The Analytical Value of Time Use Data

AISHWARYA LAKSHMI RATAN
Deputy Director of EGC, Yale

Yale *Economic Growth Center*

EGC.YALE.EDU

Session structure

Research presentations

Time Use and Macroeconomic Uncertainty paper that highlights how time use data uncovers important demand and labor shifts under conditions of macroeconomic uncertainty using US time use data [15 min – recorded presentation]

Research that leverages Sri Lanka's time use data alongside focused caregiver surveys to understand **care-related issues as a constraint to labor market activity**, and discussion of path to macro-modeling work utilizing time use data that can inform policy to relieve this constraint [15 min]

Research that leverages India's time use data alongside labor force survey data to look at the **intensive margin of labor market engagement and choices**, vs just extensive margin participation to inform policy [15 min]

A few synthesis remarks and open Q&A [15 min]



New tools for growth, structural transformation, and productivity analysis

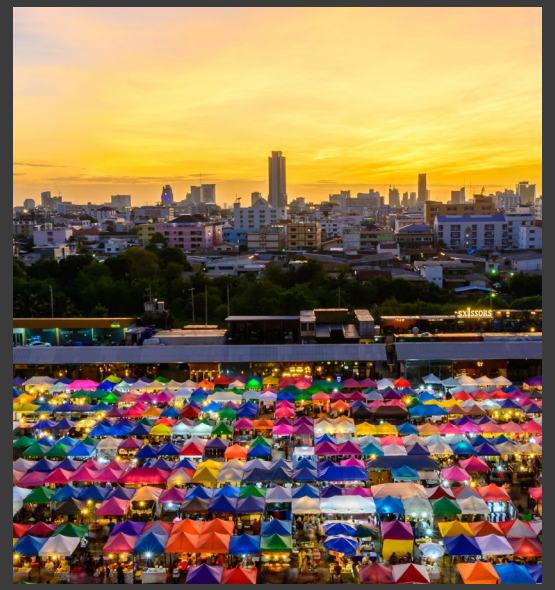
A microscope into macro dynamics

Traditionally, macroeconomic analysis presented aggregate trends using computed averages over large populations. This meant losing all the heterogeneity that can allow for rich sub-group analysis.

More recently, labor force and household surveys provide information on extensive margin participation in labor markets – are you employed or self-employed or not, and remuneration?

Time use data allows us to uncover the richness of micro-data and dynamics underlying macro trends, by observing how many hours you work, in which types of activities, for what returns, and with which types of indivisibilities/rigidities in the labor market? Similarly for shifts between home production and market purchase, which feeds into aggregate demand.

In economies that have a large share of informal workers and unincorporated enterprises, time use data is critical to provide estimates of labor allocations and productivity. Without productivity estimates, it is difficult to paint a rich picture of structural transformation and welfare improvement.



New tools for growth, structural transformation, and productivity analysis

A microscope into macro dynamics

Example: Peters, Torola, Uniat and Zilibotti. (December 2024). '**From Rural Fields to Urban Kitchens: Structural Change and the Decline of Women's Work in India**.' Yale EGC Discussion Paper.

The puzzle of India's low urban employment rate for women. Analyzing time use data, they find that the higher rate of FLFP in rural areas is driven by the extensive margin through part-time work (observed through time use data) in agriculture or family-owned enterprises, while in urban areas women either take formal jobs (facing a discrete choice given the inflexibility of formal work in terms of hours committed per week) or leave the labor force altogether. Their model calibrated to time use microdata highlights potential drivers of these time allocation decisions between formal and informal work, home production, and leisure.

Example 2: Donovan, Lu, and Schoellman. **Labor Market Dynamics and Development** 2023. *Quarterly Journal of Economics*, 138(4): 2287 - 2325.

The puzzle of high labor market flows in LMICs. Build and analyze a harmonized dataset of microdata from rotating panel labor force surveys that covers 80 million people from 49 countries. The study finds that labor market flows are higher in developing countries, but reflect a slippery job ladder, i.e. workers are not climbing to better paying jobs, but transitioning frequently between jobs due to subsistence self-employment and selection patterns for wage work.

