(R)

```
 _____  _____  _____  _____  _____
|   ___||   ___||   ___||   ___||   ___||
```
Statistics/Data Analysis   **15.1**   Copyright 1985-2017 StataCorp LLC
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     Notes:
          1. Unicode is supported; see help unicode_advice.
          2. More than 2 billion observations are allowed; see help obs_advice.
          3. Maximum number of variables is set to 5000; see help set_maxvar.

1 . cd "/home/ru/svd30/Downloads"
  /var/autofs/misc/home/ru/svd30/Downloads

2 . use basiclit.dta

3 . reg earnyr3 basiclit pretest

```
      Source |       SS           df       MS      Number o
> f obs   =      234
-------------+----------------------------------   F(2, 231
> )        =    248.08
       Model |  1.9031e+09          2   951559836   Prob > F
>          =    0.0000
    Residual |   886063962        231  3835774.73   R-square
> d        =    0.6823
-------------+----------------------------------   Adj R-sq
> uared    =    0.6796
       Total |  2.7892e+09        233  11970745.2   Root MSE
>          =    1958.5
```

```
------------------------------------------------------------------------------
     earnyr3 |      Coef.   Std. Err.      t    P>|t|     [
> 95% Con
>      f. Interval]
-------------+----------------------------------------------------------------
    basiclit |   2090.282   428.6152     4.88   0.000       1
> 245.787
>               2934.777
     pretest |   537.3847    31.7883    16.91   0.000       4
> 74.7526
>               600.0168
       _cons |   432.1051   2101.953     0.21   0.837      -3
> 709.345
>               4573.555
------------------------------------------------------------------------------
```

4 . reg earnyr3 basiclit pretest

Source	SS	df	MS
Model	1.9031e+09	2	951559836
Residual	886063962	231	3835774.73
Total	2.7892e+09	233	11970745.2

```
Number of obs =     234
F(2, 231)     =  248.08
Prob > F      =  0.0000
R-squared     =  0.6823
Adj R-squared =  0.6796
Root MSE      =  1958.5
```

earnyr3	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
basiclit	2090.282	428.6152	4.88	0.000	1245.787	2934.777
pretest	537.3847	31.7883	16.91	0.000	474.7526	600.0168
_cons	432.1051	2101.953	0.21	0.837	-3709.345	4573.555

5 . twoway (scatter earnyr3 pretest) (Line ehat pretest, sort) xline (60)
  Line is not a twoway plot type
  r(198);

6 . twoway (scatter earnyr3 pretest)

7 . predict ehat
  (option **xb** assumed; fitted values)

8 . twoway (scatter earnyr3 pretest)

9 . twoway (scatter earnyr3 pretest) (line ehat pretest, sort)

10. twoway (scatter earnyr3 pretest) (line ehat pretest, sort), xline(60)

11. twoway (scatter earnyr3 pretest) (line ehat pretest, sort), xline(60, lwidth(thin))

12. twoway (scatter earnyr3 pretest) (line ehat pretest, sort), xline(60, lwidth(medium))

13. twoway (scatter earnyr3 pretest) (line ehat pretest, sort), xline(60, lwidth(medium))

14. twoway (scatter earnyr3 pretest) (line ehat pretest, sort), xline(60, lwidth(medium))

15. translate @Results /home/ru/svd30/Desktop/Untitled.pdf.pdf
  (file /home/ru/svd30/Desktop/Untitled.pdf.pdf written in PDF format)

16. use eitc.dta
  no; data in memory would be lost
  r(4);

17. use eitc.dta, clear

18. gen child = children > 0

19. d

```
Contains data from eitc.dta
  obs:        13,746
  vars:           12                          10 Apr 2006 15:37
  size:       618,570
```

variable name	storage type	display format	value label	variable label
state	float	%9.0g		**State of Residence**
year	float	%9.0g		**Year [taxyear]**
urate	float	%9.0g		**State Unemp Rate**
children	byte	%8.0g		**Number of Children**
nonwhite	byte	%8.0g		**Dummy=1 if Hispanic/Black**
finc	double	%10.0g		**Annual Family Income (97$)**
earn	double	%10.0g		**Annual earnings (97$)**
age	byte	%8.0g		**Age of woman**
ed	byte	%8.0g		**Years of education**
work	byte	%8.0g		**Dummy =1 if Employed last year**
unearn	double	%10.0g		**Unearned Income (97$)**

child	float	%9.0g

Sorted by:
    Note: Dataset has changed since last saved.

20. edit

21. gen year1994 = year == 1994

22. reg earn year1994 child

Source	SS	df	MS
Model	1.1543e+11	2	5.7714e+10
Residual	4.4378e+12	13,743	322916704
Total	4.5533e+12	13,745	331267597

Number of obs	= 13,746
F(2, 13743)	= 178.73
Prob > F	= 0.0000
R-squared	= 0.0254
Adj R-squared	= 0.0252
Root MSE	= 17970

earn	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
year1994	-142.9866	413.8967	-0.35	0.730	-954.2806	668.3075
child	-5851.072	309.4932	-18.91	0.000	-6457.721	-5244.423
_cons	13784.14	243.4375	56.62	0.000	13306.97	14261.31

23. gen year1995 = year == 1995

24. reg earn year1995 child

Source	SS	df	MS
Model	1.1683e+11	2	5.8417e+10
Residual	4.4364e+12	13,743	322814531
Total	4.5533e+12	13,745	331267597

Number of obs	= 13,746
F(2, 13743)	= 180.96
Prob > F	= 0.0000
R-squared	= 0.0257
Adj R-squared	= 0.0255
Root MSE	= 17967

earn	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
year1995	903.1656	427.2227	2.11	0.035	65.75078	1740.58
child	-5845.771	309.4441	-18.89	0.000	-6452.323	-5239.218
_cons	13620.67	242.5376	56.16	0.000	13145.27	14096.08

25. edit

26. sum

Variable	Obs	Mean	Std. Dev.	Min	Max
state	13,746	54.52459	27.13489	11	95
year	13,746	1993.347	1.703207	1991	1996
urate	13,746	6.761734	1.462464	2.6	11.4
children	13,746	1.192638	1.382105	0	9
nonwhite	13,746	.6006838	.4897757	0	1
finc	13,746	15255.32	19444.25	0	575616.8
earn	13,746	10432.48	18200.76	0	537880.6
age	13,746	35.20966	10.15713	20	54
ed	13,746	8.806053	2.635639	0	11
work	13,746	.513022	.4998486	0	1
unearn	13,746	4.822844	7.122624	0	134.0575
child	13,746	.56882	.4952592	0	1
year1994	13,746	.1640477	.3703323	0	1
year1995	13,746	.1516805	.358724	0	1

27. gen year1996 = year == 1996

28. reg earn year1996 child

Source	SS	df	MS
Model	1.1694e+11	2	5.8471e+10
Residual	4.4363e+12	13,743	322806616
Total	4.5533e+12	13,745	331267597

Number of obs	=	13,746
F(2, 13743)	=	181.13
Prob > F	=	0.0000
R-squared	=	0.0257
Adj R-squared	=	0.0255
Root MSE	=	17967

earn	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
year1996	951.8134	434.1601	2.19	0.028	100.8003	1802.826
child	-5849.621	309.4329	-18.90	0.000	-6456.152	-5243.09
_cons	13621.02	241.8618	56.32	0.000	13146.94	14095.11

29. translate @Results /home/ru/svd30/Desktop/Untitled.pdf.pdf