Jobs and Transitions Out of Poverty: A Literature Review

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Abstract

This paper summarizes the existing literature on the links between labor and poverty reduction. The vast majority of studies find that more and better paid work is critical in lifting people out of poverty. Studies analyzing poverty dynamics and economic mobility find that improved returns to endowments, particularly the returns to human and physical capital, are critical for exiting poverty. Although non-labor incomes and demographic changes can help to lift the poor out of poverty, there is no substitute for providing an enabling environment that fosters better work and pay for the poor.

JEL classification: Q12, R23, J22

Keywords: Poverty dynamics

The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the World Development Report 2013 team, the World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.
I. Introduction

The most plentiful resource that poor households have is their own labor. What are the conditions under which more or better paid work allow people to exit poverty? Can these conditions be summarized into a set of events or circumstances? A better understanding of the enabling environment that allows the poor to pull themselves upward through their own efforts is critical for the design of interventions aimed at poverty reduction and prevention.

This paper aims to summarize the existing literature on the links between labor and poverty reduction through two related questions. First, how different are the events that lead people out of poverty from those that drag people into poverty and what is the role of employment? Second, how important are the returns to work relative to demographics, or other shocks? The methodologies used to answer these questions have been varied, ranging from models estimating the determinants of transitions across poverty states using household panel surveys, to models that look at changes in welfare over time, to qualitative surveys based on community-based inquiries. In each case the questions revolve around issues of economic mobility and poverty dynamics.

These questions are related to a wide literature which has dramatically grown in the last decade. Baulch and Hoddinott (2000) began summarizing existing studies on economic mobility and poverty dynamics in developing countries at a time when panel data were scarce, resulting in a limited number of studies able to track individuals over time. Baulch and Hoddinott argued that this lack of data led to a considerable knowledge gap in understanding the factors associated with movements into and out of poverty (poverty dynamics), and why some households increase their well-being over the long-run (economic mobility). Since then, the number of panels available in developing countries has expanded considerably along with the economic literature. Development economists have since distinguished between chronic and transient poverty, explored tests for nonlinear income dynamics as evidence of poverty traps; estimated the effects of volatility and risk on individual welfare; estimated reduced-form determinants of income mobility; and analyzed the determinants of transitions into and out of poverty.

With the growing availability of panel data, some of the caveats to their use have also become clearer, including their representativeness over long periods of time and the inevitable problems of attrition and non-response. Moreover, even when panel data are available, different

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1 A recent compilation of databases in developing and transition countries by Baulch (2011) adds up to 66 different panel datasets for developing countries. See http://www.chronicpoverty.org/uploads/publication_files/Annotated_Listing_of_Panel_Datasets_in_Developing_and_Transitional_Countries.pdf
3 Carter and Barrett (2006), Antman and McKenzie (2007), and Quisumbing and Baulch (2009).
4 See Gottschalk and Spolaore (2002); Bigsten and Shimles (2004)
Methodologies are available. Studies interested in better understanding poverty dynamics have investigated the determinants of transitions into and out of poverty by modeling discrete transitions or duration models to distinguish between short and long poverty spells. Studies interested in economic mobility, on the other hand, typically use a continuous welfare measure such as income or expenditure to model changes in welfare. Each method has its advantages and drawbacks. Discrete choice models use high frequency panels that allow us to see that gross movements into and out of poverty are typically much larger than net changes in the poverty headcount. Moreover they highlight the importance of studying the drivers underlying the upward and downward movements separately, since the underlying causes are not symmetric. However, these models are sometimes seen as problematic because they reduce a continuous welfare variable into discrete categories by imposing what is essentially an arbitrary poverty line. Modeling changes in expenditure or income, on the other hand, allow the use of a continuous variable, and are typically used to look at longer term dynamics. However these models cannot easily link changes in welfare to poverty transitions. Finally, although duration models are able to distinguish between short and long spells into poverty, they typically require multiple rounds of panel data that are not always available for developing countries. In practice, each modeling approach has been widely used, often with adjustments to minimize their drawbacks.8

In addition to the wider availability and use of panel data, micro-decomposition methods9 have sought to account for the contributions to poverty reduction stemming from labor versus non-labor income, while pseudo panel methods have substantially improved and can now delve into some issues of economic mobility.10 The big advantage of microdecomposition and pseudo panel methodologies is that they can be used on a wider set of countries with limited data. Typically, they use multiple cross-sections of representative household surveys so that as long as the surveys are comparable, they can look into movements that span long periods of time and do not have the problems of attrition seen in panels. However, these methods cannot be used to identify the events that allow people to transition out of poverty, nor do they answer questions about the drivers of economic mobility.

This review finds that regardless of the methodology employed, the literature points to the conclusion that more and better paid work has been critical in lifting people out of poverty. Whether additional sources of household labor income come from greater diversification, higher earnings per hour, or a greater number of hours worked, labor is at the core of what counts for poverty reduction. Households able to exit poverty have experienced either improved returns to labor (through more education or other productive assets), or higher returns to their human or physical capital endowments.

The rest of the paper is structured as follows. The next section describes the literature on poverty dynamics that has flourished in settings where income can be measured reasonably well both at the household and at the individual level, where panel data is frequent and abundant, and where the contribution of labor income can be quantified directly. The paper then turns to the evidence

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8 See Baulch (2011) for a review of the methodological issues that arise when analyzing poverty dynamics using panel data including measurement error, attrition and tracking.
10 See Lanjouw et al (2011) for new pseudo panel methods to analyze income mobility.
on economic mobility in settings where the rural population is a larger fraction of the economy, where the focus has been on human and physical capital endowments and the impacts of shocks on welfare. Section 4 describes alternative methods in the analysis of poverty dynamics, including community based enquiries, mixed methods, and non-income dimensions of poverty. Section 5 concludes.

II. Poverty dynamics when income can be measured

This section summarizes a growing literature on poverty dynamics, where the objective is to determine the conditions under which a household moves out of poverty. Early studies using panel data in developed countries used simple tabulations of the number of times a household was poor over a fixed time period and variance components models. This literature then moved to duration models led by work pioneered by Bane and Ellwood (1986), who pointed out that different events are likely to have different impacts on poverty transitions and on the length of time that households remain in poverty. Since then this methodology has been applied to a host of countries where panel data are available and labor income can be measured relatively well. As discussed below, the vast majority of empirical work in this area across a wide range of countries suggests that most of the observed changes in poverty can be attributed to labor events, defined as changes in household members' labor market attachment and earnings.

Early Models

Although tabulations of the number of times poor over a period offer a simple and transparent account of changes in individual or household status, there is no attention focused on the events which lead people into and out of poverty. As pointed out by Bane and Ellwood (1986), it is very difficult to trace processes whereby persons may gradually or suddenly escape from poverty. Moreover, the method takes no account of whether the observed poverty spells are censored or not. This can lead to misleading conclusions about the duration of poverty spells and the prevalence of short versus long spells.

Lillard and Willis (1978) were the first to use a variance components model to summarize the probabilities of making a poverty transition for persons with different characteristics. In these models, ‘income’ is the dependent variable and dynamics are introduced through the residual error structure, with assumptions about permanent and transitory components. In these models, deviations from permanent income tend to be treated as random and behaviorally equivalent. Typically all “disturbances” in income lead to the same temporal path of income in the future.

Hazard Models

However, as Bane and Ellwood (1986) argued, all changes in family income are not likely to lead to the same sort of long-run dynamics given household income has many different sources, across multiple household members, and can therefore change because any one of the income

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11 Lillard and Willis (1978) assumed that error components are normally distributed, but Ulrick (2008) shows that the normality assumption is not essential for this exercise. For a recent review of these models, see Jenkins (2011), chapter 6.
sources, household size or composition change. In fact, demographic changes have a dual effect, changing both the number of people contributing to the household, as well as the household equivalence-scale rate. In contrast, they argued that poverty transitions are triggered by the occurrence of significant life-course events such as changes in household members' labor market attachment and earnings, changes in non-labor income, or changes in household demography. Therefore, these events are likely to have different impacts on poverty transitions and the length of time a household remains poor. This idea led Bane and Ellwood (1986) to analyze poverty transitions on the basis of duration models with the objective of understanding the sort of adverse events that lead people into poverty and whether duration depends on how the poverty spell began, and how (if ever) families are able to escape poverty.

Using the Panel Survey of Income Dynamics (PSID), Bane and Ellwood identify continuous periods during which income falls below the poverty line and then calculate exit probabilities (or hazard rates) to generate distributions of spell lengths for new spells. A key feature of this method is that beginning and ending events are classified into mutually exclusive categories, with the events defined using a hierarchy of event ‘importance’. In this hierarchy, significant changes in family structure change are most important, followed by changes in the sources of income and changes in the needs of the household. Since every poverty transition is associated with a single event, then by construction the sum of the trigger events add up to all observed poverty changes. It is therefore straightforward to assess the importance of different trigger events from the aggregate point of view. This approach has since been replicated in Stevens (1994), Jenkins (2000) and Jenkins and Rigg (2001) for Britain, Oxley et al (2000/1) for six OECD countries, and Cantó for Spain (2003). As panel data have become available in developing countries, the approach has been used by Woolard and Klassen (2005) for KwaZulu Natal in South Africa, Bigsten and Shimless (2004) in Ethiopia, and Nielson et al (2008) in Chile.

In each of these studies, labor market changes were the most common reason for a significant change in well-being (Figure 1). For example, Woolard and Klasen (2005) find that changes in household income associated with the head or other family members getting a job are the most important reason for households getting out of poverty in South Africa. Similarly, Nielson et al (2008) find that 93 percent of households exiting poverty were associated with changes in labor earnings in Chile.

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12 Bane and Ellwood's method and a closely related one have been used to study poverty transitions in Britain by Jenkins (2000), and Jenkins and Rigg (2001). Using the formats established by the latter, the Department for Work and Pension's annual Low Income Dynamics publication now also includes tables linking trigger events and poverty exits and entries. For a recent review, see Jenkins, 2011.
One problem that has been recognized with this approach is that multiple events may occur simultaneously, and although one could treat each joint occurrence as a separate event, there are practical limits. In a closely related methodology, instead of defining a set of mutually exclusive events using a predefined hierarchy, Jenkins and Schluter (2003) focus on a subset of the most important events individually as well as jointly. To make this more explicit, suppose that there is a set of mutually exclusive events $j=1,\ldots,J$, which trigger exits from poverty. Then, among poor households the probability of exit from poverty between one year and the next is given by the sum of the probabilities for households that exit by each of these different events:

$$
pr(\text{exit poverty}) = \sum_{j=1}^{J} pr(\text{exit poverty via event } j)
$$

(1)

Each term on the right hand side can be written as the product of the probability of each event and the probability of exit conditional on event occurrence:

$$
pr(\text{exit poverty}) = \sum_{j=1}^{J} pr(\text{exit poverty }|\text{event } j)pr(\text{event } j)
$$

(2)
This decomposition of the probabilities of transitions allows an assessment as to whether the importance of a given event results from its high probability of occurrence, or from its strong impact on the household income. This method has since been used by Cantó for Spain (2003), and Beccaria et al (2011) for five countries in Latin America.

Despite the difference in method with the original Bane and Ellwood (1986) approach, these studies tend to arrive at similar conclusions, namely that events exclusively related to the labor market account for over 50 percent of the triggers associated with poverty exits (Figure 1). Maurizio et al (2011) find that the most frequent among these labor events are either wage growth (Argentina and Ecuador) or a rise in the number of employed household members (Brazil, Costa Rica, and Peru), although these new jobs tend to be informal or precarious jobs among the poor.

A fundamental problem with these methods recognized in the literature is that ‘changes in both income and household size are themselves driven by a number of inter-related decisions about household labor supply, household formation and fertility, as well as government tax and transfer decisions (Oxley, Dang, and Antolín 2000). There have been some attempts to deal with this problem. For instance, Machado and Ribas (2010) construct time-varying covariates that represent changes in the Brazilian labor market in order to estimate the effects of aggregate demand on poverty duration. Moreover, they find that the movement of industrial and commercial workers into the service sector in metropolitan areas has caused a significant reduction in the length of time that households remain in poverty. However, this movement has been slow. They show that increasing the average wage of formal sector workers causes a reduction in the probability of exiting poverty, while increasing the average wage of informal sector wages causes an increased probability of exiting poverty.

Other papers have attempted structural models to deal with this problem. For instance, there are a few studies evaluating the causal effect of divorce on income (see, for example, Aassve et al. 2007 and Ananat and Michaels 2007). However, these evaluation methods are often focused on particular events or subsamples of the population, whereas the intended scope of analysis seeking to better understand the dynamics of poverty is much wider. As a result, despite the potential endogeneity between trigger events and poverty transitions, accounting for poverty transitions among the population as a whole are still considered useful (Jenkins, 2011).

III. Poverty dynamics in rural settings

While the approaches described above have been useful in separating the impact of labor-related events on transitions into and out of poverty, most of these studies have relied on frequent rounds of panel data and contexts in which labor income can be measured relatively easily. These methods have been less widespread in contexts where the majority of the population lives and works in the agricultural sector, where it is difficult to separate the returns to labor from the returns to land or other assets. In these contexts, the movement away from farm activities and into off-farm income has often been associated with economic mobility. This section reviews recent research that has exploited panel data to further probe the impact of rural non-farm activity in poverty reduction.
Farm and Nonfarm distinctions

Rural households are highly diversified, with off-farm sources of income accounting for 50 percent of total rural income in most countries (Figure 2). Not surprisingly then, studies focusing on rural populations have given greater emphasis to movements out of poverty on account of movements from the traditional rural agricultural sector to the nonfarm sector. Indeed, nonfarm sources of income are consistently associated with increasing income inequality. For instance, Davis et al (2010) find that wealthier households in rural areas have a higher level of participation in, and greater income share from nonfarm activities. Conversely, agricultural sources of income are generally the most important for the poorest households, with a greater share of households at the bottom of the income distribution specializing in on-farm activities.

Figure 2. Sources of Income and Diversification

A. Source of Earnings
   (share of rural income generating activities in total income)

B. Income Diversification
   (share of rural households with a diversified income portfolio)

Source: Davis et al (2010).

However, as noted by Lanjouw (2007), simple stories about growth in the nonfarm sector driving down rural poverty do not survive close scrutiny. Although it is true that rural poverty has been declining alongside growing nonfarm sectors in some countries, this does not mean that the nonfarm sector was responsible. Indeed, the direction of causality could have been the reverse or alternatively both poverty and nonfarm sector growth were driven by a third factor, such as technological change.

In fact, the evidence suggests that there is wide heterogeneity in rural nonfarm activities, and the extent to which the poor can participate in an expansion of that sector varies significantly across countries. As Reardon et al (2000) describe, there is evidence that in some contexts poor people may be unable to overcome entry barriers to nonfarm activities. It would be an error to assume

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13 See Lanjouw and Lanjouw, (2001); and recent reviews in Haggblade et al (2007), and Haggblade et al. (2010).
that one can address poverty and inequality in the nonfarm sector without addressing farm-side problems and vice versa.\textsuperscript{14}

In order to better understand the relationship between the nonfarm sector and poverty dynamics, it is best to look at the dynamic interactions using panel data sets. For instance, careful analysis looking at region-level panel data for India finds that poverty is associated in a complex way with the nonfarm sector. Although expansion in the nonfarm sector is directly associated with poverty decline, and therefore expansion of the nonfarm sector also puts pressure on wage rates in agriculture, where most of the poor are concentrated it also contributes to poverty reduction indirectly (Lanjouw and Murgai, 2009).

Similarly, based on a series of panel data studies for East Asia, Otsuka et al (2009) argue that the development of the nonfarm sector has led to an increase in nonfarm income and a major reduction in rural poverty. In particular, they postulate that in the early stage of development, when farming was a dominant source of income, access to land and agricultural technology were the major determinants of farm household income. They point to work done by Estudillo, Sawada, and Otsuka (2009) and Takahashi and Otsuka (2009), who use intergenerational household surveys of villages and provinces in the Philippines spanning 2 decades. After studying the determinants of changes in household incomes and educational attainment, they conclude that the spread of the Green Revolution and the implementation of land reforms stimulated the development of a land-pawning market and investments in schooling of the next generation. Otsuka et al (2009) groups similar work and findings found in Thailand\textsuperscript{15}, Bangladesh\textsuperscript{16}, and Tamil Nadu, India\textsuperscript{17} and argue that this reflects the notion that as economies develop, the availability of nonfarm jobs increases so the importance of both the "quality" and the "quantity" of human capital is highlighted, leading to a shift of household income structure away from the farm to the nonfarm sector, motivated by an increase in nonfarm wage earnings. They conclude that the development of the domestic nonfarm labor market was the single most important factor behind the observed poverty reduction in these rural villages. However, as pointed out by Thorbecke (2009), this analysis implicitly assumes that a larger supply of educated workers from farm households will automatically obtain nonfarm jobs, since no attempt was made to explore the determinants, extent, and magnitude of effective demand for nonfarm jobs.

\section*{IV. Understanding Economic Mobility}

Beyond the distinction between farm and nonfarm activities, there is a wide literature on economic mobility, aiming to understand why certain households are able to increase their well-being over the long-run, and what prevents other households from doing the same. These efforts have led to models that focus on a continuous welfare measure, such as income or consumption, which estimate the impact of idiosyncratic and community level shocks. Other models have directly modeled transitions into and out of poverty. Transition studies are useful to the extent

\textsuperscript{14} Similar points have been raised by Dercon and Krishnan (1996), Escobar, (2001), and Lanjouw (2007).
\textsuperscript{17} Kajisa and Palanichamy (2009) use detailed daily records of farming households from 1971 to 2003 in Tamil Nadu, India.
that they enable us to see that gross movements in and out of poverty are typically much larger than net changes in the poverty ratio. Moreover they point to the fact that it is important to study the drivers underlying the upward and downward movements separately, since the underlying causes for these transitions are not symmetric. The results from these studies suggest that escape from poverty is often due to a combination of improved labor returns to endowments, the possibility that households accumulate assets, and to some extent, good fortune.

The impact of shocks on changes in household welfare

Beyond the distinction between farm and non-farm activities, studies have more generally focused on economic mobility by modeling the change in household income or consumption over time (Fields 1999 and 2003, Dercon, 2004, Deininger and Okidi, 2003, and Gunning et al, 2000). In particular, Dercon (2004) was inspired by the standard empirical dynamic growth models as in Mankiw et al. (1992), where household growth rates are negatively related to initial level of income, and positively related to a number of variables determining initial efficiency and the steady state, including investment rates in human and physical capital. Assuming a Cobb–Douglas production function for output, dependent on capital, labor and human capital, and constant returns to scale, he models the change in consumption as:

\[ \ln y_{it} - \ln y_{it-1} = \alpha + \zeta \ln k_{it-1} + \eta \ln h_{it-1} + \delta Z_{it} + \gamma X_i + u_{it} \]  

(3)

where \( k_i \) represents the household level of capital per capita and \( h_{it} \) is a vector of commune or region levels of capital (infrastructure, institutions and so forth) (Dercon, 2004). In order to allow for the effects of economic shocks on consumption expenditure growth, Dercon assumes the existence of a multiplicative risk, which can be idiosyncratic or common to all households in a particular commune or region. Dercon argues that it is possible to introduce risk into equations (3) as a control for shocks without adding any further distributional assumptions about the shock. This risk variable can also be used to analyze the persistence of shocks across time when sufficient data is available for a long period of time. With this model, Dercon (2004) investigates the impact of weather and health related shocks on economic growth.

This type of model has been useful in determining the impact of economic shocks on changes in household welfare characteristics and changes in the returns to those characteristics. However, as Justino et al (2008) argue, consumption and earnings functions which impose constant parameters across the entire consumption distribution, limit their application to the analysis of the impact of economic shocks on household poverty transitions when the determinants of household welfare have different returns to the poor when compared to the non-poor. In addition, the model introduces shocks that are multiplicative in a Cobb-Douglas and therefore additive in equation (3) so that shocks are analyzed individually. However, this abstracts from the possibility that households might experience multiple shocks simultaneously.

One way to link the welfare variable with poverty status is to include the poverty status in the initial year as one of the independent variables of a fixed effects regression. For example, Fields et al (2003) use panel data for Indonesia, South Africa, Spain, and Venezuela and regress the change in the log of per capita adult equivalent income on initial conditions such as the level of

\[ 18 \] For a recent literature review on studies using this approach in Latin America, see Fields et al (2007).
income, the household head’s characteristics, and changes in the head’s and household characteristics in four countries. Their results consistently show that initial income and job changes of the head are the most important variables in accounting for income changes. Moreover, changes in labor earnings are more important than changes in other sources of income. Similarly, Woolard and Klasen (2005) use the same approach for South Africa, Lawson et al (2006) for Uganda, and Lohano (2011) for Pakistan. In each case, initial conditions matter. For instance, Woolard and Klasen (2005) find that initial household size, poor initial assets, poor initial education and poor initial participation in the labor market hinder advancement for the poor. However, they also find that improvement in education, reductions in household size and improved employment opportunities are the most promising ways to improve incomes. Similarly, Lohano (2011) finds that households that escaped poverty experienced an increase in their asset ownership as well as marked improvements in their human development indicators.

Another way to link the expenditure variable with poverty status is to use interquantile regressions calibrated to the average expenditures of the chronically poor and never poor in all survey rounds. For instance Baulch and Vu (2011) apply this approach to rural Vietnam between 2002 and 2006, while Quisumbing (2011) applies it to rural Bangladesh over a six to twelve year period. The results from these studies show that escape from poverty is due to a combination of improved labor returns to endowments and household accumulation of assets (Table 1).

**Differentiating household poverty transitions**

The interest in differentiating entries and exits from poverty dynamics directly has spurred models that can estimate movements into and out of poverty between two time periods using discrete outcome models, such as a multinomial logit model (MNL). In these models, the probability of moving from poor to non-poor states is estimated. These models are popular partly because a large number of panel waves are not needed, as in the case for Markov models. However, given the difficulty in distinguishing the sources of income, these models typically do not focus on trigger events as the hazard models described earlier. Instead, the focus is typically on human and physical capital endowments. These usually include educational status of the head and other household members, demographic characteristics of the household, and assets including landholding. In addition, learning from the literature on shocks, these models typically include measures of shocks experienced by the household, which include both community level shocks (such as natural disasters), and idiosyncratic shocks, such as asset and crop losses, illness and/or death related shocks, as well as social spending shocks.

These studies find that improved returns to endowments, particularly the returns to labor are critical for exiting poverty. Obtaining an education or other productive endowment can be seen as triggers to escape from poverty (Table 1). However, an absence of bad shocks such as illness or death, and the presence of good shocks (such as rain) are also needed to boost the possibility to escape from poverty. In contrast, falling into chronic poverty is due to a combination of negative shocks, and a lack of resilience in the form of low assets. For example, Dercon and

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19 See Capellari and Jenkins, 2004; Stewart and Swaffield, 1999; Canto et al, 2007 for application of Markov models in developed country settings where multiple rounds of panel data are available.
Table 1. Determinants of the Probability of Moving from Poor to Non-Poor, MNL estimates

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</table>

A positive and significant correlation between the probability of going from poor to nonpoor is identified as “+*”, while a negative correlation is noted as “-*”. When the effects were tested but were insignificant, we note “0”.
1/ This result is reversed when quantile regression estimates of log per capita expenditures are run instead of an MNL.
2/ Results from sequential logit model on the probability of escaping poverty.
3/ Refers to ethnic fractionalization in initial period.
Porter (2011) finds that households that become chronically poor have been seriously affected by drought and illness. Quisumbing (2011) shows that rural Bangladeshi households with less than median assets are especially hard hit. Similarly, Lohano (2011) finds that the drought of 1999-2002 in Pakistan was especially hard on landless households because there was a collapse of employment opportunities at the same time as rising food prices.

Although the results reported above and in Table 1 describe the direction of the main findings in some of these studies, it is difficult to decompose the impact of labor effects on the probability of escaping poverty, unless this is done explicitly by the author. For instance, Justino et al (2008) use a multinomial logit model to determine the probability that household $i$ experiences one of the $j$ mutually exclusive outcomes (remaining poor, poor to non-poor, non-poor to poor, and remaining non-poor). The poverty transition results can be used to provide a decomposition of the overall probability of escaping or entering poverty by each of the explanatory variables, as follows:

\[
S_Y = \frac{\sum_{i=1}^{n} x_{ij} \beta_i}{\sum_{i=1}^{k} \sum_{j=1}^{n} \beta_i x_{ij}}
\]

where $S$ is the share of the overall probability of outcome $Y$, $n$ is the total number of observations in the panel, $k$ is the total number of poverty dynamic outcomes, $x_{ij}$ are the values of the explanatory variables for household $i$ in period $j$ and $\beta_i$ are the coefficients obtained from the multinomial logit regression models.

Using household-level panel data for rural households in Vietnam between 1992-1998, they find that household poverty dynamics were significantly affected by an improvement in human capital, improvements in the labor market (in particular to export employment), and an improvement in agricultural production related to the rice and coffee booms. The decomposition of poverty dynamic effects implies that employment effects, including human capital effects, labor market effects, and the change in the employment share of the export sector account for 62 percent of the probability of rural Vietnamese households escaping from poverty.

V. Qualitative and Mixed Methods

While panel data methods are considered the most reliable given the comparability of the data collected at different points in time, its disadvantages are its costs and the significant delay in analysis that it entails (Addison et al, 2009). Another way to obtain information about the past when inter-temporal panels are not available with sufficient frequency is to ask people about their past and utilize this information. In this approach, each individual is engaged in a semi-structured discussion about their life course with the objective of understanding the trajectory of their well-being, and the causes underlying it.

However, many researchers are highly suspicious of this method, given the problems of recall, including the difficulty in remembering what conditions were like at the exact time that is of interest, and the fact that people tend to develop selective memories.\footnote{See Addison et al (2009).} As a result, this method is
often used extensively to collect qualitative data, often to triangulate other data, and/or to understand the ways in which people subjectively interpret change over time. Two alternatives are presented in this section. The first is to make data more reliable by asking an entire community, rather than a single individual, about changes in the poverty status of households within that community. A second method is to employ mixed methods by combining qualitative and quantitative methods in an integrated fashion.

Community Based Enquiries

One alternative have been group-based methods, or community-based inquiries, which could make data more reliable as interviewees debate each other's recall and researchers can triangulate data between groups. For instance, in a series of studies following a Stages of Progress methodology, survey teams met with representative community groups in India, Kenya, Peru, and Uganda (Krishna, 2004; Krishna et al, 2004; Krishna et al, 2006a; and Krishna et al, 2006b respectively). In each case, the community collectively defined ‘poverty’ given their social context, rather than using standard international measures. For example, in the case of Kenya, poor households were defined as those unable to acquire food, clothing, perform repairs to their roof, allow for primary education of children, and those unable to acquire a chicken and a goat. Given the agreed definition, then all households in the village are listed and the community group is asked to describe the status of each household 25 years earlier compared to their status today.

In each case, the authors identify households moving into and out of poverty. Poor health, large family size together with an uneconomic subdivision of land, and expenses on death feasts are the most important reasons for descent into poverty in Kenya, India, Peru and Uganda (Krishna et al, 2004, 2006a and 2006b). In addition, in India, high expenses on marriages and high interest payments on private debt are also important contributors to descent into poverty. For households escaping from poverty, diversification of incomes sources by establishing links with the urban economy was critical in Kenya, India, and Peru. Among those escaping poverty in Kenya, 73% reported a household member obtaining a job. In India, diversification of income sources was a principal factor for escaping poverty in 70% of cases. However these data are not amenable to precise calculations given their small sample size, and potential for errors in recall and measurement. However they do provide a means to generate additional facts about poverty and its causes in diverse local contexts.

Non-income measures of poverty dynamics and mixed methods

An alternative to community-based enquiries is the use of both qualitative and quantitative methods. An early example of this “mixed method” approach includes Sen (2003) who collected household-level panel data from a survey of 21 rural villages in Bangladesh between 1987 and 2000, and finds that moving out of poverty meant combining different exit routes, including fast accumulation of human and physical assets, diversification of the asset base favoring higher income-yielding nonagricultural assets, a general reorientation from agricultural to nonagricultural activities, and the pooling of household incomes from different sources. In addition to observing the sources of income for the poor versus the non-poor, respondent’s perceptions as to why their economic well-being had improved among the economically
ascending households were reported. Simple tabulations show that 64 percent of households exiting poverty attributed their upward mobility to issues related to the availability of better work, on account of increases in human or physical assets, favorable market conditions, or a greater number of labor force participants.

More recent examples of this approach include Davis and Baulch (2011), who show how different methods lead to very different assessments of socio-economic mobility. They embark on what is often referred to as mixed-methods research into poverty dynamics, or ‘qsquared’ methods. In particular, they apply a methodologically integrated approach which involves undertaking qualitative and quantitative fieldwork simultaneously or sequentially, with integrated analysis and write-up.21 Their analysis highlights the fact that a small shift in the peak of the expenditure distribution or of poverty lines, can lead to the impression of a large number of people moving out of, or into, poverty. Their qualitative findings, on the other hand tend towards a much more pessimistic view of the tangible poverty reduction in rural Bangladesh. By looking at the mismatches between quantitative and qualitative assessments they find different types of ill-being which are not well detected in standard expenditure-based measures, including ill health, dowry pressure, disability, domestic violence, social isolation or stigma. Similarly, Quisumbing (2011) and Lohano (2011) conduct qualitative interviews as part of their studies in Bangladesh and Pakistan. These interviews point to cases where there was a sequence of negative shocks that were important for downward mobility, and would have typically not have been picked up in standard panel data. Given these caveats, some authors are now strongly advocating for the use of mixed methods (Addison et al, 2009; Davis and Baulch, 2011; Kristjanson et al, 2011).

Finally, several authors have argued that poverty dynamics can look very different when non-income measures are used, and these are critical as both a cross-check on trends in income measures, as well as giving us a broader picture of how well-being in all its dimensions is moving over time (Addison et al, 2009). In particular, Barrett et al. (2006) provide empirical evidence that household welfare dynamics differ significantly depending on whether an income-based measure is used versus an asset-based welfare measure. Carter and Barrett, (2006 ) argue that asset-based approaches have several advantages over income-based measures, and show the linkages between the depth of poverty, in terms of material and social assets, and duration with a focus on household-level poverty traps. Moreover, given that assets like land and livestock represent both accumulated past wealth and security in the future, Davis and Baulch (2011), argue that assets play a vital role in most household’s strategies for accumulation and consumption smoothing. They show that using an asset-based measure, such as land ownership, improves their ability to detect actual poverty transitions and therefore the reliability of the poverty assessments substantially in Bangladesh.

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21 Some examples of methodologically integrated q-squared studies include Devereux et al. (2003) in Ethiopia, and Parker and Kozel (2005) in India.
VI. Conclusions

Although the methodologies reviewed in this paper are diverse, they all point to a similar pattern: more and better paid work is critical in lifting people out of poverty. More specifically, improving the returns to labor is critical in lifting people out of poverty. Whether additional labor income comes from greater diversification, higher earnings per hour, or a greater number of hours worked, jobs are at the core of what counts for poverty reduction (Figure 3). The substantial literature on economic mobility and poverty dynamics that has emerged in the past decade provides a better understanding of the circumstances that allow the poor to pull themselves up.

Figure 3. Events related to Poverty Exits

1/ For stages of progress methods labor-related events include diversification of income sources, obtaining a job, improving productivity, employment in private sector. For perceptions methodology, labor-related events include increases in human or physical assets, an increase in the labor force, or favorable market conditions. For MNL methods, labor-related events include improvements in human capital, improvements in the labor market and the changes in the employment share in the export sector. For the Bane and Ellwood and Jenkins and Schluter methods, labor-related events include changes in household members' labor market attachment and earnings.

2/ Includes both changes in non-labor earnings (e.g., rents, pensions, land assets) and demographic changes.

3/ Only includes diversification out of livestock.
The methodologies used to answer these questions have been varied, ranging from models estimating the determinants of transitions across poverty states using household panel surveys, to qualitative surveys based on community-based inquiries. However, the consensus seems to be that improved returns to endowments, particularly the returns to human and physical capital, are critical for exiting poverty. Although non-labor incomes and demographic changes can help to lift the poor out of poverty, there is no substitute for providing an enabling environment for better work and pay for the poor.
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