

Discussion of “Consumption Smoothing
and Household Savings : Role of
Demographics and Durables.” by
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Plotting life-cycle profiles for Indian households in CPHS

- Uses very large consumer panel 2014-2019.
- Generates synthetic panels and follow Villaverde and Krueger 2007
 - Compare to United States—both inverted U shapes in age.
 - Find flatter profiles for India when adjusted for demographics.
 - Savings follows strong inverted U shape in India (panel estimation).

Overall Take

- Interesting stylized fact from impressive dataset.
 - ★ Some interpretations could be more clear.
- Comparison to the U.S. interesting, but too much.
- Seems a “crime” to kill panel and turn into pseudo-panel.
- Would prefer to see income and consumption profiles together from the start.
 - ★ Fitting a model would provide stronger interpretation.
(Future work?)

Data

- What is consumption?
 - ★ Non-durable consumption. Includes many services. I worry about rent included, but not imputed rent—“consumption” will go down spuriously after purchasing home.
 - ★ Construct pseudo-panel from aggregating observations in age groups.
 - ★ Construct pseudo-panels separately for urban/rural agricultural/white collar etc. (I think.)

Main regression

- $c_{it} = f(\text{age}_{it}) + \alpha_i \text{cohort}_i + \alpha_t \text{time}_t + \text{epsilon}_{it}$
 - ★ Not sure what this means. (Different slope for each i ? t ?. I assume not.)
 - ★ Linear term in age not identified from cohort, time. (But all the linear terms are estimated in Table 2. How?)
 - ★ Why non-linear in age and not in time? (identifying assumption).
 - ★ Fit a simple non-parametric curve for $f()$. (Uses a fancy-sounding one, but probably a simple frequency plot would do it.)

Regressions II

- VK had only X-sections. Forced to do pseudo-panel using CEX.
- With panel you could show uncertainty around average curve.
 - ★ Would need to estimate slope from overlapping age-groups, but that is what you do anyway.
 - ★ Pseudo-panel also estimate different parts of age slope from non-overlapping cohorts (maybe discuss).
 - ★ India is changing fast compared to U.S. mature economies, cohorts may behave differently.

Writing I

- Study “growth” in consumption. Confusing to me. It is a study of curvature/peak-over-trough in consumption.
- Measurement error in “head-of-household”??
 - ★ Not an economic concept.
 - ★ Considered inappropriate in the U.S. (Census Bureau dropped in 1980)
 - ★ Use another term. Just say, what if we replace what CPHS “head-of-household” with another reference person; e.g., main earner—who knows who makes financial decisions? (If you do, use the data to write a top paper on that!)

Writing II

- “Canonical consumption model.” What is that?
- Seems to mean PIH.
- Buffer-stock model with credit limits are more “canonical” to me at this stage.
 - ★ in b-s model, agents impatient but mildly smooth transitory shocks to avoid zero consumption.
 - ★ More about India, less about US would be interesting; e.g., put India consumption profiles and income profiles in the same figure and not India vs. U.S. (some comparison India/US interesting, but maybe less).

Writing III

- Some more background information on India would be good.
 - ★ Mortgages? Recourse? Etc.
 - ★ Car financing?
- Hard to decipher equation 3 (saving around big purchase).
 - ★ Sample? Only households that purchase (say) house?
 - ★ Seems to be standard event study regressions?

Role of the income process

- Most models predict no smoothing of persistent shocks.
- Readers like me have no knowledge of Indian income structure.
- Can estimate income persistence from the panel.
- Are income shocks/profiles exogenous?
 - ★ Friedman 1956 showed that if consumption reacts to permanent shocks and transitory shocks mainly aggregate out.
 - ★ Then MPCs much higher for aggregate data.
 - ★ Here, choose to aggregate. Matter for estimated life-cycle profile?
 - ★ Maybe not, but may matter for interpretation—is the hump due to household being credit-constrained?

What seems to happen (from reading paper)

- Current income has a hump shape.
- Most agents consume current income (at least on average, after aggregating).
- Because Indians have more children it looks like they smooth income over the life-cycle, but it may just be a “co-incident” that family size goes up as income goes up.
- Indians save for big durable items.
 - ★ Do Americans? (No comparison done for this.)
 - ★ What is known about collateralized loans in India?
 - ★ If houses/cars can not easily be used for collateral, that gives explanation.

Some suggestions/wish list I

- Make much more use of actual panel structure.
 - ★ Sample too short for life-cycle household-by-household, but can study slopes by household and show distribution across agents.
- Could estimate equivalence scales for India.
- Make more use of huge sample size. E.g. adjusted profiles for household with few/many children (rather than equivalence scale adjustment).

Some suggestions/wish list II

- Maybe next paper: Fit a structural model to panel (not pseudo-).
- Or fit a statistical model if life-cycle savings.
- Some loose thoughts on that:
 - ★ You could do calculate consumption growth as a function of income growth and age and other co-variates, in particular children/household size.
 - ★ This is what you do in Table 2, which sticks out from the rest. I would prefer focus on such regressions, less focus on non-parametric figures.
 - ★ But there are causality issues with savings as function of intention to buy car. Might be able to do 2SLS/GMM with, e.g., utility of house/car/..a function of demographics.

Conclusions

- Interesting average life-cycle patterns in consumption in India.
- Role of demographics not quite clear. A mechanical fertility pattern or savings behavior?
- Looks as if main difference to U.S. is payment for house/car has to be financed with savings.
- More discussion of why that is would be good.