

# Problem Set 1: PSID - Labor Outcomes

Tate Mason

CPI = .014 -> divide all by this

```
df <- read_dta("~/SchoolWork/Y2S1/Macro/Data/PSID/PSID.dta")
```

```
df <- df %>%
  mutate(
    famid = coalesce(!!!rlang::syms(c(
      "ER66009", "ER60009", "ER53009", "ER47309", "ER42009",
      "ER36009", "ER25009", "ER21009", "ER17022", "ER13019"
    )))
  )

long <- map_dfr(1:nrow(pivot), function(i){
  sel <- pivot[i, ]
  df %>%
    transmute(
      famid,
      year = sel$year,
      sex = .data[[sel$sex]],
      age = .data[[sel$age]],
      inc = .data[[sel$earnings_annual]],
      labor_par = .data[[sel$labor_par]],
      hourly = .data[[sel$hourly]],
      hr_worked = .data[[sel$hr_worked]],
      educ_HS = .data[[sel$educ_HS]],
      educ_coll = .data[[sel$educ_coll]],
      ind = .data[[sel$ind]],
      wealth = .data[[sel$wealth]]
    )
})

glimpse(long)
```

Rows: 188,900

Columns: 12

```
$ famid      <dbl> 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, NA, 4, 4, 4, 4, ~
$ year       <dbl> 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, 1999, ~
$ sex        <dbl> 1, 1, 2, NA, 2, 1, 2, NA, 1, 1, 2, NA, NA, NA, NA, NA, 1, 1, ~
$ age        <dbl> 76, 47, 45, NA, 39, 34, 25, NA, 23, 22, 20, NA, NA, NA, NA, ~
$ inc        <dbl> 0, 400, 0, NA, 0, 600, 0, NA, 0, 0, 0, NA, NA, NA, NA, NA, 5~
$ labor_par  <dbl> 0, 0, 0, NA, 0, 0, 0, NA, 0, 0, 0, NA, NA, NA, NA, NA, 0, 0, ~
$ hourly     <dbl> 0.00, 0.00, 0.00, NA, 15.35, 0.00, 0.00, NA, 8.50, 8.00, 5.0~
$ hr_worked  <dbl> 0, 40, 65, NA, 45, 50, 0, NA, 40, 30, 40, NA, NA, NA, NA, NA, NA~
$ educ_HS    <dbl> 3, 3, 1, NA, 1, 3, 1, NA, 3, 1, 1, NA, NA, NA, NA, NA, 1, 1, ~
$ educ_coll  <dbl> 0, 0, 0, NA, 0, 0, 0, NA, 0, 5, 0, NA, NA, NA, NA, NA, 1, 0, ~
$ ind        <dbl> 0, 628, 669, NA, 907, 69, 0, NA, 139, 67, 669, NA, NA, NA, N~
$ wealth     <dbl> 91500, 26000, 413500, NA, 42000, 20000, 12700, NA, 3000, 125~
```

```
glimpse(long$ind)
```

```
num [1:188900] 0 628 669 NA 907 69 0 NA 139 67 ...
```

```
long <- long %>%
  filter(
    age >= 25 & age <= 60,
    sex == 1
  )

df <- long %>%
  group_by(year) %>%
  mutate(
    labor_par = as.numeric(labor_par == 0),
    blue_col = as.numeric(ind %in% c(range(67:77), range(47:57), range(17:28), 107:398)),
    white_col = as.numeric(ind %in% c(range(407:479), range(707:718), range(727:759), range(
    educ_HS = as.numeric(educ_HS == 1),
    educ_coll = as.numeric(educ_coll == 1),
  )
```