Finance 4355

R Assignment #2

## Step 1: Introduction

Load the MIDUS data into R. Show the summary statistics.

## Step 2: Linear Probability Models

Estimate the following equation using Least Squares (Linear Probability Model). The dependent variable is College Completion (a binary variable with 0 for not completing college and 1 for successfully graduating). The predictor variables are a binary indicator for race called Race2 (0=white , 1= nonwhite), Maternal Education (in year) and binary outcome variable Sex (0=male, 1=female). Are the predictor variables significant? Interpret the effect of Maternal Education and Race2.

Re-estimate the model and include a new set of predictors. We are adding Paternal Education (in years), Race3 (other) a binary variable. Compare model 2 to model 1. Which one is better and why?

1. Generate a forecast for completed education. Summarize the forecast.

## Step 2: Logit and Probit

Re-estimate Equation 1&2 with Logit and Probit.

Use the AIC to pick the best models for Logit and Probit between Equation (1) and (2)

Generate the marginal fixed effects for Equation 2 and interpret the coefficients. Also generate forecasts and summarize the forecasts. Compare forecasts from OLS with Logit and Probit.

## Step 3: Submit on Blackboard by October 24th, 2022