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# An Economic Analysis of What Role Monetary Contributions Play in How a Government Representative Will Vote

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**AN ECONOMIC ANALYSIS OF WHAT ROLE MONETARY CONTRIBUTIONS PLAY IN HOW A GOVERNMENT REPRESENTATIVE WILL VOTE**

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in partial fulfillment of the requirements for Departmental Honors

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(digital signature)

05/02/17

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**Abstract:**

As a result of polarizing election outcomes, controversial legislative actions, and the general stigma that elected officials are corrupt, many Americans are questioning whether their representatives in government have the best interest of their constituents at heart, or are considering more self-centered motives. One point of contention is that political action committees and lobbyists contribute hundreds of thousands of dollars to legislators' campaigns in return for consideration of their viewpoints. This study seeks to determine exactly how much weight members of the House of Representatives give to monetary contributions when considering how to vote on a bill by using voting records and control variables associated with the Patient Protection and Affordable Care Act.

After testing how party, ideology, monetary contributions, constituent income, percent of votes received in the election, and the size of the election margin impacted how each Representative voted on the ACA it was unclear whether any variables had significant impacts on the dependent variable. However, when only the data from the Democrats was considered, it was possible to conclude that both ideology and monetary contributions were major contributing factors for the vote.

**Introduction:**

The political system in the United States of America has fallen under more and more

scrutiny in recent years, especially in light of the 2016 election. A growing number of Americans

report feelings of mistrust toward the government and many citizens take it as fact that their

representatives do not have their best interests at heart. Other constituents see legislators as purely

divided by party lines, more cogs in a political machine than free-thinking delegates. A more

menacing theory is that representatives and their votes are swayed primarily by monetary

contributions from interest groups pushing political agendas.

To determine whether or not this is true, it is important to determine which factors most

impact how a member of the House of Representatives chooses to vote. Extensive research has

been done on this topic due to the far-reaching impact of the outcomes of Congressional voting.

Previous research has suggested that party affiliation, proximity to election season, constituent

interests, interest group contributions, personal ideology, and voter preferences are the variables

which most likely influence congressional votes.

This study builds upon previous research by using data specific to the Patient Protection

and Affordable Care Act to determine which elements were most important during the decision-

making process for that specific piece of legislation. This bill was chosen due to it being arguably

the most controversial bill of recent years and one which directly impacted many citizens. This

divisive piece of legislation is particularly fascinating because it seems that the most contentious

issues are those that most heavily impact the American people.

To determine the extent to which monetary contributions influence how congressional

representatives vote on key issues, data on the amount of money contributed to the campaigns of

each representative identified as originating within the health sector was obtained. Also,

Congressional Representatives' previous votes were taken into consideration to gauge ideology

and to determine political party affiliation, in addition to the number of individuals in each

congressional district without health insurance prior to the passage of the Affordable Care Act and

the median household income for each congressional district for the year 2010. Lastly, the margin

by which the legislator won the 2008 election and the total percent of votes he or she received of

those who voted in each congressional district will be considered to determine how safe the seat

would have been considered in the upcoming election. Logistic regression analysis was performed

to determine how these variables impacted how a Representative voted.

**Literature Review:**

Previous research sought to determine how significant an impact financial contributions to

Congressmen are in determining how he or she will vote by focusing on the North American Free

Trade Agreement (NAFTA), the General Agreement on Tariffs and Trade (GATT), and the most-

favored nation (MFN) status of China. (Baldwin and Magee, 1998) Political Action Committees

(PACs) tend to support legislators who are likely to support bills which align with that group's

interests and give money accordingly. Congressmen, who are assumed to maximize chances of

reelection, require both financial support for campaigns and popular support from constituents in

order to continue their political careers. After regression analysis, which determined how

contributions, constituents' interests, impact on employment, influence of the President, and

ideology impacted voting determination, overall it was concluded by the researchers that

contributions are only an effective means by which to influence congressional voting when

accompanied by vigorous lobbying. Interestingly, the researchers also estimate that special

benefits awarded by the president can essentially "buy" votes. In addition, economic conditions in

the legislators' regions, unemployment, unions, education level of workers, import-oriented vs.

export-oriented employment, regional industry, and personal policy views were important

deciding factors.

Steven D. Levitt contributed to the discussion about the utility function for Senators given

that ideology could not be observed. (Levitt, 1996) He found that voter preferences accounted for

less than twenty-five percent of the weight of the decision function, and of that weight, supporters'

preferences are far more influential than non-supporters' preferences. This weight fluctuates as

election season approaches and for Senators with lower levels of certainty of reelection.

Levitt notes that since ideology and party lines are so closely correlated, one cannot be

estimated without controlling for the other without significant omitted variable bias (Levitt, 1996).

Also, the estimation technique of this paper would be applicable to any roll-call data sets. Baldwin

and Magee controlled for ideology by collecting data from Senators' voting records, and it would

be interesting to apply this method to the roll-call voting estimation technique used by Levitt.

James M. Snyder further deals with the party-ideology problem within the United States'

Congress. (Snyder, 2000) He quotes Krehbiel in asking, "In casting apparently partisan votes, do

individual legislators vote with fellow party members in spite of their disagreement about the

policy in question, or do they vote with fellow party members because of their agreement about

the policy in question?" Levitt chose to focus on lopsided outcomes to determine ideology, which

he believed to truly show legislators' real policy preferences since the outcomes are predictable

and parties should not have uselessly wasted resources coercing a party line vote. Using these

estimates, he ran regressions on roll-calls with closer votes. Having thus controlled for preference,

Snyder concluded that party was an important deciding factor in congressional voting. However,

one limitation of this study was the shortage of lopsided roll calls in roughly twelve congresses.

An interesting point that Syder makes is that by looking at representatives from the same state who belong to different parties, it is possible to see how much weight their individual parties have on their voting preferences, assuming they have the same constituency. (Snyder, 2000) He estimates that roughly one quarter of the decision is based on party in these cases. He also suggests using the procedure from this paper that in order to determine the influence of interest groups by including some measure of the groups' standing across constituencies in the second-step regressions.

**Theory:**

The equation estimated for this model was:

$$D_iACAVOTE = \beta_0 + \beta_1 MONEY + \beta_2 IDEOLOGY + \beta_3 NoHEALTHINSURANCE +$$

$$\beta_4 PERCENTOFVOTES + \beta_5 INCOME + \beta_6 ELECTIONMARGIN + \varepsilon$$

The dependent variable of this study is a dummy variable where a value of 1 corresponds to a yes vote for the Patient Protection and Affordable Care Act and a value of 0 indicates a no vote. Monetary Contributions flagged as originating somewhere in the Health Industry are expected to also have a negative coefficient since it was widely known that Health professionals and lobbyists gave large campaign contributions to Republicans to stop the act from passing. Party Affiliation, which assigned a value of 0 for members of the House who were identified as Democrats and a value of 1 for those who were identified as Republicans, is expected to have a negative coefficient, since the Affordable Care Act was widely opposed by members of the Republican Party. It is anticipated that higher values for the percent of the population in each district without health insurance will result in a positive coefficient, since a larger number of uninsured constituents will result in more political pressure ot pass a bill which would provide coverage. A higher ideology score is anticipated to result in positive coefficients because the higher

the ideology score, the more liberal-leaning the Representative is perceived to be and therefore the

more liberal the constituency is, which will place a higher pressure on the representative to vote

with that ideology. It is also expected that lower values for median household income will result

in positive coefficients because lower income districts are expected to be more in favor of the

Affordable Care Act, resulting in pressure on the representative to vote in favor of the bill. Lastly,

it is expected that higher election margins and greater percentages of votes won in the election of

2008 will result in negative coefficients, since these seats should be considered "safe" and the

Representatives will not feel pressured to vote for the act in order to be reelected.

**Data:**

Data on the House of Representatives' party affiliation and vote on the Affordable Care

Act was acquired from GovTrack (H.R. 3590 (111th), 2010). Figures on the total monetary

contributions a Representative received from any group affiliated with the Health industry came

from the Center for Responsive Politics. The percentage of people in each congressional district

without Health Insurance was originally obtained from "The Uninsured by State and

Congressional District," written by David Newman (2011). Data on the median household income

for 2010 was obtained from the U.S. Census Bureau. Ideology scores for each House of

Representatives Member was computed by the Americans for Democratic Action (Voting

Records, 2010). Data on the victory margins and total percent of votes received by each candidate

during the 2008 election was compiled by Lorraine C. Miller, the clerk of the House of

Representatives (2009).

**Model:**

A binomial logit model was used in this study since the dependent variable was a dummy

variable. The logit's dependent variable was whether or not each representative voted in favor of

the Affordable Care Act. The independent variables were the total dollar amount of monetary

contributions received by each representative while the 111th Congress was in session that

originated in the health sector, representatives' political parties, the percent of people in each

district living without health insurance in the year before the bill was voted on, the margin by

which each representative won the 2008 election over the runner up, the percent of votes each

representative received in their congressional district in the 2008 election, the median household

income of each congressional district for 2009, and the score of each representative's ideology as

measured by the Americans for Democratic Action.

The logit regression was then rerun omitting the variable "party" because under-

identification occurred from the inclusion of a variable which perfectly predicted failure to vote in

the affirmative for the bill for all Republicans. The controversial nature of this piece of legislation

led to a largely party-line vote, in which every Republican member of the House of Representatives

voted no. This under-identification removed 171 observations from the sample, which

compromised the estimated coefficients. Binomial logit models work best with samples which

have close to or over 500 observations, which was no longer the case in this study when the party

variable was included.

Then, a second logit regression was run that reinstated the party variable and only included

data from the members of the House identified as Democrats. Due to the party-line nature of the

vote, the results were less informative when the Republican members were included. While the

ACA still had very little variation within the Democratic party, there were 34 Democrats who did

not vote on the party line and voted against the bill. This deviation allows economic analysis to

determine what variable were most important in that decision and was therefore far more

enlightening.

**Results:**

The percent change in the probability a member of the House would vote yes on the Affordable Care act was measured by obtaining the marginal effects from the original logit regressions. The marginal effects transform the log value of the original coefficients into the change in probability that the Representatives will vote yes on the bill that results from a one unit change in an independent variable.

The McFadden $R^2$ was used as a measure of overall fit for this model. The first regression equation had a Pseudo $R^2$ of 0.8814, showing this model accounted for all but 12% of the variance in the dependent variable.

Table 1

Logit Results

| | ACAvote |
|---|---|
| Monetary Contributions in $10,000s | -0.037 |
| | (-1.41) |
| Ideology | 0.174*** |
| | (6.39) |
| % Without Health Insurance 2009 | 0.085 |
| | (1.06) |
| % of Votes Received | -1.335 |
| | (-0.19) |
| Median Household Income in $10,000s | -0.165 |
| | (-0.66) |
| Election Margin in 10,000s | 0.002 |
| | (0.11) |
| N | 418 |

z statistics in parentheses

* p<0.01, ** p<0.05, *** p<0.001

Full Regression Results: Appendix A

In order to interpret the results of this model, the marginal effects for the logit results were computed. The marginal coefficients provide the change in probability of obtaining a value of 1 in a dummy dependent variable, in this case a yes vote on the Affordable Care Act, based on a one unit change in an independent variable.

Table 2
Logit Marginal Effects Results

| ACAvote | |
| --- | --- |
| Monetary Contributions in $10,000s | -0.085 |
| | (-1.44) |
| Ideology | 0.407*** |
| | (12.27) |
| % Without Health Insurance 2009 | 0.198 |
| | (1.06) |
| % of Votes Received | -3.12 |
| | (-0.19) |
| Median Household Income in $10,000s | -0.384 |
| | (-0.67) |
| Election Margin in 10,000s | 0.040 |
| | (-0.11) |
| N | 418 |

z statistics in parentheses
* p<0.01, ** p<0.05, *** p<0.001

Full Regression Results: Appendix A

The variable party was omitted by Stata in the first logit regression because under-identification occurred. Of the 178 Republicans in the 111th Congress, every one voted against the Affordable Care Act. Since a value of 0, which indicated a no vote, perfectly predicted failure in the model for Republicans, the variable was not useful for determining which factors were influential in determining how a delegate voted.

A second logit regression was run to determine what affect the independent variable had on the decision-making process of the Democratic members. Since there was variation in the way that the members of the Democratic Party voted led to more interesting results, though the smaller

sample size means that the results may not be as reliable. In the second logit regression, party was

omitted because only the Democrat Representatives were considered.

Table 4
Logit Margin Results- Democrats

| acavote | |
| --- | --- |
| Monetary Contributions in $10,000s | -0.184** |
| | (-2.10) |
| Ideology | 0.638*** |
| | (-13.04) |
| % Without Health Insurance 2009 | 0.351 |
| | 1.11 |
| % of Votes Received | -8.7 |
| | -0.34 |
| Median Household Income in $10,000s | 0.235 |
| | -0.26 |
| Election Margin in 10,000s | -0.27 |
| | -0.11 |
| N | 246 |

z statistics in parentheses
* p<0.01, ** p<0.05, *** p<0.001

For every $10,000 increase in the total monetary contributions a candidate received from

health sector interest groups between their election in 2008 and 2010, there was a 0.184% decrease

in the probability that the representative voted in favor of the Affordable Care Act. These results

were significant and were consistent with the hypothesis of this study. Since the majority of health

campaign contribution was spent to stop the enactment of the Affordable Care Act, it was expected

that the impact on voting would be negative. One explanation for this variable being statistically

significant when monetary contributions was not significant in the original regression is that

money contributed to the campaigns of Democrats was more effective in eliciting a no vote since

the Republican Representatives were all going to vote no regardless of money.

For every \$10,000 increase in the median household income of the $i^{th}$ congressional district

in 2010, the probability that the representative will vote in favor of the Affordable Care Act

increased by .235%, all other variables held constant. This does not support the hypothesis that

income and ACA vote are inversely correlated, but the result was statistically insignificant.

For every 1% increase in the percent of the population of the $i^{th}$ congressional district living

without health insurance, the probability that the Representatives of the Democratic party will vote

in favor of the Affordable Care Act increases by .351%, all other variables held constant. This

result supports the hypothesis that the percent of individuals without health insurance and votes on

the Affordable Care Act would be positively related. However, the results were not statistically

significant.

A one unit increase in ideology score in the $i^{th}$ representative resulted in a .638% increase

in the probability that he or she voted in favor of the bill, all other variables held constant. This

was consistent with the hypothesis that the more liberal the Representative, the more likely they

would be to support the Affordable Care Act. These results were statistically significant.

A 10,000 vote increase in the victory margin of the winning candidate over the runner-up

led to a .27% decrease in the probability that that representative voted yes for the Affordable Care

Act. This result was consistent that the hypothesis that "safer" seats would feel less pressure to

vote for the bill and be less inclined to rock the boat by helping to put in place such a controversial

policy. However, this result was not statistically significant.

A 1% increase in the percent of total votes the $i^{th}$ candidate received in their congressional

district led to an 8.7% decrease in the likelihood that the representative would cast a favorable vote

for the bill. This result was not consistent with the hypothesis stated for this study, but the result

was not statistically significant.

The second logit regression equation had a pseudo $R^2$ of 0.7251. This decrease in the

overall fit can be accounted for by the lack of inclusion of Republican House of Representatives

members. Also, the sample size decreased from 418 in the first regression to 246 in the second.

Binomial Logit regressions function best with sample sizes close to 500 observations, so this

drastic decrease in the sample size can be credited for some decrease in overall fit. Again, the

marginal effects were obtained from these results.

Democrats received average campaign contributions from the health sector that amounted

to $135,934.30 per representative (Appendix D). In comparison, the average Republican member

of the House received $137,928.30 (Appendix C), which is not drastically different from the

amount received by Democrats. Since 34 Democrats voted against the piece of legislation, it is

possible to observe the difference in those who voted for the act and those who voted against it.

Democrats who voted for the enactment of the Patient Protection and Affordable Care Act received

an average of $133,151.20 (Appendix F), while their fellow Democrats who opposed the bill

received an average of $152,633.30 (Appendix E), nearly $20,000 per person more. Without

knowing what purpose interest groups had in mind when they contributed to Representatives'

campaigns, the assumption can be made from the literature that overall, health sector interest

groups wanted to prevent the ACA from passing. In order to accomplish this, the summary

statistics suggest that Democrats who had lower ideology scores who were perceived to be more

conservative were targeted by these interest groups as being open to voting against their party and

therefore received more monetary contributions.

**Conclusion:**

Based on the results from this study, we can conclude that monetary contributions were statistically significant in the process by which members of the House of Representatives chose to vote on the Patient Protection and Affordable Care Act when there was some variation in the voting patterns of Representatives. However, personal ideology was a factor heavily considered by members that was significant, even at the 97.5% significance level. These inferences can be extended to describe the process through which congressmen make decisions on bills.

While the factor which Representatives appear to consider the most heavily is personal ideology and monetary contributions also play a role in determining how they will vote. The other explanatory variables were insignificant and did not appear to seriously influence the voting inclinations of members of the House of Representatives.

The conclusion that ideology is the factor that Representatives most heavily consider when deciding how to vote is a positive one, because constituents elect delegates whom they believe will best represent their interests and who they believe most aligns with their personal beliefs. However, the significance of monetary contributions tells a less optimistic tale. While campaign contributions seem to only change a vote when the Representative is open-minded and does not have an extreme personal ideology, the results suggest that House of Representatives votes are for sale in some situations.

However, the Affordable Care Act was very politically polarizing and largely came down to a party line vote, with some exceptions from the Democratic Party. This negated the Party variable since the dummy variables for vote and party were too similar to be compared. It is possible that when considering other votes which are less divisive, and when the party variable

can be considered by data analysis software, the results would more accurately reflect how

legislators make voting decisions.

There was a high degree of correlation between ideology and vote on the Affordable Care

Act, which may have impacted the overall efficiency of the coefficients. Also, there was some

correlation between the percent of votes a representative receive in their congressional district and

the margin by which they won the election. This was to be expected given the close relationship

of the two variables. (Appendix G)

In future research, bills which have some voting variation within party should be

considered in order to obtain reliable coefficient which incorporate data from both major political

parties. Also, additional relevant variables should be added to the model for a more robust result.

For example, polling data on the popularity of the potential impacts of the proposed legislation

within each congressional district and the approval ratings of the current administration.

**Appendix:**

## A. Full Logit Results- All Members

```
. logit acavote contributionsin10000s nohi ideology precentofvotes electionmarginin1000s  incomein10000
> s

Iteration 0:   log likelihood = -289.69246
Iteration 1:   log likelihood = -45.452295
Iteration 2:   log likelihood = -36.168657
Iteration 3:   log likelihood =  -34.39126
Iteration 4:   log likelihood = -34.371716
Iteration 5:   log likelihood = -34.371664
Iteration 6:   log likelihood = -34.371664
```

Logistic regression

| | | Number of obs | = | 418 |
|---|---|---|---|---|
| | | LR chi2(6) | = | 510.64 |
| | | Prob > chi2 | = | 0.0000 |
| Log likelihood = -34.371664 | | Pseudo R2 | = | 0.8814 |

| acavote | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|
| contributionsin10000s | -.0366109 | .0259436 | -1.41 | 0.158 | -.0874593 | .0142376 |
| nohi | .0847549 | .080219 | 1.06 | 0.291 | -.0724716 | .2419813 |
| ideology | .1744094 | .0272989 | 6.39 | 0.000 | .1209045 | .2279144 |
| precentofvotes | -1.335459 | 7.035833 | -0.19 | 0.849 | -15.12544 | 12.45452 |
| electionmarginin1000s | .0017085 | .0160477 | 0.11 | 0.915 | -.0297444 | .0331615 |
| incomein10000s | -.1645415 | .2482055 | -0.66 | 0.507 | -.6510153 | .3219324 |
| _cons | -9.855347 | 4.276448 | -2.30 | 0.021 | -18.23703 | -1.473663 |

```
. margins, dydx(*)
```

Average marginal effects

| | | Number of obs | = | 418 |
|---|---|---|---|---|

Model VCE    : **OIM**

Expression   : **Pr(acavote), predict()**
dy/dx w.r.t. : **contributionsin10000s nohi ideology precentofvotes electionmarginin1000s incomein10000s**

| | dy/dx | Delta-method Std. Err. | z | P>\|z\| | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|
| contributionsin10000s | -.0008548 | .0005931 | -1.44 | 0.150 | -.0020172 | .0003077 |
| nohi | .0019788 | .001869 | 1.06 | 0.290 | -.0016843 | .0056419 |
| ideology | .0040719 | .0003318 | 12.27 | 0.000 | .0034216 | .0047222 |
| precentofvotes | -.031179 | .1642304 | -0.19 | 0.849 | -.3530648 | .2907068 |
| electionmarginin1000s | .0000399 | .0003748 | 0.11 | 0.915 | -.0006947 | .0007745 |
| incomein10000s | -.0038416 | .005761 | -0.67 | 0.505 | -.0151328 | .0074497 |

## B. Full Logit Result- Democrats

```
. logit acavote nohi ideology contributionsin10000s incomein10000s electonmarginin10000s precentofvote
> s if party == 0

Iteration 0:   log likelihood =  -98.81901
Iteration 1:   log likelihood = -42.683013
Iteration 2:   log likelihood = -29.657373
Iteration 3:   log likelihood = -27.234322
Iteration 4:   log likelihood = -27.163517
Iteration 5:   log likelihood = -27.163324
Iteration 6:   log likelihood = -27.163324
```

| Logistic regression | | | | Number of obs | = | 246 |
|---|---|---|---|---|---|---|
| | | | | LR chi2(6) | = | 143.31 |
| | | | | Prob > chi2 | = | 0.0000 |
| Log likelihood = -27.163324 | | | | Pseudo R2 | = | 0.7251 |

| acavote | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. Interval] | |
|---|---|---|---|---|---|---|
| nohi | .1097693 | .099353 | 1.10 | 0.269 | -.0849591 | .3044977 |
| ideology | .1997957 | .0355828 | 5.61 | 0.000 | .1300547 | .2695367 |
| contributionsin10000s | -.0576809 | .0291082 | -1.98 | 0.048 | -.1147319 | -.0006299 |
| incomein10000s | .0736372 | .2837769 | 0.26 | 0.795 | -.4825553 | .6298296 |
| electonmarginin10000s | -.084561 | .1812542 | -0.47 | 0.641 | -.4398128 | .2706907 |
| precentofvotes | 2.722209 | 7.951265 | 0.34 | 0.732 | -12.86198 | 18.3064 |
| _cons | -14.71891 | 5.599268 | -2.63 | 0.009 | -25.69327 | -3.744541 |

```
. margins, dydx(*)
```

| Average marginal effects | | | | Number of obs | = | 246 |
|---|---|---|---|---|---|---|
| Model VCE    : OIM | | | | | | |

```
Expression   : Pr(acavote), predict()
dy/dx w.r.t. : nohi ideology contributionsin10000s incomein10000s electonmarginin10000s
               precentofvotes
```

| | | Delta-method | | | | |
|---|---|---|---|---|---|---|
| | dy/dx | Std. Err. | z | P>\|z\| | [95% Conf. Interval] | |
| nohi | .0035068 | .0031589 | 1.11 | 0.267 | -.0026845 | .0096982 |
| ideology | .0063829 | .0004895 | 13.04 | 0.000 | .0054236 | .0073423 |
| contributionsin10000s | -.0018427 | .0008765 | -2.10 | 0.036 | -.0035607 | -.0001248 |
| incomein10000s | .0023525 | .0090752 | 0.26 | 0.795 | -.0154345 | .0201395 |
| electonmarginin10000s | -.0027015 | .0057703 | -0.47 | 0.640 | -.0140112 | .0086082 |
| precentofvotes | .0869672 | .2538144 | 0.34 | 0.732 | -.4105 | .5844343 |

## C. Summary if Republican

`. summarize if party==1`

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| party | 176 | 1 | 0 | 1 | 1 |
| acavote | 176 | 0 | 0 | 0 | 0 |
| monetaryco~s | 173 | 137928.3 | 160276 | 0 | 1100000 |
| nohi | 176 | 14.7608 | 4.714415 | 5.6 | 30.5 |
| income | 176 | 68575.71 | 16114.06 | 21431 | 123991 |
| reelected | 176 | .8636364 | .3441534 | 0 | 1 |
| ideology | 174 | 5.833333 | 10.97927 | 0 | 100 |
| electionma~n | 172 | 77095.79 | 46270.83 | 350 | 274567 |
| precentofv~s | 174 | .6255288 | .1041282 | .3862169 | 1 |
| contri~1000s | 176 | 135.5773 | 159.9019 | 0 | 1100 |
| income~1000s | 176 | 68.57571 | 16.11406 | 21.431 | 123.991 |
| electi~1000s | 173 | 76.65015 | 46.50698 | 0 | 274.567 |

## D. Party if Democrat

`. summarize if party==0`

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| party | 255 | 0 | 0 | 0 | 0 |
| acavote | 255 | .8588235 | .3488883 | 0 | 1 |
| monetaryco~s | 252 | 135934.3 | 120864.8 | 2000 | 725100 |
| nohi | 255 | 15.2302 | 6.575916 | 3.2 | 38.5 |
| income | 255 | 67416.09 | 19112.88 | 34020 | 137003 |
| reelected | 255 | .7215686 | .4491084 | 0 | 1 |
| ideology | 254 | 83.83858 | 18.37062 | 0 | 100 |
| electionma~n | 243 | 101346.4 | 56237.91 | 727 | 242404 |
| precentofv~s | 247 | .6727317 | .1223223 | .4301275 | .9997008 |
| contri~1000s | 252 | 135.9343 | 120.8648 | 2 | 725.1 |
| income~1000s | 255 | 67.41609 | 19.11288 | 34.02 | 137.003 |
| electi~1000s | 245 | 100.5191 | 56.74752 | 0 | 242.404 |

## E. Summary if Democrat and Voted No

```
. summarize if party==0 & acavote==0
```

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| party | 36 | 0 | 0 | 0 | 0 |
| acavote | 36 | 0 | 0 | 0 | 0 |
| monetaryco~s | 36 | 152633.3 | 119387.8 | 11900 | 462300 |
| nohi | 36 | 14.28333 | 4.200714 | 3.5 | 21.8 |
| income | 36 | 62394.72 | 20071.99 | 42503 | 130903 |
| reelected | 36 | .3888889 | .4944132 | 0 | 1 |
| ideology | 36 | 49.02778 | 18.8914 | 0 | 95 |
| electionma~n | 34 | 80283.62 | 62570.1 | 1790 | 225335 |
| precentofv~s | 34 | .6378934 | .1446781 | .4301275 | .9997008 |
| contri~1000s | 36 | 152.6333 | 119.3878 | 11.9 | 462.3 |
| income~1000s | 36 | 62.39472 | 20.07199 | 42.503 | 130.903 |
| electi~1000s | 34 | 80.28362 | 62.5701 | 1.79 | 225.335 |

## F. Summary if Democrat and Voted Yes

```
. summarize if party==0 & acavote==1
```

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| party | 219 | 0 | 0 | 0 | 0 |
| acavote | 219 | 1 | 0 | 1 | 1 |
| monetaryco~s | 216 | 133151.2 | 121159.1 | 2000 | 725100 |
| nohi | 219 | 15.38584 | 6.883182 | 3.2 | 38.5 |
| income | 219 | 68241.52 | 18870.5 | 34020 | 137003 |
| reelected | 219 | .7762557 | .4177074 | 0 | 1 |
| ideology | 218 | 89.58716 | 10.08326 | 55 | 100 |
| electionma~n | 209 | 104772.9 | 54536.55 | 727 | 242404 |
| precentofv~s | 213 | .6782927 | .1178069 | .4351859 | .9995421 |
| contri~1000s | 216 | 133.1512 | 121.1591 | 2 | 725.1 |
| income~1000s | 219 | 68.24152 | 18.8705 | 34.02 | 137.003 |
| electi~1000s | 211 | 103.7798 | 55.22196 | 0 | 242.404 |

## G. Correlation

```
. corr
(obs=418)
```

|            | party   | acavote | nohi    | ideology | precen~s | c~10000s | i~10000s | e~10000s |
|-----------:|---------|---------|---------|----------|----------|----------|----------|----------|
| party      | 1.0000  |         |         |          |          |          |          |          |
| acavote    | -0.8483 | 1.0000  |         |          |          |          |          |          |
| nohi       | -0.0310 | 0.0516  | 1.0000  |          |          |          |          |          |
| ideology   | -0.9267 | 0.9223  | 0.0142  | 1.0000   |          |          |          |          |
| precentofv~s | -0.1984 | 0.2164 | 0.2810 | 0.2215  | 1.0000   |          |          |          |
| contr~10000s | 0.0183 | -0.0406 | -0.0963 | -0.0219 | -0.1018 | 1.0000   |          |          |
| incom~10000s | 0.0408 | 0.0052  | -0.3729 | 0.0244  | -0.2412  | 0.1345   | 1.0000   |          |
| elect~10000s | -0.2130 | 0.2382 | 0.0045  | 0.2463  | 0.8264   | -0.0689  | -0.1365  | 1.0000   |

Carrier
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