

Inclusive Growth and Poverty Reduction: A Role for Demography?

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SUMMARY:

This paper posits a broad role for demography in poverty reduction policies. Rather than a single variable (in the past, population growth), demography as a field offers a full perspective that can uniquely enrich poverty studies. We review these unique insights and how they play out at various stages of the research cycle, including a) the formulation of research questions, theory-building, methods, and policy dialogue. Based on this review, the presentation will highlight key demographic trends that stand to shape global trends in poverty. Not only are these trends multiple (they include trends in age structure, the concentration of fertility, migration and international remittances, assortative marriage, and changes in family structure) but their effects are complex. For instance contemporary fertility transitions in low income countries are likely to have benefits that extend beyond economic growth and they can foster economic convergence between world countries. On the other hand, several aspects of these transitions are expected to foster inequality within countries.

INTRODUCTION

Success in reducing global poverty during the Millennium Development era was mixed. The world as a whole did halve extreme poverty between 1990 and 2015 (a global decline from 36% to 12%), but progress was uneven across regions and countries. Rates fell by 84% in South East Asia, but only by 28% in sub-Saharan Africa, with further disparities across countries in this region (UN 2015). This mixed record can be a valuable source of insight as the world renews its attack on poverty under the UN's Sustainable Development agenda. It is unclear how much future success hinges on political will, budget resources, or scientific understanding but, within this broad question, the specific task of social science is to improve policy understanding of the drivers of world poverty.

Much of this understanding has so far relied on insights from economics and, to a lesser extent, sociology. We envision a greater role for demography. A demographic perspective, we suggest, would deepen understanding beyond the microeconomic and cultural arguments that have so far dominated the poverty debates. To highlight these contributions, the paper describes some key features of a demographic perspective and how they play out across the research process. It then uses this description to draw implications for poverty reduction.

A DEMOGRAPHIC PERSPECTIVE

A disciplinary perspective can be defined as the unique vision a discipline brings to the study of scientific questions. In keeping with this 'vision' metaphor, a perspective covers the unique lens, angle and filters that shape both what a discipline investigates and how it musters the evidence. Because poverty is a broad social concern, its study attracts multiple disciplines, each of which --implicitly or explicitly-- begins its inquiry from different assumptions about key questions, possible sources of answers, reasonable expectations, promising methods, standards of evidence, scale and generalizability of inferences, and policy validation processes.

Yet because poverty is usually defined as an economic *outcome*, its study remains dominated by views from economics, with limited infusion from other social sciences. Greater integration is warranted for three reasons. First, perspective matters: investigations started from different places and use different compasses will likely reach different destinations. Unless researchers acknowledge the artifactual "noise" from methodological differences, they will likely under-estimate the consistency of findings. In other words, findings will appear to be mixed simply because methods are inconsistent.

Second, even if poverty is an economic outcome, its causes need not be all economic. By ignoring non-economic processes, analysts end up with a partial or even distorted story about the roots of poverty. Ideally, research should not merely juxtapose perspectives but integrate them in order to capitalize on existing complementarities.

Third, even though rigorous micro-level studies can estimate the individual risks of poverty, converting these individual effects into national outcomes requires some attention to demography and population heterogeneity. Demography matters in three main ways: The minimum, mechanical, relevance is that population is the denominator in calculating national

poverty rates.¹ More substantively, several demographic trends –reviewed later-- shape the national policy context for poverty reduction. Even more fundamentally, demography as a field of study offers a set of tools and conceptual perspectives that can refine the understanding of individual poverty risks. These tools can also help convert micro-level/ cross-sectional findings into the national level evidence that is of interest to policy makers. In short, demography is more than a variable but rather a broad perspective that can substantially enrich the study of poverty.

What, then, is a demographic perspective, and how does it improve scientific insight? According to Bianchi (2014), the basic “project” of demography is to understand how individual or family behaviors (about childbearing, marriage and partnering, geographic mobility, health, ...) ultimately influence the composition or character of a population or society, and change in that population over time. Beyond this generic definition, other authors have fleshed out a few distinctive features of a demographic approach. These include, in no special order and non-exhaustively: (a) a focus on demographic events and processes (Stycos 1970); (b) a systematic tendency to disaggregate outcomes by age and sex (Vance 1944); (c) an interest in decomposing national trends, to acknowledge population heterogeneity (Vaupel 2003); (d) attention to multiple dimensions of time and their complementary contributions to social change, including cohort, period and age dimensions (Feeney 2003); (e) an interest in person-periods as units of analysis and in a life cycle approach; (f) careful attention to lag and momentum, and (g) interest in the interplay between demographic and social reproduction.

These and other features of from demographic analysis can add to microeconomic insights. Instead of reviewing these features individually, we discuss how they play out throughout the research process.

DEMOGRAPHY AROUND THE RESEARCH CYCLE

The research cycle describes the usual sequence of activities or steps in research study. The list can vary but four key steps include (1) the formulation of research questions, (2) the theory and hypotheses, (3) the study design and methods of data collection and analysis, and (4) the policy dialogue. We review these steps, and discuss how they can be uniquely informed by a demographic perspective.

Step 1: Formulating the Research Questions

¹ This, of course, is not to say that the effects of population are limited to its mechanical influence on the denominator of poverty rates. Rather, the very formulation of poverty rates should serve as a reminder of the relevance of population processes and a demographic perspective

From the very start of the research process, different disciplines are likely to diverge in the kind of questions they are wont to ask or even in the implicit definitions of poverty and unit of analysis.

The questions can range from the fundamental to the very applied studies focused on assessing program impact. The latter can be rigorous and internally valid but their narrow focus on specific programs excludes ('controls for') other potentially influential forces. Exploratory studies cast a wider net and, by so doing, can capture forces operating at different levels, whether or not they are tied to a program. The significance of perspective at this stage is that the answers found at the end of a study largely depend upon the questions asked in the first place.

With respect to definition, different disciplines can choose to emphasize absolute or relative poverty. If the latter is emphasized, further questions can be asked about appropriate comparison groups, whether they are simply some statistical aggregate (median national income for instance) or a sociologically meaningful reference such as neighbors, parents' generation, ethnic group in country of origin.

Finally, with respect to analytical units, the question is whether poverty is an attribute of places, people, or periods (life phases)? Social demographers often do not view poverty in geographic and large-scale terms but rather in event-history perspectives using person-periods as units of analysis. From that perspective, poverty describes neither people nor places but critical life events that carry higher risks of poverty. Not surprisingly, these events are often demographic in nature: Orphanhood, divorce, school leaving, or widowhood are instances of such events. Just as the choice of definition, the choice of analytical units determines the theories that can be considered and tested and, ultimately, the policy answers found. Because of its event-history orientation, a demographic perspective can draw research and policy attention to the influences of recurrent life events.

Step 2: Theory:

Poverty theories can vary, inter alia, in their assumptions about a) the locus of root causes b) the existing social order, and c) the counterfactual trend expected in the absence of policy.

- a) *Locus of root causes:* Theories here differ in whether they see poverty as rooted in nature, nurture, or structure. The first emphasize innate biological attributes; the second cover early development and socialization processes; the third, in contrast, focus away from the individual and, instead, on broader social forces that enhance or constrain people's opportunities. Constraints can be geographic (land and climate for instance), material (road system, physical infrastructure) or institutional (laws and norms regulating access to resources). They can also be demographic. The most often noted constraint is population growth (Lebras 1993) but other demographic forces (marriage markets, age structure, changes in family structure, concentration of fertility) (Bloom, Canning and Sevilla 2002; Eloundou, Giroux and Tenikue 2017).

In the debate over "nature versus nurture versus structure" demography eclectically fits all the three boxes. From a 'nature' perspective, individual circumstances at birth –themselves partly associated with the timing and spacing of

pregnancies – shape initial health outcomes. These initial effects have been found to shape later-life outcomes (Hayward & Gorman 2004). From a nurture perspective, the socialization and resources allotted to individual children depend on family size and structure and therefore on couples' choices about marriage, divorce, and fertility (Blake 1989; Mc Lanahan 2004). From a structure perspective, demography can invoke the aforementioned structural forces, including population growth, relative cohort size, sex composition, or age dependency ratios.

- b) *Consensus versus conflict orientation*: the distinction here is between theories that assume a just social order where societies genuinely seek to reduce poverty, and where the benefits of growth tend to be shared (consensus) versus theories that assume more exploitative and competitive systems fraught with inequality. The first tend to seek technical solutions to poverty, while the latter emphasize political solutions. Both perspectives are found in demography, and they lead to view the family, alternatively as a cohesive unit versus one plagued by divergent interests (Folbre 1987).
- c) *Counterfactual trend*: At issue here is the default trend in poverty expected in the absence of any policy intervention. The optimistic scenario has poverty stagnating or even declining slowly in response to un-programmed benefits from modernization, globalization and technological development (Bhagwati 2005, Friedman 2005). However, the prognosis from demography is bleaker. Rather than decline, poverty is expected to worsen in response to a concentration of fertility among the poor. From that perspective, countries where fertility is concentrated among the poor will already find it difficult to maintain their levels of poverty, let alone reduce them. In most African countries today, fertility rates are much higher in the lowest wealth quintile compared to the top quintile, sometimes by a factor exceeding 2.5 (DHS 2017). Forces that can compound this concentration in fertility include a possible a rise in assortative marriage (Giroux 2017) or family nucleation (Case et al. 2004). Together, these forces can worsen inequality and poverty among low SES groups.

Step 3: Study Design and Methods

This step covers multiple activities but the most relevant here are the study design and methods of data analysis and interpretation.

- a) *Designs*: National policy-makers must be able to track poverty rates over time and for this, they need longitudinal designs. Demographers' unique insight here is to distinguish between multiple dimensions of time, including cohort, period and age dimensions. From one decade to the next, poverty can decline because of period-specific programs, cohort effects, or changes in population age composition. Capturing these three dimensions requires designs that follow multiple cohorts over multiple years as they undergo individual life stages under changing socioeconomic contexts.
- b) *Data analysis (cumulative experiences of poverty)*. Consistent with their reliance on person-years as analytical units, demographers expect that people can move in and out of poverty multiple times during their lifetime. To fully understand the cumulative experience of poverty and of the impact of policies, one needs dynamic approaches that

consider these transition risks into and out of poverty. Demographers’ life table methodology is well suited to this task.

- c) *Data interpretation:* Policy makers are mostly interested in macro-level outcomes, but macro-modeling is usually considered unreliable (Rodrik 2012). Micro-level models are deemed more rigorous, especially when they are based on experimental or quasi-experimental data. Yet their results do not directly speak to the macro-level concerns of policy makers. To reconcile this micro-macro conundrum, researchers need aggregation methods that extend micro-level findings and draw their macro-level implications. The use of mixed decomposition methods in demography can serve that function.

Step 4: Policy dialogue and Targeting

To be effective and efficient, interventions must target some subpopulations whether these are defined on substantive, economic, or sociopolitical grounds. Practically, these groups are selected on the basis of demographic such as age, sex, marital or migrant status (UNECA 2013). Policy makers can also rely on demographic criteria to justify selection. For instance, the focus on children is often justified by the remaining life span as well as the long-term effect of intervention in childhood, the so-called “long arm of childhood” (Hayward and Gorman 2004). Or, a focus on young adults can be justified by their being a “trigger generation” whose economic and demographic behavior would initiate the dividend. A focus on adult families and their ability to save for retirement can be justified as a way to “prepare for the second demographic dividend.” Finally, investing in the elderly honors the social contract between generations but also helps take advantage of the leadership, mentoring, and cultural skills of retirees (Brown 2017). In short, demographic considerations associated with the size, life-span, life stage, accumulated capital of different groups can be invoked in selecting groups to target for policy interventions.

SUMMARY AND MEGATRENDS TO WATCH

This note argued for a greater role for demography in poverty policy, one that extends beyond consideration of a few population variables. Instead, demography as a field can contribute a general perspective that enriches the conceptualization, measurement, and theorizing on poverty but also the methodological tools that can strengthen poverty studies. These contributions are summarized in the table below

Table 1. A summary of potential insights of demography to poverty studies

Research step	Microeconomic studies	Unique insights from demography
FORMULATION OF RESEARCH QUESTIONS		
1. Fundamental vs. applied “policy impact” questions	Impact studies	

2. Definition of poverty (absolute vs relative); if relative what is the reference group?	Both Statistical reference	
3. Unit of analysis:	Individuals	Person-years / event history perspective
THEORY		
4. Locus of root causes (nature, nurture or structure)	structure	All the above
5. Critical vs. uncritical	uncritical	Both
6. Default trend	Constant poverty	Increasing poverty
METHODS		
7. Study design	Longitudinal/ experimental studies	Three dimensions of time
8. Data analysis	Annual specific risks	Cumulative lifetime risks (with life tables)
9. Level of inference	Individual	Aggregation to national-level implications (with mixed decomposition methods)
POLICY DIALOGUE		
10. Criteria for choosing target groups	Statistical significance, cost; political feasibility, need	Remaining life span; cumulative effects over the life course; life stage

Having said this, and building on rows 3 and #4 of this table, one can identify several demographic variables likely to play a fundamental role in the prospects of poverty reduction across the world. The focus on person-years in social demography and the relatedly strong event-history orientation lead to pay attention to crucial life events likely to raise the risk of poverty. Such events include, for instance, early child birth, early marriage, divorce, widowhood, or migration, for instance.

In the debate over the ‘nature vs. nurture vs. structure’ causation of fertility, demography can fit all the boxes. Under the ‘nature’ umbrella i.e., factors that are innate or quasi innate, one can cite the health status at birth and its potential effects on later poverty outcomes. Insofar as this health depends on the timing and spacing of births, demography is influential. Demography is also relevant to the ‘nurture’ box insofar as factors such as the size and structure of families affect the resources available to educate children. Finally demographic forces that influence the structural environment (with implications on poverty) include age and sex composition.

There are, therefore, multiple demographic variables that are relevant to poverty but their effects are likely to be varied and complex. Taking the case of age dependency ratios for instance, their effects are expected to be beneficial for a wide range of outcomes, including average economic growth, schooling, and economic convergence between countries. On the other hand, these contemporary fertility transitions are also expected to raise inequality within countries (Eloundou, Giroux, and Tenikue).

