**Background/Data**

Funding in Politics / Title Slide

Campaign financing has been a hot button issue for a long time now, with people arguing that the contributions provided to politicians running for office in the American democracy are bought and sold through campaign contributions - leading to favorable legal treatment or passage of policies benefiting the “owner”. This is especially true now, as we enter 2016, a presidential election year.

Quote Slide

Interestingly, the debilitating effects of campaign financing on the country’s politics are a non-partisan issue. 2016 Democrat and presidential candidate Bernie Sanders calls it, “legalized bribery”. Donald Trump, a 2016 Republican presidential candidate, references being a “buyer” saying, “When you give, they do whatever the hell you want them to do.”

But how much influence does campaign financing really have over the outcome of elections? Can it be quantified? Can we see the “favors” resulting from contributing to a candidate materializing as gains after their election? All of the data that one would need to answer these questions is rarely found together, and is rarely in a consumable form. Our group made it our goal to address this data science question and search for truths about campaign financing.

Data Origins Slide

We used a few different data sources. Open Secrets contains campaign contribution information at the Candidate-Year-Election level, yielding the list of contributions, binned by industry, that contributed enough for the campaign to be required to report it. The New York Times and FEC sites had election information. Normally you can get all election information from the FEC, but since the government can be pretty slow, 2014 wasn’t posted yet. As a result, we scraped those results from the New York Times, instead. Finally, we used Yahoo Finance to pull together stock indices to use as performance indicators of the industries that contributed to candidates.

Summary Statistics Slides

This will give you a very rough idea of the data. Note that the data was at the Year-Election-Candidate-Industry level. We had to make some difficult choices in the outlier removal process. Notice, for instance, the NAs in votes and percent, which are caused by records belonging to uncontested candidates. Since these candidates would not exhibit “normal” behavior in campaign funding, we decided to exclude them from analysis. Note also that the standard deviations for most continuous variables are greater than the median or mean, indicating a heavy skew to the right. These reflect some candidates that are so far above the pack, we thought it would be best to remove them. Note also that there are some candidates that only received 5 votes. We tried to remove candidates that were not “serious” contenders.

New Summary Statistics

Here we have the new statistics with outliers removed. To remove outliers we discarded any values that were 1 IQR above the 75th percentile or 1 IQR below the 25th percentile. Note the lack of NAs, much less skewness in the variables, and we have lost any fringe candidates.