Statistics/Data analysis

```
cap log close
log using "$log_save\analysis", replace
do "Z:\Workbenches\epadmin\michael_kilumelume\2024 projects\minimum wage\programs\5_di
> dplot.do"
*GENERAL RESULTS
cap mkdir "$saveaddress_grahs\general results"

foreach dataset in unbalanced unbalanced_survivors balanced survivors {
    foreach modification in base cluster cluster_weight {


use "$saveaddress_data\\analysis_`dataset'.dta", clear


cap  mkdir "$saveaddress_grahs\general results\\`dataset'"
gl graph_save  "$saveaddress_grahs\general results\\`dataset'"

*local keep_log = " ljobs_seasonal ljobs_nonseasonal ljobs_low_wage ljobs_high_wage la
> vg_seasonal_wage lavg_nonseasonal_wage lavg_low_wage lavg_high_wage   exit ltrain ln
> on_wage_labcosts lawage llabcost_pe llabcost_capcost loprofit lmaterials l_labcost
> loprofits_pe lcap_lab lrev_pe lrevenue k l "


*CREATE GROWTH VARIABLES FOR THE REGRESSION
foreach var in ljobs_seasonal ljobs_nonseasonal ljobs_low_wage ljobs_high_wage lavg_se
> asonal_wage lavg_nonseasonal_wage lavg_low_wage lavg_high_wage  ltrain lnon_wage_lab
> costs lawage llabcost_pe llabcost_capcost loprofit lmaterials l_labcost  loprofits_p
> e lcap_lab lrev_pe lrevenue k l {

        gen `var'_2012 = `var' if taxyear == 2012
        bys FID : egen `var'_2012_full = max(`var'_2012)
        gen `var'_change = `var'-`var'_2012_full
}


        label var ljobs_seasonal_change "Seasonal_Employment"
        label var ljobs_nonseasonal_change "NonSeasonalEmployment"
        label var ljobs_low_wage_change "LowWageEmployment"
        label var ljobs_high_wage_change "HighWageEmployment"
        label var lavg_seasonal_wage_change "AverageWage_Seasonal"
        label var lavg_nonseasonal_wage_change "AverageWage_NonSeasonal"
        label var lavg_low_wage_change "AverageWage_LowWageWorker"
        label var lavg_high_wage_change "AverageWage_HighWageWorker"
        label var ltrain_change "EmployeeExpenditure"
        label var lnon_wage_labcosts_change "NonWageLabourCost"
        label var lawage_change  "AverageWage"
        label var llabcost_pe_change "LabourCostPerWorker"
        label var llabcost_capcost_change "LabourCostPerCapital"
        label var loprofit_change  "OperatingProfit"
        label var lmaterials_change "Materials"
        label var l_labcost_change "LabourCost"
        label var loprofits_pe_change "OperatingProfitPerWorker"
        label var lcap_lab_change "CapitalIntensity"
        label var lrev_pe_change "RevenuePerWorker"
        label var lrevenue_change "Revenue"
        label var k_change "Capital"
        label var l_change "Employment"



local keep_log = " ljobs_seasonal_change ljobs_nonseasonal_change ljobs_low_wage_chang
> e ljobs_high_wage_change lavg_seasonal_wage_change lavg_nonseasonal_wage_change lavg
> _low_wage_change lavg_high_wage_change   exit ltrain_change lnon_wage_labcosts_chang
> e lawage_change llabcost_pe_change llabcost_capcost_change loprofit_change lmaterial
> s_change l_labcost_change  loprofits_pe_change lcap_lab_change lrev_pe_change lreven
> ue_change k_change l_change"
```

```
foreach var of local keep_log  {
    local lab : variable label `var'
    didplot_`modification'  `var'
  graph export "$graph_save\\`lab'-`modification'.png", replace
}

        }

}


cap log close
STOP

*RESULTS BY FIRM-SIZE [MICRO ; SMALL AND MEDIUM TO LARGE AS DEFINED BY THE CIT C_TYPE
> VARIABLE]
cap mkdir "$saveaddress_grahs\results by firm size"

forvalues size = 1/3 {
    if "`size'" == "1"{
            local size_lab = "Micro"
        }
        if "`size '" == "2" {
            local size_lab = "Small"
        }
        if "`size'" == "3" {
            local size_lab = "Medium_large"
        }

        cap mkdir"$saveaddress_grahs\results by firm size\\`size_lab'"

foreach dataset in unbalanced unbalanced_survivors balanced survivors {
    foreach modification in base cluster cluster_weight {

use "$saveaddress_data\\analysis_`dataset'.dta", clear
keep if size_ctype_adj == `size'

cap  mkdir "$saveaddress_grahs\results by firm size\\`size_lab'\\`dataset'"
gl graph_save   "$saveaddress_grahs\results by firm size\\`size_lab'\\`dataset'"

*CREATE GROWTH VARIABLES FOR THE REGRESSION
foreach var in ljobs_seasonal ljobs_nonseasonal ljobs_low_wage ljobs_high_wage lavg_se
> asonal_wage lavg_nonseasonal_wage lavg_low_wage lavg_high_wage  ltrain lnon_wage_lab
> costs lawage llabcost_pe llabcost_capcost loprofit lmaterials l_labcost  loprofits_p
> e lcap_lab lrev_pe lrevenue k l {

        gen `var'_2012 = `var' if taxyear == 2012
        bys FID : egen `var'_2012_full = max(`var'_2012)
        gen `var'_change = `var'-`var'_2012_full
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        label var lavg_low_wage_change "AverageWage_LowWageWorker"
        label var lavg_high_wage_change "AverageWage_HighWageWorker"
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        label var lcap_lab_change "CapitalIntensity"
        label var lrev_pe_change "RevenuePerWorker"
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```

```
        label var k_change "Capital"
        label var l_change "Employment"



local keep_log = " ljobs_seasonal_change ljobs_nonseasonal_change ljobs_low_wage_chang
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> s_change l_labcost_change  loprofits_pe_change lcap_lab_change lrev_pe_change lreven
> ue_change k_change l_change"



foreach var of local keep_log  {
    local lab : variable label `var'
    cap noisily  didplot_`modification'  `var'
   cap noisily graph export "$graph_save\\`lab'-`modification'.png", replace
}

        }

}

}
```