



99% **46.4** **80.6** Kurtosis **48.49532**

Robbery Crime Rate per 100,000 population (BJS)

	Percentiles	Smallest		
1%	8.3	6.4		
5%	17.1	6.4		
10%	24	6.9	Obs	1,173
25%	71.1	7.6	Sum of wgt.	1,173
50%	124.1		Mean	161.8202
		Largest	Std. dev.	170.51
75%	192.7	1266.4		
90%	306.1	1400.6	Variance	29073.65
95%	402.5	1448	Skewness	3.882311
99%	1083.1	1635.1	Kurtosis	24.32595

othervio

	Percentiles	Smallest		
1%	52.9	39.6		
5%	100.6	43.4		
10%	122.1	43.8	Obs	1,173
25%	201.6	44.7	Sum of wgt.	1,173
50%	305.1		Mean	333.5893
		Largest	Std. dev.	188.0383
75%	440.3	1357.4		
90%	552	1485.4	Variance	35358.41
95%	655.9	1491.2	Skewness	1.544157
99%	936.9999	1613.7	Kurtosis	8.448142

72-99 ONLY - Lagged Rate per 100,000 resident pop
of sentenced prisoners in Stat

	Percentiles	Smallest		
1%	39	19		
5%	62	21		
10%	76	26	Obs	1,173
25%	114	26	Sum of wgt.	1,173
50%	187		Mean	226.5797
		Largest	Std. dev.	178.8881
75%	291	1650		
90%	410	1682	Variance	32000.95
95%	473	1782	Skewness	3.881709
99%	905	1913	Kurtosis	29.04173

pb1064

	Percentiles	Smallest		
1%	.3796886	.2482066		
5%	.7105804	.2658058		
10%	1.186826	.2839493	Obs	1,173
25%	2.202196	.2973519	Sum of wgt.	1,173
50%	4.026213		Mean	5.336217
		Largest	Std. dev.	4.885688
75%	6.850673	26.65354		
90%	10.4767	26.78969	Variance	23.86994
95%	11.73186	26.94793	Skewness	2.351575
99%	25.1352	26.97957	Kurtosis	9.704216

pw1064

	Percentiles	Smallest		
1%	24.20183	21.78043		
5%	47.1011	21.91194		
10%	52.75498	21.99967	Obs	1,173
25%	59.9397	22.06764	Sum of wgt.	1,173

50%	65.06128		Mean	62.94543
75%	69.2001	Largest	Std. dev.	9.761527
90%	71.27304	75.23706		
95%	73.03449	75.65321	Variance	95.28741
99%	74.63558	76.06671	Skewness	-2.223298
		76.52575	Kurtosis	9.068317

pm1029

	Percentiles	Smallest		
1%	12.73195	12.21368		
5%	13.55572	12.41844		
10%	14.02926	12.50534	Obs	1,173
25%	14.65337	12.50831	Sum of wgt.	1,173
50%	15.89517		Mean	16.08113
		Largest	Std. dev.	1.732143
75%	17.52571	21.55065		
90%	18.34835	21.97401	Variance	3.000321
95%	18.74896	22.05606	Skewness	.2675794
99%	20.01816	22.35269	Kurtosis	2.434813

avginc

	Percentiles	Smallest		
1%	9.321481	8.554884		
5%	10.08594	8.566631		
10%	10.66621	8.615	Obs	1,173
25%	11.93476	8.645796	Sum of wgt.	1,173
50%	13.40155		Mean	13.7248
		Largest	Std. dev.	2.554543
75%	15.27101	22.89234		
90%	17.12022	23.13307	Variance	6.525687
95%	18.3592	23.39974	Skewness	.7342556
99%	21.29597	23.64671	Kurtosis	3.641812

density

	Percentiles	Smallest		
1%	.0009535	.0007071		
5%	.005599	.0007083		
10%	.0096274	.00071	Obs	1,173
25%	.0319112	.0007106	Sum of wgt.	1,173
50%	.081569		Mean	.3520382
		Largest	Std. dev.	1.355472
75%	.177718	10.13149		
90%	.5210142	10.65598	Variance	1.837304
95%	.9380123	10.90248	Skewness	6.694125
99%	10.00683	11.10212	Kurtosis	47.29512

pop

	Percentiles	Smallest		
1%	.458377	.402753		
5%	.569273	.403437		
10%	.655273	.404764	Obs	1,173
25%	1.187706	.405315	Sum of wgt.	1,173
50%	3.271332		Mean	4.816341
		Largest	Std. dev.	5.252115
75%	5.685611	31.78083		
90%	11.4347	32.21771	Variance	27.58471
95%	16.6218	32.68279	Skewness	2.430632
99%	28.46425	33.14512	Kurtosis	10.32564

shall

Percentiles		Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	1,173
25%	0	0	Sum of wgt.	1,173
50%	0	Largest	Mean	.2429668
75%	0		Std. dev.	.4290581
90%	1	1	Variance	.1840908
95%	1	1	Skewness	1.198639
99%	1	1	Kurtosis	2.436735

1 . pwcorr

	year	vio	mur	rob	incarc~e	pb1064	pw1064
year	1.0000						
vio	0.1214	1.0000					
mur	-0.0330	0.8265	1.0000				
rob	-0.0142	0.9071	0.7976	1.0000			
incarc rate	0.5041	0.7027	0.7096	0.5668	1.0000		
pb1064	0.0686	0.5698	0.6018	0.5812	0.5308	1.0000	
pw1064	-0.0335	-0.5730	-0.6154	-0.5842	-0.5271	-0.9820	1.0000
pm1029	-0.8658	-0.1696	0.0150	-0.0860	-0.4463	0.0162	-0.0126
pop	0.0594	0.3190	0.0999	0.3172	0.0953	0.0581	-0.0654
avginc	0.5252	0.4080	0.2206	0.4148	0.4615	0.2627	-0.1912
density	-0.0040	0.6647	0.7486	0.7818	0.5593	0.5432	-0.5551
stateid	-0.0000	-0.3170	-0.2428	-0.2507	-0.2171	-0.3105	0.3112
shall	0.3794	-0.2069	-0.1794	-0.2125	0.0424	-0.1839	0.2123
othervio	0.2301	0.9221	0.7060	0.6738	0.7067	0.4618	-0.4643
	pm1029	pop	avginc	density	stateid	shall	othervio
pm1029	1.0000						
pop	-0.0975	1.0000					
avginc	-0.5279	0.2152	1.0000				
density	-0.0637	-0.0780	0.3433	1.0000			
stateid	0.0084	-0.0637	-0.2035	-0.1640	1.0000		
shall	-0.2772	-0.1244	-0.0000	-0.1126	0.1873	1.0000	
othervio	-0.2242	0.2754	0.3403	0.4428	-0.3266	-0.1679	1.0000

```

2 .
3 . /* year wise violence when shall law not in place */
4 . preserve

5 .      keep if shall==0
   (285 observations deleted)

6 .      collapse vio,by(year)

7 .      twoway line vio year,ysc(r(100,1000))

8 . restore

9 . /* year wise violence when shall law  in place */
10. preserve

```

```
11.          keep if shall==1
   (888 observations deleted)

12.          collapse vio,by(year)

13.          twoway line vio year,ysc(r(100,500))

14. restore

15.
16. /* year wise murder when shall law not in place */
17.
18. preserve

19.          keep if shall==0
   (285 observations deleted)

20.          collapse mur,by(year)

21.          twoway line mur year,ysc(r(1,20))

22. restore

23. /* year wise murder when shall law  in place */
24. preserve

25.          keep if shall==1
   (888 observations deleted)

26.          collapse mur,by(year)

27.          twoway line mur year,ysc(r(1,10))

28. restore

29. /* year wise robbery when shall law not in place */
30. preserve

31.          keep if shall==0
   (285 observations deleted)

32.          collapse rob,by(year)

33.          twoway line rob year,ysc(r(20,300))

34. restore

35. /* year wise robbery when shall law  in place */
36. preserve

37.          keep if shall==1
   (888 observations deleted)

38.          collapse rob,by(year)

39.          twoway line rob year,ysc(r(20,300))

40. restore

41. /* year wise other violence when shall law not in place */
```

```

42. preserve
43.          keep if shall==0
   (285 observations deleted)
44.          collapse othervio,by(year)
45.          twoway line othervio year,ysc(r(100,800))
46. restore
47. /* year wise other violence when shall law  in place */
48. preserve
49.          keep if shall==1
   (888 observations deleted)
50.          collapse othervio,by(year)
51.          twoway line othervio year,ysc(r(100,500))
52. restore
53.
54. /*Distribution Plots */
55.
56. histogram vio, freq normal
   (bin=30, start=47, width=95.826668)
57. graph hbox vio
58. summarize vio,detail

```

Violent Crime Rate per 100,000 population (BJS)

	Percentiles	Smallest		
1%	66.9	47		
5%	126.9	51.3		
10%	167.5	53.6	Obs	1,173
25%	283.1	53.7	Sum of wgt.	1,173
50%	443		Mean	503.0747
		Largest	Std. dev.	334.2772
75%	650.9	2661.4		
90%	850	2662.6	Variance	111741.2
95%	996.1	2832.8	Skewness	2.538371
99%	2010.6	2921.8	Kurtosis	14.87774

```

59.
60.
61. histogram mur, freq normal
   (bin=30, start=.2, width=2.6799999)
62. graph hbox mur
63. summarize mur,detail

```

Murder Crime Rate per 100,000 population (BJS)

	Percentiles	Smallest		
1%	1	.2		
5%	1.8	.6		
10%	2.3	.6	Obs	1,173
25%	3.7	.7	Sum of wgt.	1,173
50%	6.4		Mean	7.665132
		Largest	Std. dev.	7.52271
75%	9.8	75.2		
90%	12.1	77.8	Variance	56.59116
95%	14.4	78.5	Skewness	5.785826
99%	46.4	80.6	Kurtosis	48.49532

64.
 65. histogram rob, freq normal
 (bin=30, start=6.4000001, width=54.289999)

66. graph hbox rob

67. summarize rob,detail

Robbery Crime Rate per 100,000 population (BJS)

	Percentiles	Smallest		
1%	8.3	6.4		
5%	17.1	6.4		
10%	24	6.9	Obs	1,173
25%	71.1	7.6	Sum of wgt.	1,173
50%	124.1		Mean	161.8202
		Largest	Std. dev.	170.51
75%	192.7	1266.4		
90%	306.1	1400.6	Variance	29073.65
95%	402.5	1448	Skewness	3.882311
99%	1083.1	1635.1	Kurtosis	24.32595

68.
 69. histogram othervio, freq normal
 (bin=30, start=39.599998, width=52.470002)

70. graph hbox othervio

71. summarize othervio,detail

othervio

	Percentiles	Smallest		
1%	52.9	39.6		
5%	100.6	43.4		
10%	122.1	43.8	Obs	1,173
25%	201.6	44.7	Sum of wgt.	1,173
50%	305.1		Mean	333.5893
		Largest	Std. dev.	188.0383
75%	440.3	1357.4		
90%	552	1485.4	Variance	35358.41
95%	655.9	1491.2	Skewness	1.544157
99%	936.9999	1613.7	Kurtosis	8.448142

72.
 73. histogram incarc_rate, freq normal
 (bin=30, start=19, width=63.133333)

74. graph hbox incarc_rate

75. summarize incarc,detail

72-99 ONLY - Lagged Rate per 100,000 resident pop
 of sentenced prisoners in Stat

	Percentiles	Smallest		
1%	39	19		
5%	62	21		
10%	76	26	Obs	1,173
25%	114	26	Sum of wgt.	1,173
50%	187		Mean	226.5797
		Largest	Std. dev.	178.8881
75%	291	1650		
90%	410	1682	Variance	32000.95
95%	473	1782	Skewness	3.881709
99%	905	1913	Kurtosis	29.04173

76.
 77. histogram pbl064, freq normal
 (bin=30, start=.24820656, width=.89104546)

78. graph hbox pbl064

79. summarize pbl064,detail

pbl064				
	Percentiles	Smallest		
1%	.3796886	.2482066		
5%	.7105804	.2658058		
10%	1.186826	.2839493	Obs	1,173
25%	2.202196	.2973519	Sum of wgt.	1,173
50%	4.026213		Mean	5.336217
		Largest	Std. dev.	4.885688
75%	6.850673	26.65354		
90%	10.4767	26.78969	Variance	23.86994
95%	11.73186	26.94793	Skewness	2.351575
99%	25.1352	26.97957	Kurtosis	9.704216

80.
 81. histogram pwl064, freq normal
 (bin=30, start=21.78043, width=1.824844)

82. graph hbox pwl064

83. summarize pwl064,detail

pwl064				
	Percentiles	Smallest		
1%	24.20183	21.78043		
5%	47.1011	21.91194		
10%	52.75498	21.99967	Obs	1,173
25%	59.9397	22.06764	Sum of wgt.	1,173
50%	65.06128		Mean	62.94543
		Largest	Std. dev.	9.761527
75%	69.2001	75.23706		
90%	71.27304	75.65321	Variance	95.28741
95%	73.03449	76.06671	Skewness	-2.223298
99%	74.63558	76.52575	Kurtosis	9.068317

84.
 85. histogram pml029, freq normal
 (bin=30, start=12.21368, width=.33796686)

86. graph hbox pml029

87. summarize pml029,detail

pml029				
	Percentiles	Smallest		
1%	12.73195	12.21368		
5%	13.55572	12.41844		
10%	14.02926	12.50534	Obs	1,173
25%	14.65337	12.50831	Sum of wgt.	1,173
50%	15.89517		Mean	16.08113
		Largest	Std. dev.	1.732143
75%	17.52571	21.55065		
90%	18.34835	21.97401	Variance	3.000321
95%	18.74896	22.05606	Skewness	.2675794
99%	20.01816	22.35269	Kurtosis	2.434813

88.
 89. histogram pop, freq normal
 (bin=30, start=.402753, width=1.0914123)

90. graph hbox pop

91. summarize pop,detail

pop				
	Percentiles	Smallest		
1%	.458377	.402753		
5%	.569273	.403437		
10%	.655273	.404764	Obs	1,173
25%	1.187706	.405315	Sum of wgt.	1,173
50%	3.271332		Mean	4.816341
		Largest	Std. dev.	5.252115
75%	5.685611	31.78083		
90%	11.4347	32.21771	Variance	27.58471
95%	16.6218	32.68279	Skewness	2.430632
99%	28.46425	33.14512	Kurtosis	10.32564

92.
 93. histogram avginc, freq normal
 (bin=30, start=8.554884, width=.50306098)

94. graph hbox avginc

95. summarize avginc,detail

avginc				
	Percentiles	Smallest		
1%	9.321481	8.554884		
5%	10.08594	8.566631		
10%	10.66621	8.615	Obs	1,173
25%	11.93476	8.645796	Sum of wgt.	1,173
50%	13.40155		Mean	13.7248
		Largest	Std. dev.	2.554543
75%	15.27101	22.89234		
90%	17.12022	23.13307	Variance	6.525687
95%	18.3592	23.39974	Skewness	.7342556
99%	21.29597	23.64671	Kurtosis	3.641812

96.
 97. histogram density, freq normal
 (bin=30, start=.00070708, width=.37004695)

98. graph hbox density

99. summarize density,detail

density				
	Percentiles	Smallest		
1%	.0009535	.0007071		
5%	.005599	.0007083		
10%	.0096274	.00071	Obs	1,173
25%	.0319112	.0007106	Sum of wgt.	1,173
50%	.081569		Mean	.3520382
		Largest	Std. dev.	1.355472
75%	.177718	10.13149		
90%	.5210142	10.65598	Variance	1.837304
95%	.9380123	10.90248	Skewness	6.694125
99%	10.00683	11.10212	Kurtosis	47.29512


```
100
101 /* scatter plot w.r.t explanatory variables with shall law */
102
103 twoway scatter vio incarc_rate,mlabel(shall)
104 twoway scatter mur incarc_rate,mlabel(shall)
105 twoway scatter rob incarc_rate,mlabel(shall)
106 twoway scatter othervio incarc_rate,mlabel(shall)
107
108
109 twoway scatter vio pb1064,mlabel(shall)
110 twoway scatter mur pb1064,mlabel(shall)
111 twoway scatter rob pb1064,mlabel(shall)
112 twoway scatter othervio pb1064,mlabel(shall)
113
114 twoway scatter vio pw1064,mlabel(shall)
115 twoway scatter mur pw1064,mlabel(shall)
116 twoway scatter rob pw1064,mlabel(shall)
117 twoway scatter othervio pw1064,mlabel(shall)
118
119 twoway scatter vio pm1029,mlabel(shall)
120 twoway scatter mur pm1029,mlabel(shall)
121 twoway scatter rob pm1029,mlabel(shall)
122 twoway scatter othervio pm1029,mlabel(shall)
123
124
125 twoway scatter vio pop,mlabel(shall)
126 twoway scatter mur pop,mlabel(shall)
127 twoway scatter rob pop,mlabel(shall)
128 twoway scatter othervio pop,mlabel(shall)
129
130 twoway scatter vio avginc,mlabel(shall)
131 twoway scatter mur avginc,mlabel(shall)
132 twoway scatter rob avginc,mlabel(shall)
133 twoway scatter othervio avginc,mlabel(shall)
134
135 twoway scatter vio density,mlabel(shall)
```

```

136 twoway scatter mur density,mlabel(shall)
137 twoway scatter rob density,mlabel(shall)
138 twoway scatter othervio density,mlabel(shall)
139
140 /* scatter plot with different crime rates w.r.t year with shall and with out shall law */
141 preserve
142         keep if shall == 0
      (285 observations deleted)
143         graph twoway scatter vio year||scatter vio year
144         graph twoway scatter mur year||scatter mur year
145         graph twoway scatter rob year||scatter rob year
146         graph twoway scatter othervio year||scatter othervio year
147 restore
148
149 preserve
150         keep if shall == 1
      (888 observations deleted)
151         graph twoway scatter vio year||scatter vio year
152         graph twoway scatter mur year||scatter mur year
153         graph twoway scatter rob year||scatter rob year
154         graph twoway scatter othervio year||scatter othervio year
155 restore
156
157 /* Violence rate when shall law not in place across states */
158 preserve
159         keep if shall==0
      (285 observations deleted)
160         collapse vio,by(stateid)
161         twoway line vio stateid
162 restore
163 /* Violence rate when shall law in place across states */
164
165 preserve
166         keep if shall==1
      (888 observations deleted)
167         collapse vio,by(stateid)

```

```
168          twoway line vio stateid
169 restore
170 /* Murder rate when shall law not in place across states */
171
172 preserve
173          keep if shall==0
          (285 observations deleted)
174          collapse mur,by(stateid)
175          twoway line mur stateid
176 restore
177 /* Murder rate when shall law in place across states */
178
179 preserve
180          keep if shall==1
          (888 observations deleted)
181          collapse mur,by(stateid)
182          twoway line mur stateid
183 restore
184 /* Robbery rate when shall law not in place across states */
185
186 preserve
187          keep if shall==0
          (285 observations deleted)
188          collapse rob,by(stateid)
189          twoway line rob stateid
190 restore
191
192 /* Robbery rate when shall law in place across states */
193
194 preserve
195          keep if shall==1
          (888 observations deleted)
196          collapse rob,by(stateid)
197          twoway line rob stateid
198 restore
199
200 /* Other Violence rate when shall law not in place across states */
201
```

```

202 preserve

203         keep if shall==0
      (285 observations deleted)

204         collapse othervio,by(stateid)

205         twoway line othervio stateid

206 restore

207 /* Other Violence rate when shall law in place across states */
208
209
210 preserve

211         keep if shall==1
      (888 observations deleted)

212         collapse othervio,by(stateid)

213         twoway line othervio stateid

214 restore

215
216
217 /*hardcoding unique values as i tried with list and memory list cant get clue */
218
219 gen stateid7780 = stateid if (shall==1 & (year>=77 & year<=80))
      (1,157 missing values generated)

220 replace stateid7780=0 if(stateid7780==.)
      (1,157 real changes made)

221 replace stateid7780 =stateid if (stateid == 18|stateid==33|stateid==50|stateid==53)
      (76 real changes made)

222
223 gen stateid8085 = stateid if (shall==1 & (year>=81 & year<=85) & stateid!=stateid7780)
      (1,169 missing values generated)

224 replace stateid8085=0 if(stateid8085==.)
      (1,169 real changes made)

225 replace stateid8085 =stateid if (stateid == 23)
      (19 real changes made)

226
227 gen stateid8590 = stateid if (shall==1 & (year>=86 & year<=90)&stateid!=stateid7780 & stateid!=stat
      (1,153 missing values generated)

228 replace stateid8085=0 if(stateid8085==.)
      (0 real changes made)

229 replace stateid8085 =stateid if (stateid == 12|stateid==13|stateid==38|stateid==42|stateid==46|sta
      (161 real changes made)

230
231

```

```

232 gen stateid9095 = stateid if (shall==1 & (year>=91 & year<=95)&stateid!=stateid7780 & stateid!=stateid7780)
    (1,146 missing values generated)

233 replace stateid9095=0 if (stateid9095==.)
    (1,146 real changes made)

234 replace stateid9095 =stateid if (stateid == 2|stateid==4|stateid==16|stateid==22|stateid==28|stateid==34|stateid==40|stateid==46|stateid==52|stateid==58|stateid==64|stateid==70|stateid==76|stateid==82|stateid==88|stateid==94|stateid==100|stateid==106|stateid==112|stateid==118|stateid==124|stateid==130|stateid==136|stateid==142|stateid==148|stateid==154|stateid==160|stateid==166|stateid==172|stateid==178|stateid==184|stateid==190|stateid==196|stateid==202|stateid==208|stateid==214|stateid==220|stateid==226|stateid==232|stateid==238|stateid==244|stateid==250|stateid==256|stateid==262|stateid==268|stateid==274|stateid==280|stateid==286|stateid==292|stateid==298|stateid==304|stateid==310|stateid==316|stateid==322|stateid==328|stateid==334|stateid==340|stateid==346|stateid==352|stateid==358|stateid==364|stateid==370|stateid==376|stateid==382|stateid==388|stateid==394|stateid==400|stateid==406|stateid==412|stateid==418|stateid==424|stateid==430|stateid==436|stateid==442|stateid==448|stateid==454|stateid==460|stateid==466|stateid==472|stateid==478|stateid==484|stateid==490|stateid==496|stateid==502|stateid==508|stateid==514|stateid==520|stateid==526|stateid==532|stateid==538|stateid==544|stateid==550|stateid==556|stateid==562|stateid==568|stateid==574|stateid==580|stateid==586|stateid==592|stateid==598|stateid==604|stateid==610|stateid==616|stateid==622|stateid==628|stateid==634|stateid==640|stateid==646|stateid==652|stateid==658|stateid==664|stateid==670|stateid==676|stateid==682|stateid==688|stateid==694|stateid==700|stateid==706|stateid==712|stateid==718|stateid==724|stateid==730|stateid==736|stateid==742|stateid==748|stateid==754|stateid==760|stateid==766|stateid==772|stateid==778|stateid==784|stateid==790|stateid==796|stateid==802|stateid==808|stateid==814|stateid==820|stateid==826|stateid==832|stateid==838|stateid==844|stateid==850|stateid==856|stateid==862|stateid==868|stateid==874|stateid==880|stateid==886|stateid==892|stateid==898|stateid==904|stateid==910|stateid==916|stateid==922|stateid==928|stateid==934|stateid==940|stateid==946|stateid==952|stateid==958|stateid==964|stateid==970|stateid==976|stateid==982|stateid==988|stateid==994|stateid==1000)
    (180 real changes made)

235
236
237 gen stateid9599 = stateid if (shall==1 & (year>=96 & year<=99)&stateid!=stateid7780 & stateid!=stateid7780)
    (1,144 missing values generated)

238 replace stateid9599=0 if (stateid9599==.)
    (1,144 real changes made)

239 replace stateid9599 =stateid if (stateid == 5|stateid==21|stateid==32|stateid==37|stateid==40|stateid==46|stateid==52|stateid==58|stateid==64|stateid==70|stateid==76|stateid==82|stateid==88|stateid==94|stateid==100|stateid==106|stateid==112|stateid==118|stateid==124|stateid==130|stateid==136|stateid==142|stateid==148|stateid==154|stateid==160|stateid==166|stateid==172|stateid==178|stateid==184|stateid==190|stateid==196|stateid==202|stateid==208|stateid==214|stateid==220|stateid==226|stateid==232|stateid==238|stateid==244|stateid==250|stateid==256|stateid==262|stateid==268|stateid==274|stateid==280|stateid==286|stateid==292|stateid==298|stateid==304|stateid==310|stateid==316|stateid==322|stateid==328|stateid==334|stateid==340|stateid==346|stateid==352|stateid==358|stateid==364|stateid==370|stateid==376|stateid==382|stateid==388|stateid==394|stateid==400|stateid==406|stateid==412|stateid==418|stateid==424|stateid==430|stateid==436|stateid==442|stateid==448|stateid==454|stateid==460|stateid==466|stateid==472|stateid==478|stateid==484|stateid==490|stateid==496|stateid==502|stateid==508|stateid==514|stateid==520|stateid==526|stateid==532|stateid==538|stateid==544|stateid==550|stateid==556|stateid==562|stateid==568|stateid==574|stateid==580|stateid==586|stateid==592|stateid==598|stateid==604|stateid==610|stateid==616|stateid==622|stateid==628|stateid==634|stateid==640|stateid==646|stateid==652|stateid==658|stateid==664|stateid==670|stateid==676|stateid==682|stateid==688|stateid==694|stateid==700|stateid==706|stateid==712|stateid==718|stateid==724|stateid==730|stateid==736|stateid==742|stateid==748|stateid==754|stateid==760|stateid==766|stateid==772|stateid==778|stateid==784|stateid==790|stateid==796|stateid==802|stateid==808|stateid==814|stateid==820|stateid==826|stateid==832|stateid==838|stateid==844|stateid==850|stateid==856|stateid==862|stateid==868|stateid==874|stateid==880|stateid==886|stateid==892|stateid==898|stateid==904|stateid==910|stateid==916|stateid==922|stateid==928|stateid==934|stateid==940|stateid==946|stateid==952|stateid==958|stateid==964|stateid==970|stateid==976|stateid==982|stateid==988|stateid==994|stateid==1000)
    (155 real changes made)

240
241
242 /*Year 77-80 violence rate when states implemented shall law across years */
243
244 preserve

245             keep if (stateid7780!=0)
    (1,081 observations deleted)

246             collapse vio,by(year)

247             twoway line vio year,ysc(r(200,600))

248 restore

249 /*Year 80-85 violence rate when states implemented shall law across years */
250
251 preserve

252             keep if (stateid8085!=0)
    (989 observations deleted)

253             collapse vio,by(year)

254             twoway line vio year,ysc(r(200,600))

255 restore

256
257 /*Year 85-90 violence rate when states implemented shall law across years */
258
259
260 preserve

261             keep if (stateid8590!=0)
    (0 observations deleted)

262             collapse vio,by(year)

263             twoway line vio year,ysc(r(200,600))

```

```

264 restore

265
266 /*Year 90-95 violence rate when states implemented shall law across years */
267
268
269 preserve

270         keep if (stateid9095!=0)
      (966 observations deleted)

271         collapse vio,by(year)

272         twoway line vio year,ysc(r(200,600))

273 restore

274
275 /*Year 95-99 violence rate when states implemented shall law across years */
276 preserve

277         keep if (stateid9599!=0)
      (989 observations deleted)

278         collapse vio,by(year)

279         twoway line vio year,ysc(r(200,600))

280 restore

281
282 /*Year 77-80 Murder rate when states implemented shall law across years */
283
284 preserve

285         keep if (stateid7780!=0)
      (1,081 observations deleted)

286         collapse mur,by(year)

287         twoway line mur year,ysc(r(1,10))

288 restore

289 /*Year 80-85 Murder rate when states implemented shall law across years */
290
291 preserve

292         keep if (stateid8085!=0)
      (989 observations deleted)

293         collapse mur,by(year)

294         twoway line mur year,ysc(r(1,10))

295 restore

296 /*Year 85-90 Murder rate when states implemented shall law across years */
297
298 preserve

```

```
299          keep if (stateid8590!=0)
      (0 observations deleted)

300          collapse mur,by(year)

301          twoway line mur year,ysc(r(1,10))

302 restore

303
304 /*Year 90-95 Murder rate when states implemented shall law across years */
305
306
307 preserve

308          keep if (stateid9095!=0)
      (966 observations deleted)

309          collapse mur,by(year)

310          twoway line mur year,ysc(r(1,10))

311 restore

312
313 /*Year 95-99 Murder rate when states implemented shall law across years */
314
315
316 preserve

317          keep if (stateid9599!=0)
      (989 observations deleted)

318          collapse mur,by(year)

319          twoway line mur year,ysc(r(1,10))

320 restore

321
322 /*Year 77-80 Robbery rate when states implemented shall law across years */
323
324
325 preserve

326          keep if (stateid7780!=0)
      (1,081 observations deleted)

327          collapse rob,by(year)

328          twoway line rob year,ysc(r(1,10))

329 restore

330
331 /*Year 80-85 Robbery rate when states implemented shall law across years */
332
333
334 preserve
```

```
335          keep if (stateid8085!=0)
      (989 observations deleted)

336          collapse rob,by(year)

337          twoway line rob year,ysc(r(1,10))

338 restore

339
340 /*Year 85-90 Robbery rate when states implemented shall law across years */
341
342
343 preserve

344          keep if (stateid8590!=0)
      (0 observations deleted)

345          collapse rob,by(year)

346          twoway line rob year,ysc(r(1,10))

347 restore

348
349 /*Year 90-95 Robbery rate when states implemented shall law across years */
350
351
352 preserve

353          keep if (stateid9095!=0)
      (966 observations deleted)

354          collapse rob,by(year)

355          twoway line rob year,ysc(r(1,10))

356 restore

357
358 /*Year 95-99 Robbery rate when states implemented shall law across years */
359
360
361 preserve

362          keep if (stateid9599!=0)
      (989 observations deleted)

363          collapse rob,by(year)

364          twoway line rob year,ysc(r(1,10))

365 restore

366
367 /*Year 77-80 Other Violence rate when states implemented shall law across years */
368
369
370 preserve
```



```
371          keep if (stateid7780!=0)
(1,081 observations deleted)

372          collapse othervio,by(year)

373          twoway line othervio year,ysc(r(1,10))

374 restore

375
376 /*Year 80-85 Other Violence rate when states implemented shall law across years */
377
378
379 preserve

380          keep if (stateid8085!=0)
(989 observations deleted)

381          collapse othervio,by(year)

382          twoway line othervio year,ysc(r(1,10))

383 restore

384
385 /*Year 85-90 Other Violence rate when states implemented shall law across years */
386
387
388 preserve

389          keep if (stateid8590!=0)
(0 observations deleted)

390          collapse othervio,by(year)

391          twoway line othervio year,ysc(r(1,10))

392 restore

393
394 /*Year 90-95 Other Violence rate when states implemented shall law across years */
395
396
397 preserve

398          keep if (stateid9095!=0)
(966 observations deleted)

399          collapse othervio,by(year)

400          twoway line othervio year,ysc(r(1,10))

401 restore

402
403 /*Year 95-99 Other Violence rate when states implemented shall law across years */
404
405
406 preserve
```

```

407      keep if (stateid9599!=0)
      (989 observations deleted)

408      collapse othervio,by(year)

409      twoway line othervio year,ysc(r(1,10))

410 restore

411
412
413
414 xtset stateid year

```

```

Panel variable: stateid (strongly balanced)
Time variable: year, 77 to 99
Delta: 1 unit

```

```

415 xtline vio
416 xtline mur
417 xtline rob
418 xtline othervio

419
420
421 g logvio=log(vio)

422 histogram logvio, freq normal
      (bin=30, start=3.8501475, width=.13766026)

423 graph hbox logvio

424 summarize logvio,detail

```

logvio				
	Percentiles	Smallest		
1%	4.203199	3.850147		
5%	4.8434	3.937691		
10%	5.120983	3.981549	Obs	1,173
25%	5.6458	3.983413	Sum of wgt.	1,173
50%	6.09357		Mean	6.027293
		Largest	Std. dev.	.6456943
75%	6.478356	7.886608		
90%	6.745236	7.887058	Variance	.4169211
95%	6.903848	7.949021	Skewness	-.4267379
99%	7.606188	7.979955	Kurtosis	3.487111

```

425
426 g logmur=log(mur)

427 histogram logmur, freq normal
      (bin=30, start=-1.6094379, width=.19996456)

428 graph hbox logmur

```

429 summarize logmur,detail

logmur				
	Percentiles	Smallest		
1%	0	-1.609438		
5%	.5877866	-.5108256		
10%	.8329091	-.5108256	Obs	1,173
25%	1.308333	-.356675	Sum of wgt.	1,173
50%	1.856298		Mean	1.782542
		Largest	Std. dev.	.703418
75%	2.282382	4.320151		
90%	2.493206	4.354141	Variance	.4947969
95%	2.667228	4.363099	Skewness	-.1359629
99%	3.8373	4.389499	Kurtosis	4.183134

430

431 g logrob=log(rob)

432 histogram logrob, freq normal
(bin=30, start=1.856298, width=.18477205)

433 graph hbox logrob

434 summarize logrob,detail

logrob				
	Percentiles	Smallest		
1%	2.116256	1.856298		
5%	2.839078	1.856298		
10%	3.178054	1.931521	Obs	1,173
25%	4.264087	2.028148	Sum of wgt.	1,173
50%	4.821088		Mean	4.68516
		Largest	Std. dev.	.9546157
75%	5.261135	7.143933		
90%	5.723912	7.244656	Variance	.9112911
95%	5.997695	7.277938	Skewness	-.5202923
99%	6.987583	7.399459	Kurtosis	3.380082

435

436 g logothervio=log(othervio)

437 histogram logothervio, freq normal
(bin=30, start=3.6788292, width=.12358185)

438 graph hbox logothervio

439 summarize logothervio,detail

logothervio				
	Percentiles	Smallest		
1%	3.968403	3.678829		
5%	4.611152	3.770459		
10%	4.804841	3.779634	Obs	1,173
25%	5.306285	3.799973	Sum of wgt.	1,173
50%	5.72064		Mean	5.650882
		Largest	Std. dev.	.589422
75%	6.087456	7.213326		
90%	6.313548	7.30344	Variance	.3474183
95%	6.486008	7.307336	Skewness	-.4666877
99%	6.842683	7.386285	Kurtosis	3.169728

```

440
441 g logincarc_rate=log(incarc_rate)
442 histogram logincarc_rate, freq normal
    (bin=30, start=2.9444389, width=.15373297)
443 graph hbox logincarc_rate
444 summarize logincarc_rate,detail

```

logincarc_rate				
	Percentiles	Smallest		
1%	3.663562	2.944439		
5%	4.127134	3.044523		
10%	4.330733	3.258096	Obs	1,173
25%	4.736198	3.258096	Sum of wgt.	1,173
50%	5.231109		Mean	5.202726
		Largest	Std. dev.	.6622038
75%	5.673323	7.408531		
90%	6.016157	7.427739	Variance	.4385138
95%	6.159095	7.485492	Skewness	-.030965
99%	6.807935	7.556428	Kurtosis	3.197107

```

445
446 g logdensity=log(density)
447 histogram logdensity, freq normal
    (bin=30, start=-7.2543664, width=.32205007)
448 graph hbox logdensity
449 summarize logdensity,detail

```

logdensity				
	Percentiles	Smallest		
1%	-6.955408	-7.254366		
5%	-5.185166	-7.252669		
10%	-4.643144	-7.250187	Obs	1,173
25%	-3.444798	-7.249385	Sum of wgt.	1,173
50%	-2.506306		Mean	-2.546755
		Largest	Std. dev.	1.571322
75%	-1.727557	2.315649		
90%	-.651978	2.366122	Variance	2.469052
95%	-.0639922	2.38899	Skewness	.0463115
99%	2.303267	2.407136	Kurtosis	4.180406

```

450
451
452
453 reg logvio logincarc_rate pb1064 pw1064 pm1029 pop avginc logdensity shall

```

Source	SS	df	MS	Number of obs	=	1,173
Model	328.008468	8	41.0010585	F(8, 1164)	=	297.13
Residual	160.623091	1,164	.137992346	Prob > F	=	0.0000
				R-squared	=	0.6713
				Adj R-squared	=	0.6690
Total	488.631558	1,172	.416921125	Root MSE	=	.37147

logvio	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	.6935672	.0252298	27.49	0.000	.6440662	.7430682
pb1064	.0033125	.014386	0.23	0.818	-.0249129	.031538
pw1064	.0033576	.0070293	0.48	0.633	-.0104339	.0171491
pm1029	.1167641	.0102156	11.43	0.000	.096721	.1368071
pop	.0240749	.0023009	10.46	0.000	.0195605	.0285892
avginc	.0232989	.0063738	3.66	0.000	.0107936	.0358042
logdensity	.0928883	.0089614	10.37	0.000	.0753059	.1104707
shall	-.2826839	.0283135	-9.98	0.000	-.338235	-.2271328
_cons	.1816538	.4902108	0.37	0.711	-.7801417	1.143449

454 estimates store ols

455

456 test pb1064 pw1064

(1) **pb1064 = 0**

(2) **pw1064 = 0**

F(2, 1164) = **0.69**
 Prob > F = **0.5037**

457

458 predict ehat,xb

459

460 predict sl,residual

461

462 graph twoway scatter sl ehat, yline(0)

463

464 estat imtest, white

White's test

H0: Homoskedasticity

Ha: Unrestricted heteroskedasticity

chi2(43) = **293.46**
 Prob > chi2 = **0.0000**

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	293.46	43	0.0000
Skewness	35.45	8	0.0000
Kurtosis	0.08	1	0.7754
Total	328.99	52	0.0000

465

466 reg logvio logincarc_rate pm1029 pop avginc shall logdensity

Source	SS	df	MS	Number of obs	=	1,173
Model	327.819114	6	54.6365191	F(6, 1166)	=	396.15
Residual	160.812444	1,166	.137918048	Prob > F	=	0.0000
				R-squared	=	0.6709
				Adj R-squared	=	0.6692
Total	488.631558	1,172	.416921125	Root MSE	=	.37137

logvio	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	.6781481	.0202026	33.57	0.000	.6385106	.7177857
pm1029	.1134168	.0086277	13.15	0.000	.0964893	.1303443
pop	.0245819	.0022304	11.02	0.000	.020206	.0289579
avginc	.0239844	.0053965	4.44	0.000	.0133965	.0345722
shall	-.2780539	.0274432	-10.13	0.000	-.3318975	-.2242102
logdensity	.0880118	.0079309	11.10	0.000	.0724513	.1035723
_cons	.5193309	.2328941	2.23	0.026	.0623926	.9762693

467

468 predict ehat1,xb

469

470 predict s2,residual

471

472 graph twoway scatter s2 ehat1, yline(0)

473

474 estat imtest, white

White's test

H0: Homoskedasticity

Ha: Unrestricted heteroskedasticity

chi2(26) = 156.18

Prob > chi2 = 0.0000

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	156.18	26	0.0000
Skewness	29.77	6	0.0000
Kurtosis	0.03	1	0.8585
Total	185.99	33	0.0000

475

476

477 reg logvio logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity, vce(robust)

Linear regression

Number of obs	=	1,173
F(8, 1164)	=	299.91
Prob > F	=	0.0000
R-squared	=	0.6713
Root MSE	=	.37147

logvio	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	.6935672	.0246505	28.14	0.000	.6452028	.7419316
pb1064	.0033125	.016037	0.21	0.836	-.0281521	.0347771
pw1064	.0033576	.0080255	0.42	0.676	-.0123884	.0191036
pm1029	.1167641	.0098848	11.81	0.000	.09737	.1361582
pop	.0240749	.0024971	9.64	0.000	.0191755	.0289742
avginc	.0232989	.0061111	3.81	0.000	.0113088	.0352889
shall	-.2826839	.029917	-9.45	0.000	-.3413811	-.2239867
logdensity	.0928883	.0093021	9.99	0.000	.0746375	.1111391
_cons	.1816538	.5714627	0.32	0.751	-.9395583	1.302866

```

478 estimates store fixedclusterrobust
479
480 predict ehat3,xb
481
482 predict s3,residual
483
484 graph twoway scatter s3 ehat3, yline(0)
485
486 estat imtest, white

```

White's test
H0: Homoskedasticity
Ha: Unrestricted heteroskedasticity

chi2(43) = **293.46**
Prob > chi2 = **0.0000**

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	293.46	43	0.0000
Skewness	35.45	8	0.0000
Kurtosis	0.08	1	0.7754
Total	328.99	52	0.0000

```

487
488 reg logvio logincarc_rate pm1029 pop avginc shall logdensity,vce(robust)

```

Linear regression	Number of obs	=	1,173
	F(6, 1166)	=	389.89
	Prob > F	=	0.0000
	R-squared	=	0.6709
	Root MSE	=	.37137

logvio	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	.6781481	.0191451	35.42	0.000	.6405855	.7157108
pm1029	.1134168	.0080454	14.10	0.000	.0976317	.1292019
pop	.0245819	.0024664	9.97	0.000	.0197428	.0294211
avginc	.0239844	.0050571	4.74	0.000	.0140623	.0339064
shall	-.2780539	.0282393	-9.85	0.000	-.3334594	-.2226483
logdensity	.0880118	.0075957	11.59	0.000	.073109	.1029146
_cons	.5193309	.2162536	2.40	0.016	.0950413	.9436206

```

489
490 predict ehat4,xb
491
492 predict s4,residual

```

```

493
494 graph twoway scatter s4 ehat4, yline(0)
495
496
497 xtreg logvio logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity, fe

```

```

Fixed-effects (within) regression              Number of obs   =       1,173
Group variable: stateid                     Number of groups =        51

R-squared:                                     Obs per group:
    Within = 0.2236                             min =         23
    Between = 0.1068                            avg  =        23.0
    Overall = 0.0757                            max  =         23

corr(u_i, Xb) = -0.6657                        F(8,1114)       =       40.11
                                           Prob > F        =       0.0000

```

logvio	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	-.0672299	.0282092	-2.38	0.017	-.122579	-.0118808
pb1064	.0952893	.0150322	6.34	0.000	.0657947	.1247839
pw1064	.0428067	.0052073	8.22	0.000	.0325894	.053024
pm1029	-.0690675	.0083143	-8.31	0.000	-.0853809	-.052754
pop	.024386	.0092824	2.63	0.009	.0061732	.0425989
avginc	-.0041476	.0057273	-0.72	0.469	-.0153851	.0070899
shall	-.0379066	.0189886	-2.00	0.046	-.075164	-.0006491
logdensity	-.251832	.0859535	-2.93	0.003	-.420481	-.0831831
_cons	3.592115	.4393088	8.18	0.000	2.730149	4.454081
sigma_u	.81282483					
sigma_e	.16012284					
rho	.96264251	(fraction of variance due to u_i)				

F test that all u_i=0: F(50, 1114) = 103.01 Prob > F = 0.0000

```

498
499 xtreg logvio logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity, fe vce(cluster stateid)

```

```

Fixed-effects (within) regression              Number of obs   =       1,173
Group variable: stateid                     Number of groups =        51

R-squared:                                     Obs per group:
    Within = 0.2236                             min =         23
    Between = 0.1068                            avg  =        23.0
    Overall = 0.0757                            max  =         23

corr(u_i, Xb) = -0.6657                        F(8,50)        =       5.89
                                           Prob > F        =       0.0000

```

(Std. err. adjusted for 51 clusters in **stateid**)

logvio	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	-.0672299	.0690289	-0.97	0.335	-.2058784	.0714187
pb1064	.0952893	.0315747	3.02	0.004	.0318696	.1587089
pw1064	.0428067	.0145712	2.94	0.005	.0135395	.0720739
pm1029	-.0690675	.0257976	-2.68	0.010	-.1208835	-.0172514
pop	.024386	.0119407	2.04	0.046	.0004024	.0483697
avginc	-.0041476	.0131294	-0.32	0.753	-.0305188	.0222236
shall	-.0379066	.0430022	-0.88	0.382	-.124279	.0484659
logdensity	-.251832	.1676589	-1.50	0.139	-.5885848	.0849207
_cons	3.592115	.7697758	4.67	0.000	2.045974	5.138255
sigma_u	.81282483					
sigma_e	.16012284					
rho	.96264251	(fraction of variance due to u_i)				


```

500
501 predict ehat5,xb

502
503 predict s5,residual

504
505 graph twoway scatter s5 ehat5, yline(0)

506
507 xttest3

```

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: $\sigma(i)^2 = \sigma^2$ for all i

```

chi2 (51) = 1503.84
Prob>chi2 = 0.0000

```

```

508
509
510 test avginc

```

(1) **avginc = 0**

```

F( 1, 50) = 0.10
Prob > F = 0.7534

```

```

511
512 xtreg logvio logincarc_rate pb1064 pw1064 pm1029 pop shall logdensity, fe vce (cluster stateid)

```

```

Fixed-effects (within) regression      Number of obs   = 1,173
Group variable: stateid              Number of groups = 51

```

```

R-squared:                             Obs per group:
  Within = 0.2233                      min = 23
  Between = 0.1087                     avg = 23.0
  Overall = 0.0771                     max = 23

```

```

corr(u_i, Xb) = -0.6658                F(7,50) = 7.06
                                         Prob > F = 0.0000

```

(Std. err. adjusted for 51 clusters in **stateid**)

logvio	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	-.0726068	.0664483	-1.09	0.280	-.2060721	.0608584
pb1064	.0940313	.0306698	3.07	0.003	.0324293	.1556333
pw1064	.0425889	.0145957	2.92	0.005	.0132725	.0719052
pm1029	-.0672519	.0244447	-2.75	0.008	-.1163505	-.0181534
pop	.0241646	.011653	2.07	0.043	.0007589	.0475703
shall	-.0380101	.0429559	-0.88	0.380	-.1242896	.0482694
logdensity	-.2503523	.1668377	-1.50	0.140	-.5854557	.0847511
_cons	3.559252	.7664323	4.64	0.000	2.019827	5.098677
sigma_u	.81222128					
sigma_e	.16008869					
rho	.96260441	(fraction of variance due to u_i)				

```

513
514 predict ehat6,xb

515
516 predict s6,residual

517
518 graph twoway scatter s6 ehat6, yline(0)

519
520
521 xtreg logvio logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity i.year, fe

```

```

Fixed-effects (within) regression      Number of obs   =      1,173
Group variable: stateid              Number of groups =       51

```

```

R-squared:                            Obs per group:
    Within = 0.4256                      min =      23
    Between = 0.2521                     avg =     23.0
    Overall = 0.1791                     max =      23

```

```

corr(u_i, Xb) = -0.7920                F(30,1092)      =      26.97
                                          Prob > F        =      0.0000

```

logvio	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	-.1042005	.0281708	-3.70	0.000	-.1594756	-.0489254
pb1064	-.0116159	.0196878	-0.59	0.555	-.050246	.0270142
pw1064	-.0012751	.0076177	-0.17	0.867	-.0162221	.0136719
pm1029	.0790354	.0154122	5.13	0.000	.0487945	.1092763
pop	.0060215	.0083075	0.72	0.469	-.0102788	.0223219
avginc	.0018515	.0062919	0.29	0.769	-.010494	.014197
shall	-.0280295	.0172992	-1.62	0.105	-.0619729	.005914
logdensity	-.2539255	.0768528	-3.30	0.001	-.4047213	-.1031297
year						
78	.0676702	.0280068	2.42	0.016	.012717	.1226233
79	.1865317	.028683	6.50	0.000	.1302517	.2428117
80	.2485785	.0292264	8.51	0.000	.1912323	.3059247
81	.2569276	.0304912	8.43	0.000	.1970997	.3167555
82	.2505044	.0327855	7.64	0.000	.1861746	.3148342
83	.2292094	.0358749	6.39	0.000	.1588179	.299601
84	.2715517	.0397885	6.82	0.000	.1934812	.3496222
85	.3302087	.0435107	7.59	0.000	.2448346	.4155828
86	.4184033	.0478227	8.75	0.000	.3245685	.5122381
87	.4274345	.052169	8.19	0.000	.3250717	.5297972
88	.4992313	.0569334	8.77	0.000	.3875201	.6109425
89	.5644762	.0613829	9.20	0.000	.4440344	.684918
90	.7010562	.0743982	9.42	0.000	.5550765	.8470359
91	.7656106	.0780946	9.80	0.000	.6123781	.9188431
92	.8085042	.082475	9.80	0.000	.6466768	.9703315
93	.8406783	.0856934	9.81	0.000	.6725359	1.008821
94	.8368897	.0895086	9.35	0.000	.6612615	1.012518
95	.8428252	.0933387	9.03	0.000	.6596817	1.025969
96	.7985925	.0970704	8.23	0.000	.6081268	.9890581
97	.787869	.1006015	7.83	0.000	.5904749	.985263
98	.7426846	.1046289	7.10	0.000	.5373882	.947981
99	.693198	.1081344	6.41	0.000	.4810233	.9053728
_cons	4.243414	.4896784	8.67	0.000	3.282597	5.204231
sigma_u	.94152993					
sigma_e	.13910999					
rho	.97863663	(fraction of variance due to u_i)				

```

F test that all u_i=0: F(50, 1092) = 123.48      Prob > F = 0.0000

```

522

523 xtreg logvio logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity i.year, fe vce(cluster

Fixed-effects (within) regression
 Group variable: **stateid**

Number of obs = **1,173**
 Number of groups = **51**

R-squared:

Within = **0.4256**
 Between = **0.2521**
 Overall = **0.1791**

Obs per group:

min = **23**
 avg = **23.0**
 max = **23**

corr(u_i, Xb) = **-0.7920**

F(30,50) = **50.65**
 Prob > F = **0.0000**

(Std. err. adjusted for **51** clusters in **stateid**)

logvio	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	-.1042005	.0701137	-1.49	0.144	-.245028	.036627
pb1064	-.0116159	.0518888	-0.22	0.824	-.1158377	.0926059
pw1064	-.0012751	.02644	-0.05	0.962	-.0543814	.0518312
pm1029	.0790354	.0542966	1.46	0.152	-.0300225	.1880933
pop	.0060215	.0132625	0.45	0.652	-.020617	.03266
avginc	.0018515	.016111	0.11	0.909	-.0305084	.0342114
shall	-.0280295	.0393915	-0.71	0.480	-.1071496	.0510907
logdensity	-.2539255	.1934079	-1.31	0.195	-.6423967	.1345458
year						
78	.0676702	.0162234	4.17	0.000	.0350845	.1002558
79	.1865317	.0279303	6.68	0.000	.130432	.2426314
80	.2485785	.0398247	6.24	0.000	.1685882	.3285687
81	.2569276	.0441591	5.82	0.000	.1682314	.3456238
82	.2505044	.0552367	4.54	0.000	.1395581	.3614506
83	.2292094	.0683524	3.35	0.002	.0919195	.3664994
84	.2715517	.0836701	3.25	0.002	.1034954	.439608
85	.3302087	.0991093	3.33	0.002	.1311418	.5292756
86	.4184033	.1156434	3.62	0.001	.1861267	.6506799
87	.4274345	.1327176	3.22	0.002	.1608633	.6940056
88	.4992313	.1477365	3.38	0.001	.2024938	.7959688
89	.5644762	.1624827	3.47	0.001	.23812	.8908324
90	.7010562	.2107014	3.33	0.002	.2778501	1.124262
91	.7656106	.2205978	3.47	0.001	.3225269	1.208694
92	.8085042	.2334615	3.46	0.001	.3395831	1.277425
93	.8406783	.2436728	3.45	0.001	.3512471	1.33011
94	.8368897	.2525728	3.31	0.002	.3295823	1.344197
95	.8428252	.2644269	3.19	0.002	.3117082	1.373942
96	.7985925	.2765084	2.89	0.006	.2432089	1.353976
97	.787869	.2843986	2.77	0.008	.2166375	1.3591
98	.7426846	.2966396	2.50	0.016	.1468665	1.338503
99	.693198	.3071174	2.26	0.028	.0763345	1.310062
_cons	4.243414	1.159203	3.66	0.001	1.915085	6.571743
sigma_u	.94152993					
sigma_e	.13910999					
rho	.97863663	(fraction of variance due to u_i)				

524

525 predict ehat7,xb

526

527 predict s7,residual

528

529 graph twoway scatter s7 ehat7, yline(0)

530

531

532 testparm i.year

```
( 1) 78.year = 0
( 2) 79.year = 0
( 3) 80.year = 0
( 4) 81.year = 0
( 5) 82.year = 0
( 6) 83.year = 0
( 7) 84.year = 0
( 8) 85.year = 0
( 9) 86.year = 0
(10) 87.year = 0
(11) 88.year = 0
(12) 89.year = 0
(13) 90.year = 0
(14) 91.year = 0
(15) 92.year = 0
(16) 93.year = 0
(17) 94.year = 0
(18) 95.year = 0
(19) 96.year = 0
(20) 97.year = 0
(21) 98.year = 0
(22) 99.year = 0
```

```
F( 22, 50) = 21.15
Prob > F = 0.0000
```

533

534 /*Other Study w.r.y mur,rob and other vio w.r.t shall law and other variables */

535

536

537 reg logmur logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity, vce(robust)

Linear regression

```
Number of obs    = 1,173
F(8, 1164)       = 236.17
Prob > F         = 0.0000
R-squared        = 0.6493
Root MSE        = .41801
```

logmur	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	.7362824	.0370714	19.86	0.000	.6635481	.8090168
pb1064	.0398446	.0187626	2.12	0.034	.0030323	.076657
pw1064	.0076499	.0089313	0.86	0.392	-.0098734	.0251732
pm1029	.1661738	.0149406	11.12	0.000	.1368602	.1954873
pop	.022887	.0031127	7.35	0.000	.0167798	.0289941
avginc	-.0420935	.008937	-4.71	0.000	-.059628	-.0245591
shall	-.2172423	.0336449	-6.46	0.000	-.2832537	-.151231
logdensity	.075228	.0114808	6.55	0.000	.0527027	.0977533
_cons	-4.702676	.6090757	-7.72	0.000	-5.897685	-3.507667

538 estimate store olsmur

539

540 reg logrob logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity, vce(robust)

Linear regression	Number of obs	=	1,173
	F(8, 1164)	=	319.82
	Prob > F	=	0.0000
	R-squared	=	0.6899
	Root MSE	=	.53341

logrob	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	.6159967	.0363407	16.95	0.000	.5446962	.6872973
pb1064	.042355	.0220157	1.92	0.055	-.0008398	.0855498
pw1064	.0149416	.0112489	1.33	0.184	-.0071288	.037012
pm1029	.1600125	.0131161	12.20	0.000	.1342787	.1857464
pop	.0472803	.0042123	11.22	0.000	.0390158	.0555448
avginc	.0474107	.0078771	6.02	0.000	.0319557	.0628657
shall	-.4178669	.0440234	-9.49	0.000	-.504241	-.3314928
logdensity	.2307483	.0129727	17.79	0.000	.2052959	.2562007
_cons	-2.448641	.8464578	-2.89	0.004	-4.109394	-.787887

541 estimate store olsrob

542

543 reg logothervio logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity, vce(robust)

Linear regression	Number of obs	=	1,173
	F(8, 1164)	=	253.52
	Prob > F	=	0.0000
	R-squared	=	0.6138
	Root MSE	=	.36755

logothervio	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	.7516862	.0231836	32.42	0.000	.7061998	.7971726
pb1064	-.0220912	.0158217	-1.40	0.163	-.0531335	.0089511
pw1064	-.0033954	.0078905	-0.43	0.667	-.0188767	.0120859
pm1029	.0995236	.0099764	9.98	0.000	.0799498	.1190973
pop	.0156382	.001999	7.82	0.000	.0117161	.0195602
avginc	.0117596	.0065301	1.80	0.072	-.0010525	.0245717
shall	-.2409245	.0296171	-8.13	0.000	-.2990334	-.1828156
logdensity	.0442578	.0092765	4.77	0.000	.0260572	.0624584
_cons	.4057572	.5488479	0.74	0.460	-.6710848	1.482599

544 estimate store olsothervio

545

546 xtreg logmur logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity, fe vce(cluster stateid)

Fixed-effects (within) regression	Number of obs	=	1,173
Group variable: stateid	Number of groups	=	51

R-squared:	Obs per group:	
Within = 0.1448	min =	23
Between = 0.3204	avg =	23.0
Overall = 0.2658	max =	23

corr(u_i, Xb) = -0.8914	F(8, 50)	=	9.19
	Prob > F	=	0.0000

(Std. err. adjusted for 51 clusters in **stateid**)

logothervio	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	.0186821	.0781843	0.24	0.812	-.1383556	.1757199
pb1064	.0243922	.0352095	0.69	0.492	-.0463282	.0951126
pw1064	.0316746	.0157847	2.01	0.050	-.00003	.0633792
pm1029	-.0761758	.0282489	-2.70	0.010	-.1329155	-.0194362
pop	.0354944	.0131615	2.70	0.010	.0090588	.0619301
avginc	.0141287	.0144215	0.98	0.332	-.0148378	.0430951
shall	-.0528694	.0466816	-1.13	0.263	-.1466322	.0408935
logdensity	-.3824609	.2017059	-1.90	0.064	-.7875991	.0226773
_cons	3.328689	.8751216	3.80	0.000	1.570955	5.086422
sigma_u	.94852485					
sigma_e	.17379294					
rho	.96751922	(fraction of variance due to u_i)				

553 estimate store feothervio

554

555 xtreg logmur logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity i.year, fe vce(cluster

Fixed-effects (within) regression	Number of obs	=	1,173
Group variable: stateid	Number of groups	=	51
R-squared:	Obs per group:		
Within = 0.2743	min =		23
Between = 0.3462	avg =		23.0
Overall = 0.2602	max =		23

	F(30,50)	=	23.56
corr(u_i, Xb) = -0.8625	Prob > F	=	0.0000

(Std. err. adjusted for 51 clusters in **stateid**)

logmur	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	-.097374	.0632256	-1.54	0.130	-.2243664	.0296184
pb1064	-.0747712	.0953016	-0.78	0.436	-.2661901	.1166478
pw1064	-.0121343	.0242838	-0.50	0.619	-.0609099	.0366412
pm1029	.072678	.0436957	1.66	0.103	-.0150874	.1604434
pop	-.0220534	.0255257	-0.86	0.392	-.0733232	.0292164
avginc	.0655945	.0171512	3.82	0.000	.0311452	.1000438
shall	-.0182687	.0405761	-0.45	0.654	-.0997682	.0632308
logdensity	-.2756466	.1953226	-1.41	0.164	-.6679636	.1166703
year						
78	.0073549	.0325562	0.23	0.822	-.0580361	.0727458
79	.0835518	.0305103	2.74	0.009	.02227	.1448336
80	.13454	.0458216	2.94	0.005	.0425046	.2265753
81	.1542946	.0543531	2.84	0.007	.0451232	.2634661
82	.0900484	.0620696	1.45	0.153	-.0346219	.2147188
83	.0461393	.0704676	0.65	0.516	-.0953991	.1876778
84	-.0568242	.0763014	-0.74	0.460	-.21008	.0964315
85	-.004386	.090361	-0.05	0.961	-.1858814	.1771095
86	.0737611	.0963548	0.77	0.448	-.1197733	.2672954
87	.0625852	.1051157	0.60	0.554	-.148546	.2737163
88	.0808516	.1263883	0.64	0.525	-.1730066	.3347099
89	.0908247	.1413771	0.64	0.524	-.1931395	.374789
90	.2010231	.1838312	1.09	0.279	-.1682126	.5702589
91	.2596706	.1959554	1.33	0.191	-.1339174	.6532586
92	.2321529	.2046	1.13	0.262	-.1787983	.6431041
93	.3285592	.2110069	1.56	0.126	-.0952606	.752379
94	.2266539	.2244348	1.01	0.317	-.2241366	.6774444
95	.2499018	.2272343	1.10	0.277	-.2065117	.7063153
96	.1904031	.2401148	0.79	0.432	-.2918817	.6726879
97	.0930874	.2439126	0.38	0.704	-.3968255	.5830004
98	.0360549	.2573069	0.14	0.889	-.4807612	.552871

99	-.0248638	.2624991	-0.09	0.925	-.5521087	.5023811
_cons	.6804811	1.355935	0.50	0.618	-2.042994	3.403956
sigma_u	1.1403091					
sigma_e	.20512592					
rho	.96865522	(fraction of variance due to u_i)				

556 estimate store tfemur

557 testparm i.year

```
( 1) 78.year = 0
( 2) 79.year = 0
( 3) 80.year = 0
( 4) 81.year = 0
( 5) 82.year = 0
( 6) 83.year = 0
( 7) 84.year = 0
( 8) 85.year = 0
( 9) 86.year = 0
(10) 87.year = 0
(11) 88.year = 0
(12) 89.year = 0
(13) 90.year = 0
(14) 91.year = 0
(15) 92.year = 0
(16) 93.year = 0
(17) 94.year = 0
(18) 95.year = 0
(19) 96.year = 0
(20) 97.year = 0
(21) 98.year = 0
(22) 99.year = 0
```

```
F( 22, 50) = 18.49
Prob > F = 0.0000
```

558

559

560 xtreg logrob logincarc_rate pb1064 pw1064 pm1029 pop avginc shall logdensity i.year, fe vce(cluster

```
Fixed-effects (within) regression      Number of obs   =      1,173
Group variable: stateid                Number of groups =       51
```

```
R-squared:                             Obs per group:
    Within = 0.2593                      min =      23
    Between = 0.0112                     avg =     23.0
    Overall = 0.0227                     max =      23
```

```
corr(u_i, Xb) = -0.0431                 F(30,50)         =      41.63
                                         Prob > F         =      0.0000
```

(Std. err. adjusted for 51 clusters in stateid)

logrob	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	-.2210864	.114238	-1.94	0.059	-.4505402	.0083675
pb1064	-.0211238	.0728314	-0.29	0.773	-.1674099	.1251623
pw1064	-.021238	.0336132	-0.63	0.530	-.0887521	.0462761
pm1029	.1142254	.0745984	1.53	0.132	-.0356099	.2640608
pop	-.0028893	.0209791	-0.14	0.891	-.0450269	.0392484
avginc	.0163426	.0216896	0.75	0.455	-.0272223	.0599074
shall	.0084954	.0519241	0.16	0.871	-.0957973	.112788
logdensity	.0499362	.2914895	0.17	0.865	-.5355377	.6354102
year						
78	.0427367	.020344	2.10	0.041	.0018745	.0835989
79	.1663092	.0345572	4.81	0.000	.096899	.2357195
80	.2809688	.0497179	5.65	0.000	.1811075	.3808301

81	.3216487	.0534717	6.02	0.000	.2142476	.4290499
82	.2918147	.0691929	4.22	0.000	.1528367	.4307927
83	.222436	.0942281	2.36	0.022	.0331732	.4116987
84	.1933769	.109634	1.76	0.084	-.0268296	.4135834
85	.2398075	.1290732	1.86	0.069	-.0194436	.4990586
86	.3325581	.1526886	2.18	0.034	.025874	.6392421
87	.3157822	.1698457	1.86	0.069	-.0253628	.6569273
88	.3664797	.1893335	1.94	0.059	-.0138079	.7467673
89	.4377827	.2151334	2.03	0.047	.0056747	.8698908
90	.5825199	.27194	2.14	0.037	.0363124	1.128727
91	.7160606	.2851327	2.51	0.015	.1433548	1.288766
92	.7278618	.3002344	2.42	0.019	.1248233	1.3309
93	.7566171	.3146878	2.40	0.020	.124548	1.388686
94	.7839902	.3275994	2.39	0.021	.1259874	1.441993
95	.8031932	.3393177	2.37	0.022	.1216535	1.484733
96	.7611103	.3567786	2.13	0.038	.0444922	1.477714
97	.7064991	.3639217	1.94	0.058	-.0244592	1.437457
98	.6241532	.3734595	1.67	0.101	-.1259623	1.374269
99	.5591909	.3879089	1.44	0.156	-.2199471	1.338329
_cons	4.917915	1.858755	2.65	0.011	1.184497	8.651333
sigma_u	.93532373					
sigma_e	.19054733					
rho	.96015065	(fraction of variance due to u_i)				

```
561 estimate store tferob
```

```
562 testparm i.year
```

```
( 1) 78.year = 0
( 2) 79.year = 0
( 3) 80.year = 0
( 4) 81.year = 0
( 5) 82.year = 0
( 6) 83.year = 0
( 7) 84.year = 0
( 8) 85.year = 0
( 9) 86.year = 0
(10) 87.year = 0
(11) 88.year = 0
(12) 89.year = 0
(13) 90.year = 0
(14) 91.year = 0
(15) 92.year = 0
(16) 93.year = 0
(17) 94.year = 0
(18) 95.year = 0
(19) 96.year = 0
(20) 97.year = 0
(21) 98.year = 0
(22) 99.year = 0
```

$$F(22, 50) = 25.98$$
$$\text{Prob} > F = 0.0000$$

563

564

```
565 xtreg logothervio logincarc rate pb1064 pw1064 pm1029 pop avginc shall logdensity i.year, fe vce(c
```

```
Fixed-effects (within) regression               Number of obs   =      1,173
Group variable: stateid                      Number of groups =       51

R-squared:                                     Obs per group:
    Within = 0.5059                                min =      23
    Between = 0.1236                                avg  =     23.0
    Overall  = 0.0758                                max  =      23
```

corr(u i, Xb) = -0.8723	F(30,50)	=	36.23
	Prob > F	=	0.0000

(Std. err. adjusted for 51 clusters in **stateid**)

logothervio	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
logincarc_rate	-.0421034	.0825481	-0.51	0.612	-.2079061	.1236992
pb1064	-.0995495	.0585977	-1.70	0.096	-.2172464	.0181474
pw1064	-.0186143	.0285973	-0.65	0.518	-.0760537	.038825
pm1029	.095413	.0588427	1.62	0.111	-.022776	.2136019
pop	.0149746	.013892	1.08	0.286	-.0129283	.0428776
avginc	.0130267	.0188252	0.69	0.492	-.0247848	.0508382
shall	-.0504476	.0421777	-1.20	0.237	-.1351641	.0342689
logdensity	-.4011632	.2086889	-1.92	0.060	-.8203271	.0180008
year						
78	.0734384	.0197298	3.72	0.001	.0338099	.1130668
79	.198456	.0329327	6.03	0.000	.1323086	.2646033
80	.2476453	.0433918	5.71	0.000	.1604904	.3348002
81	.2427268	.0503237	4.82	0.000	.1416486	.3438049
82	.2616063	.0651803	4.01	0.000	.1306877	.3925248
83	.2639967	.0802167	3.29	0.002	.1028768	.4251166
84	.3392178	.0987423	3.44	0.001	.1408881	.5375475
85	.4049533	.1153271	3.51	0.001	.1733119	.6365946
86	.4927675	.1332299	3.70	0.001	.2251674	.7603677
87	.5183534	.1519802	3.41	0.001	.2130921	.8236146
88	.5979343	.1685314	3.55	0.001	.2594289	.9364396
89	.659286	.18495	3.56	0.001	.2878029	1.030769
90	.8370833	.2380779	3.52	0.001	.3588898	1.315277
91	.8893727	.248637	3.58	0.001	.3899707	1.388775
92	.9463117	.2640573	3.58	0.001	.4159371	1.476686
93	.9847774	.276249	3.56	0.001	.4299149	1.53964
94	.9826707	.2867517	3.43	0.001	.406713	1.558628
95	.9909005	.2996685	3.31	0.002	.3889986	1.592802
96	.9502984	.3128963	3.04	0.004	.3218277	1.578769
97	.9569853	.3226646	2.97	0.005	.3088944	1.605076
98	.9221287	.3364844	2.74	0.008	.2462798	1.597978
99	.8778705	.3484835	2.52	0.015	.1779208	1.57782
_cons	4.185182	1.216814	3.44	0.001	1.741139	6.629226
sigma_u	1.1290767					
sigma_e	.15403702					
rho	.98172765					

(fraction of variance due to u_i)

566 estimate store tfeothervio

567 testparm i.year

```

( 1) 78.year = 0
( 2) 79.year = 0
( 3) 80.year = 0
( 4) 81.year = 0
( 5) 82.year = 0
( 6) 83.year = 0
( 7) 84.year = 0
( 8) 85.year = 0
( 9) 86.year = 0
(10) 87.year = 0
(11) 88.year = 0
(12) 89.year = 0
(13) 90.year = 0
(14) 91.year = 0
(15) 92.year = 0
(16) 93.year = 0
(17) 94.year = 0
(18) 95.year = 0
(19) 96.year = 0
(20) 97.year = 0
(21) 98.year = 0
(22) 99.year = 0

```

F(22, 50) = 16.15
 Prob > F = 0.0000

568
 569 /*Compare other crime rates study*/
 570
 571 estimate table olsmur femur tfemur

Variable	olsmur	femur	tfemur
logincarc ~e	.73628244	-.15924099	-.09737396
pb1064	.03984465	-.02347342	-.07477117
pw1064	.00764987	.01440054	-.01213434
pm1029	.16617375	.00387808	.07267798
pop	.02288696	-.00882476	-.0220534
avginc	-.04209353	.0378963	.06559448
shall	-.21724231	-.05643298	-.01826872
logdensity	.07522799	-.37070118	-.27564665
year			
78			.00735488
79			.08355178
80			.13453998
81			.15429464
82			.09004845
83			.04613934
84			-.05682424
85			-.00438596
86			.07376107
87			.06258517
88			.08085164
89			.09082472
90			.20102314
91			.25967063
92			.23215288
93			.32855918
94			.22665391
95			.24990178
96			.19040309
97			.09308741
98			.03605491
99			-.02486378
_cons	-4.7026758	.3594866	.68048106

572 estimate table olsrob ferob tferob

Variable	olsrob	ferob	tferob
logincarc ~e	.61599673	-.19891984	-.22108639
pb1064	.042355	.10982811	-.02112381
pw1064	.01494163	.03614011	-.021238
pm1029	.16001255	-.02581845	.11422541
pop	.04728032	.01898272	-.00288926
avginc	.04741071	-.00411044	.01634256
shall	-.41786691	-.01274975	.00849535
logdensity	.2307483	.07399156	.04993624
year			
78			.0427367
79			.16630925
80			.28096882
81			.32164875
82			.29181474
83			.22243596
84			.1933769
85			.2398075
86			.33255808
87			.31578224

88			.36647969
89			.43778271
90			.58251989
91			.71606062
92			.72786176
93			.75661711
94			.78399018
95			.80319324
96			.76110303
97			.70649908
98			.62415318
99			.55919087
_cons	-2.4486406	3.4308775	4.917915

573 estimate table olsothervio feothervio tfeothervio

Variable	olsother~o	feothervio	tfeother~o
logincarc ~e	.75168617	.01868212	-.0421034
pbl064	-.02209121	.02439221	-.09954946
pw1064	-.00339542	.03167461	-.01861435
pm1029	.09952356	-.07617584	.09541296
pop	.01563815	.03549443	.01497463
avginc	.01175961	.01412865	.01302674
shall	-.2409245	-.05286935	-.05044761
logdensity	.04425778	-.38246089	-.40116315
year			
78			.07343839
79			.19845597
80			.24764528
81			.24272678
82			.26160626
83			.26399673
84			.3392178
85			.40495329
86			.49276755
87			.51835337
88			.59793428
89			.65928599
90			.83708333
91			.88937274
92			.94631173
93			.98477736
94			.98267066
95			.9909005
96			.95029843
97			.95698529
98			.92212866
99			.87787054
_cons	.40575716	3.3286885	4.1851825

574

575 translate @Results "Project.pdf"