Problem Set 1: PSID - Labor Outcomes

Tate Mason

```r
df <- read_dta("~/SchoolWork/Y2S1/Macro/Data/PSID/PSID.dta")
head(df, 10)
```

```
# A tibble: 10 x 218
   ER13001 ER13002 ER13010 ER13011 ER13216 ER13218 ER13224 ER13363 ER13601
     <dbl>   <dbl>   <dbl>   <dbl>   <dbl>   <dbl>   <dbl>   <dbl>   <dbl>
 1       9       3      76       1       0       0       0       0       0
 2       9       2      47       1     628     400       0      40       0
 3       9    6129      45       2     669       0       0      65       0
 4      NA      NA      NA      NA      NA      NA      NA      NA      NA
 5       9    6944      39       2     907       0    15.4      45       0
 6       9    3818      34       1      69     600       0      50       0
 7       9    1702      25       2       0       0       0       0       0
 8      NA      NA      NA      NA      NA      NA      NA      NA      NA
 9       9    5478      23       1     139       0     8.5      40       0
10       9    2471      22       1      67       0       8      30       0
# i 209 more variables: ER14113 <dbl>, ER14428 <dbl>, ER15937 <dbl>,
#   ER15952 <dbl>, ER15953 <dbl>, ER17001 <dbl>, ER17002 <dbl>, ER17013 <dbl>,
#   ER17014 <dbl>, ER17227 <dbl>, ER17229 <dbl>, ER17235 <dbl>, ER17375 <dbl>,
#   ER17393 <dbl>, ER17657 <dbl>, ER18579 <dbl>, ER19998 <dbl>, ER20013 <dbl>,
#   ER20014 <dbl>, ER21001 <dbl>, ER21002 <dbl>, ER21017 <dbl>, ER21018 <dbl>,
#   ER21146 <dbl>, ER21153 <dbl>, ER21159 <dbl>, ER21202 <dbl>, ER21234 <dbl>,
#   ER21266 <dbl>, ER21339 <dbl>, ER21356 <dbl>, ER21589 <dbl>, ...
```

```r
earn <- sample(c("ER13218", "ER17229", "ER21153", "ER25142", "ER36147", "ER42182", "ER47495"
df <- df %>%
  pivot_longer(
    c("ER13218", "ER17229", "ER21153", "ER25142", "ER36147", "ER42182", "ER47495", "ER53195"
    , names_to = "year", values_to = "earnings"
  ) %>%
  mutate(year = as.numeric(str_extract(year, "\\d+"))) %>%
```

```
    mutate(earnings = ifelse(earnings == 999999, NA, earnings))
summary(df$year)
```

```
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
  13218   25142   47495   47293   66211   82199
```

1 - Construct life-cycle profiles for the entire sample:

Labor force participation:

Annual earnings: