistent deprivation associated with generally low standards of living. The accumulated evidence based on a wide range of indicators strongly suggests that the incidence of these problems is widespread and the consequences severe (World Bank 1986, 1988*a*; Cornia *et al* 1987; Drèze and Sen 1989; UNICEF 1989; United Nations 1987; Pinstrup-Andersen forthcoming). This is in contrast to the situation in most developed countries where deprivation and adversity are less prevalent and the implications less severe—though even in developed countries deprivation is common and unpleasant (Atkinson 1989; Danziger and Weinberg 1986; Sawhill 1988; Harvard School of Public Health 1985; Murray 1984).

Part of the reason for this contrast lies in government social-security programmes. Most developed countries have government-operated or -supported programmes to provide all or most of the following: old-age pensions; unemployment benefit; family income support; facilities for the infirm or disabled; education; and health services (Atkinson 1989; Barr 1987). The mechanisms, eligibility, entitlements, coverage, administration, and levels of benefits vary greatly, but nevertheless there is a considerable degree of support for those who may suffer deprivation or adversity. Concern and support for the deprived and destitute is by no means a modern phenomenon and to a large extent current levels of support reflect a long history of social action (Atkinson 1989).

The position for most developing countries is very different. Unemployment insurance and State pensions rarely cover more than a minority, generally a small minority (see Chaps. 3 and 8, below; also Midgley 1984). Health care, whilst often subsidized, may be thinly and haphazardly spread, State support for the infirm and disabled is generally negligible, and education seldom extends beyond primary school (Halstead *et al* 1985; Caldwell 1986; Schultz **(p.42)** 1988). These differences in the level, coverage, and effectiveness of State provision of social security partly reflect acute resource constraints in developing countries (see Chaps. 3 and 7 below; also Ahmad 1989; Midgley 1984). The supply of social security is also restricted by the low level of institutional development of a kind which may help to facilitate effective provision of resources to the poor and vulnerable (Lewis *et al.* 1988). On the demand side, the role of the public in exerting pressure for social security through social, legal, and political processes is hindered by the relative powerlessness of those in need in developing countries (see Chap. 1 above; also Drèze and Sen 1989, 1990).

Greater incidence and severity of deprivation, a low degree of development of formal social-security systems, limited or inappropriate coverage of public support, resource constraints, low levels of institutional development for social-security provision, and the relative powerlessness of the poor and vulnerable are all factors which combine to make the problems of social security in developing countries both important and difficult. The problems are conceptual, ethical, and theoretical as well as empirical, practical, and administrative. Our purpose here is to help clarify some of the problems and issues raised by attempts to understand and alleviate the deprivation and fragility associated with the lives of so many people.

We begin in Section 2 by explaining what we mean by social security. For developing countries we shall define the term with respect to objectives. This contrasts with definition by reference to the programmes and institutional mechanisms designed to deliver support, which is the approach generally used when defining the subject matter for developed countries where extensive programmes are already in existence. One should not be overly rigid, however, in insisting on a definition either through ends or through means. In thinking about social security, what we are considering is public action for the removal or reduction of deprivation or vulnerability. An examination of which social means are effective or appropriate with respect to this objective is clearly central. Writers on social security for developing, as well as for developed, countries quite clearly have both ends and means in mind (see Chap. 3 below; also Atkinson 1989; Drèze and Sen 1989; Midgley 1984).

We go on to ask (Section 3) why the State should be involved in social security and investigate various general reasons for intervention which may be relevant to entities other than government. We examine arguments concerning market failure and income distribution which arise within the standard economic theory of policý and then look more widely at questions concerning rights of individuals, at notions of State obligations, and at the concept of standard of living and the role of the State in improving it. In Section 4 we pose the question of who should carry responsibility for social security. Should it be the central government, the local government, the village, trade unions, the religious community, the family, or some other entity? Section 5 contains a **(p.43)** preliminary analysis of the mechanisms for providing social security. We ask how provision may be made and what problems arise. Questions of budget constraints, administration, fraud, and incentives are briefly addressed. Concluding comments are provided in Section 6.

2. What Is Social Security?

Deprivation and vulnerability are integral to the lives of many in poor countries. In developed countries unfavourable outcomes in economic activity frequently mean real hardship but in poor countries they often lead to death or destitution. For many, severe deprivation is not a matter of an unfortunate fall from a previously more comfortable position but is a chronic state arising, for example, from the absence of any asset or resource that can ensure adequate livelihood. A crucial policy issue is therefore how lives and livelihoods can be made more secure against adversity and deprivation. Accordingly, we define the objective of social security as being the prevention, by social means, of very low standards of living irrespective of whether these are the result of chronic deprivation or temporary adversity. The term 'social security' may then be viewed as a measure of success in meeting this objective. It should, however, be made clear from the outset that we will be restricting the set of means under consideration by examining only those social means which have a direct bearing on deprivation and vulnerability. This restriction is twofold. First, the restriction to social means excludes a wide range of other factors (for example, climatic change, industrialization) which may contribute to our objective but which none the less cannot be considered primarily as part of a social-security agenda. Second, the restriction to those social means which directly influence deprivation and vulnerability further focuses us on a limited set of measures which include direct interventions, alterations in market functioning, and redistributive policy. We are using 'direct' here to distinguish from 'indirect' measures, in which we include the general development of the economy and society. There is no doubt that such developments can contribute to greater security, but that is not our main subject matter. In essence our approach is to focus attention on the role of public action at the State, community, and family level in improving social security.

Our approach contrasts with that of developed countries where social security is generally seen in terms of specific public programmes involving social assistance, social insurance, and redistribution (see Chap. 3 below; also Atkinson 1989; Kotlikoff 1987). For developing countries, the fact that few programmes of this type exist, and those that do often have low or poorly directed coverage (Midgley 1984; Puffert 1988), suggests that a definition along these lines would be too narrow. Increases in social security may arise in ways which are not simply enacted or imposed by government. A definition **(p.44)** based on State programmes fails to take into account household and community contributions and their interactions with State provision, and may miss the important role of public pressure (Drèze and Sen 1989; Bardhan 1988; Lewis *et al.* 1988). Even within the sphere of State action, there is no clear indication that social security in developing countries should take the same form as it has taken in developed countries (see Chap. 3 below). Given the greater problems of insecurity, limited administrative resources, and tightness of budget constraints in developing countries, doubts have been expressed as to whether conventional social security measures are operationally tenable or financially viable (see Chap. 7 below). For example, it might be argued that there is a case for more emergency prevention and relief measures at one extreme and for the diversification of economic activity and the improvement of market functioning at the other.

As a result, an analysis of achievement or commitment to our 'social-security objective' in terms of types and levels of expenditure on State social-security programmes is likely to be misleading. This assertion is strengthened by the fact that some State programmes may in fact be regressive and contribute negatively or negligibly to the security of the very poor. This appears to have been the case in some important examples in Latin America (see Chap. 8 below; also Mackenzie 1988; de Oliviera *et al.* 1987; Jimenez and Puffert 1988).

We do not wish to say that choice of the mechanism of delivery is unimportant, but rather to place emphasis, in the analysis, on outcomes instead of confining the subject matter to certain means. The nature and extent of the problems would seem to dictate a wider perspective. Means must, however, play a central part in the discussion, and the diversity of measures implemented across developed and developing countries shows that an analysis of the actual and potential outcomes of programmes should take a broad view of the possibilities (see Chaps. 1 above and 3 below; also Atkinson 1989; Drèze and Sen 1989). Given the various shortcomings outlined above it is imperative that governments view the problem of social-security provision in a framework which is more extensive than that limited to conventional social-security measures.

In defining ends we have avoided specifying goals with respect to poverty lines or safety nets despite the fact that this approach to deprivation has been standard in the literature for many years. Poverty alleviation, typically, requires the definition of a poverty line, usually seen as an income cut-off, and the problems of definition can lead to real confusion both conceptually and in applied work. One cannot simultaneously define poverty as the minimum for survival and then record how many are surviving below the minimum. And given the scope for substantial differences in the choice of line, it is discomforting that the distribution of the population around proposed lines is typically very dense, so that small movements in the line cause big changes in the numbers in **(p.45)** poverty (see, for example, Bardhan and Srinivasan 1974; Bliss and Stern 1978). The definition of income itself, generally unavoidable when a poverty line is invoked, raises difficulties which are much more severe in developing countries (than developed) where statistics and administration are much poorer—these include the choice of time period, the treatment of inputs in own-account productive activities, and the specification of unit (household, family, individual—see, for example, Deaton 1988). It is perhaps not surprising that discussions of numbers in poverty in developed countries often focus on State-defined levels for the receipt of benefit, or on how the poverty line has moved over time or with respect to some other level (Atkinson 1989). Further, the focus on a line can divert attention from the distribution below the line which is generally of considerable importance—the number and conditions of the very poor, however defined, will be of as much, or greater significance, as those for the poor (Lipton 1988). Brave, interesting, and important attempts at definition have been made (see, for example, Townsend 1979,1985; Sen 1976, 1985; Atkinson 1987) but the conceptual and practical basis is not sufficiently strong to lead one to define social security with respect to poverty lines.

Related problems arise with the notion of 'safety net'. Safety nets are supposed to catch anyone who might fall (those designed to save only the most valuable or good-looking members of the troupe would be both impractical and repugnant), and to catch them before they fall below some particular level. This would appear to imply a formula that is both universal and specific. Minimum levels for all types of individual, family, or household (which may, of course, be different for different people depending on the formula) must be specified, together with means by which they may be universally achieved. There may be a case for providing 'safety nets' to individuals who become subject to specific types of identifiable sources of hardship (for example, widowhood, physical disability). Nevertheless it is the universality of coverage of programmes combined with the need to define justifiable minima for each category that make the notion of safety net less than satisfactory as an analytical or administrative tool.

We do not therefore find the language either of poverty lines or of safety nets to be useful for a definition on which to base either analytical enquiry or policy measures. We would suggest that the one we have used is less ambitious, more practical, and carries less danger of misdirection. The objective of preventing deprivation and adversity can be pursued in many different ways from widows' pensions to food for work programmes, and including improved sanitation, water supply, education, and so on. These are not easily incorporated into notions of poverty lines or safety nets. Also, in order to facilitate measurement of poverty lines there is a tendency to concentrate on income as the main welfare criterion and hence ignore other important influences.

The definition of social security suggested here includes public action at the household, community, and State level to remove or reduce deprivation and **(p.46)** vulnerability. The breadth of the definition leads to inclusion of the study of possible interactions (for example, between State provision and family support —see Section 5.3) and emphasis on the role of public pressure in facilitating provision. Comprehensiveness of scope must not, however, be taken to imply that all influences are of equal importance. We shall try to retain our focus on those measures which have a direct bearing on deprivation and adversity. The challenge then becomes to identify the most important and fruitful avenues of policy influence and we trust that the studies in this book make some contribution.

We place special emphasis on uncertainty, as developing countries suffer particularly from dependence on risky agriculture, susceptibility to macro shocks, high morbidity, and so on. Separate from the issue of uncertainty is the fact that persistently low standards of living themselves carry negative consequences in the sense of long-term or chronic deprivation. Whilst these may be less visible than those associated with short-term failures, their incidence and persistence suggest that they are perhaps of greater importance. The raising of living standards then becomes an issue that falls within the domain of social security, but it is used here in the narrow sense involving essentially the use of social mechanisms to mitigate the adverse consequences of low levels of living as opposed to the general sense which involves essentially the whole of development economics. Specific measures such as government provision of pensions or subsidization of food-grains would fit into this category, as they are concerned with raising the living standards of the deprived irrespective of whether or not the focus is on uncertainty. One should, however, also note that fluctuating climatic conditions and commodity prices can limit the design of effective social-security schemes in that policy-makers cannot be sure of the environment in which they are operating. Relative price changes induced by the introduction of programmes also constrain policy design.

It is important not to dissociate the chronic deprivation and temporary adversity issues as there are significant complementarities involved and effective policy instruments often influence both simultaneously. In particular, if the probability or consequences of adverse outcomes are reduced or mitigated with little or no change in the probability or consequences of favourable outcomes, then the mean standard of living is raised. More broadly, the probability of occurrence of extreme hardship would generally be reduced if the mean income (or standard of living) is raised, provided the distribution (in the appropriate sense) is not widened. This reminds us that there are broad complementarities between risk reduction and the sustained promotion of living standards, which should be exploited in the design of policy. The dynamics of social-security provision also need to be kept firmly in mind as effects are not limited to the current period. Policies which involve direct provisioning, human-capital formation, and economic growth will influence deprivation over different time scales. There may be important trade-offs between protecting **(p.47)** individuals in the short run and providing greater incomes and security in the longer term.

3. Why Should Governments Involve Themselves in Social Security?

The theory of economic policy is usually based on the idea that individuals consistently pursue well-defined objectives which can also be interpreted as their own well-being. We first consider the reasons why governments should involve themselves in social security which arise within this standard framework. In this context there are essentially two reasons for government intervention. The first is that the markets in which individuals trade may not work efficiently in the sense made precise in the theorems of welfare economics. Some markets may not exist, markets which do exist may not be competitive, and there may be externalities. For these reasons an equilibrium (if one exists) may not be Pareto-efficient (where Pareto efficiency is defined in the usual sense that it is impossible to make one person better off without making another worse off—and better off is defined with respect to individual objectives). The second reason for governments to involve themselves in social security within this framework is the improvement of the distribution of welfare. Whether or not an equilibrium is Pareto-efficient, the government might regard the distribution of welfare as unsatisfactory and may see scope for improving it, and a responsibility to do so. In Section 3.1 we consider these two reasons and analyse what they imply for the potential for government intervention.

In Section 3.2 we examine reasons for government involvement in social security which lie outside the standard framework. First, a government may believe that individuals are not the best judges of their own self-interest. Second, a government may have goals which cannot be specified in terms of the objectives of agents, together with an aggregate across agents, which we often term social welfare. Thus a government may have views of individual and social states, and of the processes which generate them, which cannot simply be defined in terms of the usual economic language of individual utility, Pareto efficiency, and social welfare. This leads us to consider what is important about an individual's state for public policy, including capabilities and rights.

Third, the public, or at least sections of the public may desire the provision of social security. One can then take the view that the provision of social security has some justification from the viewpoint of democracy. The reasons the public might desire social security may well overlap with those we have already mentioned, but it is the fact that they may wish it that we are emphasizing here. The usual qualification to the democratic argument, namely, that it should not interfere with basic rights, would apply here. Note that this **(p.48)** normative question is distinct from the positive one which points to the role of public pressure in eliciting a government response (see Section 3.3). We shall not pursue the 'democratic' justification for social security in any further detail here.

Political economy considerations are stressed throughout. What is clear is that the role played by institutions and the interaction between interest groups are critical in determining whether, and to what extent, social security is provided. It should be noted that though we have phrased our approach in terms of government intervention, many of the reasons mentioned apply more generally.

3.1. The Standard Framework of Welfare Economics

3.1.1. Market Failure

In the standard framework of welfare economics, each agent is assumed to be able to compare and rank economic states which are defined in terms of his or her own consumption and supplies and those of other agents (here households and firms). Individuals are then assumed to act in their own self-interest as defined by this ranking, finding the best outcome for themselves subject to whatever constraints they may face. We are to think of goods delivered at different times as being different goods. We should also think of goods which occur in different states of nature as being different goods (for example, a cold beer when it is drizzling is a different good from a cold beer when it is hot and sunny). The two basic theorems of welfare economics are the following. First, a competitive equilibrium is Pareto-efficient, if there are no externalities. The assumption that there are no externalities means that one agent's action does not directly affect the welfare or opportunities of another. Note that a competitive equilibrium here involves the assumption that all markets exist and are perfect in the sense that any individual acts as if he or she can buy or sell as much as is desired without affecting the market price.

The second theorem states that a given Pareto-efficient allocation can be achieved as a competitive equilibrium, provided again that there are no externalities, and further, that production is convex (constant or decreasing returns to scale), that preferences are convex (constant or diminishing marginal rates of substitution), and that the government can make lump-sum transfers and levy lump-sum taxes. The definition of lump-sum here is that there is no action an individual can take to alter the transfer or the tax. We consider reasons, in the context of social security, why the Pareto efficiency of the first theorem may not be achieved and the problems of redistribution which may be associated with the failure of the assumptions in the second theorem.

There are many reasons why a competitive equilibrium may fail to exist. As we have seen, if one does exist the only reason that it can fail to be Pareto-efficient is that there are externalities. We focus here on the problems of **(p.49)** establishing a competitive equilibrium with particular reference to those which may be associated with social security. We then comment briefly on externalities in this context. There are three markets where failures are of particular importance for the security of the less well-off: capital markets, insurance markets, and labour markets. We consider them briefly in turn.

Capital markets allow people to transfer spending power from one period to another, thus freeing them from being constrained in a period by the income which they receive in that particular period. Someone who has low income in a particular week or month may borrow and repay in a period when income is high. This allows the individual to remove fluctuations in the sense of allowing the consumption stream to be independent of the income stream, subject to the overall constraint that loans must be repaid, that is, a long-term budget constraint. Capital markets may therefore prevent a severe disruption for an individual in one period when the individual's overall resources in the long term are indeed sufficient to sustain a higher standard of living. Well-functioning capital markets also allow individuals to save in a productive way for their retirement, an extended period of low or zero earned income. Given high volatility of incomes (for example, through seasonal variations) and general uncertainties surrounding livelihoods, the consumption-smoothing and insurance potential of capital markets would appear to be of considerable importance (see Deaton 1989; Gersovitz 1988).

We must ask ourselves, then, why it is that capital markets may not work properly in the sense that an individual who is likely to be able to pay back may not be able to borrow (at 'reasonable' market rates) to carry himself or herself through a period of crisis. A basic problem is that the lender may not be prepared to take the risk of default or may find it too costly to ensure that the interest and debt are repaid. This consideration tells us that there is a fundamental reason why capital markets can never be perfect. An individual cannot expect to borrow as much as he or she desires at the going price (interest rate), since lenders will regard a higher indebtedness of a particular borrower as a sign that repayment will be more uncertain and may therefore wish to alter the terms of the loan, if indeed there is any preparedness to offer further sums. In addition to this problem it may also happen that higher interest rates attract less dependable borrowers. As a result some degree of credit-rationing may ensue (Stiglitz and Weiss 1981; Braverman and Guasch 1986). The government will therefore never be able to ensure that capital markets are perfect in the sense that is generally used in economics.

On the other hand, capital markets can work more or less well and the government may take action to improve them. We must then ask ourselves what the government can do that the markets without government intervention cannot. The government may, in principle, be able to take bigger risks than the market, since it can pool risks from different sources. This is an argument of size which, however, is not compelling since private banks (or insurance **(p.50)** companies) may be large. It may be argued, however, that the government should take the lead, given the limited coverage of private banks and the scarcity of private credit in general in many developing countries (Bell 1988; Braverman and Guasch 1989).

The government may have better information since, for example, it gathers data on individuals for legal and fiscal reasons. A large body of evidence, however, suggests that local institutions and individuals have an informational advantage especially with regard to the crucial issue of ability to repay (Binswanger *et al.* 1985; von Pishke et al. 1983;Bhende 1983;Bell 1988,1989). Governments may have powers of enforcement which are not open to private individuals or local institutions. However, the very high default rates reported for a wide range of geographically distinct government credit programmes, juxtaposed with substantially better recovery rates for localized private credit, would suggest that such measures, if they exist, may not operate effectively (Braverman and Guasch 1989; von Pishke *et al.* 1983). The issue of government provision of credit hinges on the enforcement problems which clearly exist but which none the less must be seen against a background of high interest rates and extreme credit-rationing for the most needy in the local informal market (Ryan and Walker, forthcoming; von Pishke *et al.* 1983). From the perspective of social security it may be that governments have a greater role to play in (1) reducing the cost of private credit through investment in infrastructure and the like (Bell 1988); (2) fostering and financing local institutions which encourage participation by the poor and implement innovative mechanisms such as joint liability in order to enforce repayment (Huppi and Feder 1989; Braverman and Guasch 1989; Hossain 1986; Bell 1989).

While capital markets may allow an individual to borrow in difficult circumstances, insurance markets can protect the individual against those outcomes. Similar kinds of problems to those which constrain the satisfactory functioning of capital markets may arise. There are real difficulties of monitoring, moral hazard, and adverse selection. An insurance company has to monitor in the sense that it has to be in a position to ascertain whether the outcome against which insurance has been bought has actually occurred. Moral hazard arises where this outcome may have been made more likely by the action (inattention, indolence, negligence, or worse) of the insured. Adverse selection arises where insurance arrangements attract bad risks.

Given the magnitude of these difficulties it is not surprising that there is little insurance against unemployment, disease, disability, or widowhood in developing countries. Even predictable life-cycle events such as ageing or the costs associated with child-bearing are not generally covered by government programmes in developing countries. Some protection against these types of events is provided by governments in developed countries in the form of social insurance (see Chap. 3 below; also Atkinson 1989). Government social-insurance schemes are not widespread in developing countries, and where they **(p.51)** exist coverage does not normally include the poor (see Chap. 8 below; also Mackenzie 1988; Puffert 1988; Ahmad 1989; Midgley 1984). Apart from their potential for insurance, these schemes could introduce an important element of redistribution into government policy, though both these aspects remain largely unexploited. Given the importance of the events they are designed to protect against, this may represent an area where properly designed government intervention may carry substantial benefits (see Chap. 6 below and Ahmad 1989 for a discussion).

Selling labour is the main source of income for many or most of the poor in developing countries, and it is in the operation of the labour market that government action may be most effective in directly providing social security. Private employers may not be willing or able to take on employees at difficult times because they themselves may be credit-constrained, or uncertain about their ability to sell output, or unwilling to take the risk of hiring labour and producing for future sale. There are many reasons to suppose that employment may fluctuate a great deal and there is ample empirical evidence that loss of employment is indeed an important phenomenon affecting the welfare of the needy worldwide (Rosenzweig 1988*a*; Drèze and Sen 1989; Srinivasan and Bardhan 1988; de Janvry *et al.* 1986). Agriculture, an activity in which many of the rural poor are employed, is inherently risky and involves seasonal variation in employment (Chambers *et al.* 1981; Longhurst *et al.* 1986; Ravallion 1988). Unemployment and underemployment are regular features of the informal sector in which many of the urban poor are found (Fields 1980). Employment prospects in all sectors are also highly dependent on international commodity prices and the demand for exports, both of which may fluctuate widely (Newbery and Stiglitz 1981).

The provision of employment on public works has been shown, in a number of geographical and historical contexts, to be an effective means of protection both against short-term risk, such as that associated with drought, as well as against longer-term chronic deprivation, as is the case with the Employment Guarantee Scheme in Maharashtra (see Chaps. 7 and 9 below; also Drèze 1988*a*, 1989; Drèze and Sen 1989; Dandekar 1983). Part of this success may be attributed to an element of self-targeting introduced by offering a wage so low that only the truly needy apply (Ravallion 1989*a*). Identification of deserving beneficiaries is in general both imperfect and costly (see Section 5.1), and reliance on a self-targeting mechanism can significantly improve targeting and reduce demands on local administrative capabilities and resources, thus enhancing cost-effectiveness. Public work schemes may be used to complement longer-term productivity-raising measures (for example, credit provision) by effectively addressing the issue of how to protect the incomes and living standards of the poor and vulnerable which are regularly threatened by events such as drought or seasonal loss of employment.

Informational constraints such as the lack of reliable data on income **(p.52)** (Glewwe 1989), a lack of resources, and problems of moral hazard and adverse selection may help to explain why means-tested benefits of the kind common in developed countries as well as general insurance against the consequences of unemployment remain extremely rare (see Sections 5.2 and 5.3). Public work schemes have a crucial role to play in protecting the assets of the rural poor, such as livestock, which otherwise might be sacrificed in order to ensure short-term survival. In this way short-term protective measures (for example, public work schemes during droughts) may carry strong positive benefits for the livelihood of the community in the longer term (see Chap. 9 below; Drèze 1988*a*, 1988*b*, 1989).

With respect to chronic deprivation, the processes of wage determination are important in determining whether the working poor have incomes which allow them to escape destitution. In this context, wage bargaining, unionization, and the form of interlinked transactions, if any, are all relevant (Drèze and Mukherjee 1987; Datt and Ravallion 1988; de Janvry *et al.* 1986; Rosenzweig 1988*a*; Bell 1988). In general, bargaining and conflict between groups over the terms of transactions (for example, wages, prices) profoundly affect the level of security enjoyed by a particular community or occupation group, and the government may see some role in influencing security through this mechanism by such measures as minimum wage laws or tenancy regulations. However, in their desire to protect, governments do not always think through the consequences of market regulation. For example, tenancy regulations may limit the availability of land for leasing, and minimum wages may reduce employment (particularly for the less productive labourers).

Finally, we ask whether externalities provide a reason in this context for government intervention for social security. In order to illustrate the issues we consider only two cases—the environment and relative incomes. Environmental degradation arising from the actions of one group may have dramatic effects on the security of others. For example, it is argued that deforestation and consequent soil erosion in Nepal contribute significantly to the silting of rivers and thus the size and probability of floods in Bangladesh. One cannot expect the market to cope with externalities on this scale. Not even the most fervent devotees of the 'Coase theorem' would suggest that the current (and future) peasants and landless labourers of Bangladesh, recognizing the potential for a Pareto improvement, would seek out their counterparts in Nepal and negotiate on side payments to reduce the amount of silt flowing down from the rivers. Even at the local level, exploitation by individuals of resources on which a community may depend can pose a serious threat to social security. However, at the local level co-operation may be more feasible, as has been shown by the literature on the management of common property resources (Runge 1986; Sugden 1986). Though government may see itself as having a role in preventing or controlling access to large natural resource bases (marine fisheries, for example), evidence would suggest that at a more micro level, such as communal **(p.53)** grazing, it may be more effective to support local initiatives and institutions. The greater familiarity in the locality with the complexity of the issues involved can lead to the evolution of mechanisms which may cope adequately with the problems and which are not easily replaced by regulatory mechanisms imposed from outside (Wade 1988; Sugden 1986; Runge 1986; World Bank 1988*b*; Lewis *et al.* 1988; Rao *et al.* 1988).

The second illustration of the problems posed by externalities involves relativity in the determination of welfare. There are those who consider relative income to be an influential aspect of individual welfare. Some individuals may become, or be perceived as, poor not because their absolute income has fallen, but because the income of others is higher whereas theirs has stayed the same, or not risen as much. In this sense the increasing income of others has lowered the welfare of the less well-off. The government may then feel some obligation to compensate those who have not gained. The status of this argument is far from straightforward, and has been the object of some controversy (see Sen 1983; Townsend 1985; Runciman 1966, for a discussion). Notice that it is the negative relation between the perceived welfare of one individual and the income or welfare of another that causes a competitive equilibrium to fail to be Pareto-efficient. Winter (1969) shows how a positive relation between the utility of one individual and that of another will not generally disturb the conclusion that a competitive equilibrium is Pareto-efficient.

3.1.2. Redistribution

Whether or not markets are perfect the government may regard the outcomes as unattractive, unsatisfactory, or unjust from a distributional point of view. In these circumstances it may attempt to introduce mechanisms for the redistribution of income, wealth, or assets. The standard theory of welfare economics tells us that the most efficient way to redistribute is through lump-sum taxes and transfers. There are fundamental problems here. It is not because lump-sum taxes and transfers cannot be invented. One could, in principle, have taxes on sex or height, bases which could be changed only by drastic and unusual action. The problem is rather that the desirable set of lump-sum taxes and transfers cannot be implemented without their ceasing to be lump-sum. We may wish to redistribute from rich to poor. This means that the taxes and transfers will be related to income and wealth. Such taxes cannot be lump-sum since individuals will realize the basis of assessment and can then adjust their income and wealth through changes in work or accumulation.

We therefore immediately run into the problem of incentive compatibility. The issue then becomes, in theory, one of trading off efficiency and equity. This has become the subject of a standard literature (see, for example, Atkinson and Stiglitz 1980, or Newbery and Stern 1987), a large part of which builds on the seminal work of Mirrlees (1971). A simple version of the government's problem in these theories can be expressed formally as the **(p.54)** maximization of social welfare, subject to the constraint that a given amount of revenue is raised. This revenue constraint will have as a crucial ingredient the responses of individuals to taxation. For example, revenues from indirect taxes depend on consumer demands and from income taxes on factor supplies. These responses we group under the heading of incentives and they can take many different forms depending on the context. Attention has mainly been focused on commodity demands and labour supply but some contributions (for example, Diamond 1977) also examine intertemporal transfers within and between generations.

There are crucial examples, however, where the incentive problems may be of less significance and where focus on them might divert attention from more important issues. Many of these would arise from chronic deprivation. For example, severe disability, such as loss of arms or legs, would be obvious grounds for State support. The relevant personal incentive to self-maim or take less care to prevent accidents is unlikely to be a serious consideration. Similarly widows' pensions are unlikely to lead to a serious rise in the homicide of husbands. The effect of State support on the support provided by others is a different issue to which we return in Section 5.

Given the incentive and administrative problems associated with taxation, a highly uneven distribution of assets (such as land), together with deprivation associated with lack of assets (say, landlessness) may lead a government to consider straightforward redistribution as an alternative. Attempts in this direction, such as those involving land reform, have generally met with strong and often insurmountable opposition (King 1977; Powelson and Stock 1987). The specific examples of land reform and wage bargaining bring into sharp focus the constraints and importance of group bargaining and conflict between interest groups in the determination of social security. Economic and political power is strongly related to ownership, occupation, class, gender, and race and there is thus inherent conflict over control of resources, the outcome of which will largely determine the security of a particular group or individual. The government can thus influence social security by changing the distribution of assets or the conditions of bargaining. The prospects for such interventions, however, are often limited because those who have power tend to be the most able to influence government policy and block redistributive reforms. Serious redistributive measures have typically taken place only in countries which have also witnessed a significant political transformation (see, for example, Chap. 6 below on the crucial importance of land reform for China's social-security system).

(p.55) 3.2. Reasons Outside the Standard Framework for Government Involvement in Social Security

3.2.1. Are Individuals the Best Judges of Their Own Interests?

The preceding theory assumed that individuals are indeed the best judges of their own interests, and the hackles of many economists and others are raised when the contrary is suggested. This irritation is often couched in accusations of paternalism, of violation of liberty, of interference, and so on. There are, however, many examples where individuals do not appear to be, or society does not act as if they are, taking wise decisions from their own standpoint. An obvious example is children (hence the word paternalism). Adults often act to constrain the immediate desires of children, not simply because they may be offensive or destructive, but also because they may be damaging to the future of the child. The argument is that the individual does not understand, or does not act as if he or she understands, that the current action is not in his or her best interests. Society may take analogous action to prevent someone who wants to use drugs and has the money to buy them from actually using them. Important examples where this type of argument appears to have been influential concern compulsory insurance or pension schemes. It is quite common in countries around the world for employment insurance, health insurance, and contributions to pensions to be compulsory (Atkinson 1989). It is not clear that this compulsion can always be justified by invoking the arguments of market failure, which we have discussed above. It seems that the government believes that it has a responsibility to prevent the individual from doing something which might be regarded as short-sighted or irresponsible, and which the individual may subsequently regret. In this sense the government might be seen as acting to reinforce the higher or more responsible self in an individual who may have more than one strand in his or her attitudes and behaviour.

It is not obvious that this kind of compulsion should be regarded as dictatorial or unacceptable. Individuals, for example, when they vote may consciously vote for a government that would impose this compulsion on them because they think they may wish to be protected from themselves. Similarly someone may contract with a slimming or alcohol clinic to be prevented from consuming food or alcohol in the quantity that he or she would wish in the short term.

3.2.2. The Standard of Living

The language and argument of welfare economics suggest individual utility as the object of study (which then may or may not be aggregated into social welfare) and that the level of utility which is achieved by an individual is constrained (and thus determined) by the prices and incomes that individuals face. Hence much of the literature on defining **(p.56)** poverty and standard of living focuses on incomes and price indices. The term 'standard of living' can encompass a broader perspective. The ability to be adequately nourished, to avoid preventable morbidity, to escape premature mortality, and so on are obvious candidates for inclusion in the determination of standard of living as perceived by an individual (Sen 1987). Accordingly, indicators of nutritional status, morbidity, and mortality take on special relevance and are frequently used to reflect the conditions of life within a country (see, for example, UNICEF 1989; United Nations 1987; World Bank 1988*a*). These are not features which are embodied in standard utility analysis as based on revealed preference and market choices. Lives may become adjusted to deprivation. Mechanisms to escape basic deprivations may not be available either through the market mechanism or at the community or household level. Factors such as undernutrition, disease, and poor sanitation may threaten standards of living independently of the level of real income. The government may, then, see itself as having a fundamental role to play in raising the standard of living through various types of direct or indirect interventions which influence nutrition, health, and other constituents of human well-being. The notion of standard of living, and its importance for public policy, are discussed in greater detail in the contribution by Drèze and Sen to this volume (see also Sen 1987, and Drèze and Sen 1989).

3.2.3. Rights

The membership of society may be seen as involving both duties and rights. The duties may involve observance of the law, certain customs of behaviour, military service, amongst others. The rights may involve voting, protection of the law, basic education, health, and housing, and so on (some of these rights may be confirmed in constitutions). The belief that, as members of society, we are entitled to certain fundamental rights is widespread even though the set of rights which are regarded as fundamental may vary. This viewpoint has great practical significance both in terms of the rhetoric and reality of government policy as well as for the perceptions and demands of the citizen.

A number of aspects of government policy, viewed from the perspective of rights, may be seen as emanating from notions of liberty and equality, and justification for the provision of social security as a basic right may flow from these two ideas. Liberty to pursue one's own life and income opportunities may conflict with ideas of equality of outcomes but for social security the conflict is not so clear. One might argue that equality should operate in the sense of everyone having the right to some basic position from which to pursue the opportunities provided by the liberties while being accorded equal protection against deprivation and adversity. This would appear to be a common theme in Western democracies. Asserted rights might include: the ability to escape serious deprivations (for example, hunger); to live without shame or fear; or to practise important liberties (such as freedom of religion and speech). Important **(p.57)** elements of social security might then be regarded as part of the protection of fundamental rights. By fundamental here we mean that it would be wrong for the government to deny these rights even if it were in the general interest to do so.

The assertion of rights involves a basic departure from the objective of maximizing general interest or welfare as embodied in a social welfare function of the type familiar in welfare economics. The objective of treating citizens with equal concern and respect has been expressed in terms of rights to equal treatment and the right to treatment as an equal (Dworkin 1977). Utilitarian arguments (interpreted here in the broad sense which would include the use of a Bergson-Samuelson social welfare function) which might suggest constraints on liberty may violate this conception of equality. Personal preferences and interpersonal judgements, embodied in the Bergson-Samuelson approach, do not provide grounds for distinguishing between individuals if one adopts the viewpoint of rights. If critical weight is attached to these Bergson-Samuelson aspects then the right of everyone to be treated with equal concern and respect may be prejudiced.

3.2.4. Public Pressure

The public can exert pressure on the government to provide social security. One can regard this pressure both as a normative justification for social security (if, for example, it embodies a majority) or as a positive exploration of why governments do in fact provide social security. We concentrate on the latter here.

There may be a strong perception on the part of the public that they are entitled to certain basic rights. The consequences of short- or long-term inability to provide for social security can be politically damaging. The survival of a government may depend on its record with regard to the protection of living standards. Even those not directly affected by deprivation or adversity may have motivations which go beyond their own well-being and hence they may rally in support of the deprived. Pressure from individuals, communities, and social or political organizations may provide one of the strongest (positive) reasons for government provison of social security (see Chap. 1 and Drèze and Sen 1989,1990).

The public may be active both in the dissemination of information to heighten awareness of breaches in social security and in the exertion of pressure to correct them. Drèze (1988*a*) and Ram (1986) both highlight the role of the press in ensuring early and concerted State action by drawing attention to potential famine situations. It has been argued that some of the differences in success in dealing with Indian and African famines may be traced in part to differences in the freedom to gain access to and disseminate information, and in the ability to exert social and political pressure once alerted (Sen 1988). In a longer-term perspective, success in protecting populations may be traced to the existence of democratic forms of government which make **(p.58)** political survival contingent on the maintenance of an adequate standard of living. Violent reactions to the reduction or removal of subsidies seen in countries as diverse as Egypt, Tunisia, Zambia, Bangladesh, and Argentina illustrate the political forces which may be unleashed (Hopkins 1988; Bienen and Gersovitz 1986). People accustomed to a given standard of living may react strongly if the standard becomes threatened. It should, however, be pointed out that political clout does not generally correspond to need, and hence though government action may be elicited (and maintained) it may well be in favour of those not experiencing the most serious deprivation (such as the military or public employees). This appears to be at least partly true, for example, for public food distribution systems in South Asia (see Chap. 7 below; also Sobhan 1986), for food subsidies in Egypt and elsewhere (Alderman 1988*a,b*; Pinstrup-Andersen 1988) and for formal social-security systems in Latin America and elsewhere (see Chap. 8 below; also de Oliviera *et al.* 1987; Ahmad 1989; Midgley 1984).

From the perspective of both preventing temporary adversity and removing chronic deprivation it then becomes critical that the needy or threatened have access to institutions or channels of influence by which dissent can be expressed and action instigated (Lewis *et al.* 1988; Drèze and Sen 1989). The nature and influence of the institutions which exist in a given country, whether they be political (such as opposition parties), social (for example, grass-root organizations) or legal (for example, labour unions), are critical in determining whether the pressure for provision of social security is effective. The empowerment of the poor and their participation in the process of development appear to have been of crucial importance in countries which have had some success in the provision of social security (see Chap. 5 below; also Drèze and Sen 1989; Caldwell 1986; Lewis *et al.* 1988).

4. Who Should Provide Social Security?

The discussion in the preceding section has suggested that there are a number of reasons, many of them strong, for social intervention in the provision of social security. But who should carry out that intervention? Should it be the family (extended or nuclear), the village, the social or religious group, the firm, the city, the province, the national government, or some other entity? Different societies have answered the question in different ways. One part of the answer should be associated with how social security can be most efficiently supplied —different groups have different information, different organizing abilities, different financing capabilities, and different sanctions. Another part of the answer concerns where obligations to help should lie. A number of the questions of efficiency and incentives are taken up in this section and the **(p.59)** discussion will be continued in Section 5 when we consider how social security can be provided.

In some Muslim countries charitable provision by religious groups can be of great importance for health, education, and for the alleviation of destitution (see Qureshi 1985). In China the firm and commune have been providers of social security across the board, though this system has undergone fundamental transformation in recent years with the introduction of the 'responsibility system' (see Chap. 6 below and Hussain and Liu 1989). In Israel the trade unions play a major role in providing health services and pensions for a very wide section of the population. In the UK the major responsibility has been taken by the central government, local authorities (concerned with education and some social services) being controlled and heavily subsidized by central government in the provision of services they do supply (Barr 1987). The concept of 'looking after one's own people' appears to be common in a number of communities from supporters of Liverpool Football Club to the Freemasons. Finally, in most countries, the family is for many the first place to turn. Which of these should carry the obligation and which of these can discharge it most efficiently?

Intrahousehold and interhousehold transfers between related or proximate individuals constitute a basic form of social security in developing countries. To a large extent the family or community serves many of the roles carried out by formal institutions in developed countries. As we have noted, information problems and resource constraints make formal institutions difficult to establish or operate effectively in low-income settings (Rosenzweig 1988*b*). Transfers between related or proximate individuals, for example, have been shown to serve the purposes of risk mitigation, insurance against income shortfalls, support for the elderly in retirement, help during illness, unemployment insurance, educational loans, and financing of rural-urban migration (see Chap. 4 below; also Cox and Jimenez 1989*a*; Ravallion and Dearden 1988; Rosenzweig 1988*b*). These transfers represent an important component of household income and expenditure both in traditional village and rural households as well as in urban households (see Chap. 4 below; also Cox and Jimenez 1989*a*; Kaufman and Lindauer 1984).

The rationale for such provision is unclear, though a greater degree of altruism between related or proximate individuals has been traditionally put forward as an explanation (see Chap. 4 below; also Becker 1974; Cox 1987; Ravallion and Dearden 1988; Sugden 1986). More recently it has been argued that transfer behaviour may result from repeated interactions of self-interested individuals or households in a risky environment, whereby current generosity ensures future reciprocity (Coate and Ravallion 1989).

Recent findings in Peru and elsewhere suggest that private transfers are not substituted on a one-for-one basis by public transfers (Cox and Jimenez 1989*b*). Transfers to those unlikely to reciprocate, such as the disabled, and the finding of an inverse **(p.60)** relationship between household income and receipt of transfers in El Salvador and rural Java, where the poorest families tend to be the primary recipients of transfer income, would suggest a strong element of altruism in certain situations (Kaufman and Lindauer 1984; Ravallion and Dearden 1988). Positive relationships have been found by other studies (Cox and Jimenez 1989*b*; Lucas and Stark 1985), and both motives are probably important with self-interested reciprocation increasing in importance as relatedness declines, though clearly the fact that individuals are related or proximate helps to generate trust and facilitates enforcement, thus making sustained reciprocation much more feasible.

It may be argued that a person has special responsibilities toward family members. This may be more than simply the statement that family members are in a position to supply help more efficiently than others. One could reason that being a good member of a family involves much stronger obligations towards others than being a good neighbour, which in turn involves much stronger obligations towards others than being a good member of a village or firm. Further, some bonds may arise from a common religion, occupation, or interest.

The general finding then is that private transfers are significant, do help smooth consumption, and are directed towards the poor, the young, the old, women, the infirm, and the unemployed (Cox and Jimenez 1989*a*). One must then ask how such family and community provisions overcome the difficulties which prevent the establishment or limit the effectiveness of general social-security programmes. It may be argued that the ties of heritage, common background, and altruism which may exist amongst related or proximate persons help to transcend the information problems which confront impersonal markets (Rosenzweig 1988*b*). The immediate family or community may be well placed to judge whether an individual really has fallen on hard times, and thus to deal with the question of fraud, and whether that individual has been careless or indolent in bringing about the difficulties. Further, the sanction of social opprobrium which may arise from fraud or neglect can be very strong within the family or community. From this point of view local entities may be the most efficient suppliers of social security.

Though the family or local community may possess an informational advantage and may thus be able effectively to deal with problems of moral hazard, adverse selection, and the like, insurance and risk-spreading considerations go the other way (see Chap. 4 below). The fact that members of a household or community will tend to be affected by adverse phenomena at the same time (covariate risk, such as drought) places severe constraints on the effectiveness of social-security provision at this level (see Chaps. 4 and 5 below; also Rosenzweig 1988*b*). Insurance is generally most efficiently supplied if the income of the person being insured is not positively correlated with the income of those providing the insurance. Thus if the community falls on bad times it **(p.61)** should look for support from outside the community. Rural-urban migration and modernization, which are commonly seen as threats to traditional social-security arrangements, can carry substantial risk-spreading benefits. Diversification of rural activity (for example, into cash crop production or rural industry) and migration (for example, to cities by labourers looking for work, or by women to marry) may both help to mitigate income risk and facilitate consumption-smoothing in agricultural environments characterized by covariate risk (Rosenzweig and Stark 1989; Lucas and Stark 1985; Drèze and Sen 1989).

A second argument for making the provision more distant from the individual concerns the stigma attached to an application for help. It may be much more humiliating for an individual to go to the local group than to a more anonymous body. These more anonymous groups, however, because their information may be poorer, generally involve substantial amounts of administration (see Chap. 6 below).

Given the various difficulties and shortcomings presented so far concerning the provision of social security both at the State and the household or community level, one should consider the role of 'grass-roots' organizations in providing support to the poor and vulnerable. Such organizations, which generally arise from local initiatives, are often oriented towards helping the poor and needy. They also carry the advantage of being able to draw on local information by directly involving the poor, and are often large enough to deal to some extent with covariate risk (see Chap. 5 below for some Indian examples).

Questions of incentives and fraud are usually discussed from the point of view of the individual. However, where several groups may be involved in social security we must ask how the provision by one group may affect the provision by another. This type of incentive is rather different from the individual incentives which have received such prominent analysis in the theoretical and empirical literature for developed countries.

In some circumstances the net effect of State provision may simply be a transfer payment to the entities that would otherwise have provided the assistance. For example, if the State takes over responsibility from a church organization this may act like a transfer payment from the general taxpayer to the church. There may, of course, be other effects in terms of real resources employed in providing the assistance, incentives to the individual, and distributional implications. An assessment of the distributional aspects of this type of incentive will be influenced not only by the incomes of those who would otherwise provide the assistance, but also by the view of who carries the moral obligation for the assistance.

The accumulated empirical evidence, most of which has appeared only recently, strongly suggests that provision of assistance from the State does not result in the complete replacement of the assistance provided by the family or **(p.62)** community, though partial displacement is observed (Cox and Jimenez 1989*a,b*). If the State provides a special means of transport for a disabled person this does not mean that the family or local community will automatically cease providing help to that individual. They will probably provide a little less help, but the individual will get a net increase in transport services available to him or her. The government may indeed wish to look for schemes which do provide net additional help to those to whom the scheme is directed, as well as relieving others of the burden of provision. These 'group incentives' should be a crucial element in the design of any scheme. On balance it would seem that there is a role for social provision both at the household or community level and at the government level, especially given the evidence that the different levels are most effective and efficient in insuring against different types of events and that they do not completely displace one another. Again, social and political organizations which provide support somewhere between these two levels would appear to be important both in providing a voice for the poor and vulnerable as well as in serving as an effective alternative source of support which does not depend on the whims or machinations of State bureaucracy.

5. How Should Social Security Be Provided and What are The Problems?

5.1. Costs and Targeting

Government budgets and the costs of programmes impose severe constraints on what can be achieved by social-security programmes in developing countries. The position is less favourable than for developed countries not only because GNP per capita is low. In addition, raising revenue is more difficult due to the limitations of tax instruments, and often calls on revenue are strong. Both these factors constrain the ability to finance sustained provision of social security at the government, community, and household levels and highlight the importance of self-financing components of different schemes. Further, the problems of low and uncertain standards of living in developing countries affect a very large proportion of the population. The scope and levels of provision seen in developed countries are clearly infeasible (see Chaps. 3 and 7 below).

Examination of costs has led people to consider the importance and role of alternatives, and targeting of limited government resources would appear to be inescapable. Though such arguments have some validity they do evade considerations which should be made explicit. First, how tight in fact is the budget constraint? Does the 'impossibility' of formal social security for all those in need not partly reflect a low priority being attached to such an objective? Could resources, for example, not be transferred out of higher-priority budgets **(p.63)** such as defence? Clearly the allocation of government funds is not fixed and may be affected by changes in the perceptions both of government and citizens as to what the priorities of development are. Second, the issue of policy-switching under a fixed budget constraint to improve effectiveness is avoided. Certain programmes (for example, immunization, primary health care) are cost-effective whilst some of the components of formal social-security programmes may simply be inappropriate in developing countries. Third, placing all the onus on the family and community to provide resources for support ignores the important role that government may have in strengthening local institutions which support the poor (see, for example, Lewis *et al.* 1988). Resource constraints are important but there is considerably greater flexibility and scope for innovation than ardent proponents of minimal government would have us believe.

The tightness of existing government budget constraints and the limited opportunities for self-financing schemes do suggest that there will be a high pay-off from making full use of alternative channels of influence. The relative effectiveness of family and community provision of social security (discussed earlier) must be examined and the limitations assessed. Private provision of insurance or of services such as health care represents another mechanism by which dependence on limited government revenue may be avoided. However the association between ability to pay and participation in such schemes casts doubt over whether they would be effective in reaching the truly needy. At worst such schemes may, by reducing contributions or participation by the better-off, divert funds away from public schemes which serve the vulnerable in a more effective manner (for example, private health care). The size of the resource base is critical and for this reason it is essential to examine how different social-security schemes interact with the tax system, other governmental programmes, and informal support (see Chaps. 3 and 9 below; also Ahmad 1989). Despite numerous calls for formal and informal social-security systems to reinforce each other (for example, Midgley 1984), there is little research on the relationship between the two. (See Section 5.3 and Cox and Jimenez 1989*a*, for a review of the available literature on the scope for beneficial co-operation.)

Targeting has recently come to be seen as a major mechanism by which costs can be contained whilst still providing government assistance to those in need (World Bank 1986, 1988*b*), and a spate of mainly theoretical papers reflect the perceived importance of this issue (for example, Besley and Kanbur 1988; Besley 1989; Glewwe 1989; Kanbur 1988; Nichols and Zeckhauser 1982; Ravallion and Chao 1988). Irrespective of the measure which a government chooses to adopt (see Ahmad 1989; Weisbrod 1988, for an examination of some options), it is confronted by a basic dilemma which arises when it tries to provide assistance. If, on the grounds of equity with respect to some particular service, or on the grounds of rights, it tries to make the service available to all **(p.64)** people then the costs are likely to be very high and there will be a number of 'non-deserving' beneficiaries. On the other hand if a stringent selection procedure is imposed this will increase the probability that deserving individuals are excluded. Targeting refers to procedures designed to concentrate provision on those individuals who are deserving or needy. The justification for targeting derives in a straightforward manner from a consideration of costs in terms of the attempt to achieve the greatest economy of resources in reaching those for whom support is intended by excluding individuals who do not 'need' the benefit. The success of targeted programmes is intimately linked to how successful the selection procedure is in excluding non-deserving individuals who try to obtain the benefit (for example, rich people receiving an income transfer). This is made difficult by the fact that welfare characteristics are generally unobservable. It is thus important that schemes be incentive-compatible so that potential recipients reveal truthfully such information as they have which is relevant to the policymaker (see Besley 1989; Hammond 1979; and Section 5.3 below).

There is an important sense, however, in which an excessive emphasis on targeting can be dangerous. It may divert our attention from the need to reach all those in need. Weisbrod (1969), for example, has emphasized two aspects of targeting efficiency by examining not only the proportion of needy amongst beneficiaries but also the extent to which the needy are reached.

The arguments against targeting are, in addition to ideas of universal entitlement (for example, to education), also based on administrative costs, 'take-up', and stigma. Many targeting procedures involve substantial administrative costs. The inaccuracy or unreliability of administrative procedures and the dislike by individuals of submitting themselves to testing for eligibility by a bureaucracy can lead to low take-up rates (see Atkinson 1989: Chap. 11). Various authors, following the thinking in the English Poor Laws, see such ordeals as an effective mechanism by which to increase targeting efficiency as those not in need would object to being subjected to a demeaning selection test (Nichols and Zekhauser 1982). However, so might those in need and an important fraction may be deterred. The weaker criterion of the labour test in rural public works programmes would appear to be a more effective form of targeting without the side-effect of low take-up rates although such programmes may be of little help to the most needy who are unable to work—especially the aged, the infirm, and the disabled (Drèze 1988*a*, 1989).

Self-selection (the central feature of the labour test) does not represent a viable option in a large range of public intervention schemes and the problem then becomes one of targeting with respect to available information. In this context income-testing has often been the main criterion for selection. Important examples include the targeting of subsidized credit, social services, and food. However, maladministration can entail large leakages and has often reduced significantly the effectiveness of such schemes. Given these constraints there is **(p.65)** a growing consensus that targeting should not be based solely on income-testing. Regular life cycle contingencies like maternity, sickness, disability, age-related and seasonal undernutrition, unemployment, and old age might be used as more reliable and less costly indicators of the probability of being in need (see Chap. 3 below; also Ahmad 1989). Targeting of benefits may also be based on location of residence or on ethnic identity where deprivation is location- or race-dependent (Garcia and Pinstrup-Andersen 1987; Besley and Kanbur 1988; Anand 1983). In order for there to be significant improvements in targeting performance it is essential that better information on the specific attributes and characteristics of the indigent be gathered (see Drèze 1988*b*). This requires a better understanding of the processes which lead to deprivation and vulnerability.

There are also important arguments for and against targeting which are based on the need to gather political support for particular programmes. Though targeting assistance to the very needy would appear to carry the greatest moral weight it may be necessary to target benefits to the non-needy who have the political power to force the effective and sustained implementation of any given scheme (for example, the urban elite). In general, any form of targeting may be opposed by those not receiving benefit and this can lead to arguments for universal entitlement. What is clear is that targeting is often based on criteria other than need. In the case, for example, of food subsidies, political clout would appear to be a major consideration in some important examples (Hopkins 1988; Bienen and Gersovitz 1986; Alderman 1988*a*).

5.2. Administration

In this subsection we comment briefly on two related constraints which often severely limit the implementation of social-security schemes, namely incomplete information and maladministration.

5.2.1. Incomplete Information

Considerations of cost and redistribution lead naturally to targeting of benefits. Given incentives to misrepresent status, administrative selection procedures should be based on observable indicators which are not easily manipulated. Information on the welfare status of individuals, however, is usually highly imperfect (Glewwe 1989). The fact that information on the incomes of all individuals within a population is seldom available limits the scope for means-tested benefits. If the agencies involved have to collect their own data and if the pool of potential claimants is large and the administrative infrastructure needed to collect such information is weak, then the cost of the exercise may escalate to the extent that the potential benefits of the programme are vitiated. Though the problems of incomplete information and limited administrative capability do cloud the prospects for effective provision of **(p.66)** social security, various methods for trying to cope with these drawbacks have been devised.

First, household surveys (such as the National Sample Surveys in India and World Bank Living Standard Surveys for various countries) can be used to generate detailed micro-data for a representative sample of households. Close analysis of the sample can then suggest which characteristics provide useful indicators of deprivation, as well as insights into its determinants (Deaton and Case 1987; Cox and Jimenez 1989*a*). Household micro-data of this type is also essential for the design and testing of tax-benefit models. By examining the interactions between different forms of social security, taxation, and other government programmes within the sample, such models can help policymakers assess the viability of different schemes and the scope for policy change (see Chap. 3 below; also Ahmad 1989). Household survey data collected over several years can also be used to assess the behavioural responses of households to changes in the form or level of social-security provision (see Section 5.3).

Second, attributes which are 'fixed', costlessly identifiable, and perfectly coordinated with poverty represent an ideal choice with respect to both targeting efficiency and administrative capability. To a lesser extent attributes such as landlessness, geographic location, demographic structure, or age can be used effectively to limit coverage and to escape having to collect information on the population as a whole.

Third, problems associated with administrative selection may be by-passed by the use of 'self-targeting' systems, such as a work requirement, to screen out non-needy individuals (see Section 5.3). Subsidies to foods which are consumed mainly by the poor could provide another mechanism of targeting, although it is likely to be less precise.

5.2.2. Diversion by Administration

Though the decisions of policy-makers may aim at the removal of deprivation or protection from adversity, there is no guarantee that this objective is shared by the agency which actually implements the policy. Information on, and control of, the performance of the intervening agency is limited. Hence there may be considerable scope for corruption or misappropriation by agency officials who hold their interests above those of the target group and whose wages will not usually depend on performance in reaching the needy. One might improve incentive compatibility by devising contracts which make the agents' wage dependent on an indicator of targeting performance (Ravallion 1989*b*), although this system itself could, no doubt, be manipulated.

There may be a less attractive version of 'self-targeting' inherent in administrative behaviour. An obvious and empirically important example of this concerns the case where formal social-security benefits are linked to employment in formal-sector enterprises. Such employees are typically better off than the poor, many of whom are either self-employed in the informal sector, or **(p.67)** unemployed, and the system can be both ineffective in reaching the poor and regressive (see Chap. 8 below; also Mackenzie 1988; Midgley 1984). Because the administration holds the purse strings and because internal political support for such measures can be strong and entrenched, there is a tendency not only for such practices to survive but also for them to proliferate so that in addition to social-security payments they also cover life insurance, pensions, food rations, and so on (see Chap. 8 below; also Midgley 1984). The fiscal consequences of this form of 'capture' by non-deserving beneficiaries can be severe (see Ahmad 1989).

5.3. Incentives

We consider here three types of incentives: group incentives; the incentive to cheat; the incentive to reduce effort. The first involves the relationship between government support and other forms of support. The second concerns the problem of fraudulent claims for support and the third concerns the possible reduction of effort or care as a result of the insurance or promise of support if things go wrong.

5.3.1. Group Incentives

In an investigation of the relation between government and other forms of support, a first step is an analysis of the extent, nature, and determinants of household or community provision of social security. This task is complicated by the fact that such forms of support are numerous and poorly documented. Further, many may be specific to certain circumstances. Comprehensiveness cannot be expected and we will have to proceed by examining a few important examples. We look at just two here, one is the support of the elderly, and the other is single-lineage villages in South China.

Old age is for most or many a period of low or zero private income and increased health risks. Support for the elderly has been one of the main elements of social-security programmes in developed countries (see Chap.

3 below; also Atkinson 1989). In developing countries State support for the indigent elderly is generally lacking and the elderly are supported mainly by the family or community (Ahmad 1989; Guhan 1988; Midgley 1984). Evidence on transfers gleaned from survey data for Malaysia (Butz and Stan 1982), Java (Ravallion and Dearden 1988), and Kenya (Knowles and Anker 1981) strongly indicates that significant transfers flow, within the family or community, from the young to the old (see Cox and Jimenez 1989*a*, for a review). In addition to income support, families also represent the main source of health care for the elderly (Cox and Jimenez 1989*a*; Hussain and Liu 1989). Provision for those indigent elderly who do not receive family support is often the responsibility of the community, as is largely the case with *wubao* relief in China (see Chap. 6 below; also Hussain and Liu 1989). Provision for the elderly by the family or community may be limited by factors such as urbanization, the breakup of **(p.68)** extended families, and increased dependency ratios arising from the ageing of populations.

In the design of policy for supporting the elderly one should know what effect State provision of social security might have on support by the household or community. Households could, for example, reduce support for the elderly if the sole criterion for transfers is the perceived welfare of recipients. If the reduction were one-for-one with public provision of benefits, the effect on the well-being of the elderly might be negligible (see Becker 1974; Barro 1974). Attention would still need to be given to households who receive no support initially. Note that this displacement may not be inconsistent with the achievement of other policy objectives such as population control, that is to say, if individuals can rely on the State for support in their old age they may have fewer children (Nugent 1985). If, however, support for the elderly partly represents some form of intertemporal exchange of services or resources then a complete displacement would not be expected and state provision of social security would carry a net benefit to the elderly (Cox and Jimenez 1989*b*). Recent evidence from Peru suggests that provision of social security or public health benefits to elderly households does reduce their chance of receiving transfers from other households but such displacement is by no means sufficient to neutralize public policy (Cox and Jiminez 1989*b*). Those who design schemes for support should look for transfer mechanisms which avoid the withdrawal of help by others (for example, one would favour, *ceteris paribus*, support for the elderly which kept them within their own communities). On the other hand, if those who would otherwise provide support are also very poor then relieving them of a burden would itself reduce deprivation.

Single-lineage villages (all sharing the same family name) were, and still are, fairly common south of the Yangtze, especially in South-East China. Prior to liberation in 1949, lineages held a certain amount of common property, which was used for the support of corporate activities. These corporate activities consisted of the building and the maintenance of ancestral temples, organizing ancestral rites, providing schooling for the children of the lineage, and occasionally helping the poor members of the lineage. Following the take-over of power by the Communists, the corporate substructure of lineages was disbanded. The social welfare activities financed by the common property of the lineage became the responsibility of the village. Parish and Whyte (1978) point out that during the era of collective agriculture, communal social welfare provisions such as rural health insurance and education were better organized and more extensive in single-lineage villages than in multi-lineage villages. Although lineage organizations were disbanded, lineage continued to exercise influence during the collectivist era. Following the shift to household farming, lineage organizations have revived, and in Guangdong and Fujian the expatriate members of lineages have financed the rebuilding of temples, hospitals, and schools in their ancestral villages. The web of allegiance between lineage **(p.69)** members thus not only appears to have enhanced the effectiveness of State intervention in the collectivist period but has also proven to be a viable alternative to State support both prior to the gaining of power by the Communist Government in 1949 and after the recent economic reforms (1979). (For further details see Freedman 1965, 1966 and Parish and Whyte 1978—we are grateful to Athar Hussain for this example.)

5.3.2. Cheating

Any system can be fiddled. However, some systems may be more easily fiddled than others and it may be important to consider the potential problems in this direction when social-security systems are designed. Certainly this is a common question which is asked of any tax system. For example, it is often suggested that the value added tax (VAT) has an administrative advantage in that the claim for credit for tax paid on inputs can be checked against the declaration, or lack of it, of tax collected on output supplied by the firm providing the inputs.

There are a number of mechanisms which might be designed to avoid fraud. First, there may be a cost in meeting the requirement for eligibility. An obvious and important example concerns public works programmes. An individual has to present himself or herself and be available for labour at a certain place. Those who are better off, or with a higher value of time, may not be prepared to claim payment in such circumstances. Second, the form of benefits transferred to the needy may be designed to avoid fraud. Examples might include medical treatment and food for the malnourished. Third, we may look for cross-checks of the kind mentioned in the case of the VAT. One may, for example, try to construct a system of records which prevents two separate children claiming assistance for support of an elderly parent. Fourth, one may try to base the eligibility for assistance on certain characteristics which are fairly easily identified. Examples may be widowhood or physical disability. Fifth, one may depend more strongly on local bodies which are in a better position to detect fraud.

Whilst one should look for systems which will reduce the risk of fraud it is clear that this will remain a substantial problem. If eligibility requires a piece of paper, then pieces of paper can be produced. And those administering the system may be in a position to divert funds. As a partial check one may want to compare assistance given against the overall number of people in the locality with certain characteristics, that is, a macro or statistical scrutiny. But these figures can be misrepresented and in any case funds within a correct aggregate total can be misused.

We must ask ourselves, however, how far these problems of fraud undermine the case for particular social-security measures. The answer surely depends on the magnitude and type of fraud. If all funds intended for the poor and insecure are going to the rich and secure (possibly at the expense of the former) then presumably the abolition of the system would represent an improvement. But **(p.70)** how much diversion, and to whom, would justify an argument for abandonment of the system? There cannot be general answers to such questions and careful evaluation of schemes *ex ante* and *ex post* is required.

5.3.3. Reduction of Effort, Care, or Savings

In many Western countries it is argued that unemployment insurance makes people work less hard whilst on the job (because they are less worried about losing it), and put less effort into finding a job, than would be the case if there was no support at all for the unemployed. The empirical literature is hard to evaluate (Atkinson 1989), but in theory the possibility is real and many have claimed that the problems of incentives in practice have been very substantial. Similar arguments have been made concerning sick pay, where it is argued that those who receive pay are sick more often and take longer to return to work (Krueger 1990). These problems of incentives have to be traded off against the equity and protection benefits provided by the insurance. This is essentially the standard problem of optimal policy which has been the concern of the literature on optimal taxation. (It is not possible to provide an extended discussion here but see Mirrlees 1971; Atkinson and Stiglitz 1980; Newbery and Stern 1987; Stern 1984). That literature focuses on the equity-efficiency trade-offs and typically ignores the administrative problems which loom even larger in developing countries than they do in developed.

These incentive problems have, in many respects, dominated the econometric literature on social security for developed countries (Atkinson 1989; Katz and Meyer 1990; Krueger 1990; Moffitt 1990). Empirical work for developing countries has been much less substantial. A major reason for this is lack of data. The kind of data that are necessary for detailed analysis of these problems are the most unlikely to be available. It takes a sophisticated and reliable household survey to provide real information on how receipt of benefit affects various aspects of household behaviour. Recent initiatives to collect this type of data by organizations such as the World Bank and by national governments should help to shed some light on this complex subject. The other possible source is official data from those authorities which are administering social-security schemes such as unemployment benefit or health insurance. As there are so few schemes of this type data is not generally available. It is very difficult, therefore, for those designing schemes for developing countries to form a judgement on the extent of these incentive problems. Also different types of incentives may be of greater significance in developing countries. For example, one might want to account for behavioural responses to the relative price effects of social-security schemes in the design of policy. One conclusion one might draw is that it would be prudent to start with a few experiments in which these problems can be evaluated first, rather than embarking on major economy-wide programmes. At the same time one has to draw what lessons might be available from the empirical work on developed countries **(p.71)** and see how they might be applied to developing countries (see Chap. 3 below).

6. Concluding Comments

This paper examined a number of basic issues related to the provision of social security in developing countries. In particular, we have attempted to clarify what social security means, why public action in this field is important, who is best placed to carry out different types of social-security measures, and how social-security programmes can be implemented in practice. We hope that elements of the analysis we have provided for these difficult questions, taken together, constitute a useful framework for the study of social security in developing countries.

6.1. What

We have defined our subject as the contribution of public action, be it at the household, community, or State level, to the prevention of very low standards of living. This represents a departure from the government programme-based approach which is standard in the developed country literature (see Chap. 3 below; also Atkinson 1989), and which has been adopted for various developing countries (see Chap. 8 below; also Midgley 1984). A number of aspects of the problem in developing countries, which include the greater severity and pervasiveness of threats to living standards, the lack of conventional social-security programmes, severe resource constraints, a low degree of institutional development, and the relative powerlessness of the poor and vulnerable, would seem to indicate the desirability of a broader approach centred on objectives. Given the restricted prospects for government intervention, the State should not be viewed as the sole provider of social security. Contributions of the household and community assume considerable importance as do interactions between groups which have some responsibility for the provision of social security.

6.2. Why

The first major set of arguments concerned market failure. Most people depend to some degree on markets for their livelihood (through labour, for example) and for protection against adversity (for example, through credit). Deprivation and vulnerability may thus result where these markets do not exist or do not function well. The theory of market failure led us to identify several important ways in which governments may intervene in market functioning to improve social security. Given that insurance markets are generally missing in **(p.72)** developing countries we saw that the provision of credit or employment may be useful in serving a similar function. Interventions in capital markets can provide the needy with the ability to smooth consumption. Greater access to credit may also allow the poor to engage in productive activities and asset accumulation which may entail long-term benefits as regards levels of living. Interventions in the labour market, such as through the guarantee of employment on public work schemes or through the promotion of non-farm employment opportunities, can provide basic security to those who are able to work. Direct transfers could then be directed mainly at those unable to work (such as the disabled or infirm).

The correction of externalities which are detrimental to social security (such as environmental degradation) may constitute a rationale for government intervention. In the case of environmental externalities, however, the scope for intervention was seen to be limited by difficulties associated with attempts to impose cooperation.

Governments may also wish to alter highly uneven distributions of income, wealth, or assets. Redistribution and the raising of revenue via taxes and transfers raise problems of information, administration, and fraud as well as those of incentives to work, save, and so on. More straightforward redistribution (for example, through land reform) often leads to conflict, political turmoil, and the abandonment of reform.

Another major set of arguments for governments to provide social security included paternalism, the distinction between utility and living standard, and the concept of basic human rights. These may lead governments to acknowledge a duty to provide individuals with protection against certain basic deprivations (such as hunger) and access to certain opportunities (such as education). Exertion of pressure by the public in demanding these rights constitutes a major mechanism by which State action may be elicited and maintained. Institutions which facilitate the expression of popular dissent can help sustain a reallocation of resources towards the poor.

We noted that the democratic process can provide a justification for social security if that is what a majority desire. As ever, one has to check that this argument does not cut across basic rights. The normative argument involving democracy should be distinguished from the positive one which points to the role of public pressure in generating and sustaining government response.

6.3. Who

It is neither feasible nor desirable for the State to be the sole provider of social security. Other agencies, family, community, firm, religious group, and so on will have roles to play, and complementarities and trade-offs between State support and other sources of social security require careful examination. An important question here relates to which groups can provide particular types of **(p.73)** security most effectively or efficiently. Issues of information, incentives, and risk-pooling are relevant in this context. Generally individual security depends greatly on support by the family and community. We examined the ways in which proximate or related individuals and local institutions might provide workable mechanisms for overcoming the information and incentive problems which confront government agencies. Local institutions may also be more able to stimulate and to respond to local initiatives and to allow the indigent poor to be active agents in the implementation of policy. On the other hand we note that larger bodies such as central government have the ability to deal with collective risks and possess greater resources and potential for redistribution. A combination of efforts to deal effectively with the various types of risk affecting the indigent is thus desirable.

6.4. How

Given the different forms which social security might take, the different reasons why it might be proposed or demanded, and the different agencies by whom it could be delivered, it is clear that the answer to the question 'how' cannot be general. We focused our discussion on the many problems of social security in practice, including information and administrative costs, fraud by the bureaucracy, cheating by claimants, and disincentives to individual initiative or care. Limited revenues and high costs mean that sources of finance and the efficient use of resources should be central. The criteria for the assessment of interventions would include administrative feasibility, incentive effects, cost, effectiveness in reaching the needy, political acceptability, and so on. If extra benefits are to be provided then the incidence, coverage, and potential for extra taxation at the central and local level must be considered if the overall impact of any scheme on incomes and welfare is to be evaluated.

We emphasized that criteria for the eligibility of beneficiaries should, as far as possible, be clear in principle, easily measured or identified in practice, and closely correlated with the incidence of hardship. In this sense they should be well targeted. At the same time, we pointed to the dangers of an excessive emphasis on targeting in that large numbers of the needy might be overlooked or excluded. Important examples of groups which might be targeted are those who may find it difficult to work such as the disabled, infirm, or widows. For those who can work, self-targeting mechanisms such as employment guarantee schemes at 'subsistence' wages can be effective.

The nuts and bolts of social-security provision require a great deal of further attention, and we hope that the case-studies included in the second part of this book provide useful clues as to the most important areas of practical enquiry.

(p.74) 6.5. When

We have seen that the arguments for social security are strong and the problems in provision severe. It is surely a topic of fascination and importance for research. Having asked ‘what, why, who, and how’, it is perhaps obvious that we have left out ‘when’. The severity and extent of deprivation surely dictate a very prompt response and, whilst intellectual enquiry should inform action, this may be an outstanding example where we shall have to do our learning by doing.

(p.75) References

Bibliography references:

Ahmad, S. E. (1989), ‘Social Security and Poverty Alleviation: Issues for Developing Countries’, mimeo, World Bank, Washington, DC.

Alderman, H. (1988*a*), ‘Do Food Subsidies Reach the Poor?’, mimeo, International Food Policy Research Institute, Washington, DC.

——— (1988*b*), ‘Food Subsidies and State Policies in Egypt’, in A. Richards (ed.), *Food, States and Peasants: Analysis of the Agrarian Question in the Middle East*. Boulder, Colo.: Westview.

Anand, S. (1983), *Inequality and Poverty in Malaysia: Measurement and Decomposition*. Oxford: Oxford University Press.

Atkinson, A. B. (1987), ‘On the Measurement of Poverty’, *Econometrica*, 55.

——— and Stiglitz, J. E.——— (1980), *Lectures in Public Economics.* New York: McGraw Hill.

——— (1989), *Poverty and Social Security.* Hemel Hempstead: Harvester Wheatsheaf.

Bardhan, P. K. (1988), *The Economic Theory of Agrarian Institutions*. Oxford: Clarendon Press.

——— and Srinivasan, T. N. (eds.) (1974), *Poverty and Income Distribution in India*. Calcutta: Statistical Publishing Society.

Barr, N. (1987), *The Economics of the Welfare State*. London: Weidenfeld & Nicolson.

Barro, R. J. (1974), 'Are Government Bonds Net Wealth?', *Journal of Political Economy*, 82.

Becker, C. S. (1974), 'A Theory of Social Interactions', *Journal of Political Economy*, 82.

Bell, C. (1988), 'Credit Markets and Interlinked Transactions', in H. B. Chenery and T. N. Srinivasan (eds.), *Handbook of Development Economics*, i. Amsterdam: North-Holland.

——— (1989), 'Credit and Saving', mimeo, World Bank, Washington, DC.

Besley, T. (1989), 'Targeting Taxes and Transfers: Administrative Costs and Policy Design in Developing Economies', paper presented at the World Bank Conference on Agriculture, Development Policies, and the Theory of Rural Organization, Washington, DC.

——— and Kanbur, R. (1988), 'Food Subsidies and Poverty Alleviation', *Economic Journal*, 98.

Bhende, M. J. (1983), 'Credit Markets in the Semi-arid Tropics of Rural South India', Economics Programme Progress Report No. 56, ICRISAT, Hyderabad.

Bienen, H., and Gersovitz, M. (1986), 'Consumer Subsidy Cuts, Violence and Political Stability', *Comparative Politics*, 19/1.

Binswanger, H. P., Balaramaiah, T., Rao, V. B., Bhende, M. J., and Kashirsagar, K. V. (1985), 'Credit Markets in Rural South India: Theoretical Issues and Empirical Analysis', Research Report ARU 45, Agriculture and Rural Development Department, World Bank, Washington DC.

Bliss, C. J., and Stern, N. H. (1978), 'Productivity, Wages and Nutrition, Part I: The Theory' and Part II: Some Observations', *Journal of Development Economics*, 5.

Braverman, A., and Guasch, J. L. (1986), ‘Rural Credit Markets and Institutions in Developing Countries: Lessons for Policy Analysis from Practice and Modern Theory’, *World Development*, 14.

(p.76) Braverman, A., and Guasch, J. L. (1989), ‘Rural Credit in Developing Countries’, Population Planning and Research Working Paper No. 219, World Bank, Washington, D.C.

Butz, W. P. and Stan, P. J. E. (1982), ‘Household Compensation and Inter-Household Exchange in Malaysia’, *Population and Development Review*, 8.

Caldwell, J. C. (1986), ‘Routes to Low Mortality in Poor Countries’, *Population and Development Review*, 12.

Chambers, R., Longhurst, R., and Pacey, A. (eds.) (1981), *Seasonal Dimensions of Rural Poverty*. London: Francis Pinter.

Coate, S., and Ravallion, M. (1989), ‘Repricocity Without Commitment: Characterization and Performance of Non-Cooperative Risk Sharing’, mimeo, World Bank, Washington, DC.

Cornia, G., Jolly, R., and Stewart, F. (eds.) (1987), *Adjustment with a Human Face*. Oxford: Clarendon Press.

Cox, D. (1987), ‘Motives for Private Income Transfers’, *Journal of Political Economy*, 95.

——— and Jimenez, E. (1989*a*), ‘Social Objectives through Private Transfers: A Review’, mimeo, Public Economics Division, World Bank, Washington, DC.

——— (1989*b*), ‘The Connection between Social Security and Private Transfers in Peru’, Public Economics Division, World Bank, Washington, DC.

Dandekar, K. (1983), *Employment Guarantee Scheme: An Employment Opportunity for Women*. Pune: Orient Longman.

Danziger, S. H., and Weinberg, D. H. (eds.) (1986), *Fighting Poverty*. Cambridge, Mass.: Harvard University Press.

Datt, G., and Ravallion, M. (1988), ‘Wage Bargaining and Income Distribution in India: Measuring Unequal Power’, mimeo, Department of Economics, Australian National University.

Deaton, A. (1988), ‘Household Behavior in Developing Countries’, Occasional Paper No. 1, Economic Growth Center, Yale University.

——— (1989), ‘Saving in Developing Countries: Theory and Review’, paper presented at the First Annual World Bank Conference on Economic Development, 27–8 Apr. 1989, Washington, DC.

——— and Case, A. (1987), ‘Analysis of Household Expenditures’, Living Standards Measurement Study No. 28, World Bank, Washington, DC.

de Janvry, A., Sadoulet, E., and Wilcox, L. (1986), ‘Rural Labour in Latin America’, mimeo, Rural Employment Research Programme, World Employment Programme, Geneva.

de Oliviera, F., Henriques, M.-H., and Beltrao, K. I. (1987), ‘The Brazilian Social Security System’, mimeo, World Bank, Washington, DC.

Diamond, P. A. (1977), ‘A Framework for Social Security Analysis’, *Journal of Public Economics*, 8.

Dworkin, R. (1977), *Taking Rights Seriously*. London: Duckworth.

Drèze, J. P. (1988*a*), ‘Famine Prevention in India’, Discussion Paper No. 3, Development Economics Research Programme, London School of Economics; to be published in Drèze and Sen (1990).

——— (1988*b*), ‘Social Security in India’, paper presented at a Workshop on Social Security in Developing Countries held at the London School of Economics, July 1988.

(p.77) ——— (1989), ‘Famine Prevention in Africa’, Discussion Paper No. 17, Development Economics Research Programme, London School of Economics.

——— and Mukherjee, A. (1987), ‘Labour Contracts in Rural India: Theories and Evidence’, Discussion Paper No. 7, Development Economics Research Programme, London School of Economics.

——— and Sen, A. K. (1989), *Hunger and Public Action*. Oxford: Clarendon Press.

——— (eds.) (1990), *The Political Economy of Hunger*. Oxford: Oxford University Press.

Fields, G. (1980), *Poverty, Inequality and Development*. Cambridge: Cambridge University Press.

Freedman, M. (1965), *Lineage Organization in Southeastern China*. London: Routledge & Kegan Paul.

——— (1966), *Chinese Lineage and Society*. London: Routledge & Kegan Paul.

Garcia, M., and Pinstrup-Andersen, P. (1987), 'The Pilot Food Price Subsidy Scheme in the Phillipines: Its Impact on Income, Food Consumption and Nutritional Status', Research Report No. 61, International Food Policy Research Institute, Washington, DC.

Gersovitz, M. (1988), 'Saving and Development', in H. B. Chenery and T. N. Srinivasen (eds.), *Handbook of Development Economics*, i. Amsterdam: North Holland.

Glewwe, P. (1989), 'Targeting Assistance to the Poor: Efficient Allocation of Transfers when Household Incomes are Unobservable', mimeo, World Bank, Washington, DC.

Guhan, S. (1988), 'Social Security in India: Looking One Step Ahead', *Bulletin of the Madras Development Seminar Series*, 18.

Halstead, S. B., Walsh, J. A., and Warren, K. S. (eds.) (1985), *Good Health at Low Cost*. New York: Rockefeller Foundation.

Hammond, P. J. (1979), 'Straightforward Individual Incentive Compatability in Large Economies', *Review of Economic Studies*, 46.

Harvard School of Public Health (1985), *Hunger in America: The Growing Epidemic*. Boston: Harvard University Press.

Hopkins, R. (1988), 'Political Considerations in Subsidizing Food', in P. Pinstrup-Anderson (ed.), *Consumer-Oriented Food Subsidies: Costs, Benefits and Policy Options for Developing Countries*. Baltimore: Johns Hopkins.

Hossain, M. (1986), 'Credit for Alleviation of Rural Poverty: The Experience of Grameen Bank in Bangladesh', Research Report No. 65. International Food Policy Research Institute, Washington, DC.

Huppi, M., and Feder, G. (1989), ‘The Role of Groups and Credit Cooperatives in Rural Lending’, mimeo, Agriculture and Rural Development Department, World Bank, Washington, DC.

Hussain, A., and Liu A. (1989), ‘Compendium of Literature on the Chinese Social Security System’, Chinese Programme No. 3, Development Economics Research Programme, London School of Economics.

Jimenez, E., and Puffert, D. (1988), ‘The Macroeconomics of Social Security in Brazil: Fiscal and Financial Considerations’, mimeo, World Bank, Washington, DC.

Kanbur, R. (1988), ‘The Principles of Targeting’, mimeo, Department of Economics, University of Warwick.

Katz, L. F., and Meyer, B. D. (1990), ‘The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment’, forthcoming *in Journal of Public Economics*, 41/1.

(p.78) Kaufmann, D., and Lindauer, D. L. (1984), ‘Income Transfers Within Extended Families to Meet Basic Needs: The Evidence from El Salvador’, World Bank Staffing Paper No. 644, World Bank, Washington, DC.

King, R. (1977), *Land Reform.* London: C. Bell & Sons.

Knowles, J. C., and Anker, R. (1981), ‘An Analysis of Income Transfers in a Developing Country’, *Journal of Development Economics*, 8.

Kotilikoff, L. J. (1987), ‘Social Security’, in J. Eatwell, N. Milgate, and P. Newman (eds.), *The New Palgrave: A Dictionary of Economics*, iv. London: Macmillan.

Krueger, A. B., (1990), ‘Incentive Effects of Workers Compensation Insurance’, *Journal of Public Economics* (forthcoming).

Lewis, J. P. *et al.* (1988), *Strengthening the Poor: What Have We Learned?* Washington, DC: Transaction Books for ODA.

Lipton, M. (1988), ‘The Poor and the Poorest: Some Interim Findings’, World Bank Discussion Paper No. 25, World Bank, Washington DC.

Longhurst, R., Chambers, R., and Swift, J. (eds.) (1986), ‘Seasonality and Poverty: Implications for Poverty and Research’, *IDS Bulletin*, 17.

Lucas, R. E. B., and Stark, O. (1985), ‘Motivations to Remit: Evidence from Botswana’, *Journal of Political Economy*, 93.

Mackenzie, G. A. (1988), ‘Social Security Issues in Developing Countries: The Latin American Experience’, IMF Working Paper No. 21, Washington, DC.

Midgley, J. (1984), *Social Security, Inequality and the Third World*. Chichester: John Wiley & Sons.

Mirrlees, J. A. (1971), ‘An Exploration of the Theory of Optimum Income Taxation’, *Review of Economic Studies*, 38.

Moffitt, R. (1990), ‘The Effect of the U.S. Welfare System on Marital Status’, forthcoming in *Journal of Public Economics*, 41/1.

Murray, C. (1984), *Losing Ground: American Social Policy 1950–1980*. New York: Basic Books.

Newbery, D. M. G., and Stern, N. H. (eds.) (1987), *The Theory of Taxation for Developing Countries*. Oxford: Oxford University Press.

——— and Stiglitz, J. E. (1981), *The Theory of Commodity Price Stabilization.* Oxford: Oxford University Press.

Nichols, A., and Zekhauser, R. (1982), ‘Targeting Transfers through Restrictions on Recipients’, *American Economic Review*, 72.

Nugent, J. B. (1985), ‘The Old Age Motive for Fertility’, *Population and Development Review*, 11.

Parish, W., and Whyte, M. K. (1978), *Village and Family Life in Contemporary China*. Chicago: Chicago University Press.

Pinstrup-Andersen, P. (1988), *Food Studies in Developing Countries.* Baltimore: Johns Hopkins University Press.

——— (ed.) (forthcoming), *The Political Economy of Food and Nutrition*. Baltimore: Johns Hopkins University Press.

Powelson, J. P. and Stock, R. (1987), *The Peasant Betrayed: Agriculture and Land Reform in the Third World*. Boston: Oelgeschlager, Gunn, and Hain.

(p.79) Puffert, D. J. (1988), ‘Social Security Finance in Developing Countries’, Policy Planning and Research Working Paper No. 36, World Bank, Washington DC.

Qureshi, M. L. (1985), ‘Zakat and Ushr System for Relief and Rehabilitation of the Poor in Pakistan’, in S. Mukhopapadhyay (ed.), *Case Studies on Poverty Programmes in Asia*. Kuala Lumpur: Asian and Pacific Development Centre.

Ram, N. (1986), ‘An Independent Press and Anti-Hunger Strategies: The Indian Experience’, paper presented at a Conference on Food Strategies held at the World Institute for Development Economics Research, Helsinki, July 1986; to be published in Drèze and Sen (1990).

Rao, C. H. H., Ray, S. K., and Subbarao, K. (1988), *Unstable Agriculture and Droughts: Implications for Policy*. New Delhi: Vikas.

Ravallion, M. (1988), ‘Expected Poverty under Risk-induced .Welfare Variability’, *Economic Journal*, 98.

——— (1989*a*), ‘On the Coverage of Public Employment Schemes for Poverty Alleviation’, forthcoming in *Journal of Development Economics*.

——— (1989*b*), ‘Constraints on Poverty Alleviation: Information, Incentives and Targeting’, note for Poverty Research Group Meeting, World Bank, Washington, DC.

——— and Dearden, L. (1988), ‘Social security in a "Moral Economy": An Empirical Analysis for Java’, *Review of Economics and Statistics*, 70.

——— and Chao, K. (1988), ‘Targeted Policies for Poverty Alleviation under Imperfect Information: Algorithms and Applications’, mimeo, Australian National University.

Rosenzweig, M. (1988*a*), ‘Labour Markets in Low-income Countries’, in H. B. Chenery and T. N. Srinivasan, (eds.), *Handbook of Development Economics*, i. Amsterdam: North Holland.

——— (1988*b*), ‘Risk, Implicit Contracts and the Family in Rural Areas of Low-Income Countries’, *Economic Journal*, 98.

——— and Stark, O. (1989), ‘Consumption Smoothing, Migration and Marriage: Evidence from Rural India’, *Journal of Political Economy*, 97.

Runciman, W. G. (1966), *Relative Deprivation and Social Justice*. London: Routledge.

Runge, C. T. (1986), ‘Common Property and Collective Action in Economic Development’, *World Development*, 14.

Ryan, J., and Walker, T. (forthcoming), *Against the Odds: Village and Household Economies in India’s Semi-Arid Tropics*. Baltimore: Johns Hopkins.

Sawhill, I. V. (1988), ‘Poverty in the US: Why is It so Persistent?’, *Journal of Economic Literature*, 26.

Schultz, T. P. (1988), ‘Education Investments and Returns’, in H. Chenery and T. N. Srinivasan (eds.), *Handbook of Development Economics*, i. Amsterdam: North Holland.

Sen, A. K. (1976), ‘Poverty: An Ordinal Approach to Measurement’, *Econometrica*, 44.

——— (1983), ‘Poor, Relatively Speaking’, *Oxford Economic Papers*, 35.

——— (1985), ‘A Sociological Approach to the Measurement of Poverty: A Reply to Professor Townsen’, *Oxford Economic Papers*, 37.

——— (1987), *The Standard of Living*, Tanner Lectures with discussion by J. Muellbauer and others (ed. C. Hawthorn). Cambridge: Cambridge University Press.

——— (1988), ‘Africa and India: What Do We Have to Learn from Each Other?’, in K. J. Arrow (ed.), *The Balance between Industry and Agriculture in Economic Development*, i, *Basic Issues*. London: Macmillan.

(p.80) Sobhan, R. (1986), ‘Politics of Hunger and Entitlements’, paper presented at a Conference on Food Strategies held at the World Institute for Development Economics Research, Helsinki, July 1986; to be published in Drèze and Sen (1990).

Srinivasan, T. N., and Bardhan, P. K. (eds.) (1988), *Rural Poverty in South Asia*. New York: Columbia University Press.

Stern, N. H. (1984), ‘Optimum Taxation and Tax Policy’, IMF Staff Papers, 3/12.

Stiglitz, J., and Weiss, A. (1981), ‘Credit Rationing in Markets with Imperfect Information’, *American Economic Review*, 71.

Sugden, R. (1986), *The Economics of Rights, Co-operation and Welfare*. Oxford: Basil Blackwell.

Townsend, P. (1979), ‘The Development of Research on Poverty’, in Department of Health and Social Security, *Social Science Research: The Distribution and Measurement of Poverty*. London: HMSO.

——— (1985), ‘A Sociological Approach to the Measurement of Poverty: A Rejoinder to Professor Amartya Sen’, *Oxford Economic Papers*, 37.

UNICEF (1989), *The State of the World’s Children 1989.* Oxford: Oxford University Press.

United Nations (1987), *First Report on the World Nutrition Situation*, Administrative Committee on Coordination, Subcommittee on Nutrition, United Nations, Rome.

von Pishke, J. P., Adams, D. W., and Donald, G. (eds.) (1983), *Rural Financial Markets in Developing Countries*. Baltimore: Johns Hopkins.

Wade, R. (1988), *Village Republics*. Cambridge: Cambridge University Press.

Weisbrod, B. A. (1969), ‘Collective Action and the Distribution of Income: A Conceptual Approach’, in *The Analysis and Evaluation of Public Expenditures*, Joint Economic Committee, US Government Printing Office, Washington, DC.

——— (1988), ‘The Role of Government in the Provision of Social Services in Developing Countries’, mimeo, World Bank, Washington, DC.

Winter, S. G. (1969), ‘A Simple Remark on the Second Optimality Theorem of Welfare Economics’, *Journal of Economic Theory*, 1.

World Bank (1986), *Poverty and Hunger: Issues and Options for Food Security in Developing Countries*. Washington, DC: World Bank.

——— (1988*a*), *Social Indicators of Development 1988*. Washington, DC: World Bank.

——— (1988*b*), *The World Bank’s Support for the Alleviation of Poverty*. Washington, DC: World Bank.