Analysis Of Income Inequality Trends And Economic Mobility In Developing Countries[1]

Neelam Singh
Associate Professor, Economics Department, VMLG PG College
Ghaziabad

ABSTRACT

The most pressing issue of our day is the global disparity in wealth and resource distribution. There is a widening disparity between the wealthy and everyone else's income, as seen by the decile ratios and the Gini coefficient derived from the Lorenz curve. This disparity is substantial and becoming worse in both established and emerging countries.

This research serves as an introductory piece for study for development issues on the dynamics of poverty and economic mobility in emerging nations. It not only lays forth the theoretical groundwork, but also shows where the new works fit into the larger body of knowledge. From this research, a number of patterns appear. The poor include both individuals who are perpetually destitute and those who experience ebbs and flows of wealth, the latter of which is quite numerous. If we examine poverty in absolute or relative terms, we can see that people get into and out of poverty. Alterations to endowment yields have the potential to significantly boost earnings. The last point is that shocks that don't appear to be permanent might really have lasting effects. In its last section, the paper delineates the policy consequences of these patterns.

Keywords: *economic growth; income inequality; development; poverty*

INTRODUCTION

Analyses of economic mobility and poverty have three dimensions. One is the metric, the way in which welfare is measured. Commonly used metrics include income, consumption, expenditures, health, assets, or more broadly functioning and capabilities. The second is temporal, the time frame over which the metric is assessed. In particular, one can distinguish between static data, drawn from a single cross-section, and longitudinal data that track the unit of observation (individuals, households or some other aggregation of these) over time. The third dimension is the method used to summarise these measures over the population of interest. There is a rich literature on the appropriate measure of poverty [Anand and Harris, 1994; Deaton, 1997; Ravallion, 1993; Sen, 1986]^ Methods for creating a summary aggregate statistic have long been the focus of inquiry. Atkinson [1987], Foster [1984], Lipton and Ravallion [1995] and Ravallion [1993] provide reviews of this literature. By contrast, the literature on the temporal component of poverty in developing countries is remarkably thin. A recent literature review by Yaqub [1999a] revealed that only five of the 44 countries classified as having 'low' human development indicators by UNDP [1998] have household level data that permit analysis of poverty dynamics. Similarly, only seven of the 66 countries with 'medium' human development indicators have such data. Such a lacuna is important to policy-makers for several reasons. First, governments often try to target specific groups such as the poor, using static welfare indicators. Even within a single time period, it is well known that this results in errors of both inclusion - providing resources to individuals who are, in fact, not poor - and errors of exclusion - omitting individuals who are truly poor, but are measured as not-poor according to this indicator [Besley and Kanbur, 1993]. But these difficulties are compounded when one considers the temporal dimension. Using a static welfare indicator will result in the inclusion within the target group of households who are suffering from temporary misfortunes but who would not be considered poor based on their permanent incomes or consumption. Conversely, some households who would be regarded as poor over the long term may be excluded from the target group due to favourable short-term circumstances. Second, knowledge of factors associated with movements into and out of poverty (which we shall describe as 'poverty dynamics') have great value in the design

---

[1] *How to cite the article:*

of safety nets policies and other interventions designed to protect the vulnerable. Third, understanding why, over longer time periods, some households increase their well-being relative to others (which we shall term 'economic mobility') will assist in the design of policies that promote more equitable growth. This special issue of The Journal of Development Studies aims to redress this lacuna. It presents six original empirical studies that, using household longitudinal data, examine poverty dynamics and economic mobility over periods of time ranging from 18 months to 18 years. The principal purpose of this overview is to provide a context within which these studies can be located. It does so by placing them within a conceptual framework that outlines factors affecting poverty dynamics and economic mobility and by illustrating how they contribute to the small extant literature on these topics.

Objective of the study

1- To Analysis of income inequality trends and economic mobility in developing countries with help of literature and theoretical framework.

METHODOLOGY

This study is designed theoretical way to provide critical overview income inequality trends and economic mobility in developing countries. So, number of literatures are blend together to take out the crux of the study.

REVIEW OF LITERATURE

Think of a freshly established family living in the country. This region is defined by a single growing season for crops and then a dry spell during which no crops are grown.1 Physical, social, political, legal, and economic settings' all form its foundation. Natural phenomena like rainfall, soil fertility, height, and inaccessibility are all part of the physical context. A person's social environment includes things like the level of social harmony or discord and the prevalence of certain behavioural standards. One way to look at it is that the political context captures the procedures by which these rules are formed, and the legal setting is like the broad "rules of the game" in which trading takes place. As a last point, an economic setting may be used to record policies that influence asset returns, both in terms of level and variability. The local, regional, national, and international levels will each have their own unique configuration. The household has resources such as money and labour within various contexts. Here, "capital" refers to a wide range of resources, including but not limited to: land, physical tools for farming, human capital (including information, skills, and health), financial capital (including assets and other forms of wealth storage), and social capital (including social organisation features like norms, trust, and networks that allow for cooperation and coordination for mutual benefit [Putnam, 1995]). A household's labour endowment is a measure of its capacity to labour for itself or for other people. These assets are seen as coming from outside the newly established home in our case. These represent the actions that members of the family did before creating this household, investments in health and education, dowries or inter vivo gifts, and the transfer of certain assets from one generation to the next. These endowments are distributed among various activities by the family. The household's estimation of the amount and variability of activity returns, together with their covariance, form the basis of these allocations. The family may, for instance, choose to cultivate a variety of crops that exhibit varying degrees of vulnerability to weather extremes. Intercropping, temporal diversity (i.e., different crops may reach maturity at different rates), and geographical diversity are all ways in which crops might vary.2 In a similar vein, the family may branch out from farming and engage in non-agricultural pursuits like processing or leisurely wage work. Additional discussion of these techniques may be found in Alderman and Paxson [7992], McCloskey [1976], Morduch [1990, 1995, 1999], and Townsend [1993]. 'Nature' steps in as shocks after these distributions are finalised. Possible types of shocks include common or covariant shocks, which impact all households in the area, and idiosyncratic shocks, which impact just this particular household. 'Nature' is defined here as a random-acting pseudo-player in game theory. Shocks, which aren't under anyone's control, may have good or bad effects on a home. Endowment stock and endowment return are both susceptible to their influence. Idiosyncratic shocks are often the result of a confluence of distinct and unpredictable variables. The long-term sickness of a working-age adult is often cited as an example of a unique shock that impacts the endowment stock. Idiosyncratic shocks may diminish returns to some activities; for instance, a disease that impacts crop quality is one such example. The opposite is true with covariant shocks, which may cause physical asset destruction in the case of large-scale calamities like droughts, earthquakes, floods, or landslides. The need for service providers like barbers and tailors often drops sharply following a drought, as pointed out by Sen [1981]. This causes a covariant shock for these people, which lowers the profits they get from their actions. Revenue is created by the distribution of endowments to various endeavours and the subsequent returns on those endowments. There probably isn't a direct correlation between this income and spending, however. According to Kochar's research for South India [Kochar, 1999], families may adjust their labour supply in response to changes in income. In addition, they could look for ways to get their hands on government assistance, including welfare or jobs via public works programs. Private sources, such remittances or gifts, are another option. A more current assessment of this literature is given by Morduch [1999]. A household's decision to enhance or decrease its

portfolio of assets may also be influenced by the kind of shock and the availability of spare money. Poor families in developing nations save mostly in response to these shocks, according to Deaton [7959]. They might liquidate their savings in the form of cash, cattle, jewels, or other long-term assets. On the other hand, they may borrow money from the credit market or change their investment strategy for human capital. As an example, Jacoby and Skoufias [1997] point out that families in semi-arid India may decrease girls' education due to unfavourable economic shocks. To what degree families smooth consumption in the face of these shocks is determined by the consequence of resorting to such acts. This subject is now being investigated by a significant empirical body of work. As stated in Morduch [1995, 1999] and Townsend [1995], the main finding is that although some families are able to smooth their consumption, this is by no means the case for everyone. The smoothing ability is especially low for low-income families who are dealing with financial limitations. Three disclaimers must be made before we proceed. To begin, as an expositional tool, we have shown consumption smoothing processes as ex post shock reactions. In reality, choices about spending are connected to choices about making money and about how much risk one is willing to take. An excellent case study of how choices about the distribution of labour change in semi-arid Burkina Faso when the magnitude of rainfall shocks is known is Fafchamps [1993]. Poor, risk-averse families will also utilise ex ante consumption smoothing, according to Morduch [1995]. To continue, the outside world is considered an exogenous variable in our theoretical model. This may be a reasonable assumption to make in the short term, but in the long run, families may change the external environment (for instance, by lobbying governments for resources) by their activities. Third, there is a lot of data that challenges the notion that households are homogeneous units, yet it nevertheless treats them as one [Alderman et. ah, 1995]. Each member's bargaining position within the home is affected by these shocks, and a collective household model would account for this. Take these limitations into account as you plan the following agricultural cycle. Because of how the family dealt with the income shocks mentioned earlier, its physical, financial, and social capital stocks would have changed. Households' expectations of returns and unpredictability to various activities will have changed based on last years' experience. There will be human capital built up via 'learning by doing' as well. Households may also have learnt new things about how to deal with negative shocks. Throughout a household's lifetime, the aforementioned process—the allocation of endowments to various activities, shocks, and potential income and consumption smoothing behaviors—is repeated repeatedly. Capital stocks and expectations are then subject to further updates as a result of this. Despite the descriptive presentation of this framework, it is easy to place its essential parts in a more formal theoretical model. Dercon and Krishnan (in this book) rely on the helpful elucidation provided by Deaton [1992]. A household's intertemporal utility function, which takes into account both present and future consumption, is essentially specified. This is optimised within the constraints of an intertemporal budget. For all time periods, households in a hypothetical society with fully operational markets and zero uncertainty select their consumption levels such that the marginal utility of consuming is identical. This reality is quite different from the one that households in underdeveloped nations experience. Deaton [1992], Foster [1995], and Dercon and Krishnan (this book) formally discuss the challenges that more realistic assumptions bring. In the two sections that follow, we'll take a look at how this framework can shed light on two different aspects of poverty dynamics: short-term changes in the household welfare measure, which push or pull households into or out of poverty depending on whether they cross a fixed but very subjective poverty line, and long-term processes of economic mobility, which allow households to shift their relative rankings across the distribution of welfare.

POVERTY DYNAMICS IN THE SHORT-TERM:

According to the theoretical model we just discussed, a single cross-section of the population will show poverty for a variety of reasons, including persistently low welfare levels and unexpected shocks. Consequently, in a longitudinal research, there will be 'always poor', 'sometimes poor,' and 'never poor' homes. For thirteen panels spread across 10 nations, data on these categories is presented in 1. It would be foolish to try to make cross-country or cross-study comparisons since these research employed various time periods, poverty levels, and welfare indicators. Having said that, it does become clear that the proportion of low-income families (the "sometimes poor"), as compared to those classified as "always poor," is almost always higher. While some studies find that the 'always poor' group is smaller, the majority find that the 'sometimes poor' category is far greater. It seems that almost every home goes through poverty at some point in certain places, like the ICRISAT panel.

Additional evidence indicating the reality of observed improvements in poverty status is necessary in light of the potentially confusing role played by measurement error. Alderman and Garcia [1993] provide a solid illustration by investigating the possibility that measurement error is to blame for income variations over the first three years of the Pakistan data set used by McCulloch and Baulch. They use income changes as a regression variable, assuming that assets are well-measured. There ought to be no correlation between changes in assets and changes in income if the changes in income that are observed are just the result of measurement error. Actually, there is good measurement of the link. Scott and Gunning et al. adopt a different tack in their investigations. Their observation that changes in income are correlated with shifts in the quantities of productive assets is in line with that of Alderman and Garcia. They back up these findings with qualitative sample knowledge. For their assertion that returns to land operated in

75

their sample rise, Gunning et al. use increases in land quality as an example. Scott triangulates the evidence of downward mobility experienced by certain families by drawing on his extensive understanding of idiosyncratic shocks. Using this concept further, Dercon and Krishnan create an index of agricultural, animal, and disease shocks. Using a fixed effects regression to explain the logarithm of consumption per adult equivalent, they discover that these shocks have a respectable amount of explanatory power. Taking a different tack, McCulloch and Baulch in this volume explicitly and roughly account for the effect of measurement error on their poverty estimates in rural Pakistan. The 'noise-to-signal' ratio in their welfare measure (observed incomes) is derived from the estimated coefficients of a basic model of income—with and without instrumental variables. When different poverty measures are recalculated, this ratio reduces the diversity of observed incomes and indicates that measurement error significantly increases estimates of both permanent and temporary poverty. However, it is estimated that almost two-thirds of the overall squared poverty-gap in their Pakistan data is transitory, even after this approximation for measurement error has been established. The problem of measurement inaccuracy must be thoroughly investigated in any research pertaining to the dynamics of poverty or economic mobility. Assuming that all changes from one era to another represent actual changes in relative economic position or poverty is erroneous. It would be as wrong to attribute all observed changes only to measurement error, however, since we also point out that some of these changes are true. These differences are achieved in the research included in this collection either by using additional data that triangulates the results on economic mobility or poverty dynamics, or by doing further analyses of the spending (or income) data. Another drawback of Table 1 is the high degree of heterogeneity that will be shown by the large 'sometimes poor' group. A good illustration of this is the ICRISAT panel, which includes low-income families in all but one of its nine years of data collection. This is something that many longitudinal surveys have in common, as seen in Table 2. If we were to reclassify our three options as "not poor most of the time," "sometimes poor and sometimes not poor," and "almost always poor," it would make sense. Assuming we utilise the Zimbabwe panel, we may classify families as impoverished three times or more, as poor once or never, and as never, with the new 'sometimes' category covering the rest. This effectively quadruples the percentage of homes falling into the first two groups, while drastically reducing the size of the 'sometimes' category compared to Table 1. Because of the subjective nature of the categories used (such as "never poor" and "not poor most of the time"), it is prudent to use caution when interpreting Tables 1 and 2. Rather, these many forms of poverty need a more methodical strategy. A variation of Friedman's permanent income hypothesis may be used to differentiate between chronic and temporary poverty. Two pieces in this collection, one by Jalan and Ravallion and the other by McCulloch and Baulch, use this approach. The welfare of a household is defined as its permanent wellbeing times the average of its welfare over all time periods, with the residual representing its welfare during the transitory period. Next, we define chronic poverty as a household's intertemporal average welfare falling below a predetermined threshold (the "poverty line"), and we define transitory poverty as the gap between overall poverty and chronic poverty in any given time period. Despite what Jalan and Ravallion say, this does not imply that low-income families are 'always poor,' meaning that their one-time welfare payments are never enough to keep them over the poverty line. Indeed, a subgroup of the chronically poor will be considered always poor due to the high frequency of poverty trajectories seen in longitudinal data sets. However, it is not as simple as it may seem to measure both temporary and chronic poverty. The method requires at least three more observations to be used since chronic poverty is defined in relation to the intertemporal average wellbeing of a family. The only way to tell the difference between temporary and chronic poverty is using longitudinal data. In addition, various welfare measures may provide quite different estimates of chronic and transitory poverty due to the inherent variability in certain welfare measures (like income) and the relative stability of others (like consumer spending).

By looking at what causes both long-term and temporary poverty, Jalan and Ravallion test this hypothesis. They discover that in rural southern China, those with more control over their physical wealth had less chronic and transitory poverty. There aren't many additional factors linked to both, however, except from this discovery. For instance, the probability of temporary poverty is unaffected by family size or education level, whereas smaller and more educated families tend to have lower chronic poverty. Greater standard deviations of wealth per capita are linked to more severe cases of temporary poverty and less severe cases of chronic poverty. A smaller number of adults, lower levels of male education, and more ownership of rainfed land all correlate to greater income fluctuation in rural Pakistan, according to research by McCulloch and Baulch. They then demonstrate, via the use of a simulation method, that measures that help families to gradually increase their income may lead to significant decreases in temporary poverty. Over the course of many years, these two studies differentiate between two types of poverty: chronic and temporary. Their inability to account for the seasonal aspects of temporary poverty is a result of their reliance on panels of yearly averages. Despite the recognised relevance of seasonal factors in developing nations, this constraint is present in the majority of the published research [Chambers, Longhurst and Pacey, 1981; Lipton and Ravallion, 1995]. Dercon and Krishnan's piece in this collection tackles this same problem. As they point out, there is no change in poverty states inter-annually and changes in these states intra-annually when families are unable to smooth their consumption between seasons. They find that, out of the three time periods they look at, energy consumption is greatest in the second period and prices are lowest in the first. Households boost consumption due to these characteristics and

76

underdeveloped asset markets, which leads to a decline in poverty as a function of expenditures. They point out that these findings line up with the aforementioned alterations to the formalised intertemporal model.

ECONOMIC MOBILITY IN THE LONG TERM

The frequency with which families enter and exit poverty is less of a concern for longitudinal household studies (such as those included in this book) than the welfare trajectories of households over the longer term. This divergence of focus arises for several reasons, such as the fact that comparing poverty over extended periods of time is challenging, that returns can follow secular trends, and that households' consumption 'smoothing' strategies and welfare trajectories are affected by asset accumulation (or depletion). Economic mobility, not poverty dynamics, is the most appropriate term to use here for these reasons. Section II's conceptual framework posits that a household's asset endowments, perceptions of returns on assets, idiosyncratic and covariant shocks, and the mapping between income and consumption will all influence the household's poverty/welfare status in any given year. While savings and investing do help families manage their spending more effectively, they do not actively contribute to the story's overarching goal of asset creation. Other aspects of economic mobility, however, emerge when this paradigm is examined over a wider time horizon. These encompass: (a) the function of beginning conditions in explaining trends in household living standards; (b) the effect of repeated shocks on economic mobility; (c) the presence of asymmetries and non-reversabilities in household welfare trajectories; and (e) the influence of economy-wide secular trends. In order to understand the practical impact of these characteristics, we consult a number of research that examine economic mobility over longer periods of time (Table 3). We have placed many inclusion criteria on this list to keep it reasonable and provide you with this summary. Households who are initially better off are not the only ones affected by this migration. Individuals who start out in the lowest quintile seem to be just as likely to be mobile as the entire group.7 Expenditures are a measure of permanent income, and as we go from welfare metrics like land holdings—which we would anticipate to fluctuate very slowly—to current earnings, we get much bigger swings across quintiles. This is probably not unexpected.

To begin, similar to the dynamics of short-term poverty, transition matrices will amplify the degree of mobility in a panel if the underlying welfare indicator is recorded inaccurately. Because positive and negative measurement mistakes can't cancel each other out, this will be an especially big issue for the poorest and wealthiest groups. Additionally, the ranks provided by transition matrices are only relative. Imagine a scenario where the earnings of the lowest-income families drop by 30% and those of the middle-income households drop by 70%. The lowest-income families' situation will improve compared to their current situation, but it will deteriorate substantially in absolute terms. Lastly, considerations of the life cycle are not taken into account by transition matrices. Let us pretend that there are two categories of families in a panel, "young" and "middle-aged," and that income follows the typical pattern of a rising and declining life cycle. For instance, when household welfare is monitored over a decade, the 'young' households will undergo a transformation from relatively poor to relatively prosperous, whereas the 'middle-aged' homes would experience the exact opposite. Here, mobility seems to be rather great, but it's really only a result of elements related to the life cycle.

But most homes will feel a combination of good and bad shocks, which will cancel each other out to some extent. It is very difficult to detect such shock sequences since so few longitudinal studies are either long enough or have been specifically designed to gather enough retrospective data. When confronted with a similar negative shock, some families fall into poverty or worse, while others are able to return to their pre-shock levels of living within a few years. This may be understood by differentiating between idiosyncratic and covariant shocks. Asset stocks are the result of thousands of individual family choices and are used to cushion consumption when credit or insurance markets aren't working properly. It just takes one unfavourable idiosyncratic shock during tough circumstances for a household's welfare to take a drastically different turn than it would have during good times. Some families may have social capital that they have worked hard to accumulate over the years, allowing them to lean on in times of need, while others may be far less fortunate. While the study of South Africa by Maluccio, Haddad, and May in this book shows that social capital accumulation is very difficult to assess, it is likely to still have a substantial impact on the fortunes of certain families. Most studies on economic mobility actually leave out social capital as a significant element. Researching physical system asymmetries and non-reversibility is a well-developed area of expertise in the natural sciences. The field of economics has made use of some of these and other approaches. One important body of work that employs the idea of hysteria is that which deals with European and British long-term unemployment [Layard, Nickell and Jackman, 1991]. Additionally, there are studies that follow children over time to see how temporary shocks affect their health [Hoddinott and Kinsey, 1999]. A small body of research has examined "spells of poverty" in the US using the massive Panel Survey of Income Dynamics [Bane and Ellwood, 1986; Stevens, 1994]. On the other hand, longitudinal home studies in underdeveloped nations often do not lend themselves to these methods. This is due to a number of factors, including the fact that most developing-world panels do not cover enough time, that standard household questionnaires do not adequately capture important life events (such as the death of a working-age family

77

member or the distress sale of livestock), and that samples of the typical size contain relatively few idiosyncratic shocks.

Using fewer formal methods to investigate the causes of long-term economic mobility is one strategy for dealing with such issues. Scott has used anthropological life history methods to look back at the plight of low-income families in Chile over the course of eighteen years, and these things are clearly shown in the research. While he did find that temporary causes contributed to poverty for around half of the households in his sample, he also found that idiosyncratic shocks were the primary driver of poverty for the other half. Additionally, by conducting key informant surveys at the community or village level and by assessing changes in living standards using participatory and case study methodologies, additional information about the mechanisms driving mobility may be uncovered.

CONCLUSIONS AND THEIR IMPLICATIONS FOR RESEARCH AND PUBLIC POLICY

The research included in this book, as well as our own analysis of the existing literature, reveal four consistent patterns, which we will first highlight: (a) People are considered poor if they remain perpetually impoverished or if they experience periods of wealth and poverty. The publications by Dercon and Krishnan, Jalan and Ravallion, and McCulloch and Baulch show that the second category of people who are "sometimes poor" is often rather numerous. Indeed, in some studies they are numerically the largest group among the poor; (b) moving in and out of poverty is apparent, whether one is conceptualising poverty in absolute terms (as in the poverty dynamics literature) or in relative terms (as in the transition matrices reported in our discussion of economic mobility); (c) changes in returns to endowments, driven by exogenous events (as in the South Africa study described by Maluccio, Haddad and May) or small, continuous improvements in the quality of broadly defined capital stock (as in the Zimbabwean resettlement households considered by Gunning et al.) can be a potent source of increased income; and (d) seemingly transitory shocks can have long term consequences, as in Scott's Chilean panel. However, there are a number of exceptions to these rules. The number of longitudinal home studies is progressively growing, although it is still rather small.10 Therefore, the aforementioned regularities are not meant to be taken as literal realities. Secondly, there are valid worries about attrition bias and measurement inaccuracy when panel data is analysed. Attrition, no matter how little, might skew results if it disproportionately affects certain populations. Transition matrices could exaggerate the upward mobility of the poor if, for instance, the poorest families leave the panel (because of distress migration, dissolution, or worse). Similarly, part of the reported changes in poverty levels would be due to statistical artefacts, given the welfare metric is assessed with error. Thirdly, people may change their conduct when they are watched too closely. In the research that are reviewed here, this topic has been mostly ignored, with the noteworthy exception of Walker and Ryan [1990]. These are only a few of the key issues that aren't addressed by the research presented here. As previously mentioned, there is still a lack of clarity on the extent to which transient shocks have long-lasting consequences. The argument that certain families may be pushed onto chronically poorer welfare trajectories by short-lived negative shocks is still valid. It is unclear if there are such 'poverty ratchets,' and if so, how they change with life-cycle and fertility. How much poverty is passed down from one generation to another is related to this. Developed nations are paying more and more attention to this problem (Yaqub, 1999b), whereas developing nations have paid less attention to it (Strauss and Thomas, 1995; Lam and Schoeni, 1993; and, with a few exceptions, the factors affecting children's health and earnings). This is a sad development. Policies aimed at mitigating or preventing such occurrences would have a stronger case if it were true that transient shocks have lasting impacts and that these consequences are transferred from generation to generation. We now go on to the policy implications of these studies on economic mobility and poverty dynamics, keeping in mind the significant limitations and gaps in knowledge mentioned earlier. Remember that the core idea behind our theory is that low endowments, low returns on those endowments, and susceptibility to shocks all work together to make people poor. All of these things are related. Less susceptible to shocks are households with larger endowments and higher returns. After all, Sen's seminal Poverty and Famines (1981) rightfully served as a reminder that poverty is closely associated with shock susceptibility. However, keep in mind that links may also work in reverse. Endowments are severely impacted by susceptibility to shocks. To begin, in contexts where irreversibility play a significant role, investment opportunities may be hampered by insecure settings [Dixit and Pindyck, 1994; Collier and Patillo, 1997]. Secondly, in areas with underdeveloped credit and insurance markets, consumers are more likely to keep asset portfolios that aren't very productive, but could be good at cushioning consumption in the event of a shock. These findings suggest that while formulating anti-poverty initiatives, policymakers should keep all three of these considerations in mind. Reviews by authors like Lipton and Ravallion [7995] address the first two levels—increasing returns to endowments. Here, we focus in on vulnerability as the third consideration. The first thing we've seen is that families often get shocks from the government. This occurs because governments impact the household's economic, legal, and political environments. Not only does ineffective macroeconomic policy cause living standards to decline, but it also leads to policy reversals since it is not sustainable. poor rural households can be protected from climate shocks through area-based insurance contracts. These contracts are written against specific perils or events that are defined and recorded at a regional level, such as drought, flood, or area yield loss, for instance, at a local weather station. Standard units with standard contracts are used to sell

78

insurance. Every customer in a certain area pays the same premium for the same contract, and in the event that the insured event happens, every buyer receives the same indemnity. With this kind of insurance available, families don't have to put all their eggs in one basket by investing in assets that do nothing more than protect them from unexpected events. Their welfare trajectories and the prevalence of chronic poverty in the nation will be impacted in the long run by this. The credibility of the pledge to honour insurance agreements is crucial for the good benefits of these programs. The vulnerable are not a static group, and that is the most crucial thing to remember. Vulnerability fluctuates as endowments and returns to such assets fluctuate as families enter and exit poverty over time. Although there may be certain generalisations about which homes are more susceptible to particular shocks than others, such as freshly established households with small children, those residing in rural regions, or the elderly, no such thing exists in practice. The possible benefits of designing credible, self-targeted safety net programs increase in proportion to the magnitude of the targeting mistakes that occur when the time component of poverty is included.

REFERENCES

- Adams, R., & He, J. (1995). *Sources of income inequality and poverty in rural Pakistan* (Research Report No. 102). Washington, DC: International Food Policy Research Institute.
- Alderman, H., & Paxson, C. (1992). Do the poor insure? A synthesis of the literature on risk and consumption in developing countries (RPDS Discussion Paper No. 164). Princeton University.
- Alderman, H., & Garcia, M. (1993). *Poverty, household food security, and nutrition in rural Pakistan* (Research Report No. 96). Washington, DC: International Food Policy Research Institute.
- Alderman, H., Chiappori, P. A., Haddad, L., Hoddinott, J., & Kanbur, R. (1995). Unitary versus collective models of the household: Is it time to shift the burden of proof? *World Bank Research Observer, 10*(1), 1–19.
- Anand, S., & Harris, C. (1994). Choosing a welfare indicator. *American Economic Review: Papers and Proceedings, 84*(2), 226–231.
- Atkinson, A. (1987). On the measurement of poverty. *Econometrica, 55*(4), 749–764.
- Bane, M., & Ellwood, D. (1986). Slipping into and out of poverty: The dynamics of spells. *Journal of Human Resources, 21*(1), 1–23.
- Banerjee, A., & Newman, A. (1993). Occupational choice and the process of development. *Journal of Political Economy, 101*(2), 274–298.
- Besley, T., & Kanbur, R. (1993). The principles of targeting. In M. Lipton & J. van der Gaag (Eds.), *Including the poor* (pp. 67–90). Washington, DC: World Bank.
- Cain, M. (1981). Risk and insurance: Perspectives on fertility and agrarian change in India and Bangladesh. *Population and Development Review, 7*(3), 435–474.
- Carter, M. (1999). Getting ahead or falling behind? The dynamics of poverty in post-apartheid South Africa (Unpublished manuscript). University of Wisconsin.
- Chambers, R., Longhurst, R., & Pacey, A. (1981). *Seasonal dimensions to rural poverty*. London: Frances Pinter.
- Collier, P., & Lal, D. (1986). *Labour and poverty in Kenya 1900–1980*. Oxford: Clarendon Press.
- Collier, P., & Patillo, C. (1997). Risk and investment in Africa (Unpublished manuscript). Centre for the Study of African Economies, Oxford.
- Deaton, A. (1989). Saving in developing countries: Theory and review. In *Proceedings of the World Bank Annual Conference on Development Economics* (pp. 61–96). Washington, DC: World Bank.
- Deaton, A. (1992). *Understanding consumption*. Oxford: Clarendon Press.
- Deaton, A. (1997). *The analysis of household surveys*. Baltimore, MD: Johns Hopkins University Press.
- Dercon, S., & Krishnan, P. (1998). Changes in poverty in rural Ethiopia 1989–1995: Measurement, robustness tests, and decomposition (Working Paper No. 98/7). Centre for the Study of African Economies, Oxford.
- Dixit, A., & Pindyck, R. (1994). *Investment under uncertainty*. Princeton, NJ: Princeton University Press.
- Ellis, F. (1998). Household strategies and rural livelihood diversification. *The Journal of Development Studies, 35*(1), 1–38.
- Fafchamps, M. (1993). Sequential labor decisions under uncertainty: An estimable household model of West-African farmers. *Econometrica, 61*(5), 1173–1198.
- Foster, A. (1995). Prices, credit markets, and child growth in low-income rural areas. *Economic Journal, 105*(2), 551–570.
- Foster, J. (1984). On economic poverty: A survey of aggregate measures. *Advances in Econometrics, 3*(2), 215–251.

- Francis, E., & Hoddinott, J. (1993). Migration and differentiation in western Kenya. *The Journal of Development Studies, 30*(1), 115–145.
- Gaiha, R. (1988). Income mobility in rural India. *Economic Development and Cultural Change, 36*(2), 27–302.
- Gaiha, R., & Deolalikar, A. (1993). Persistent, expected, and innate poverty: Estimates for semi-arid rural India, 1975–1984. *Cambridge Journal of Economics, 17*(4), 409–421.
- Glewwe, P., & Hall, G. (1998). Are some groups more vulnerable to macroeconomic shocks than others? Hypothesis tests based on panel data from Peru. *The Journal of Development Economics, 56*(1), 181–206.
- Grootaert, C., & Kanbur, R. (1995). The lucky few amidst economic decline: Distributional changes in Côte d'Ivoire as seen through panel data sets, 1985–1988. *The Journal of Development Studies, 31*(4), 603–619.
- Haddad, L., & Kanbur, R. (1990). How serious is the neglect of intrahousehold inequality? *Economic Journal, 100*(402), 866–881.
- Haddad, L., & Kanbur, R. (1991). Intrahousehold inequality and the theory of targeting. *European Economic Review, 35*(2–3), 372–378.
- Hoddinott, J. (1992). Rotten kids or manipulative parents: Are children old-age security in Western Kenya? *Economic Development and Cultural Change, 40*(3), 545–565.
- Hoddinott, J., & Haddad, L. (1995). Does female income share influence household expenditures? Evidence from Côte d'Ivoire. *Oxford Bulletin of Economics and Statistics, 57*(1), 77–96.
- Hoddinott, J., & Quisumbing, A. (2003). Data sources for micro econometric risk and vulnerability assessments. *Social Protection Discussion Paper No. 0323*. World Bank.
- Jalan, J., & Ravallion, M. (1998). Determinants of transient and chronic poverty: Evidence from rural China (Policy Research Working Paper No. 1936). World Bank.
- Jodha, N. (1988). Poverty debate in India: A minority view. *Economic and Political Weekly, 23*(45–47), 2421–2428.
- Kanbur, R., & Mukherjee, D. (2007). Premature mortality and poverty measurement. *Bulletin of Economic Research, 59*(4), 339–359.
- Kanbur, R., & Squire, L. (2001). The evolution of thinking about poverty: Exploring the interactions. In G. Meier & J. Stiglitz (Eds.), *Frontiers of development economics: The future in perspective* (pp. 183–226). New York: Oxford University Press.
- Krishna, A. (2006). Pathways out of and into poverty in 36 villages of Andhra Pradesh, India. *World Development, 34*(2), 271–288.
- Lipton, M., & Ravallion, M. (1995). Poverty and policy. In J. Behrman & T. N. Srinivasan (Eds.), *Handbook of development economics: Volume III* (pp. 2551–2657). Amsterdam: Elsevier.
- Loury, G. (1981). Intergenerational transfers and the distribution of earnings. *Econometrica, 49*(4), 843–867.
- Morduch, J. (1994). Poverty and vulnerability. *American Economic Review: Papers and Proceedings, 84*(2), 221–225.
- Morduch, J. (1995). Income smoothing and consumption smoothing. *Journal of Economic Perspectives, 9*(3), 103–114.
- Moser, C. (1998). The asset vulnerability framework: Reassessing urban poverty reduction strategies. *World Development, 26*(1), 1–19.
- Narayan, D., & Pritchett, L. (1999). Cents and sociability: Household income and social capital in rural Tanzania. *Economic Development and Cultural Change, 47*(4), 871–897.
- Quisumbing, A., Haddad, L., & Peña, C. (2001). Are women overrepresented among the poor? An analysis of poverty in 10 developing countries. *Journal of Development Economics, 66*(1), 225–269.
- Ravallion, M., & Chaudhuri, S. (1997). Risk and insurance in village India: Comment. *Econometrica, 65*(1), 171–184.
- Ravallion, M., & Jalan, J. (1996). Growth, inequality, and poverty: Looking beyond averages (Policy Research Working Paper No. 1904). World Bank.
- Rosenzweig, M., & Binswanger, H. (1993). Wealth, weather risk, and the composition and profitability of agricultural investments. *Economic Journal, 103*(416), 56–78.
- Sahn, D., & Stifel, D. (2003). Urban-rural inequality in living standards in Africa. *Journal of African Economies, 12*(4), 564–597.
- Sen, A. (1981). *Poverty and famines: An essay on entitlement and deprivation*. Oxford: Clarendon Press.
- Sen, A. (1992). *Inequality re-examined*. Cambridge, MA: Harvard University Press.
- Skoufias, E., & Quisumbing, A. (2005). Consumption insurance and vulnerability to poverty: A synthesis of the evidence from Bangladesh, Ethiopia, Mali, Mexico, and Russia. *European Journal of Development Research, 17*(1), 24–58.

- Thomas, D. (1990). Intra-household resource allocation: An inferential approach. *Journal of Human Resources, 25*(4), 635–664.
- World Bank. (2000). *World development report 2000/2001: Attacking poverty*. New York: Oxford University Press.
- Thorbecke, E. (1993). Impact of state and civil institutions on the operation of rural markets and nonmarket configurations. *World Development, 21*(4), 591–605.
- Udry, C. (1994). Risk and insurance in a rural credit market: An empirical investigation in Northern Nigeria. *Review of Economic Studies, 61*(3), 495–526.
- United Nations Development Programme (UNDP). (1990). *Human development report 1990*. New York: Oxford University Press.
- United Nations Development Programme (UNDP). (1997). *Human development report 1997: Human development to eradicate poverty*. New York: Oxford University Press.
- van de Walle, D. (1998). Assessing the welfare impacts of public spending. *World Development, 26*(3), 365–379.
- Zimmerman, F., & Carter, M. (2003). Asset smoothing, consumption smoothing, and the reproduction of inequality under risk and subsistence constraints. *Journal of Development Economics, 71*(2), 233–260.