Appendix

/\*First upload data, then import it in SAS\*/

proc import datafile = "/home/u60659161/MySAS/NCLB.xlsx"

out = work.NCLB

dbms = xlsx

replace;

getnames = yes;

run;

/\*Sorting the data\*/

proc sort data=NCLB;

by state year;

run;

/\*Looking at the frequency of the data\*/

proc freq data=NCLB nlevels;

Table state year;

run;

/\*Creating the after variable\*/

data After;

set NCLB;

if year > 2001 then after = 1;

else after = 0;

run;

/\*Creating the DID Variable\*/

data DID;

set after;

did=treatment\*after;

run;

/\*Regression\*/

ods output ParameterEstimates=PEforModel1 DataSummary=ObsModel1 FitStatistics=AdjRsqModel1 Effects=OverallSigModel1;

Proc Surveyreg data=DID;

class State Year / ref=first;

Model GraduationRate = did state year/ Solution Adjrsq ;

run;

/\* Step 1: Cleaning up the output of the regression analysis \*/

Data Table\_Long\_Project;

length Model $10;

length Parameter $30;

set PEforModel1 indsname=M;

keep Model Parameter EditedResults;

if M="WORK.PEFORMODEL1" then Model="Model1";

Where Estimate ne 0;

if Probt le 0.01 then Star="\*\*\*";

else if Probt le 0.05 then Star="\*\*";

else if Probt le 0.1 then Star="\*";

Results=Estimate;

EditedResults=Cats(put(Results,comma16.2),Star);

output;

Results=stderr;

EditedResults=Cats("(",put(Results,comma16.2),")");

output;

run;

/\* Sorting table \*/

proc sort data=Table\_Long\_Project out=Table\_Long\_Sorted;

by Model Parameter;

run;

/\* Step 2: Creating separate results columns corresponding to each model \*/

data Model1Results(rename=(EditedREsults=Model1));

set Table\_Long\_Sorted;

if Model="Model1" then output Model1Results;

drop Model;

run;

/\* Step 3: Creating the final results table that would include all models side-by-side\*/

data Table\_Wide;

merge Model1Results ;

by Parameter;

if mod(\_n\_,2)=1 then Regressors=Parameter;

length Order 3;

if Parameter="Intercept" then Order=1;

else if substr(Parameter,1,10)= "treatment " then Order =2;

else if substr(Parameter,1,6)= "after " then Order =3;

else if substr(Parameter,1,4)="did " then Order=5;

else Order=100;

run;

/\* Ordering the variables in the results table \*/

proc sort data=Table\_Wide out=Table\_Wide\_Sorted(drop=Order Parameter);

by Order;

run;

/\*Step 4: Create the rows for other statistics\*/

/\* The row for Number of Obs \*/

data NumofObs(keep=Label1 Model1);

merge ObsModel1(rename=(nvalue1=NVMoel1));

by Label1;

where Label1="Number of Observations";

Model1=put(NVMoel1,comma16.0);

run;

/\* The row for Adj R-sq \*/

Data AdjRsq;

merge AdjRsqModel1(rename=(cvalue1=Model1)) ;

by Label1;

Where Label1="Adjusted R-Square";

drop nvalue1;

run;

/\* The row for Overall Significance \*/

data OSM1(rename=(EditedValue=Model1)) ;

set OverallSigModel1 indsname=M;

Where Effect="Model";

Label1="Overall Significance";

if ProbF le 0.01 then Star="\*\*\*";

else if ProbF le 0.05 then Star="\*\*";

else if ProbF le 0.1 then Star="\*";

EditedValue=Cats(Put(FValue,comma16.2),Star);

if M="WORK.OVERALLSIGMODEL1" then output OSM1;

keep Label1 EditedValue;

run;

Data OverallSig;

merge OSM1 ;

by Label1;

run;

/\* Combining all rows for other statistics \*/

Data OtherStat;

set NumofObs AdjRsq OverallSig;

rename Label1=Regressors;

Run;

/\* Step 5: Adding other statistics to the results table \*/

Data Table\_Wide\_Sorted\_WithStat;

set Table\_Wide\_Sorted OtherStat;

run;

/\* creating new name for variables in the regression results table through defining a new format\*/

proc format;

value $VariableName(default=50) "did"="DID"

"Number of Observations"="Number of Obs"

"Adjusted R-Square"="Adjusted R-sq"

"State Alaska"="Alaska"

"State Arizona"="Arizona"

"State Arkansas"="Arkansas"

"State California"="California"

"State Colorado"="Colorado "

"State Connecticut"="Connecticut"

"State Delaware"="Delaware"

"State Florida"="Florida"

"State Georgia"="Georgia"

"State Hawaii"="Hawaii"

"State Idaho"="Idaho"

"State Illinois"="Illinois"

"State Indiana"="Indiana"

"State Iowa"="Iowa"

"State Kansas"="Kansas"

"State Kentucky"="Kentucky"

"State Louisiana"="Louisiana"

"State Maine"="Maine"

"State Maryland"="Maryland"

"State Massachusetts"="Massachusetts"

"State Michigan"="Michigan"

"State Minnesota"="Minnesota"

"State Mississippi"="Mississippi"

"State Missouri"="Missouri"

"State Montana"="Montana"

"State Nebraska"="Nebraska"

"State Nevada"="Nevada"

"State New Hampshire"="New Hampshire"

"State New Jersey"="New Jersey"

"State New Mexico"="New Mexico"

"State New York"="New York"

"State North Carolina"="North Carolina"

"State North Dakota"="North Dakota"

"State Ohio"="Ohio"

"State Oklahoma"="Oklahoma"

"State Oregon"="Oregon"

"State Pennsylvania"="Pennsylvania"

"State Rhode Island"="Rhode Island"

"State South Carolina"="South Carolina"

"State South Dakota"="South Dakota"

"State Tennessee"="Tennessee"

"State Texas"="Texas"

"State Utah"="Utah"

"State Vermont"="Vermont"

"State Virginia"="Virginia"

"State Washington"="Washington"

"State West Virginia"="West Virginia"

"State Wisconsin"="Wisconsin"

"State Wyoming"="Wyoming"

"Year 1998"="1998"

"Year 1999"="1999"

"Year 2000"="2000"

"Year 2001"="2001"

"Year 2002"="2002"

"Year 2003"="2003"

"Year 2004"="2004"

"Year 2005"="2005"

"Year 2006"="2006"

"Year 2007"="2007";

Run;

/\* Printing the clean results table \*/

ods excel file="/home/u60659161/MySAS/Project3.xlsx" options(Embedded\_Titles="ON" Embedded\_Footnotes="ON"); /\*Use the path to your MySAS folder \*/

Title "Table 1: Impact of No Child Left Behind Act on States";

footnote justify=left "Note: robust standard errors are in parentheses. \*, \*\*, and \*\*\* indicate

10%, 5%, and 1% significance levels, respectively.";

proc print data=Table\_Wide\_Sorted\_withstat noobs;

var Regressors;

var Model1 /style(header)={just=center} style(data)={just=center tagattr="type:String"};

format Regressors $VariableName.;

run;

ods excel close;