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## Assets and Domestic Units

### Methodological Challenges for Longitudinal Studies of Poverty Dynamics

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#### Introduction

Throughout this collection we describe repeated instances of transformation. We have frequently found that once-poor families appear to be richer due to better farming technology (ploughs, more oxen, and improved crop breeds), higher crop prices, and changing social relations within villages. Or we find villages that were once remote are now bustling with busy centres, motorbike taxis for hire, frequent bus services, solar-powered electricity, and mobile telephone services. Housing quality has markedly improved.

These stories may appear easy to tell. Changes to farming activity have made people richer and they have invested in their homes and farms. But things are not as simple as that. Before we can claim that there is greater meaningful local prosperity, we have to pay more attention to what has improved, and how it has been experienced. Embedded in any claim about changing prosperity are other important claims about how prosperity should be measured and the social units which experience that prosperity.

As we discussed in the second chapter of this book, many of the changes in wealth described here are best captured by exploring changes to *assets*, not poverty lines, because the latter measure standard baskets of consumption and exclude assets. Describing the transformations we have just reported requires describing changes in asset access, ownership, and control. Assets are particularly important to emic definitions of wealth and well-being.

Any measure of wealth and poverty requires the right analytical social unit to track change. Inseparable from any investigation of assets is the question of what is the appropriate social unit of analysis required to understand change in assets. Many of the assets described here (land, houses, livestock) are effectively owned and managed by social units larger than individuals. Their benefits, or the

problems of their loss, are experienced collectively, although not equally. They are not, therefore, a good measure of change in individual fortunes. Rather assets will require reference to the families, households, domestic units, or domestic groups who collectively own and manage these assets. We will talk about these social entities as ‘domestic units’ in this chapter.

However, investigations involving domestic units are difficult. It is well established, but inadequately recognized, that domestic units contain and can obscure considerable inequalities, power struggles, and differences between intersections that include gender and age (inter alia). These can be fundamental to understanding the nature and reproduction of poverty and prosperity. This issue is compounded in longitudinal research because domestic units are not static entities. Their membership, location, activities, and both internal and external power relations can change substantially and rapidly.

In this chapter we explore the conceptual and practical challenges that can arise when trying to use assets, and therefore domestic units, in longitudinal research on wealth and poverty. We contend that exploring the socially embedded dynamics of assets is necessary to understanding changing prosperity, both in and out of poverty.

We argue that this requires examining carefully the nature of the domestic units in which assets are socially embedded. As we will show, in some circumstances the challenges of tracking change by following domestic units can be insurmountable. We will argue that it is useful to examine the circumstances in which instability of domestic units makes working with assets so hard. But we will also identify situations where it is more practical to use assets and domestic units in longitudinal research, if the challenges of so doing are tackled carefully.

We proceed as follows. First, we consider how the complications of exploring assets and wealth change over time. Next we turn to the social units through which changes in assets need to be examined. We show that this needs to work with entities like domestic units, but we then outline the problems of working with such units over time. We conclude with thoughts on the importance of tackling these problems in order to understand dynamics of asset ownership over time.

### **Assets and Poverty Dynamics over Time**

As we explored in the two previous chapters, assets are an essential part of rural definitions of wealth and poverty. They provide income streams upon which day-to-day consumption and strategies for investment and growing wealth depend. They are clearly important to monitor as part of understanding poverty dynamics. But their contribution is probably best described as a necessary complication,

rather than a welcome clarification. Assets are central to any robust understanding of wealth and poverty, but how to capture that relationship and its changes over time is fraught with difficulty.

If we try and explore the changing value of assets over time problems arise. The monetary value of assets is hard to capture because asset prices can vary considerably over various time scales both seasonally (livestock) and over years (land or motorcycles). Meaningful depreciation costs of houses, in contexts where houses are rarely bought or sold, and where each domestic unit constructs their own, are hard to calculate. This is particularly true of poorer people's houses, or houses built from naturally and locally available materials. The value of land, especially where markets are dominated by informal exchanges, can be hard to ascertain.

These problems grow when exploring the changing value of assets over the long term. In high inflationary environments converting an asset into a cash value and then subjecting that number to modifications due to inflation and purchasing power parity changes, further adds to the difficulties in determining the worth of assets. Even without these financial considerations, exploring change in asset ownership and wealth is complicated because local interpretations of wealth and the value of assets change over time (cf. Mushongah and Scoones 2012).

Finally, the relationship of assets with more common measurements of poverty is not straightforward. The relationship between income and assets is not linear (Harttgen et al. 2013) and asset indices are not always a good proxy for consumption (Howe et al. 2009, and cf. Friis-Hansen, this volume). A recent study, and one of the few to use longitudinal data, found that income increased in all groups studied, but that over the same time period the value of asset portfolios owned by these groups decreased (de Weerd 2010, Beegle et al. 2011). Borgerhoff Mulder (this volume) does find good relationships between assets and other measures of well-being, concluding that 'assets tell us a lot about a household' (p. 90). But she also cautions against extrapolating these findings broadly. Assets share the flaws of income, consumption, and other measures in that all are, individually, imperfect measures of welfare.

None of these challenges make historical comparisons using assets futile. Indeed, the very fact that asset dynamics can vary from measures of consumption and nutrition is another reason to include assets—for otherwise the changes they signify will be missed. However our point is that it is no easy task. Indeed, as Angus Deaton and Thomas Pogge have pointed out for poverty-line data, these difficulties attend all international and diachronic measures of poverty (Deaton 2004, Pogge 2004). Attention to assets therefore complicates recognized methodological woes; it does not solve them. But the difficulties of examining assets are not in themselves an objection to trying to use them.

## Domestic Units and Poverty Dynamics over Time

If assets are important for understanding wealth and poverty dynamics then the social unit and scale of analysis used to assess assets also has to be considered carefully. The social consequences of access to an asset or a bundle of assets can only be understood in the context of the domestic units that own, access, use, and share them (Meinzen-Dick et al. 2011, Johnson et al. 2016). Domestic units can even be understood as entities that come to exist and form themselves around particular configurations of assets. Their origins, fission, and fusion are signalled by transfers and changes in asset distribution. The classic example of this is livestock in pastoral societies, in which male heads of domestic units may have significant decision-making power over the disposal of cattle, but their wives, and their children and their children's fiancés and prospective in-laws, all have claims of varied importance and priority to different animals. In pastoral societies the transfer of livestock marks moments of engagement, marriage, childbirth, and ties between families (Broch-Due 1990).

If the benefit streams and management costs of assets at any moment in time are controlled by domestic units then it follows that any sort of meaningful claim about changes in wealth based on assets which are owned by domestic units hinges on the conceptualization, composition, and stability of domestic units. For example, consider the claim that a particular village has become richer because the asset ownership of its constituent domestic units has improved—they have more livestock, more televisions, more smartphones, and bigger houses. This single claim has in fact two components: the obvious claim that asset portfolios are better, and, underlying it, the claim that domestic units being compared have been stable enough to merit comparison.

If there is no such stability then the comparison becomes less meaningful. For example, it might be that a village appears to have become richer only because the poor are no longer present. This could be the case if poorer domestic units have died, or their members redistributed, because of their poverty, or been forced out, or been displaced by some process of gentrification. Another possibility might be that the organization of domestic production and the membership of domestic units has changed in ways which have allowed new forms of asset accumulation. There may have been no noticeable immigration or emigration, but the domestic units that people live in have changed.

We must attend to the stability of the social unit used because there is a history of domestic units which has seen the term, and particularly cognate terms like 'household', used carelessly and in ways which disguise important dynamics (cf. van de Walle 2006). Specifically, they conceal inequalities between age groups and gender that make generalizations across 'households' problematic at best. These problems have been recognized for many years (cf. Guyer 1981, Vandergeest

and Rigg 2012), but still persist (Randall et al. 2011, Randall and Coast 2015). The problems, serious enough in cross-sectional surveys, are compounded in longitudinal studies which attempt to revisit communities, and in particular the same domestic units more than once, because the sorts of economic activity (of production and consumption) that creates domestic units, and the social life that animates them, will vary considerably over time. They may be, in short, not at all the same units that were originally visited.

Numerous dynamics that have to be accounted for when attempting to use domestic units as a vehicle for understanding social change. Perhaps the most well known is the 'developmental cycle' of domestic groups (Goody 1958). This refers to the stages through which domestic units pass as they age and members are born and die, which, to an extent, determine their residence patterns, control over resources, and membership, as well as their asset base. Fortes used this concept to explain how households from the same ethnic group could appear to adopt different residence patterns, demonstrating that this was simply a function of the 'time factor' that had to be grasped if we are to understand how these societies reproduce themselves (Fortes 1958: 2). As Stenning showed so clearly, the developmental cycle of WoDaabe pastoralists in northern Nigeria was marked by stages of betrothal, child birth, and then the subsequent dispersal and dissolution of the domestic units (Stenning 1958). He also made clear that exigencies of climate, disease, and the internal dynamics of units themselves would mean that units would coalesce and fissure over varying time-scales. For the purposes of understanding dynamics in prosperity and wealth with respect to assets, the developmental cycle is essential. It shows how younger units and older units can be expected to be poorer than mature units. Growing prosperity may simply be a sign of a maturing family, and immiseration a sign of senescence.

But the developmental cycle contains important assumptions that, if violated, may limit its usefulness (Murray 1987). First, it assumes a homogeneity in societies to processes of change over time that allows for these generational processes to be observed. Second, the developmental cycle can be distinguished from other forces for change which are occurring over similar time spans. Murray argued that, in southern African contexts in the 1980s, there was too much variety in the form and dynamics of domestic units to generalize in terms of cycles. What people did, and what happened to their residential groups and larger families, was bound up in changes to the migrant labour economy of South Africa, more than it was driven by internal dynamics.

These tensions illustrate that the domestic unit is both a product of cultural expression that reproduces a society (it facilitates stasis), and an expression of the ways that individuals interact through relations of mutual dependence in order to ensure their own survival in a context of varying economic, environmental and

political conditions (it helps people to cope with change). Hyden suggests that an economy of affection is characteristic of the peasant mode of production:

it denotes a network of support, communications and interaction among structurally defined groups connected by blood, kin, community or other affinities, for example, religion. It links together in a systematic fashion a variety of discrete economic and social units which in other regards may be autonomous.

(Hyden 1983: 8)

Whilst the original analysis saw the economy of affection as offering resistance to the capitalist mode of production, Hyden (2015) finds the concept still useful to describe social relations and reciprocity in increasingly urban and capitalist Africa.

Ferguson's recent work on notions of dependence in southern Africa develops the idea that people seek relations of dependence on each other and on collective institutions (Ferguson 2013 and 2015). In apartheid South Africa, the labour market and apartheid laws dominated the domestic networks that could be constituted, with many men migrating to earn wages to send home to their dependents in the homelands. In contemporary South Africa, social protection systems and high unemployment create new forms of dependence, where the recipients of social welfare (the elderly and children) can construct domestic units that do not rely on the waged labour of a male employee. Thus the domestic unit is also buffeted and shaped by wider economic and political forces.

There are common forms of heterogeneity and instability in some societies that make it difficult to talk about developmental cycles, and indeed stymie the whole project of trying to explore change through the lens of domestic groups, particularly if those groups are seen as geographical nodes, rather than as networks of relationships. Membership of domestic units may be highly unstable because of divorce, fostering practices, or migration. Mathew Lockwood describes in detail the sorts of dynamism that occurred in rice growing districts of southern Tanzania that exemplify these difficulties:

The following is the history of the household in which I lived between December 1985 and September 1986. Before I moved in, the household consisted of a man in his forties, A, his wife, son from a previous marriage, aged about 15, and a daughter aged about 5. In December his wife left him and went to live with relatives in Zanzibar. The daughter went to stay with her grandmother in the village. At this point I moved in. January: a cousin of A's arrives, with her teenage daughter. They start preparing to farm rice in the valley. February: A's son argues with his father and leaves for relatives in Mkongo. A's daughter comes back to the house. April: The visiting cousin moves to a dungu [small hut in the fields

used when cultivation work is heavy] in the rice fields. Her daughter, together with A's daughter, lives half there and half in the village. A's son returns for a short time and then leaves again. Late May/June: A's cousin and her daughter harvest rice and return to the village. They then go off to a village on the road to Dar es Salaam to visit her husband. Throughout this period, A would go to Dar es Salaam for a few days every month, where he acted as a rent collector for someone. The cousin's husband would also come at weekends from the other village, where he was a teacher. (Lockwood 1998: 143 fn 1)

The relationships and dependencies which make domestic units come to exist in the first place, are themselves dynamic. Units, and their cycles, may experience varied pressures as they take on tasks of educating children (and young adults) or providing migratory labour, or taking on new livelihoods (agriculture, urban occupations). The domestic unit, which was configured around one set of assets, livelihoods and their social relations, may have transformed into differently structured and configured units under new forms of livelihood, opportunity, and constraint, whilst continuing to serve key roles as a site of socialization, care, and support.

When exploring change involving domestic units the stability of the unit becomes key. 'Stability' here does not refer simply to residential stasis, but to social relations within domestic units. Whitehead's experience of working with 'households' in Northern Ghana provides a salutary example of the difficulties of comparing domestic units whose location remains the same, but whose developmental cycles have become so complex and convoluted that understanding how assets benefit different members cannot be understood without delving into the different components of the domestic unit. She describes, for example, (polygamously) married sons remaining with their (polygamously married) father in the same compound, and sometimes continuing to do so after their father had died. As a result:

Households could have several adults living in them and these adults included closely related married and single men, as well as polygamously married wives and the elderly widows of former male household members. This complex compound was an asset holding and cooperative work unit, although its physical, economic and social organization allowed for the possibility of overlapping circles of individual and collective responsibilities. (Whitehead 2006: 285)

The number of people living in these groups were large, with median 'household' size being over twelve and ranging up to 73. Any assumption that domestic units remain sufficiently constant to compare over time is clearly ambitious in this case. Jane Guyer's longitudinal study of change around Ibadan eschewed domestic

units altogether because ‘people were mobile from one house to another, and their income earning, including farming, was individuated [so] at the pragmatic level of research method “the household” was unmanageable’ (Guyer 1997: 25).

It is possible therefore, that a domestic unit surveyed for one purpose, or at one particular moment, may not be the best vehicle to understand the relationships and dependencies around which different sorts of domestic units come to exist at a later time. This could be because its circumstances have changed so much over time, or it could reflect the nature of the research instrument. A large-scale questionnaire-based survey creates a particular domestic unit through both the definition of the unit designed to guide the interviewers and the questions that are being asked in order to make it visible. The domestic unit produced by a survey may preclude understanding of wider dynamics, resource flows, and relationships. These important dynamics can be beyond the scope of many research projects, as their limited levels of analysis and recording of data precludes understanding such complexity as experienced in daily realities of life. The type of data we, as researchers, want to collect, especially when we need larger scale statistics, are not concerned with the dynamics of domestic unit level changes or fluctuations.

Alternatively there may be so little stability, or even recognizability, in the constitution of domestic units from one period to the next that using domestic units when bounded by geographical location as a lens through which to view change simply makes no sense at all. They are too ephemeral. This is likely to be the case in Mathew Lockwood’s study site in Rufiji (Lockwood 1998). Housing structures might remain constant, but who lives in them, how they are related to each other, and, crucially, what assets bring which benefits to whom are too variable to be easily tracked over time.

Even if a once surveyed domestic unit ceases to exist, the relationships of dependence between individuals can still continue in ways largely invisible to the outsider using a survey tool. In 2004–5, Mdee interviewed what she thought were several distinct households located around a public tap in the village of Uchira in Tanzania (see Chapter 16). On marrying into one of those households, and over the course of several visits, she realized that these several households were in fact one domestic unit sharing blood relations, economic interests, and assets. However, a survey of domestic units which assumed domestic units were constituted by housing units would have recorded two elderly female-headed households, and two male-headed households at different life stages. In fact, the ‘unit’ in the terms defined in this paper is constituted by relations of dependence, obligation, and reciprocity that now extend across continents.

A variation of the scenario that Lockwood describes is that the degree of instability in social relations that constitute domestic units may be a contributing factor to the prosperity of the units. More stable units may experience more prosperity and derive more benefits from their assets. De Weerd’s research on the



Kagera panel study indicates as much (de Weerd 2010). He used quantitative data to predict which households (as defined by the Kagera study) were more likely to lose and gain assets over time, and then focus group research to explore which households were bucking the expected trends (gaining assets when losses would have been predicted, and vice versa). This produced a number of characteristics that were typically missed by econometric analyses, including the importance of good co-operative relations between spouses for prosperity. Conversely, divorce could be particularly disadvantageous to women, as could widowhood in polygamous marriages.

In instances such as these the dynamism of domestic units becomes a means by which the fortunes of their members can be understood. Such longitudinal data cannot be organized by rows of 'households' in a spreadsheet—with obvious implications for panel data. Rather it is the changes to the definition and functioning of domestic units, and individuals within them, which becomes the focus for analysis. The domestic units become the dependent variable.

Once again the dynamism of the domestic units which come to exist around bundles of assets does not make exploration of asset dynamics impossible. That very dynamism, potentially visible through assets, can make exploring change in assets ever more important. Our point therefore is not that domestic units should not be used, just that they should be used carefully, and, if necessary re-defined should the stability required for meaningful comparison simply be inadequate.

### **Assets, Progress, and Change**

Ben White, in his review of *Revisiting Rural Places* captures well the dangers of longitudinal research. They are certainly pleasurable and exciting for the researcher but:

however promising, many re-studies are ultimately disappointing, showing us 'then it was like that, now it is like this' but unable to tell us much more about how and why things changed, or how these changes have been experienced. To be useful, they must go beyond the presentation of contrasting snapshots or time slices to the more demanding project of writing rural social history, focusing on the processes and mechanisms, rather than just the 'facts' and outcomes, of rural change. (White 2014: 635)

We do not dispute this point. But for longitudinal studies to be taken seriously, there must be room for some more empirically focused approaches. As we saw in Chapter 2 sometimes the facts are disputed, or obscured by techniques used to track change. We need to get a clear understanding of who gets what, or who owns what, as well as what do they do with it (following Bernstein 2010) to

understand the role of assets (and not just land ownership) in class dynamics. That means knowing what the ‘what’ is that Bernstein refers to.

In our case studies the assets we examined are also particularly important for vernacular definitions of wealth and poverty, for, in other words, understanding situated class dynamics. For example, change in Gitting (see Chapter 10), the example with which we began was locally explained by the decline in ‘capitalism’ (Swahili: *ubepare*). This was a reference to a broadening of the means of production which had seen ploughs, oxen, and eventually tractors spread from a restricted number of individuals who charged extortionate fees for their use. Greater equality in asset ownership, through local investment, resulted in a general rise in prosperity. As we have seen in Chapter 2 it is precisely this form of investment that poverty-line data omit.

But the opposite proved to be the case in Dodoma, where Östberg worked (see Chapter 9). Here wealthy entrepreneurs’ tractors are new arrivals and essential to the larger farms that people are now working. Investment in shared water points has also reduced labour (particularly women’s work) in collecting water. Greater inequality, in the form of relatively benevolent wealthy businessmen, has been key to raising productivity generally. The changes to the village have also seen a change in the meaning of daily labour from being solely a sign of penury and disadvantage to also signifying, in some circumstances, the ability to invest in particular projects.

However, while greater attention to assets can provide more sensitive insights into local-level class dynamics it is also possible for attention to assets to be used in ways which obscure change. In tandem with this burgeoning interest in measuring assets lies a significant danger of the ‘seduction of quantification’ (Merry 2016), with the push to quantify, track, and compare complex social phenomena.

Specifically there is a danger that one or two assets become proxies for ‘prosperity’. For example, if the use of iron sheeting as a roofing material (which is helpfully visible to remote sensing) denotes progress (Jean et al. 2016, Watmough et al. 2019), then policy and resources might shift to fulfil this indicator. However, changes to the roofing of a dwelling can conceal all sorts of changes in the social lives of those living in it, and may not be linked to the ‘prosperity’ of the individuals living under it. Thus a single asset used as an indicator could conceal important dynamics, and become as a proxy for a normative concept (that iron sheeted roofing makes a better home).

If assets can be incorporated into national measures of well-being (Maganga et al. 2016), it is important to understand how such changes might be grounded in specific instances in the lived experiences of particular domestic units in different places. General measures of change in assets across regions or countries may be based in very different experiences of the distribution and enjoyment of those assets in particular places. There remains a strong role for locally based and well-grounded research that can contextualize such change.

## **Conclusion: Exploring Asset Dynamics in Development Research**

We began with apparently straightforward observations of simple changes, and improvements in people's lives that are measurable and locally meaningful because they detail changes that matter, for which people strive. The purpose of our reflections in this chapter is not to invalidate such observations. However, we want to make clear precisely what claims are being made when prosperity is said to have improved because of a change in patterns of asset ownership.

In the first instance the prosperity that assets signify has to be taken in conjunction with other measurements of well-being. In the second, these claims are not just about assets, they also entail claims about the social units which share, benefit from, maintain, and reproduce these assets. We must recognize that there are two things which have happened in numerous examples in this collection: assets have increased, and domestic units have remained sufficiently stable for that to be a visible and meaningful change. Instability in the membership of domestic units would render the comparison over time less meaningful.

If circumstances allow—reasonable membership stability in domestic units—then exploring change in assets can be useful. And if not, then not. In two chapters in this collection (Chapters 13 and 16) other methods have been necessary. But we also suggest that this is, ideally, not the only measure used. The weak relationship between assets and other forms of well-being and prosperity (income, nutrition, wealth) means that it is but one measure among many that needs to be considered. This should be no surprise: poverty is multi-faceted. The main reason why these other measures were not also included in the re-studies we have undertaken is simply that they were not easily accessible in the original survey data.

Researchers of poverty dynamics and long-term change, we submit, need to understand these conceptions of wealth and the social units which wield them. This requires accurate and nuanced evidence and conceptualizations of domestic units that are recognizable to those communities from which we collect our data. An approach to understanding poverty dynamics, dominated by Western academic or policy evidence, cannot claim to understand those changes as experienced within their original context.

More generally, understanding poverty in its many dimensions requires exploring different indicators at a variety of scales—the individual, the domestic unit, the community, region, or nation. For each scale particular indicators are required, and others may be inappropriate. But tracking change over time requires sufficient constancy in the unit of measurement. And if the individuals, households, or communities we are interested in effectively disappear, then we cannot make statements about change over time at those scales, and we may not be able to compare different places for which data at particular scales no longer exist.

Or, to make this point another way: there are some aspects of the world which are simply unknowable because of the ways that they are constituted and because of the ways in which they change. The challenge of research in development is to push the boundaries between what can be known, and what cannot. The changing nature and meaning of assets, and the changing social units which govern and derive benefit from them, will make the location and shape of this research frontier ever interesting.

We believe that tracing assets through domestic units does indeed push the boundaries of our knowledge and understanding of social change, but only if the limitations of what we can learn from assets, and how we treat domestic units, are taken seriously. Attempts to use assets as proxies for change without due care will miss the social contexts that make assets meaningful in the first place. As the consequences of land loss and economic investment strategies are vigorously debated we encourage more researchers to use this sort of longitudinal approach to understand change in rural areas. However progress in understanding will be achieved if researchers recognize the heterogeneity of change and the critical importance of local context and conditions, often at small scales.

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