



# CAMPAIGN FINANCE

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# **INTRODUCTION**

# KEY POINTS

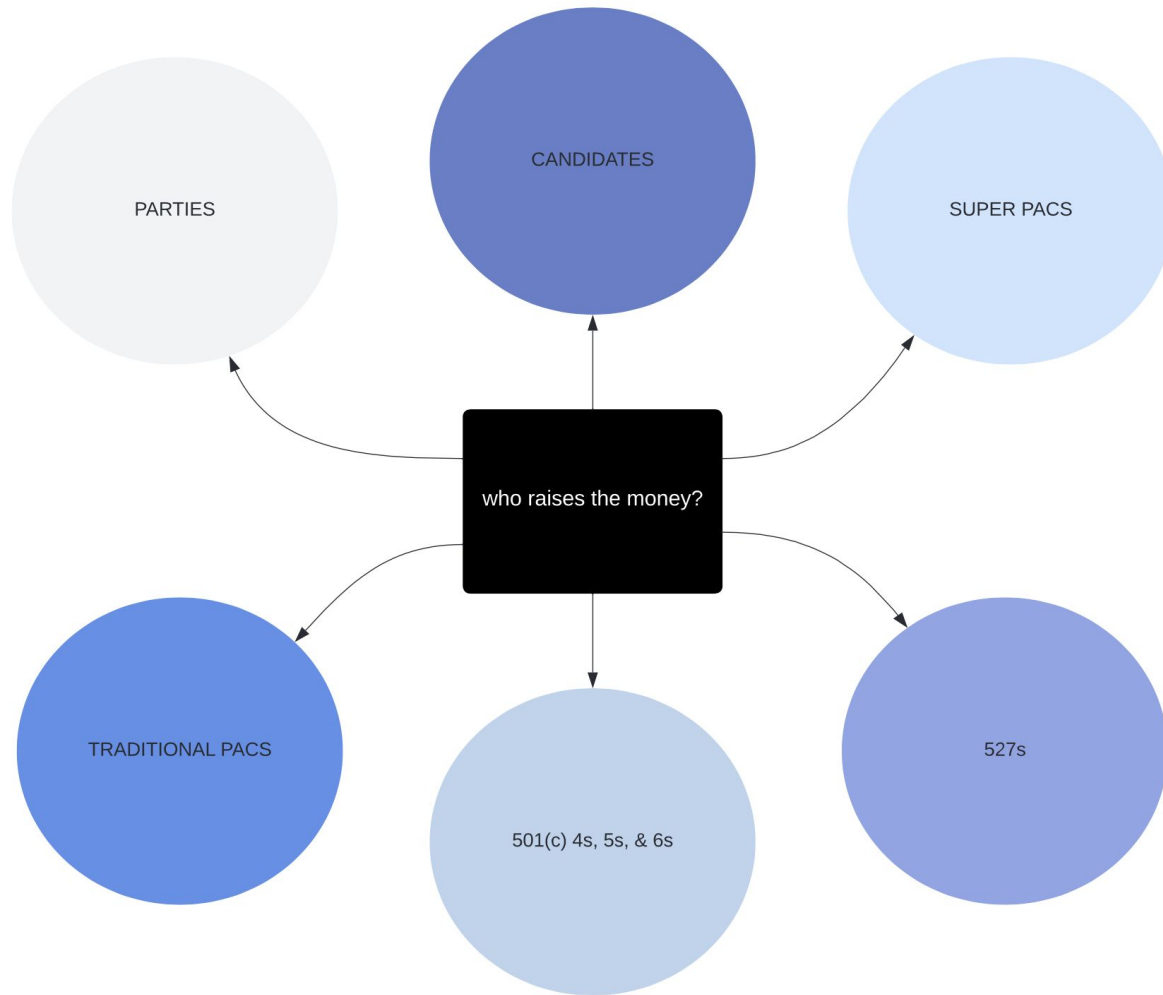
Context/Background Information

Research Questions

Data and Plots

Analysis

Conclusion



# DEFINITIONS AND DISTINCTIONS:

PACS: political action committees—raise money to help elect (or prevent the election) of a candidate or candidates.

501(c)s: tax exempt, nonprofit groups that may engage in political activity and are not required to disclose information about their donors.

527s: tax exempt groups organized to raise money for “political activities”. FEC only requires disclosure reports regarding PACs and political parties.

Campaign Committee: created by a candidate to fund/finance their campaign.

# PRELIMINARY QUESTIONS:

The questions we began with before formulating our hypotheses and analysis to guide the initial research and data exploration:

- Which states have the strictest campaign finance policies, which are the most lenient?
- Is there correlation between party ID and donation amount?
- What are the stats of donations to each candidate or party by PACs, individuals, etc?
- Where are the largest donations from? Who are they too?
- Where are the smallest donations from? Who are they too?
- Is there correlation between strictness of state policy and party ID?
- Are incumbent candidates better funded? To what extent?
- Subsequently, is there a correlation between incumbency and donation amounts?
- What are the differences between PAC donations by state? or house vs senate?
- Do females or males donate more to campaigns? Is gender relevant? Is it influenced by party ID?
- How much influence does money wield? How does campaign funding affect success?
- What differences will we find between state and federal elections? What are the financial differences in funding?

# RESEARCH QUESTION AND HYPOTHESES:

## Research Questions:

Is there a correlation between greater campaign finances and electoral wins on both a state-by-state basis and federal level?

How is campaign finance impacted by party ID (and state policy), and how does it differ state-by-state?

How do PACS, parties, individuals, etc. contribute to/fund campaigns? What does that distribution look like, and how does it vary?

## Hypotheses:

It is hypothesized that party ID does not greatly impact fundraising outcomes—republican and democrat candidates receive similar ratios of contributions (i.e from PACs) and similar total donation amounts.

It is hypothesized that candidates that spend more money are more likely to win their election.

# DATA:

## Sources:

- FEC: Federal Election Commission
- Political MoneyLine
- Open Secrets
- NCSL: National Conference of State Legislatures
- Coalition for Integrity
- Follow the Money
- Kaggle

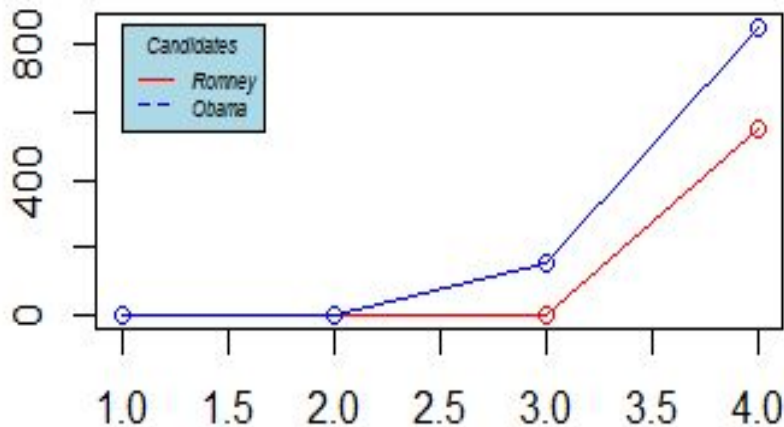
Modern data,  
2020 & 2022



# DATA VISUALIZATION OF FEDERAL ELECTIONS (2012)

Campaign Finances (million)

## Presidential Election (2008-2012)

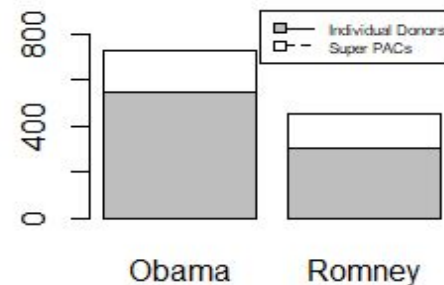


Year

Barack Obama Total:  
\$847,366,151

Mitt Romney Total:  
\$550,729,150

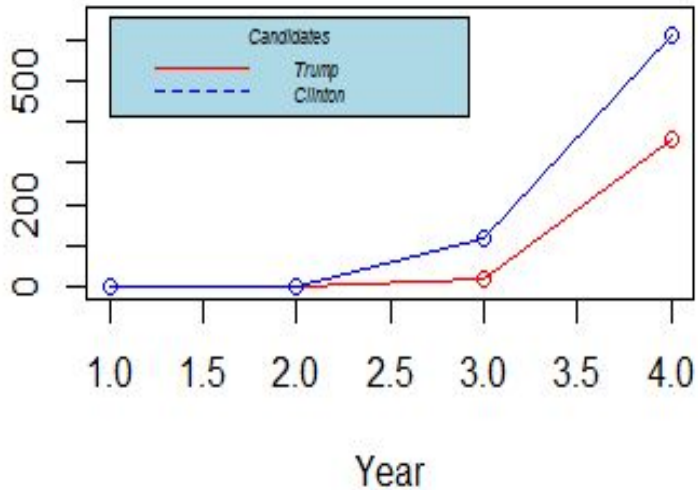
Campaign Funding (millions)



# DATA VISUALIZATION OF FEDERAL ELECTIONS (2016)

Campaign Finances (million)

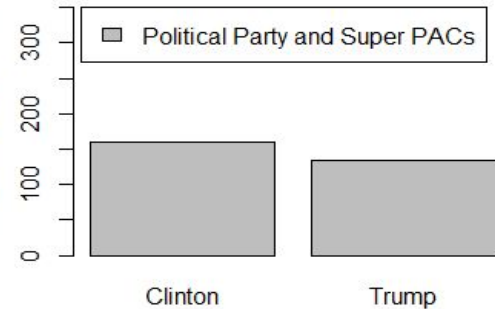
## Presidential Election (2012-2016)



Hillary Clinton Total:  
\$612,381,250

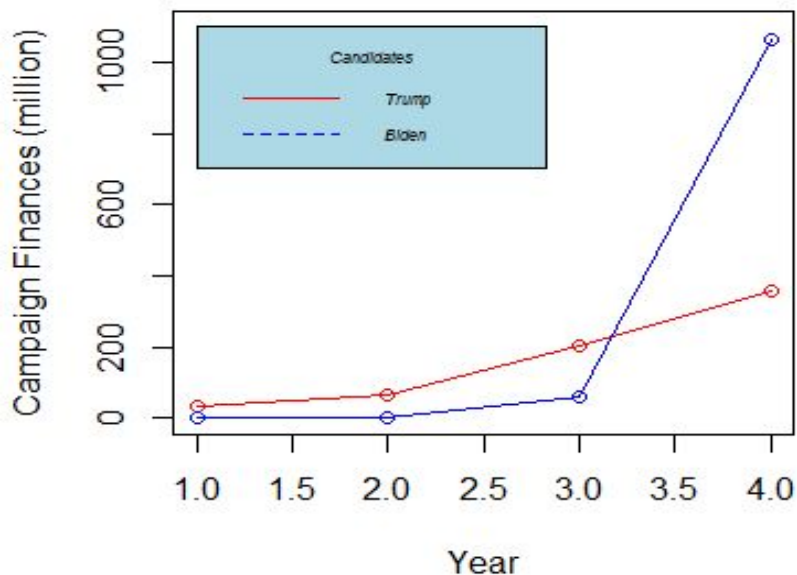
Donald Trump Total:  
\$358,116,002

Campaign Funding (millions)



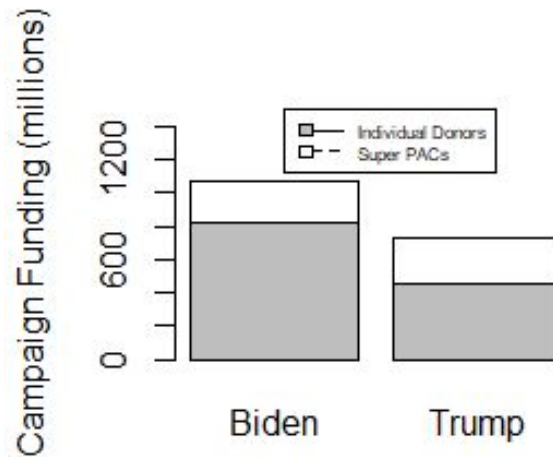
# DATA VISUALIZATION OF FEDERAL ELECTIONS (2020)

## Presidential Election (2016-2020)

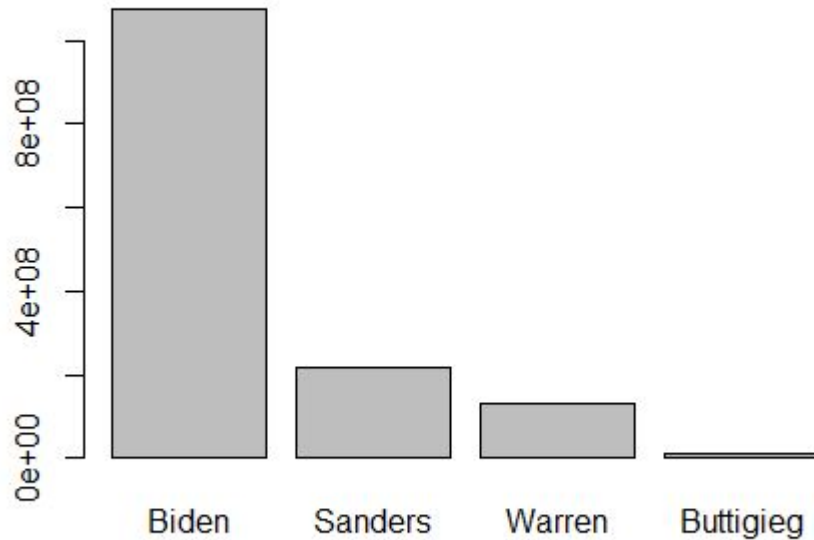


Joseph Biden Total: \$1,074,179,975

Donald Trump Total: \$744,350,229



## PARTY CANDIDATE AND CAMPAIGN FINANCES(2018-2020)



Joseph Biden: \$1,074,179,975

Bernie Sanders: \$218,907,026

Elizabeth Warren: \$131,368,111

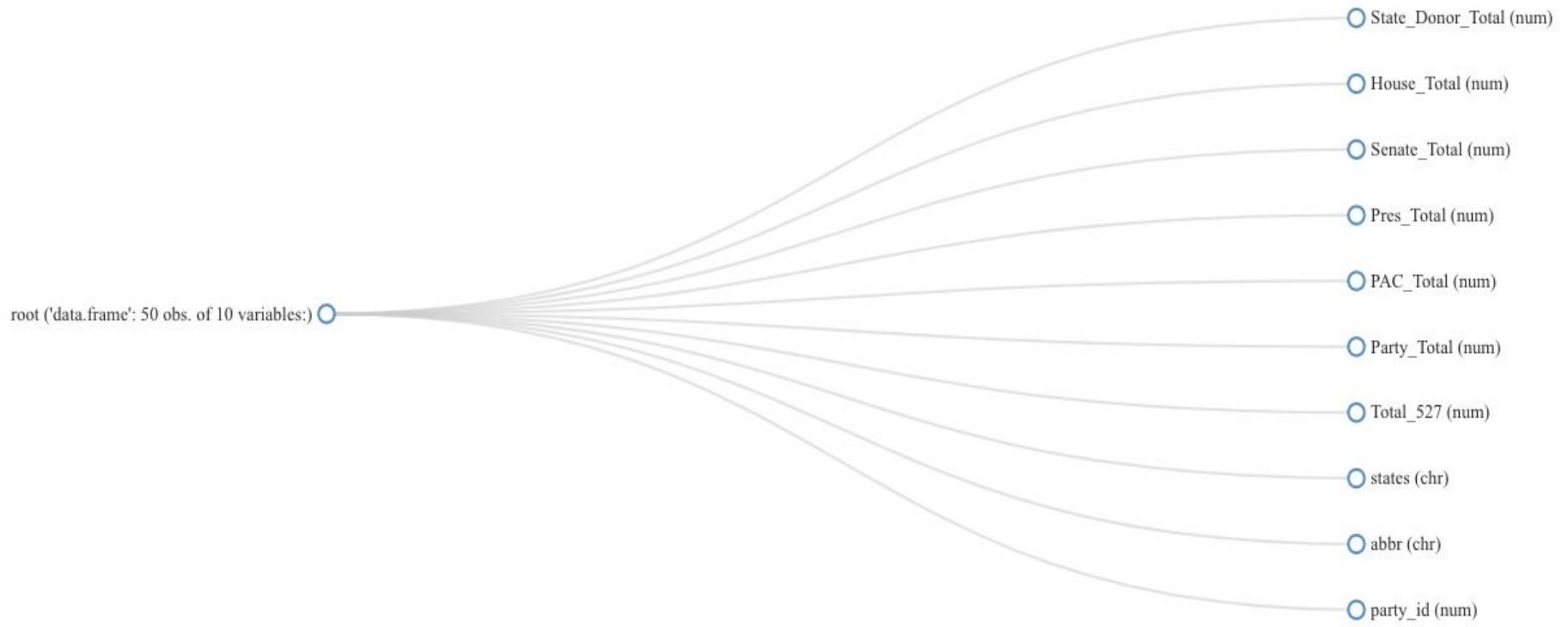
Pete Buttigieg: \$102,73,974

# EDA FOR STATE-BY-STATE:

	State_Donor_Total <dbl>	House_Total <dbl>	Senate_Total <dbl>	Pres_Total <dbl>	PAC_Total <dbl>	Party_Total <dbl>	Total_527 <dbl>
Alaska	13598371	2726282	4799210	2218300	2063244	1460360	330975
Alabama	54073317	10497848	16495444	5089898	15943662	5238865	807600
Arkansas	31287895	5820860	5173979	3041153	10500803	2864079	3887021
Arizona	99393014	15600074	35566685	14977528	21509679	8249942	3489106
California	1184582383	177064633	198947319	191438455	473013762	77040874	67077340
Colorado	126278129	17613214	37092516	24012848	35089016	8230309	4240226
Connecticut	96989613	11125971	17380720	14204573	38879760	7699484	7699105
Delaware	15852885	1421959	2816414	4413363	4852877	1260067	1088205
Florida	399825186	72198411	72076565	50748059	151778296	335549583	17474272
Georgia	171989122	23257467	52686149	317804539	56877581	11581532	9781854
Hawaii	13161724	1855443	3782963	3291695	2783995	1345368	102260
Idaho	19882393	2309530	4257777	3254479	7066606	2463591	530410
Illinois	245890949	41154462	36905984	33496079	101624791	15418509	17291124
Indiana	68829914	10425093	10294201	9382112	28191129	5178046	5359333
Kansas	39582393	8324906	11579586	4070707	10345901	3154749	2106544
Kentucky	40895555	5192308	8823752	4631498	10891856	8017582	3338559
Louisiana	57297331	12254437	11065298	5397856	21505851	3695258	3378631
Maryland	138320653	21075240	27640352	26818450	45112869	11145649	6528093
Maine	21478469	2978979	7452328	3815162	4769985	2089043	372972
Michigan	134933612	23148344	33626118	17505203	39816994	15106017	5730936
Minnesota	93176647	17185592	16082607	16350466	28899908	7981349	6676725
Missouri	78454209	12807144	12933900	9185795	23419869	7251341	12856160
Mississippi	19160624	2691419	5066757	1986252	5423992	2968554	1023650
Montana	21884379	4894800	7136224	2705228	4878927	1885480	383720
NorthCarolina	116413361	19631749	25227845	18982327	30716530	10559864	11295046
NorthDakota	9306925	835458	1344059	90633	4732878	1205203	282995
Nebraska	28204165	5074626	3210223	2512052	12630766	2740898	2035600
NewHampshire	23038927	3479998	6543110	5411941	4951825	2214253	437800
NewJersey	34176446	29032234	21514450	26433905	42148291	8728694	6318872
NewMexico	35113356	9261391	9605079	6386308	5911455	2938670	1010453
Nevada	89747751	9583638	9936602	7714253	45768222	5335294	11409742
NewYork	654505644	106283545	96729357	92257835	288022300	43426149	27786458

# EDA FOR STATE-BY-STATE:

State_Donor_Total	House_Total	Senate_Total	Pres_Total
Min. : 9.307e+06	Min. : 835458	Min. : 1344059	Min. : 90633
1st Qu.: 2.178e+07	1st Qu.: 3354743	1st Qu.: 5147174	1st Qu.: 3282391
Median : 5.569e+07	Median : 10461470	Median : 11322442	Median : 6999381
Mean : 1.234e+08	Mean : 20164961	Mean : 29972701	Mean : 25011331
3rd Qu.: 1.249e+08	3rd Qu.: 19992622	3rd Qu.: 29136794	3rd Qu.: 20239957
Max. : 1.185e+09	Max. : 177064633	Max. : 326350387	Max. : 317804539
PAC_Total	Party_Total	Total_527	
Min. : 2010376	Min. : 819643	Min. : 102260	
1st Qu.: 5789589	1st Qu.: 2438833	1st Qu.: 796477	
Median : 17543608	Median : 5287080	Median : 3433868	
Mean : 46048810	Mean : 15885812	Mean : 6912604	
3rd Qu.: 42889436	3rd Qu.: 10706310	3rd Qu.: 8787481	
Max. : 473013762	Max. : 335549583	Max. : 67077340	



# FOR PARTY ID:

I classified each state as red or blue by referencing the 2020 electorate and the 2022 senate, and added a column of 1s and 0s to my df.

1 = red

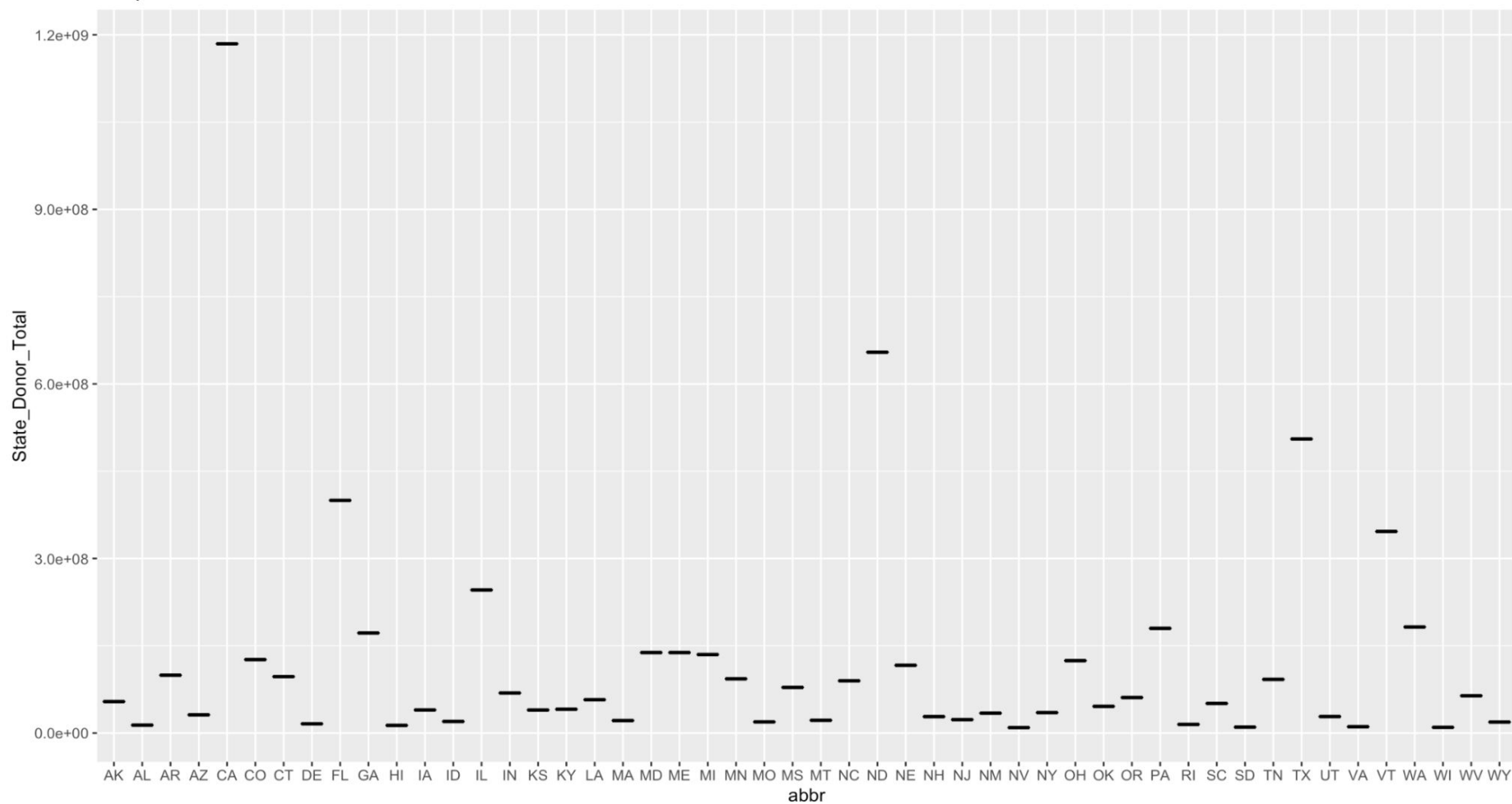
0 = blue

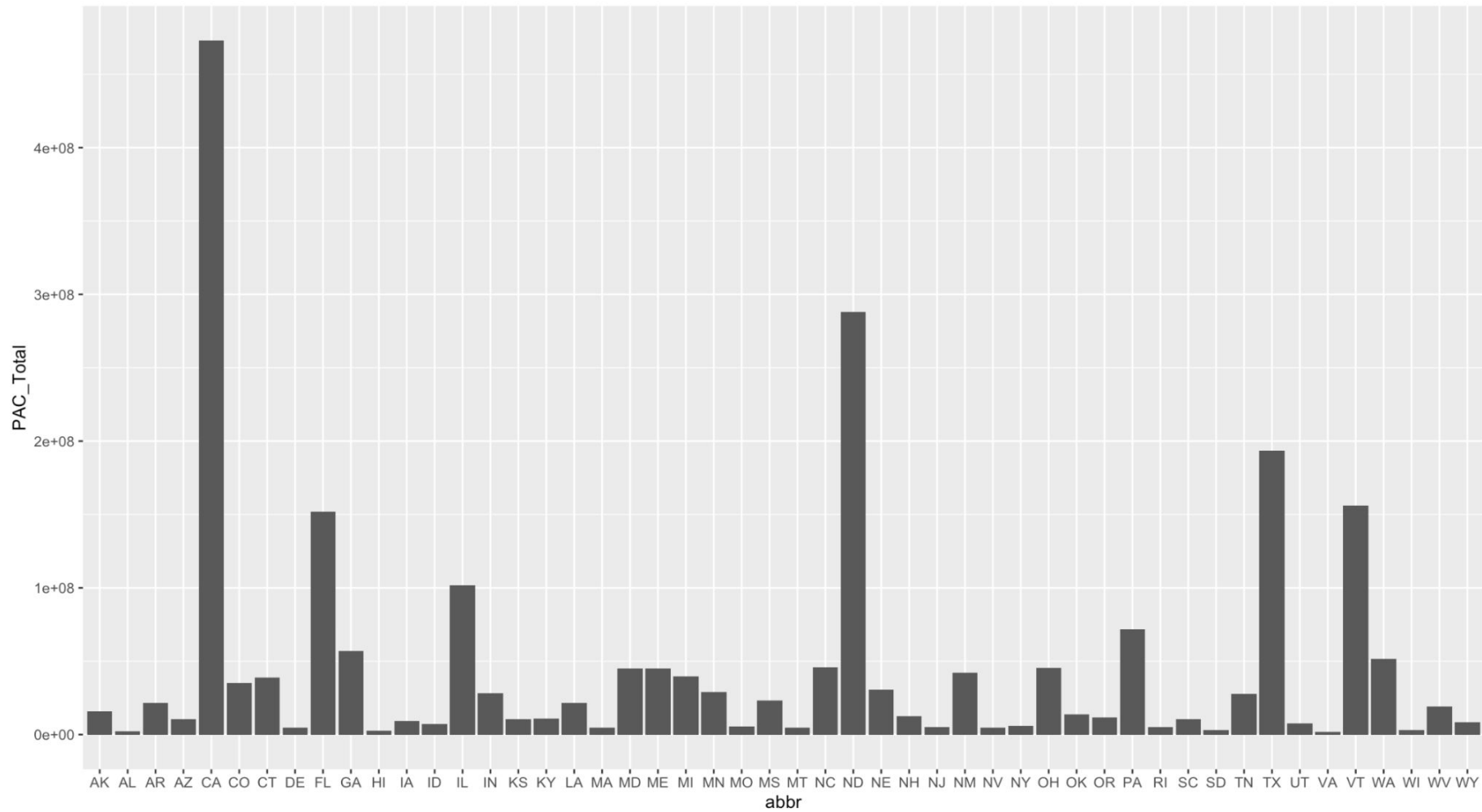
Name	Total Receipts	Total Disbursements	Ending Cash
DCC C	\$324,132,497	\$307,902,762	\$37,194,426
DNC	\$278,181,784	\$274,361,972	\$42,609,581
DSC C	\$251,653,287	\$227,326,223	\$34,111,522
Total:	\$853,967,568	\$809,590,957	\$113,915,529
Name	Total Receipts	Total Disbursements	Ending Cash
RNC	\$308,031,043	\$364,163,818	\$24,396,840
NRC C	\$262,222,093	\$216,900,673	\$57,880,918
NRS C	\$234,618,372	\$235,339,123	\$13,691,113
Total:	\$804,871,508	\$816,403,614	\$95,968,870

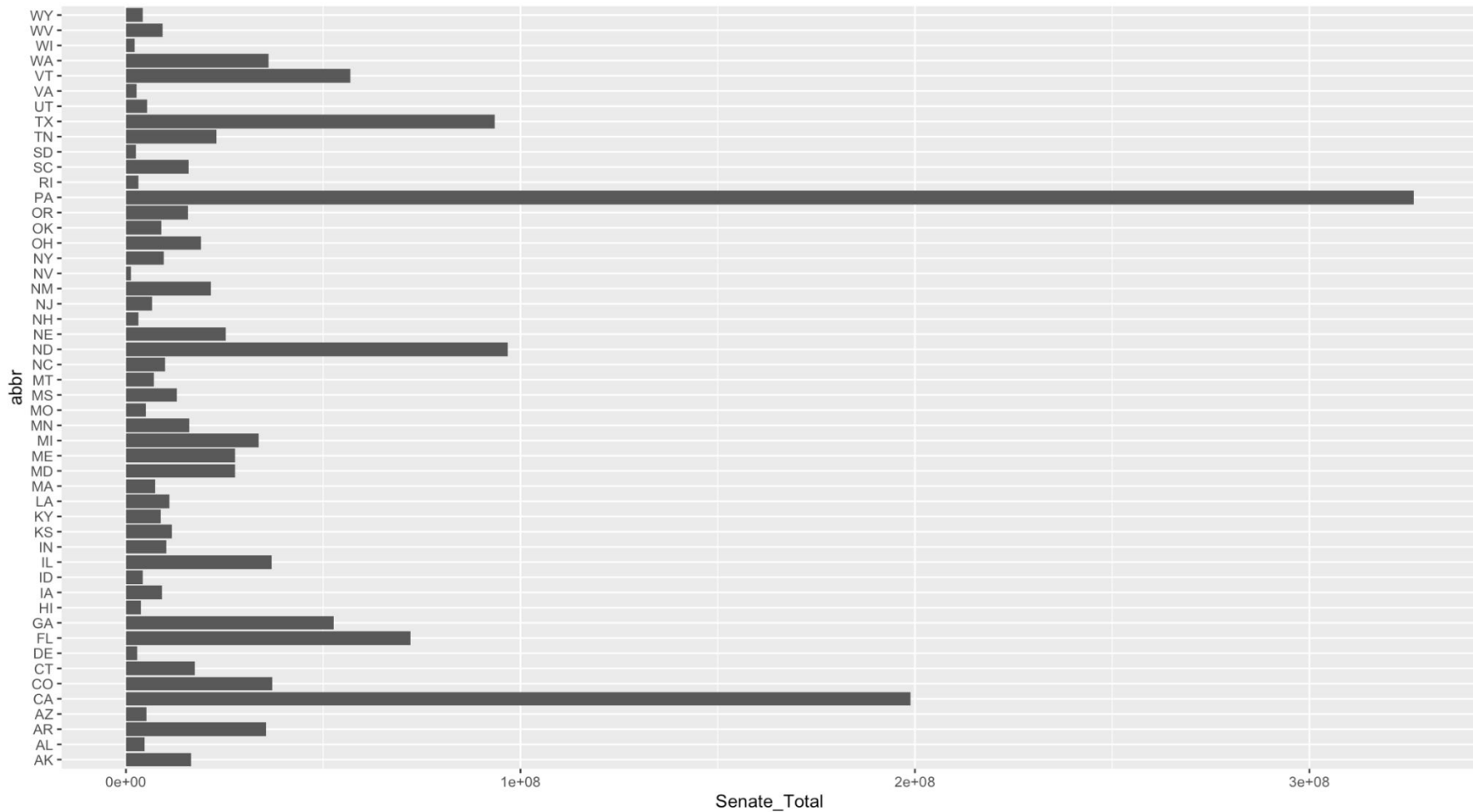
Political MoneyLine

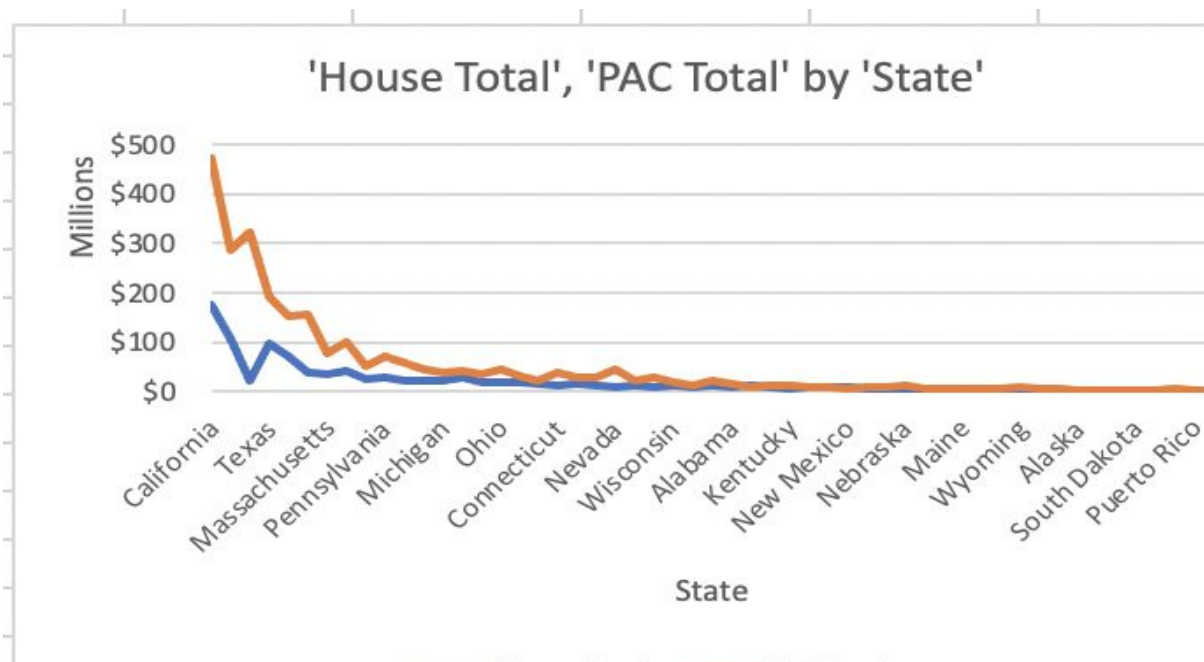


Boxplot of the Donor Total









root (Classes 'data.table' and 'data.frame': 1008 obs. of 32 variables:)

- State.Name (chr)
- Year (chr)
- Full public financing for state election campaigns available...1 all or most state elections..0 1 trial basis or a few state offices..0 none. (chr)
- Some public financing for state election campaigns available...1 all or most state offices..0 1 some state offices or on trial basis..0 none. (chr)
- Some public financing for political parties available..No tax credits or filing fee rebates....1 yes..0 no. (chr)
- Is the source of public funds a voluntary tax add on only..Does not count check offs that count against tax liability..1 yes..0 no. (chr)
- Public financing index..tfullpub..0 5 tpartpub...0 1 tptpps....1 ttaxadd. (chr)
- Limits on individual contributions to house candidates..per two years primary general..0 if prohibited...none..if unlimited. (chr)
- Limits on corporate contributions to house candidates..per two years primary general..0 if prohibited...none..if unlimited. (chr)
- Limits on corporate contributions to political parties..per two years primary general..0 if prohibited...none..if unlimited. (chr)
- Limits on individual contributions to political parties..per two years primary general..0 if prohibited...none..if unlimited. (chr)
- Maximum available limits on PAC contributions to political parties..per two years primary general..0 if prohibited...none..if unlimited. (chr)
- Maximum available limits on PAC..including Super PACS..contributions to house candidates..per two years primary general..ignoring expenditure limits...0 if prohibited...none..if unlimited. (chr)
- Limits on individual contributions to PACs..per two years primary general..0 if prohibited...none..if unlimited. (chr)
- Limits on corporate contributions to PACs..per two years primary general..0 if prohibited...none..if unlimited. (chr)
- number of state house districts (chr)
- Population estimate (chr)
- apophd (chr)
- Implicit GDP price deflator..2010.100. (chr)
- Index of individual contributions to candidates..tindconcrow.tpphd.2005 price level current price level..2 if no limit. (chr)
- tcorconcrow.tpphd.2005 price level current price level..2 if no limit. (chr)
- tcorconcrow.apop.1000.2005 price level current price level..40 if no limit. (chr)
- Index of individual contributions to parties..tindconcrow.apop.1000.2005 price level current price level..40 if no limit. (chr)
- tpaconcrow.apop.1000.2005 price level current price level..40 if no limit. (chr)
- tpaconcrow.tpphd.2005 price level current price level..2 if no limit. (chr)
- tindpacrow.apop.1000.2005 price level current price level..40 if no limit. (chr)
- tcorpacrow.apop.1000.2005 price level current price level..40 if no limit. (chr)
- Index of grassroots PAC regulation..candidate contributions.tindpac.tpacconc (chr)
- Index of grassroots PAC regulation..party contributions.tindpac.tpacconp.20 (chr)
- Index of corporate PAC regulation..candidate contributions.icorpac.tpacconc (chr)
- Index of corporate PAC regulation..party contributions.icorpac.tpacconp.20 (chr)
- Bans on contributions during legislative session..2 all donors..1 5 lobbyists and all donors for certain fundraisers..1 lobbyists only..0 5 all donors for certain fundraisers only..0 none. (chr)

# FINDINGS (STILL IN PROGRESS):

## Federal Level:

- During presidential elections there was evidence to support that candidates who had greater spending power, due to higher campaign finances, were more likely to win the election.
- Party candidates are more likely to represent a party if they received more donations

## State-by-State:

- Red states have less restrictive policies, specifically regarding PACs and individual contributions
- (so far) blue states steadily have marginally higher total donations—this holds true for both the senate and the house

## Overall:

- PACs are biggest donors and are the most successful fundraisers in campaign finance (above candidates, parties, individuals, party committees, etc)
- There is an incumbency advantage when it comes to fundraising



# CONCLUSION

To Finalize: Modeling, Analyzing Ratios, & Regression

# SOURCES:

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