

# ECON 690, Analyzing Opioid Overdoses

## Part 1 – analyzing data

```
library(readxl)
data <- read_excel("690_data8.xlsx")
attach(data)
```

## obtain the dimension and inspect the structure

```
is.data.frame(data)
```

```
## [1] TRUE
```

```
str(data)
```

```
## tibble [663 × 23] (S3: tbl_df/tbl/data.frame)
##   $ state                                : chr [1:663] "Alabama" "Alabama"
##   "Alabama" "Alabama" ...
##   $ stateid                             : num [1:663] 1 1 1 1 1 1 1 1 1 1
##   ...
##   $ year                                : num [1:663] 2006 2007 2008 2009
##   2010 ...
##   $ t                                    : num [1:663] 6 7 8 9 10 11 12 13
##   14 15 ...
##   $ cpi                                 : num [1:663] 198 202 211 211 217
##   ...
##   $ mcare_millions                     : num [1:663] 6732 7135 7659 8039
##   8299 ...
##   $ medicaid_spend_actual              : num [1:663] 3.89e+09 4.31e+09 4.
```

```

08e+09 4.42e+09 4.87e+09 ...
## $ overdoses : num [1:663] 124 165 185 206 187
176 165 166 270 282 ...
## $ population : num [1:663] 4628981 4672840 4718
206 4757938 4785437 ...
## $ hhincome : num [1:663] 47624 47654 47244 46
905 51999 ...
## $ state_gdp : num [1:663] 184796 185869 185298
178021 182263 ...
## $ unemployment_pct : num [1:663] 4 4 5.7 11 10.5 9.6
8 7.2 6.8 6.1 ...
## $ labor_participation_pct : num [1:663] 59.1 58.7 57.2 53.1
53.2 53.4 53.5 53.6 53.3 53.5 ...
## $ insured_pct : chr [1:663] "84.9" "88.3" "86.7"
"86.2" ...
## $ grad_hs_pct : num [1:663] 82.1 82.1 80.8 80.8
81.4 81.9 82.6 83.1 83.7 84.3 ...
## $ is_manufacturing_state : num [1:663] 1 1 1 1 1 1 1 1 1 1
...
## $ post_recession : num [1:663] 0 0 1 1 1 1 1 1 1 1
...
## $ per_capita_state_tax_revenue: num [1:663] 2774 2891 2972 2849
2835 ...
## $ pct_change_str : num [1:663] 0.081 0.042 0.028 -0
.041 -0.005 0.021 0.023 0.016 -0.002 0.043 ...
## $ medicaidml : num [1:663] 3885 4311 4078 4416
4873 ...
## $ tmcaidml : num [1:663] 10617 11446 11737 12
455 13172 ...
## $ tmcaidmlreal : num [1:663] 13272 14016 13783 14
621 15067 ...
## $ Prescription Rate : num [1:663] 116 120 126 132 134
...

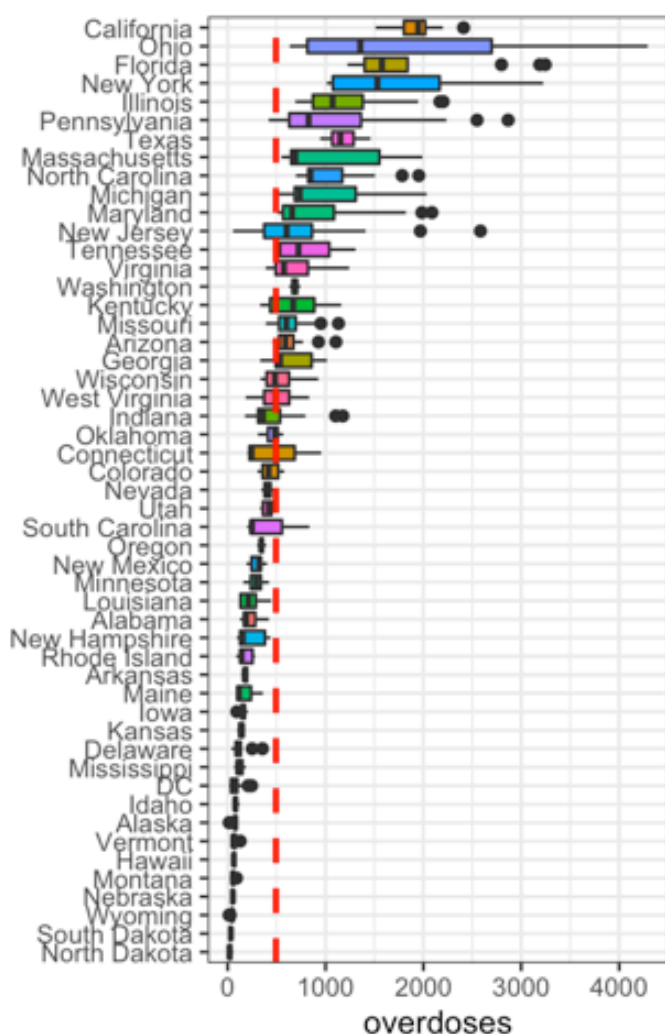
```

```
sapply(data, class)
```

```
##               state               stateid
##           "character"           "numeric"
##               year               t
##           "numeric"           "numeric"
##               cpi               mcare_millions
##           "numeric"           "numeric"
##   medicaid_spend_actual       overdoses
##           "numeric"           "numeric"
##           population           hhincome
##           "numeric"           "numeric"
##           state_gdp           unemployment_pct
##           "numeric"           "numeric"
##   labor_participation_pct       insured_pct
##           "numeric"           "character"
##           grad_hs_pct       is_manufacturing_state
##           "numeric"           "numeric"
##           post_recession per_capita_state_tax_revenue
##           "numeric"           "numeric"
##           pct_change_str       medicaidml
##           "numeric"           "numeric"
##           tmcareml          tmcaremlreal
##           "numeric"           "numeric"
##           Prescription Rate
##           "numeric"
```

# Using Boxplots to check for data outliers

```
library(ggplot2)
ggplot(data = data,
       mapping = aes(x = reorder(state, overdoses), y = overdoses, fill = state)) +
  geom_boxplot() +
  labs(x=NULL, y="overdoses") +
  coord_flip() +
  geom_hline(yintercept = 493, linetype="dashed", color = "red", size = 1) +
  theme_bw()
```



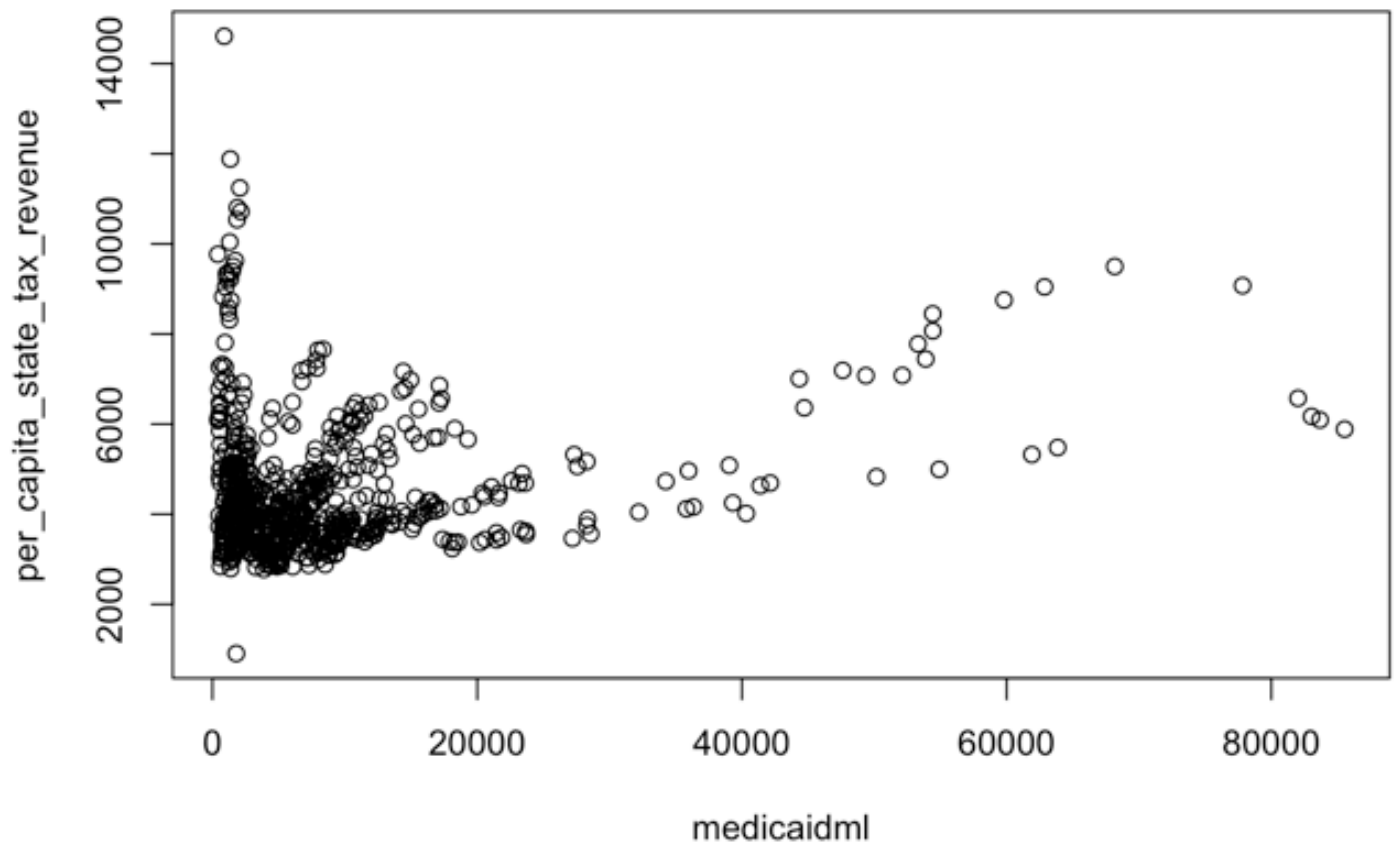
state



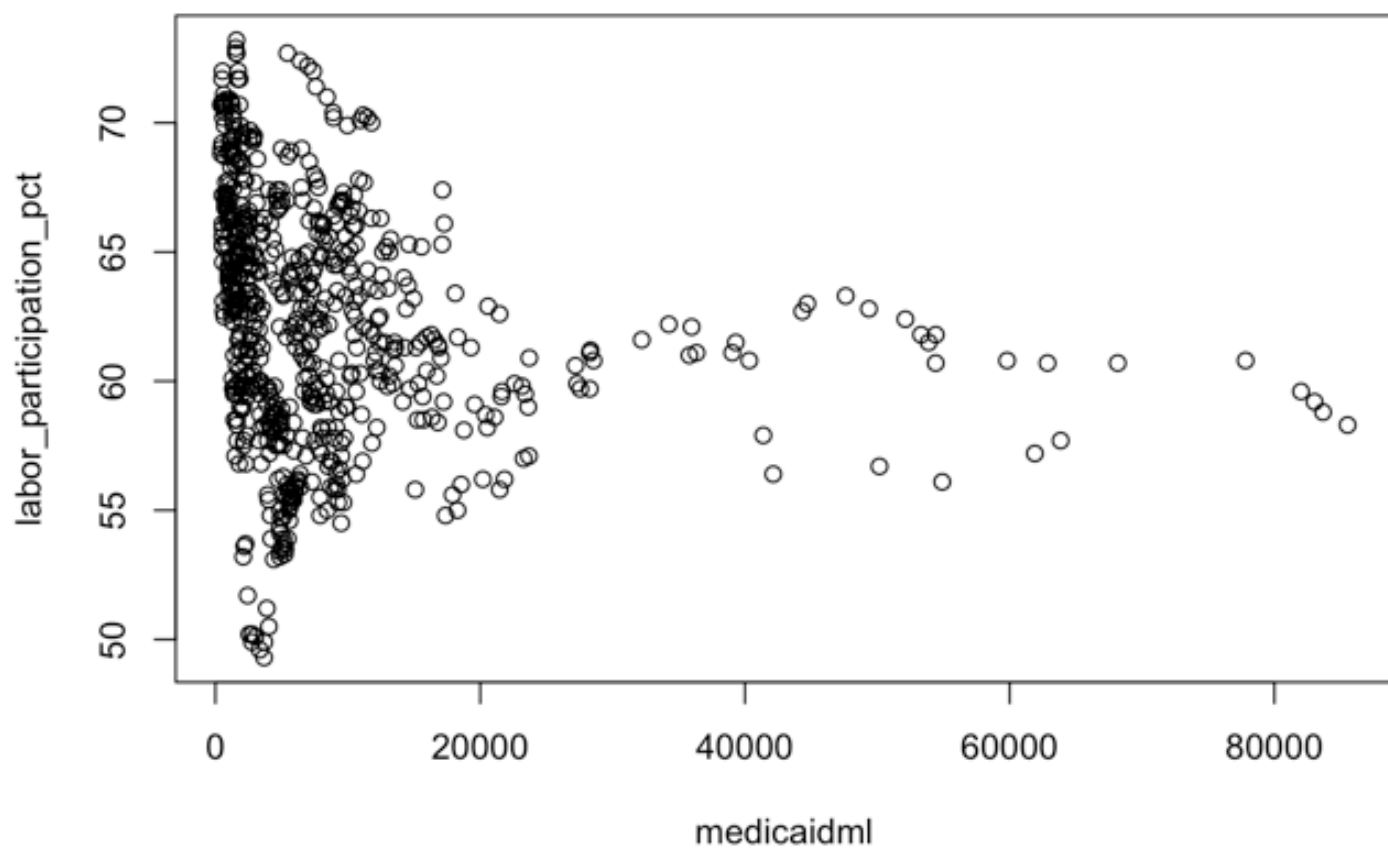
# We can see that there are not a lot of data outliers in the data set. Therefore, we can use the data set to make accurate predictions.

## plots

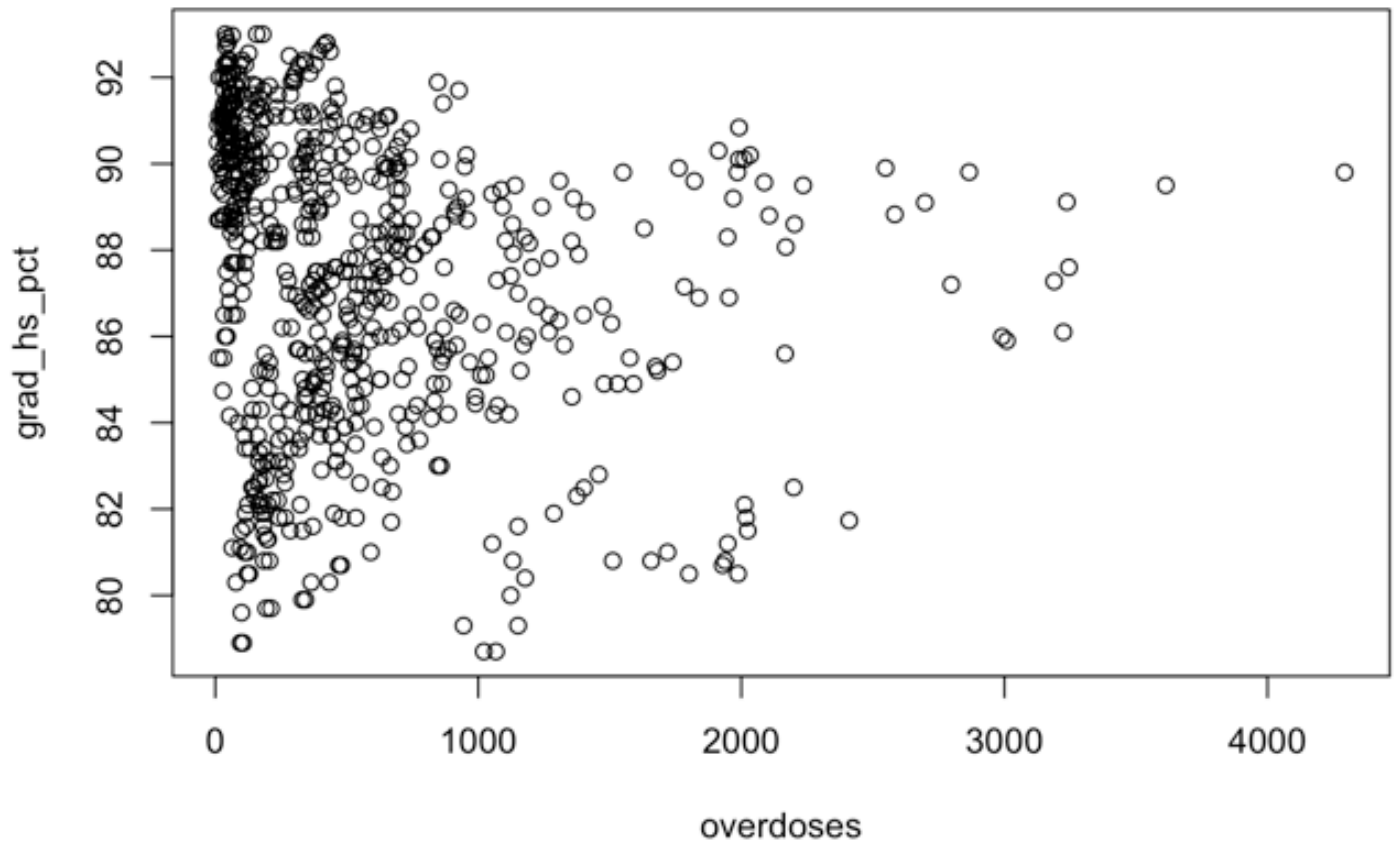
```
plot(medicaidml,per_capita_state_tax_revenue)
```



```
plot(medicaidml, labor_participation_pct)
```

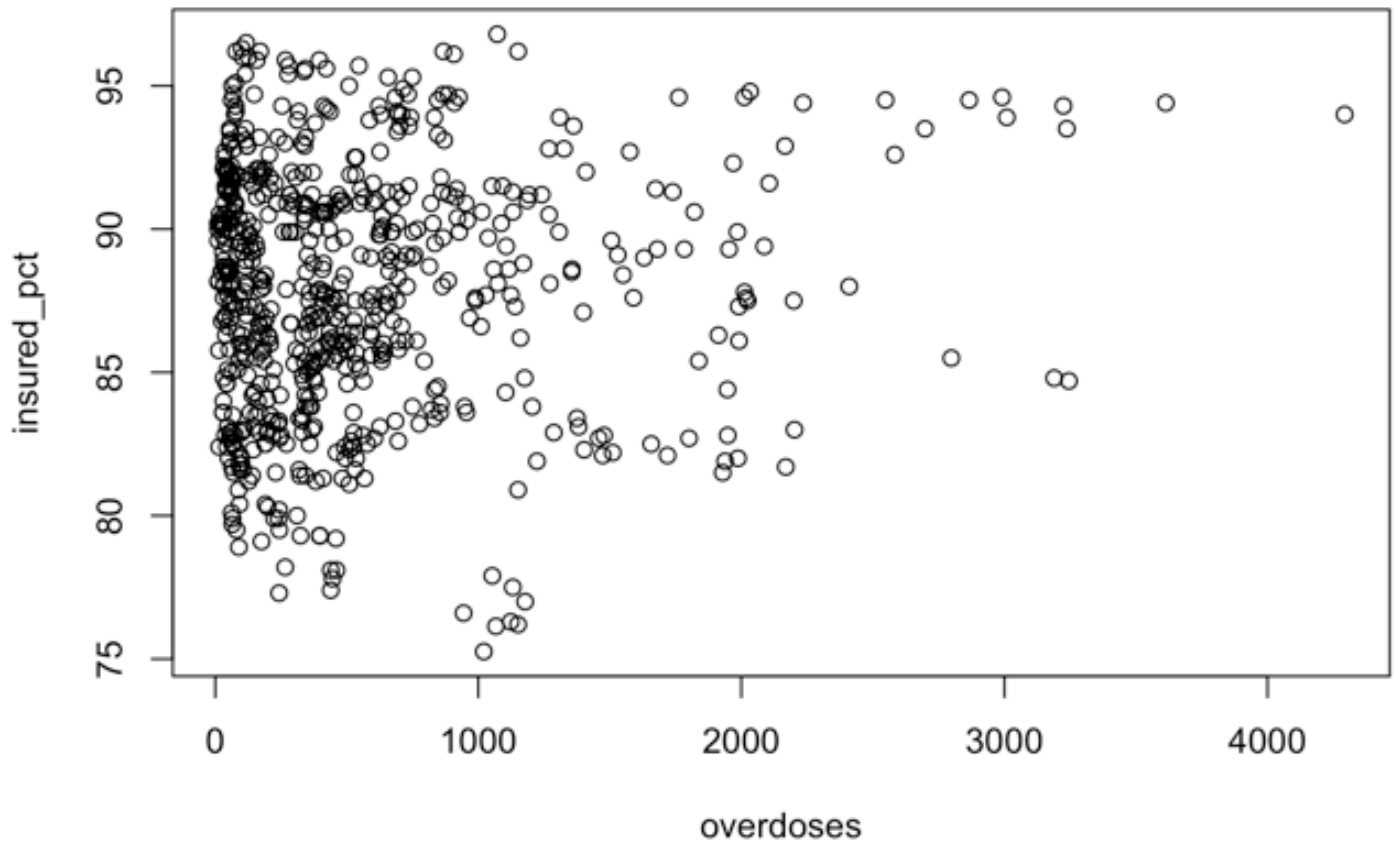


```
plot(overdoses,grad_hs_pct)
```



```
plot(overdoses,insured_pct)
```

```
## Warning in xy.coords(x, y, xlabel, ylabel, log): NAs introduced by coercion
```



# scatter plots to look at relations

```
library(ggplot2)
library(cowplot)
```

```
##
## *****
```

```
## Note: As of version 1.0.0, cowplot does not change the
```

```
## default ggplot2 theme anymore. To recover the previous
```

```
## behavior, execute:
## theme_set(theme_cowplot())
```



```
## *****
```

```
library(gridExtra)

sc1 = ggplot(data = data, aes(x = overdoses, y = medicaidml)) + geom_
point() + geom_smooth(method = lm, fill="blue", color="blue", se = F
ALSE) + xlab("overdose") + ylab("medicade in millions") + ggtitle("o
verdoses ~ medicade($ million)")

sc2 = ggplot(data = data, aes(x = overdoses, y = unemployment_pct))
+ geom_point() + geom_smooth(method = lm, fill="blue", color="blue",
se = FALSE) + xlab("overdose") + ylab("unemployed %") + ggtitle("ove
rdoses ~ unemployment %")

sc3 = ggplot(data = data, aes(x = overdoses, y = `Prescription Rate`
)) + geom_point() + geom_smooth(method = lm, fill="blue", color="red"
, se = FALSE) + xlab("overdose") + ylab("Prescription Rate") + ggtit
le("overdoses ~ Prescription rate")

sc4 = ggplot(data = data, aes(x = overdoses, y = hhincome)) + geom_po
int() + geom_smooth(method = lm, fill="blue", color="blue", se = FAL
SE) + xlab("overdose") + ylab("HH income") + ggtitle(" overdoses ~ H
H income")

plot_grid(sc1, sc2,sc3,sc4)
```

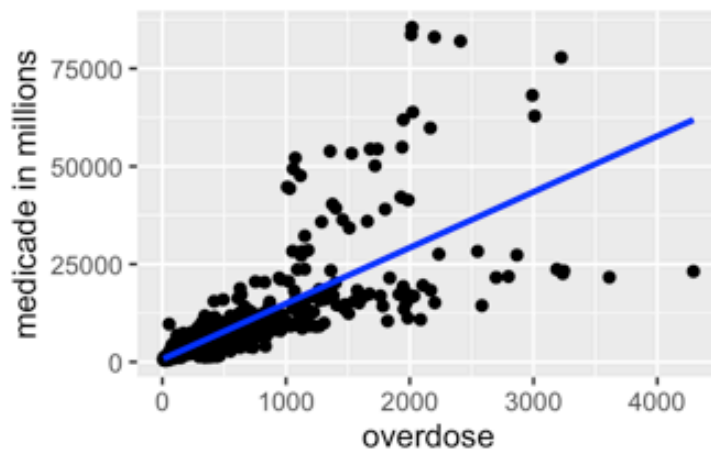
```
## `geom_smooth()` using formula 'y ~ x'
```

```
## `geom_smooth()` using formula 'y ~ x'
```

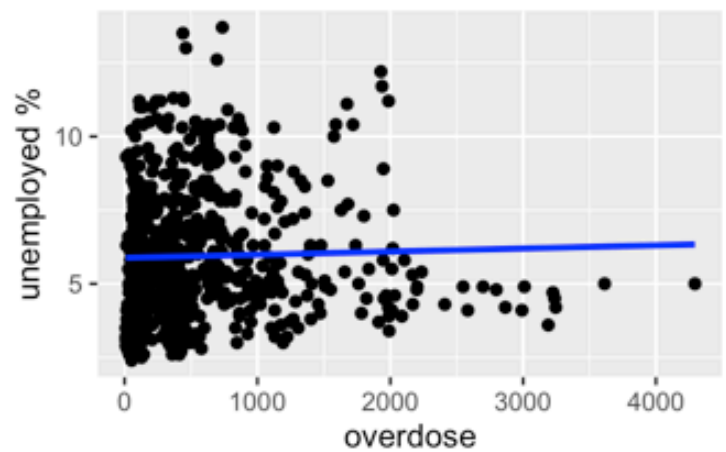
```
## `geom_smooth()` using formula 'y ~ x'
```

```
## `geom_smooth()` using formula 'y ~ x'
```

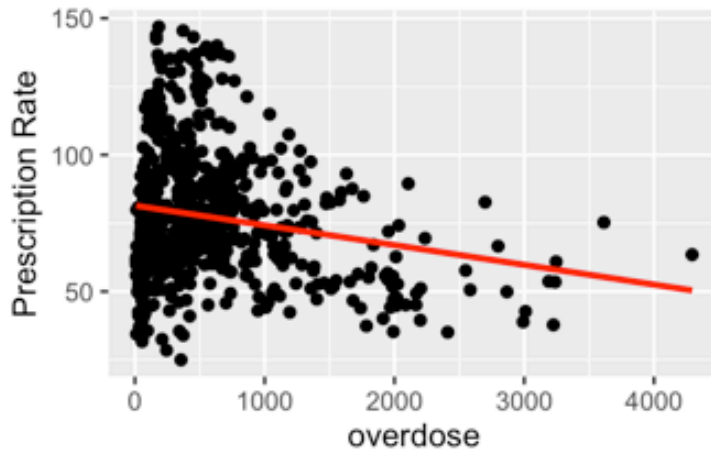
overdoses ~ medicade(\$ million)



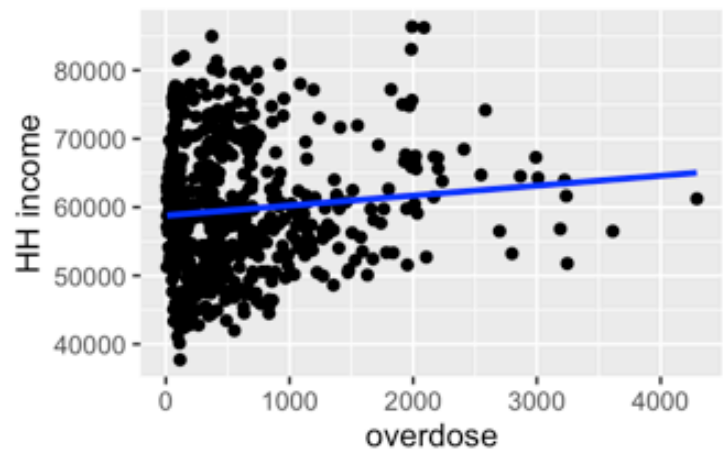
overdoses ~ unemployment %



overdoses ~ Prescription rate



overdoses ~ HH income



correlation of Variables, using  
Pearson-method with listwise-  
deletion.

```
insured.num <- as.numeric(data$insured_pct)
```

```
## Warning: NAs introduced by coercion
```

```
data[, "insured.num"]<-insured.num
```

```
df1 <- data.frame(overdoses,medicaid_spend_actual,`Prescription Rate`  
`,unemployment_pct,labor_participation_pct,state_gdp,pct_change_str)  
df2 <- data.frame(overdoses, medicaidml,population,cpi,hhincome,  
insured.num)
```

```
library(sjlabelled)  
library(sjmisc)  
library(sjPlot)
```

```
##  
## Attaching package: 'sjPlot'
```

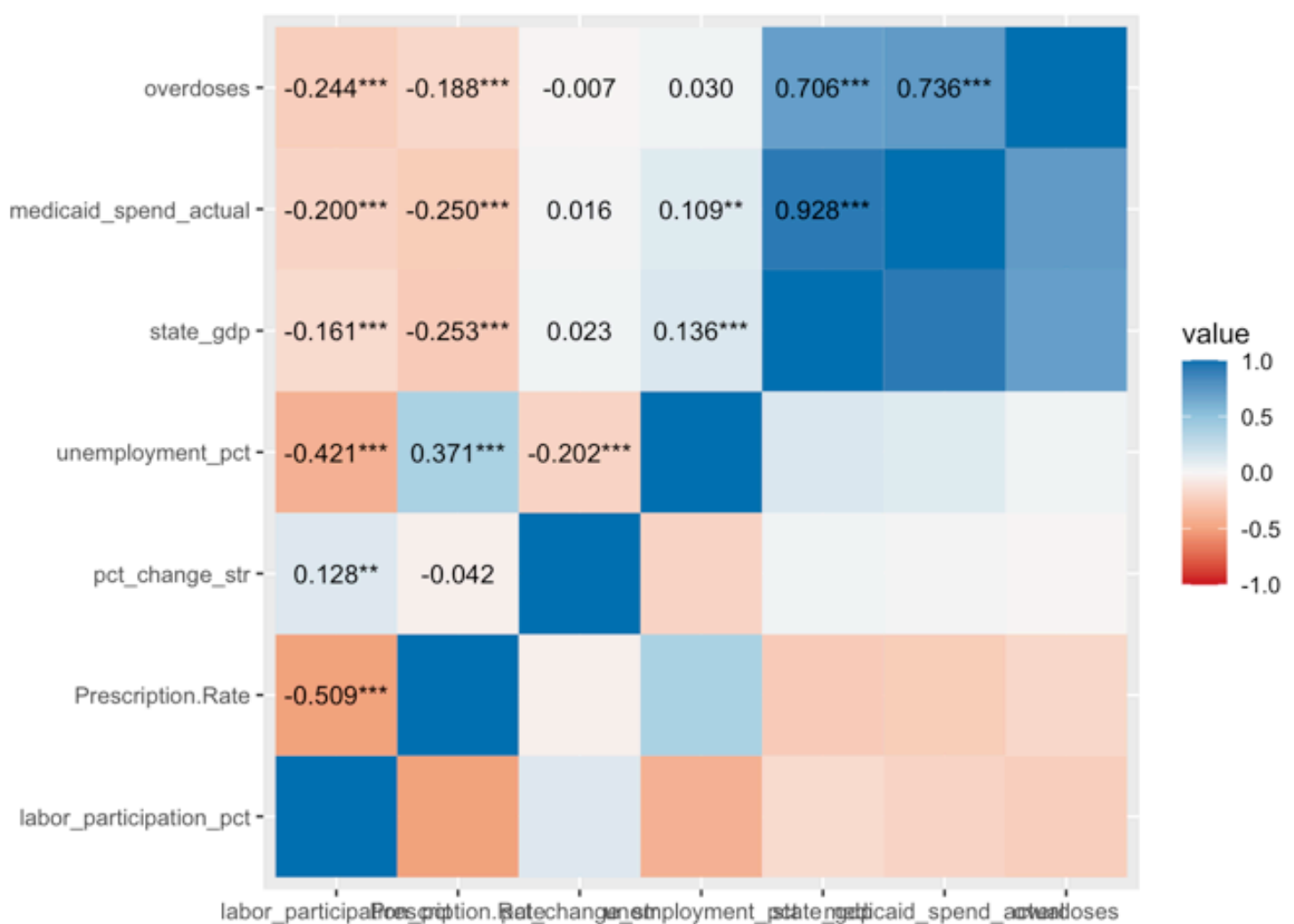
```
## The following objects are masked from 'package:cowplot':  
##  
## plot_grid, save_plot
```

```
library(sjstats)
```

```
q = cor(df1)  
sjp.corr(df1, show.legend = TRUE)
```

```
## Computing correlation using pearson-method with listwise-deletion  
...
```

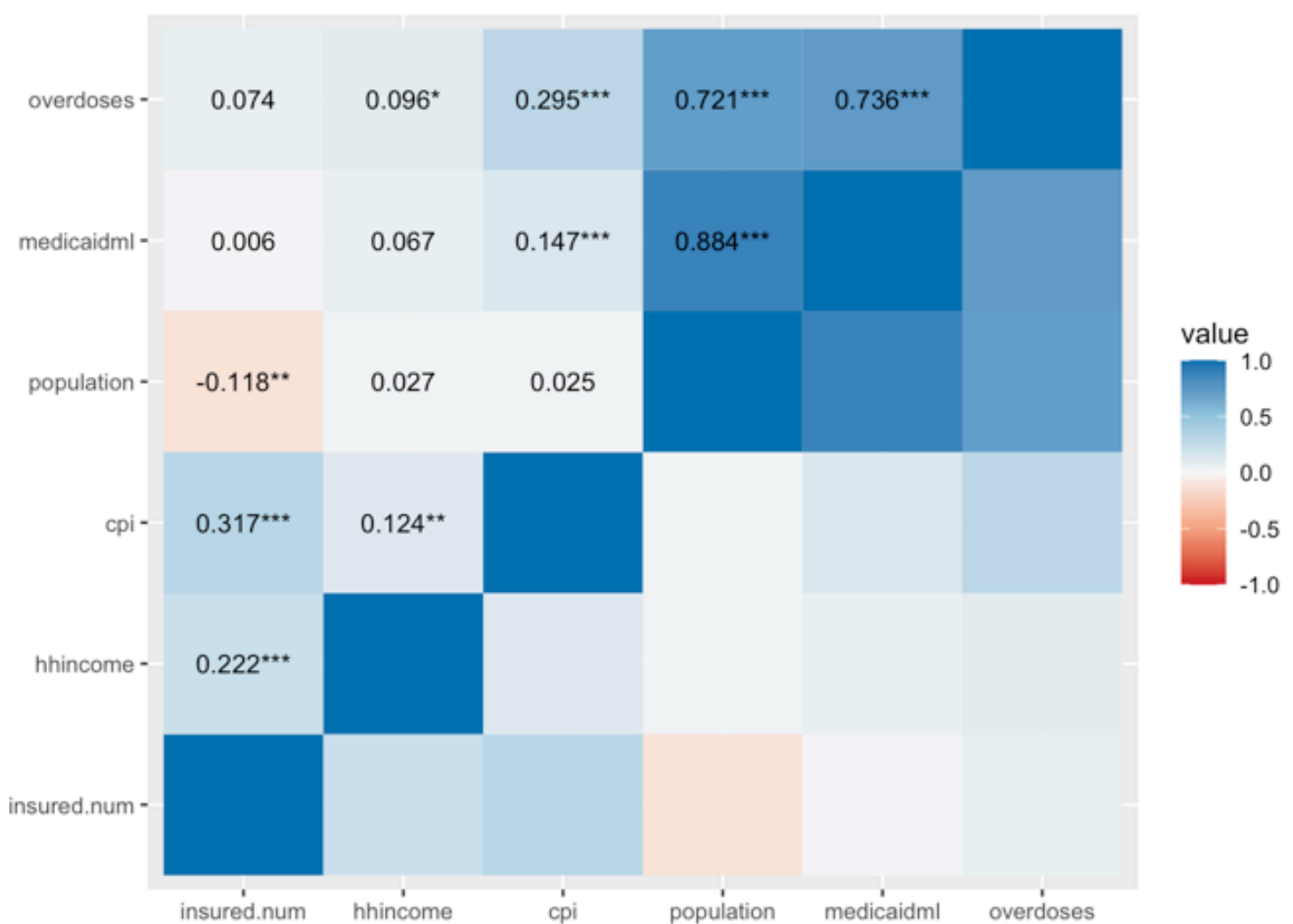
```
## Warning: Removed 28 rows containing missing values (geom_text).
```



```
q = cor(df2)
sjp.corr(df2, show.legend = TRUE)
```

```
## Computing correlation using pearson-method with listwise-deletion
...
```

```
## Warning: Removed 21 rows containing missing values (geom_text).
```



# Looking at the coeralation relations using SjPlot, we can see that all variables are highly coorelated, by looking at the sign before the number and having mediem strenght being bigger 0.3 and have \*\*. Intrestingly, overdoses and prescription rates and actual medicaid spending have a negative coorelation but are highly coorelated, which means we can run a lm model on these variables to learn more about the relation.

**calculating cost of death per overdoses, we start by creating the ovd\_cost variable, which stands for cost per overdose. Then coverting the new variable into a numeric value**

```

data$ovd_cost <- (data$overdoses / data$medicaidml) * population

ovd_cost.num <- as.numeric(data$ovd_cost)

data[, "ovd_cost.num"]<-ovd_cost.num

# summary of cost per overodose by state
tapply(data$ovd_cost.num, data$state, summary)

```

```

## $Alabama
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 147729  173597  214022  225592  258462  367759
##
## $Alaska
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  10697   36522   38118   38525   43807   67960
##
## $Arizona
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 404638  427437  430676  458264  446667  649525
##
## $Arkansas
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  84078  104845  119935  123162  136454  172264
##
## $California
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 918224 1159662 1300380 1349916 1670007 1774408
##
## $Colorado
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 366667  411837  448033  463724  535587  579156
##
## $Connecticut
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 106891  138942  197802  237820  312874  428389
##
## $DC
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   6353   16810   24173   33402   35547   79161
##

```

```

## $Delaware
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##    24417   39739   47898   52144   52442   121288
##
## $Florida
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##  1335230 1642694 1814157 1946953 1991754 2921932
##
## $Georgia
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   450700   589866   646586   704257   884792 1034491
##
## $Hawaii
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##    31633   43812   58512   56342   64253   93472
##
## $Idaho
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##    64837   79105   85832   88126   96045   117061
##
## $Illinois
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   692831   882835   929466 1062665 1107165 1857216
##
## $Indiana
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   196419   316794   333657   391819   379003   712971
##
## $Iowa
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##    97082   119447   134708   132401   149259   155845
##
## $Kansas
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   118531   129497   143510   148794   171561   184965
##
## $Kentucky
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   317907   346907   454197   430376   503073   538746
##
## $Louisiana
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.

```

##	79652	95033	166131	144222	172341	221115
##						
##	\$Maine					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	47489	57497	63007	87966	122519	179104
##						
##	\$Maryland					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	416039	511589	585383	672192	681079	1161602
##						
##	\$Massachusetts					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	305989	356200	435629	501585	676610	799031
##						
##	\$Michigan					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	544090	589016	719258	775796	815131	1212681
##						
##	\$Minnesota					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	146188	164455	173818	174976	185126	204530
##						
##	\$Mississippi					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	52796	70411	74162	77413	86932	100901
##						
##	\$Missouri					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	348292	396868	437299	452670	472326	654387
##						
##	\$Montana					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	22324	47373	57145	59094	67427	99997
##						
##	\$Nebraska					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	32800	41785	55093	52081	58082	74021
##						
##	\$Nevada					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	343986	384087	703790	612964	786221	852180
##						



```

## $`New Hampshire`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##    98444  124950  163331  197226  293218  308283
##
## $`New Jersey`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##    49814  329900  512543  575612  563697 1592990
##
## $`New Mexico`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   114526  138020  148899  166304  200885  213918
##
## $`New York`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   399744  444011  561788  595866  711833  939837
##
## $`North Carolina`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   661213  688990  752683  870467  871230 1482012
##
## $`North Dakota`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##     9673   14093   21622   23441   26618   55897
##
## $Ohio
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   540994  755069  956984 1142376 1451262 2161074
##
## $Oklahoma
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   216584  362182  425068  408235  463023  536260
##
## $Oregon
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   151948  181446  306847  288717  381070  460383
##
## $Pennsylvania
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##   337127  466809  517738  655709  744325 1342917
##
## $`Rhode Island`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.

```

```

##      53248      70857      81455      86360      104401      121613
##
## $`South Carolina`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      212387  222541  239826  344914  454430  663907
##
## $`South Dakota`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      25548   28358   35542   33606   37369   43157
##
## $Tennessee
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      414919  471793  530373  604075  748168  931608
##
## $Texas
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      951714  987331 1042990 1078217 1135100 1375844
##
## $Utah
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      543363  567420  608212  605516  632685  670642
##
## $Vermont
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      20466   26071   30216   31329   37468   44460
##
## $Virginia
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      482608  664571  724383  798071  846163 1161311
##
## $Washington
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      458781  519735  634051  608673  714899  754757
##
## $`West Virginia`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      139681  299759  311521  304860  327621  374923
##
## $Wisconsin
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      336725  389321  421620  461828  483588  655927
##

```

```
## $Wyoming
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  17364   35033   45649   42833   49352   57433
```

# Linear Regression

```
library(lme4)
```

```
## Loading required package: Matrix
```

```
d <- data.frame(stateid=rep(c('1', '2'), c(10, 10)),
                 t=rep(1:10, 2),
                 response=c(rnorm(10), rnorm(10)))
```

```
lmreg1 <- lmList(ovd_cost.num ~ overdoses+ medicaidml+cpi+population
+hhincome+state_gdp+unemployment_pct+labor_participation_pct+grad_hs
_pct+per_capita_state_tax_revenue+`Prescription Rate`| state, data=d
ata)
```

```
## Warning: Unknown or uninitialised column: `(weights)`.
```

```
## Warning: Unknown or uninitialised column: `(offset)`.
```

```
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## Warning: Unknown or uninitialised column: `(weights)`.
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## Warning: Unknown or uninitialised column: `(offset)`.
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```
summary(lmreg1)
```

```
## Call:
```

```
## Model: ovd_cost.num ~ overdoses + medicaidml + cpi + population  
+ hhincome + state_gdp + unemployment_pct + labor_participation_pct  
+ grad_hs_pct + per_capita_state_tax_revenue + `Prescription Rate` |  
NULL
```

```
## Data: data
```

```
##
```

```
## Coefficients:
```

```
## (Intercept)
```

##	Estimate	Std. Error	t value	Pr(> t )
## Alabama	-2543871.73	22046528	-0.115386503	0.9085919001
## Alaska	496691.35	7511624	0.066123035	0.9475384027
## Arizona	-472945.60	8036881	-0.058846907	0.9533040258
## Arkansas	1987698.67	5492361	0.361902385	0.7189202007
## California	8161825.45	10368629	0.787165359	0.4348280383
## Colorado	1892648.57	4519317	0.418790859	0.6771275097
## Connecticut	2240448.43	10364060	0.216174785	0.8297138403
## DC	-156916.88	2530785	-0.062003233	0.9508026178
## Delaware	-35165.88	2895365	-0.012145577	0.9903568581
## Florida	-12886082.42	5249006	-2.454956510	0.0175408042
## Georgia	-881908.60	4174428	-0.211264544	0.8335227909
## Hawaii	6057282.16	14924935	0.405849818	0.6865507429
## Idaho	18039.51	3130388	0.005762709	0.9954245320
## Illinois	-11414470.23	6839188	-1.668980375	0.1012496477
## Indiana	-3031754.42	5701330	-0.531762691	0.5971992093

## Iowa	547740.36	5435360	0.100773515	0.9201253820
## Kansas	191481.47	7848275	0.024397904	0.9806304336
## Kentucky	-7406542.76	11780416	-0.628716578	0.5323405433
## Louisiana	-2120981.71	5608285	-0.378187238	0.7068611283
## Maine	-1553119.51	22143513	-0.070138805	0.9443574875
## Maryland	5688918.60	7767305	0.732418604	0.4672659192
## Massachusetts	-4809598.30	3591404	-1.339197357	0.1864446475
## Michigan	-25004407.48	21516222	-1.162118870	0.2505968251
## Minnesota	1138248.26	17764652	0.064073772	0.9491619717
## Mississippi	-744076.41	5504171	-0.135184099	0.8929984603
## Missouri	-776641.91	3316290	-0.234189988	0.8157750986
## Montana	295998.60	9660279	0.030640793	0.9756756065
## Nebraska	-178792.98	5901720	-0.030295064	0.9759499795
## Nevada	-560782.80	4019419	-0.139518382	0.8895900481
## New Hampshire	4678773.28	11753833	0.398063605	0.6922447891
## New Jersey	-34279327.03	15776051	-2.172871248	0.0344602987
## New Mexico	-854166.60	9207639	-0.092767169	0.9264519962
## New York	-3010378.58	4275890	-0.704035610	0.4846129309
## North Carolina	-3828878.48	5493489	-0.696984882	0.4889772601
## North Dakota	218149.47	3496032	0.062399154	0.9504888821
## Ohio	-14212331.89	13885964	-1.023503429	0.3109003375
## Oklahoma	-634703.98	2575209	-0.246467015	0.8063100845
## Oregon	-682505.00	6206413	-0.109967707	0.9128665731
## Pennsylvania	1064530.82	17042784	0.062462259	0.9504388773
## Rhode Island	529042.27	15964499	0.033138671	0.9736933622
## South Carolina	632237.05	3295259	0.191862626	0.8486116943
## South Dakota	592876.86	10353807	0.057261728	0.9545604705
## Tennessee	280248.21	5697299	0.049189658	0.9609602918
## Texas	-12343660.70	3218173	-3.835611231	0.0003461086
## Utah	3737248.18	6169453	0.605766566	0.5473563782
## Vermont	-347087.38	9116909	-0.038070728	0.9697799253
## Virginia	-13923053.19	9345751	-1.489773591	0.1424425804
## Washington	-4305246.29	3545835	-1.214169923	0.2302753200
## West Virginia	7636407.00	11523868	0.662660065	0.5105321117
## Wisconsin	-809966.01	8547365	-0.094762071	0.9248751599
## Wyoming	-30445.22	3436013	-0.008860625	0.9929649070

## overdoses

##	Estimate	Std. Error	t value	Pr(> t )
## Alabama	894.0525	783.57647	1.14098943	2.592039e-01
## Alaska	655.9761	339.07502	1.93460469	5.859514e-02
## Arizona	607.8792	526.20582	1.15521194	2.533875e-01
## Arkansas	465.1904	557.41826	0.83454454	4.078664e-01

## California	337.9808	188.87591	1.78943315	7.948376e-02
## Colorado	853.6367	258.77497	3.29876062	1.775004e-03
## Connecticut	479.0071	136.07264	3.52023091	9.175884e-04
## DC	344.2573	231.72874	1.48560479	1.435394e-01
## Delaware	373.2808	377.10917	0.98984805	3.269216e-01
## Florida	751.6726	58.76442	12.79128740	1.541798e-17
## Georgia	985.5957	371.16394	2.65541870	1.054280e-02
## Hawaii	217.8660	2550.64999	0.08541588	9.322652e-01
## Idaho	1018.3163	998.52259	1.01982295	3.126260e-01
## Illinois	454.4518	117.60772	3.86413196	3.162986e-04
## Indiana	572.7744	85.58747	6.69226923	1.667229e-08
## Iowa	472.2344	1659.69736	0.28453044	7.771561e-01
## Kansas	1087.3445	607.44581	1.79002719	7.938697e-02
## Kentucky	358.4861	447.88220	0.80040266	4.271904e-01
## Louisiana	713.8948	220.44126	3.23848075	2.116045e-03
## Maine	531.1121	540.26192	0.98306405	3.302167e-01
## Maryland	658.1318	75.45380	8.72231521	1.099694e-11
## Massachusetts	331.1991	87.60551	3.78057364	4.114559e-04
## Michigan	560.1458	105.34909	5.31704469	2.354011e-06
## Minnesota	524.5905	301.60777	1.73931377	8.801258e-02
## Mississippi	618.9202	412.14476	1.50170596	1.393397e-01
## Missouri	572.7162	179.95058	3.18263072	2.486437e-03
## Montana	1156.1572	910.09372	1.27037160	2.097173e-01
## Nebraska	1022.8146	1167.08259	0.87638577	3.849297e-01
## Nevada	1546.8845	680.84065	2.27202142	2.733315e-02
## New Hampshire	1007.2978	786.70524	1.28040058	2.061972e-01
## New Jersey	599.7965	30.84479	19.44563526	3.050381e-25
## New Mexico	584.2927	297.19044	1.96605473	5.474719e-02
## New York	321.6378	33.33671	9.64815591	4.311463e-13
## North Carolina	724.9577	88.96996	8.14834207	8.523597e-11
## North Dakota	1104.6631	1038.17104	1.06404729	2.923194e-01
## Ohio	593.1445	36.69367	16.16476340	1.034251e-21
## Oklahoma	848.2748	183.54434	4.62163405	2.624723e-05
## Oregon	819.9091	269.69055	3.04018477	3.726184e-03
## Pennsylvania	593.9708	135.54787	4.38199988	5.875639e-05
## Rhode Island	539.4301	381.09696	1.41546672	1.630096e-01
## South Carolina	930.5679	267.59902	3.47747141	1.044000e-03
## South Dakota	1107.7658	1355.45689	0.81726378	4.175793e-01
## Tennessee	891.8073	561.68966	1.58772255	1.185303e-01
## Texas	982.9666	213.97973	4.59373702	2.885079e-05
## Utah	1265.6169	1800.78558	0.70281376	4.853677e-01
## Vermont	395.2903	965.97806	0.40921254	6.840972e-01

## Virginia	784.1977	183.99598	4.26203719	8.743187e-05
## Washington	1127.0520	293.79442	3.83619259	3.454748e-04
## West Virginia	611.1847	109.59589	5.57671240	9.366648e-07
## Wisconsin	810.8696	212.11568	3.82277046	3.603964e-04
## Wyoming	1055.7065	1639.84149	0.64378573	5.225991e-01
## medicaidml				
##	Estimate	Std. Error	t value	Pr(> t )
## Alabama	-49.762569	108.429262	-0.45894040	6.482270e-01
## Alaska	-57.143695	169.040258	-0.33804784	7.367148e-01
## Arizona	-49.346405	41.181947	-1.19825333	2.363572e-01
## Arkansas	-1.813791	56.382178	-0.03216959	9.744624e-01
## California	-5.167369	6.830220	-0.75654495	4.528033e-01
## Colorado	-124.079883	55.080670	-2.25269379	2.860997e-02
## Connecticut	-27.410314	16.158793	-1.69630948	9.592391e-02
## DC	-52.178684	129.485595	-0.40296902	6.886554e-01
## Delaware	-19.900603	74.090807	-0.26859747	7.893230e-01
## Florida	-99.871332	14.139484	-7.06329393	4.323364e-09
## Georgia	-69.460837	176.055936	-0.39453845	6.948287e-01
## Hawaii	52.473299	320.838026	0.16355075	8.707312e-01
## Idaho	-54.992255	132.118118	-0.41623553	6.789842e-01
## Illinois	-106.179268	11.116727	-9.55130655	6.024850e-13
## Indiana	-42.068035	15.936652	-2.63970346	1.098132e-02
## Iowa	-36.874699	68.271830	-0.54011587	5.914680e-01
## Kansas	-43.215040	128.198295	-0.33709528	7.374284e-01
## Kentucky	-46.041971	50.616874	-0.90961705	3.673034e-01
## Louisiana	-35.821132	53.689221	-0.66719412	5.076558e-01
## Maine	-25.256042	49.935284	-0.50577547	6.151935e-01
## Maryland	-93.127686	22.717068	-4.09945882	1.487930e-04
## Massachusetts	-32.971299	14.298758	-2.30588551	2.521765e-02
## Michigan	7.814041	31.708257	0.24643554	8.063343e-01
## Minnesota	-21.030539	56.694538	-0.37094472	7.122151e-01
## Mississippi	-24.758723	54.198328	-0.45681710	6.497423e-01
## Missouri	-45.967929	26.068839	-1.76332854	8.383553e-02
## Montana	4.395244	63.021160	0.06974235	9.446715e-01
## Nebraska	-35.928950	290.703871	-0.12359295	9.021234e-01
## Nevada	-160.473489	74.726399	-2.14748058	3.653013e-02
## New Hampshire	-265.762574	180.866128	-1.46938831	1.478696e-01
## New Jersey	-70.112774	18.907560	-3.70818729	5.156424e-04
## New Mexico	-30.728790	39.484026	-0.77825879	4.400123e-01
## New York	-12.343020	1.947315	-6.33848163	6.027855e-08
## North Carolina	-70.989858	11.712760	-6.06089917	1.646386e-07
## North Dakota	-49.088479	42.996611	-1.14168253	2.589182e-01

##	Ohio	-136.332603	34.738776	-3.92450800	2.611379e-04
##	Oklahoma	-22.689182	37.972009	-0.59752387	5.528016e-01
##	Oregon	-38.407556	31.927220	-1.20297215	2.345420e-01
##	Pennsylvania	-38.250992	13.435236	-2.84706508	6.343022e-03
##	Rhode Island	-57.400782	85.325343	-0.67272841	5.041569e-01
##	South Carolina	-65.076773	132.404765	-0.49149872	6.251825e-01
##	South Dakota	-36.396623	402.952516	-0.09032484	9.283829e-01
##	Tennessee	-91.246694	101.417166	-0.89971647	3.724999e-01
##	Texas	-3.420030	13.117192	-0.26072882	7.953516e-01
##	Utah	-261.896267	246.041914	-1.06443761	2.921444e-01
##	Vermont	-26.269201	144.867877	-0.18133213	8.568256e-01
##	Virginia	-65.246153	71.035034	-0.91850667	3.626774e-01
##	Washington	-58.791408	10.205797	-5.76058989	4.852780e-07
##	West Virginia	-161.292248	122.567437	-1.31594698	1.940764e-01
##	Wisconsin	-67.321044	27.972340	-2.40670048	1.975734e-02
##	Wyoming	-70.547236	534.784404	-0.13191715	8.955689e-01
##	cpi				
##		Estimate	Std. Error	t value	Pr(> t )
##	Alabama	-1478.65180	7428.541	-0.199050095	0.843015006
##	Alaska	55.57410	6074.380	0.009148933	0.992736005
##	Arizona	-3043.26134	7828.125	-0.388759934	0.699072085
##	Arkansas	1417.51574	4348.287	0.325994038	0.745762764
##	California	-941.87419	12152.101	-0.077507109	0.938523422
##	Colorado	-7752.03203	4200.892	-1.845330178	0.070799064
##	Connecticut	781.85016	5720.617	0.136672342	0.891827897
##	DC	-38.98076	3333.825	-0.011692501	0.990716566
##	Delaware	-36.56740	4357.594	-0.008391650	0.993337251
##	Florida	-15692.18048	9656.674	-1.625008758	0.110325515
##	Georgia	-2485.94340	16081.386	-0.154585144	0.877758531
##	Hawaii	79.60855	12078.437	0.006590964	0.994766924
##	Idaho	406.20717	3074.815	0.132107844	0.895418818
##	Illinois	20225.58473	6680.829	3.027406250	0.003861982
##	Indiana	539.93548	5768.855	0.093594905	0.925797690
##	Iowa	-729.35983	13196.449	-0.055269401	0.956139794
##	Kansas	-364.13935	8741.312	-0.041657287	0.966934566
##	Kentucky	-5964.14320	5886.190	-1.013243453	0.315726984
##	Louisiana	-2801.57370	7548.871	-0.371124883	0.712081781
##	Maine	-515.95614	7991.404	-0.064563889	0.948773647
##	Maryland	-1884.99717	4654.394	-0.404993039	0.687176416
##	Massachusetts	-6811.64211	5748.684	-1.184904700	0.241547409
##	Michigan	-2957.22553	2616.263	-1.130324346	0.263627489
##	Minnesota	-539.20878	10506.032	-0.051323731	0.959268054

## Mississippi	-525.57398	6144.732	-0.085532453	0.932173001
## Missouri	5363.83423	8017.400	0.669024177	0.506497387
## Montana	-143.78653	4972.216	-0.028918000	0.977042857
## Nebraska	-219.57697	7056.122	-0.031118644	0.975296385
## Nevada	-3914.22357	4571.959	-0.856136974	0.395926752
## New Hampshire	-1165.03457	19411.383	-0.060018112	0.952375782
## New Jersey	-7233.17040	5883.102	-1.229482404	0.224533127
## New Mexico	-2520.52161	7780.408	-0.323957506	0.747295066
## New York	890.75608	3063.951	0.290721394	0.772443397
## North Carolina	-316.56931	8480.097	-0.037330859	0.970366943
## North Dakota	406.80139	1490.687	0.272895206	0.786035761
## Ohio	2932.46305	3435.416	0.853597550	0.397319564
## Oklahoma	-3703.51716	5648.141	-0.655705501	0.514960880
## Oregon	-4750.09201	9433.443	-0.503537465	0.616754556
## Pennsylvania	3566.34000	4994.875	0.713999908	0.478482366
## Rhode Island	635.11526	3173.960	0.200101816	0.842196736
## South Carolina	-2250.48743	14264.081	-0.157773036	0.875258672
## South Dakota	-96.96943	6179.465	-0.015692205	0.987541175
## Tennessee	2976.80533	9562.580	0.311297293	0.756843558
## Texas	12514.10686	13368.845	0.936064901	0.353651277
## Utah	-3883.25667	13863.361	-0.280109328	0.780526677
## Vermont	73.18419	6075.761	0.012045272	0.990436492
## Virginia	-27062.90440	13168.707	-2.055091952	0.045009034
## Washington	674.11172	4226.637	0.159491273	0.873911806
## West Virginia	3232.05177	4207.977	0.768077375	0.445983150
## Wisconsin	-1643.92967	5587.095	-0.294236939	0.769771130
## Wyoming	19.03287	5349.291	0.003558017	0.997175001
## population				
##	Estimate	Std. Error	t value	Pr(> t )
## Alabama	0.76705260	3.8282690	0.20036538	0.84199170
## Alaska	-0.20641774	2.3893250	-0.08639166	0.93149337
## Arizona	0.20808180	0.5145150	0.40442321	0.68759267
## Arkansas	-0.74681572	2.3381631	-0.31940275	0.75072581
## California	0.13284083	0.1179443	1.12630131	0.26531000
## Colorado	1.06587789	0.9125690	1.16799705	0.24823929
## Connecticut	-1.11869687	3.9032156	-0.28660904	0.77557285
## DC	0.33669352	1.6439446	0.20480832	0.83853710
## Delaware	0.32552273	1.5797121	0.20606459	0.83756087
## Florida	0.64497515	0.2777457	2.32217851	0.02425279
## Georgia	0.23170528	0.8063601	0.28734716	0.77501087
## Hawaii	-0.11782718	2.9275020	-0.04024837	0.96805227
## Idaho	-0.20079779	1.3141451	-0.15279728	0.87916108

##	Illinois	0.96098850	0.5396420	1.78078882	0.08090339
##	Indiana	0.88317571	0.4933344	1.79021713	0.07935605
##	Iowa	0.31933616	5.1450021	0.06206726	0.95075188
##	Kansas	0.03299047	1.6950796	0.01946249	0.98454810
##	Kentucky	1.21071749	1.4445240	0.83814286	0.40586151
##	Louisiana	0.25033130	0.6788312	0.36876811	0.71382707
##	Maine	0.89983324	12.2885776	0.07322517	0.94191337
##	Maryland	0.10032026	1.2032617	0.08337360	0.93388087
##	Massachusetts	1.14762249	1.0891380	1.05369798	0.29698785
##	Michigan	3.72702857	2.5261177	1.47539785	0.14625306
##	Minnesota	0.08118286	3.3257091	0.02441069	0.98062029
##	Mississippi	0.15249208	2.5801163	0.05910279	0.95310122
##	Missouri	-0.41260558	0.9267525	-0.44521658	0.65804731
##	Montana	-0.24772492	3.6080882	-0.06865822	0.94553016
##	Nebraska	0.13504163	3.2515750	0.04153114	0.96703463
##	Nevada	-0.12770514	0.6253917	-0.20420025	0.83900972
##	New Hampshire	-0.06781675	24.1767488	-0.00280504	0.99777285
##	New Jersey	4.43899266	3.3777144	1.31420010	0.19465922
##	New Mexico	0.80511755	2.6661263	0.30198028	0.76389516
##	New York	0.16759017	0.1010235	1.65892307	0.10326962
##	North Carolina	0.29810837	0.3684760	0.80903068	0.42225584
##	North Dakota	-0.21883681	2.1341468	-0.10254066	0.91872967
##	Ohio	1.99869247	1.2591184	1.58737454	0.11860912
##	Oklahoma	0.42591007	1.1326111	0.37604263	0.70844498
##	Oregon	0.43299414	1.1020931	0.39288345	0.69604300
##	Pennsylvania	0.39945592	1.1747631	0.34003104	0.73522967
##	Rhode Island	0.60153285	7.6340789	0.07879573	0.93750346
##	South Carolina	0.18819872	1.4684385	0.12816247	0.89852445
##	South Dakota	-0.11487042	5.7477085	-0.01998543	0.98413298
##	Tennessee	0.25400497	1.3010216	0.19523501	0.84598471
##	Texas	-0.49011183	0.3450023	-1.42060465	0.16151696
##	Utah	0.88336257	3.4512400	0.25595513	0.79901507
##	Vermont	0.72189806	12.2484794	0.05893777	0.95323201
##	Virginia	2.38218127	1.1522280	2.06745654	0.04378324
##	Washington	0.20321887	0.2480100	0.81939775	0.41637237
##	West Virginia	-0.49346119	5.0902577	-0.09694228	0.92315220
##	Wisconsin	0.47280995	1.5655251	0.30201365	0.76386987
##	Wyoming	0.34241267	4.5129052	0.07587411	0.93981611
##	hhincome				
##		Estimate	Std. Error	t value	Pr(> t )
##	Alabama	-0.36633874	8.559475	-0.042799204	0.966028726
##	Alaska	-0.03943588	6.235545	-0.006324368	0.994978592



## Arizona	-0.47958073	6.235366	-0.076913006	0.938993699
## Arkansas	-0.22346221	4.488533	-0.049785135	0.960488083
## California	-53.02366538	26.638554	-1.990485904	0.051909655
## Colorado	3.61251322	5.442973	0.663702257	0.509870200
## Connecticut	-2.73127087	6.729207	-0.405883005	0.686526513
## DC	0.41559313	2.293003	0.181244060	0.856894404
## Delaware	-0.09286428	3.398136	-0.027328009	0.978304774
## Florida	7.52318560	5.381481	1.397976684	0.168170912
## Georgia	-1.29279055	3.516343	-0.367652012	0.714654130
## Hawaii	-0.64150832	4.407190	-0.145559503	0.884842923
## Idaho	0.21689413	4.332202	0.050065562	0.960265711
## Illinois	-52.40805017	18.302222	-2.863480176	0.006067225
## Indiana	-1.03677340	4.391236	-0.236100599	0.814300249
## Iowa	-2.84381669	21.259521	-0.133766735	0.894113498
## Kansas	-0.36922717	5.150248	-0.071691145	0.943128112
## Kentucky	3.91099026	8.348293	0.468477844	0.641439132
## Louisiana	-0.42619543	6.149510	-0.069305596	0.945017404
## Maine	-0.44103703	15.199749	-0.029016073	0.976965022
## Maryland	1.54976370	1.966622	0.788033424	0.434324710
## Massachusetts	1.66137348	5.520831	0.300928142	0.764692751
## Michigan	-15.84100020	8.043479	-1.969421545	0.054348406
## Minnesota	0.97404354	6.116085	0.159259310	0.874093612
## Mississippi	-0.30175160	4.773493	-0.063213999	0.949843209
## Missouri	-0.85607380	2.297572	-0.372599313	0.710990690
## Montana	0.14715955	4.626943	0.031804923	0.974751766
## Nebraska	-0.15981899	3.235624	-0.049393568	0.960798591
## Nevada	0.34158373	5.044273	0.067717137	0.946275599
## New Hampshire	0.96554929	9.805424	0.098470938	0.921944363
## New Jersey	1.73952230	4.003744	0.434473921	0.665777110
## New Mexico	-0.25040873	3.119626	-0.080268821	0.936337615
## New York	1.36406993	3.240846	0.420899322	0.675597066
## North Carolina	1.95213968	5.151788	0.378924708	0.706316786
## North Dakota	0.02407125	2.487865	0.009675465	0.992317966
## Ohio	29.99201596	15.867574	1.890144988	0.064427763
## Oklahoma	-0.49588131	2.814142	-0.176210452	0.860826463
## Oregon	0.72406886	3.268689	0.221516616	0.825574777
## Pennsylvania	6.50131937	4.881216	1.331905603	0.188813149
## Rhode Island	-0.74096264	3.956316	-0.187286028	0.852179487
## South Carolina	-1.24935635	4.320266	-0.289185038	0.773612100
## South Dakota	-0.12295334	7.057363	-0.017421995	0.986167942
## Tennessee	-2.50743793	14.175298	-0.176887849	0.860297097
## Texas	46.76113139	16.722016	2.796381140	0.007269561

##	Utah	-5.61146909	9.308139	-0.602856193	0.549275898
##	Vermont	0.11800121	3.123589	0.037777441	0.970012620
##	Virginia	6.34328047	5.241887	1.210113977	0.231814161
##	Washington	-2.60846231	3.452568	-0.755513758	0.453416111
##	West Virginia	3.31735538	5.039351	0.658290229	0.513312491
##	Wisconsin	-1.83839777	7.395534	-0.248582141	0.804682324
##	Wyoming	-0.10523818	4.434836	-0.023729891	0.981160669
##	state_gdp				
##		Estimate	Std. Error	t value	Pr(> t )
##	Alabama	-2.32483515	25.8446082	-0.089954358	0.92867584
##	Alaska	-1.36228706	6.5456000	-0.208122566	0.83596219
##	Arizona	0.35182074	10.8547186	0.032411778	0.97427019
##	Arkansas	0.25162491	8.1574845	0.030845894	0.97551284
##	California	1.23323725	0.6021469	2.048067078	0.04571865
##	Colorado	-8.13947729	7.7192914	-1.054433218	0.29665451
##	Connecticut	-0.37855260	2.2411727	-0.168908265	0.86653694
##	DC	0.23657625	9.8466124	0.024026156	0.98092551
##	Delaware	-0.13537632	3.5693288	-0.037927668	0.96989343
##	Florida	0.72380362	1.0377345	0.697484426	0.48866733
##	Georgia	0.38935095	5.3822116	0.072340326	0.94261403
##	Hawaii	14.72433973	41.6249774	0.353738084	0.72499339
##	Idaho	2.07974252	22.2399406	0.093513852	0.92586176
##	Illinois	2.88365872	3.6137119	0.797976918	0.42858396
##	Indiana	-2.43545172	2.5534715	-0.953780642	0.34469365
##	Iowa	-0.90437276	8.7148055	-0.103774291	0.91775549
##	Kansas	-0.54950158	7.6715837	-0.071628180	0.94317797
##	Kentucky	9.79994616	8.8796621	1.103639532	0.27492983
##	Louisiana	2.58922081	6.8031128	0.380593546	0.70508555
##	Maine	-1.86076894	15.9524276	-0.116644876	0.90759960
##	Maryland	-1.70101835	2.1782618	-0.780906308	0.43846746
##	Massachusetts	-2.18197591	1.9716995	-1.106647306	0.27363911
##	Michigan	2.56307243	4.1291203	0.620730869	0.53754102
##	Minnesota	-0.19044027	6.7570589	-0.028183900	0.97762548
##	Mississippi	1.74530355	20.0118137	0.087213662	0.93084322
##	Missouri	0.39145227	4.0803382	0.095936232	0.92394721
##	Montana	2.60318009	14.8147464	0.175715467	0.86121332
##	Nebraska	-0.27426482	10.3377478	-0.026530423	0.97893781
##	Nevada	-3.05976678	3.9775443	-0.769260258	0.44528702
##	New Hampshire	-8.04311417	41.2739709	-0.194871344	0.84626791
##	New Jersey	3.10856867	2.3499058	1.322848226	0.19178688
##	New Mexico	-3.07184342	16.1119216	-0.190656552	0.84955161
##	New York	-0.03223288	0.4512221	-0.071434626	0.94333125

##	North Carolina	0.41112511	2.8287549	0.145337831	0.88501704
##	North Dakota	0.04281545	4.3955556	0.009740624	0.99226623
##	Ohio	2.43820722	1.5076821	1.617189216	0.11200682
##	Oklahoma	-2.60591998	5.7991070	-0.449365733	0.65507180
##	Oregon	2.34924737	12.0508431	0.194944648	0.84621083
##	Pennsylvania	-2.34669542	2.2074831	-1.063063817	0.29276086
##	Rhode Island	-1.79376682	19.2756960	-0.093058472	0.92622172
##	South Carolina	-0.46046323	6.1549093	-0.074812350	0.94065670
##	South Dakota	0.01327826	7.8778838	0.001685511	0.99866173
##	Tennessee	-0.59398045	4.7693893	-0.124540147	0.90137721
##	Texas	0.61796925	0.7117328	0.868260159	0.38931942
##	Utah	-6.16156340	41.2167343	-0.149491790	0.88175520
##	Vermont	-0.20212483	41.6996842	-0.004847155	0.99615146
##	Virginia	-4.05966411	3.4649211	-1.171646915	0.24678352
##	Washington	-0.18590184	1.7664391	-0.105241010	0.91659740
##	West Virginia	-4.07037740	19.1962018	-0.212040769	0.83292039
##	Wisconsin	-2.92260526	3.8451105	-0.760083560	0.45070420
##	Wyoming	-0.58737432	13.8144198	-0.042518928	0.96625106
##	unemployment_pct				
##		Estimate	Std. Error	t value	Pr(> t )
##	Alabama	-3984.59034	34076.085	-0.116932165	9.073731e-01
##	Alaska	3427.48183	103346.032	0.033165103	9.736724e-01
##	Arizona	-692.94307	22416.306	-0.030912456	9.754600e-01
##	Arkansas	13462.45066	50516.800	0.266494525	7.909329e-01
##	California	101854.16646	18625.338	5.468580942	1.376340e-06
##	Colorado	-48869.40689	53679.597	-0.910390724	3.668993e-01
##	Connecticut	11194.67231	40701.792	0.275041260	7.843958e-01
##	DC	-1915.23426	14941.757	-0.128179986	8.985107e-01
##	Delaware	1100.37713	19250.491	0.057160991	9.546403e-01
##	Florida	36295.37498	40418.162	0.897996665	3.734073e-01
##	Georgia	-2389.99546	32008.038	-0.074668602	9.407705e-01
##	Hawaii	12639.09894	46364.885	0.272600677	7.862609e-01
##	Idaho	609.66423	19220.843	0.031718912	9.748200e-01
##	Illinois	46273.72370	37510.841	1.233609341	2.230037e-01
##	Indiana	-6562.36117	21832.928	-0.300571734	7.649630e-01
##	Iowa	-2607.05322	53330.897	-0.048884481	9.612023e-01
##	Kansas	-802.29559	38702.781	-0.020729662	9.835422e-01
##	Kentucky	17411.53073	34456.357	0.505321283	6.155101e-01
##	Louisiana	-7869.42023	32776.745	-0.240091570	8.112217e-01
##	Maine	-722.23964	9064.238	-0.079680124	9.368035e-01
##	Maryland	10397.97294	22679.105	0.458482505	6.485537e-01
##	Massachusetts	-12301.90385	26729.236	-0.460241504	6.472992e-01

##	Michigan	24484.97805	47462.774	0.515877522	6.081693e-01
##	Minnesota	1352.75139	68416.030	0.019772433	9.843021e-01
##	Mississippi	3139.11026	41778.853	0.075136344	9.404002e-01
##	Missouri	9943.49676	16338.736	0.608584207	5.455013e-01
##	Montana	-1952.64346	50924.278	-0.038344058	9.695631e-01
##	Nebraska	1701.50088	43834.586	0.038816401	9.691883e-01
##	Nevada	11564.43316	9665.291	1.196490903	2.370378e-01
##	New Hampshire	52.95111	14191.086	0.003731294	9.970374e-01
##	New Jersey	-65774.85345	60394.322	-1.089090025	2.812338e-01
##	New Mexico	-6646.96762	10799.820	-0.615470204	5.409812e-01
##	New York	-5635.74164	9618.648	-0.585918260	5.605146e-01
##	North Carolina	-5833.59964	9717.884	-0.600295235	5.509678e-01
##	North Dakota	-903.69924	22197.132	-0.040712433	9.676841e-01
##	Ohio	-98510.36705	49640.469	-1.984476965	5.259555e-02
##	Oklahoma	-9660.93772	31507.402	-0.306624386	7.603777e-01
##	Oregon	-10499.19065	21136.566	-0.496731143	6.215131e-01
##	Pennsylvania	-52042.61244	41783.593	-1.245527467	2.186300e-01
##	Rhode Island	-8923.32579	65074.268	-0.137125257	8.914717e-01
##	South Carolina	-5963.53975	31364.658	-0.190135654	8.499576e-01
##	South Dakota	-3743.08378	79587.323	-0.047031156	9.626721e-01
##	Tennessee	-11478.16959	34051.793	-0.337079738	7.374401e-01
##	Texas	124469.01424	37632.960	3.307446808	1.730376e-03
##	Utah	5306.18578	73858.791	0.071842305	9.430084e-01
##	Vermont	-2056.79940	17335.607	-0.118645944	9.060220e-01
##	Virginia	-16600.63858	24981.325	-0.664521947	5.093499e-01
##	Washington	1487.14946	10666.831	0.139418114	8.896689e-01
##	West Virginia	-36477.59169	30202.613	-1.207762761	2.327097e-01
##	Wisconsin	-20025.77997	24051.389	-0.832624664	4.089386e-01
##	Wyoming	463.92781	13769.071	0.033693473	9.732531e-01
##	labor_participation_pct				
##		Estimate	Std. Error	t value	Pr(> t )
##	Alabama	6.064120e+03	102082.722	5.940398e-02	9.528625e-01
##	Alaska	-8.421368e+03	57861.180	-1.455443e-01	8.848548e-01
##	Arizona	-7.450279e+02	43127.063	-1.727518e-02	9.862845e-01
##	Arkansas	7.429963e+03	24956.845	2.977124e-01	7.671321e-01
##	California	1.104366e+05	21398.086	5.161048e+00	4.075432e-06

## Colorado	-1.511822e+04	38910.128	-3.885421e-01	6.992323e-0
1				
## Connecticut	3.709741e+03	25316.781	1.465329e-01	8.840784e-0
1				
## DC	-2.204632e+03	14676.060	-1.502196e-01	8.811839e-0
1				
## Delaware	6.800755e+02	18505.842	3.674923e-02	9.708284e-0
1				
## Florida	3.731388e+04	67336.946	5.541368e-01	5.819070e-0
1				
## Georgia	9.868514e+01	46566.886	2.119213e-03	9.983174e-0
1				
## Hawaii	2.302098e+03	29789.255	7.727948e-02	9.387036e-0
1				
## Idaho	-2.233237e+03	24720.613	-9.033906e-02	9.283717e-0
1				
## Illinois	-2.619032e+04	16247.311	-1.611979e+00	1.131386e-0
1				
## Indiana	9.590208e+03	26089.204	3.675930e-01	7.146979e-0
1				
## Iowa	-5.311361e+03	23893.308	-2.222949e-01	8.249721e-0
1				
## Kansas	-2.290994e+03	45826.553	-4.999272e-02	9.603235e-0
1				
## Kentucky	1.143771e+04	56037.684	2.041075e-01	8.390818e-0
1				
## Louisiana	-1.267621e+04	36635.408	-3.460097e-01	7.307588e-0
1				
## Maine	-5.641539e+02	22153.257	-2.546596e-02	9.797827e-0
1				
## Maryland	-7.035104e+04	57364.814	-1.226380e+00	2.256881e-0
1				
## Massachusetts	8.209206e+03	21247.779	3.863559e-01	7.008403e-0
1				
## Michigan	-3.583385e+04	26154.083	-1.370105e+00	1.766557e-0
1				
## Minnesota	-6.507311e+03	83451.662	-7.797701e-02	9.381515e-0
1				
## Mississippi	4.433854e+02	7832.321	5.660970e-02	9.550773e-0
1				
## Missouri	2.964681e+04	43635.741	6.794158e-01	4.999466e-0
1				

## Montana	1.666484e+03	46517.801	3.582466e-02	9.715620e-0
1				
## Nebraska	1.676065e+00	40259.941	4.163109e-05	9.999669e-0
1				
## Nevada	1.610420e+04	33670.989	4.782811e-01	6.344941e-0
1				
## New Hampshire	-3.002874e+04	178130.341	-1.685774e-01	8.667959e-0
1				
## New Jersey	2.097278e+04	58185.366	3.604476e-01	7.200010e-0
1				
## New Mexico	1.029655e+03	24438.502	4.213251e-02	9.665576e-0
1				
## New York	-2.648633e+02	17259.882	-1.534560e-02	9.878163e-0
1				
## North Carolina	3.006835e+04	36808.379	8.168888e-01	4.177917e-0
1				
## North Dakota	2.689046e+01	15331.279	1.753960e-03	9.986074e-0
1				
## Ohio	-1.475438e+05	67747.436	-2.177850e+00	3.406673e-0
2				
## Oklahoma	5.460396e+03	24010.944	2.274128e-01	8.210120e-0
1				
## Oregon	-7.282406e+03	16701.546	-4.360319e-01	6.646538e-0
1				
## Pennsylvania	-4.370400e+04	46376.690	-9.423701e-01	3.504460e-0
1				
## Rhode Island	-9.222049e+03	72740.814	-1.267796e-01	8.996134e-0
1				
## South Carolina	-7.169016e+03	30497.094	-2.350721e-01	8.150941e-0
1				
## South Dakota	-2.893579e+03	53953.940	-5.363053e-02	9.574391e-0
1				
## Tennessee	1.007955e+03	10493.778	9.605262e-02	9.238552e-0
1				
## Texas	1.221286e+05	36890.167	3.310601e+00	1.714437e-0
3				
## Utah	2.543554e+04	45956.742	5.534670e-01	5.823621e-0
1				
## Vermont	-5.780752e+02	67535.598	-8.559563e-03	9.932039e-0
1				
## Virginia	7.148424e+04	49941.205	1.431368e+00	1.584246e-0
1				

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## Washington      2.078024e+04   16865.765   1.232096e+00  2.235637e-0
1
## West Virginia  -4.768762e+04   45599.941  -1.045782e+00  3.005929e-0
1
## Wisconsin      -1.766322e+04   27665.369  -6.384596e-01  5.260314e-0
1
## Wyoming         2.919773e+03   33531.480   8.707558e-02  9.309524e-0
1
##      grad_hs_pct
##      Estimate Std. Error      t value    Pr(>|t|)
## Alabama      -2620.5725   44888.268  -0.058379897  0.95367417
## Alaska        3090.4400   71775.775   0.043056867  0.96582434
## Arizona       5193.6175   76641.183   0.067765362  0.94623740
## Arkansas     -11729.2328   29347.588  -0.399665984  0.69107149
## California   -181954.4920   87137.020  -2.088142239  0.04179735
## Colorado     -18693.5028   23780.700  -0.786078758  0.43545857
## Connecticut   16218.6472   72271.017   0.224414266  0.82333164
## DC            1621.2132   46747.157   0.034680467  0.97246992
## Delaware     -2869.7032   56687.918  -0.050622835  0.95982382
## Florida      13200.5727   25293.636   0.521893049  0.60400420
## Georgia     -1920.6863   44140.228  -0.043513283  0.96546230
## Hawaii     -83553.2747  215379.591  -0.387934968  0.69967869
## Idaho        3365.4757   33821.848   0.099505968  0.92112666
## Illinois     32196.4645   23589.835   1.364844818  0.17829328
## Indiana     -17920.3894   19246.028  -0.931121447  0.35617764
## Iowa        -6919.3771   89258.752  -0.077520433  0.93851288
## Kansas       1396.1801   70678.751   0.019753888  0.98431678
## Kentucky     12948.8053   41092.430   0.315114129  0.75396075
## Louisiana    20559.2337   60642.451   0.339023790  0.73598381
## Maine        8189.7764  111752.518   0.073284939  0.94186605
## Maryland     -272.1690   87075.466  -0.003125668  0.99751828
## Massachusetts -6754.4300   40841.664  -0.165380870  0.86929804
## Michigan    -99283.7936   62639.478  -1.585003530  0.11914738
## Minnesota    -9026.8648   28772.298  -0.313734580  0.75500230
## Mississippi   2891.9701   36540.953   0.079143259  0.93722840
## Missouri     3270.8809   20645.167   0.158433251  0.87474111
## Montana     -2990.7658   83305.243  -0.035901291  0.97150122
## Nebraska      650.3937   33028.150   0.019692103  0.98436583
## Nevada       2278.6897   24581.250   0.092700317  0.92650484
## New Hampshire -16640.3355  121783.002  -0.136639228  0.89185394
## New Jersey   -45840.0560  183833.686  -0.249356127  0.80408690
## New Mexico    3343.5750   48792.175   0.068526869  0.94563420

```

##	New York	2921.6967	44494.866	0.065663682	0.94790232
##	North Carolina	1218.3203	17909.650	0.068025913	0.94603101
##	North Dakota	-1130.0166	35554.572	-0.031782596	0.97476948
##	Ohio	1377.6770	20589.229	0.066912509	0.94691299
##	Oklahoma	3239.8173	9055.564	0.357770905	0.72199124
##	Oregon	9566.6755	82647.737	0.115752418	0.90830334
##	Pennsylvania	-33200.2403	30665.719	-1.082649993	0.28405617
##	Rhode Island	-2722.5470	55005.357	-0.049496033	0.96071734
##	South Carolina	-1531.9411	14417.018	-0.106259223	0.91579355
##	South Dakota	-2820.0982	57980.409	-0.048638812	0.96139712
##	Tennessee	-18155.4926	133036.312	-0.136470204	0.89198687
##	Texas	117356.6567	62476.741	1.878405552	0.06604779
##	Utah	-57312.4530	95987.824	-0.597080448	0.55309535
##	Vermont	-315.4007	27064.502	-0.011653667	0.99074740
##	Virginia	-13204.9802	25021.430	-0.527746816	0.59996377
##	Washington	27279.0739	24764.374	1.101545059	0.27583115
##	West Virginia	-54095.1382	47114.851	-1.148154713	0.25626178
##	Wisconsin	11178.0210	21560.552	0.518447812	0.60638807
##	Wyoming	-2786.4505	54830.224	-0.050819607	0.95966779
##	per_capita_state_tax_revenue				
##		Estimate	Std. Error	t value	Pr(> t )
##	Alabama	-47.4347727	387.288299	-0.122479230	0.903000864
##	Alaska	1.0694391	4.923029	0.217231907	0.828894350
##	Arizona	-45.1832898	285.583120	-0.158214147	0.874912865
##	Arkansas	103.7793338	306.875448	0.338180635	0.736615300
##	California	-576.6331497	200.204937	-2.880214439	0.005797544
##	Colorado	85.8410572	137.345083	0.625002769	0.534755795
##	Connecticut	24.7795629	66.137248	0.374668796	0.709460284
##	DC	0.2198947	28.328401	0.007762341	0.993836895
##	Delaware	-1.1099999	80.121345	-0.013853984	0.989000528
##	Florida	150.6259760	205.615460	0.732561529	0.467179472
##	Georgia	-62.6858608	611.416749	-0.102525586	0.918741575
##	Hawaii	21.5550268	215.333103	0.100100850	0.920656727
##	Idaho	4.2717056	108.899786	0.039226024	0.968863338
##	Illinois	-207.0135679	73.994754	-2.797678969	0.007244352
##	Indiana	-158.8910617	207.406569	-0.766085003	0.447157100
##	Iowa	28.5500781	141.088274	0.202356137	0.840443400
##	Kansas	11.8503434	107.107538	0.110639677	0.912336339
##	Kentucky	23.3529615	182.447806	0.127998040	0.898653920
##	Louisiana	51.7542913	317.185556	0.163167239	0.871031614
##	Maine	-12.1615466	169.296664	-0.071835713	0.943013627
##	Maryland	48.5992358	150.293543	0.323362101	0.747743247



##	Massachusetts	58.6871627	111.216089	0.527685908	0.600005748
##	Michigan	-170.4731882	190.849676	-0.893232788	0.375928226
##	Minnesota	9.9004453	127.747688	0.077499996	0.938529052
##	Mississippi	30.5171273	238.923081	0.127727832	0.898866680
##	Missouri	48.7875383	124.684453	0.391288066	0.697214361
##	Montana	-1.2010675	82.084819	-0.014632030	0.988382837
##	Nebraska	4.3784122	128.838288	0.033983781	0.973022744
##	Nevada	308.0354685	202.714651	1.519552078	0.134799324
##	New Hampshire	67.1463557	402.577296	0.166791213	0.868193881
##	New Jersey	-171.3211277	188.409854	-0.909300251	0.367468975
##	New Mexico	-11.8362042	78.026834	-0.151694021	0.880026758
##	New York	-10.2912287	40.517681	-0.253993525	0.800521810
##	North Carolina	-110.2808594	193.996067	-0.568469562	0.572210920
##	North Dakota	3.4314455	13.053397	0.262877580	0.793704022
##	Ohio	-324.4614411	147.961859	-2.192872156	0.032903186
##	Oklahoma	5.8735221	142.742157	0.041147774	0.967338757
##	Oregon	-139.8878463	452.030466	-0.309465527	0.758228310
##	Pennsylvania	64.3623442	225.207492	0.285791310	0.776195573
##	Rhode Island	-39.2074190	198.893730	-0.197127476	0.844511310
##	South Carolina	-14.5862945	196.271280	-0.074317009	0.941048877
##	South Dakota	7.0900356	172.202892	0.041172570	0.967319086
##	Tennessee	-115.6988900	340.705060	-0.339586650	0.735562361
##	Texas	480.6183196	227.054380	2.116754232	0.039180121
##	Utah	55.1978654	245.877648	0.224493222	0.823270540
##	Vermont	-2.7322483	101.210116	-0.026995802	0.978568441
##	Virginia	-140.4709172	150.412595	-0.933903955	0.354754197
##	Washington	-93.3540734	126.974235	-0.735220602	0.465572832
##	West Virginia	102.2658253	193.385060	0.528819678	0.599224621
##	Wisconsin	18.1960009	128.752340	0.141325593	0.888169502
##	Wyoming	-1.4520763	23.686454	-0.061304083	0.951356656
##	`Prescription Rate`				
##		Estimate	Std. Error	t value	Pr(> t )
##	Alabama	-277.21109	2757.4693	-0.100530979	0.9203169597
##	Alaska	73.87498	6203.3186	0.011908946	0.9905447253
##	Arizona	-63.46951	1623.7938	-0.039087174	0.9689734968
##	Arkansas	247.61439	743.3642	0.333099711	0.7404245446
##	California	-13751.04577	16749.3323	-0.820990686	0.4154727888
##	Colorado	-4619.84232	7392.9092	-0.624901807	0.5348215344
##	Connecticut	2459.68358	4922.3702	0.499694964	0.6194389874
##	DC	-159.83388	914.8766	-0.174705406	0.8620028411
##	Delaware	182.10038	1990.6604	0.091477368	0.9274716553
##	Florida	15778.03638	4405.6553	3.581314273	0.0007620665

## Georgia	1414.10825	9285.5214	0.152291744	0.8795577319
## Hawaii	4825.99146	17830.8701	0.270653728	0.7877497354
## Idaho	-217.18655	4113.5032	-0.052798439	0.9580987775
## Illinois	-45577.73553	18291.4041	-2.491757073	0.0160040680
## Indiana	-81.92217	2668.9300	-0.030694762	0.9756327767
## Iowa	146.47085	2747.1019	0.053318316	0.9576865960
## Kansas	-173.41801	4727.1821	-0.036685281	0.9708791637
## Kentucky	1003.29712	1979.1197	0.506941104	0.6143811156
## Louisiana	1714.56010	2929.6178	0.585250436	0.5609600669
## Maine	181.17256	3729.4021	0.048579519	0.9614441416
## Maryland	-2133.85491	3997.6928	-0.533771605	0.5958184977
## Massachusetts	-996.64484	4455.2761	-0.223699902	0.8238845090
## Michigan	216.54526	4534.4507	0.047755567	0.9620975727
## Minnesota	-387.46138	9589.5813	-0.040404410	0.9679284751
## Mississippi	-206.20934	2174.5398	-0.094828958	0.9248222957
## Missouri	154.05307	2509.3695	0.061391147	0.9512876616
## Montana	479.60815	3855.7271	0.124388510	0.9014966553
## Nebraska	-64.73123	2788.4400	-0.023214139	0.9815700521
## Nevada	-869.54673	1254.4113	-0.693191114	0.4913345566
## New Hampshire	-2217.51697	5182.6235	-0.427875375	0.6705433065
## New Jersey	1548.32081	6361.9079	0.243373660	0.8086922253
## New Mexico	-1463.75182	3964.6534	-0.369200448	0.7135067909
## New York	2366.44331	4315.5622	0.548351108	0.5858433145
## North Carolina	1155.69359	923.8310	1.250979447	0.2166505119
## North Dakota	-771.32451	2759.5646	-0.279509493	0.7809843148
## Ohio	6468.15598	1567.8178	4.125578976	0.0001366874
## Oklahoma	-1211.83831	1132.3570	-1.070191062	0.2895721839
## Oregon	-101.08514	2263.9531	-0.044649840	0.9645607847
## Pennsylvania	7020.09329	5998.9852	1.170213462	0.2473545270
## Rhode Island	61.97025	2406.1236	0.025755224	0.9795530904
## South Carolina	714.04435	2510.6409	0.284407207	0.7772499547
## South Dakota	-32.97505	1950.9114	-0.016902381	0.9865804450
## Tennessee	2144.90691	7240.9283	0.296219882	0.7682650772
## Texas	-10796.27852	3909.3315	-2.761668707	0.0079746251
## Utah	-3309.03562	14256.7174	-0.232103613	0.8173863938
## Vermont	146.02447	4443.8705	0.032859749	0.9739146985
## Virginia	-1095.17319	2564.6694	-0.427023145	0.6711598832
## Washington	17.66419	2009.3847	0.008790844	0.9930203097
## West Virginia	-459.43293	2727.3407	-0.168454544	0.8668920021
## Wisconsin	506.69563	1723.4144	0.294006841	0.7699459487
## Wyoming	-392.79312	6928.6951	-0.056690779	0.9550130448
##				

```
## Residual standard error: 13731.68 on 51 degrees of freedom
```

# Logarithmic Regression Model

```
library(plm)
data$logovd=log(data$ovd_cost.num)
logovd.num <- as.numeric(data$logovd)
data[, "logovd.num"]<-logovd.num
head(logovd.num)
```

```
## [1] 11.90313 12.09426 12.27383 12.31025 12.12083 12.06449
```

```
# summary of log cost per overdose by state
tapply(data$logovd.num, data$state, summary)
```

```
## $Alabama
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    11.90  12.06   12.27   12.29   12.46   12.82
##
## $Alaska
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    9.278 10.506 10.548 10.475 10.688 11.127
##
## $Arizona
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    12.91  12.97   12.97   13.03   13.01   13.38
##
## $Arkansas
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    11.34  11.56   11.69   11.70   11.82   12.06
##
## $California
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    13.73  13.96   14.08   14.09   14.33   14.39
##
## $Colorado
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    12.81  12.93   13.01   13.04   13.19   13.27
```

```

##
## $Connecticut
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      11.58  11.84   12.20   12.28  12.65   12.97
##
## $DC
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      8.757   9.730  10.093  10.187  10.479  11.279
##
## $Delaware
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      10.10   10.59   10.78   10.77   10.87   11.71
##
## $Florida
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      14.10   14.31   14.41   14.45   14.50   14.89
##
## $Georgia
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      13.02   13.29   13.38   13.43   13.69   13.85
##
## $Hawaii
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      10.36   10.69   10.98   10.90   11.07   11.45
##
## $Idaho
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      11.08   11.28   11.36   11.37   11.47   11.67
##
## $Illinois
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      13.45   13.69   13.74   13.84   13.92   14.43
##
## $Indiana
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      12.19   12.67   12.72   12.82   12.85   13.48
##
## $Iowa
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      11.48   11.69   11.81   11.78   11.91   11.96
##
## $Kansas

```

##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	11.68	11.77	11.87	11.90	12.05	12.13
##						
##	\$Kentucky					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	12.67	12.76	13.03	12.96	13.13	13.20
##						
##	\$Louisiana					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	11.29	11.46	12.02	11.82	12.06	12.31
##						
##	\$Maine					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	10.77	10.96	11.05	11.28	11.72	12.10
##						
##	\$Maryland					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	12.94	13.15	13.28	13.36	13.43	13.97
##						
##	\$Massachusetts					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	12.63	12.78	12.98	13.06	13.42	13.59
##						
##	\$Michigan					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	13.21	13.29	13.49	13.52	13.61	14.01
##						
##	\$Minnesota					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	11.89	12.01	12.07	12.07	12.13	12.23
##						
##	\$Mississippi					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	10.87	11.16	11.21	11.24	11.37	11.52
##						
##	\$Missouri					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	12.76	12.89	12.99	13.01	13.07	13.39
##						
##	\$Montana					
##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
##	10.01	10.77	10.95	10.92	11.12	11.51

```

##
## $Nebraska
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   10.40  10.64   10.92   10.84   10.97   11.21
##
## $Nevada
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   12.75  12.86   13.46   13.27   13.57   13.66
##
## $`New Hampshire`
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   11.50  11.74   12.00   12.11   12.59   12.64
##
## $`New Jersey`
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   10.82  12.71   13.15   13.01   13.24   14.28
##
## $`New Mexico`
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   11.65  11.84   11.91   12.00   12.21   12.27
##
## $`New York`
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   12.90  13.00   13.24   13.26   13.48   13.75
##
## $`North Carolina`
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   13.40  13.44   13.53   13.64   13.68   14.21
##
## $`North Dakota`
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   9.177  9.553   9.981   9.924  10.189  10.931
##
## $Ohio
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   13.20  13.53   13.77   13.85   14.19   14.59
##
## $Oklahoma
##   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   12.29  12.80   12.96   12.89   13.05   13.19
##
## $Oregon

```

```

##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      11.93   12.11   12.63   12.50   12.85   13.04
##
## $Pennsylvania
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      12.73   13.05   13.16   13.30   13.52   14.11
##
## $`Rhode Island`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      10.88   11.17   11.31   11.34   11.56   11.71
##
## $`South Carolina`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      12.27   12.31   12.39   12.66   13.03   13.41
##
## $`South Dakota`
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      10.15   10.25   10.48   10.41   10.53   10.67
##
## $Tennessee
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      12.94   13.06   13.18   13.27   13.53   13.74
##
## $Texas
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      13.77   13.80   13.86   13.89   13.94   14.13
##
## $Utah
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      13.21   13.25   13.32   13.31   13.36   13.42
##
## $Vermont
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      9.926  10.169  10.316  10.324  10.531  10.702
##
## $Virginia
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      13.09   13.41   13.49   13.56   13.65   13.97
##
## $Washington
##      Min. 1st Qu.  Median      Mean 3rd Qu.      Max.
##      13.04   13.16   13.36   13.30   13.48   13.53

```

```
##
## $`West Virginia`
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      11.85   12.61   12.65   12.60   12.70   12.83
##
## $Wisconsin
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      12.73   12.87   12.95   13.02   13.09   13.39
##
## $Wyoming
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      9.762  10.464  10.729  10.626  10.807  10.958
```

```
logreg <- lmList(logovd.num ~ overdoses+ medicaidml+cpi+population+h
income+state_gdp+unemployment_pct+labor_participation_pct+ grad_hs_
pct+per_capita_state_tax_revenue+`Prescription Rate`| state, data=da
ta)
```

```
## Warning: Unknown or uninitialised column: `(weights)`.
```

```
## Warning: Unknown or uninitialised column: `(offset)`.
```

```
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```

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```

```
summary(logreg)
```

```
## Call:
```

```
##   Model: logovd.num ~ overdoses + medicaidml + cpi + population +  
hhincome + state_gdp + unemployment_pct + labor_participation_pct +  
grad_hs_pct + per_capita_state_tax_revenue + `Prescription Rate` | N  
ULL
```

```
##   Data: data
```

```
##
```

```
## Coefficients:
```

```
##   (Intercept)
```

##	Estimate	Std. Error	t value	Pr(> t )
## Alabama	-46.72038213	169.34034	-0.275896353	0.7837425693
## Alaska	-18.08572644	57.69711	-0.313459843	0.7552097791
## Arizona	6.63704350	61.73163	0.107514464	0.9148027016
## Arkansas	15.37416559	42.18707	0.364428408	0.7170448379
## California	17.04078700	79.64189	0.213967637	0.8314254555
## Colorado	17.12718253	34.71307	0.493392915	0.6238530182
## Connecticut	-0.93316397	79.60680	-0.011722165	0.9906930157
## DC	-8.27762672	19.43907	-0.425824135	0.6720277361
## Delaware	8.28948001	22.23942	0.372738058	0.7108880488
## Florida	12.45164269	40.31785	0.308836996	0.7587036423
## Georgia	9.07012532	32.06396	0.282875996	0.7784168931
## Hawaii	20.06166987	114.63908	0.174998531	0.8617737036
## Idaho	11.56876029	24.04465	0.481136632	0.6324772913
## Illinois	26.79770456	52.53210	0.510120570	0.6121677466
## Indiana	-14.11958242	43.79216	-0.322422594	0.7484506245
## Iowa	17.91790393	41.74924	0.429179175	0.6696004683
## Kansas	6.32933153	60.28294	0.104993738	0.9167926297
## Kentucky	-12.82118272	90.48589	-0.141692622	0.8878810466

##	Louisiana	-18.81264138	43.07748	-0.436716393	0.6641604966
##	Maine	-69.27199071	170.08529	-0.407277975	0.6855083073
##	Maryland	14.78820666	59.66101	0.247870549	0.8052298542
##	Massachusetts	-5.74510174	27.58573	-0.208263553	0.8358526946
##	Michigan	-64.05185159	165.26704	-0.387565799	0.6999502070
##	Minnesota	22.91866698	136.45107	0.167962536	0.8672770554
##	Mississippi	5.26554169	42.27778	0.124546320	0.9013723427
##	Missouri	8.35347279	25.47257	0.327939959	0.7442996054
##	Montana	23.25401622	74.20102	0.313392133	0.7552609160
##	Nebraska	-0.09222339	45.33137	-0.002034428	0.9983846996
##	Nevada	13.15416985	30.87333	0.426069026	0.6718504449
##	New Hampshire	-24.29088086	90.28171	-0.269056511	0.7889717143
##	New Jersey	-465.67240512	121.17653	-3.842925633	0.0003382154
##	New Mexico	-5.96728161	70.72428	-0.084373880	0.9330895105
##	New York	-2.38913365	32.84329	-0.072743422	0.9422948393
##	North Carolina	12.62450865	42.19573	0.299189281	0.7660114913
##	North Dakota	55.30131002	26.85318	2.059395391	0.0445790606
##	Ohio	42.74401752	106.65870	0.400755113	0.6902744469
##	Oklahoma	12.63283655	19.78029	0.638657820	0.5259034207
##	Oregon	14.56395900	47.67173	0.305505163	0.7612249343
##	Pennsylvania	-4.11872728	130.90637	-0.031463154	0.9750229865
##	Rhode Island	18.48349538	122.62401	0.150733083	0.8807808863
##	South Carolina	14.08505131	25.31103	0.556478831	0.5803172459
##	South Dakota	42.51887089	79.52804	0.534639997	0.5952221223
##	Tennessee	5.95608820	43.76121	0.136104299	0.8922746570
##	Texas	5.81723286	24.71893	0.235335165	0.8148910259
##	Utah	18.46466263	47.38784	0.389649846	0.6984179471
##	Vermont	-4.75661812	70.02738	-0.067925120	0.9461108510
##	Virginia	-54.58593850	71.78512	-0.760407412	0.4505123733
##	Washington	6.15257311	27.23571	0.225900932	0.8221813546
##	West Virginia	79.07635748	88.51533	0.893363407	0.3758589615
##	Wisconsin	6.32918085	65.65268	0.096403994	0.9235775586
##	Wyoming	-0.38364165	26.39216	-0.014536195	0.9884589201
##	overdoses				
##		Estimate	Std. Error	t value	Pr(> t )
##	Alabama	0.0031279402	0.0060186850	0.5197049	6.055177e-01
##	Alaska	0.0206405519	0.0026044500	7.9251097	1.902724e-10
##	Arizona	0.0013066309	0.0040418099	0.3232787	7.478061e-01
##	Arkansas	0.0051584155	0.0042815540	1.2047998	2.338417e-01
##	California	0.0003667103	0.0014507641	0.2527705	8.014617e-01
##	Colorado	0.0019924704	0.0019876618	1.0024192	3.208737e-01
##	Connecticut	0.0026622444	0.0010451799	2.5471638	1.391940e-02



##	DC	0.0059620314	0.0017799185	3.3496091	1.528441e-03
##	Delaware	0.0072203873	0.0028965919	2.4927181	1.596562e-02
##	Florida	0.0003515633	0.0004513721	0.7788770	4.396513e-01
##	Georgia	0.0010794244	0.0028509264	0.3786223	7.065400e-01
##	Hawaii	0.0145138675	0.0195916537	0.7408189	4.622006e-01
##	Idaho	0.0099887230	0.0076696955	1.3023624	1.986434e-01
##	Illinois	0.0006530725	0.0009033500	0.7229451	4.730162e-01
##	Indiana	0.0012437697	0.0006574011	1.8919496	6.418174e-02
##	Iowa	0.0040572836	0.0127482078	0.3182631	7.515850e-01
##	Kansas	0.0071875370	0.0046658177	1.5404667	1.296289e-01
##	Kentucky	0.0005019434	0.0034402027	0.1459052	8.845714e-01
##	Louisiana	0.0054442299	0.0016932190	3.2153136	2.262881e-03
##	Maine	0.0020452440	0.0041497754	0.4928566	6.242293e-01
##	Maryland	0.0009377544	0.0005795639	1.6180344	1.118241e-01
##	Massachusetts	0.0004746813	0.0006729017	0.7054244	4.837559e-01
##	Michigan	0.0004928382	0.0008091910	0.6090506	5.451946e-01
##	Minnesota	0.0030067486	0.0023166624	1.2978795	2.001682e-01
##	Mississippi	0.0087191717	0.0031657019	2.7542618	8.133009e-03
##	Missouri	0.0010675545	0.0013822082	0.7723543	4.434692e-01
##	Montana	0.0172618916	0.0069904695	2.4693465	1.692470e-02
##	Nebraska	0.0211165191	0.0089644122	2.3555944	2.237639e-02
##	Nevada	0.0028067785	0.0052295667	0.5367134	5.937993e-01
##	New Hampshire	0.0033305690	0.0060427172	0.5511708	5.839234e-01
##	New Jersey	0.0007367855	0.0002369202	3.1098471	3.061182e-03
##	New Mexico	0.0038202996	0.0022827328	1.6735641	1.003398e-01
##	New York	0.0004026152	0.0002560607	1.5723426	1.220551e-01
##	North Carolina	0.0006494904	0.0006833821	0.9504059	3.463884e-01
##	North Dakota	0.0391225850	0.0079742370	4.9061227	9.901835e-06
##	Ohio	0.0005870501	0.0002818457	2.0828779	4.229515e-02
##	Oklahoma	0.0021597642	0.0014098121	1.5319518	1.317145e-01
##	Oregon	0.0028353857	0.0020715049	1.3687564	1.770744e-01
##	Pennsylvania	0.0008441533	0.0010411491	0.8107900	4.212539e-01
##	Rhode Island	0.0064636137	0.0029272224	2.2081048	3.175923e-02
##	South Carolina	0.0025350271	0.0020554397	1.2333259	2.231085e-01
##	South Dakota	0.0350290766	0.0104113234	3.3645172	1.462545e-03
##	Tennessee	0.0006582249	0.0043143628	0.1525660	8.793426e-01
##	Texas	0.0008992064	0.0016435876	0.5470998	5.866963e-01
##	Utah	0.0022808557	0.0138319125	0.1648981	8.696761e-01
##	Vermont	0.0110845040	0.0074197196	1.4939249	1.413569e-01
##	Virginia	0.0003714494	0.0014132812	0.2628277	7.937423e-01
##	Washington	0.0017864943	0.0022566477	0.7916584	4.322266e-01
##	West Virginia	0.0021245941	0.0008418108	2.5238381	1.476497e-02

## Wisconsin	0.0014147251	0.0016292698	0.8683185	3.892878e-01
## Wyoming	0.0258593553	0.0125956939	2.0530314	4.521618e-02
## medicaidml				
##	Estimate	Std. Error	t value	Pr(> t )
)				
## Alabama	-3.942367e-04	8.328499e-04	-0.47335867	6.379773e-01
1				
## Alaska	-2.231259e-03	1.298406e-03	-1.71846071	9.177851e-01
2				
## Arizona	-1.294031e-04	3.163203e-04	-0.40908888	6.841874e-01
1				
## Arkansas	-1.446292e-04	4.330740e-04	-0.33395956	7.397794e-01
1				
## California	-1.004951e-05	5.246322e-05	-0.19155341	8.488527e-01
1				
## Colorado	-2.701990e-04	4.230770e-04	-0.63865214	5.259071e-01
1				
## Connecticut	-1.603931e-04	1.241164e-04	-1.29227956	2.020852e-01
1				
## DC	-2.836086e-03	9.945845e-04	-2.85152843	6.266904e-01
3				
## Delaware	-2.675908e-04	5.690947e-04	-0.47020432	6.402137e-01
1				
## Florida	-3.684583e-05	1.086060e-04	-0.33926145	7.358059e-01
1				
## Georgia	-1.010857e-04	1.352293e-03	-0.07475134	9.407050e-01
1				
## Hawaii	-5.314142e-04	2.464371e-03	-0.21563888	8.301294e-01
1				
## Idaho	-5.807430e-04	1.014805e-03	-0.57227052	5.696529e-01
1				
## Illinois	-8.075957e-05	8.538806e-05	-0.94579455	3.487131e-01
1				
## Indiana	-1.055501e-04	1.224101e-04	-0.86226637	3.925775e-01
1				
## Iowa	-2.538493e-04	5.243989e-04	-0.48407680	6.304037e-01
1				
## Kansas	-2.869451e-04	9.846967e-04	-0.29140452	7.719239e-01
1				
## Kentucky	-6.523931e-05	3.887904e-04	-0.16780073	8.674037e-01
1				
## Louisiana	-3.198433e-04	4.123892e-04	-0.77558586	4.415753e-01

1					
##	Maine	-2.690694e-04	3.835551e-04	-0.70151437	4.861711e-0
1					
##	Maryland	-1.647122e-04	1.744908e-04	-0.94395927	3.496411e-0
1					
##	Massachusetts	-7.380880e-05	1.098294e-04	-0.67203142	5.045969e-0
1					
##	Michigan	1.059514e-04	2.435525e-04	0.43502482	6.653798e-0
1					
##	Minnesota	-1.138133e-04	4.354732e-04	-0.26135534	7.948711e-0
1					
##	Mississippi	-3.934486e-04	4.162997e-04	-0.94510897	3.490595e-0
1					
##	Missouri	-1.099348e-04	2.002359e-04	-0.54902659	5.853831e-0
1					
##	Montana	-7.022814e-04	4.840683e-04	-1.45079000	1.529616e-0
1					
##	Nebraska	-5.720922e-04	2.232909e-03	-0.25620933	7.988199e-0
1					
##	Nevada	-3.557338e-04	5.739767e-04	-0.61977046	5.381682e-0
1					
##	New Hampshire	-1.113565e-03	1.389241e-03	-0.80156376	4.265243e-0
1					
##	New Jersey	-2.549544e-04	1.452298e-04	-1.75552426	8.517448e-0
2					
##	New Mexico	-2.307538e-04	3.032785e-04	-0.76086415	4.502419e-0
1					
##	New York	-1.523831e-05	1.495741e-05	-1.01877997	3.131162e-0
1					
##	North Carolina	-7.476923e-05	8.996622e-05	-0.83108112	4.098019e-0
1					
##	North Dakota	-1.531829e-03	3.302588e-04	-4.63826679	2.480589e-0
5					
##	Ohio	-2.800759e-04	2.668300e-04	-1.04964154	2.988316e-0
1					
##	Oklahoma	-2.916833e-04	2.916647e-04	-1.00006393	3.220011e-0
1					
##	Oregon	-1.819751e-04	2.452344e-04	-0.74204572	4.614635e-0
1					
##	Pennsylvania	-4.865491e-05	1.031966e-04	-0.47147770	6.393104e-0
1					
##	Rhode Island	-7.858504e-04	6.553877e-04	-1.19906184	2.360455e-0

```

1
## South Carolina -6.001526e-05 1.017007e-03 -0.05901167 9.531734e-0
1
## South Dakota -5.797102e-04 3.095096e-03 -0.18729960 8.521689e-0
1
## Tennessee -5.877195e-05 7.789897e-04 -0.07544638 9.401547e-0
1
## Texas -1.080157e-05 1.007537e-04 -0.10720761 9.150449e-0
1
## Utah -4.130209e-04 1.889859e-03 -0.21854594 8.278760e-0
1
## Vermont -6.063284e-04 1.112736e-03 -0.54489842 5.881984e-0
1
## Virginia -9.095575e-05 5.456232e-04 -0.16670067 8.682648e-0
1
## Washington -1.052134e-04 7.839117e-05 -1.34215891 1.854892e-0
1
## West Virginia -9.353362e-04 9.414458e-04 -0.99351039 3.251518e-0
1
## Wisconsin -1.815544e-04 2.148568e-04 -0.84500206 4.020565e-0
1
## Wyoming -2.680450e-03 4.107702e-03 -0.65254238 5.169820e-0
1
## cpi
## Estimate Std. Error t value Pr(>|t|)
## Alabama -2.549368e-02 0.05705895 -0.446795527 0.65691432
## Alaska -2.147975e-03 0.04665758 -0.046036992 0.96346056
## Arizona -1.154381e-02 0.06012817 -0.191986655 0.84851505
## Arkansas 5.295722e-03 0.03339938 0.158557464 0.87464374
## California -3.064957e-04 0.09334082 -0.003283620 0.99739287
## Colorado -1.239773e-02 0.03226723 -0.384220334 0.70241253
## Connecticut -1.369923e-02 0.04394031 -0.311769032 0.75648707
## DC 3.391433e-02 0.02560726 1.324403172 0.19127385
## Delaware -5.582610e-04 0.03347087 -0.016679011 0.98675777
## Florida -7.123157e-03 0.07417334 -0.096033931 0.92387000
## Georgia -1.046282e-02 0.12352183 -0.084704243 0.93282816
## Hawaii 4.305036e-03 0.09277500 0.046402974 0.96317030
## Idaho 1.150415e-03 0.02361779 0.048709675 0.96134092
## Illinois -5.768741e-03 0.05131574 -0.112416602 0.91093441
## Indiana -2.057543e-02 0.04431083 -0.464343066 0.64437814
## Iowa 2.963649e-03 0.10136250 0.029238116 0.97678880
## Kansas -2.073139e-03 0.06714240 -0.030876744 0.97548836

```

## Kentucky	-1.706176e-02	0.04521208	-0.377371651	0.70746331
## Louisiana	-3.227080e-02	0.05798320	-0.556554333	0.58026603
## Maine	-2.423864e-02	0.06138232	-0.394879738	0.69457834
## Maryland	-6.512631e-03	0.03575060	-0.182168429	0.85617272
## Massachusetts	-1.877898e-02	0.04415589	-0.425288244	0.67241576
## Michigan	-9.009942e-03	0.02009563	-0.448353330	0.65579731
## Minnesota	-3.402163e-03	0.08069729	-0.042159570	0.96653612
## Mississippi	-7.935143e-03	0.04719795	-0.168124723	0.86715012
## Missouri	2.362954e-02	0.06158200	0.383708519	0.70278952
## Montana	5.151934e-03	0.03819180	0.134896316	0.89322484
## Nebraska	-5.922137e-03	0.05419838	-0.109267778	0.91341891
## Nevada	-2.049657e-03	0.03511742	-0.058365820	0.95368533
## New Hampshire	-1.842147e-02	0.14909968	-0.123551398	0.90215612
## New Jersey	-9.011174e-02	0.04518836	-1.994136077	0.05149677
## New Mexico	-2.654175e-02	0.05976165	-0.444126771	0.65882977
## New York	5.316948e-03	0.02353434	0.225922953	0.82216432
## North Carolina	-6.063119e-03	0.06513600	-0.093084006	0.92620154
## North Dakota	1.526596e-02	0.01145003	1.333268059	0.18836887
## Ohio	1.617298e-02	0.02638758	0.612901299	0.54266521
## Oklahoma	1.244434e-03	0.04338362	0.028684428	0.97722823
## Oregon	-1.068136e-02	0.07245869	-0.147413171	0.88338715
## Pennsylvania	6.852632e-03	0.03836585	0.178612810	0.85894938
## Rhode Island	1.310565e-02	0.02437933	0.537572195	0.59321049
## South Carolina	-1.063813e-02	0.10956303	-0.097095984	0.92303075
## South Dakota	8.034721e-05	0.04746474	0.001692777	0.99865596
## Tennessee	-8.568559e-03	0.07345060	-0.116657449	0.90758969
## Texas	9.531752e-03	0.10268668	0.092823641	0.92640735
## Utah	-5.612816e-03	0.10648508	-0.052709885	0.95816899
## Vermont	2.630955e-03	0.04666818	0.056375765	0.95526275
## Virginia	-1.079986e-01	0.10114941	-1.067713527	0.29067787
## Washington	2.184965e-03	0.03246498	0.067302203	0.94660429
## West Virginia	2.696369e-02	0.03232165	0.834229802	0.40804209
## Wisconsin	-6.907889e-03	0.04291472	-0.160967828	0.87275469
## Wyoming	-8.300864e-03	0.04108814	-0.202025790	0.84070028
## population				
##	Estimate	Std. Error	t value	Pr(> t )
## Alabama	1.548295e-05	2.940510e-05	0.526539659	0.60079595
## Alaska	1.263669e-05	1.835251e-05	0.688553530	0.49422468
## Arizona	8.191683e-07	3.952012e-06	0.207278810	0.83661755
## Arkansas	-2.278132e-06	1.795953e-05	-0.126848044	0.89955947
## California	2.005558e-08	9.059354e-07	0.022137976	0.98242428
## Colorado	2.078860e-06	7.009482e-06	0.296578245	0.76799300

## Connecticut	7.050578e-06	2.998077e-05	0.235170004	0.81501851
## DC	2.030124e-06	1.262721e-05	0.160773739	0.87290677
## Delaware	1.652584e-05	1.213384e-05	1.361963206	0.17919528
## Florida	1.554896e-07	2.133377e-06	0.072884249	0.94218333
## Georgia	9.046952e-07	6.193687e-06	0.146067310	0.88444408
## Hawaii	8.215767e-07	2.248627e-05	0.036536817	0.97099696
## Idaho	-4.376909e-06	1.009401e-05	-0.433614676	0.66639697
## Illinois	3.874932e-07	4.145014e-06	0.093484173	0.92588522
## Indiana	6.504149e-06	3.789323e-06	1.716440744	0.09215028
## Iowa	-9.084789e-07	3.951899e-05	-0.022988418	0.98174922
## Kansas	5.310427e-07	1.301998e-05	0.040786748	0.96762516
## Kentucky	3.763285e-06	1.109545e-05	0.339173658	0.73587159
## Louisiana	2.681521e-06	5.214132e-06	0.514279409	0.60927809
## Maine	6.332092e-05	9.438910e-05	0.670849942	0.50534308
## Maryland	1.054718e-06	9.242305e-06	0.114118478	0.90959196
## Massachusetts	3.530762e-06	8.365716e-06	0.422051337	0.67476145
## Michigan	1.064110e-05	1.940322e-05	0.548419229	0.58579689
## Minnesota	-2.849340e-08	2.554492e-05	-0.001115424	0.99911437
## Mississippi	-2.076589e-06	1.981799e-05	-0.104783042	0.91695898
## Missouri	-2.211677e-06	7.118426e-06	-0.310697505	0.75729689
## Montana	-4.226655e-06	2.771388e-05	-0.152510383	0.87938618
## Nebraska	3.372602e-06	2.497549e-05	0.135036484	0.89311458
## Nevada	-6.936246e-07	4.803661e-06	-0.144394983	0.88575768
## New Hampshire	1.972878e-05	1.857027e-04	0.106238559	0.91580987
## New Jersey	5.863220e-05	2.594437e-05	2.259919725	0.02812655
## New Mexico	7.778823e-06	2.047863e-05	0.379850695	0.70563352
## New York	3.620107e-07	7.759657e-07	0.466529295	0.64282345
## North Carolina	4.924616e-07	2.830280e-06	0.173997484	0.86255628
## North Dakota	1.241742e-05	1.639247e-05	0.757507304	0.45223189
## Ohio	-1.300009e-07	9.671343e-06	-0.013441871	0.98932771
## Oklahoma	1.592761e-08	8.699635e-06	0.001830837	0.99854635
## Oregon	1.286327e-06	8.465225e-06	0.151954262	0.87982254
## Pennsylvania	2.268264e-06	9.023406e-06	0.251375569	0.80253389
## Rhode Island	2.058523e-05	5.863769e-05	0.351057975	0.72699096
## South Carolina	5.520290e-07	1.127914e-05	0.048942471	0.96115631
## South Dakota	-1.374112e-05	4.414840e-05	-0.311248465	0.75688046
## Tennessee	4.483590e-07	9.993204e-06	0.044866396	0.96438902
## Texas	-3.217792e-07	2.649977e-06	-0.121427137	0.90382990
## Utah	1.053410e-06	2.650912e-05	0.039737627	0.96845746
## Vermont	3.263856e-05	9.408110e-05	0.346919423	0.73007931
## Virginia	9.915084e-06	8.850313e-06	1.120308810	0.26783027
## Washington	1.955623e-07	1.904976e-06	0.102658679	0.91863647

## West Virginia	-1.083116e-05	3.909849e-05	-0.277022527	0.78288255
## Wisconsin	2.108144e-06	1.202487e-05	0.175315398	0.86152602
## Wyoming	3.125637e-05	3.466382e-05	0.901699983	0.37145507
## hhincome				
##	Estimate	Std. Error	t value	Pr(> t )
)				
## Alabama	-1.037915e-05	6.574570e-05	-0.157868170	0.87518409
0				
## Alaska	-2.242717e-05	4.789549e-05	-0.468252162	0.64159939
9				
## Arizona	2.217912e-07	4.789412e-05	0.004630865	0.99632318
4				
## Arkansas	8.289880e-07	3.447662e-05	0.024044934	0.98091060
2				
## California	-2.028186e-05	2.046119e-04	-0.099123575	0.92142875
3				
## Colorado	9.147779e-06	4.180771e-05	0.218806039	0.82767442
4				
## Connecticut	-4.577945e-05	5.168733e-05	-0.885699512	0.37993666
4				
## DC	5.907459e-05	1.761265e-05	3.354099315	0.00150830
3				
## Delaware	-1.063298e-05	2.610123e-05	-0.407374716	0.68543771
6				
## Florida	1.084645e-05	4.133539e-05	0.262401015	0.79406934
0				
## Georgia	-5.969812e-06	2.700918e-05	-0.221028979	0.82595241
3				
## Hawaii	-3.996733e-06	3.385182e-05	-0.118065559	0.90647949
7				
## Idaho	7.864664e-06	3.327583e-05	0.236347634	0.81410960
5				
## Illinois	-3.938477e-05	1.405802e-04	-0.280158800	0.78048893
7				
## Indiana	-5.426702e-06	3.372927e-05	-0.160889967	0.87281569
7				
## Iowa	-3.711483e-05	1.632953e-04	-0.227286597	0.82110957
1				
## Kansas	-1.814656e-07	3.955928e-05	-0.004587182	0.99635786
8				
## Kentucky	1.206246e-05	6.412360e-05	0.188112600	0.85153488
1				

## Louisiana	-3.425968e-07	4.723465e-05	-0.007253082	0.99424122
6				
## Maine	-6.057015e-05	1.167499e-04	-0.518802423	0.60614249
9				
## Maryland	4.429406e-06	1.510571e-05	0.293227307	0.77053829
4				
## Massachusetts	5.647595e-07	4.240575e-05	0.013317995	0.98942605
5				
## Michigan	-4.312100e-05	6.178231e-05	-0.697950615	0.48837819
5				
## Minnesota	6.176971e-06	4.697792e-05	0.131486684	0.89590766
1				
## Mississippi	-9.631677e-06	3.666541e-05	-0.262691108	0.79384695
9				
## Missouri	-3.747265e-06	1.764775e-05	-0.212336706	0.83269075
1				
## Montana	-3.482990e-06	3.553975e-05	-0.098002666	0.92231433
9				
## Nebraska	8.566699e-07	2.485297e-05	0.034469526	0.97263730
1				
## Nevada	1.914647e-06	3.874528e-05	0.049416261	0.96078059
6				
## New Hampshire	-5.031049e-06	7.531589e-05	-0.066799301	0.94700266
7				
## New Jersey	-4.705655e-05	3.075293e-05	-1.530148603	0.13215956
8				
## New Mexico	-6.695894e-06	2.396199e-05	-0.279438171	0.78103873
4				
## New York	-2.693400e-06	2.489308e-05	-0.108198739	0.91426261
1				
## North Carolina	4.103112e-06	3.957111e-05	0.103689602	0.91782236
1				
## North Dakota	1.286031e-05	1.910940e-05	0.672983614	0.50399591
7				
## Ohio	1.106975e-04	1.218795e-04	0.908253454	0.36801635
1				
## Oklahoma	-8.244095e-07	2.161555e-05	-0.038139650	0.96972524
3				
## Oregon	2.516300e-06	2.510694e-05	0.100223278	0.92056001
7				
## Pennsylvania	2.745627e-05	3.749284e-05	0.732307216	0.46733329
7				



```

## Rhode Island      -1.478372e-05  3.038863e-05  -0.486488562  0.62870491
8
## South Carolina    -6.607995e-06  3.318415e-05  -0.199131028  0.84295203
1
## South Dakota      -7.605784e-06  5.420791e-05  -0.140307646  0.88896960
7
## Tennessee         4.532236e-06  1.088811e-04   0.041625563  0.96695973
2
## Texas             3.167518e-05  1.284425e-04   0.246609766  0.80620019
8
## Utah             -7.469051e-06  7.149622e-05  -0.104467772  0.91720790
9
## Vermont          -1.597634e-06  2.399243e-05  -0.066589102  0.94716918
3
## Virginia          1.832021e-05  4.026316e-05   0.455011601  0.65103199
4
## Washington       -3.899491e-06  2.651932e-05  -0.147043402  0.88367751
6
## West Virginia     3.221015e-05  3.870747e-05   0.832143030  0.40920788
6
## Wisconsin         4.883572e-07  5.680542e-05   0.008597018  0.99317419
8
## Wyoming          -1.178704e-05  3.406417e-05  -0.346024491  0.73074773
8
##      state_gdp
##              Estimate      Std. Error      t value      Pr(>|t
|)
## Alabama          -4.242890e-05  1.985136e-04  -0.2137330154  0.8316074
50
## Alaska           -7.089331e-05  5.027704e-05  -1.4100534342  0.1645937
30
## Arizona          -2.808911e-06  8.337557e-05  -0.0336898634  0.9732559
73
## Arkansas         -1.753125e-06  6.265799e-05  -0.0279792781  0.9777878
79
## California        6.745129e-07  4.625117e-06   0.1458369476  0.8846250
07
## Colorado         -1.902008e-05  5.929221e-05  -0.3207855429  0.7496837
21
## Connecticut       7.973167e-08  1.721455e-05   0.0046316452  0.9963225
65
## DC               -3.919695e-05  7.563226e-05  -0.5182570019  0.6065202

```

19					
##	Delaware	-1.108448e-05	2.741617e-05	-0.4043045593	0.6876793
46					
##	Florida	1.808342e-06	7.970884e-06	0.2268685112	0.8214329
16					
##	Georgia	4.637574e-07	4.134100e-05	0.0112178559	0.9910934
02					
##	Hawaii	2.152437e-05	3.197233e-04	0.0673218729	0.9465887
04					
##	Idaho	6.705336e-05	1.708260e-04	0.3925244358	0.6963065
30					
##	Illinois	8.477774e-06	2.775708e-05	0.3054274594	0.7612837
66					
##	Indiana	-7.605190e-06	1.961333e-05	-0.3877562641	0.6998101
18					
##	Iowa	-7.694273e-06	6.693880e-05	-0.1149448845	0.9089401
75					
##	Kansas	-5.538459e-06	5.892577e-05	-0.0939904389	0.9254850
48					
##	Kentucky	3.121416e-05	6.820507e-05	0.4576516645	0.6491465
46					
##	Louisiana	3.272379e-05	5.225501e-05	0.6262325813	0.5339553
65					
##	Maine	-1.254616e-04	1.225313e-04	-1.0239151135	0.3107077
19					
##	Maryland	-1.016529e-05	1.673132e-05	-0.6075607134	0.5461747
63					
##	Massachusetts	-9.397905e-06	1.514471e-05	-0.6205404506	0.5376653
45					
##	Michigan	9.005516e-06	3.171595e-05	0.2839427722	0.7776038
47					
##	Minnesota	8.058747e-08	5.190126e-05	0.0015527072	0.9987671
77					
##	Mississippi	4.879540e-05	1.537116e-04	0.3174477021	0.7521999
62					
##	Missouri	3.516603e-06	3.134126e-05	0.1122036547	0.9111024
01					
##	Montana	5.386728e-05	1.137927e-04	0.4733807591	0.6379616
10					
##	Nebraska	2.376860e-06	7.940469e-05	0.0299335010	0.9762369
22					
##	Nevada	-5.878709e-06	3.055169e-05	-0.1924184600	0.8481785

97					
##	New Hampshire	-1.419201e-04	3.170272e-04	-0.4476590830	0.6562950
19					
##	New Jersey	5.299703e-05	1.804973e-05	2.9361676431	0.0049745
35					
##	New Mexico	3.416868e-06	1.237564e-04	0.0276096334	0.9780812
55					
##	New York	-8.929843e-07	3.465857e-06	-0.2576518136	0.7977124
43					
##	North Carolina	2.024902e-06	2.172779e-05	0.0931940896	0.9261145
19					
##	North Dakota	-8.390325e-06	3.376245e-05	-0.2485105301	0.8047374
20					
##	Ohio	9.548461e-06	1.158057e-05	0.8245241396	0.4134815
61					
##	Oklahoma	2.562211e-06	4.454319e-05	0.0575219369	0.9543542
16					
##	Oregon	-6.649901e-06	9.256305e-05	-0.0718418560	0.9430087
63					
##	Pennsylvania	-8.186401e-06	1.695577e-05	-0.4828090651	0.6312973
92					
##	Rhode Island	-5.128974e-05	1.480575e-04	-0.3464177872	0.7304539
58					
##	South Carolina	-2.006429e-08	4.727613e-05	-0.0004244063	0.9996630
29					
##	South Dakota	-4.358276e-06	6.051037e-05	-0.0720252705	0.9428635
19					
##	Tennessee	3.313843e-06	3.663389e-05	0.0904584079	0.9282772
87					
##	Texas	4.094130e-07	5.466851e-06	0.0748901025	0.9405951
39					
##	Utah	-5.719213e-06	3.165875e-04	-0.0180651877	0.9856573
40					
##	Vermont	3.643779e-06	3.202971e-04	0.0113762489	0.9909676
48					
##	Virginia	-1.377477e-05	2.661421e-05	-0.5175718312	0.6069948
73					
##	Washington	1.048789e-07	1.356810e-05	0.0077298145	0.9938627
20					
##	West Virginia	-1.438790e-05	1.474469e-04	-0.0975802309	0.9226481
14					
##	Wisconsin	-9.924067e-06	2.953446e-05	-0.3360165128	0.7382369

```

66
## Wyoming      -8.271694e-06  1.061092e-04 -0.0779545733  0.9381692
35
##      unemployment_pct
##              Estimate Std. Error      t value      Pr(>|t|)
## Alabama      -0.0569988493  0.26173989 -0.217769058  0.8284780193
## Alaska        0.6987246099  0.79380538  0.880221562  0.3828683911
## Arizona       0.0008622456  0.17218062  0.005007797  0.9960239105
## Arkansas      0.0411459038  0.38802174  0.106040201  0.9159664577
## California    0.0382927991  0.14306203  0.267665705  0.7900362098
## Colorado     -0.1108863453  0.41231532 -0.268935787  0.7890640980
## Connecticut  -0.0012871914  0.31263224 -0.004117270  0.9967309663
## DC           -0.4764360017  0.11476829 -4.151286053  0.0001257084
## Delaware      0.0777951611  0.14786386  0.526126952  0.6010805864
## Florida      -0.0295387235  0.31045367 -0.095146963  0.9245709640
## Georgia      -0.0203371197  0.24585514 -0.082719930  0.9343980538
## Hawaii        0.0135425079  0.35613070  0.038026792  0.9698147845
## Idaho         -0.0002795143  0.14763613 -0.001893265  0.9984967805
## Illinois     -0.0474271626  0.28812240 -0.164607688  0.8699034717
## Indiana      -0.0501544799  0.16769968 -0.299073208  0.7660995453
## Iowa         0.0206971805  0.40963694  0.050525669  0.9599008651
## Kansas        0.0105046852  0.29727775  0.035336265  0.9719495522
## Kentucky      0.0636492991  0.26466078  0.240493882  0.8109115374
## Louisiana    -0.1436094892  0.25175961 -0.570423070  0.5708955164
## Maine        -0.0932475501  0.06962281 -1.339324719  0.1864034798
## Maryland      0.0055090196  0.17419920  0.031624828  0.9748946854
## Massachusetts -0.0444999857  0.20530843 -0.216747000  0.8292702306
## Michigan      0.0875611532  0.36456363  0.240180713  0.8111529771
## Minnesota     0.0160561249  0.52550651  0.030553617  0.9757447895
## Mississippi   0.1125591084  0.32090519  0.350755028  0.7272168810
## Missouri      0.0523485527  0.12549854  0.417124781  0.6783378174
## Montana      -0.0578648395  0.39115160 -0.147934561  0.8829777526
## Nebraska      0.0051036254  0.33669537  0.015157991  0.9879652799
## Nevada        0.0119723319  0.07423952  0.161266280  0.8725208358
## New Hampshire  0.0226148682  0.10900235  0.207471386  0.8364679641
## New Jersey    -0.9961132940  0.46389142 -2.147298389  0.0365453684
## New Mexico    -0.0508213053  0.08295389 -0.612645229  0.5428332186
## New York      -0.0161961229  0.07388126 -0.219218293  0.8273550050
## North Carolina -0.0196273023  0.07464349 -0.262947266  0.7936506071
## North Dakota  -0.2083348704  0.17049714 -1.221925914  0.2273535168
## Ohio         -0.2912153904  0.38129060 -0.763762303  0.4485279693
## Oklahoma      -0.0028056089  0.24200973 -0.011592959  0.9907955955

```

## Oregon	-0.0220168818	0.16235089	-0.135612946	0.8926611301
## Pennsylvania	-0.1108103570	0.32094160	-0.345266423	0.7313141068
## Rhode Island	-0.2155060770	0.49983829	-0.431151597	0.6681751365
## South Carolina	-0.0462377559	0.24091331	-0.191926950	0.8485615717
## South Dakota	-0.2042621537	0.61131370	-0.334136393	0.7396467924
## Tennessee	-0.0058768330	0.26155331	-0.022468968	0.9821615475
## Texas	0.0776742090	0.28906041	0.268712722	0.7892348057
## Utah	0.0088525645	0.56731259	0.015604386	0.9876108928
## Vermont	-0.1192230965	0.13315555	-0.895367088	0.3747974737
## Virginia	-0.0104245514	0.19188264	-0.054327745	0.9568863090
## Washington	0.0085639569	0.08193239	0.104524676	0.9171629796
## West Virginia	-0.3211102056	0.23198759	-1.384169759	0.1723338718
## Wisconsin	-0.0885808768	0.18473977	-0.479490026	0.6336399112
## Wyoming	0.0478842843	0.10576083	0.452760096	0.6526417636
## labor_participation_pct				
##	Estimate	Std. Error	t value	Pr(> t )
## Alabama	0.158100618	0.78410184	0.201632761	8.410059e-01
## Alaska	-0.072080879	0.44443425	-0.162185700	8.718005e-01
## Arizona	0.019598824	0.33126085	0.059164323	9.530525e-01
## Arkansas	0.025392063	0.19169462	0.132461015	8.951409e-01
## California	0.036414167	0.16435963	0.221551771	8.255476e-01
## Colorado	-0.042804841	0.29887039	-0.143222088	8.866792e-01
## Connecticut	0.041920954	0.19445930	0.215577011	8.301773e-01
## DC	-0.589670208	0.11272745	-5.230937021	3.188550e-06
## Delaware	0.075929496	0.14214418	0.534172396	5.955432e-01
## Florida	-0.069834650	0.51721802	-0.135019755	8.931277e-01
## Georgia	0.002143305	0.35768228	0.005992204	9.952423e-01
## Hawaii	0.005851869	0.22881257	0.025574947	9.796962e-01
## Idaho	-0.071695027	0.18988011	-0.377580509	7.073091e-01
## Illinois	-0.140318852	0.12479631	-1.124383047	2.661149e-01
## Indiana	0.031991272	0.20039232	0.159643207	8.737927e-01
## Iowa	-0.035317141	0.18352554	-0.192437201	8.481640e-01
## Kansas	0.005393785	0.35199575	0.015323437	9.878339e-01
## Kentucky	0.055354588	0.43042790	0.128603626	8.981771e-01
## Louisiana	-0.158099885	0.28139817	-0.561836937	5.766881e-01
## Maine	-0.196285135	0.17016013	-1.153531890	2.540696e-01
## Maryland	-0.116807749	0.44062164	-0.265097624	7.920028e-01
## Massachusetts	0.030612291	0.16320512	0.187569428	8.519585e-01
## Michigan	-0.078254152	0.20089065	-0.389536064	6.985016e-01
## Minnesota	-0.065169408	0.64099585	-0.101669002	9.194181e-01
## Mississippi	0.008470411	0.06016040	0.140797115	8.885849e-01
## Missouri	0.128898809	0.33516803	0.384579665	7.021479e-01

##	Montana	-0.032441514	0.35730526	-0.090794953	9.280112e-01
##	Nebraska	0.020081025	0.30923836	0.064937046	9.484780e-01
##	Nevada	0.007333583	0.25862833	0.028355682	9.774891e-01
##	New Hampshire	-0.128738110	1.36822691	-0.094091199	9.254054e-01
##	New Jersey	0.732128268	0.44692433	1.638148139	1.075466e-01
##	New Mexico	0.026257398	0.18771320	0.139880405	8.893055e-01
##	New York	0.007058935	0.13257390	0.053245281	9.577445e-01
##	North Carolina	0.003209749	0.28272676	0.011352829	9.909862e-01
##	North Dakota	-0.019694264	0.11776022	-0.167240376	8.678423e-01
##	Ohio	-0.466977079	0.52037101	-0.897392575	3.737264e-01
##	Oklahoma	-0.010390396	0.18442911	-0.056338156	9.552926e-01
##	Oregon	0.008499345	0.12828530	0.066253460	9.474351e-01
##	Pennsylvania	-0.044963073	0.35622137	-0.126222276	9.000523e-01
##	Rhode Island	-0.228361983	0.55872536	-0.408719558	6.844567e-01
##	South Carolina	-0.024280820	0.23424951	-0.103653666	9.178507e-01
##	South Dakota	-0.166761850	0.41442256	-0.402395684	6.890745e-01
##	Tennessee	-0.004916511	0.08060317	-0.060996499	9.516004e-01
##	Texas	0.076217320	0.28335498	0.268981753	7.890289e-01
##	Utah	0.031481922	0.35299574	0.089184990	9.292842e-01
##	Vermont	0.008035464	0.51874387	0.015490235	9.877015e-01
##	Virginia	0.351917000	0.38360057	0.917404792	3.632488e-01
##	Washington	0.028459933	0.12954668	0.219688632	8.269906e-01
##	West Virginia	-0.428222251	0.35025514	-1.222600920	2.271005e-01
##	Wisconsin	-0.084697706	0.21249891	-0.398579490	6.918670e-01
##	Wyoming	0.240464967	0.25755676	0.933638741	3.548897e-01
##	grad_hs_pct				
##		Estimate	Std. Error	t value	Pr(> t )
##	Alabama	-0.025740500	0.34478874	-0.07465586	0.94078060
##	Alaska	0.325179370	0.55131286	0.58982729	0.55791072
##	Arizona	0.044468989	0.58868426	0.07553963	0.94008091
##	Arkansas	-0.010051730	0.22542011	-0.04459110	0.96460738
##	California	-0.060667344	0.66930325	-0.09064254	0.92813170
##	Colorado	-0.036400344	0.18266059	-0.19927858	0.84283722
##	Connecticut	-0.120144728	0.55511683	-0.21643143	0.82951487
##	DC	0.611752802	0.35906695	1.70372909	0.09451853
##	Delaware	-0.207565249	0.43542237	-0.47669863	0.63561296
##	Florida	0.003329326	0.19428152	0.01713661	0.98639450
##	Georgia	-0.013228061	0.33904302	-0.03901588	0.96903006
##	Hawaii	-0.144563302	1.65434002	-0.08738427	0.93070828
##	Idaho	0.075591988	0.25978709	0.29097669	0.77224924
##	Illinois	-0.109466195	0.18119455	-0.60413623	0.54843123
##	Indiana	-0.092944432	0.14782958	-0.62872689	0.53233384

## Iowa	0.010180513	0.68560036	0.01484905	0.98821055
## Kansas	0.048023822	0.54288656	0.08846014	0.92985742
## Kentucky	0.040608753	0.31563275	0.12865824	0.89813412
## Louisiana	0.296949881	0.46579731	0.63750879	0.52664534
## Maine	0.360782225	0.85837596	0.42030793	0.67602619
## Maryland	0.054150970	0.66883045	0.08096367	0.93578774
## Massachusetts	0.011360756	0.31370660	0.03621459	0.97125263
## Michigan	-0.282109646	0.48113656	-0.58634007	0.56023334
## Minnesota	-0.063929510	0.22100127	-0.28927213	0.77354583
## Mississippi	0.077150373	0.28067265	0.27487670	0.78452148
## Missouri	0.027237274	0.15857643	0.17176118	0.86430503
## Montana	-0.093330016	0.63987120	-0.14585750	0.88460886
## Nebraska	0.048779116	0.25369066	0.19227794	0.84828809
## Nevada	0.001941375	0.18880965	0.01028218	0.99183627
## New Hampshire	0.337351176	0.93542055	0.36064119	0.71985719
## New Jersey	-0.664910956	1.41203455	-0.47088859	0.63972823
## New Mexico	0.091874725	0.37477482	0.24514647	0.80732679
## New York	0.096778983	0.34176701	0.28317240	0.77819096
## North Carolina	-0.032179511	0.13756480	-0.23392256	0.81598159
## North Dakota	-0.602927643	0.27309622	-2.20774804	0.03178561
## Ohio	-0.074626299	0.15814677	-0.47188001	0.63902519
## Oklahoma	0.004794688	0.06955618	0.06893260	0.94531284
## Oregon	-0.048954149	0.63482087	-0.07711490	0.93883388
## Pennsylvania	-0.091596765	0.23554472	-0.38887208	0.69898964
## Rhode Island	-0.095706966	0.42249854	-0.22652614	0.82169772
## South Carolina	-0.005761720	0.11073774	-0.05203032	0.95870779
## South Dakota	-0.115849800	0.44535005	-0.26013200	0.79580932
## Tennessee	0.079101610	1.02185771	0.07740961	0.93860060
## Texas	0.066993249	0.47988657	0.13960226	0.88952411
## Utah	-0.086540929	0.73728666	-0.11737759	0.90702189
## Vermont	-0.061890150	0.20788362	-0.29771538	0.76712984
## Virginia	-0.014363798	0.19219070	-0.07473722	0.94071618
## Washington	0.042905897	0.19021624	0.22556380	0.82244217
## West Virginia	-0.356413995	0.36189122	-0.98486499	0.32933983
## Wisconsin	0.047158652	0.16560754	0.28476151	0.77698002
## Wyoming	-0.164375470	0.42115334	-0.39029839	0.69794137
## per_capita_state_tax_revenue				
##	Estimate	Std. Error	t value	Pr(> t )
## Alabama	-1.509170e-03	0.0029747783	-0.50732196	0.61411580
## Alaska	4.791617e-05	0.0000378140	1.26715398	0.21085611
## Arizona	-5.433839e-05	0.0021935764	-0.02477160	0.98033382
## Arkansas	2.317138e-04	0.0023571237	0.09830361	0.92207657

## California	-2.306496e-04	0.0015377828	-0.14998842	0.88136536
## Colorado	1.876861e-04	0.0010549536	0.17790939	0.85949891
## Connecticut	2.414120e-04	0.0005080031	0.47521760	0.63666089
## DC	2.876647e-04	0.0002175917	1.32203912	0.19205425
## Delaware	7.720309e-05	0.0006154155	0.12544871	0.90066154
## Florida	3.882542e-04	0.0015793413	0.24583298	0.80679820
## Georgia	-3.244825e-04	0.0046963187	-0.06909295	0.94518583
## Hawaii	-2.082765e-05	0.0016539830	-0.01259242	0.99000210
## Idaho	1.502616e-05	0.0008364640	0.01796390	0.98573775
## Illinois	-9.756117e-05	0.0005683569	-0.17165476	0.86438826
## Indiana	-5.784309e-04	0.0015930989	-0.36308540	0.71804170
## Iowa	2.364936e-04	0.0010837052	0.21822691	0.82812319
## Kansas	1.156304e-04	0.0008226977	0.14055027	0.88877889
## Kentucky	-2.872771e-05	0.0014013895	-0.02049945	0.98372495
## Louisiana	5.716270e-04	0.0024363161	0.23462759	0.81543724
## Maine	-1.190540e-03	0.0013003751	-0.91553588	0.36421916
## Maryland	1.326250e-04	0.0011544113	0.11488537	0.90898712
## Massachusetts	2.777658e-04	0.0008542556	0.32515533	0.74639369
## Michigan	-1.953575e-04	0.0014659247	-0.13326568	0.89450773
## Minnesota	7.525170e-05	0.0009812356	0.07669076	0.93916963
## Mississippi	8.588855e-04	0.0018351786	0.46801194	0.64177001
## Missouri	2.831174e-04	0.0009577067	0.29562010	0.76872052
## Montana	-2.182502e-04	0.0006304971	-0.34615580	0.73064965
## Nebraska	-6.875825e-05	0.0009896125	-0.06947997	0.94487929
## Nevada	5.347219e-04	0.0015570601	0.34341767	0.73269598
## New Hampshire	8.227654e-04	0.0030922138	0.26607651	0.79125304
## New Jersey	-3.541587e-03	0.0014471843	-2.44722629	0.01788006
## New Mexico	-1.153736e-04	0.0005993275	-0.19250510	0.84811110
## New York	4.839151e-06	0.0003112181	0.01554907	0.98765481
## North Carolina	-1.982949e-04	0.0014900922	-0.13307558	0.89465731
## North Dakota	4.494517e-05	0.0001002637	0.44826960	0.65585733
## Ohio	-8.608046e-04	0.0011365015	-0.75741615	0.45228600
## Oklahoma	-1.607250e-05	0.0010964087	-0.01465922	0.98836125
## Oregon	1.233456e-04	0.0034720657	0.03552513	0.97179969
## Pennsylvania	1.674663e-04	0.0017298286	0.09681095	0.92325598
## Rhode Island	-7.976053e-04	0.0015277114	-0.52209163	0.60386693
## South Carolina	-2.351097e-04	0.0015075683	-0.15595291	0.87668581
## South Dakota	5.217358e-04	0.0013226979	0.39444821	0.69489485
## Tennessee	-3.734065e-04	0.0026169704	-0.14268655	0.88709997
## Texas	2.983681e-04	0.0017440146	0.17108117	0.86483691
## Utah	8.501272e-05	0.0018885969	0.04501369	0.96427219
## Vermont	-1.034094e-04	0.0007773993	-0.13301961	0.89470135



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## Virginia      -8.290175e-04  0.0011553257  -0.71756173  0.47630158
## Washington    -1.051509e-04  0.0009752946  -0.10781445  0.91456592
## West Virginia  5.644317e-04  0.0014853991   0.37998659  0.70553326
## Wisconsin     2.184583e-04  0.0009889523   0.22089875  0.82605327
## Wyoming       -1.905199e-04  0.0001819367  -1.04717692  0.29995564
## `Prescription Rate`
##              Estimate  Std. Error      t value    Pr(>|t|
## )
## Alabama        -1.149866e-02  0.021180242  -0.5428956855  0.58956652
5
## Alaska         -5.641652e-02  0.047647961  -1.1840280204  0.24189114
6
## Arizona        -4.437213e-04  0.012472431  -0.0355761700  0.97175919
3
## Arkansas        3.889322e-04  0.005709813   0.0681164598  0.94595928
8
## California     -4.512815e-03  0.128652351  -0.0350775911  0.97215480
5
## Colorado       -1.335488e-02  0.056785258  -0.2351821456  0.81500914
2
## Connecticut     1.225543e-02  0.037808940   0.3241409793  0.74715697
6
## DC             -2.351176e-02  0.007027207  -3.3458185852  0.00154563
9
## Delaware        1.590261e-02  0.015290350   1.0400419865  0.30322605
4
## Florida         1.374775e-02  0.033840031   0.4062571024  0.68625339
7
## Georgia         4.028454e-03  0.071322495   0.0564822378  0.95517835
3
## Hawaii          2.875460e-03  0.136959690   0.0209949380  0.98333162
1
## Idaho          -3.222014e-03  0.031595997  -0.1019753781  0.91917610
9
## Illinois       -1.634803e-02  0.140497072  -0.1163585152  0.90782540
3
## Indiana         5.624364e-03  0.020500167   0.2743569564  0.78491859
0
## Iowa           1.699895e-04  0.021100609   0.0080561414  0.99360363
0
## Kansas         -1.652968e-03  0.036309692  -0.0455241484  0.96386731
7
```

## Kentucky	3.067163e-03	0.015201705	0.2017644107	0.84090354
6				
## Louisiana	2.696984e-02	0.022502522	1.1985250316	0.23625244
6				
## Maine	-2.018042e-02	0.028645700	-0.7044834690	0.48433644
7				
## Maryland	-4.168876e-03	0.030706453	-0.1357654571	0.89254117
0				
## Massachusetts	-3.705079e-03	0.034221170	-0.1082686137	0.91420746
2				
## Michigan	6.036114e-03	0.034829314	0.1733055784	0.86309726
2				
## Minnesota	-3.951112e-03	0.073657992	-0.0536413196	0.95743051
0				
## Mississippi	-2.396364e-03	0.016702735	-0.1434713279	0.88648334
3				
## Missouri	5.173469e-04	0.019274576	0.0268408981	0.97869138
7				
## Montana	2.311348e-03	0.029616008	0.0780438740	0.93809855
2				
## Nebraska	1.916960e-03	0.021418129	0.0895017677	0.92903371
5				
## Nevada	-1.324473e-03	0.009635188	-0.1374620376	0.89120686
7				
## New Hampshire	-2.379685e-03	0.039807957	-0.0597791379	0.95256517
7				
## New Jersey	-5.571977e-03	0.048866092	-0.1140254190	0.90966535
4				
## New Mexico	-1.185253e-02	0.030452676	-0.3892114287	0.69874018
1				
## New York	5.664778e-03	0.033148021	0.1708934116	0.86498378
8				
## North Carolina	4.269092e-04	0.007095986	0.0601620612	0.95226169
9				
## North Dakota	-2.631305e-02	0.021196336	-1.2413961530	0.22013885
9				
## Ohio	1.717804e-02	0.012042477	1.4264541569	0.15983058
9				
## Oklahoma	7.037887e-04	0.008697683	0.0809167966	0.93582483
4				
## Oregon	-1.119615e-03	0.017389522	-0.0643844887	0.94891578
6				

```
## Pennsylvania      1.931208e-02  0.046078467   0.4191128353  0.67689371
2
## Rhode Island      2.951557e-04  0.018481540   0.0159702980  0.98732040
1
## South Carolina    9.862929e-03  0.019284342   0.5114475310  0.61124506
4
## South Dakota      8.275979e-05  0.014985036   0.0055228293  0.99561498
9
## Tennessee         -1.105482e-05  0.055617885  -0.0001987638  0.99984218
5
## Texas             -7.171758e-03  0.030027746  -0.2388377050  0.81218858
7
## Utah              -3.692273e-03  0.109506468  -0.0337173950  0.97323412
6
## Vermont           6.038802e-03  0.034133563   0.1769168490  0.86027443
6
## Virginia          -1.116644e-02  0.019699337  -0.5668436680  0.57330685
2
## Washington        -3.182770e-04  0.015434171  -0.0206215790  0.98362799
6
## West Virginia     9.820091e-04  0.020948823   0.0468765776  0.96279467
9
## Wisconsin         1.892957e-03  0.013237621   0.1429982526  0.88685504
9
## Wyoming           -4.168829e-02  0.053219609  -0.7833257864  0.43705848
7
##
## Residual standard error: 0.1054736 on 51 degrees of freedom
```