Time Deficits and the Measurement of Income Poverty:
Methodology and Evidence from Latin America

Ajit Zacharias
Levy Economics Institute of Bard College

Rania Antonopoulos
Levy Economics Institute of Bard College

Thomas Masterson
Levy Economics Institute of Bard Colleg

We develop alternatives to the official income-poverty thresholds because they are fundamentally inequitable. Implicit in the calculation of the thresholds is the assumption that households must combine a certain minimum amount of time on household production and income if they are to attain the poverty-level standard of living. But, some households may not have enough time to meet the poverty-level time requirement because they devote too much (relative to the requirement) time to employment. As a result, two households with income equal to the poverty threshold will have the same poverty ranking even though one of them might not have the minimum amount of time required for household production or the resources to purchase the requisite market substitutes.

A solution to the problem is the construction of thresholds that include, in addition to the minimal amount of money income, the replacement cost of the time-deficit that the household faces with respect to the required minimum amount of household production. However, very few studies have attempted to comprehensively explore the underlying issues involved in the construction of an alternative poverty measure. The sparse existing literature have paid even less attention to the implications of such a construction for public policies, particularly with respect to poverty reduction, gender equity, and the balance between work and other life-enriching activities. By a coherent joint treatment of income and time constraints in our work, we hope to contribute to the formulation of better policies in the domains highlighted above. Our two-dimensional "time-income poverty" measure will provide a truer and dramatically different profile of poverty—its incidence, depth and demographic characteristics. It will also shed light on the problems of hard-core poverty (a type of poverty from which individuals cannot hope to escape by earning the income that the labor market forces might confer upon them) faced by certain population subgroups. Furthermore, a novelty of our approach is that, in the construction of our alternative poverty measure, we take explicit account of the gender disparities in the intrahousehold division of domestic labor.

We develop the time-income poverty measure for Argentina (2005), Chile (2006), and Mexico (2008). Because of the well-known limitations of the income data collected in time-use surveys, we statistically match the time-use survey of each country with their respective income survey. The synthetic data files serve as the source of our estimates of time-income poverty and comparisons across the three countries. A key question for us is whether employment (under the existing conditions of remuneration) offers a way out of time-income poverty for those who have sufficient time available for employment. To answer this question, we simulate two profiles of

time allocation and income. In the first simulation, we assess time-income poverty in the situation in which every employable adult is employed full-time and in the second simulation we examine time-income poverty when every employable adult is working either part-time or full-time. Our initial results indicate that in each country there is a substantial portion of the population that would remain both time and income-poor even with full-time work.