

Econ 229 Research Project I Assignment II

Relationship between work and earnings

In this assignment, we will explore the relationship between how much people work and their income.

Step 1: Compiling a dataset from American Community Survey 2020

1. Go to the IPUMS-USA website
2. Go to Browse and Select Data
3. Go to Add more variables. Under Person, select Educational Attainment (EDUC), Age (AGE), Sex (SEX), Total Personal Income (INCTOT), Wage and Salary Income (INCWAGE), Weeks worked last year (WKSWORK1) and usual hours worked per week (UHRSWORK)
4. Go to Select Samples. Make sure only 2020 ACS is checked (uncheck everything else).
5. Submit sample selections
6. Go to view cart
7. Create data extract
8. In data format, change format to Comma delimited (csv)
9. In Select Case, choose ages from 18 to 60 years
10. In Customize Sample Sizes, change household number to 10 and submit
11. Submit extract
12. Create an account and follow instructions. Once the file is available, save the data file and code book.

Step 2:

Analysis: For each question, do the necessary work in Excel, copy results to a Word document and interpret each result.

1. Use appropriate graphs to show the distributions of total income and hours worked in the year. Note that the hours worked per year variable needs to be constructed from the two variables WKSWORK1 and UHRSWORK.
2. Draw a scatter plot showing the relationship between total income and hours worked.
3. Find the covariance and correlation coefficient between total income and hours worked.
4. Draw a regression line in the scatter plot and estimate the slope, intercept and R square.
5. Repeat everything using Wage and Salary Income (INCWAGE) as your Y variable and verify whether you find a stronger correlation than when you used Total Income (INCTOT). Explain why?
6. Using INCWAGE, repeat the correlation and regression analysis separately for men and women and compare the results.