

University of California San Diego

“The Comparative Returns of Earned Media in Garnering
Electoral Support in the GOP Primary: Why an Election Cannot
be Bought and Must be Earned”

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The 2016 GOP Primary left the academics perplexed, the pundits heads spinning and the GOP leadership shocked when Donald J Trump secured the GOP nomination for President. The candidate who had bucked the party leadership, been outspent by many large GOP Super PACs, and received an entourage of negative press coverage was now the nominee of the Republican Party. Mr. Trump's primary campaign stood out because of scores of highly controversial remarks from which he received large amounts of free media coverage. The natural questions that follow are: Was the change in Trump's popularity over time a function of Trump's media coverage relative to other GOP primary candidates? What insight does this case offer on existing theory regarding primary electoral politics where "big money" often dictates candidate choice? This primary election cycle not only left heads spinning, but also seemed to contradict current political science knowledge surrounding primary election cycles.

Mr. Trump's success in the GOP Primary brought my attention to the importance of "free" media as opposed to "paid" media. Free or "earned" media occurs when publicity is gained through non-paid exposure while on the other hand "paid" media is just the opposite: publicity gained through paid advertising. The reason this distinction is so important here is that Trump's campaign was characterized by his controversial remarks that earned him free media coverage while running a "lean" primary campaign that Mr. Trump, by and large, self-financed. I argue that this free media coverage led to his precipitous rise in the polls and propelled him to the GOP nomination. In contrast, many of the other GOP primary contenders outspent Trump by large margins on paid media and political

advertising but were still unable to gain the traction in the polls. My central claim is that Trump's dominance in free media, as generated by his highly controversial remarks and unconventional campaign financing, overwhelmed sources of paid media fielded by other GOP candidates and led to his eventual GOP nomination for president. The goal of this thesis is to understand how important earned media was to the success of Trump, and how important paid media was to both Trump and other candidates in their electoral support.

At face value it may seem intuitive that if one candidate in a given primary receives more news coverage than the other than we would expect to see a greater amount of support (as a function of exposure) for said candidate. This intuition when applied to the Trump primary campaign looks to explain how Mr. Trump was able to create this media-driven, electoral phenomenon *without* the support of big donors and GOP Super PACs, in fact with much opposition from them. The point here is that these big donors and Super PACs traditionally create the exposure through paid media such as commercials, advertising, articles, etc. However in this cycle, Mr. Trump's dominance was in *free media*, which starkly contradicts the status quo primary campaign. Under this examination of Trump's primary campaign the independent variable can be understood as media coverage of Mr. Trump relative to the other GOP primary candidates and the dependent variable can be understood as the precipitous rise in poll numbers of Mr. Trump again relative to the other GOP primary contenders. The dominance in media coverage of Trump relative to his other GOP counterparts is attributable to a series of highly controversial remarks he made during his primary campaign in combination with

his unconventional self-funding campaign finance strategy. Essentially Trump created a populist primary campaign in which he made scores of controversial remarks that created his dominance in free media as a function of aggregate media coverage, which in turn led to his precipitous rise in the polls. All the while he spent very little on his primary campaign relative to his competition. This media frenzy over the Trump primary campaign paved the way for Trump to gain maximum public exposure and hit his target voter demographic in order to secure the GOP nomination for president.

In this thesis, I show that Trump benefited from an advantage in earned media in his public opinion polling. Importantly, I also show that the other 2016 GOP candidates benefitted from earned media more than they did from paid media, suggesting this is not just a Trump phenomenon. In addition to the statistically significant impact of earned media on driving up public polling numbers, I also found that paid media has a positive, statistically significant impact on increasing polling numbers. The nuanced point here is that earned media has a larger impact on public polling support than does paid media suggesting that there is a comparative advantage of earned media over paid media for the entire GOP candidate field. At its core this suggests that “exposure” through the media may be more valuable than large sums of campaign donations.

There is a score of traditional political science literature that sets up the Trump primary campaign to be a stark contrast to what we expect to observe in a status quo primary election cycle. As Andrew Gelman and Gary King explain in *Why Are American Presidential Election Campaign Polls so Variable When Votes are so*

Predictable? “At the start of a campaign, voters do not have the information necessary to make enlightened voting decisions” (434). This is especially true at the beginning of presidential campaigns (primaries) where voters are uneducated on the platforms of the candidates running for office and where media exposure is absolutely key to mobilizing support. Furthermore existing political science literature posits that voters are highly influenced by paid media in presidential primary campaigns due to the fact that they are largely uninformed about the candidates at this point in the election cycle. As Wayne Stager elaborates in *Do Primary Voters Draw from a Stacked Deck? Presidential Nominations in an Era of Candidate Centered Campaigns* “Money on hand and national poll position prior to primaries are found to be significant predictors of the aggregate primary vote in the postreform era; money raised and prior television news coverage do not significantly affect the primary vote” (1). Again under this framework, Jeb Bush would be the predicted winner of the GOP primary as he had the greatest amount of money on hand before the start of the primaries and a dominant position in the polls until Trump came on to the scene. Finally there is a major obstacle to be noted here for the Trump campaign in the GOP primary: namely the 16 other candidates competing for the GOP presidential nomination. Under our current understanding of primary elections, it would seem that the sheer number of candidates present would serve to emphasize the advantages of money and public support pre primary in order for a candidate to gain traction in the news as well as mobilize support for the campaign. As Stephen Ansolabehere outlines in his article *Mass Media and Elections: An Overview*, the exposure of a candidate through paid media brings about increased

voter awareness of the candidate and often times precipitates into more coverage of said candidate in free media (news coverage, interviews, etc.). The point being here is again paid media leads to free media, which is a predictive framework that is starkly contradicted by the 2016 GOP primary. In summary this thesis should be seen as a case study of how an effective manipulation of free media can lead to popular candidate support without the prerequisites of stockpiled money and previous political support that traditional political science literature would lead us to believe.

Since Mr. Trump's primary campaign was distinct for the amount of free media that it attracted, the news media will be a large part of my analysis. In order to approximate the amount of aggregate media coverage each of the GOP candidates in the primary received I will use three news stations and their weekly coverage of each candidate. The news stations to be analyzed are ABC World News Tonight, NBC Nightly News, and CBS Evening News. For each GOP candidate the aggregate media coverage they received in each week of the GOP primary was approximated by summing their total minutes of coverage received from each of the three news stations previously noted. The reason that these three stations were selected to approximate news coverage of the candidate is because these news stations are largely centrist and their selection serves as a control on ideological bias influencing amount of news coverage for candidates. For example removing Fox News as an approximate for GOP candidate media coverage would limit the possibility of right-leaning ideological bias impacting the amount of coverage of each candidate. The same logical framework applies to not using a station with left leaning bias such as

MSNBC to be part of this empirical analysis. The primary cycle was defined as stretching from May 4th 2015 to May 4th 2016 to give a full year of media analysis in order to provide a large enough sample size for analysis. The reason for using May 4th as the cutoff day is because the GOP Primary effectively ended on May 4th after Trump won the state of Indiana and his last opponents, Senator Ted Cruz and Governor John Kasich, collectively dropped out of the race that day. Although media coverage is the main focus of this thesis it only comprises a part of the analysis presented in this thesis.

In combination with tracking the amount of media coverage each GOP candidate received on a weekly basis, the same weekly unit of analysis was used to show weekly GOP candidate poll averages. In order to investigate the statistical significance of relationship, the same one-year period that will be used for this data collection spanning from May 4th 2015 to May 4th 2016. RealClearPolitics was used in order to build the data set on electoral support for GOP primary candidates on a weekly basis. The RealClearPolitics “Presidential Primary Poll” denoted the average of all national presidential primary polling for each of the candidates for each week spanning that one-year period. The reason that an average of the national polls was used here was to reduce variation between polls and reduce the margin or error for sampling bias. Again polling stopped after May 4th as Donald J Trump was then declared the presumptive GOP nominee for President. This data set will provide another unit of analysis for the time series analysis model.

Finally political ads or “paid” media taken out by each of the GOP primary candidates were included in this analysis in order to illustrate the contrast between

“free” and “paid” media impact on this primary cycle discussed earlier. The ads are again reported on an aggregate weekly basis from the same one-year period from May 4th 2015 to May 4th 2016. This triangulation between media coverage, public opinion polling, and paid political advertising of GOP primary candidates will be the basis of analysis for evaluating the “free versus paid media” argument in context of the “Trump Phenomenon”.

The remainder of the thesis is structured as follows. In Section 1, I review related studies on how candidates win presidential primary elections. In Section 2, I analyze and contextualize the unusual candidacy of Donald J. Trump in the context of existing political science literature. In Section 3, I present the data I will use to understand the importance of paid and free media to the success of candidates in the 2016 Republican Primary. In Section 4, I present the data analysis and interpret the results. In Section 5, I conclude and discuss limitations and implications for primary elections beyond 2016.

Senior Honors Thesis: Conventional Beliefs and Related Literature

Many skeptics of the “primary system” in western democracies posit that because of the influence of money and political elitism on the primary process that

candidates are “pressed upon” the public as opposed to vetted, scrutinized, and compared in order for the public to make informed choices on choosing a candidate that aligns with their interest. As Wayne Stager points out in *Do Primary Voters Draw from a Stacked Deck? Presidential Nominations in an Era of Candidate Centered Campaigns* “Money on hand and national poll position prior to primaries are found to be significant predictors of the aggregate primary vote in the postreform era; money raised and prior television news coverage do not significantly affect the primary vote”(1). The take away point here is that *money* and *poll position* prior to the primary are the greatest statistical predictors of a primary candidate securing the nomination and not a more democratic principle such as “saliency of message” or “alignment with the electorate”. Another important point to parse out of Professor Wayne Stager’s conclusion is that both money on hand and poll position *prior* to the primary are key indicators of the primary winner. This observation suggests that there is a “momentum” component to the primary process by which candidates that start out with large amounts of campaign donations and public notoriety (public polling position prior to primary) are able to gain momentum early in the primary process that propels them to victory. Essentially candidates with these “primary winning predictors” are able to garner the media attention and advertising legitimacy early in the primary whereby they quickly gain public polling support and crowd out their competitors for these scarce resources. The net result of this process is that there is an unequal distribution of power to political elites and the donor class in this process because they have the means to “stack the deck” in favor of candidates they believe will do their bidding. On the other hand the public is

left relatively disenfranchised in this situation because they are only aware of candidates with a highly level of publicity which is generated through “political notoriety” (public polling support) and advertising (paid media). This suggest that the very exposure of candidates to the public is already being rigged from the onset since elites are the class in power that largely determines the predictive primary winning aspects of “public polling position prior to the primary” and campaign donations.

One of the strongest gatekeepers in the primary cycle is the national news media. The reason that the national news media has such power over the primary process is because voters at this stage of the national election cycle are generally poorly informed on potential candidates as well as not strongly engaged in the election cycle. As Andrew Gelman and Gary King explain in *Why Are American Presidential Election Campaign Polls so Variable When Votes are so Predictable?* “At the start of a campaign, voters do not have the information necessary to make enlightened voting decisions”(434). Voters in turn look to the national media to compare and contrast candidate positions as well as vet candidates by shifting through issues ranging from candidate policy positions to instances of candidate-centric political controversies. In context of the 2016 Republican Presidential Primary this “gatekeeper” role of the media became even more powerful given the sheer number of candidates running for the Republican Presidential Nomination. There were a total of 16 candidates running for the nomination all with competing policy positions, their own set of political controversies, and their varying demographic appeals. Given the abundance of information that had to be translated

to a relatively “unengaged” electorate the national news media had to “pick and choose”, in the form of news coverage, what information to cover in order to translate this 16 candidate field to the American public. All the while the national news networks pursued their own vested interest of boosting ratings throughout the GOP primary process. This unique set of circumstances set the stage for the rise of Donald J. Trump whom leveraged his right-winged populist appeal to dominate the news cycle and capture the attention of the Republican electorate. The news networks were more than willing to ride the populist wave as it translated into higher ratings for their programs.

This rise of right-winged populism did not come at the expectation of conventional political science research surrounding the primary process. As noted earlier the strongest predictors of securing the nomination of a major political party was by having the most money on hand and polling support *prior* to the start of the primary. Stephen Ansolabehere outlines how money on hand and polling support feed into news coverage in his article *Mass Media and Elections: An Overview*. Essentially the political exposure of a candidate occurs as the candidate uses paid political advertising to increase voter awareness of their policy positions and general vision for the country (2). This precipitates into news coverage of the candidate, which in turn leads to increased public polling support of said candidate. This positive feedback loops creates a cycle in which candidates with high political notoriety and stockpiles of money quickly gain momentum in the primary cycle and pull away from their competition largely due to the fact that they are receiving the most media attention and by proxy drown out their competition in news coverage.

Donald J Trump fully exploited the positive feedback loop between “earned” media coverage and public polling support in order to secure the GOP nomination. Yet, he did not do so through the usual channel of stockpiles of money and buying paid political advertising.

In the case of the 2016 Republican Primary the results of this contest starkly contrast the “predictive” model for primary “winners” that has been the working knowledge of political science discussed earlier in this section. When the “predictive” indicators of “money on hand” and “polling position” *prior* to the primary are assessed the conventional model would predict that Jeb Bush would be the nominee of the Republican Party by a landslide. In all fairness Jeb Bush did dominate the “money on hand” category of the predictive model prior to and throughout the GOP primary. The *New York Times* reported that Jeb Bush fully exploited this advantage during the primary in order to earn more media coverage by outspending Trump \$82 million to \$10 million on bought media (New York Times, Figure 1). However contrary to the working knowledge of political science this dominance in paid media on part of Jeb Bush did not translate into aggregate media dominance and a precipitous increase in public polling support. It was Donald J Trump’s dominance in “earned” media that translated into an increase in public polling support. The important thing to note here is that the conventional model was starkly contrasted with (1) “paid” media not translating into public support and (2) “earned” media translating into more public support when juxtaposed to “paid” media. This is again highlighted by the figure below from the *New York Times* that details Trump’s dominance in “earned” media (\$2 Billion) to Jeb Bush’s mere \$214

million (New York Times, Figure 1). This simple big-picture comparison suggests that the “money on hand” predictive input of our “primary winner” model was not supported by the election results of the 2016 GOP primary.

Bought versus Earned Media in GOP Primary

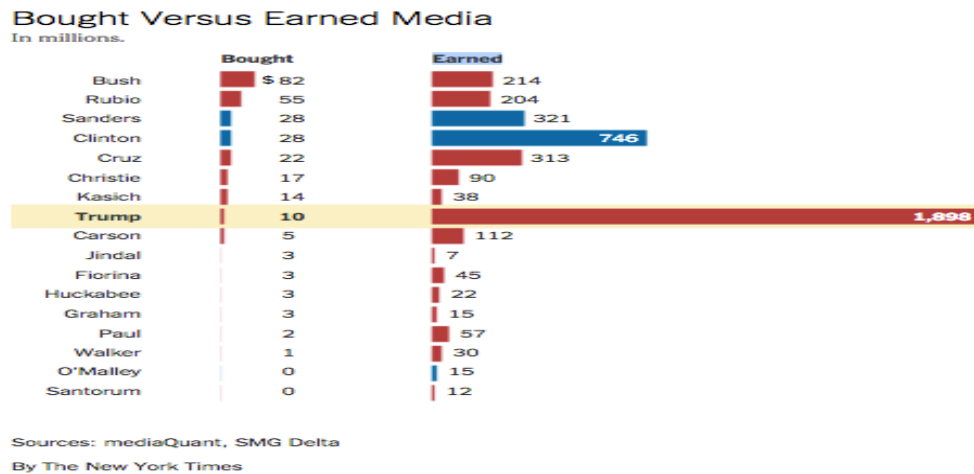


Figure 1: Comparison across GOP Primary field of candidate expenditures on paid political advertising and earned media coverage

There is also something to be said about the “poll position prior to primary” component of the predictive primary model. The data speaks to this component of the model holding true throughout the GOP primary. Jeb Bush in particular enjoyed a strong public polling lead over the eventual nominee Donald J Trump during the early months (May- late July 2015) of the GOP Primary (Figure 2). However a clear divergence between “earned” media coverage of the two candidates did precipitate into a dominant lead in public opinion polls for Trump leading up to the first GOP Primary, the Iowa Caucus, on February 1st 2016 (Figure 3, Figure 4). The take away point here is that the positive feedback loop of “money on hand” *and* “poll position prior to the primary” was broken in order for Donald J Trump to emerge as a

legitimate contender for the GOP nomination for President. Mr. Trump clearly dominated the news cycle by receiving more news coverage by multiples of what his opponents were receiving. This dominance of the news cycle by Mr. Trump, and more broadly the national media, allowed for Mr. Trump to “overcome” the “money on hand” component of the predictive primary winning model. In essence the amount of national news coverage Mr. Trump received overwhelmed the large amounts of paid media taken out by his competitors, namely Jeb Bush. This “earned” media translated very strongly into public polling support for Mr. Trump and gave him momentum to overcome the “power of money” in the primary process.

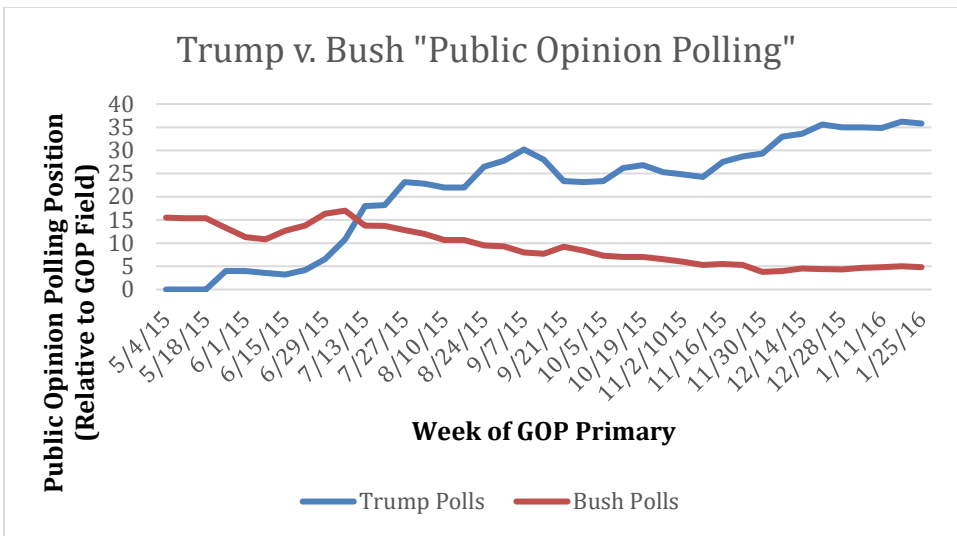


Figure 2: Comparison of public opinion polling between Donald J Trump and Jeb Bush throughout the GOP Primary to examine comparative role of earned media to paid media

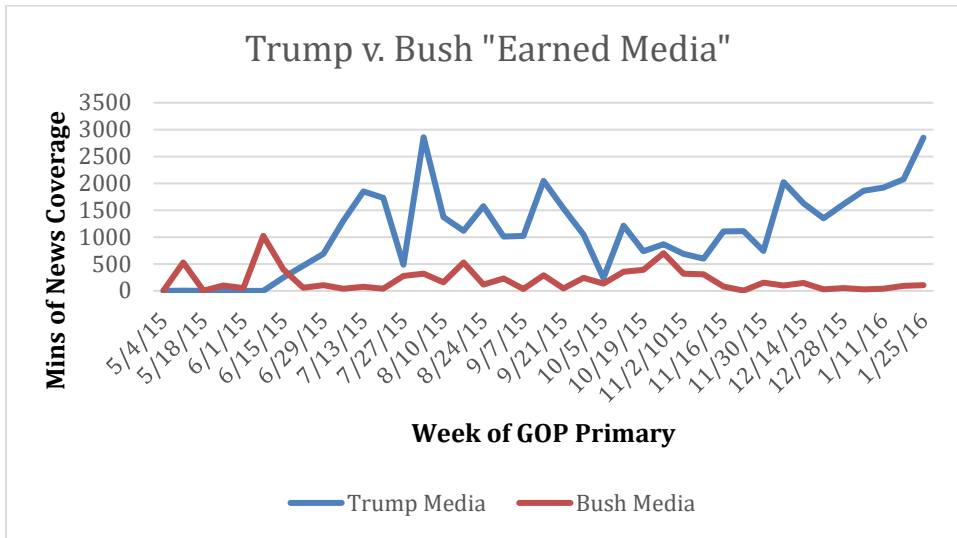


Figure 3: Comparison of earned media between Donald J Trump and Jeb Bush in GOP Primary to evaluate relative returns of minutes of news coverage on polling

The takeaway point from this primary cycle is that at some level the Republican electorate was given more control over the nomination of their party’s candidate for President. Conventional political science literature and predictive models by in large concluded that inputs such as “money on hand” and “poll position prior to the primary” (largely generated by paid media or political notoriety) predicted the winner of primaries for national office. These “inputs” are by nature not aspects of the political process that are controlled by the people but rather the donor class and political elites of our country. Donald J. Trump was able to overcome the “predictive” nature of these inputs by running a campaign that attracted a large amount of national media attention that observably translated into public polling support and primary wins across the country. If democracy is “government of the people and by the people” then this election cycle provides hope to the ideal of democracy and showcases that the United States has not lost touch with this fundamental value.

Senior Honors Thesis: Research Question and Theory

The rise of Donald J Trump in the 2016 GOP primary cycle very definitively showcased that although “money on hand” and “polling position prior to the primary” are in many cases necessary components to win a primary they are not always sufficient. It would appear that the role of the national media is a strong and encompassing enough force to propel a candidate to electoral wins despite a fault in one of the two “critical” categories. Specifically in the case of Donald J Trump there is a key disadvantage in terms of paid media and more generally “money on hand” for his primary campaign (Figure 5). In fact a large part of Trump’s rhetoric was arguing against a “rigged system” that was typified by “the donor class” and he argued that his solution to this problem was to “self-fund” his primary campaign (Figure 6). In combination with this relatively unchartered campaign financing strategy Mr. Trump made scores of highly controversial remarks from which he received large amounts of media coverage. The natural question that follows is: Was the change in Trump’s popularity over time a function of Trump’s media coverage relative to other GOP primary candidates? It would appear that amidst a primary system that is becoming increasingly dominated by money and the donor class that Donald J Trump was able to break this cycle by utilizing the national media to his advantage.

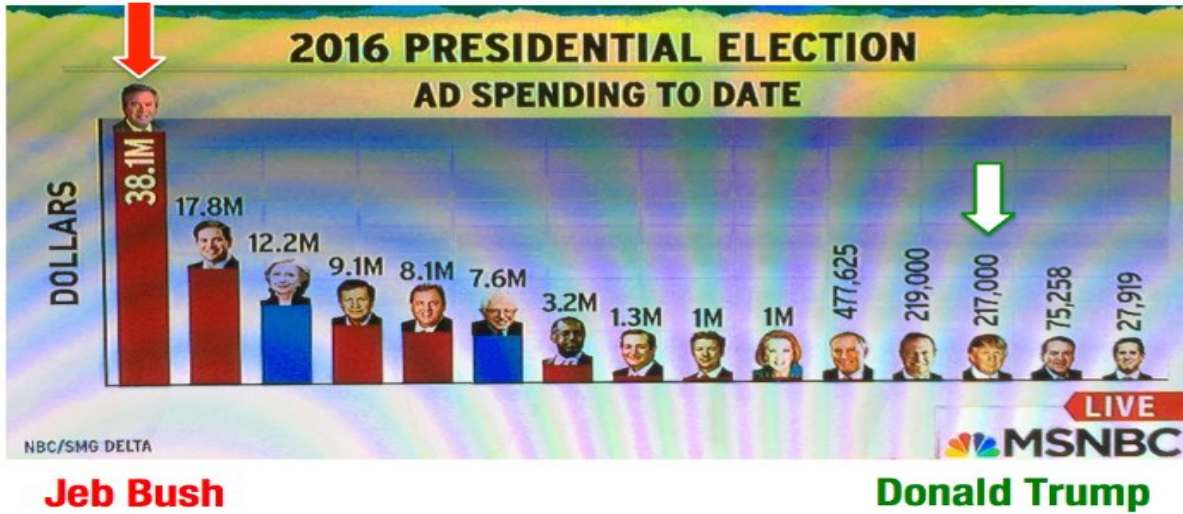


Figure 5: Comparison of relative campaign expenditures on paid political advertising

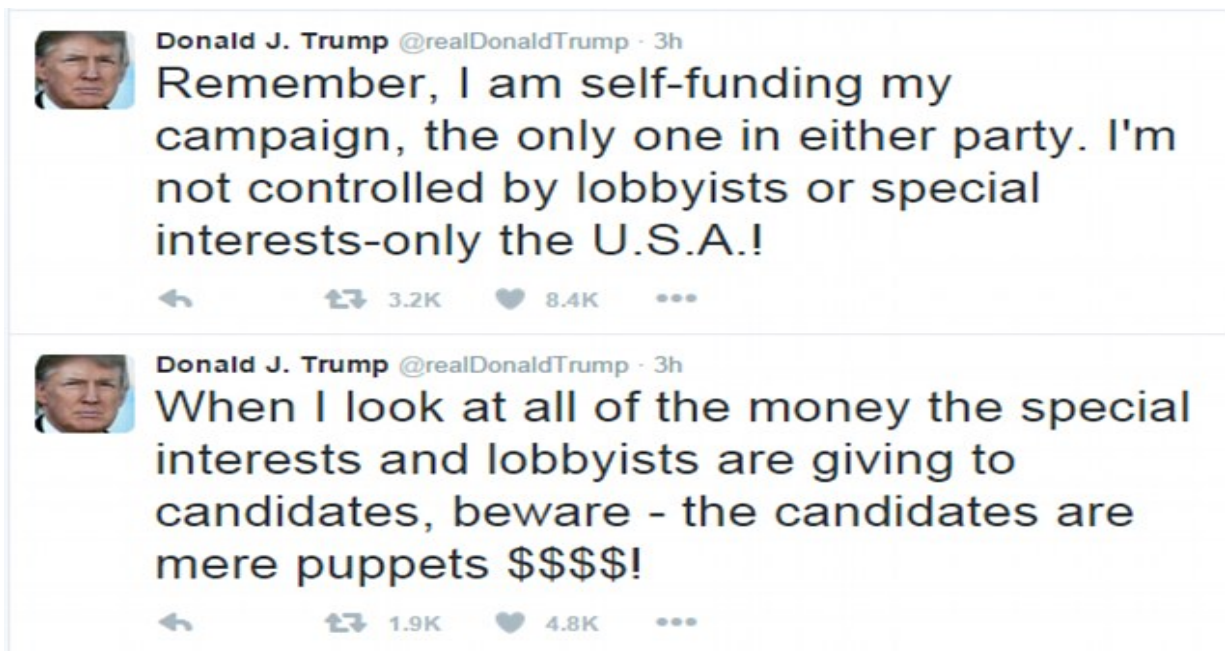


Figure 6: Tweets from Candidate Trump on self-funding his primary campaign

The Trump Campaign during the 2016 GOP Primary sets up a stark contrast between the power of “free” media versus “paid” media. “Free” or earned media will be measured by the number of minutes in news coverage a candidate receives in the GOP Primary cycle whereas “paid” media will be understood as the number of television advertisements taken out by a GOP Primary contender. There is a clear

divergence that can be observed between the Trump campaign and the other GOP primary contenders in terms of success in the respective media categories. Donald Trump dominates the GOP field in terms of “free” or earned media largely due to the characteristic inflammatory and controversial comments made throughout his primary campaign coupled with the unconventional “self-funding” campaign finance strategy that he undertook to fuel his populist and anti-establishment branding. On the other hand the top GOP contenders, such as Jeb Bush, dominate Trump in terms of “paid” media, which is showcased by the dominance in political advertising that they have over Trump throughout the GOP Primary. The stunning result of the GOP Primary is that the amount of spending on paid political advertising by the rest of the GOP field, excluding Trump, did not translate into public polling support and by proxy electoral wins.

Although it is pretty clear that earned media dictated the course of this primary cycle it does not simply suffice to say that dominance in free media in and of itself directly translates to a larger share of public polling. There is not an “unlimited” amount of earned media time that all candidates can aspire to have large amounts of earned media. Given that there is a “scarcity” of earned media time this means that if one candidate receives more media coverage than another candidate they are not only receiving more minutes for their own campaign but they are also taking away minutes of media coverage from another campaign. For example in a hypothetical primary where there are only 10 minutes of media coverage to be allocated and 10 candidates to receive said coverage if one candidate receives 8 minutes of coverage they are not only receiving more coverage *relative* to

their competition but they are also *taking coverage away* from the other candidates in the field. This creates a “crowding out” effect in which candidates that attract the most media attention “crowd out” competition for that same earned media coverage because there is a scarce amount of earned media coverage to be allocated. If you couple this “crowding out” effect with the fact that voters are heavily reliant on the national media for information and candidate exposure (as discussed earlier) then this “crowding out” effect limits candidate exposure for candidates that fail to garner earned media. Ultimately this translates into these said candidates struggling to increase their public polling support in spite of high “paid” media expenditures. This “crowding out” effect allowed for Trump to leverage his television appeal (earned media) in order to crowd out exposure to the other 16 GOP candidates in the 2016 GOP Primary.

One of the observable implications that showcases the dominating effect of earned media over paid media are the poor returns on spending per voter in the GOP Primary. Specifically in the case of the GOP New Hampshire Primary, there is a clear divergence between candidates that receive large amounts of media coverage and candidates that spend large amount of funds on paid political advertising in order to garner more public polling support. For example the “big spender” in the GOP, Governor Jeb Bush, spent upward of \$1,200 per vote received and ended up only receiving 11% of the New Hampshire GOP Primary votes (Figure 7 and 8). On the other hand Donald J Trump spent about \$40 per vote received and won the New Hampshire primary with 35% of the vote (Figure 7 and 8). In all fairness Senator Ted Cruz spent less than Donald J Trump coming out to about \$18 per vote received

and came in third place in the New Hampshire Primary at 16% of the vote (Figure 7 and 8). The point here is that high campaign expenditure on paid media is not translating into high public polling support. However the story does not end here with simply stating that less campaign expenditure implies a “winning” strategy. When the total earned media coverage and paid media coverage are observed in the week leading up to the GOP primary in New Hampshire there seems to be a strong trend between earned media coverage of a candidate and their success in the primary (Figure 9). It would appear that spending large amounts of money on a primary campaign did not necessarily prove to be an effective strategy for winning said primary. Ultimately exposure to the candidate through the national news networks goes a lot farther than does the amount of money the candidate spent.

2016 GOP Primary Campaign Expenditures: New Hampshire

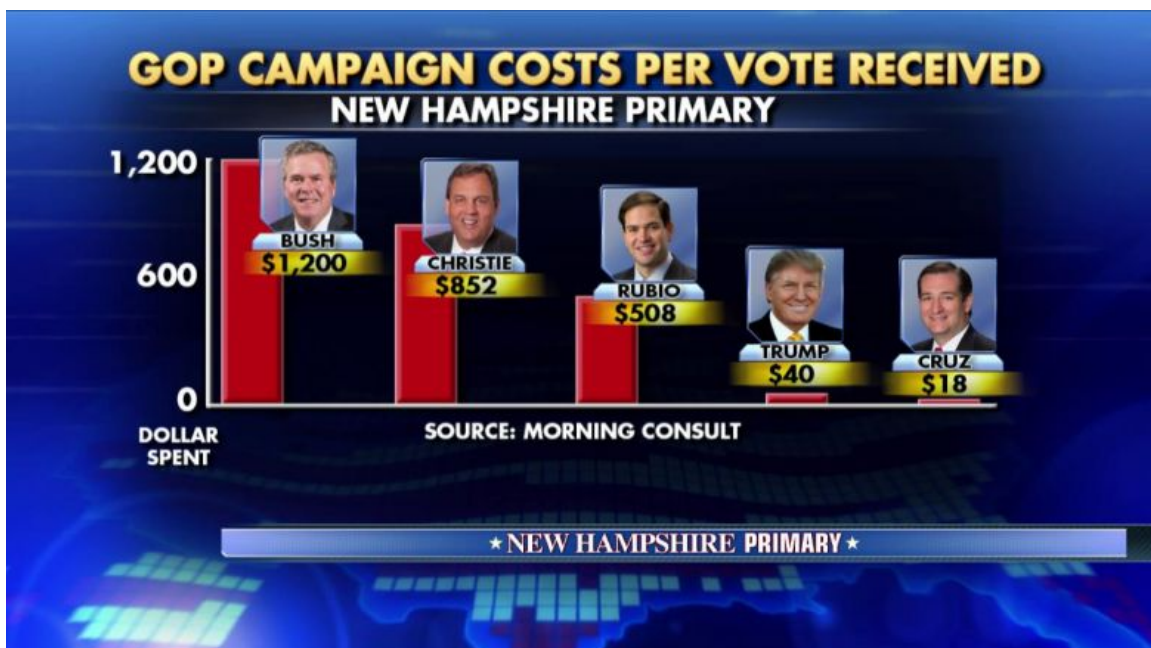


Figure 7: Comparative figure on campaign expenditures (primarily on paid political advertising) per vote received.

2016 GOP Primary Results: New Hampshire

President - GOP Primary				
February 10, 2016 - 03:57PM ET				
New Hampshire - 300 of 300 Precincts Reporting - 100%				
	Name	Party	Votes	Vote %
✓	Trump, Donald	GOP	100,406	35%
	Kasich, John	GOP	44,909	16%
	Cruz, Ted	GOP	33,189	12%
	Bush, Jeb	GOP	31,310	11%
	Rubio, Marco	GOP	30,032	11%
	Christie, Chris	GOP	21,069	7%
	Fiorina, Carly	GOP	11,706	4%
	Carson, Ben	GOP	6,509	2%
	Paul, Rand	GOP	1,900	1%
	Total Write-ins	GOP	1,775	1%

Figure 8: Final 2016 GOP Primary results for New Hampshire

Excerpt from Data Set: Units of Analysis

February 1 st -February 8 th 2016	Weekly Mins of Coverage	Number of Paid Political Ads
Trump	1525	1364
Cruz	949	2008
Kaisich	211	309
Rubio	1583	3165
Carson	235	174
Bush	490	2698
Christie	298	537
Fiorina	19	235
Walker	0	0
Paul	21	62
Huckabee	6	32
Jindal	0	0
Perry	0	0
Santorum	9	0
Graham	0	0
Pataki	0	0

Figure 9: Note New Hampshire Primary was on February 9th 2016

The data at a bird's eye view speaks very strongly to the power of the national media in allocating media coverage amongst candidates and the net effect that that coverage has on public polling of said candidate. Whether it is exposing the electorate to a policy agenda to covering political controversy within the candidate field, this news coverage appears to have an almost linear effect on public polling support for a candidate. This is not to say however that paid political advertising or more generally "paid" media does not have a strong role in the primary system. However it does appear that there are other "means to an end" in garnering public support for candidacy. If a candidate can garner large amounts of media coverage they can be competitive with candidates with large amounts of "money on hand". This essentially enables less "well-funded" candidates to challenge the political "pecking order" established by the donor class and political elites of a respective party. In turn voters have the ability to vote for populists (populist being defined as candidates that are gifted at attracting popular attention on TV) as an alternative to establishment candidates within their party. The Trump candidacy and eventual garnering of the GOP nomination for President is an example of how populism in its most fundamental form can overwhelm a primary system where typically money is a large predictor of the outcome of the process.

Senior Honors Thesis: Research Design

The observable implication of the New Hampshire GOP Primary discussed in the “theory” section of the paper is that there will be a comparative advantage for candidates that do a better job at attracting earned media coverage (independent variable) as opposed to candidates that are better at generating paid political advertising or “paid” media (control variable). This “comparative” advantage in media returns will be measured largely in the variation in public polling support (dependent variable) that occurs as a result of these media inputs. I suspect that for every minute of earned media coverage candidates will see a higher return (in the form of increasing public polling position) than every political ad a candidate takes out for their campaign. The variation in public polling support for a candidate should be predominantly explained by the free or earned media they receive. Paid political advertising will be used as a control variable in this first regression model. In order to be sure that earned media better explains public polling variation as opposed to paid media, paid media will be regressed with public polling support with earned media as the control variable to parse out which form of media is making the larger statistical impact. This design will shed light on not only the comparative advantages associated with different forms of media but will in many ways give insight to strategic campaign planning for the future. Campaigns will look to invest in media where they get the highest returns and for this reason this comparison is essential to efficient campaign planning.

While the data at a bird’s eye view seems to showcase the power that free media had on the GOP Primary it does not suffice to say that the conclusions of the

data should be a zero sum analysis. Instead this section of the paper looks to parse out the key variables involved in this primary cycle in order to see if our observable implications hold statistical significance. In order to accomplish this the three key variables of earned media, paid media, and public polling support will be operationalized into weekly aggregations and regressed in order to test for statistical significance.

“Free” or earned media will be measured by using approximate aggregate minutes of new coverage each week per GOP Primary candidate. This data source was made available by the Media Research Center via a professional contact Rich Noyes that heads the Media Analysis Project. The media coverage will be approximated using the number of minutes of coverage per GOP candidate on ABC World News Tonight, NBC Nightly News, and CBS Evening News. The reason that these news stations were chosen to create this aggregate number is because they are relatively “centrist” news stations, which institutes a control for ideological bias affecting news coverage. For example news stations such as Fox News on the right leaning side of the ideological spectrum or MSNBC on the other hand may bias their news coverage of candidates based on ideological bias of their viewership. This would in turn skew the results of weekly analysis on each GOP candidate because coverage would be in part responding to ideological bias of the news network as opposed to a candidate’s “ability” to attract news coverage. The idea here is that “earned” media should be a measure of the candidate’s ability to attract or “earn” media coverage, independent of ideological bias, and not a measure of how much Rachel Maddow wants to bash the GOP Primary candidate field or to what extent

Sean Hannity wishes to cozy up to them. Finally aggregation is done at the weekly level in order to measure variation in news coverage as it pertains to weekly variation in paid political advertising and public opinion polling (Figure 10).

GOP Primary Weekly Minutes of Coverage per Candidate

February 1 st -February 8 th 2016	Weekly Mins of Coverage
Trump	1525
Cruz	949
Kasich	211
Rubio	1583
Carson	235
Bush	490
Christie	298
Fiorina	19
Walker	0
Paul	21
Huckabee	6
Jindal	0
Perry	0
Santorum	9
Graham	0
Pataki	0

Figure 10: Note weekly unit of analysis for minutes of news coverage

Paid media or political advertising will be measured using the number of ads aired weekly by each GOP Primary candidate. This data source was acquired from Kantar Media, which is a group that monitors paid media expenditures from political campaigns. Ads will be measured in “number of ads weekly” in order to control for the variability in cost of political advertisements. First and foremost the “number” of ads will be used to control for the variation in cost of political advertising that occurs in different media markets across the United States. The point here is to create an “order of magnitude” analysis which looks at the statistical

significance between the “number of ads aired per week” versus the “number of minutes of media coverage received each week” in order to more directly compare the impact of both forms of media on public polling support. There is also a more nuanced standardization taking place here with essentially comparing a political ad with a minute of news coverage. This brings up the question of: how is it fair to compare a minute of news coverage to a political ad that varies in length? The point here is that media exposure, whether it be paid or earned, is still net exposure of a candidate. Whether a voter watches an ad on Ted Cruz’s voting record as a Texas Senator or watches a minute of news coverage addressing Donald J Trump’s proposed wall, in both cases the voter is being educated on the candidate and receiving information from which to draw a conclusion on said candidate. In both cases the voter is given finite exposure to a political candidate and then later asked to make a judgment call of who they support. The question that this operationalization seeks to examine is: what form of exposure is more effective at generating public polling support (Figure 11)? Fundamentally earned media and paid political advertising are the greatest gatekeepers of information between candidates and the public which means that in order to form a campaign strategy the implicit comparative advantage between these sources of media need to be understood.

GOP Primary Weekly Political Ads per Candidate

February 1 st -February 8 th 2016	Number of Paid Political Ads
Trump	1364
Cruz	2008
Kasich	309

Rubio	3165
Carson	174
Bush	2698
Christie	537
Fiorina	235
Walker	0
Paul	62
Huckabee	32
Jindal	0
Perry	0
Santorum	0
Graham	0
Pataki	0

Figure 11 Above: Note weekly unit of analysis of number of paid political advertisements

Finally public polling support will be measured using weekly national polls averages for the GOP Primary candidates (Figure 12). This data set was aggregates using RealClearPolitics “GOP Primary National Polling Average”. An important aspect of this data selection to not here is that this is national and not state polling. Since the national media outlets have a national audience then using national polling data ensures standardization and comparability of the data sets. Again the data suggests that the media coverage allocated to each GOP Primary candidate has a strong effect on their aggregate polling support at the national level. It would seem to make intuitive sense that the audience that is consuming “earned” media exposure of a candidate should be the same audience being tracked in terms of their support of said candidate. As our model suggests in the “Related Literature and Conventional Wisdom” section of this paper, increased exposure of a candidate should translate into greater public polling support of said candidate. For this reason national public polling support will be regressed with weekly minutes of

coverage as well as number of political advertisements aired weekly to investigate the statistical significance of these media groups.

GOP Primary Weekly National Public Polling Support Averages

February 1 st -February 8 th 2016	GOP Primary Weekly National Public Polling Support Averages
Trump	29.5
Cruz	21
Kaisich	4
Rubio	17.8
Carson	7.8
Bush	4.3
Christie	2.5
Fiorina	2
Walker	0
Paul	2.5
Huckabee	2.8
Jindal	0
Perry	0
Santorum	0
Graham	0
Pataki	0

Figure 12 Above: Note weekly unit of analysis of Weekly GOP Public Polling Averages

The comparative advantage outlook on the returns of media coverage should be thought of as exploring the possibility of earned media acting as a potential substitute to the “money on hand” portion of the model discussed in the related literature section of this paper (Figure 13). The point of this comparison is that if candidates cannot wield their connections to the “donor class” to gain political notoriety and consequently public polling support then they can use media exposure as another “means to an end”. Candidates that have a comparative advantage in attracting media coverage yet lack the large amounts of donations to

jump start a campaign will be better served generating large amounts of media coverage as opposed to trying to take the “donor class” route. In addition there appears to be a comparative advantage in free media coverage when compared to paid media which opens the door to a whole other class of candidates that may not be “political elites” but can get the ratings to jumpstart a national campaign. The results section of this paper will dive deeper into what the data speaks to in this relationship.

Model: Conventional Beliefs and Related Literature

Money on Hand (Paid Media) + Public Polling Support= Winner of Primary

Model: Substitute to Conventional Beliefs Model

Aggregate News Coverage (Free Media) + Paid Political Advertising (Paid Media) +
Public Polling Support Before Primary= Winner of Primary

Figure 13 Above: Note comparative model referenced in literature review section

Senior Honors Thesis: Results

The 2016 GOP primary showcases a strong phenomenon that is robust across the candidate field: earned media coverage has a much stronger effect on public polling support than does paid political advertising. This is a more nuanced result than to say simply that earned media is better than paid media on a zero sum basis. As the literature review section of this paper suggests, paid political advertising operates much like an advertising campaign for a product: it increases brand (candidate) awareness. After the initial public consciousness is raised this is followed by an increase in public polling support. In the case of earned media this is also a channel from which a candidate raises public awareness through news coverage of said candidate. This “type” of media just presents an alternative way to raise public awareness of a candidate, which thereby increases public polling support. However the point of this comparison is to suggest that there is an implicit comparative advantage of earned media as opposed to paid media in increasing public polling support. Since candidates are rational actors in the political system trying to win elections it makes sense that they should want to know how to best allocate their time, energy, and resources in order to maximize their public polling support and by proxy win elections (or primaries). The following section will detail the comparative returns of earned media to paid media.

In order to parse out which form of media had a stronger effect on public polling support I used a time series regression between weekly national poll averages, weekly paid political ads, and weekly minutes of news coverage for all GOP Candidates. The results showed that paid political ads and minutes of news

coverage were statistically significant to raising poll numbers (Figure 14). This speaks to the point that both paid political ads as well as minutes of news coverage represent exposure of a candidate that will increase public consciousness and thereby national public polling support, which was confirmed by the time series regression. However the caveat here is that minutes of news coverage raised poll numbers by a ratio of 3 to 1 over paid political ads (Figure 14). The coefficient for a paid political ad was 0.0004348 while the coefficient for minutes of news coverage was 0.0012633, again illustrating an almost 3 to 1 ratio of a comparative advantage for earned or free media (Figure 14). These results by and large seem to confirm the notion that earned media has a comparative advantage over free media, which poses earned media to be a stronger substitute for paid media in terms of returns on public polling support. Even if we double the effect of an advertisement to make it comparable to one minute of earned media coverage (since most ads are 30 seconds in length) the ratio is still 1.5 to 1 in favor of earned media.

In order to check for robustness of this relationship, another set of time series regressions between national poll averages, weekly paid political advertising, and weekly minutes of news coverage were run using a “poll lag” variable. The “Poll Lag” variable was a proxy for “momentum” in the GOP Primary or the idea that any given week’s public polling numbers are in part predictable by the previous week’s polling numbers. This is to say that if “candidate x” polls at 30 percent one week then you would expect the following week for their poll numbers to be somewhere around +/- 30 percent based upon their campaign’s performance for the week. Essentially this variable dictates that while earned media and paid political

advertising do in part predict public polling support it seems reasonable to say that the public polling support a candidate receives will be affected by the previous week’s polling averages. In effect this variable institutes a control variable on the “momentum” component in candidates gaining and losing public polling support in order to isolate the effect of just paid political advertising and earned media on public polling support. It should be noted here that for all three regression of the “Poll Lag” model the coefficient for “Poll Lag” exceeded 0.90 implying that this consideration for the previous week’s polling averages affecting this week’s polling averages has empirical heft. While there is strong evidence to suggest that both earned and paid media have a statistically significant effect on raising public polling support “on the margin” (week to week) there is still a “critical mass” of public polling support that a candidate needs in order to go from one public opinion polling threshold to another. Although Lindsay Graham outperformed some of the top three GOP Primary contenders in earned media inconsistently throughout the 2016 GOP Primary, his public polling support never broke a 1% threshold illustrating how the “poll lag” variable is critical to checking the robustness of this relationship.

Results: Time Series Analysis of All GOP Primary Candidates

PollAverage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
Ads	.0004384	.0001811	2.42	0.016	.0000834	.0007934
Minutes	.0012633	.0003958	3.19	0.001	.0004876	.0020391
_cons	4.045456	.3271142	12.37	0.000	3.404324	4.686588

Figure 14: Note Example Equation- Weekly Poll Number Increase= Mins. Coefficient x Weekly Mins of Coverage

Results: Time Series Analysis of All GOP Candidates with “Poll Lag”

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PollAverage |   Coef.  Std. Err.   z  P>|z|  [95% Conf. Interval]
-----+-----
    Ads | .0001839 .0000841   2.19  0.029   .000019   .0003487
  Minutes | .000884 .0002139   4.13  0.000   .0004648   .0013031
poll_lag1 | .9569936 .0087344 109.57  0.000   .9398744   .9741128
   _cons | -.0135069 .0197841  -0.68  0.495  -.052283   .0252691
-----

```

Figure 15: Note Example Equation- Weekly Poll Number Increase= Mins. Coefficient x Weekly Mins of Coverage

While the initial time series regression between public poll averages, political advertisements, and minutes of media coverage demonstrate a comparative advantage of free media versus paid media for all 2016 GOP candidates, in terms of returns in public polling support. A “Trump Only” model was run in order to test that this phenomenon remained true for Donald J Trump by himself. In the “Trump Only” time series regression public poll averages of Trump support, political advertisements taken out by or on behalf of candidate Trump, and minutes of news coverage that Trump received were compared to see if the same comparative returns of earned media would be observed (Figure 15). This model showed that minutes of news coverage earned by Donald J Trump were statistically significant for raising poll numbers whereas paid political advertisements did not demonstrate this same significance (Figure 15). It seems fair to say that paid political advertisements were not statistically significant for the Trump campaign primarily because Trump did not take out many paid political advertisements and instead leveraged his campaign on its ability to earn media coverage. The political

advertising coefficient for this “Trump Only” model was -0.000377 and the coefficient for earned media coverage was 0.0014207 respectively. Minutes of media coverage raised poll numbers significantly more than paid political advertisements, which is consistent with the results that the time series regression model for all candidates showcased (Figure 15). The take away point here is that specifically in the case of Donald J Trump, paid political advertisements were not effective at raising public polling support whereas earned media was effective at raising public polling support. Donald Trump’s candidacy specifically highlights the comparative returns of earned media as opposed to paid media. Trump was able to win the GOP Primary by leveraging the comparative returns of earned media through a motto that can only be described, as “any publicity is good publicity”. It would seem that Trump’s campaign strategy of inflammatory and polarizing rhetoric was quite successful at maximizing media coverage of his campaign and by proxy optimizing the amount of national public polling support he received in the GOP Primary.

Results: Time Series Analysis of “Trump Only”

PollAverage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
Ads	-0.000377	.0007993	-0.47	0.637	-0.0019435	.0011895
Minutes	.0014207	.0006984	2.03	0.042	.0000519	.0027894
_cons	25.4128	2.481971	10.24	0.000	20.54822	30.27737

Figure 16: Note Example Equation- Weekly Poll Number Increase= Mins. Coefficient x Weekly Mins of Coverage

Results: Time Series Analysis of “Trump Only” with “Poll Lag”

PollAverage	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
Ads	-.0002819	.0004568	-0.62	0.537	-.0011772 .0006133
Minutes	.0008174	.0005263	1.55	0.120	-.0002142 .001849
poll_lag1	.9141596	.0397013	23.03	0.000	.8363465 .9919728
_cons	1.867447	.8277354	2.26	0.024	.2451157 3.489779

Figure 17: Note Example Equation- Weekly Poll Number Increase= Mins. Coefficient x Weekly Mins of Coverage

The final time series regression that was run was to again test to see if the comparative advantage of earned media over paid media held true with all the GOP Primary candidates excluding Donald J Trump. The time series regression again used public poll averages, paid political advertisements, and minutes of media coverage of the entire GOP Primary candidate field excluding Trump. This time series regression found that paid political ads and minutes of news coverage were both statistically significant in raising public opinion polling numbers as was the case in the first time series regression where all GOP Primary candidates, including Trump, were regressed (Figure 16). Minutes of news coverage raised poll numbers by a ratio of 2 to 1 over paid political advertisements in this model (Figure 16). The respective coefficients of minutes of news coverage and paid political advertisements are the data points from which this conclusion is drawn. Paid political advertisements had a coefficient of 0.0006426 whereas minutes of news coverage received had a coefficient of 0.00144, again illustrating a 2 to 1 ratio in

favor of new coverage’s impact on raising public opinion polling. This model goes to show that the power of earned media is not exclusive to one candidate’s campaign (Donald J Trump) but was a relevant factor for all the 2016 primary campaigns. Although Trump was the most effective at capitalizing on the comparative advantage of earned media as compared to paid political advertising this does not mean that an “earned media strategy” was not effective for other GOP Primary candidates that were also talented at earning media attention.

Results: Time Series Analysis of GOP Primary Candidates Excluding Trump

```

-----
PollAverage |   Coef.  Std. Err.   z  P>|z|   [95% Conf. Interval]
-----+-----
      Ads | .0006426 .0001976   3.25  0.001   .0002552   .00103
     Minutes | .0014392 .0005207   2.76  0.006   .0004186   .0024597
      _cons |  3.6363  .2560685  14.20  0.000   3.134415  4.138185
  
```

Figure 18: Note Example Equation- Weekly Poll Number Increase= Mins. Coefficient x Weekly Mins of Coverage

Results: Time Series Analysis of GOP Primary Candidates Excluding Trump with “Poll Lag”

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-----
PollAverage |   Coef.  Std. Err.   z  P>|z|   [95% Conf. Interval]
-----+-----
      Ads | .0001898 .0000874   2.17  0.030   .0000185   .0003612
     Minutes | .0010477 .0003118   3.36  0.001   .0004366   .0016589
    poll_lag1 | .9544019 .00895  106.64  0.000   .9368602   .9719435
      _cons | -.0137174 .0189824  -0.72  0.470  -.0509222   .0234874
  
```

Figure 19: Note Example Equation- Weekly Poll Number Increase= Mins. Coefficient x Weekly Mins of Coverage

The three models presented in this section showcase the comparative returns of earned media as opposed to paid media in generating public polling support. Whether the entire GOP Primary candidate field is observed or only Donald J Trump is observed there are higher returns per unit on a minute of news coverage than there are on a paid political advertisement. If candidates are rational actors trying to win elections then these results indicate that candidate campaign strategy should be focused on garnering the most amount of news coverage in order to bolster their public opinion polling numbers. An important point to note here is that this focus on garnering news coverage is indiscriminate of whether the coverage is positive about a candidate or negative about a candidate. It appears that what matters is the “magnitude” or net amount of coverage received which goes to give empirical heft to the notion that “any publicity is good publicity” in the context of winning elections. This phenomenon has even broader implications past giving candidates a roadmap to win elections. Implicit in the argument that earned media coverage has more of an effect on public polling support than does paid political advertising is the notion that a campaign does not need to be beholden to donors or interest groups with large amounts of money in order for the campaign to stand a legitimate chance at winning an election. Instead candidates that bypass this constraint through campaign strategies that generate large amount of earned media coverage independent of political donations or political notoriety. The point here is that this phenomenon allows for the candidate field to be expanded to candidates that are not party of the political class but rather are just more effective at garnering media coverage as compared to their counterparts in the campaign. The first step in

decreasing the control of political elites and the donor class on our democratic system is empowering candidates to run for office independent of the need to raise excessive amounts of campaign contributions.

Senior Honors Thesis: Conclusion

Many Americans, on both sides of the political spectrum are concerned about the influence of money in our politics. The successful candidacy of Donald J Trump and my analysis here offer some hope that money's role might be surmounted in our democracy. The candidacy of Donald J Trump in the 2016 GOP Primary typified the comparative returns of earned media as opposed to paid political advertising. As previously discussed Trump was notorious for his inflammatory rhetoric as well as his criticism of the donor class in context of their control over the political system. This in turn generated Trump large amounts of earned media coverage that propelled his campaign towards garnering a large share of the public polling support and ultimately winning the GOP Primary. However this comparative return was not something that was simply observed with Donald J Trump's candidacy but expands to the entire GOP Primary Candidate field as the results section detailed. The important thing to note here is that this comparative return of earned media is not exclusive to the Trump candidacy or easily dismissed as a "Trump centric" phenomenon. Instead this phenomenon should be understood as a robust phenomenon across the GOP Primary field that should send a strong signal to rational candidates running for political office. Rational in this context must simply be understood as candidate acting in their own best interest which translates to winning elections. At the very least this phenomenon presents a way in which the donor class and political elites of this country can be bypassed in order for a candidate to run a successful primary campaign. If we believe that "getting the money out of politics" is one of the cornerstones of having a more robust and

representative democracy for the people of this country, then finding a way to bypass this “elite influence” in an election cycle is the first step towards that moral pursuit.

Further research on this topic should look at the 2016 general election more broadly to observe the comparative returns of earned media as opposed to paid media. Hilary Clinton dominated Donald J Trump on all fronts of paid media ranging from paid political advertising to Super PAC coordination according to “2016 by the numbers: Hillary Clinton dwarfs Donald Trump in TV Ad Spending” by Jake Miller of CBS News (1). This contrast between paid media spending by Hilary Clinton and Donald Trump could not be more stark: Hilary Clinton’s campaign spent about \$142 million in paid political advertising compared to Donald Trump’s \$59 million according to “Trump Spent about Half of What Clinton did on his way to the Presidency” by Jacob Pramuck of CNBC (1). The take away point here is that there is no doubt that Hilary Clinton was the big spender in the 2016 election cycle yet was not able to win the presidency. In addition Donald Trump dominated Hilary Clinton in the 2016 general election in terms of earned media where his advantage grew to hundreds of millions of dollars at various points in the campaign according to Media Quant which sums online mentions, broadcast, and “other” earned media. The point here is that there seems to be an observable implication of the comparative returns of earned media as opposed to paid media in the 2016 general election cycle. However in fairness the public polling up until the election overwhelmingly showed Hilary Clinton with a commanding lead in the race. The probing questions are: why does the discrepancy exist? If Trump’s public polling increased as his earned media

increased why was this not the case for general election polling despite his commanding Electoral College victory? There is more than enough content to sift through for future researchers on the comparative returns to earned media and the 2016 general election would be a stimulating case study. It appears that at a bird's eye view spending on paid political advertising could not "buy" Hillary Clinton the election.

The results of this paper are not meant to suggest simply that rational candidates have no choice but to double down on earned media or that paid political advertising has no net effect on public polling support. As was observed in the results section, paid political advertising had a statistically significant effect on raising public polling support, which makes it a rational investment for candidates seeking to win elections. However it is important to note here that there is a comparative advantage to utilizing the power of earned media as opposed to paid media as has been the "beating drum" of this thesis. The implicit point here is that this comparative advantage of earned media allows for the candidate pool for national office to be expanded beyond the political elites that have access to large amounts of donations and can afford to field large amounts of political advertising. This comparative advantage in essence lifts the constraint that only candidates with large stockpiles of campaign donations and Super PAC connectivity can gain any traction in our national election cycles. Instead now candidates can draw upon their own individual wealth (in the case of Trump) or draw upon small individual donations (in the case of Bernie Sanders) and run competitive national campaigns independent of the bidding of the political establishment. This is the overarching

implication of particularly the Trump candidacy but more broadly the earned media comparative advantage: no longer can political elites and the donor class dictate which candidates represent the American people. This phenomenon showcases that at the very least the political elites are one step removed from the process as opposed to being the puppeteers of our election cycles.

It is important to note here that this comparative advantage in earned media does not lay this pastoral framework for having candidates run for national office that are not “elites” in some regard. In the case of Donald J Trump specifically, this is a billionaire celebrity candidate that arguably would not have garnered the attention and consequently public polling support had he not had the celebrity and billionaire pre-requisites for seeking media attention and ultimately gaining public polling support. Furthermore the GOP candidate field more generally would not have garnered the earned media attention they did without political notoriety and connectivity to political elites. The point here is that these comparative returns to earned media arguable do not expand the candidate field to include “average” citizens such as a public school teacher or a manufacturing worker. There is still an “elite” element that seems robust through all of this in running for national office. However the comparative returns to earned media do fundamentally expand the candidate pool to include many other elites in the country that were previously excluded from being a part of the political system. This combats a consolidation of these channels of power to regime families such as the Bush and Clinton families who have exchanged power back on forth for years in our democracy. In essence the comparative returns to earned media “frees up” more elites to run for national office

without having to sell out to the “puppeteers” that try and dictate political representation of the American people for their own vested interest. Instead now qualified elites with alternative resumes (business experience, leadership notoriety outside of politics, etc.) can compete for national office without having to be a part of the “system” that they rhetorically proclaim they will reform. Hopefully this strategic advantage of free media over paid media puts us one step closer to loosening money’s influence over politics.

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