



Chronic Poverty
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Assets and chronic poverty: background paper

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What is Chronic Poverty?

The distinguishing feature of chronic poverty is extended duration in absolute poverty.

Therefore, chronically poor people always, or usually, live below a poverty line, which is normally defined in terms of a money indicator (e.g. consumption, income, etc.), but could also be defined in terms of wider or subjective aspects of deprivation.

This is different from the transitorily poor, who move in and out of poverty, or only occasionally fall below the poverty line.



Abstract

The role of assets is key to the study of changes in welfare outcomes. Assets can play an important role in reducing vulnerability, which is a key dimension of both chronic and transient poverty. Assets are also important in influencing what households are able to achieve, in terms of income and many other outcomes. Those with more assets are often better able to improve their income levels and so to participate in economic growth. Accumulation of assets is a means by which people can move out of poverty and improve their livelihoods. On the other hand, those losing assets may be pushed into poverty. And those lacking assets to begin with risk being caught in a poverty trap. This paper begins by discussing the relationship between assets (or their absence) and vulnerability, given the central role of vulnerability in understanding both chronic and transient poverty. It then discusses the role of changes in asset holdings in poverty transitions. This leads into a discussion of asset-based poverty traps and of the potential role of discrimination. It concludes by setting out some areas for further research.

Keywords: assets, vulnerability, poverty traps, chronic poverty

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1 Introduction

By definition, the Chronic Poverty Research Centre (CPRC) adopts a dynamic approach to the study of poverty. This calls for a focus on changes in key welfare outcomes. But within such framework, the role of assets is key. The assets which individuals own or have access to matter in at least two respects. First, assets can play an important role in reducing vulnerability, which is a key dimension of both chronic and transient poverty. There is extensive evidence that assets help provide insurance against shocks, reducing insecurity and frequently reducing risk-averse behaviour and reliance on more destructive coping strategies – which commonly involve reducing asset levels, e.g. withdrawing children from school. Of course many households, especially those in chronic poverty, may not have access to sufficient assets, which then limits their ability to cope with vulnerability. Second, assets play an important role in influencing what households are able to achieve, in terms of income and many other outcomes. Those with more assets are often better able to improve their income levels and so to participate in economic growth (for example, by having better access to credit), as well as being better able to protect themselves against downturns.

Accumulation of assets is an important means by which people can move out of poverty and improve their livelihoods. Having more assets also potentially plays an important role in providing – and indicating – social status, and potentially benefiting more from public policy interventions. On the other hand, those losing assets – perhaps as the result of a health shock – may be pushed into poverty. And those lacking assets to begin with risk being caught in a poverty trap (Carter and Barrett, 2006), or at least left behind in an environment of positive change. There is an important risk of an inequality dynamic which can be understood in terms of assets.

A wide range of assets is important in this, as suggested in a livelihoods framework. As well as the level of assets to which individuals and households have access, it is also important to consider the uses to which they can put these assets. A higher level of human capital is less valuable if an individual is not able to obtain a skilled job; or if she receives a lower wage, due to discrimination. The inability to use assets effectively ('low returns' to assets) may contribute to chronic poverty; while the ability to earn an adequate return on assets may be an important factor underlying escapes from poverty – perhaps over a period of time. The factors which affect how individuals are able to use their assets are very important. In addition, the need of some households to sell assets is also a key potential cause of chronic poverty if they have few assets to begin with. Understanding why some need to make these choices, while others can avoid them, is important in understanding chronic poverty.

Assets are also of interest as a potential indicator of poverty in their own right, although there is a challenge in trying to combine information on many different assets. Many individual or household-level assets tend to fluctuate much less over time than income or often



consumption, and as such might be better indicators of longer-term welfare prospects. Lack of key assets therefore may be a good proxy for chronic poverty.

The pattern of access to assets – whether through ownership or not – and of the uses to which these assets can be put is therefore of key importance in analysing vulnerability, poverty dynamics and chronic poverty. There are key political dimensions underlying these issues. It is important to understand the processes through which some individuals (or households) are able to own and accumulate assets, while others are not; and why some are able to use their assets more effectively than others.

While these issues have been discussed to date at the individual or household (micro) level, analogous issues arise at meso and macro levels. The fact that an individual or household is located in a lagging region of a country (in which other regions are growing) may itself be a major factor underlying chronic poverty; alternatively, specific villages might be considered as persistently poor due to specific disadvantages they face. Being poor in a country which is experiencing sustained economic decline – or at least no consistent economic progress – is likely to imply being in chronic poverty. The meso and macro contexts clearly matter. And these meso and macro contexts can potentially also be considered in terms of assets, returns to assets and vulnerability.

This paper begins by discussing the relationship between assets (or their absence) and vulnerability, given the central role of vulnerability in understanding both chronic and transient poverty. It then discusses in Section 3 the role of changes in asset holdings in poverty transitions. This leads into a discussion of asset-based poverty traps (Section 4) and of the potential role of discrimination (Section 5). Section 6 concludes, setting out some areas for further research.



2 Assets and vulnerability

In practice, poor people often manage relatively complex asset portfolios. Poverty reduction policy therefore should focus on what poor people have (assets) as much as what they lack (Moser, 1998), and should seek to help them to accumulate assets and manage more effectively what they have. Assets provide poor people with a key means of coping with shocks. Equally, the erosion of assets translates into increased insecurity.

The importance of assets in relation to vulnerability has been extensively developed, in particular in rural areas (Swift, 1989, Sen, 1991, Maxwell and Smith, 1992), and Barrett (1999) highlights the key role that assets play in relation to food security. Having cash savings means that food can be purchased; having land plus sufficient labour enables cultivation; having a strong supporting network or access to government may allow access to goods even without cash. There is much evidence of assets providing a buffer against idiosyncratic and covariant risks and being an important determinant of social status (Barrett *et al.*, 2006a). But assets themselves are not sufficient; institutions and technology are also important (Barrett, 1999), e.g. access to markets or production technology, or the effectiveness of government or private food distribution.

Households cope with adverse shocks in different ways (Chambers, 2003; Dercon, 2000). They often rely initially on various *ex post* mechanisms to try to smooth consumption levels, e.g. diversifying activities, adjusting consumption or drawing down savings. Sometimes sales of assets may be part of this response, though hopefully not to such an extent as to compromise their future security. Households' ability to respond in this way depends on the assets they own, as well as on their market access. A combination of assets plus market access can mean that variability arising from, say, climate or market variability need not translate into physical vulnerability. Where market-based responses do not succeed, households will typically seek to draw on the 'moral economy': support networks of family and friends (Lourenço-Lindell, 2002; Woolcock, 2005).. The effectiveness of such mechanisms depends on there being a sufficiently developed level of social capital, as well as on the shocks not being covariate, such that the family and friends are equally affected. Formal assistance programmes offer a third channel of support in the face of shocks (Devereux, 2002).

In urban areas the environment, and sometimes the assets which are relevant, may be significantly different (Moser, 1998; Mitlin, 2003; Nkurunziza and Rakodi, 2005). More facilities may be available, but the extent of commoditisation will often be much greater than rural areas; and in addition there may be important environmental hazards, such as poor housing, inadequate water and sanitation, as well as pollution. The moral economy may be less well developed than rural areas. The types of assets which are often important in urban areas include labour and human capital; productive assets, among which housing may be very important; as well as less tangible assets, such as household relations and social capital



(Moser, 1998). The majority of even poor households benefit from access to some or all of these assets, and they form a basis of a household's responses to shocks. There are often significant adjustments in a household's supply of labour. This may involve women or children becoming more involved in work (which may nonetheless have adverse longer-term consequences, for example for family relations; or a family member may migrate elsewhere (with, again, potential risks for family relations). Housing is often used as an income-generating asset through home-based economic activities. Household composition is frequently flexible and may adjust as part of a response to a shock (e.g. migration or taking in other family members). And social capital is often a key component of a response to a shock, through, for example, more community-based activities or increased reliance on social support networks (González de la Rocha, 2006; 2007; Lourenço-Lindell, 2002).

In responding to shocks households will often seek to protect the assets they have, and this may then involve modifying consumption. Devereux (1993) considers consumption-modifying strategies in response to shocks (see also Corbett, 1988); and Moser (1998) focuses some of her discussion on household responses to consumption which do not damage their net asset position. In terms of empirical evidence, Fafchamps *et al.* (1998) find that, in a period of severe droughts in Burkina Faso in the early 1980s, only a small proportion of the income shortfall was made up by households selling their livestock. Nor was there any evidence that this shortfall was compensated by food stocks, off-farm work or transfers. The benefit of holding onto livestock may have been a high return after the drought ceased; it may also be that livestock are not a liquid asset in Burkina. But it seems that some of the adjustment to the shocks was born by households adjusting their consumption levels. There is evidence from Uganda too of households adjusting their consumption in response to shocks (reference).

It is important to remember though that poor people, by the very fact of their poverty, have a limited asset base. They are often more highly reliant on natural resources (Arun, 2008), which may be common property resources, than the non-poor, and this potentially exposes them to greater risks. They will typically receive inadequate protection from the law, may be at greater risk from possible conflict, and may often be discriminated against. If, in addition, they lack voice (as is frequently the case), then they are unlikely to be able to demand access to assets and to protect themselves under the law and against discrimination. The asset poverty of the poor reflects to a substantial extent their adverse incorporation in society (Arun, 2008). Inappropriate asset management practices (e.g. excessive exploitation of common property resources or shortened fallow cycles in cultivation) may further enhance their vulnerability. In many countries, the fact that women may not have their right of access to land legally recognised is a severe constraint in their ability to use this asset effectively in reducing vulnerability. Thus, while poor people do have assets – and that is an important resource to build on in designing policy interventions – the limited level of these assets and households' difficulty in managing them effectively (the latter linked to institutional,



governance and discrimination issues, among other things) severely constrains their ability to use assets to reduce vulnerability.

Social capital potentially plays a very key role. It was stressed above as a key coping mechanism, and the limited level of assets and difficulty in managing them emphasises this more. In general, social capital is likely to be more important for poor people (though they might have lower levels) than for non-poor people, but political capital also matters (Arun, 2008). Development of social capital implies, among other things, development of effective community-based organisations (CBOs), and Moser (1998) reports that horizontal CBOs were quite well developed in urban squatter settlements she studied. But it is also important to recognise the limits of social capital. Moser (1998) reports that in the urban areas she studies people often fail to support their communities once their other assets are depleted. Social capital may be important, but is potentially of limited use without, for example, housing, friends or education. Investment in social capital is therefore not a substitute for investment in other forms of assets for poor people. Investment in these other assets (for instance, human capital, providing tenure security for land and housing, or providing credit to squatters) is critical in order to reduce the vulnerability that poor people face.

Assets of all types do play a key role in reducing the vulnerability that households face. But the limited level of assets that many households have, plus severe constraints in being able to manage these effectively, is a major contributor to high levels of vulnerability, as well as persistent poverty.



3 Asset accumulation, loss and poverty transitions

There is now a lot of empirical evidence, much based on panel data, in support of the role of asset loss (often a sudden phenomenon, as in a major health shock) or asset accumulation (often a gradual process) being a correlate – and probably a cause – of descents into poverty or escapes from poverty, respectively. There is also a wide literature on how the ways individuals and households are able to use their assets influence their livelihood trajectories and poverty levels. Each of these issues is briefly commented on in turn here, drawing on selected recent empirical literature.

3.1 Adverse asset shocks and descents into poverty

As argued above, there is extensive evidence of the importance of loss of key assets as major factors associated with descents into poverty – poverty which is potentially long term in many instances. Much of this relates to health shocks, health being a key dimension of human capital (as well as an important welfare indicator in its own right). Many empirical studies demonstrate this (Harpham and Grant, 2002).. Thus in rural Uganda, Krishna *et al.* (2006) found factors associated with illness as being the primary cause of descents into poverty, with various factors being important, including the direct effect of ill health itself, high healthcare expenses and the death of an income earner. Land-related factors – including the impact of land division (associated with inheritance) and land exhaustion – were also strongly associated with descents into poverty.

Ahmed (2005) finds that the cost of healthcare limits its use by the poorest in Bangladesh, resulting in increased morbidity rates and destructive coping strategies (e.g. sale of assets or accessing credit on highly unfavourable terms), which result in a deeper descent into poverty. Krishna (2004) also report evidence from Rajasthan, India, of health shocks leading to entries into poverty and increased levels of indebtedness, with the extortionate interest rates charged on such loans being a major factor keeping households poor. These examples highlight the importance of credit market failures in keeping people poor.

Small household size is found to make the impact of health shocks more severe in North East Ghana, where a vicious circle is identified between poverty and small household size (Whitehead, 2006). Small households are much less able to resist the impact of illness and mortality shocks. Morbidity tended to lead to adverse impacts on food production, but larger households were more able to cope with these shocks. This is in contrast to the more common assertion that poverty levels are higher in large households, though is consistent with some other findings (e.g. Howe and McKay, 2007, on chronically poor people in Rwanda).



HIV/AIDS represents a severe adverse health shock. Besides its direct effects, it also has a serious adverse affect on human capital formation through various channels: deaths of teachers and trainers; reduced life expectancy reducing returns to investment in education; parents potentially spreading education more widely among their children reducing the likelihood that any one achieves the threshold level necessary to engage in high return activities; increased health expenditures; reduced savings rates; as well as asset liquidation and/or reduced consumption levels (Hamoudi and Birdsall, 2001).

Other adverse shocks affecting a household may also lead to reduced human capital formation in education, and these effects are not adequately captured by simply looking at the impact of conventional educational indicators such as enrolment rates. In Peru, Escobal *et al.* (2005) report various adverse effects of shocks which do not necessarily show up in enrolment rates, including reduced expenditure on education, reduced time devoted to schooling, and movements from better quality private to poorer quality public schools.

In Bangladesh, Sen (2004) finds that various adverse assets shocks are associated with descents into poverty, including life cycle changes (generally increased dependency rates); health shocks again; and natural crises, such as flooding. In Kenya and Madagascar, Barrett *et al.* (2006b) also highlight the importance of asset shocks in declines, in particular shocks associated with health, land or labour. In Uganda, the belief of urban elites that descents into poverty in rural areas are associated with drunkenness and laziness is not supported by the findings of Krishna *et al.* (2006), except in a few specific cases.

It is quite clear that the loss of assets is a major factor associated with descent into poverty, with the strongest evidence for this relating to diverse health shocks. The ability of households to cope with these adverse shocks without employing destructive coping strategies is clearly a major factor in enabling them to recover. Hoddinott (2006) finds in Uganda that the children from more wealthy households, whose BMI was adversely affected by a rainfall shock, were able to recover their growth trajectories afterwards, while those in poorer households were not. Assembling more evidence on the factors which enable households to cope from asset – or other – shocks without compromising their long-term livelihood potentials, and how this can be enhanced for the many households that are not able to do this, is an ongoing research challenge.



3.2 Asset accumulation and escapes from poverty

The process of accumulating key assets – or the fact of holding sufficient levels of assets to begin with – are key factors enabling individuals and households to escape from poverty. But it is equally clear that many are unable to participate in adequate levels of asset accumulation, and this is an important part of understanding what underlies chronic poverty.

There is strong evidence that levels of asset holdings are strongly associated with level of income. In a study of rural areas in four African countries, Ellis and Freeman (2004) find asset accumulation as a gradual process of trading up activities, with acquisition of livestock and an ability to access non-farm self-employment activities being particularly important. The extent to which households are able to trade up assets is crucial to increasing welfare, and this route was limited for many by various factors. In these environments, livestock was critical, playing multiple roles in livelihood successes (e.g. savings, income smoothing); they can form the basis of a virtuous circle for improving welfare, and their absence might contribute to a poverty trap. In addition, Ellis and Freeman find that land productivity increased sharply with income level (see discussion of asset-based poverty traps below).

Where households acquired access to even small plots of land in rural Mexico, this was often found to raise household welfare substantially (Finan *et al.*, 2005); but the value of the land to the household depended also on their access to complementary assets, including having primary education and access to a road. The importance of complementary factors also comes out strongly in resettlement sites in rural Zimbabwe (Chimhowu, 2002). Acquiring more land was important in enabling some households to escape from poverty, but for the majority the land still gave inadequate income levels due to the absence of the other factors. The key absent factors here appeared to be public policy interventions to provide social services and infrastructure. In Southern Africa as a whole, Chimhowu (2006) argues that land reform programmes have had limited poverty reduction impact (for various reasons); and more generally Rigg (2006) also argues that land redistribution may not result in a redistribution of wealth – partly because of the increasing importance of individuals engaging in non-agricultural activities in order to escape poverty.

As this suggests, much of the literature on asset accumulation and escapes from poverty has focused on agricultural environments; but some other studies have looked at the factors influencing human capital, an important welfare outcome in its own right as well as a determinant of other outcomes. In Latin America, Attanasio and Szekely (1999) highlight many features of the close relationship between lack of education and poverty. In Costa Rica and Peru poor people have lower levels of human capital, and earn lower returns on the assets they do have in the labour market. In Brazil risk and uncertainty lead poor people to



invest in easily redeemed asset groups rather than human capital, and these assets are much less productive in the longer term.

In environments where credit market imperfections limit the ability to invest in human capital formation, migration as well as associated remittances can be important factors leading to increased school attendance (Mansuri, 2006). Conditional cash transfers have played an important role in leading to increased levels of secondary school enrolment and reduced child labour in some Latin American countries ((MCDSS/GTZ, 2006; Haarman *et al.*, 2008; Samson *et al.*, 2006; Rawlings and Rubio, 2005).

In many environments, access to wage employment is a key factor enabling escapes from poverty (e.g. Whitehead, 2006; Krishna *et al.*, 2006) human capital is obviously an important enabler of this in many instances.

There is significant evidence therefore of the importance of asset accumulation in enabling escapes from poverty, though at present the evidence base is strongest for rural areas (in particular in relation to agriculture or movement out of agriculture) and in relation to human capital. It is clear though that large numbers of individuals and households are unable to accumulate key assets; and understanding why this is, and how policy might respond, is a key research issue. The ways in which markets operate, as well as the nature of existing public policy, are likely to be key dimensions of this.

3.3 Returns to assets and poverty transitions

As highlighted above, it is not just the level of assets to which individuals and households have access that is important for their poverty status, but also the uses they can make of these assets. Owning or having access to assets is of limited value if these assets cannot be utilised effectively.

Rigg (2006) argues that land is no longer a prerequisite for enabling poor rural households to escape poverty. He argues that rural livelihoods have become increasingly separated from agricultural production; as is widely recognised, the importance of non-agricultural activities has been increasing significantly over time and this may offer the key escape route from poverty for many rural households. According to his analysis, the view that the redistribution of resources will reinvigorate agricultural production is incorrect. This implies that the solution to rural poverty lies within rural areas and within agriculture, a view that Rigg strongly challenges (the 'yeoman farmer fallacy').

Traditionally, poverty has been associated with lack of integration into markets and lack of state provision, especially in remote rural areas. Overcoming these potentially generates increased opportunities to trade and so to raise incomes. But Rigg (2006) raises the issue of whether this may be partly replaced by 'new poverty' associated with terms of integration into markets. He questions the extent to which poor people in rural areas can benefit substantially



from opportunities offered by increased commodification and market integration. Whether this is the case or not, it is clear that many of the best poverty reduction opportunities lie outside of agriculture. As noted above, individuals frequently perceive the best option as being a wage job outside the agricultural sector.

In rural Uganda important correlates of escape from poverty were increased productivity and diversification into cash crops (Krishna *et al.*, 2006). But again, only some households were able to achieve this. Other asset-related factors associated with movements out of poverty included successes in own business (a return to physical and/or human capital), or through obtaining a private wage job – a factor which is repeatedly identified as an important factor behind escapes from poverty in many countries.

In the case of North East Ghana, land was not identified as being a major constraint, but rather labour and capital were the key factors (Whitehead, 2006). The social management of household labour and household membership was critical for household security – in particular ensuring that there was enough household labour supply available. There was therefore a virtuous circle between household size (the amount of labour within a compound) and wealth; and a poverty trap whereby households with too little labour had inadequate wealth levels. Descents into poverty were often associated with temporary sale of labour (with adverse consequences for farm production) or migration. These factors may also translate into poverty traps. Again, access to secure employment was a key factor enabling accumulation by households, enabling them to ‘straddle’ the urban and rural environment. Lack of secure rural employment opportunities, however, was a major constraint for this option.

The key question then is to understand the barriers to entry to the non-farm sector; is it just level of assets (for example human capital) or do other factors matter (for example discrimination or connections)? Ellis and Freeman (2004) similarly identify the importance of reducing reliance on agriculture for escaping from poverty. Sen highlights for Bangladesh the strong relationship between escapes from poverty and engaging in multiple livelihood strategies. Frequently livelihoods may be unsustainable, as in the case of rickshaw pullers in Dhaka, Bangladesh (Begum and Sen, 2004). For many this becomes a poverty trap, and is also associated with intragenerational transmission of poverty in that the pullers, children, are much less likely to attend school.

3.4 Other factors in relation to assets

One important issue of asset ownership to consider is who within the household controls the assets to which it has access. Hoddinott (2006) finds important intra-household differences in the extent of consumption smoothing in Zimbabwe. In Ghana Doss (2005) finds that households where women have a higher share of asset ownership have better health and



nutritional outcomes, other things being equal; and Valdiva (2001) reports better welfare outcomes in Indonesia when women household members control more assets.

In general it is clear that different individuals and households are able to attain different returns on the assets to which they have access. Sometimes this reflects the level of the assets – or the specific combinations of assets – to which they have access. It is equally possible that two people or households with similar levels of asset holdings may earn differential returns; this is frequently analysed in terms of discrimination. There have been relatively few empirical studies (outside of the labour market) that have sought to analyse the extent to which discrimination of this form may be an important factor underlying chronic poverty.

Fundamentally what is still needed is a better understanding of the processes and factors which underlie the differential returns individuals and households are able to earn on assets they command.



4 Assets in relation to poverty dynamics

The conventional poverty dynamics approach distinguishes transient and chronic poverty, which are typically identified using panel household survey data, and predominantly in the monetary dimension (income/consumption; Hulme and McKay, 2007). Both spells and components approaches have been used to measure chronic poverty (McKay and Lawson, 2003). In either of these approaches, however, the identification of people in chronic and transient poverty may be significantly affected by measurement error; this is particularly so for the spells approach, where the extent of transient poverty will tend to be overestimated, due to measurement error. In addition, though, some transient poverty is also likely to be a reflection of good or bad luck in one period. For these and other reasons, a promising alternative approach may be to use data on household assets to distinguish between the structurally poor and the stochastically poor (Carter and May, 1999, 2001). Structurally poor people are those whose current asset levels are sufficiently low that they are unlikely to be able to rise above the poverty line in future (without new asset accumulation in future). Stochastically poor people are those who are poor in one or more periods, but whose asset levels appear sufficient, suggesting that their poverty may reflect bad luck (adverse stochastic factors) in one specific period, which may not have longer-term consequences.

Many households that are identified as chronically poor in income terms may be structurally poor in asset terms; and likewise a persistently non-poor household might be expected to be likely to be structurally non-poor. Transient poor households, though, may be stochastically poor or non-poor: for example, the fact that a household was poor in the first period may just have been a reflection of bad luck in that specific period. Or they may have made a structural shift, as reflected in changing asset levels. The distinction between structurally and stochastically poor households can be made based on a regression relationship between household income and assets, which allows identification of an asset poverty line corresponding to a given income poverty line. This approach assumes that assets can be represented in a single dimensions, which is typically done by combining different dimensions using factor analysis (Sahn and Stifel, 2000). There are, however, strong assumptions in combining assets in this way.

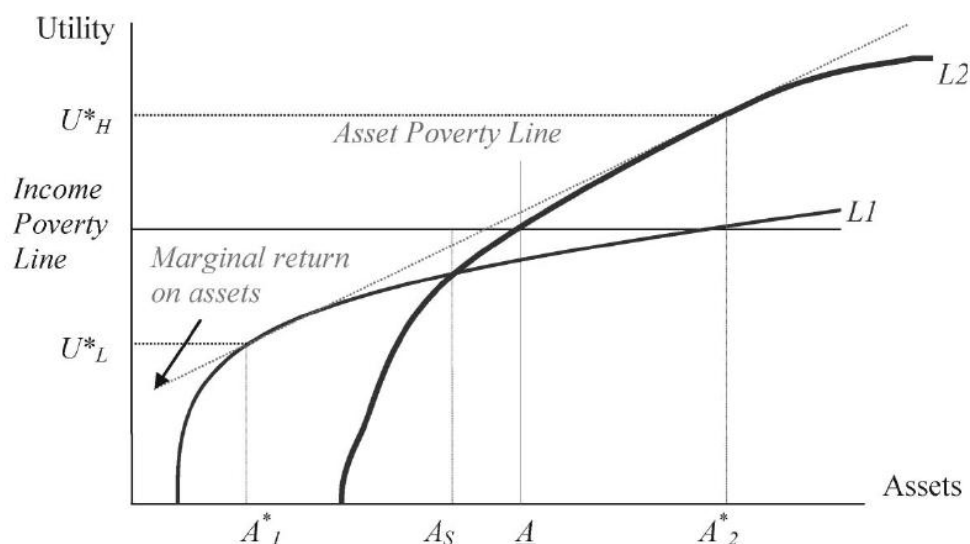
For any one household it is possible to ask whether *on average* the level of assets it accesses is sufficient to place it above the poverty line. If the level of assets in a period is sufficient to place it above the poverty line, but the household is in fact income poor, then that poverty can be considered as stochastic. If the level of assets is insufficient and the household is poor, then that poverty can be represented as structural. A similar logic applies to changes over time. If a household that escapes from poverty between two periods moves from a situation where its first period assets were below the asset poverty line to having asset levels above the asset poverty line in a second period, then this can be considered as a structural escape from poverty. If another household that escaped from poverty had levels of assets below the asset poverty line in both periods, then its escape from poverty can be



regarded as stochastic, reflecting a favourable but potentially one-off shock. In this way poverty status at a point in time and poverty transitions (or non-transitions) between two points in time can be classified as structural or stochastic.

To be able to make these judgements with confidence requires relatively comprehensive information about assets, and trust in the factor analysis approach to combining different assets. In practice, the asset index is usually constructed based on material assets only, although sometimes human capital is also included. Various assumptions are made in this process, including: (i) that similar assets are important for all households and using the same weights; (ii) that all asset categories are adequately measured; and (iii) that the returns to assets do not differ substantially across different households. All of these, and particularly perhaps (i), are strong assumptions.

Figure 1: Assets and livelihood options



Source: Carter and Barrett (2006).

In the end, though, this approach is static. Carter and Barrett (2006) therefore develop a dynamic asset threshold approach, focusing on asset accumulation over time. The key issue is whether households face decreasing returns to scale in production throughout the entire range, or whether there are areas of locally increasing returns to scale. Carter and Barrett consider three possible causes of locally increasing returns:

- (i) the underlying income-generating process has locally increasing returns;
- (ii) a high return production process has a minimum effective size; or
- (iii) marginal returns to wealth are lower for lower wealth households because of risk and financial markets.

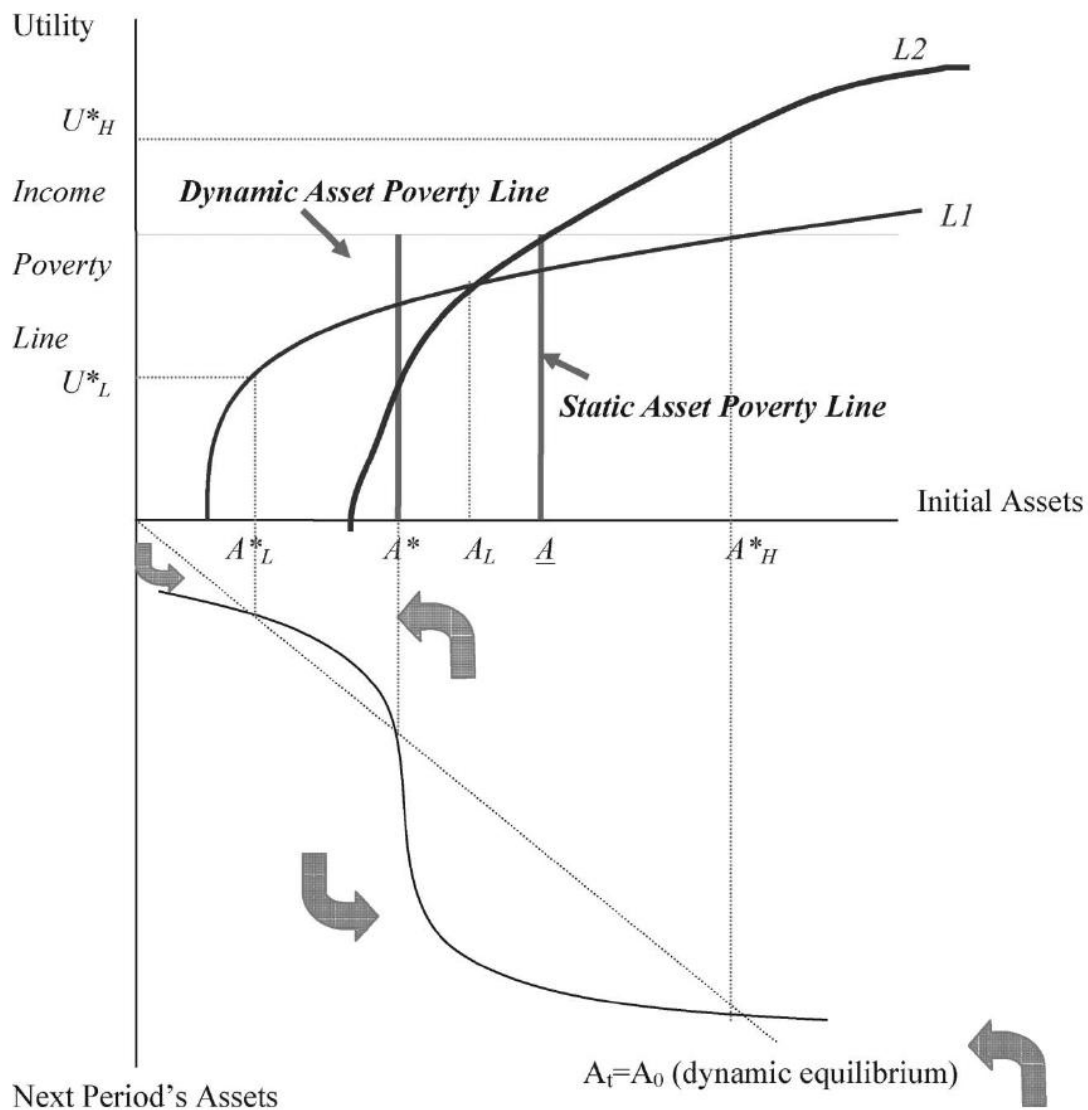


Taking the example of (ii) above, curve L2 in Figure 1 represents a high return activity which however requires a minimum scale of operation. The diagram also shows the steady state asset levels which would be adopted by two different households, one following strategy L1 (where the equilibrium asset level is A^*_1) and the other L2 (with asset level A^*_2). The former household, with few assets, cannot pursue the high return strategy and is consequently caught in a poverty trap. The second household, with the higher level of assets, can pursue the high return strategy and remains above the poverty line. Households with asset levels below A_S are required to pursue the low return strategy (and are condemned to a poverty trap); those above A_S will pursue the high return strategy. Households with assets between A^*_1 and A_S have low returns on their assets and have little incentive to save; they will converge to the equilibrium at A^*_1 .

It would of course be worth the households' while to borrow to take their asset holdings up to A_S , which then would put them onto a path of accumulation (households with assets above A_S will converge to A^*_2); but the key point is that they are likely to be excluded from credit markets and so many households below this level will be unable to borrow. Zimmerman and Carter (2003) identify a Micawber threshold, as a level of assets above which it does make sense to pursue an autarkic savings strategy (e.g. reducing consumption), which will eventually enable the household to converge to the high outcome. If asset dynamics can be represented as in the lower graph in Figure 2 below, then once households' asset levels reach the point A^* (the dynamic asset or Micawber threshold), then they can accumulate over time and this process of accumulation puts them on track to a point at which they eventually switch to the high return activity L2. Below A^* , though, they dissave and return to the low equilibrium point. This constitutes a poverty trap from which households cannot escape without external intervention. Thus there are both virtuous and vicious circles in asset accumulation, depending on the level from which a household starts. In a situation with a dynamic asset threshold there is a natural tendency to a divergence of living standards between households over time, and thus a substantial risk that (in a growth environment at least) inequality will tend to rise in the absence of external intervention.

This diagram was drawn for the case $A^*_1 < A^* < \underline{A}$. A similar analysis applies if $A^*_1 < \underline{A} < A^*$ except that in the latter case not only the currently structurally poor households but some not currently structurally poor households will tend to the low equilibrium.

Figure 2: Asset dynamics and the dynamic asset poverty line



An extension of the poverty trap concept by Barrett and Swallow (2006) introduces the concept of fractal poverty traps. Analogous concepts of poverty traps can also apply at community, regional and national levels; they refer to the situation where poverty traps exist simultaneously at different levels (micro, meso and/or macro) and reinforce each other as a fractal poverty trap. For example, governments, communities, markets and households may all simultaneously find themselves in low level equilibria, making it very difficult to escape from persistent poverty. In such an environment, it is very difficult to escape from past disadvantage or adverse shocks.

If there is evidence for the existence of poverty traps, then this has important policy implications for dealing with persistent poverty. In particular, while safety nets to prevent the use of coping strategies which destroy assets are needed, these need to be complemented



by 'cargo nets' to enable households to build up a sufficient asset base to prevent poverty-perpetuating practices. In different contexts this may imply some or all of measures which help raise productivity of assets (e.g. improved market access; improved access to finance; investment in education; and land reform). Carter and Barrett (2006) argue that the severity of shocks households face may be less important for persistent poverty than the household's ability to manage these shocks through having a sufficient level of assets (relating to the discussion of vulnerability in Section 2).

But before jumping to policy conclusions, it is necessary to understand when and if such poverty traps and divergent processes may come about (and where they do, what the fundamental cause is). The key question is the dynamics of asset accumulation and the existence, at least over a range, of increasing returns to scale. If this range of increasing returns to scale does not exist (if the asset accumulation curve does not have the S-shape shown in the lower chart in Figure 2), then there is no rationale to support a poverty trap. If this is the appropriate characterisation, then the poor are not prevented from escaping from poverty by being trapped if they are in an environment of sustained growth. That said though, it is likely to take them a very long time to escape, and they are still likely to need significant policy intervention.

How strong is the empirical evidence in support of poverty traps? The key empirical question is to find evidence of non-linearity in the accumulation relationship (i.e. the analogue of Figure 2 above). Lybbert *et al.* (2004) estimate livestock dynamics in a pastoral population – where there is only one core asset, livestock – and do report evidence of this non-linear pattern. Barrett *et al.* (2006) find similar evidence in rural Kenya and Madagascar, while Adato *et al.* (2006) find evidence for dynamic asset thresholds in environments where multiple assets are relevant. The econometric approaches adopted in these studies, though, do depend on strong econometric assumptions – in particular, the assumption that the process of accumulation for all households can be represented on the same curve, which is hard to justify. In addition, the dynamic poverty trap idea concerns the likely trajectory of a household over time, but is estimated based on a cross section of households at a specific point in time.

Quite a few recent studies do not find evidence in support of poverty traps. In multi-asset settings Naschold (2008) finds evidence from Ethiopia, India and Pakistan for a weakly concave dynamic asset threshold, in other words evidence in support of (very slow) convergence. Baulch and Quisumbing (2009) also do not find evidence in support of poverty traps in Bangladesh, despite having tried many specifications, and nor does Perge (2010) in a forest community in Bolivia. In earlier studies, Jalan and Ravallion (2004) and Lokshin and Ravallion (2004) also do not find evidence for multiple dynamic equilibria. Thus the case for poverty traps has mostly been established in cases where households primarily rely on one asset; in a broader context, where more assets are relevant, the evidence in favour of



poverty traps is much less convincing. Of course this is completely consistent with the view that it may take a very long time for the poor to escape from poverty.

The ideas about poverty traps developed by Carter, Barrett and others capture a strongly intuitive notion – that many individuals or households may be trapped in persistent poverty reflecting a lack of assets combined with disadvantaged access to credit and financial markets, or to insurance. But in the end the empirical evidence in support of this notion is not that strong.



5 Discrimination as a factor in access to and use of assets

The logic of the poverty traps approach is that many households are caught in persistent poverty because they do not have a sufficient level of assets. There is little question that lack of assets, if sustained over time, is likely to be a major factor underlying long-term poverty. Further, there is very strong evidence for those lacking sufficient assets being excluded from credit markets (Payne *et al.*, 2007); and financial markets in general, and it is widely reported that even microcredit programmes which in principle target the poor frequently fail to reach the poorest (Hulme, 2000; Kabeer, 2008; Mosley and Hulme, 2009)

But the poverty trap framework (at least as developed above) does not entertain the possibility that one household may get a higher return on the same assets than another. This of course can reflect good or bad luck, which may average out over a sufficiently long period of time. But, equally, it may reflect discrimination in the way in which households are able to make use of the assets they have. Some may systematically receive lower returns on assets than others. Furthermore, there may also be discrimination in asset accumulation opportunities in the first place.

Discrimination may take different forms – common examples being discrimination by gender, ethnicity, caste, religion, geographic location or income level. Some of this may be about ‘natural’ disadvantage of particular locations, e.g. remote areas will often be far from many important markets, though of course there may be endogenous factors underlying remoteness. It may also be about policy choice, e.g. to construct a new road to region X rather than region Y. But in many instances discrimination is much more overt.

The classic analysis of discrimination in relation to the labour market obviously concerns the rate of return to human capital. Gender and racial pay gaps have been extensively studied in many countries, both industrialised and developing, with the classic approach being to use wage regressions to separate out wage differentials between groups into elements that can be explained in terms of the characteristics of the groups, e.g. their respective education levels, and that which cannot be explained by difference in characteristics. The latter is interpreted as discrimination.

Besides discrimination in wage rates paid, there is also potentially discrimination in accessing jobs in the first place, or discrimination in sectoral allocation of jobs (presumably limiting access to better paid jobs). In practice, these factors might be more important than wage differentials; in many countries getting a waged job (outside of agriculture) is a key factor enabling an escape from poverty. This issue has been the subject of many studies, which typically involve modelling the likelihood of getting a job separately for the advantaged and disadvantaged group(s) as a function of their characteristics; or modelling sectoral allocation separately for the advantaged and disadvantaged groups. Again, from these



studies there is extensive evidence of discriminated groups suffering from disadvantage. In the Indian context, Thorat and Mahamallik (2007) provides a summary of evidence on discrimination in the labour market against scheduled castes, and finds evidence that it is substantial in hiring for jobs as well as wage payments and working conditions (despite affirmative action measures at least in the public sector).

But the differentials in characteristics – in particular education – which play a central role in these models in turn may themselves be the outcome of a discriminatory process: discriminated groups may have greater difficulty in accessing education in the first place. This concerns inequality, and possible discrimination, in accumulating assets in the first place. This is a key starting point for discrimination. Again there is a significant econometric literature on differentials in access to education (enrolment, attainment) by different groups, in particular in relation to gender. In this context there is a specific interest in disadvantage faced specifically by poor people in discriminated groups; reliance on results derived from quantile regression analysis (where the line is calculated not relative to the mean value of the variables, but about specific quantiles, including lower ones, of the distribution) may be particularly informative. One factor which is generally relevant in models of child educational outcomes is the education level of the children's parents, which itself is likely to have been an outcome of a discriminatory process in the past.

But the issue of discrimination is also important in other contexts besides the labour market. Discrimination may be active in terms of access to land, access to markets, or access to other public facilities, such as healthcare. Thorat and Mahamallik (2007) in India reviews discrimination faced by scheduled castes and policy to remedy this in relation to the land market. Scheduled castes (SCs) and tribes also suffer from lack of access to markets for consumer goods and agricultural products, among other things; and traditionally were debarred from undertaking any business. SCs face disadvantage in access to credit for reasons that do not just reflect lack of assets. Many of these forms of discrimination have become less important over time, though they still seem to exist on a substantial scale. Discrimination in access to inputs, markets or public services also has important implications for accumulation of assets and returns to assets, just as was the case for the labour market, and in many countries these forms of discrimination have more severe consequences for the chronically poor and the poorest.

Discrimination is likely to have serious adverse consequences for significant numbers of the chronically poor, who may suffer from it and may be poor as a direct result. The quantitative contribution of discrimination to chronic poverty has never been satisfactorily established. In part, this is because the above techniques cannot in the end distinguish discrimination from other observed differences between advantaged and disadvantaged groups. It is also partly because discrimination may arise in many different spheres. In addition, analysis has focused predominantly on the labour market, which is only one aspect. But in some low income countries at least, the impact of discrimination on chronic poverty is likely to be high.



But in addition, there is increasing evidence that discrimination may also have adverse impacts on overall economic performance. This evidence is probably strongest in relation to gender inequality, which appears to have adverse implications for economic growth. Thus, measures to tackle discrimination are likely to be good for chronically poor people, both directly and indirectly, through enabling an improved overall economic performance.

In summary, discrimination in access to assets and in the ability to use them is potentially an important factor underlying chronic poverty. There is scope to analyse this much more fully in relation to markets, in addition to that for labour.



6 Conclusions

Assets play a key role in the understanding of poverty, and in particular in relation to chronic poverty. First, it is important to acknowledge that poor people, including the chronically poor, do have access to a number of assets, and this needs to be recognised in strategies to seek to escape from poverty. But, that said, poor people, almost by definition, have relatively low levels of assets; or do not have a broad enough range of assets. In addition, they are likely to be able to make less effective use of the assets they do have, for various reasons, including the very fact that their ownership is low or does not cover a wide enough range of assets; that they may face other disadvantages (such as being in a remote location); or that they suffer from discrimination or political exclusion.

Low levels of assets equate to higher levels of vulnerability. As households will seek to avoid having to sell the few assets they may have, this will typically lead to more risk-averse behaviour, in terms of choice of economic activities, which in itself may keep households poor. One particular form of this is models of poverty traps, where lack of access to credit accentuates the disadvantages poor people face due to low levels of assets. Empirical evidence for poverty traps may not be very strong, but there are likely to be clear forces at work making it very difficult for the chronically asset poor to escape poverty. This may be further exacerbated in some cases by other disadvantage, discrimination or exclusion. These latter factors, combined with low asset levels and limited opportunities to use these assets, are likely to be very important factors in keeping people in chronic poverty. On the other hand, having a sufficient level of assets in the first place is an important factor enabling households to participate in processes of economic growth, as well as to protect themselves against downturns.

There is extensive evidence that loss of assets, often through health shocks, is an important factor underlying descents into poverty, and of course this is more likely for those with fewer assets to begin with. There is some weaker evidence that accumulation of assets can enable escapes from poverty, but this is often a long-term and gradual process.

In terms of a research agenda, the relationship between assets and vulnerability, and the role of asset loss in descents into poverty are both very well established. There is, however, scope for further research to investigate the possibility of poverty traps, and for a much more thorough analysis of discrimination, in particular outside labour markets, where the phenomenon is relatively well studied. Discrimination is one factor potentially underling persistence of asset inequality over time, a factor likely to be strongly associated with chronic poverty. It is also relatively well known that the extent of asset ownership is associated with power, which becomes an important factor behind the persistence of a status quo in which many remain poor. There is, however, scope for further analysis of this issue, in particular to see to what extent initiatives to build up the social capital of poor people might help to challenge this. In addition, it is important to know more about the processes of asset



accumulation and asset transactions, the latter in particular through markets and inheritance. These latter two factors may be important factors behind the persistence of asset inequality (and so of poverty), including its transmission from one generation to another.



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