DOES LEGALIZING MARIJUANA HAVE AN IMPACT ON STATE GROSS DOMESTIC PRODUCT?

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Economics 265: Econometrics

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Abstract. A central question in the debate regarding the legalization of marijuana in the United States is whether tax revenue, generated from a regulated marijuana market, will have any effect(s) on State GDP. In this paper, we review economic literatures and data which provides an insight regarding how legalizing marijuana can generate a large revenue. A key finding of the review is that data in regards to taxation (legalized marijuana) is limited by incomplete information and uncertainty. However, state GDP has other indicators that can be taken into account to see the correlation with legalized marijuana. A review of this literature is considered in terms of the size of the illicit marijuana industry, tax revenue, tax rate, and the number of drug arrests. From this review it is clear that legalizing marijuana will generate a large amount of revenue and have a probable correlation to state GDP.

Introduction. Marijuana is the most used illicit substance used in the United States causing it to be a very prominent and controversial issue in today's society. As of 2014, marijuana legalization has been gaining political momentum. Medical marijuana status has passed within 21 states while only four states have legalized recreational usage of marijuana. As more states begin to legalize marijuana, how does this impact a State's GDP? The focus of the paper is to examine if there are any correlations between legalizing marijuana and state GDP. All of the evidence presented is garnered from all 50 states of the United States between the time periods of 2004, 2008, 2012, and 2014.

A Potential New Revenue Source. In November 2012, voters in Colorado and Washington State made historic decisions to legalize marijuana for recreational sale and use. Today, Alaska and Oregon are in line for Marijuana reform. As time goes on more states begin to consider legalization. Michael Caputo begins his article "Potential Tax Revenue from a Regulated Marijuana Market: A Meaningful Revenue Source" (1994) by discussing how the data had indicated that the use of the drug has become pervasive. Caputo (1994) finds that marijuana is an easy crop to grow, since it's a weed, requiring less attention. Since it's less costly to grow, it would provide reasonable production

and distribution. As of 2015 marijuana is ranked in the top 5 cash crops coming in as number four. Meanwhile, the demand for marijuana has created a multibillion dollar industry. Les Picker (2010) discusses that the revenue generated has positive externalities. He writes about how legalizing marijuana can decrease crime rates, decrease traffic fatalities, and the revenue could be good for huge saving for law enforcement and prisons. Although, Evens (2002) also discusses that there still remains other factors that are likely to reduce the gov't eventual tax revenue and reflects individual's different reactions to these the marijuana taxes: home cultivation outside the regulated industry and continuing purchases made from the black market and interstate smuggling. Today, the marijuana tax revenue is projected to generate as much as $3 Billion with legalization, where California is projected to generate approximately $519.3 million. David Evens (2002) concludes in his article "State Medical Marijuana Laws: Understanding the Laws and Their Limitations." that as both sides continue to debate over legalizing and regulating the marijuana industry have been hampered by the lack of data found for legalized marijuana. Although the size of potential tax revenue available makes this area worthy to continue further research.

Data Description. The data on if legalizing marijuana has an impact on state GDP was constructed in the following way. To test for my results I used cross sectional data. To gather all my variables I gathered data from the Bureau of Economic Analysis database: GDP and tax rates, United States Census: population, Tax Policy Center: state sales tax rates, NORML: marijuana related arrests, and FBI crime Rate in the United States: number of drug arrests. For each variable, I gathered data for each state within the years 2004, 2008, 2012, and 2014. My reasoning for four years is so that I am able to test for which two years tend to have more significant variables so I can run the best regressions given for all my data. For the variable marijuana arrests I was only able to find data for the years 2008 and 2012. As for state tax rates some states did not have a value due that state having no state tax. Following with tax revenue, I was unable to find the marijuana tax revenue. To try and

model for it I used state tax revenue. I did that same with state tax rate. The data for marijuana tax rates was found to be all in different units and I was unable to convert them all into one common unit so I used state tax rate to account for it. All my data is based on Medical Marijuana. Originally I was trying to aim to gather data from both medical and recreational but because recreational has not started to collect any tax revenue until this year, 2015, I was not able to account for it.

Table 1 shows the descriptive statistics of each variable within all four years. For the variable gdp, which is the variable for the gross domestic product for each state. The average GDP was about 318131.2 (in million) with a low of 22,538 (in millions) and a high of 4,444,617 (in millions). Population have an average of 6,140,473 people with a low of 506,529 and a high of about 38,800,000. marrests, which is the variable for the marijuana related arrests only has 92 observations with an average of 15742.12 arrests. The number of drug arrests (variable numdrugarrests) has an average of 27,673.72 arrests. The maximum market size (mktsize) was about 15.84% and the minimum was about .13%. The last variable that I took into account for was tax revenue (taxrevenue), which had a mean of about $15,200,000 with a low of $1,062,722 and a high of 138,000,000. After gathering all my variables I had calculated GDP per capita by dividing GDP by population. My reasoning was so that the population size would not skew my results.

Table 1: Mean, Std. Dev. Min, and Max

Variable	Obs	Mean	Std. Dev.	Min	Max
states	0				
d04	200	.25	.4340993	0	1
d08	200	.25	.4340993	0	1
d12	200	.25	.4340993	0	1
d14	200	.25	.4340993	0	1
d0414	200	.5	.5012547	0	1
dmedical	200	.35	.4781665	0	1
gdpinmilli~s	200	318131.2	470497.4	22538	4444617
pop	200	6140473	6811097	506529	3.88e+07
staxrate	183	6.479809	1.45572	1.13	9.45
marrests	95	15742.12	19766.94	882	112974
numdrugarr~s	200	27673.72	41682.05	220	272980
mrktsize	200	1.993	2.53964	.13	15.84
taxrevenue	200	1.52e+07	1.91e+07	1062722	1.38e+08

Econometric Model. I estimated five different specifications. The dependent variable in each specification is GDPCap, as measured using state domestic product divided by the total population. Dmedical, statetaxrate, numdrugarrst, mrktsize, and taxrevenue are the independent variables. Here is the model that I used for my regressions:

lnGDPCap=β0+β1staxrate+β2numdrugarrests+β3mrktsize+β4taxrevenue+u (not legal)

lnGDPCap=β0+β1dmedical+β2staxrate+β3numdrugarrests+β4mrktsize+β5taxrevenue+u (legal)

I chose to use these particular specifications by looking at the components in the GDP:

GDP = C+I+G+(X-M)

C= consumption

I= investment

G= government spending

X= exports

M= imports

With this equation I tried to break down what variables for legalizing marijuana I could gather for each component of GDP, such as the market size. Unfortunately because legalizing marijuana is still a very new concept, data was very scarce. Therefore I was unable to find a variable for each component of state GDP.

Other variables such as state tax rate, number of drug arrests, and tax revenue all came from previous empirical work done by Michael Caputo (1994), David Evens (2002), and Rosalie Picker (2010). Issues that my current model will encounter is that I do not have enough variables regarding legalized marijuana. I expect to find that there is correlation between legalized marijuana and state GDP.

Results and Discussion. From regressing GDPCap dmedical staxrate numdrugarrests mrktsize taxrevenue I found that all my coefficients and standard errors appear to be quite large. To make my regression easier to interpret I did a log transformation on my regression. To find which two years I would run my regression I regressed the log model for each year separately. The results can be found on Table 1. Looking at the table we can see that at a 1% confidence level regression 1 has the highest number of variables with significant variables. And since regression 2 and 4 have the same number I decided to go with regression 4 so I would have a longer time span where more states would legalize medical marijuana. All regressions appear to have very good adj. R^2.

Now that I have the model I would like to regress I wanted to see the effects on between each variable to see if there was any correlation when marijuana was legalized, to do this I created interactive dummies for all four variables (Table 2). To only analyze the two years 2004 and 2014 I ran another regression for only those two years. When running the hettest I found this model was heteroskedastic so proceeded to regress another model with robust. Results can be found on Table 3. By looking at this table R^2 appeared to be very good. Analyzing the regression we can see for a state that has legalized marijuana will have a negative impact of about 1.43 % on GDP per capita. Looking more closely at the data only three variables (lnmrktsize, lntaxrevenue and mednumdrugarrest) were statistically significant, so I tested for joint significance and found that the variables are jointly significant so I cannot drop them. It appears that legalizing marijuana has very little effect each variable: for every percent increase in state tax rate it appears to decrease GDP per capita by 0.05%, a 1% increase in drug arrest will impact GDP per capita positively by an approximate increase of about .24%, and 1 % increase in market size will decrease GDP per capita by about 0.11%, and lastly an increase in tax revenue will decrease GDP per capita by about 0.57%. I find that all signs make sense due to the fact that an increase in tax has a negative effect on GDP by decreasing it.

Tables 4 and 5 show the regressions made on each years separately. Over the time span of 2004 and 2005 the coefficient has dramatically changed. Going from 3.05 to -5.133. In the year of 2004 there were only 12 states that had legalized marijuana to the 21 states in 2014. Based on these two regressions it appears that increase the number of legalized states has a negative effect on state GDP. To take a look further in to this I ran another regression on both years again in one model using 2004 as my base year (Table 6). The results of this model appear that legalizing marijuana in a state will have a negative effect on state GDP by about 0.42%.

In regards to the potential revenue each state can generate if state marijuana were to be legalized I took a look at the state of Colorado for the year of 2015. Since 2014 Colorado had begun to tax both recreational and medical marijuana. I was curious to see how much a state could increase their tax revenue. Table 7 depicts the total revenue Colorado had generated for the year of 2015. It appears that each month has steadily generated more and more tax revenue. The estimated total of taxes the state of Colorado has generated was about $76,152,466.

Table 1: Log regression on each year separately

	(1) lnGDPCap(04)	(2) lnGDPCap(08)	(3) lnGDPCap(12)	(4) lnGDPCap(14)
dmedical	-0.291**	-0.213	-0.392	-0.510***
	(0.119)	(0.131)	(0.253)	(0.112)
staxrate	-0.115***	0.0223	0.00578	0.0727*
	(0.0421)	(0.0423)	(0.0678)	(0.0383)
lnnumdrugarrests	0.321***	0.313**	0.0266	0.144**
	(0.0806)	(0.139)	(0.141)	(0.0579)
lnmrktsize	0.498***	0.472***	0.752**	0.862***
	(0.158)	(0.164)	(0.287)	(0.129)
lntaxrevenue	1.205***	0.743***	0.974***	1.054***
	(0.183)	(0.158)	(0.271)	(0.141)

lnmarrests		0.425**	0.395*	
		(0.170)	(0.211)	
_cons	5.471**	8.189***	7.812	8.573***
	(2.668)	(2.459)	(4.660)	(2.177)
N	45	43	44	46
R^2	0.984	0.983	0.941	0.977
adj. R^2	0.982	0.981	0.931	0.975

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 2: Log regression on all four years together (standard, robust)

	(1) lnGDPCap	(2) lnGDPCap
dmedical	-0.423	-0.423
	(2.763)	(3.009)
staxrate	0.0211	0.0211
	(0.0283)	(0.0371)
lnnumdrugarrests	0.137***	0.137
	(0.0506)	(0.0858)
lnmrktsize	0.754***	0.754***
	(0.102)	(0.144)
lntaxrevenue	1.093***	1.093***
	(0.117)	(0.160)
medstaxrate	0.0173	0.0173
	(0.0448)	(0.0540)
mednumdrugarrests	0.260***	0.260**
	(0.0997)	(0.116)
medmrktsize	0.00217	0.00217
	(0.196)	(0.188)
medtaxrev	-0.162	-0.162
	(0.175)	(0.203)
_cons	8.298***	8.298***
	(1.795)	(2.515)

N	183	183
R^2	0.967	0.967
adj. R^2	0.965	0.965

Standard errors in parentheses
$^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$

Table 3: Regression on both 2004 and 2014 together with interactive dummies

	(1) lnGDPCap
dmedical	-1.434
	(3.012)
staxrate	0.0368
	(0.0328)
lnnumdrugarrests	0.121**
	(0.0567)
lnmrktsize	0.732***
	(0.112)
lntaxrevenue	1.152***
	(0.134)
medstaxrate	-0.0509
	(0.0520)
mednumdrugarrests	0.244**
	(0.110)
medmrktsize	-0.107
	(0.214)
medtaxrev	-0.0568
	(0.200)
_cons	7.414***
	(1.974)
N	91
R^2	0.978
adj. R^2	0.976

Standard errors in parentheses
$^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$

Table 4: Log regression on the year 2004 with interactive dummies

	(1) lnGDPCap	(2) lnGDPCap
dmedical	3.050	3.050
	(6.300)	(5.676)
staxrate	-0.0937*	-0.0937*
	(0.0515)	(0.0530)
lnnumdrugarrests	0.263***	0.263***
	(0.0906)	(0.0904)
lnmrktsize	0.442**	0.442*
	(0.181)	(0.231)
lntaxrevenue	1.300***	1.300***
	(0.215)	(0.261)
medstaxrate	-0.0669	-0.0669
	(0.0921)	(0.0804)
mednumdrugarrests	0.253	0.253
	(0.269)	(0.178)
medmrktsize	0.124	0.124
	(0.451)	(0.370)
medtaxrev	-0.343	-0.343
	(0.428)	(0.373)
_cons	4.426	4.426
	(3.121)	(4.070)
N	45	45
R^2	0.985	0.985
adj. R^2	0.981	0.981

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Log regression on the year 2014 with interactive dummies

	(1) lnGDPCap	(2) lnGDPCap
dmedical	-5.133	-5.133
	(4.548)	(4.480)
staxrate	0.0891	0.0891

	(0.0538)	(0.0618)
lnnumdrugarrests	0.0519	0.0519
	(0.0670)	(0.0660)
lnmrktsize	1.065***	1.065***
	(0.162)	(0.197)
lntaxrevenue	0.861***	0.861***
	(0.195)	(0.230)
medstaxrate	-0.0802	-0.0802
	(0.0788)	(0.0721)
mednumdrugarrests	0.317**	0.317**
	(0.126)	(0.129)
medmrktsize	-0.362	-0.362
	(0.289)	(0.265)
medtaxrev	0.140	0.140
	(0.292)	(0.289)
_cons	12.46***	12.46***
	(3.146)	(3.885)
N	46	46
R^2	0.982	0.982
adj. R^2	0.978	0.978

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

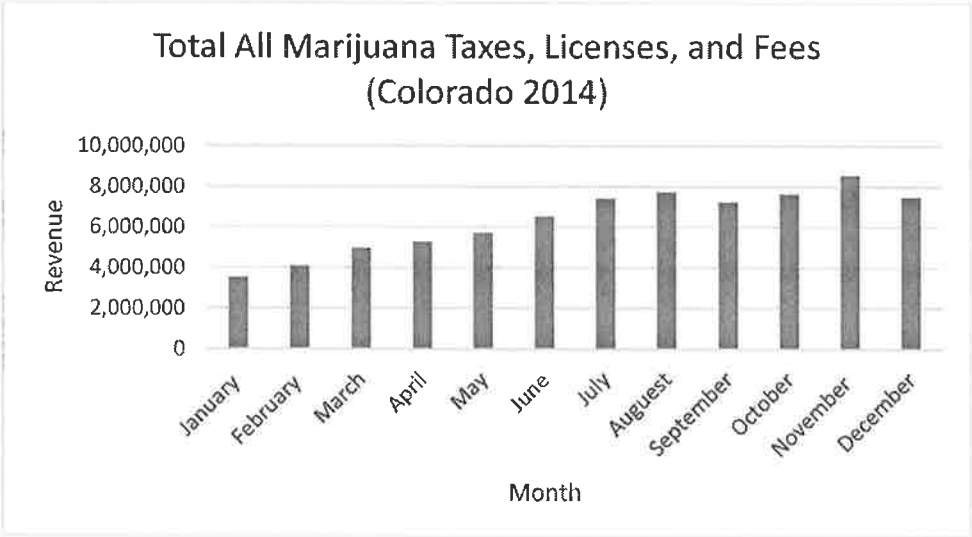
Table 6: Log regression on the year 2004 and 2014 using 2004 as a base year with interactive dummies

	(1) lnGDPCap	(2) lnGDPCap
d14	1.282	1.282
	(3.287)	(3.723)
dmedical	-0.425***	-0.425***
	(0.0817)	(0.100)
staxrate	-0.120**	-0.120***
	(0.0462)	(0.0422)

lnnumdrugarrests	0.315***	0.315***
	(0.0886)	(0.0737)
lnmrktsize	0.590***	0.590***
	(0.159)	(0.169)
lntaxrevenue	1.120***	1.120***
	(0.190)	(0.189)
staxrate14	0.199***	0.199***
	(0.0579)	(0.0558)
numdrugarrests14	-0.155	-0.155
	(0.102)	(0.134)
mrktsize14	0.235	0.235
	(0.188)	(0.213)
taxrev14	-0.0572	-0.0572
	(0.229)	(0.261)
_cons	6.932**	6.932**
	(2.715)	(2.838)
N	91	91
R^2	0.980	0.980
adj. R^2	0.978	0.978

Standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 7



Concluding Remarks. The analysis in this paper shows that there seems to be a negative correlation between legalizing marijuana and state GDP. The conclusions above are subject to a number of limitations. Such as, many variables that I tested appeared to be insignificant creating inconclusive findings, lack of data I was able to find, and the short amount of time. With more time and resources I would like to find more variables that measure legalized marijuana such as tax revenue, tax rate, marijuana arrest rates, consumption rate, and also account for those states that have legalized recreational marijuana.

Throughout my time researching many questions had crossed my mind that I was not able to account for in this data: Since I was not able to obtain data for before and after legalization had begun will my results differ if I had? Is medical marijuana a good enough indicator to account for legalizing marijuana as whole since there wasn't enough data to support it? How would my result differ if I had used a time series because we can keep track over time.

Overall, legalizing marijuana does have some correlations to state GDP whether that be negative as I have found here or positive.

Resources.

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Statistics/Data Analysis

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Statistics/Data Analysis

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Notes:
1. Unicode is supported; see help unicode_advice .
2. New update available; type - update all -

```
1 . use "E:\ECON265Project\TEST.dta"

2 . sum
```

Variable	Obs	Mean	Std. Dev.	Min	Max
states	0				
d04	200	.25	.4340993	0	1
d08	200	.25	.4340993	0	1
d12	200	.25	.4340993	0	1
d14	200	.25	.4340993	0	1
d0414	200	.5	.5012547	0	1
dmedical	200	.35	.4781665	0	1
gdpinmilli~s	200	318131.2	470497.4	22538	4444617
pop	200	6140473	6811097	506529	3.88e+07
staxrate	183	6.479809	1.45572	1.13	9.45
marrests	95	15742.12	19766.94	882	112974
numdrugarr~s	200	27673.72	41682.05	220	272980
mrktsize	200	1.993	2.53964	.13	15.84
taxrevenue	200	1.52e+07	1.91e+07	1062722	1.38e+08

```
3 .
4 . gen GDPCap = gdp* pop

5 .
6 . reg GDPCap dmedical staxrate numdrugarrests mrktsize taxrevenue
```

Source	SS	df	MS	Number of obs	=	183
				F(5, 177)	=	252.79
Model	2.5719e+28	5	5.1438e+27	Prob > F	=	0.0000
Residual	3.6016e+27	177	2.0348e+25	R-squared	=	0.8772
				Adj R-squared	=	0.8737
Total	2.9321e+28	182	1.6110e+26	Root MSE	=	4.5e+12

GDPCap	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
dmedical	5.36e+11	7.61e+11	0.70	0.482	-9.65e+11	2.04e+12
staxrate	-3.82e+11	2.43e+11	-1.57	0.117	-8.62e+11	9.71e+10
numdrugarre~s	9.89e+07	1.79e+07	5.52	0.000	6.35e+07	1.34e+08
mrktsize	-4.45e+11	5.11e+11	-0.87	0.385	-1.45e+12	5.63e+11
taxrevenue	475005.9	58583.75	8.11	0.000	359393.4	590618.5
_cons	-2.57e+12	1.58e+12	-1.63	0.104	-5.68e+12	5.38e+11

```
 7 .
 8 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of GDPCap

         chi2( 1)      =    154.26
         Prob > chi2   =    0.0000

 9 .
10 . gen lnGDPCap = ln(GDPCap)

11 .
12 . gen lnnumdrugarrests = ln(numdrugarrests)

13 .
14 . gen lnmarrests = ln(marrests)
(105 missing values generated)

15 .
16 . gen lnmrktsize = ln(mrktsize)

17 .
18 . gen lntaxrevenue = ln(taxrevenue)

19 .
20 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  if d04==1

      Source       SS           df       MS      Number of obs   =        45
                                                  F(5, 39)        =    475.50
       Model   176.137942         5  35.2275884  Prob > F        =    0.0000
    Residual   2.88933152        39  .074085424  R-squared       =    0.9839
                                                  Adj R-squared   =    0.9818
       Total   179.027273        44  4.06880167  Root MSE        =    .27219

------------------------------------------------------------------------------
    lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
    dmedical |  -.2910349   .1187777    -2.45   0.019    -.5312855   -.0507843
    staxrate |  -.1153996   .0420806    -2.74   0.009    -.2005156   -.0302837
lnnumdrugar-s|   .3214904   .0806174     3.99   0.000     .1584264    .4845544
   lnmrktsize |   .4984389   .1581667     3.15   0.003     .1785165    .8183613
 lntaxrevenue |   1.205473   .1829891     6.59   0.000     .8353428    1.575604
        _cons |   5.471301   2.667719     2.05   0.047       .07533    10.86727
------------------------------------------------------------------------------
(est1 stored)

21 .
22 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnGDPCap

         chi2( 1)      =      3.40
         Prob > chi2   =    0.0651
```

```
23 .
24 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmarrests lnmrktsize l
   > ntaxrevenue if d08==1
```

Source	SS	df	MS	Number of obs	=	43
				F(6, 36)	=	354.45
Model	159.166189	6	26.5276981	Prob > F	=	0.0000
Residual	2.69427642	36	.074841012	R-squared	=	0.9834
				Adj R-squared	=	0.9806
Total	161.860465	42	3.85382059	Root MSE	=	.27357

lnGDPCap	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
dmedical	-.2132889	.130706	-1.63	0.111	-.478373	.0517952
staxrate	.022281	.0423096	0.53	0.602	-.0635268	.1080889
lnnumdrugar~s	.3132312	.1385532	2.26	0.030	.0322322	.5942302
lnmarrests	.4250116	.1700654	2.50	0.017	.080103	.7699202
lnmrktsize	.4722366	.1640447	2.88	0.007	.1395387	.8049346
lntaxrevenue	.7425372	.1576899	4.71	0.000	.4227273	1.062347
_cons	8.189216	2.459264	3.33	0.002	3.201596	13.17683

```
(est2 stored)

25 .
26 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnGDPCap

         chi2( 1)      =     1.96
         Prob > chi2   =   0.1617

27 .
28 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmarrests lnmrktsize l
   > ntaxrevenue if d12==1
```

Source	SS	df	MS	Number of obs	=	44
				F(6, 37)	=	98.45
Model	169.372407	6	28.2287345	Prob > F	=	0.0000
Residual	10.609394	37	.286740378	R-squared	=	0.9411
				Adj R-squared	=	0.9315
Total	179.981801	43	4.18562328	Root MSE	=	.53548

lnGDPCap	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
dmedical	-.3924892	.252755	-1.55	0.129	-.9046195	.119641
staxrate	.0057808	.0678271	0.09	0.933	-.13165	.1432116
lnnumdrugar~s	.0266034	.1414932	0.19	0.852	-.260089	.3132958
lnmarrests	.3953422	.2111674	1.87	0.069	-.0325236	.8232081
lnmrktsize	.7523864	.2867248	2.62	0.013	.1714268	1.333346
lntaxrevenue	.9742314	.2711203	3.59	0.001	.4248896	1.523573
_cons	7.812277	4.660096	1.68	0.102	-1.629975	17.25453

```
(est3 stored)
```

```
29 .
30 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnGDPCap

         chi2( 1)      =      6.26
         Prob > chi2   =    0.0123

31 .
32 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  if d14==1

      Source |       SS       df       MS      Number of obs   =        46
-------------+------------------------------   F(5, 40)        =    346.59
       Model |  179.039426     5  35.8078852   Prob > F        =    0.0000
    Residual |    4.132648    40    .1033162   R-squared       =    0.9774
-------------+------------------------------   Adj R-squared   =    0.9746
       Total |  183.172074    45  4.07049053   Root MSE        =    .32143

------------------------------------------------------------------------------
     lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     dmedical |   -.510455   .1123979    -4.54   0.000    -.7376196   -.2832904
     staxrate |   .0727181    .038251     1.90   0.065      -.00459    .1500261
lnnumdrugar~s |   .1438686    .057885     2.49   0.017     .0268786    .2608586
   lnmrktsize |   .8623062   .1293735     6.67   0.000     .6008327     1.12378
 lntaxrevenue |   1.053969   .1409301     7.48   0.000     .7691387    1.338799
        _cons |   8.572529   2.177234     3.94   0.000     4.172174    12.97288
------------------------------------------------------------------------------

(est4 stored)

33 .
34 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnGDPCap

         chi2( 1)      =      0.51
         Prob > chi2   =    0.4753

35 .
36 . esttab using tvalefinal1.rtf, r2 ar2 se star(* 0.1 ** 0.05 *** 0.01)
(output written to tvalefinal1.rtf)

37 .
38 . eststo clear

39 .
40 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  if d04==1, robust

Linear regression                               Number of obs     =         45
                                                F(5, 39)          =     365.92
                                                Prob > F          =     0.0000
                                                R-squared         =     0.9839
                                                Root MSE          =     .27219
```

lnGDPCap	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
dmedical	-.2910349	.138092	-2.11	0.042	-.5703523	-.0117174
staxrate	-.1153996	.0398711	-2.89	0.006	-.1960465	-.0347528
lnnumdrugar~s	.3214904	.0789699	4.07	0.000	.1617587	.4812221
lnmrktsize	.4984389	.1900805	2.62	0.012	.1139647	.8829131
lntaxrevenue	1.205473	.2058841	5.86	0.000	.7890333	1.621913
_cons	5.471301	3.197228	1.71	0.095	-.9957041	11.93831

(est1 stored)

```
41 .
42 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmarrests lnmrktsize l
   > ntaxrevenue if d08==1, robust
```

Linear regression

Number of obs	= 43
F(6, 36)	= 367.75
Prob > F	= 0.0000
R-squared	= 0.9834
Root MSE	= .27357

lnGDPCap	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
dmedical	-.2132889	.1271017	-1.68	0.102	-.4710631	.0444852
staxrate	.022281	.0477067	0.47	0.643	-.0744727	.1190348
lnnumdrugar~s	.3132312	.1420372	2.21	0.034	.0251664	.601296
lnmarrests	.4250116	.1765787	2.41	0.021	.0668934	.7831298
lnmrktsize	.4722366	.1542299	3.06	0.004	.1594439	.7850294
lntaxrevenue	.7425372	.179825	4.13	0.000	.3778352	1.107239
_cons	8.189216	2.47515	3.31	0.002	3.169378	13.20905

(est2 stored)

```
43 .
44 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmarrests lnmrktsize l
   > ntaxrevenue if d12==1, robust
```

Linear regression

Number of obs	= 44
F(6, 37)	= 174.71
Prob > F	= 0.0000
R-squared	= 0.9411
Root MSE	= .53548

lnGDPCap	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
dmedical	-.3924892	.1674802	-2.34	0.025	-.7318364	-.053142
staxrate	.0057808	.1120828	0.05	0.959	-.2213205	.2328821
lnnumdrugar~s	.0266034	.1657666	0.16	0.873	-.3092716	.3624784
lnmarrests	.3953422	.2200483	1.80	0.081	-.0505179	.8412024
lnmrktsize	.7523864	.1678156	4.48	0.000	.4123596	1.092413
lntaxrevenue	.9742314	.1764333	5.52	0.000	.6167436	1.331719
_cons	7.812277	2.959925	2.64	0.012	1.814898	13.80965

(est3 stored)

```
45 .
46 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  if d14==1, robust

Linear regression                               Number of obs     =         46
                                                F(5, 40)          =     305.19
                                                Prob > F          =     0.0000
                                                R-squared         =     0.9774
                                                Root MSE          =     .32143

------------------------------------------------------------------------------
             |               Robust
     lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     dmedical |   -.510455   .1343812    -3.80   0.000    -.7820495   -.2388606
     staxrate |   .0727181   .0326222     2.23   0.031     .0067861    .1386501
lnnumdrugar~s |   .1438686   .1109375     1.30   0.202    -.0803444    .3680816
    lnmrktsize |   .8623062   .1659634     5.20   0.000     .5268818    1.197731
  lntaxrevenue |   1.053969   .1653461     6.37   0.000     .7197921    1.388146
         _cons |   8.572529   2.541806     3.37   0.002     3.435348    13.70971
------------------------------------------------------------------------------

(est4 stored)

47 .
48 . esttab using tvalefinal.rtf, r2 ar2 se star(* 0.1 ** 0.05 *** 0.01)
(output written to tvalefinal.rtf)

49 .
50 . eststo clear

51 .
52 . gen medstaxrate = dmedical*staxrate
(17 missing values generated)

53 .
54 . gen mednumdrugarrests = dmedical*lnnumdrugarrests

55 .
56 . gen medmrktsize = dmedical*lnmrktsize

57 .
58 . gen medtaxrev = dmedical*lntaxrevenue

59 .
60 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  medstaxrate mednumdrugarrests medmrktsize medtaxrev

      Source |       SS       df       MS      Number of obs   =       183
-------------+------------------------------   F(9, 173)       =    558.87
       Model |  717.516216     9  79.724024   Prob > F        =    0.0000
    Residual |  24.6787883   173  .142651956   R-squared       =    0.9667
-------------+------------------------------   Adj R-squared   =    0.9650
       Total |  742.195005   182  4.07799453   Root MSE        =    .37769

------------------------------------------------------------------------------
     lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     dmedical |  -.4231802   2.763039    -0.15   0.878    -5.876788    5.030427
     staxrate |   .0210622   .0282875     0.74   0.458    -.0347708    .0768952
lnnumdrugar~s |   .1367983   .0506361     2.70   0.008     .0368542    .2367424
    lnmrktsize |   .7539996   .1023166     7.37   0.000       .55205    .9559492
  lntaxrevenue |   1.093079   .1171829     9.33   0.000     .8617867    1.324371
   medstaxrate |   .0172888   .0448335     0.39   0.700    -.0712023    .1057799
mednumdruga~s |   .2600649   .0996884     2.61   0.010     .0633028     .456827
   medmrktsize |   .0021704   .1961178     0.01   0.991    -.3849212     .389262
     medtaxrev |  -.1615474   .1750084    -0.92   0.357    -.5069739    .1838792
         _cons |   8.298187   1.795281     4.62   0.000     4.754714    11.84166
------------------------------------------------------------------------------

(est1 stored)
```

```
61 .
62 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnGDPCap

         chi2( 1)      =     1.82
         Prob > chi2   =   0.1769

63 .
64 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  medstaxrate mednumdrugarrests medmrktsize medtaxrev, robust

Linear regression                               Number of obs     =        183
                                                F(9, 173)         =     578.38
                                                Prob > F          =     0.0000
                                                R-squared         =     0.9667
                                                Root MSE          =     .37769

------------------------------------------------------------------------------
             |               Robust
     lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     dmedical |  -.4231802   3.008621    -0.14   0.888    -6.36151    5.515149
     staxrate |   .0210622   .0370814     0.57   0.571    -.0521281   .0942525
lnnumdrugar~s |   .1367983   .0857757     1.59   0.113    -.0325034     .3061
   lnmrktsize |   .7539996   .1438441     5.24   0.000     .4700843   1.037915
  lntaxrevenue |   1.093079   .1604479     6.81   0.000     .7763914   1.409766
  medstaxrate |   .0172888   .0540241     0.32   0.749    -.0893425    .12392
mednumdruga~s |   .2600649   .1157706     2.25   0.026     .0315603   .4885695
  medmrktsize |   .0021704   .1875312     0.01   0.991    -.3679732   .3723141
    medtaxrev |  -.1615474   .2025336    -0.80   0.426    -.5613025   .2382077
        _cons |   8.298187   2.515419     3.30   0.001     3.333326   13.26305
------------------------------------------------------------------------------

(est2 stored)

65 .
66 . esttab using tvalefinal2.rtf, r2 ar2 se star(* 0.1 ** 0.05 *** 0.01)
(output written to tvalefinal2.rtf)

67 .
68 . eststo clear

69 .
70 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  medstaxrate mednumdrugarrests medmrktsize medtaxrev if d0414==1

      Source |       SS       df       MS      Number of obs     =        91
-------------+------------------------------   F(9, 81)          =    404.41
       Model |  357.28337      9  39.6981522   Prob > F          =    0.0000
    Residual |  7.95119762     81  .098162934   R-squared         =    0.9782
-------------+------------------------------   Adj R-squared     =    0.9758
       Total |  365.234567     90  4.05816186   Root MSE          =    .31331

------------------------------------------------------------------------------
     lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
     dmedical |  -1.434381   3.011638    -0.48   0.635    -7.426596   4.557835
     staxrate |   .0367536   .0327989     1.12   0.266     -.028506   .1020131
lnnumdrugar~s |   .1212287    .056724     2.14   0.036     .0083657   .2340917
   lnmrktsize |   .7316957   .1124824     6.50   0.000     .5078909   .9555004
  lntaxrevenue |   1.152403   .1338524     8.61   0.000     .8860793   1.418728
  medstaxrate |  -.0509082   .0519853    -0.98   0.330    -.1543426   .0525263
mednumdruga~s |   .2440789   .1104451     2.21   0.030     .0243279   .4638299
  medmrktsize |  -.1072115   .2139908    -0.50   0.618     -.532986   .3185631
    medtaxrev |  -.0568032   .2001281    -0.28   0.777    -.4549954    .341389
        _cons |   7.414473   1.974166     3.76   0.000     3.486501   11.34244
------------------------------------------------------------------------------
```

```
(est1 stored)

71 .
72 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnGDPCap

         chi2( 1)      =      0.41
         Prob > chi2   =    0.5223

73 .
74 . test dmedical staxrate medstaxrate mednumdrugarrests medmrktsize medtaxrev

 ( 1)  dmedical = 0
 ( 2)  staxrate = 0
 ( 3)  medstaxrate = 0
 ( 4)  mednumdrugarrests = 0
 ( 5)  medmrktsize = 0
 ( 6)  medtaxrev = 0

       F(  6,    81) =      5.80
            Prob > F =      0.0000

75 .
76 . esttab using tvalefinal3.rtf, r2 ar2 se star(* 0.1 ** 0.05 *** 0.01)
(output written to tvalefinal3.rtf)

77 .
78 . eststo clear

79 .
80 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  medstaxrate mednumdrugarrests medmrktsize medtaxrev if d04==1

      Source       SS           df       MS      Number of obs   =        45
                                                 F(9, 35)        =    257.02
       Model   176.358816         9   19.595424  Prob > F        =    0.0000
    Residual   2.66845787        35   .076241654 R-squared       =    0.9851
                                                 Adj R-squared   =    0.9813
       Total   179.027273        44   4.06880167 Root MSE        =    .27612

------------------------------------------------------------------------------
     lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
--------------+---------------------------------------------------------------
     dmedical |    3.050131   6.299668     0.48   0.631    -9.738875    15.83914
     staxrate |   -.0937449   .0515066    -1.82   0.077    -.1983089     .010819
lnnumdrugar~s |    .2633508   .0905681     2.91   0.006     .0794879    .4472138
    lnmrktsize |     .441774   .1807519     2.44   0.020     .0748282    .8087199
  lntaxrevenue |    1.299548   .2147972     6.05   0.000      .863487     1.73561
  medstaxrate |   -.0669478    .092102    -0.73   0.472    -.2539247    .1200291
mednumdruga~s |    .2527714   .2686561     0.94   0.353    -.2926295    .7981723
  medmrktsize |    .1236727    .451304     0.27   0.786    -.7925232    1.039869
    medtaxrev |   -.3429048   .4279891    -0.80   0.428    -1.211769    .5259592
        _cons |    4.426435    3.12083     1.42   0.165    -1.909187    10.76206
------------------------------------------------------------------------------

(est1 stored)
```

```
89 .
90 . eststo clear

91 .
92 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  medstaxrate mednumdrugarrests medmrktsize medtaxrev if d14==1

      Source |       SS       df       MS      Number of obs   =        46
-------------+------------------------------   F(9, 36)        =    219.73
       Model |  179.897253     9  19.9885837   Prob > F        =    0.0000
    Residual |  3.27482075    36  .090967243   R-squared       =    0.9821
-------------+------------------------------   Adj R-squared   =    0.9777
       Total |  183.172074    45  4.07049053   Root MSE        =    .30161

------------------------------------------------------------------------------
     lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
--------------+---------------------------------------------------------------
     dmedical |  -5.133357   4.548424    -1.13   0.267    -14.35799    4.091274
     staxrate |   .0890833   .0538381     1.65   0.107    -.0201055    .1982721
lnnumdrugar~s |   .0518933   .0670327     0.77   0.444    -.0840554     .187842
    lnmrktsize |   1.065347   .1621339     6.57   0.000     .7365246    1.39417
  lntaxrevenue |   .8611521   .1949947     4.42   0.000     .4656844    1.25662
  medstaxrate |  -.0802108   .0788272    -1.02   0.316    -.2400798    .0796582
mednumdruga~s |   .3173094   .1258344     2.52   0.016     .0621055    .5725133
  medmrktsize |  -.3619028    .288652    -1.25   0.218    -.9473162    .2235106
    medtaxrev |   .1401808   .2922117     0.48   0.634    -.4524519    .7328136
        _cons |   12.45729   3.146476     3.96   0.000     6.075938    18.83864
------------------------------------------------------------------------------
(est1 stored)

93 .
94 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnGDPCap

         chi2(1)      =     0.67
         Prob > chi2  =   0.4114

95 .
96 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  medstaxrate mednumdrugarrests medmrktsize medtaxrev if d14==1, robust

Linear regression                               Number of obs     =        46
                                                F(9, 36)          =    230.02
                                                Prob > F          =    0.0000
                                                R-squared         =    0.9821
                                                Root MSE          =    .30161

------------------------------------------------------------------------------
             |               Robust
     lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
--------------+---------------------------------------------------------------
     dmedical |  -5.133357   4.480468    -1.15   0.259    -14.22017    3.953454
     staxrate |   .0890833   .0617598     1.44   0.158    -.0361714    .2143381
lnnumdrugar~s |   .0518933   .0659779     0.79   0.437    -.0819161    .1857027
    lnmrktsize |   1.065347   .1970836     5.41   0.000     .6656434    1.465051
  lntaxrevenue |   .8611521   .2297907     3.75   0.001      .395115    1.327189
  medstaxrate |  -.0802108   .0720739    -1.11   0.273    -.2263834    .0659617
mednumdruga~s |   .3173094   .1285602     2.47   0.018     .0565772    .5780415
  medmrktsize |  -.3619028   .2653017    -1.36   0.181    -.8999596     .176154
    medtaxrev |   .1401808    .289404     0.48   0.631    -.4467577    .7271193
        _cons |   12.45729   3.885369     3.21   0.003     4.577396    20.33718
------------------------------------------------------------------------------
(est2 stored)
```

```
81 .
82 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnGDPCap

         chi2(1)      =     1.80
         Prob > chi2  =   0.1801

83 .
84 . eststo:reg lnGDPCap dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrevenue
>  medstaxrate mednumdrugarrests medmrktsize medtaxrev if d04==1, robust

Linear regression                               Number of obs     =         45
                                                F(9, 35)          =     391.95
                                                Prob > F          =     0.0000
                                                R-squared         =     0.9851
                                                Root MSE          =     .27612

                             Robust
      lnGDPCap       Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]

      dmedical    3.050131   5.675514     0.54   0.594    -8.471774    14.57204
      staxrate   -.0937449    .0530279   -1.77   0.086    -.2013973    .0139074
 lnnumdrugar~s    .2633508    .0904114    2.91   0.006     .0798059    .4468958
    lnmrktsize     .441774    .2306839    1.92   0.064    -.0265392    .9100873
  lntaxrevenue    1.299548    .2608822    4.98   0.000     .7699295    1.829167
   medstaxrate   -.0669478    .0803668   -0.83   0.410    -.2301012    .0962055
 mednumdruga~s    .2527714     .178044    1.42   0.165    -.1086772      .61422
   medmrktsize    .1236727    .3699058    0.33   0.740     -.627276    .8746214
     medtaxrev   -.3429048    .3733829   -0.92   0.365    -1.100912    .4151029
         _cons    4.426435    4.070397    1.09   0.284    -3.836909    12.68978

(est2 stored)

85 .
86 . test dmedical staxrate lnnumdrugarrests lnmrktsize medstaxrate mednumdrugarres
> ts medmrktsize medtaxrev

 ( 1)  dmedical = 0
 ( 2)  staxrate = 0
 ( 3)  lnnumdrugarrests = 0
 ( 4)  lnmrktsize = 0
 ( 5)  medstaxrate = 0
 ( 6)  mednumdrugarrests = 0
 ( 7)  medmrktsize = 0
 ( 8)  medtaxrev = 0

       F(  8,    35) =    22.41
            Prob > F =     0.0000

87 .
88 . esttab using tvalefinal4.rtf, r2 ar2 se star(* 0.1 ** 0.05 *** 0.01)
(output written to tvalefinal4.rtf)
```

```
 97 .
 98 . test dmedical staxrate lnnumdrugarrests medstaxrate mednumdrugarrests medmrkts
    > ize medtaxrev

     ( 1)  dmedical = 0
     ( 2)  staxrate = 0
     ( 3)  lnnumdrugarrests = 0
     ( 4)  medstaxrate = 0
     ( 5)  mednumdrugarrests = 0
     ( 6)  medmrktsize = 0
     ( 7)  medtaxrev = 0

           F(  7,    36) =    11.65
                Prob > F =     0.0000

 99 .
100 . esttab using tvalefinal5.rtf, r2 ar2 se star(* 0.1 ** 0.05 *** 0.01)
    (output written to  tvalefinal5.rtf )

101 .
102 . eststo clear

103 .
104 . gen staxrate14 = d14*staxrate
    (17 missing values generated)

105 .
106 . gen numdrugarrests14 = d14*lnnumdrugarrests

107 .
108 . gen mrktsize14 = d14*lnmrktsize

109 .
110 . gen taxrev14 = d14*lntaxrevenue

111 .
112 . eststo:reg lnGDPCap d14 dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrev
    > enue staxrate14 numdrugarrests14 mrktsize14 taxrev14 if d0414==1

      Source       SS           df       MS      Number of obs   =        91
                                                  F(10, 80)       =    399.18
       Model    358.058626       10  35.8058626  Prob > F        =    0.0000
    Residual    7.17594132       80  .089699267  R-squared       =    0.9804
                                                  Adj R-squared   =    0.9779
       Total    365.234567       90  4.05816186  Root MSE        =     .2995

------------------------------------------------------------------------------
   lnGDPCap |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
------------+-----------------------------------------------------------------
         d14 |    1.282003   3.286944     0.39   0.698    -5.259223    7.823229
    dmedical |   -.4246556   .0817273    -5.20   0.000    -.5872981   -.2620131
    staxrate |   -.1199378   .0461733    -2.60   0.011    -.2118256   -.0280501
lnnumdrugar~s |    .3146362   .0885523     3.55   0.001     .1384114    .4908609
   lnmrktsize |    .5900502   .1593722     3.70   0.000     .2728894    .9072109
 lntaxrevenue |    1.119672   .1904023     5.88   0.000     .7407591    1.498585
  staxrate14 |    .1987859   .0578616     3.44   0.001     .0836377    .3139341
numdrugarr~14 |   -.1551449   .1023895    -1.52   0.134    -.3589064    .0486167
  mrktsize14 |    .2352166   .1875576     1.25   0.213     -.138035    .6084682
    taxrev14 |   -.0572276   .2293632    -0.25   0.804    -.5136749    .3992198
       _cons |     6.93208   2.715399     2.55   0.013     1.528263     12.3359
------------------------------------------------------------------------------

(est1 stored)
```

```
113 .
114 . hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of lnGDPCap

         chi2( 1)      =     2.31
         Prob > chi2   =   0.1286

115 .
116 . eststo:reg lnGDPCap d14 dmedical staxrate lnnumdrugarrests lnmrktsize lntaxrev
> enue staxrate14 numdrugarrests14 mrktsize14 taxrev14 if d0414==1, robust

Linear regression                               Number of obs     =         91
                                                F(10, 80)         =     323.85
                                                Prob > F          =     0.0000
                                                R-squared         =     0.9804
                                                Root MSE          =     .2995

                             Robust
    lnGDPCap        Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]

         d14     1.282003   3.722657     0.34   0.731    -6.126322    8.690327
    dmedical    -.4246556   .1002679    -4.24   0.000     -.624195   -.2251162
    staxrate    -.1199378   .0422321    -2.84   0.006    -.2039824   -.0358933
lnnumdrugar~s    .3146362   .0737367     4.27   0.000     .1678955    .4613769
   lnmrktsize    .5900502   .1688154     3.50   0.001     .2540968    .9260036
 lntaxrevenue    1.119672   .1888923     5.93   0.000     .7437641    1.495579
  staxrate14     .1987859   .0558153     3.56   0.001      .08771     .3098618
numdrugarr~14   -.1551449   .1342789    -1.16   0.251    -.4223684    .1120787
  mrktsize14     .2352166   .2131518     1.10   0.273     -.188969    .6594022
    taxrev14    -.0572276   .2607169    -0.22   0.827    -.5760706    .4616155
       _cons      6.93208   2.837839     2.44   0.017       1.2846    12.57956

(est2 stored)

117 .
118 . test d14 numdrugarrests14 mrktsize14 taxrev14

 ( 1)  d14 = 0
 ( 2)  numdrugarrests14 = 0
 ( 3)  mrktsize14 = 0
 ( 4)  taxrev14 = 0

       F(  4,    80) =     2.77
            Prob > F =     0.0328

119 .
120 . esttab using tvalefinal6.rtf, r2 ar2 se star(* 0.1 ** 0.05 *** 0.01)
(output written to tvalefinal6.rtf)

121 .
122 . eststo clear

123 .
```