

Discussion of Raj Chetty and Jim Heckman

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August 30, 2022

Introduction

- Impressive papers taking a different perspective on intergenerational mobility
- Both rely on excellent data
- Chetty et al. are focused more on using observational data to understand what constitutes a good environment for Human development
- Heckman et al. are more focused on measuring intergenerational mobility in a reliable way and identifying an appropriate measure of parental resources

Raj Chetty

- Raj focuses on identifying the causal impact of children growing up in different counties
- The main empirical strategy is based on assuming that the age of moving into a county is effectively random.
- Sounds like a strong assumption, because the unobserved return to moving may determine the age of the move.
- Raj presents careful evidence corroborating the validity of the approach and quantifying the selection effect.
- Other sources of exogenous variation would be important to emphasize - the role of the MTO experiment is very useful in this regard.
- Once the locations that are most conducive to good life outcomes have been identified the key question becomes the identification of the underlying mechanisms (stable families, lower poverty, social capital, better schools)

- Focus on three policy Groups:
 - ① Place Based Policies (improve local environments)
 - ② Desegregation (Move to Opportunity)
 - ③ Improve Higher Education

Chetty

- On place based policies, we still need to understand the nature that these should take. Emphasis on early but also on entire childhood.
- Focus on types of ECD.
- Desegregation:
 - ① Could increase inequality by making the environment even worse for those left behind
 - ② We have very little evidence on how such policies can be scaled up
 - ③ Use spatial equilibrium models to try and understand what it would take to move to more mixed neighborhoods
 - ④ While such policies may work well for specific targeted cases (like a high poverty high crime housing project) it is unclear how this could be generalized.

Heckman

- The paper shows that measures of life cycle resources are much better predictors of child outcomes.
- A key feature of the approach is recognising nonstationarity and its effects on mobility.
- A key result is that the IGE is much higher and hence mobility lower than that based on short snapshots of income. Indeed similar to the US.
- This begs for better understanding of the mechanisms and the role of the welfare system as well as the system for supporting families.
- Evidence suggests that strong safety nets are good for child development.

A broad perspective

- An important question relating to both papers is the extent to which parental resources are the issue in the early years.
- the correlation is certainly there, but is this causation?
- Effective investments in the early years can be very low cost (taking to the child, offering affection, playing, general stimulation).
- Perhaps income alleviates the stresses of poverty (Mulainathan) and allows the mother to better engage with the child
 - ① Low cost parenting interventions for the 0-2 group can improve cognitive and language development 0.3SD
 - ② Structured Playgroups are a cost-effective approach (India: \$37 per child per year).

Results, Odisha, Phase 1: Ages 0-3

| | Point Estimate | RW P value 9 hypotheses |
|---|--------------------------------------|-------------------------|
| Panel 1: Bayley Scores MIDLINE (1 year) | | |
| Nutritional-Education | No Impact in either of three domains | |
| Group-Sessions and Nutritional-Education | | |
| Cognitive | 0.298 | 0.018 |
| Language | 0.313 | 0.006 |
| Home-Visiting and Nutritional-Education | | |
| Cognitive | 0.313 | 0.006 |
| Language | 0.156 | 0.359 |
| Panel 2: Bayley Scores ENDLINE (2 years) | | |
| Nutritional-Education | No Impact in either of three domains | |
| Group-Sessions and Nutritional-Education | | |
| Cognitive | 0.281 | 0.007 |
| Language | 0.302 | 0.001 |
| Home-Visiting and Nutritional-Education | | |
| Cognitive | 0.324 | 0.001 |
| Language | 0.239 | 0.009 |

Romano Wolf Stepdown p-values for 9 hypotheses within each panel 1 and 2. A subset of results are shown. Original source: Grantham-McGregor, Adya, Attanasio, Augsburg, Jere Behrman, Caeyers, Day, Jervis, Kochar, Makkar, Meghir, Phimister, Rubio-Codina, Vats, Pediatrics. 2020;146(6)

Parental Investments, Beliefs and the sustainability of Interventions

Material from: Attanasio, Cunha, Jervis, Meghir and Toppetta

- Investments in children have high returns and are low cost
- So why aren't parents doing as much?
- Why are the interventions as effective?
- A key to understanding this are parental beliefs
- We measure parental beliefs and perceived returns to investments using elicitation based on alternative scenarios
- We estimate the impact of the intervention on perceptions of the returns to investment
- We then estimate the production function implied by the subjective beliefs and compare it to the objective production function (Under construction)

Eliciting beliefs for first part of Experiment

Material from: Attanasio, Cunha, Jervis, Meghir and Toppetta

- The scenarios differ by the initial language ability of the child and the time spent by the mother
- The elicitation of beliefs is designed to estimate individual production functions construct the distribution of beliefs.
- The beliefs are elicited at each survey round.
- reference: Attanasio, Cunha and Jervis “Subjective Parental Beliefs. Their Measurement and Role” NBER Working Paper 26516

The intervention shifts returns for higher initial condition kids

| Dependent Variable: Perceived return to investment | | |
|--|-------------------|---------------------|
| Initial Condition | Low | High |
| Group Stimulation | -0.035 (0.090) | 0.220** (0.094) |
| Home Visits | -0.002 (0.103) | 0.154 (0.098) |
| Constant | 0.010 (0.062) | -0.133** (0.063) |
| Observations | 1313 | 1313 |

Parents Invest more when perceived returns are higher

| Dependent variable: | Material Investment - HOME | |
|---|-----------------------------------|---------------------|
| | (5) (OLS) | (6) (IV) |
| Perceived returns (<i>medium</i> words) if High Dev. | 0.057** (0.029) | 0.114*** (0.039) |
| Perceived returns (<i>medium</i> words) if Low Dev. | 0.013 (0.027) | 0.036 (0.036) |
| Dependent variable: | Time Investment - FCI | |
| | (5) (OLS) | (6) (IV) |
| Perceived returns (<i>medium</i> words) if High Dev. | 0.069*** (0.026) | 0.077** (0.032) |
| Perceived returns (<i>medium</i> words) if Low Dev. | 0.031 (0.023) | 0.035 (0.030) |
| Observations | 1255 | 1255 |

The variables have been standardized to have mean 0 and standard deviation 1. Controls: dummy for first born, the gender, the number of siblings, mother's education and Raven score and a dummy whether the mother thinks that the child's intelligence can be changed. perceived returns to investment (saying *medium* words) at midline are instrumented by the perceived returns to investment (saying *hard* word) at midline.

An Interventions for the US

- We have designed and are testing an intervention aiming at improving child development
- Our intervention addresses mental health of pregnant mothers and follows up with attachment and then child stimulation.
- Evidence points to mental health and parenting issues related to poverty, which is of course consistent with both Jim's and Raj's findings.
- Ultimately equal opportunity and upwards mobility does not stop at ECD but extends for the whole childhood. So we need a rich policy mix.