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Economics 350, Winter 2021: COMBINED PRIVATE KEY

## Instructor: James J. Heckman

- Lecture times: Wednesdays, 5:30-8:20pm
- Lecture classroom: Virtual
- · Teaching Assistant:
  - Nadav Kunievsky (email: nadavkunievsky@uchicago.edu)
  - TA Session: Tuesdays, 5:00pm 6:00pm

Occasionally, the instructor may use a TA session to supplement or make up a class. If you experience problems with this website, please contact <u>Jennifer Pachon</u>.

#### Announcements:

 The University has declared a nine-week quarter, from January 11, 2021 – March 12, 2021, so this course will meet for nine weeks.

#### **Course Description**

This course examines the theory and evidence about inequality and social mobility (within and across generations).

#### Lecture Plan

#### Format

The three hour evening session will be divided into two one-hour and twenty minute sessions each week. Ideally, the first part of each session will be a lecture on general issues; in the second part, we will discuss specific empirical studies relevant to these issues.

#### Inequality and Social Mobility

- 1. Measures (wealth, income, earnings, health, employment)
  - 1. Evidence and quality of evidence
  - 2. Which unit (person, household, extended family)?
  - 3. Debates on measures of income and income mobility
  - 4. Importance of measurement: divergent conclusions from different measures

#### 2. Roles of

- 1. Skills and prices (including discrimination); skill prices vs. rates of return
- 2. Family structure and demography
- 3. Transfers and social insurance
- 4. Credit market constraints
- 5. Sorting, peer effects, and neighborhoods
- 3. Which skills?

- 1. Schooling
- 2. On the Job Training
- 3. Traits (IQ and personality)
- 4. Complexity as a skill
- 4. Tasks and Skills
  - 1. Definition of Tasks
  - 2. Endogenous Tasks, Hedonic Models, and Sorting
  - 3. Life cycle skills
    - Traditional human capital models (OJT; schooling)
    - · Learning by doing
    - Imitation and emulation
- 5. Markets and Technology
  - 1. Monopsony and monopoly
  - 2. Technology: AI and innovation, role of robots, skill-biased technical change
- 6. Families
  - 1. Investment
  - 2. Credit constraints
  - 3. Parental influence: parenting, parental styles
- 7. Neighborhood and Peer Effects: Is Zip Code Destiny?

#### The Roy Model and the Generalized Roy Model

The Roy Model and its generalization are basic tools of applied economics and econometrics. I will draw on your knowledge of it in this course. Economics 312 and other courses teach this model. It helps you interpret the statistical estimates reported in many applied papers estimate in terms of well-posed economic models instead of ill-defined "effects." For background and review, see

- Heckman, James J. 2010. "Building Bridges between Structural and Program Evaluation Approaches to Evaluating Policy." Journal of Economic Literature, 48(2):356-98.
- Heckman, James J., Sergio Urzua, and Edward Vytlacil. (2006). "<u>Understanding Instrumental Variables in Models</u> with Essential Heterogeneity." The Review of Economics and Statistics, 88(3):389-432.

The following short documents explain key ideas.

- 1. Notes on Roy Models and Generalized Roy Models
- 2. The Roy Model and Policy Evaluation
- 3. The Normal Generalized Roy Model
- 4. <u>Notes on Identification of the Roy Model and</u> <u>the Generalized Roy Model</u>

#### Grading

Students taking the class for a grade are asked to present reports on groups of related articles supplementing the lectures. Topics must be aligned with the lecture of the day, and coordinated with the instructor and the TA. Students may form groups to prepare reports. Group size is limited to three. Topics for reports and reports themselves will be screened in advance by the TA and the instructor. A list of eligible topics is below. Presentations should be scheduled by

1/12/2021

Economics 350 Winter 2021 Syllabus/Lecture Notes Combined - Center for the Economics of Human Development

the second week, in conjunction with the TA and the instructor. Each report has to be rehearsed with the instructor and the TA. Slides have to be posted by Monday morning for a report on the following Wednesday. Reports will start as early as the third week. Third, fourth and and fifth week presenters who break the ice will get bonus points (20% for third week, 15% for fourth week, and 10% for fifth week). Reports count for 30% of course credit, homework counts for 30%, a take-home final counts for 30% of the grade, and classroom participation counts for 10%. The instructor will call on students during class.

## **Lecture Notes**

Lecture notes for each week will be posted on the Canvas site in advance of each lecture on the website. The handouts distill and complement the readings.

## **Supplemental Reading List**

Background material on methodology and additional readings on each topic are available on the <u>Supplemental Reading</u> <u>List</u>.

## **Reports by Week**

Week 1, January 13, 2021

None

Week 2, January 20, 2021

None

Week 3, January 27, 2021

• Skills and Preferences (see Section III)

Week 4, February 3, 2021 (Guest Lecture, Derek Neal?)

· Disparities vs. Discrimination: Models and Evidence (see Section IV)

Week 5, February 10, 2021

• Technology and Trade (see Section V)

Week 6, February 17, 2021

 Earnings Dynamics, Welfare Dynamics, and Uncertainty: Measurement and Consequences for Welfare (see Section VI)

Week 7, February 24, 2021

• Neighborhoods and Peers (see Section VII)

Week 8, March 3, 2021 (Guest Lecture: Flavio Cunha)

• Family Influence (see Section VIII)

Week 9, March 10, 2021

• Fertility (see Section IX)

## Syllabus

Recommended readings are indicated by (\*). All other readings on this list and the supplement are background.

- 1. Overview: Income Inequality and Social Mobility; Trends, Explanations and Controversies
  - Slides
    - Background Notes, Session by Session
    - Overview and Plan of the Course
    - Reading List
    - Inequality in What? Income Measures and Wage Measures
      - 1. Income Measures and Wage Measures

- 2. Role of Taxes and Transfers in Post Tax-Transfer Outcomes
- 3. Role of Skills and Skill Prices in Explaining Inequality.
- 4. Income Mobility
- Inequality in Health
- Poverty in the United States, Meyer (2020)
- How the Economy is Actually Doing, in 9 Charts, Koeze (2020)
- Heckman, James J., Lance Lochner, and Petra Todd. (2006). "<u>Earnings Functions, Rates of Return and</u> <u>Treatment Effects: The Mincer Equation and Beyond</u>," in E. Hanushek and F.Welch, eds., *Handbook of the Economics of Education*, (North Holland: Amsterdam), pp. 307-458
  - <u>The Rate of Return to Schooling: The Mincer Equation and Beyond</u>
- Readings
  - (\*)Hoffmann, Florian, David S. Lee, and Thomas Lemieux. 2020. "<u>Growing Income Inequality in the United</u> <u>States and Other Advanced Economies</u>." *Journal of Economic Perspectives*, 34 (4): 52-78.
    - <u>Growing Income Inequality in the United States and Other Advanced Economies</u>, Hoffman, Lee, and Lemieux (2020)
  - Auten, Gerald, and David Splinter. (2019). <u>Top 1 Percent Income Shares: Comparing Estimates Using Tax</u> <u>Data</u>." AEA Papers and Proceedings, 109: 307-11.
  - Elwell, James, Kevin Corinth, and Richard V. Burkhauser. (2019). "Income Growth and its Distribution from Eisenhower to Obama: The Growing Importance of In-Kind Transfers (1959-2016)." National Bureau of Economic Research Working Paper Series, No. 26439.
  - McLanahan, Sara, and Wade Jacobsen. (2015). "<u>Diverging Destinies Revisited</u>." In *Families in an Era of Increasing Inequality: Diverging Destinies*, edited by Paul R. Amato, Alan Booth, Susan M. McHale and Jennifer Van Hook, 3-23. Springer International Publishing.
    - Diverging Destinies Revisited, McLanahan and Jacobsen (2015)
- Guest Lecture, Thomas Coleman
  - Income Inequality Statistics Good Measures Are Important
- Supplemental
  - Early, John F. 2018. "<u>Reassessing the Facts about Inequality, Poverty, and Redistribution</u>." Cato Institute Policy Analysis No. 839.
    - Reassessing the Facts about Inequality, Poverty, and Redistribution, Early (2018)

#### 2. Schooling and On-the-Job Learning

- Slides
  - Eisenhauer, Philipp, James J. Heckman, and Stefano Mosso. (2015). "Estimation of Dynamic Discrete Choice Models by Maximum Likelihood and the Simulated Method of Moments," International Economic Review, 56(2): 331-357.
    - <u>Rate of Return Continuation Values and Option Values in a Simple Dynamic Model</u>, Eisenhauer, Heckman and Mosso (2015).
  - Roy Models of Policy Evaluation
  - <u>The Roy Model and the Generalized Roy Model</u>
  - Some Generalized Roy Math
  - Heckman, James J., John Eric Humphries, and Gregory Veramendi. (2018). "<u>Returns to Education: The</u> <u>Causal Effects of Education on Earnings, Health and Smoking</u>," *Journal of Political Economy*, 126:S1:

S197-S246.

- <u>Returns to Education: The Causal Effects of Education on Earnings, Health and Smoking</u> Heckman, Humphries, and Veramendi (2018)
- Simple Model of Human Capital Formation
- Cossa, Ricardo, James J. Heckman, and Lance Lochner. (2003). "Learning-by-Doing versus On-the-Job Training: Using Variation Induced by the EITC to Distinguish between Models of Skill Formation." In Designing Inclusion: Tools to Raise Low-End Pay and Employment in Private Enterprise, edited by Edmund S. Phelps, 74-130. New York, NY: Cambridge University Press.
  - <u>Two Interpretations of the Mincer Equation: Learning-by-doing vs. On-the-job Training</u> by Heckman, Lochner, and Cossa (2003)
  - Evidence on Learning-by-doing vs. On-the-job Training: Using variation induced by the EITC to test between models of skill formation by Heckman, Lochner, and Cossa (2003)
- Keane, Michael and Kenneth Wolpin. (1997). "<u>The Career Decisions of Young Men</u>," *Journal of Political Economy*, 105(3):473-522.
  - The Career Decisions of Young Men, Keane and Wolpin (1997)
- Ben-Porath Notes
- Sheshinski Specification
- Johnson, William R. (1978). "A Theory of Job Shopping," Quarterly Journal of Economics, 92(2): 261-278.
  - Notes on "A Theory of Job Shopping," by Johnson
- Gittins Index, Pandora's Box, and Miller's Model of Learning and Labor Market Turnover
- Sullivan, Paul. (2010). "<u>A Dynamic Analysis of Educational Attainment, Occupational Choices, and Job</u> <u>Search</u>." *International Economic Review*, 51(1):289-317.
  - <u>A Dynamic Analysis of Educational Attainment, Occupational Choices, and Job Search</u> by Sullivan (2010)
- Skills and Tasks in the Labor Market
- Readings
  - (\*)Heckman, James J.; Lochner, Lance J. and Todd, Petra E. (2006). "Earnings Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond." in Handbook of the Economics of Education, E. A. Hanushek, and F. Welch, eds. Amsterdam: North-Holland. pp. 307-458.
    - <u>Age, Period, and Cohort Effects (Extract from The Mincer Equation and the Rate of Return to Schooling)</u>
  - (\*)Rubinstein, Yona and Yoram Weiss. (2006). "Post Schooling Wage Growth: Investment, Search and Learning," In: E. Hanushek and F. Welch, (eds.), *Handbook of the Economics of Education*, Volume 1, Chapter 1. Amsterdam: Elsevier. pp. 1-67.
    - Post Schooling Wage Growth: Investment, Search and Learning by Rubinstein and Weiss (2006)
  - Yamaguchi, Shintaro. (2012). "<u>Tasks and Heterogeneous Human Capital</u>," *Journal of Labor Economics*, 30(1): 1-53.
    - Tasks and Heterogeneous Human Capital by Yamaguchi. (2012)

## 3. Skills, Tasks and Occupations

- Slides
  - Almlund, Mathilde, Duckworth, Angela Lee, Heckman, James J., and Kautz, Timothy. (2011). "<u>Personality</u> <u>Psychology and Economics</u>," In *Handbook of the Economics of Education*, E. Hanushek, S. Machin, and S. Woessman, eds. Amsterdam: Elsevier. pp. 1-181.

- Preferences, Personality Psychology, and Economics: Some New Results
- Gersbach, Hans and Samuel Schmassmann. (2019). "<u>Skills, Tasks, and Complexity</u>," IZA Discussion Paper No. 12770.
  - Skills, Tasks, and Complexity, Gersbach and Schmassmann (2019)
- Mandelbrot, Benoit. (1962). "Paretian Distributions and Income Maximization." Quarterly Journal of Economics, 76(1): 57-85.
  - Paretian Distributions and Income Maximizations, Mandelbrot (1962).
  - <u>Other Ways to Define Occupations (Paretian Distributions and Income Maximizations)</u>, Mandelbrot (1962).
- Deming, David J. and Kadeem L. Noray. (2018). "<u>STEM Careers and Technological Change</u>," NBER Working Paper No. 25065.
  - STEM Careers and Technological Change, Deming and Noray (2018).
- Borghans, Lex, Angela L. Duckworth, James J. Heckman, and Bas ter Weel. (2008). "<u>The Economics and</u> <u>Psychology of Personality Traits</u>." *Journal of Human Resources*, 43(3):972-1059.
  - The Economics and Psychology of Personality Traits
    - The Economics and Psychology of Personality Traits: Extract
- Skills vs. Tasks: A Task Approach, Zhou (2019)
- Todd, Petra E., and Weilong Zhang. (2020). "<u>A dynamic model of personality, schooling, and occupational choice</u>." *Quantitative Economics*, 11(1):231-275.
  - A Dynamic Model of Personality, Schooling, and Occupational Choice, by Todd and Zhang
- Skills and Firms
- <u>Efficiency Units, Elementary Hedonic Models (Gorman and Lancaster) With and Without Bundling</u>
  <u>Restrictions</u>
- Edin, Per-Anders, Peter Fredriksson, Martin Nybom, and Björn Öckert. (2017). "<u>The Rising Return to Non-Cognitive Skill</u>," IZA Discussion Paper No. 10914.
  - The Rising Return to Non-Cognitive Skill by Edin, Fredriksson, Nybom, and Ockert (2017)
- <u>A Rosetta Stone for Noncognitive Skills: Understanding, Assessing, and Enhancing Noncognitive Skills in</u> <u>Primary and Secondary Education</u> by Roberts, Martin, and Olaru (2015)
- Roberts, Richard D., Jonathan E. Martin, and Gabriel Olaru. 2015. "<u>A Rosetta Stone for Noncognitive</u> <u>Skills: Understanding, Assessing, and Enhancing Noncognitive Skills in Primary and Secondary</u> <u>Education</u>." Asia Society. Professional Examination Service Report.
  - <u>A Rosetta Stone for Noncognitive Skills: Understanding, Assessing, and Enhancing Noncognitive Skills</u> <u>in Primary and Secondary Education</u> by Roberts, Martin, and Olaru (2015)
- Böhm, Michael J., Khalil Esmkhani, and Giovanni Gallipoli. 2020. "Firm Heterogeneity in Skill Returns." Human Capital and Economic Opportunity Working Group Working Paper No. 2020-82.
  - [handout pending] Firm Heterogeneity in Skill Returns, Böhm, Esmkhani, and Gallipoli, 2020
- Readings
  - (\*)Acemoglu, Daron and David Autor. (2011). "<u>Skills, Tasks and Technologies: Implications for</u> <u>Employment and Earnings</u>," In: Orley Ashenfelter and David Card, (eds.), *Handbook of Labor Economics*, Volume 4, Part B, Chapter 12. Amsterdam: Elsevier. pp. 1043-1171. *Review the theory portion.*
    - Data Extract

- Economics 350 Winter 2021 Syllabus/Lecture Notes Combined Center for the Economics of Human Development
- <u>Technical Extract</u>
- (\*)Caines, Colin, Florian Hoffman, and Gueorgui Kambourov (2016). "<u>Complex-Task Biased</u> <u>Technological Change and the Labor Market</u>," *Review of Economic Dynamics*, 25: 298-319.
  - Skills vs. Tasks: How Important Are Occupations? Caines, Hoffman, and Kambourov (2016)
- (\*)Heckman, James J. (2019). "<u>The Race Between Demand and Supply: Tinbergen's Pioneering</u> <u>Studies of Earnings Inequality</u>." *De Economist*, 167(3):243-258.
  - The Race Between Demand and Supply: Tinbergen's Pioneering Studies of Earnings Inequality
- Deming, David J. (2017). "<u>The Growing Importance of Social Skills in the Labor Market</u>," *Quarterly Journal of Economics*, 132(4): 1593–1640.
  - The Growing Importance of Social Skills in the Labor Market, Deming (2017)
- Lise, Jeremy, and Fabien Postel-Vinay. (2020). "<u>Multidimensional Skills, Sorting, and Human Capital</u> <u>Accumulation</u>." *American Economic Review*, 110(8): 2328-2376.
  - Multidimensional Skills, Sorting, and Human Capital Accumulation by Lise and Postel-Vinay (2018)

## 4. Discrimination

- Slides
  - Heckman, James J. (2011). "<u>The American Family in Black & White: A Post-Racial Strategy for</u> <u>Improving Skills to Promote Equality</u>." *Daedalus*, 140(2):70-89.
    - <u>The American Family in Black & White: A Post-Racial Strategy for Improving Skills to Promote</u>
      <u>Equality</u>. Heckman
- Readings
  - (\*)Altonji, Joseph G., and Rebecca M. Blank. (1999). "<u>Race and gender in the labor market</u>." In *Handbook of Labor Economics*, edited by Orley Ashenfelter and David Card. Chapter 48, pp. 3143-3259. Amsterdam: Elsevier.
    - Race and Gender in the Labor Market, Altonji and Blank (1999)
  - (\*)Neal, Derek. (2006). "<u>Why Has Black–White Skill Convergence Stopped?</u>" In *Handbook of the Economics of Education*, edited by E. Hanushek and F. Welch, 511-576. Amsterdam: Elsevier.
    - Black-White Inequality, Neal (2020)
  - Bayer, Patrick, and Kerwin Kofi Charles. (2018). "Divergent Paths: A New Perspective on Earnings Differences Between Black and White Men Since 1940." The Quarterly Journal of Economics, 133(3):1459-1501.
    - [handout pending]
  - Maasoumi, Esfandiar, and Le Wang. (2019). "<u>The Gender Gap between Earnings Distributions</u>." Journal of Political Economy, 127(5):2438-2504.
    - Extract from "The Gender Gap Between Earnings Distributions," Maasoumi and Wang, 2019.
  - Guryan, Jonathan, and Kerwin Kofi Charles. (2013). "<u>Taste-based or Statistical Discrimination: The</u> <u>Economics of Discrimination Returns to its Roots</u>." *The Economic Journal*, 123(572):F417-F432.
    - [handout pending]
  - Bertrand, Marianne, Dolly Chugh, and Sendhil Mullainathan. (2005). "Implicit Discrimination." American Economic Review, 95(2):94-98.
    - Implicit Discrimination, Bertrand, Chugh and Mullainathan (2005
  - Heckman, James J. (1998). "<u>Detecting Discrimination</u>." *Journal of Economic Perspectives*, 12(2):101-116.

- Economics 350 Winter 2021 Syllabus/Lecture Notes Combined Center for the Economics of Human Development
- Detecting Discrimination, Heckman (1998)
- Neumark, David, Ian Burn, and Patrick Button. (2016). "<u>Experimental Age Discrimination Evidence and</u> <u>the Heckman Critique</u>." *American Economic Review*, 106(5):303-08.
  - Experimental Age Discrimination Evidence and the Heckman Critique, Neumark, Burn and Button (2016)

## 5. Role of Firms: Monopoly, Monopsony, and Technology; Al and Robots

- Slides
  - Deming, David J., and Lisa B. Kahn. (2016). "Firm Heterogeneity in Skill Demands." Harvard Graduate School of Education, Unpublished manuscript.
    - Firm Heterogeneity in Skill Demands, Deming and Kahn (2016).
  - Humlum, Anders. (2019). "<u>Robot Adoption and Labor Market Dynamics</u>," Unpublished manuscript, Princeton University, Department of Economics.
    - Robot Adoption and Labor Market Dynamics, Humlum (2019)
  - Sattinger, Michael. (1979). "<u>Differential Rents and the Distribution of Earnings</u>." Oxford Economic Papers, 31(1):60-71.
    - Notes on "Differential Rents and the Distribution of Earnings"
  - Deming, David J. (2017). "<u>The Growing Importance of Social Skills in the Labor Market</u>," *Quarterly Journal of Economics*, 132(4): 1593–1640.
    - The Growing Importance of Social Skills in the Labor Market, Deming (2017)
  - Blundell, Richard. (2014). "Income Dynamics and Life-cycle Inequality: Mechanisms and Controversies." The Economic Journal, 124(576):289-318.
    - Income Dynamics and Life-cycle Inequality: Mechanisms And Controversies by Blundell (2014)
  - Koopmans, Tjalling C., and Martin Beckmann. (1957). "<u>Assignment Problems and the Location of</u> <u>Economic Activities</u>." *Econometrica*, 25(1):53-76.
    - <u>Notes on "Assignment Problems and the Location of Economic Activities"</u> by Koopmans and Beckmann
  - Simple Model of Human Capital Formation
- Readings
  - (\*)Van Reenen, John. 2018. "Increasing Differences Between Firms: Market Power and the Macro-Economy." "Changing Market Structures and Implications for Monetary Policy," Economic Policy Symposium, Kansas City, KS.
  - Caines, Colin, Florian Hoffmann, and Gueorgui Kambourov (2017). "<u>Does Automation Drive the Labor</u> <u>Market?</u>," IFDP Notes. Washington: Board of Governors of the Federal Reserve System.
  - Acemoglu, Daron, and Pascual Restrepo. (2020). "<u>Robots and Jobs: Evidence from US Labor Markets</u>." Journal of Political Economy, 128(6):2188-2244.

# 6. Life Cycle Earnings Dynamics

- Slides
  - Income Processes/Shocks, Market Structure, and Information, Lise
  - Moffitt, Robert, and Sisi Zhang. (2018). "Income Volatility and the PSID: Past Research and New Results." AEA Papers and Proceedings, 108:277-80.
    - Income Volatility and the PSID: Past Research and New Results, Moffitt and Zhang (2018)
  - Models for Social Mobility and Skill Formation

- Hryshko, Dmytro. (2009). "<u>RIP to HIP: The Data Reject Heterogenous Labor Income Profiles</u>," Unpublished manuscript, University of Alberta.
  - RIP to HIP: The Data Reject Heterogeneous Labor Income Profiles, Hryshko
- Readings
  - (\*)Meghir, Costas and Luigi Pistaferri. (2011). "<u>Earnings, Consumption and Life Cycle Choices</u>," In: Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics,* Vol. 4, Part B. Amsterdam: Elsevier. pp. 773-854.
    - <u>Modeling the Income Process</u> (Extract from "Earnings, Consumption and Lifecycle Choices" by Meghir and Pistaferri)
    - Earnings, Consumption and Lifecycle Choices, Meghir and Pistaferri
  - Browning, Martin, and Mette Ejrnæs. (2013). "<u>Heterogeneity in the Dynamics of Labor Earnings</u>." Annual Review of Economics, 5(1):219-245.
    - [handout pending]
  - Cunha, Flávio and James J. Heckman. (2016). "<u>Decomposing Trends in Inequality in Earnings into</u> <u>Forecastable and Uncertain Components</u>," *Journal of Labor Economics*, 34(S2): S31-S65.
    - Separating Heterogeneity from Uncertainty

# 7. Neighborhoods and Peers

- Slides
  - Social Mobility Within and Between Generations
  - <u>Neighborhood Effects and Child Outcomes: Evaluating the Recent Empirical Literature</u> by Michael Galperin
  - Durlauf, Steven. (1996). "<u>Neighborhood Feedback, Endogenous Stratification, and Income Inequality</u>," in W. Barnett, G. Gandolfo, and C. Hillinger, *Dynamic Disequilibrium Modeling*. Cambridge, UK: Cambridge University Press. pp. 505-534.
    - Neighborhood Feedback, Endogenous Stratification, and Income Inequality, Durlauf (1996)
- Readings
  - Durlauf, S. and A. Seshadri. (2018). "<u>Understanding the Great Gatsby Curve</u>," In *NBER Macroeconomics Annual 2017*, volume 32, Martin Eichenbaum and Jonathan A. Parker, editors, pp. 333 393.
  - Reeves, Richard V. and Eleanor Krause. (2018). "<u>Raj Chetty in 14 charts: Big findings on opportunity and</u> <u>mobility we should all know</u>," Brookings Institution Social Mobility Memos, Thursday, January 11, 2018.
    - <u>Raj Chetty in 14 Charts: Big Findings on Opportunity and Mobility We Should All Know</u>, Reeves and Krause (2018
  - (\*)Chetty, Raj, and Nathaniel Hendren. (2018). "<u>The Impacts of Neighborhoods on Intergenerational</u> <u>Mobility I: Childhood Exposure Effects</u>." *Quarterly Journal of Economics*, 133(3):1107-1162.
  - (\*)Chetty, Raj, and Nathaniel Hendren. (2018). "<u>The Impacts of Neighborhoods on Intergenerational</u> <u>Mobility II: County-Level Estimates</u>." *Quarterly Journal of Economics*, 133(3):1163-1228.
  - Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez. (2014). "<u>Where is the Land of</u> <u>Opportunity? The Geography of Intergenerational Mobility in the United States</u>." *Quarterly Journal of Economics*, 129 (4): 1553-1623.
  - Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. (2016). "<u>The Effects of Exposure to Better</u> <u>Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment</u>." *American Economic Review*, 106(4):855-902.
  - Chetty, Raj, Nathaniel Hendren, Maggie R Jones, and Sonya R Porter. (2020). "<u>Race and Economic</u> <u>Opportunity in the United States: an Intergenerational Perspective</u>." *The Quarterly Journal of Economics*,

135(2):711-783.

- Benabou, Roland. (1996). "Equity and Efficiency in Human Capital Investment: The Local Connection," Review of Economic Studies, 62:237-264.
- Durlauf, Steven N. (1996). "<u>A theory of persistent income inequality</u>." *Journal of Economic Growth*, 1(1):75-93.
- Heckman, James J. and Rasmus Landersø. (2021). "American Inequality and Social Mobility Viewed Through a Danish Prism," Forthcoming, *Labour Economics*.
  - <u>Some Evidence on Social Mobility in the U.S. Economy</u> Extract from: American Inequality and Social Mobility Viewed Through a Danish Prism
- Pinto, Rodrigo. (2020). "<u>Beyond Intent to Treat: Using the Incentives in Moving to Opportunity to Identify</u> <u>Neighborhood Effects</u>," Unpublished manuscript, University of California at Los Angeles, Department of Economics.

# 8. Family Influence, Investment, and Intergenerational Mobility

- Slides
  - Doepke, Matthias, Giuseppe Sorrenti, and Fabrizio Zilibotti. (2019). "<u>The Economics of Parenting</u>." NBER Working Paper No. 25533.
    - The Economics of Parenting, Doepke, Sorrenti, and Zilibotti (2019)
  - Bowles, Samuel and Herbert Gintis. (2002). "<u>The Inheritance of Inequality</u>," *Journal of Economic Perspectives* 16(3): 3-30.
    - Inheritance of Inequality (Bowles and Gintis)
  - Jäntti, Markus and Stephen P. Jenkins. (2015). "Income Mobility," in Handbook of Income Distribution, Volume 2, Chapter 10. A. B. Atkinson and F. Bourguignon, eds. Amsterdam: Elsevier. pp. 807-935.
    - Income Mobility, Jäntti and Jenkins (2013)
  - Family Influence, Investment, and Intergenerational Mobility by Runhua Li, Lucas Mation and Goya Razavi
  - Overview
  - Social Mobility Within and Between Generations
  - Heckman, James J. and Rasmus Landersø. (2021). "American Inequality and Social Mobility Viewed Through a Danish Prism," Forthcoming, *Labour Economics*.
    - <u>Some Evidence on Social Mobility in the U.S. Economy</u> Extract from: American Inequality and Social Mobility Viewed Through a Danish Prism
    - The Danish Welfare State: Social mobility, Inequality, and Challenges
    - Understanding the Heterogeneity of Intergenerational Mobility across Neighborhoods: A Case Study of Denmark
  - Durlauf, S. and A. Seshadri. (2018). "<u>Understanding the Great Gatsby Curve</u>," In *NBER Macroeconomics Annual 2017*, volume 32, Martin Eichenbaum and Jonathan A. Parker, editors, pp. 333 393.
    - Understanding the Great Gatsby Curve
  - Heckman, James J. and Stefano Mosso. (2014). "<u>The Economics of Human Development and Social</u> <u>Mobility</u>," *Annual Review of Economics*, 6(1):689-733.
    - <u>The Implications of Dynamic Complementarity for Investments across Children with Different Initial</u>
      <u>Endowments</u>
    - Policies to Promote Social Mobility

- Extract: Policies to Promote Social Mobility
- Public and parental investments and children's skill formation, Landersø (2019)
- Parental Responses to High Quality Interventions, Garcia and Heckman (2015)
- Huggett, Mark, and Greg Kaplan. (2016). "<u>How large is the stock component of human capital?</u>" *Review of Economic Dynamics*, 22:21-51.
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# **Supplemental Handouts**

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- The Fall of the Labor Share and the Rise of Superstar Firms, Autor, Dorn, Katz, Patterson, and Van Reenen. (2019)
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- Life-Cycle Wage Growth and Heterogeneous Human Capital, Sanders and Taber. (2012)
- Ben-Porath Notes
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- Imperfect Compliance Notes
- Occupation Mobility, Human Capital and the Aggregate Consequences of Task-Biased Innovations by Dvorkin and Monge-Naranjo (2019).
- Student Loans and Repayment: Theory, Evidence and Policy
- <u>Credit Constraints and Education: Models and Analysis</u>
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- <u>Family Disadvantage, Gender and the Returns to Genetic Human Capital</u> by Ronda, Agerbo, Bleses, Mortensen, and Rosholm (2019)

# **Student Presentations**

- Wealth Inequality through Time by Fulin Guo, Winnie Tong, and Xiaofeng Li
- Skills and Tasks by Nadav Kunievsky, Jack Light, and Francesco Ruggieri
- Role of Firms: Automation and the Labor Market by Aabir Abubaker Kar, Jesús Pacheco, and Erika Tsuruyama

#### 1/12/2021

Economics 350 Winter 2021 Syllabus/Lecture Notes Combined - Center for the Economics of Human Development

- <u>Credit Constraints</u> by Laurence O'Brien and Francesco Ruggieri
- Interventions and Evaluation by Emileigh Harrison, Chanwool Kim and Mythili Vinnakota

# **TA Session Slides**

- Simple Model of Human Capital Formation
- Preferences, Personality Psychology, and Economics: Some New Results
- The Rising Return to Non-Cognitive Skill by Edin, Fredriksson, Nybom, and Ockert (2017)
- <u>A Rosetta Stone for Noncognitive Skills: Understanding, Assessing, and Enhancing Noncognitive Skills in Primary</u> <u>and Secondary Education</u> by Roberts, Martin, and Olaru (2015)