

## TASKS OVERVIEW

### Chicago Booth Full-Time Research Assistant Application

#### 1. Labor Market Analysis Task

- Time: Spend no more than 5 hours on this task
- File: `cps_wages_LFP.zip` contains a stata `.dta` file (and duplicate `.csv`<sup>1</sup>) from the U.S. Current Population Survey since 1976.<sup>2</sup> It provides individual-level data on year, state, month, survey weight, demographic characteristics, and labor market outcomes. You can download the data here:  
[http://faculty.chicagobooth.edu/owen.zidar/RA/cps\\_wages\\_LFP.dta.zip](http://faculty.chicagobooth.edu/owen.zidar/RA/cps_wages_LFP.dta.zip).
- Goal: We'd like you to use these data to produce your best answer to the following question: how have hourly wages ("wage") and labor force participation ("lfp") evolved for skilled and unskilled workers since 1976?
  - (a) Please summarize the key trends for wages and labor force participation.
  - (b) Among men older than age 25, which groups of people have had the biggest changes in labor force participation?
  - (c) What factors do you think are driving these patterns? What evidence might you want to assemble to test these hypotheses if you were to investigate them further?
- Output:
  - (a) Please provide a short note in `.pdf` format that concisely answers these questions. Please be sure to include a few graphs and/or tables to support your conclusions.
  - (b) Please provide the code that you used to produce these figures and/or tables.
- Note: You should feel free to use whatever techniques you want. The goal here is not to show off hi-tech econometrics, but rather to show us how you think about data. Sometimes something as simple as a graph can do more for an argument than all the estimators in the world.

#### 2. Data Manipulation Task

- Time: No limit; complete as quickly as you can without sacrificing quality (e.g., it is worth spending 5 minutes "commenting" your code so we can understand it.)
  - (a) Please email our assistant Stephen Lamb ([stephen.lamb@chicagobooth.edu](mailto:stephen.lamb@chicagobooth.edu)) and specify the time when you would like to start your task (please use the Chicago time zone).

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<sup>1</sup>A `.csv` version is available here: [http://faculty.chicagobooth.edu/owen.zidar/RA/cps\\_wages\\_LFP.csv.zip](http://faculty.chicagobooth.edu/owen.zidar/RA/cps_wages_LFP.csv.zip).

<sup>2</sup>Extracted from <https://cps.ipums.org/cps/>.

- (b) Stephen will email you the data and instructions.
  - (c) When you have finished the task, email Stephen your output and code that you used to produce it.
  - (d) If there is some reason why the time you spent on your task does not line up with the time you received / sent emails to Stephen, please send Stephen a follow-up email explaining what happened.
- File: Medicare\_Advantage.zip
    - The zip archive you will receive from Stephen contains a document called Medicare Advantage Instructions.pdf that describes the task in detail. You will need to take the data in scp-1205.csv and perform some simple manipulations. You are welcome to use whatever tool you like for this – a statistical program like Stata would work well.