

Problem Set III
Econ 350, Spring 2022
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Due May 25, 2022

1. Read the three papers on the reading list by Chetty and his coauthors (Chetty and Hendren, 2018a,b; Chetty et al., 2020). Evaluate the identification strategies they use to establish neighborhood exposure as a determinant of child lifetime outcomes.
2. Now, keeping the Chetty papers in mind, specifically write out the following:
 - (a) The formal model of neighborhood choice by families that is implicit in these papers. How do families sort by age of child?
 - (b) The model of the timing of choice and persistence of neighborhood residence.
 - (c) The criteria regarding child outcomes parents use to make these decisions.
3. How do the decisions you analyzed in the previous part affect identification of the causal effect of neighborhood exposure? Define exactly what exposure means. Is it related to schooling? crime? parental characteristics?
4. Assess the empirical tests and estimates in these papers given your answers to the previous two parts.

5. Interpret the Chetty-Hendren papers using the Seshadri-Durlauf model.
6. Interpret the Chetty-Hendren and Seshadri-Durlauf papers using the framework of Becker et al. (2018) and Cunha and Heckman (2007).
7. Review the evidence on the quantitative importance of credit market constraints in explaining the slow response in educational attainment in the U.S. in reaction to rising skill prices. How important (quantitatively) are credit markets in explaining inequality in schooling and in intergenerational immobility and the observed trends?
8. Under what conditions, if any, is it economically optimal (output maximizing) to invest relatively more in social programs in the early years of children born into disadvantage as opposed to investing more in children born into advantage?
 - (a) Should society invest more in the initially-advantaged at later stages of the life cycle? Give precise conditions.
 - (b) Define dynamic complementarity. What is the proper measure of early life advantage?

References

- Becker, G. S., S. D. Kominers, K. M. Murphy, and J. L. Spenkuch (2018). A theory of intergenerational mobility. *Journal of Political Economy* 126(S1), S1–S6.

Chetty, R. and N. Hendren (2018a, 02). The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects*. *The Quarterly Journal of Economics* 133(3), 1107–1162.

Chetty, R. and N. Hendren (2018b). The Impacts of Neighborhoods on Intergenerational Mobility II: County-Level Estimates. *The Quarterly Journal of Economics* 133(3), 1163–1228.

Chetty, R., N. Hendren, M. R. Jones, and S. Porter (2020). Race and economic opportunity in the united states: An intergenerational perspective. *Quarterly Journal of Economics* 135(2), 711–783.

Cunha, F. and J. J. Heckman (2007, May). The technology of skill formation. *American Economic Review* 97(2), 31–47.