Problem Set I Econ 350, Winter 2021 James J. Heckman Due January 20th, 2021

- I. Comparisons in wages across demographic groups are made everyday, comparing Black and White wages and male and female wages. Using the NLSY79 data from its inception to the latest wave, answer the following questions.
 - (A) Go to the "NLSY79 investigator" webpage here to download the NLSY79 data. Notice that if you do not have an account, you need to register. In the worst case scenario, approval may take a number of days, so register to the website early! (If you have a problem, please contact the TA). Once you are logged in, choose "NLSY79 (National longitude Survey of Youth 79). You would then need to choose which variables you need to download to answer the questions in this PS. In your answers please list which variables you chose, and what data cleaning process were applied.
 - (B) For each year, what % of the sample of women 25-54 is working?

 Answer the same question for males. What are the characteristics of workers (age; marital status; children; asset income)?
 - (C) Plot the distributions of wages by gender for (i) all persons, and (ii) for working persons. Do these conditional and unconditional on education, work experience, marital status, number of children and parents education. Use broad educational categories (<HS, HS,</p>

some college, college, and college+) and work experience categories (≤ 5 years, 5-20 years, and 20+ years).

- (D) Compare the wages of men with women over the period using hourly and annual measures:
 - (i) Average wages
 - (ii) Median wages
 - (iii) Stochastic dominance
 - (iv) 75th quartile
 - (v) 25th quartile

Do this conditionally and unconditionally (use logs on education, work experience, and participation). How much difference does it make to adjust for education and work experience? Is there a marital premium for men? For women?

- (E) How much of the change in each gap overtime is due to differences in
 - (i) Education
 - (ii) Work experience
 - (iii) Selectivity
 - (iv) Family status
 - (v) Children
- (F) What are trends in employment? What are the determinants of employment trends?

II. Answer the questions embedded in the "Mincer" handout.