Gruppeoppgave

Kandidatnummer??

Høst 2025

Laste inn data

```
library(haven) # Lese inn data sett
library(dplyr) # Databehandling
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
library(fixest) # Regresjon
```

```
## Warning: package 'fixest' was built under R version 4.3.3
```

```
df <- read_dta("data/Combined_allwaves_final.dta") # Leser data

df <- df |>
  mutate(miss_age_PAP = ifelse(is.na(age_med_BL), 1, 0)) |>
  mutate(age_med_BL_control= ifelse(is.na(age_med_BL), 0, 1))|>
  mutate(miss_household_size= ifelse(is.na(household_size), 1, 0))|>
  mutate(household_size_control= ifelse(is.na(household_size), 0, household_size)) |>
  mutate(miss_edu_category= ifelse(is.na(edu_nohs_BL), 1, 0))|>
  mutate(edu_nohs_BL_control= ifelse(is.na(edu_nohs_BL), 0, edu_nohs_BL))|>
  mutate(married_control= ifelse(is.na(married), 0, married))|>
  mutate(divorced_separated_control= ifelse(is.na(divorced_separated), 0,
  divorced_separated))|>
  mutate(single_control= ifelse(is.na(single), 0, single))|>
  mutate(widowed_control= ifelse(is.na(widowed), 0, widowed))|>
  mutate(miss_relationship= ifelse(is.na(rel_status_BL), 1, 0))|>
  mutate(miss_cars= ifelse(is.na(cars), 1, 0))|>
  mutate(one_car_control= ifelse(is.na(one_car), 0, one_car))|>
  mutate(mult_cars_control= ifelse(is.na(mult_cars), 0, mult_cars))|>
```

```
  mutate(miss_LF_BL= ifelse(is.na(LF_BL), 1, 0))|>
  mutate(LF_BL_control= ifelse(is.na(LF_BL), 0, LF_BL)) |>
  filter(endline_start_w3==1)
```

```
s_train <- feols(s_train_bi_w3~ treatment + age_med_BL_control + miss_age_PAP + edu_nohs_BL_control
      + miss_edu_category + married_control + single_control + widowed_control
      + miss_relationship + household_size_control + miss_household_size + one_car_control
      + miss_cars + LF_BL_control + miss_LF_BL |randomization_cohort2, cluster = c("file_nbr"), data = d
```

```
## NOTE: 34 observations removed because of NA values (LHS: 34).

## The variable 'age_med_BL_control' has been removed because of collinearity (see $collin.var).
```

```
licence <- feols(license_w3~ treatment + age_med_BL_control + miss_age_PAP + edu_nohs_BL_control
      + miss_edu_category + married_control + single_control + widowed_control
      + miss_relationship + household_size_control + miss_household_size + one_car_control
      + miss_cars + LF_BL_control + miss_LF_BL |randomization_cohort2, cluster = c("file_nbr"), data = d
```

```
## NOTE: 34 observations removed because of NA values (LHS: 34).
## The variable 'age_med_BL_control' has been removed because of collinearity (see $collin.var).
```

```
empl <- feols(employed_w3~ treatment +age_med_BL_control + miss_age_PAP + edu_nohs_BL_control
      + miss_edu_category + married_control + single_control + widowed_control
      + miss_relationship + household_size_control + miss_household_size + one_car_control
      + miss_cars + LF_BL_control + miss_LF_BL |randomization_cohort2, cluster = c("file_nbr"), data = d
```

```
## NOTE: 13 observations removed because of NA values (LHS: 13).
## The variable 'age_med_BL_control' has been removed because of collinearity (see $collin.var).
```

```
not_empl <- feols(unemployed_w3~  treatment + age_med_BL_control + miss_age_PAP + edu_nohs_BL_control
      + miss_edu_category + married_control + single_control + widowed_control
      + miss_relationship + household_size_control + miss_household_size + one_car_control
      + miss_cars + LF_BL_control + miss_LF_BL |randomization_cohort2, cluster = c("file_nbr"), data = d
```

```
## NOTE: 13 observations removed because of NA values (LHS: 13).
## The variable 'age_med_BL_control' has been removed because of collinearity (see $collin.var).
```

```
controls <- c("miss_age_PAP","age_med_BL_control", "miss_edu_category", "married_control",
              "widowed_control","miss_relationship", "household_size_control", "miss_household_size",
              "one_car_control", "mult_cars_control", "miss_cars","LF_BL_control", "LF_BL_control",
              "edu_nohs_BL_control", "single_control", "miss_LF_BL", "Constant", "randomization_cohort2


tit <- "Treatment Effects on Individual Outcomes and Intrahousehold Responses"



fitstat_register("control_mean", function(x) mean(x), "Control mean")

fitstat_register("mean", function(x) mean(x, na.rm = T), "control_m")
```

```
fitstat_register("pval", function(x) pvalue(x), "p-value b = 0")

fitstat_register("mean_c",

                 function(x){
                   name <- x$fml[2] |> as.character()
                   xer <- df |>
                   filter(treatment == 0) |>
                   select(name) |> pull()
                   mean(xer,na.rm = T)
                   },
                 "Control mean"
)


fitstat_register("me",

                 function(x){
                   name <- x$fml[2] |> as.character()
                   xer <- df |>
                   filter(treatment == 0) |>
                   select(name) |> pull()

                   x$coefficients[1]/ mean(xer,na.rm = T)
                   },
                 "b/Control mean"
)
```

```
etable(s_train,licence,
       se.below=T,
       drop = controls,
       title =tit,
       digits = "r3",digits.stats = "r3",
       tex = T,
       signif.code = NA,
       dict=c(treatment = "Treatment",
              s_train_bi_w3 = "Started driver`s training",
              license_w3 = "Received license",
              randomization_cohort2 = ""),
       style.tex = style.tex("qje", ),
       fitstat = ~ n + mean_c +me + pval)
```

```
## \begin{table}[htbp]
##    \caption{Treatment Effects on Individual Outcomes and Intrahousehold Responses}
##    \bigskip
##    \centering
##    \begin{tabular}{lcc}
##       \tabularnewline\midrule\midrule
##                       & Started driver‘s training & Received license\\
##                       & (1)                       & (2)\\
##       \midrule
##       Treatment       & 0.619                     & 0.430\\
##                       & (0.040)                   & (0.039)\\
```

```
##        \\
##       Observations   & 467                       & 467\\
##       Control mean   & 0.192                     & 0.102\\
##       b/Control mean & 3.229                     & 4.221\\
##       p-value b = 0  & 0.000                     & 0.000\\
##        \\
##        fixed effects & $\checkmark$              & $\checkmark$\\
##       \midrule \midrule & \tabularnewline
##    \end{tabular}
## \end{table}
```

```
etable(empl,not_empl ,
       se.below=T,
       drop = controls,
       title =tit,
       digits = "r3",digits.stats = "r3",
       tex = T,
       signif.code = NA,
       dict=c(treatment = "Treatment",
              employed_w3 = "Employed",
              unemployed_w3 = "Unemployed",
              randomization_cohort2 = ""),
       style.tex = style.tex("qje", ),
       fitstat = ~ n + mean_c +me + pval)
```

```
## \begin{table}[htbp]
##    \caption{Treatment Effects on Individual Outcomes and Intrahousehold Responses}
##    \bigskip
##    \centering
##    \begin{tabular}{lcc}
##       \tabularnewline\midrule\midrule
##                       & Employed      & Unemployed\\
##                       & (1)           & (2)\\
##       \midrule
##       Treatment       & 0.085         & -0.105\\
##                       & (0.043)       & (0.049)\\
##        \\
##       Observations   & 488            & 488\\
##       Control mean   & 0.210          & 0.569\\
##       b/Control mean & 0.405          & -0.185\\
##       p-value b = 0  & 0.049          & 0.032\\
##        \\
##        fixed effects & $\checkmark$   & $\checkmark$\\
##       \midrule \midrule & \tabularnewline
##    \end{tabular}
## \end{table}
```

```
etable(empl,
       se.below=T,tex = T)
```

```
## \begingroup
## \centering
## \begin{tabular}{lc}
```

```
##    \tabularnewline \midrule \midrule
##    Dependent Variable:        & employed\_w3\\
##    Model:                     & (1)\\
##    \midrule
##    \emph{Variables}\\
##    treatment                  & 0.0849$^{**}$\\
##                               & (0.0430)\\
##    edu\_nohs\_BL\_control     & -0.0930$^{**}$\\
##                               & (0.0466)\\
##    miss\_edu\_category        & $6.48\times 10^{-5}$\\
##                               & (0.1610)\\
##    married\_control           & 0.0369\\
##                               & (0.0583)\\
##    single\_control            & 0.0389\\
##                               & (0.0614)\\
##    widowed\_control           & -0.0901\\
##                               & (0.0872)\\
##    miss\_relationship         & 0.2994\\
##                               & (0.2955)\\
##    household\_size\_control   & 0.0015\\
##                               & (0.0074)\\
##    miss\_household\_size      & $-9.21\times 10^{-5}$\\
##                               & (0.1529)\\
##    one\_car\_control          & -0.0124\\
##                               & (0.0421)\\
##    miss\_cars                 & 0.2367\\
##                               & (0.1568)\\
##    LF\_BL\_control            & 0.0773\\
##                               & (0.0487)\\
##    miss\_LF\_BL               & -0.8586$^{**}$\\
##                               & (0.3694)\\
##    \midrule
##    \emph{Fixed-effects}\\
##    randomization\_cohort2     & Yes\\
##    \midrule
##    \emph{Fit statistics}\\
##    Observations               & 488\\
##    R$^2$                      & 0.06672\\
##    Within R$^2$               & 0.04894\\
##    \midrule \midrule
##    \multicolumn{2}{l}{\emph{Clustered (file\_nbr) standard-errors in parentheses}}\\
##    \multicolumn{2}{l}{\emph{Signif. Codes: ***: 0.01, **: 0.05, *: 0.1}}\\
## \end{tabular}
## \par\endgroup
```