

University of Montana

ScholarWorks at University of Montana

Undergraduate Theses and Professional Papers

2014

Comparing the Campaign Financing Patterns of Male and Female Congressional Candidates

Sara M. Thane
smariethane@gmail.com

Follow this and additional works at: <https://scholarworks.umt.edu/utpp>



Part of the [American Politics Commons](#)

Let us know how access to this document benefits you.

Recommended Citation

Thane, Sara M., "Comparing the Campaign Financing Patterns of Male and Female Congressional Candidates" (2014). *Undergraduate Theses and Professional Papers*. 15.

<https://scholarworks.umt.edu/utpp/15>

This Thesis is brought to you for free and open access by ScholarWorks at University of Montana. It has been accepted for inclusion in Undergraduate Theses and Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

COMPARING THE CAMPAIGN FINANCING PATTERNS OF MALE AND
FEMALE CONGRESSIONAL CANDIDATES

By

SARA MARIE THANE

Undergraduate Thesis

Presented in partial fulfillment of the requirements
for the University Scholar distinction

The University of Montana
Missoula, MT

December 2014

Approved by:

James C. McKusick, Dean
The Davidson Honors College

*Professor Christopher Muste, Faculty Mentor
Political Science*

Thane, Sara, B.A., December 2014

Political Science

Comparing the Campaign Financing Patterns of Male and Female Congressional Candidates

Faculty Mentor: Professor Christopher Muste

Nearly 100 years after gaining the right to vote, women are nowhere near reaching equal representation in the United States Congress. Although this is likely due to a range of factors, the possibility that women remain underrepresented because of a campaign financing disadvantage is explored in this research. While there is a rich body of literature comparing how male and female congressional candidates finance their campaigns, previous research has not compared the net worth of male and female members of Congress or how net worth affects the amount of campaign receipts a candidate receives. Additionally, the self-financing patterns of male and female candidates and the effect of self-financing on campaign success for each gender have not been explored.

This research addresses these gaps in the campaign finance literature by testing the following four hypotheses: female members of Congress have lower net worth than male members, wealthy members are able to capture a larger amount of campaign receipts than less wealthy members, female candidates rely on self-financing more than male candidates, and females who self-finance earn a lower percentage of the general election vote than male self-financing candidates. My analysis reveals that a member's net worth is positively correlated with campaign receipts, so I can accept my second hypothesis. However, I must reject the other three hypotheses and conclude that women do not appear to be at a significant campaign financing disadvantage when net worth and self-financing are considered.

Introduction

Nearly 100 years after gaining the right to vote, women remain severely underrepresented in the United States Congress. As of January 2014, women hold 99 seats in the national legislature (CAWP, 2014). Although this is the highest number in history, it is still only 18.5% of the 535 congressional seats (CAWP, 2014). The implications of women's underrepresentation are numerous and complex. How can the U.S. Congress make decisions on behalf of all Americans if its membership does not accurately reflect the demographics of the American population? How can American women be sure that their unique interests and needs are being considered if few women are at the decision making table?

Previous research investigating the behavior of women in the United States House of Representatives concludes that female members are more likely than males to initiate legislation focused on women's issues (Gerrity, Osborn, & Mendez, 2007). Additionally, "The presence of women in the legislature can substantially influence the items on the legislative agenda, policy outcomes, and the tone of debate in government" (Bauer, 2013, p. 37). Because women make unique contributions to the legislative process, it is reasonable to assume that the lack of equal representation in the U.S. Congress is detrimental to the needs of American women. In order to make strides toward equal representation, the reasons that parity has not been reached thus far must be identified. A rich body of research exists that explores whether campaign financing differences between male and female candidates puts females at a disadvantage. However, the impact of male and female candidates' net worth on campaign financing has not yet been explored. Neither have the self-financing patterns of male and female candidates nor how self-financing affects vote totals for each gender. The purpose of this research is to address these gaps in the campaign finance literature. ¹

¹ I would like to thank James McKusick, Dean of the Davidson Honors College at the University of Montana. I would also like to thank Nelson Weller and the supporters of the DHC Student-Faculty Summer Research Fellowship, which was the funding source for this project. I wish to express my gratitude to my faculty mentor Dr. Christopher Muste for his assistance throughout the course of this project. I would also like to acknowledge Chuck Harris of the Social Science Research Lab for his help with data analysis.

Prior Research

The ability of candidates to successfully raise funds is critical to campaign success. Referencing a 1987 study by Gary Jacobson, Burrell (2003) states that, “How well candidates perform on election day is a direct function of how much money they raise and spend” (p. 73). In fact, in 93% of 2008 U.S. House races the top spender won the seat (Currinder, 2008). Because of this strong relationship, campaign financing by female candidates has been the focus of many scholars seeking to answer the question, are female candidates at a disadvantage compared to male candidates? According to Burrell (2003), “The conventional wisdom has been that women candidates have greater difficulty raising money than their male counterparts, and this difficulty is viewed as a major reason why more women are not in elective office” (p. 74). Despite this theory, there is a strong body of research that concludes that women and men are on an equal playing field, and in some cases women are actually able to raise more money than men.

Adams and Schreiber (2011) compare the campaign financing success of men and women candidates at the local level. Focusing on municipal elections in seven cities, they found that there are no significant differences between the backgrounds of male and female candidates, the sources of their campaign funds, or their electoral success rates (Adams & Schreiber, 2011). In examining the campaign financing patterns of candidates in local elections in Mecklenburg County, North Carolina from 1975-1980, Ingalls and Arrington (1991) also conclude that women are not disadvantaged in fundraising, spending, or receiving votes. In fact, the female candidates studied actually received more votes for every dollar spent than the male candidates (Ingalls & Arrington, 1991).

At the national level women do not seem to be disadvantaged either. Using campaign finance data for major party candidates in the 1980 U.S. House general election, Schlozman and Uhlaner (1986) conclude that the gender of the candidate alone does not affect the amount of campaign receipts that he or she is able to collect. However, the fact that females are more often challengers than incumbents does put women at a disadvantage, as challengers of both genders are typically unable to gather as many contributions as incumbents are (Burrell 1994, as cited by Burrell 2003; Schlozman & Uhlaner, 1986).

While these pieces of research conclude that female candidates are not at a fundraising disadvantage, there are differences in how males and females fund their campaigns. The rise of female donor networks has altered the campaign financing landscape for female candidates, in many cases giving women an advantage (Burrell, 2003; Crespín & Dietz, 2010; Francia, 2001). Female candidates who receive support from these networks are able to raise more donations from individuals than male and female candidates who remain outside the network (Crespín & Dietz, 2010). Women's PACs such as EMILY's List are particularly helpful in providing early money to candidates, which can help them gather more contributions in the long run than those without seed money (Francia, 2001). However, these donor groups tend to only benefit Democratic women (Crespín & Dietz, 2010; Francia, 2001).

There appear to be differences in how male and female candidates gather donations from individuals as well. Women tend to rely on small individual contributions to fund their campaigns more than men (Baker, 2006; Crespín & Dietz, 2010; Ingalls & Arrington, 1991). Female Democrats in particular rely on contributions from women, who often give smaller amounts than men (Bryner & Weber, 2013). Could women candidates' reliance on small individual contributions be an advantage? While Ingalls and Arrington (1991) do not reach a definitive conclusion, in their study they found that "...successful women candidates appeared to have actively sought a broad, grass-roots approach" (p. 88). However, it has also been suggested that female candidates have to work harder than males, using several different fundraising methods and utilizing a variety of funding sources in order to fundraise equal amounts as men (Jenkins, 2007). In sum, although there do not seem to be significant financial advantages for candidates of one gender over the other, a closer look reveals that there are differences in *how* males and females finance their campaigns.

A somewhat less explored but equally important aspect of campaign funding is self-financing. Candidates are not limited as to how much money they can donate or loan to their own campaigns (Sides, Shaw, Grossmann, & Lipsitz, 2013). That being said, "The lack of spending limits means that candidates can fund their own campaigns, potentially giving wealthy individuals a significant advantage over the less wealthy" (Sides et al., 2013, p. 107). Despite this possibility, self-financed candidates do not tend to do well on election day (Alexander, 2005; Boatright, 2009; Currinder, 2008; Steen, 2006). In the 2008 election, only three out of 24 U.S.

Senate candidates who self-financed \$1 million or more won their election (Boatright, 2009). Incumbents rarely self-finance, while open seat candidates and challengers are more likely to do so (Steen, 2006).

There are theories as to why self-financing is often associated with failure at the polls. Steen (2006) posits that "...self-financers tend to be inexperienced, low quality candidates, so in many cases their personal funds do little more than make them more competitive with their stronger opponents" (p.122). Additionally, candidates who self-finance large portions of their total funds rather than fundraise may miss out on the benefits that fundraising brings, such as garnering attention from the media, (Steen, 2006) and forging relationships with voters (Alexander, 2005; Steen, 2006).

Closely related to self-financing is a candidate's personal wealth. Steen (2006) found that "...self-financing is positively correlated with candidate wealth" (p. 125) and that "...self-financers are significantly wealthier than other members of Congress" (p. 15). However, the wealth of a self-financing candidate does not provide him or her with a significant advantage since candidates who pour money into their own campaigns typically lose (Steen, 2006).

In conclusion, prior research comparing how male and female candidates finance their campaigns has determined that there is not a significant difference between the total amounts males and females are able to raise (Adams & Schreiber 2011; Burrell, 1994 as cited by Burrell, 2003; Ingalls & Arrington, 1991; Uhlaner & Schlozman 1986). Females rely on small individual contributions more than males (Baker, 2006; Crespín & Dietz, 2010; Ingalls & Arrington, 1991), and get an added boost from women's PACs (Burrell, 2003; Crespín & Dietz, 2010; Francia, 2001). Self-financers typically lose their elections (Alexander, 2005; Boatright, 2009; Currinder, 2008; Steen, 2006), and incumbents are less likely to contribute to their own campaigns than challengers or open seat candidates (Steen, 2006). While the existing literature suggests that women do not remain underrepresented in the national legislature because of campaign financing, the differences between how males and females self-finance and how male and female self-financers fare on election day have not been considered. Neither has the net worth of female members compared to male members, nor how net worth is related to the amount of total receipts a member was able to gather during his or her campaign. Thus, until these avenues are explored

it is not possible to conclude that campaign financing is not affecting the level of women's representation.

Hypotheses

The first hypothesis that will be tested is that female members of the United States House have a lower average net worth than male members. Because females nationwide have historically earned less than males, it can be expected that female representatives have an average net worth that is lower than males'. With lower incomes, females likely also have assets with less value and more liabilities. However, it is possible that female members may have equal or even greater net worth than male members. House candidates tend to have higher incomes than their constituents (Steen, 2006). The female members in question not only ran for office but won, suggesting that there may not be a gap between the net worth of male and female members of Congress as there is between the incomes of the average male and female American citizen. While it would be ideal to analyze the net worth of all candidates rather than just successful candidates, net worth data for losing candidates is not readily available.

My second hypothesis is that wealthier members are able to collect a larger amount of campaign receipts than less wealthy members. Wealthier individuals are likely part of a network that includes other wealthy individuals. This would give wealthy candidates an advantage, as they would have the opportunity to solicit large individual contributions from those within the network. They also would be likely to have connections with corporations, PACs, and other organizations which could donate large sums of money to the candidate. Additionally, it is common knowledge that running for office is expensive and candidates who raise and spend more tend to be more successful (Jacobson, 1987 as cited by Burrell, 2003; Currinder, 2008). So, candidates with greater personal wealth may appear to be more viable to the media and potential donors and thus amass a larger amount of total contributions. Net worth may affect the amount of total campaign receipts differently for male and female candidates, so in addition to analyzing the effect of net worth on campaign receipts for all candidates combined, the effect of net worth on campaign receipts for males and females will be tested separately.

My third hypothesis is that female candidates rely on self-financing more than male candidates. According to Jennifer A. Steen (2006), candidates who self-finance are typically

challengers or open seat candidates rather than incumbents and they are often inexperienced. Female candidates “have disproportionately been challengers” (Burrell, 2003, p. 79). Therefore, it can be expected that female candidates rely on self-financing as a larger percentage of their total receipts than male candidates do.

However, It is also possible that female candidates actually self-finance less often and in smaller amounts than male candidates. If female candidates are less wealthy than male candidates, they may not be able to afford to contribute as much or as often as males. Additionally, females might not need to self-finance as often or as much as male candidates do. Females tend to benefit greatly from early money contributed by women’s donor networks, an advantage that male candidates do not have (Burrell, 2003; Crespin & Deitz, 2010; Francia, 2001). Ingalls and Arrington (1991) conclude that female candidates for local offices in Mecklenburg County relied on self-financing less often than male candidates. This may hold true at the national level as well.

Finally, my fourth hypothesis is that male candidates who self-finance capture a higher percentage of the vote than female candidates who self-finance. If female candidates rely on self-financing to make up a larger percentage of their total receipts than male candidates do, it can be expected that self-financing female candidates are not as successful as self-financing male candidates. Candidates who do not self-finance large amounts gather more contributions from others than those who do self-finance (Steen, 2006). So, if male candidates self-finance a smaller percentage of their total receipts than female candidates do they are likely to earn a higher percentage of the general election vote than female candidates. However, it is possible that men and women self-financers may experience different rates of success at the polls even if there is not a significant difference between the raw amount or the percent that one gender self-finances compared to the other. One gender may benefit more from the perks of fundraising described by Steen (2006) and Alexander (2005), or voters may react differently to male and female self-financers.

Data Collection and Methods

To test the hypotheses described above, I constructed a dataset including all 838 major party candidates running in the 2012 U.S. House of Representatives general election. The

following variables were coded for all cases in the dataset: district, region, candidate name, candidate status (whether the candidate was an incumbent, challenger, etc.), gender, party affiliation, percent of the general election vote received, and total campaign receipts. The absolute amount and percentage of total receipts were coded for candidate contributions, candidate loans, itemized individual contributions, unitemized individual contributions, other committees contributions, party committees contributions, and transfers from authorized committees. FEC financial summaries were not available for a handful of candidates, who were excluded from the analysis as a result. For candidates who won their elections, data was also collected for 2011 and 2012 net worth. Net worth data was available for 434 out of the 435 members of the U.S. House.

Data for candidate district, name, status, and party affiliation was retrieved from CNN Election Center. The congressional districts were coded into one of four geographical regions (West, Midwest, Northeast, and South) based on the U.S. Census Bureau regions. Candidate gender was determined based on the list of female candidates provided by the Center for American Women and Politics in “Women Congressional and Statewide Elected Executive Candidates 2012.” Data on the percent of the general election vote received was retrieved from the Federal Election Commission’s “Official Election Results for United States House of Representatives.” All campaign finance data was collected using the Federal Election Commission’s financial summaries found using the “Candidate and Committee Viewer” search feature. Net worth data for 2011 and 2012 was collected from the Center for Responsive Politics, which uses the financial disclosure reports filed by members of Congress to calculate these figures. Net worth was collected for members only, rather than all House candidates in the dataset, because net worth data for unsuccessful candidates is not readily available. Complete citations of all data sources are listed in Appendix A.

Analysis

The hypothesis that female members have lower average net worth than male members was tested first. A total of 434 cases were included in this analysis, 78 females and 356 males. Net worth data was not available for one member of the House. Additionally, 2011 data was available for Representative Jackson Jr. but 2012 data was not. As a result, Jackson Jr.’s 2012 net worth was recorded as missing, and the 2011 value was used as his 2011-2012 average. I ran a

comparison of means and t-test equality of means to determine whether or not there is a difference in net worth for male and female representatives, and if so, whether this difference is statistically significant.

The results of these tests indicate that females do have a lower net worth than males. The mean net worth for female members stayed relatively constant between 2011 and 2012 but the mean net worth for males decreased by roughly \$.8 million during the same period. In 2011 male members had an average net worth that was about \$1.7 million higher than female members. This difference between males and females shrunk to \$840,370 in 2012. Because some members' net worth increased or decreased significantly between 2011 and 2012, I averaged the 2011 and 2012 net worth values for each member. I did so in order to gain a more general measure of each candidate's individual wealth and the wealth of members as a whole. Looking at this 2011-2012 average net worth figure, male members' mean net worth came in at \$1.26 million more than the female members' mean. However, the t-tests show that the differences in means for males and females are not statistically significant. The p-values for 2011 ($p=.712$), 2012 ($p=.813$) and 2011-2012 average ($p=.750$) are all quite high (a p-value of .05 or lower is the general standard for statistical significance).

Member Net Worth

	Candidate Gender	N	Mean	Std. Deviation	Std. Error Mean
Member Net Worth 2011	M	356	7564566.85	40062311.914	2123298.285
	F	78	5862473.08	15096374.821	1709327.851
Member Net Worth 2012	M	355	6736774.93	30577327.854	1622876.058
	F	78	5896405.13	15025509.356	1701303.917
Member Net Worth 2011-2012 Average	M	356	7141630.4775	34292685.75064	1817508.70977
	F	78	5879439.1026	15047828.07395	1703831.01419

Mean Member Net Worth by Gender-Independent Samples Test

	Levene's Test for Equality of Variances										t-test for Equality of Means	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference				
								Lower	Upper			
Member Net Worth 2011	.619	.432	.369	432	.712	1702093.777	4609648.985	-7358035.359	10762222.913			
Member Net Worth 2012	.295	.587	.236	431	.813	840369.801	3555172.892	-6147263.219	7828002.822			
Member Net Worth 2011-2012 Average	.470	.493	.357	238.017	.721	840369.801	2351204.312	-3791457.591	5472197.194			
			.507	274.768	.613	1262191.37496	3966716.28178	-6534272.49388	9058655.24381			
						1262191.37496	2491260.33064	-3642191.48229	6166574.23222			

In order to address the possibility that there could be differences in net worth between parties or among geographical regions, I ran a comparison of means and t-test for the variable “member net worth 2011-2012 average” with party affiliation as the grouping variable, and an ANOVA with region as the grouping variable. While the mean net worth of Republican members is \$2.28 million higher than Democrats, this difference is not statistically significant ($p=.455$). Regional differences exist as well. Members in the Midwest have a net worth of \$2.71 million, the lowest of the four regions. Representatives in the West have the highest net worth, a mean of \$11.87 million. Falling in the middle are the South with a mean of \$7.02 million, and the Northeast with a mean of \$5.26 million. Although these differences seem remarkable, particularly between the Midwest and the West, the results of the ANOVA show that these differences are not statistically significant ($p=.225$).

In sum, I cannot accept my hypothesis because the difference in mean net worth of males and females is not statistically significant. However, as I predicted in my hypothesis, male members on average are wealthier than female members. While there are differences in net worth between parties and across regions, these differences are not statistically significant either.

The net worth of a member of Congress is only important if it affects the way a member legislates or the success of his or her campaign. As noted in the literature review at the beginning of this paper, wealth and self-financing are positively correlated (Steen, 2006), so in this way wealth influences a candidate’s campaign strategy. Does personal wealth also affect the total amount of money a candidate can raise? My second hypothesis is that the net worth of U.S. House members and the total campaign receipts they collected during the two-year 2012 election cycle are positively correlated. To test this, I recoded “2011-2012 average net worth” into a new variable with two categories, “below mean” and “above mean.” I then ran a comparison of means and t-test to determine whether the mean total campaign receipts collected in the 2012 election cycle differs for members with net worth above and below the mean. Once again, my sample size was 434. After comparing the means it is clear that wealthier members were able to capture more campaign money. Members with a net worth below the mean averaged \$1,628,822 in campaign contributions, and those with a net worth above the mean averaged \$2,205,361. The

results of the t-test show that, with a p-value of .026, the difference is statistically significant at the $p=.05$ level.

Recoding 2011-2012 average net worth into quartiles yields similar results. The mean total campaign receipts increase from the first through the third quartiles (Q1=\$1,386,671, Q2=1,537,004, Q3=1,731,814) with a jump between quartile three and four (Q4=2,149,437). The ANOVA test reveals that there is a statistically significant difference ($p=.011$) between the mean total campaign receipts received when net worth is divided into quartiles. In order to identify where this difference occurs, I ran a Scheffe post-hoc test. The statistically significant difference lies only in the full range between the first and fourth quartiles ($p=.020$). Although there is a jump between quartile three and four, this difference is not statistically significant.

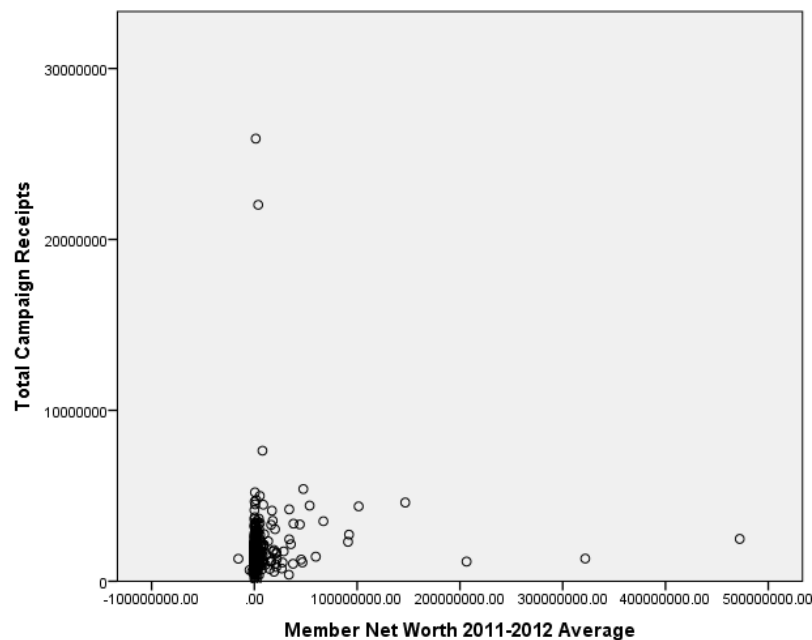
After comparing the means, I performed a Chi-Square test as well as a Pearson Correlation to test the strength and direction of the relationship between net worth and total campaign receipts. For the Chi-Square test I split both net worth and total campaign receipts at the mean. This test yielded a p-value of .030, demonstrating that there is a statistically significant relationship between net worth and total campaign receipts at the $p=.05$ level. In contrast, the correlation did not meet the $p=.05$ level of significance. With a Pearson Correlation coefficient of .069 and a p-value of .153, the relationship between net worth and total campaign receipts is positive, but not strong enough to fully reject the null hypothesis that net worth and campaign receipts are not correlated.

While there appears to be a relationship between net worth and total campaign receipts, does this relationship hold when the data is separated according to gender? Using the same mean and quartile breaks determined when all candidates were combined, I split the data according to gender and ran comparison of means tests. Surprisingly, there is still a relationship between net worth and campaign receipts for male representatives but not for females. The mean total receipts for females with a net worth below the mean is \$1.98 million, compared to \$1.96 million for females with a net worth above the mean. These two values are virtually equal ($p=.982$). When splitting females into quartiles based on net worth, there was once again no statistically significant difference between the means ($p=.713$). The sample size of females with a net worth below the mean is 10, and above the mean is 68, however the means are so close together that

even with a large sample size the difference would not be significant. Clearly, for female candidates net worth is not related to fundraising totals.

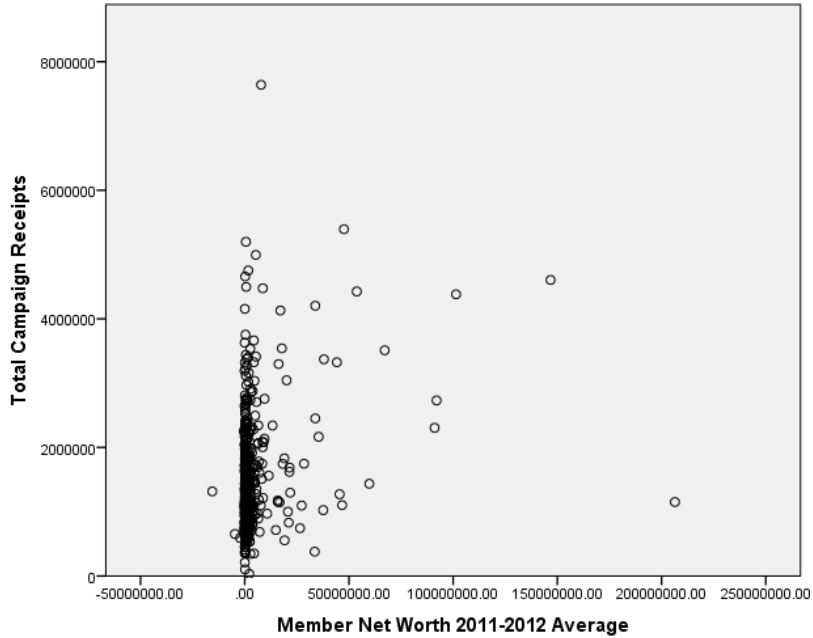
Males with a net worth below the mean (N=311) had a mean of \$1.55 million in total receipts while males with above average net worth (N=45) had a mean of \$2.26 million in receipts. This difference is statistically significant with a p-value of .004. When splitting the males into quartiles based on net worth, the differences between the first and fourth quartile (p=.002), second and fourth quartile (p=.023), and third and fourth quartile (p=.022) are statistically significant. Although net worth is not related to campaign fundraising for females, a strong relationship exists for male candidates. Male candidates with more wealth gather more campaign receipts.

To gain a deeper understanding of the relationship between net worth and total campaign receipts, I created the scatterplot below:



There are four obvious outliers, two on the dependent variable and two on the independent variable. Additionally, there is a borderline outlier on the independent variable at just over \$200 million. Interested in determining whether the relationships described above hold true when these outliers are removed, I decided to eliminate cases where campaign receipts totaled \$20 million or more, or net worth exceeded \$300 million. I decided to keep the case that looks to be a

marginal outlier, with a net worth a little over \$200 million. I kept this case in order to retain as much data as possible and because it was not clearly removed from the rest of the data as the other four cases were. The new scatterplot without the outliers is below:



Next, I ran a correlation between member average net worth 2011-2012 and total campaign receipts, both genders combined, with outliers excluded.

Member Net Worth and Total Campaign Receipts Correlations

		Member Net Worth 2011-2012 Average	Total Campaign Receipts	
Member Net Worth 2011-2012 Average	Pearson	1	.231**	
	Correlation			
	Sig. (2-tailed)			.000
	N			430
Total Campaign Receipts	Pearson	.231**	1	
	Correlation			
	Sig. (2-tailed)			.000
	N			430
		430	781	

** . Correlation is significant at the 0.01 level (2-tailed).

With the outliers removed there is a strong, positive relationship between net worth and total campaign receipts. Once again I split the data according to gender and ran correlations. With the outliers removed, the relationship between net worth and total campaign receipts is statistically significant (for females this relationship is slightly weaker than for males).

Candidate Gender			Member Net Worth 2011-2012 Average	Total Campaign Receipts
F	Member Net Worth 2011-2012 Average	Pearson Correlation	1	.276 [*]
		Sig. (2-tailed)		.015
		N	77	77
	Total Campaign Receipts	Pearson Correlation	.276 [*]	1
		Sig. (2-tailed)	.015	
		N	77	158
M	Member Net Worth 2011-2012 Average	Pearson Correlation	1	.222 ^{**}
		Sig. (2-tailed)		.000
		N	353	353
	Total Campaign Receipts	Pearson Correlation	.222 ^{**}	1
		Sig. (2-tailed)	.000	
		N	353	623

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

In conclusion, the relationship between a member of Congress' net worth and the amount of campaign funds he or she collects is present both when outliers are included and excluded (when males and females are combined), however it is much stronger without the outliers. When the outliers are included, the relationship is basically nonexistent for females alone, but once these outliers are removed it is quite strong for both genders. Of the four outliers I eliminated three were males. However, one was Michelle Bachmann. Bachmann was able to amass nearly \$26 million in funds for her 2012 House re-election bid but her net worth was not so extraordinary. This is likely related to her run for President. Because the sample size for

females was relatively small Bachmann's presence had a large effect on the correlation. Eliminating her and the other three outliers allows for a more accurate picture of the relationship.

In testing hypothesis one, I determined that there is not a statistically significant difference between the net worth of male and female members. However, males elected to the House in 2012 were wealthier than their female counterparts. If this relationship holds true for all male and female congressional candidates, including unsuccessful candidates, females may be at a disadvantage. As the results of the tests for hypothesis two indicate, when outliers are removed net worth is positively correlated with campaign receipts for males and females separately as well as candidates of both genders combined. So, if all female candidates beyond only those who are successfully elected tend to have a lower net worth than males, we can expect that they would generally gather a smaller amount of campaign receipts. The gender differences in fundraising may be even sharper among unsuccessful candidates. As noted in the literature review, typically the candidate who spends the most wins (Burrell, 2003; Currinder, 2008), so it is possible that having a lower net worth compared to males could put female candidates at a disadvantage.

My third hypothesis is that female candidates rely on self-financing more than male candidates do. Cases included all major party candidates running in the 2012 U.S. House general elections. For the Louisiana districts I included only the candidates who earned the highest and second highest percentage of the vote, since more than two candidates are permitted to run in the Louisiana general elections. My sample included 785 cases, 626 males and 159 females. While my original dataset includes separate variables for candidate contributions and candidate loans, for the purposes of this analysis these were combined into two variables, "self-financing absolute amount" and "self-financing percent of total receipts." Once again, I ran a comparison of means and t-test on this data.

The results of my data analysis show that counter to my hypothesis, males actually self-financed more than females in absolute dollars and as a percentage of total receipts. The mean amount self-financed by males in the 2012 election cycle was \$61,929, the mean amount self-financed by females was \$52,469. As a percentage of their total campaign contributions, males self-financed a mean of 9.04% compared to 7.8% for females. However, the difference in the mean absolute amounts is not statistically significant ($p=.695$), and neither is the difference in the percent of total receipts ($p=.473$).

After finding no significant differences in the mean percentages of total receipts and absolute amounts that male and female candidates self-finance, I created a new variable by multiplying the percentage and absolute values of self-financing for each case. This new variable was created in an attempt to minimize the effects of two types of candidates: those who raise a small amount of total receipts but self-finance a large portion of their receipts, and those who raise a large amount of total receipts and self-finance a small percentage (but large raw amount) of their total receipts. I performed a comparison of means and t-test for this new variable. The mean value for males is \$3,020,684 versus \$2,106,379 for females. The difference between these values is not statistically significant ($p=.558$), reaffirming the conclusion that male and female candidates do not differ in their reliance on self-financing.

Suspecting that candidate status may influence a candidate's likelihood of self-financing more than gender does, I ran a regression with candidate status as the independent variable and self-financing as a percent of total campaign receipts as the dependent variable. I held out "incumbents" as the comparison variable for the regression. I removed one case from the dataset that had a candidate status of "open seat/unopposed" in order to make it possible to run the test.

Regression: Candidate Status and Total Campaign Receipts

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.422 ^a	.178	.174	17.64953	1.967

a. Predictors: (Constant), I/I, I/Unopposed, Open, Challenger

b. Dependent Variable: Self-Financing Percent of Total Receipts

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52473.903	4	13118.476	42.113	.000 ^b
	Residual	242663.086	779	311.506		
	Total	295136.989	783			

a. Dependent Variable: Self-Financing Percent of Total Receipts

b. Predictors: (Constant), I/I, I/Unopposed, Open, Challenger

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.504	.966		.522	.602
1 Challenger	17.933	1.414	.447	12.682	.000
Open	10.389	1.908	.189	5.444	.000
I/Unopposed	1.514	3.221	.016	.470	.638
I/I	2.396	5.664	.014	.423	.672

a. Dependent Variable: Self-Financing Percent of Total Receipts

The results of this regression show that candidate status is a good predictor of the percent of total funds a candidate will self-finance. Challengers self-financed 17.933% more of their total receipts than incumbents did, and open seat candidates self-financed 10.389% more of their total receipts than incumbents did. The difference between the percentage incumbents and challengers self-financed is statistically significant ($p=.000$), so is the difference between the percentage that incumbents and open seat candidates self-financed ($p=.000$). While the sample sizes for challengers ($N=292$), incumbents ($N=334$), and open seats candidates ($N=115$) are moderate, it is important to note that the sample sizes for unopposed incumbents ($N=33$) and incumbents running against incumbents ($N=10$) are quite small, so it would not be sensible to draw conclusions about these two categories based on this test. Even so, the percentage difference with incumbents is extremely small. These results are consistent with Steen's (2006) conclusion that challengers and open seat candidates self-finance more than incumbents.

My final hypothesis is that male candidates who self-finance capture a higher percentage of the vote than female candidates who self-finance. My theory behind this hypothesis is that, since self-financing is equated with electoral failure (Alexander, 2005; Boatright, 2009; Currinder, 2008; Steen, 2006), if females rely on self-financing as a larger portion of their total receipts than males they will be less successful than male self-financers at the polls. The analysis of hypothesis three clearly indicates that females do not rely on self-financing more than male

candidates. In fact, although not statistically significant, males self-finance more in absolute dollars and as a percent of total receipts. Although these results seem to undercut the fourth hypothesis, it is still possible that self-financing could affect vote totals differently for male and female candidates.

To test this hypothesis I selected high self-financers. I first ran a frequency of the “self-financing” variable. Out of 785 candidates included in the dataset, 460 self-financed less than .1% of their total receipts. I cut the remaining candidates in half, splitting them into “low self-financers” (.1%-9.5%) and “high self-financers” (9.51%-highest value). Considering only the high self-financers, I regressed the percent of the vote received in the general election on the percent of total receipts self-financed, comparing women to men. The results of this regression show that women who self-finance more than 9.5% of their total receipts earn a slightly higher percent of the vote than men (40.056% compared to 38.999%), but this difference is not statistically significant.

Regression: Self-Financing and Percent of the General Election Vote Received

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	Self-Financers Percent = 1.00 (Selected)			
1	.034 ^a	.001	-.005	12.49879

a. Predictors: (Constant), Women Self-Financers Percent

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.759	1	28.759	.184	.668 ^c
	Residual	25151.384	161	156.220		
	Total	25180.143	162			

a. Dependent Variable: Percent of Vote Received

b. Selecting only cases for which Self-Financers Percent = 1.00

c. Predictors: (Constant), Women Self-Financers Percent

Coefficients ^{a,b}						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.999	1.092		35.713	.000
	Women Self-Financers Percent	1.057	2.465	.034	.429	.668

a. Dependent Variable: Percent of Vote Received

b. Selecting only cases for which Self-Financers Percent = 1.00

To determine whether or not this conclusion holds true when considering raw dollars self-financed instead of the percent of total receipts, I ran a frequency of absolute dollar amount self-financed. Once again I split the data into three groups, those who did not self-finance at all, those who self-financed less than \$16,939, and candidates who self-financed \$16,939 or more. Only testing the “high self-financing” group, I regressed the percent of the vote earned on dollars self-financed for women compared to men. Once again, the difference between the votes male and female high self-financers received is not statistically significant. Women received 45.915% of the vote compared to men’s 46.706%.

In order to definitively conclude that self-financing does not affect electoral success differently for male and female candidates, I ran three final regressions on the combined percent of receipts and raw dollars variable. Separating this combined variable data into “non-self-financers,” “low self-financers,” and “high self-financers” I regressed the percent of the vote received on each level of self-financing separately, comparing women and men. The differences in the percent of the vote received for males compared to females in each of the three categories were not statistically significant. In conclusion, I can reject both hypotheses three and four. Female candidates do not rely on self-financing more than male candidates, and females who do self-finance do not fare worse at the polls than males who self-finance. This is good news for women interested in running for office. Because self-financers are often less viable candidates and not as successful at fundraising (Alexander, 2005; Steen, 2006), the fact that women are not

relying on self-financing more than men is a promising sign. It demonstrates that women are just as viable and can be just as successful at fundraising as their male counterparts.

Conclusion

The purpose of this research was to determine whether women's continued underrepresentation can be partially explained by campaign financing disadvantages. While there is a consensus among previous research that women are not at a financial disadvantage compared to men (Adams & Schreiber 2011; Burrell, 1994 as cited by Burrell, 2003; Schlozman & Uhlaner, 1986) and are sometimes at an advantage in financing their campaigns (Burrell, 2003; Crespin & Dietz, 2010; Francia, 2001; Ingalls & Arrington, 1991), differences in males' and females' net worth and self-financing had not yet been explored.

This research establishes a strong base for further comparisons of net worth and self-financing between males and females. It was determined that the difference in the mean net worth of male and female members of Congress in 2012 is not statistically significant, although men are wealthier than women. To explore this in more depth, future research could aim to compare the net worth of male and female members of Congress over the course of several sessions. This would make it possible to see whether or not the gap between the net worth of male and female members has expanded or contracted. Alternatively, the net worth of all male and female general election candidates for the U.S. House, rather than just members, could be studied. It is possible that the net worth of male and female members does not differ significantly because they have already passed the election hurdle, but that it does differ for candidates running in primaries and general elections. I did not expand my sample to include all candidates in this research because net worth data was not available for all candidates, only for those who won their election. It is possible to calculate net worth for all candidates based on their financial disclosure reports, but based on the test cases I coded it would be very time consuming to do so.

Arguably the most interesting result of this research is that, consistent with my second hypothesis, personal wealth is positively correlated with the amount of campaign receipts a candidate can collect. When outliers are removed this holds true for all members combined as well as when members are split according to gender. Steen (2006) concluded that personal wealth does not give self-financers an advantage, because spending large amounts of their own

money typically has negative consequences. However, the results of my research suggest that wealthy candidates may have an advantage in raising campaign funds. Considering that the candidate with the largest war chest tends to win the election (Currinder, 2008; Jacobson, 1987 as cited by Burrell, 2003), and wealthier candidates are able to raise more campaign funds than less wealthy candidates, those with more personal money may have an advantage. Although this theory cannot be tested with my dataset because net worth was only included for winning candidates, it does provide an opportunity for future research. The relationships between the net worth of all candidates, both successful and unsuccessful, the amount of total campaign receipts collected, and the percent of the vote received, could be analyzed to determine whether this theory is accurate.

While my third hypothesis stated that female candidates rely on self-financing more than male candidates, my analysis reveals that this is not the case. Male candidates actually self-finance larger raw dollar amounts than females and rely on self-financing as a larger percentage of their total campaign funds. However, these gender differences are not statistically significant. This is good news for potential female candidates, as it likely means that women are able to fundraise successfully and do not need to rely on their own funds in order to be competitive. For those females who do choose to self-finance, they do not experience different success rates than men who self-finance. According to Steen (2006), a large number of self-financing candidates do not make it past the primaries. Future research could compare the self-financing patterns of male and female primary election candidates and how male and female primary candidates fare in the primary elections. Although there do not appear to be any differences in self-financing between males and females in the general elections, there may be significant differences at the primary level.

These results fit with the consensus provided by previous research that women do not appear to be at a significant campaign fundraising disadvantage. If this is the case, why do women remain underrepresented in Congress? Fox and Lawless (2004) suggest that not enough women are running. After creating the Citizen Political Ambition Study and analyzing its results, they concluded that eligible female candidates are less likely to think about running and to take concrete steps toward starting a campaign (Fox & Lawless, 2004). Additionally, females see themselves as less qualified for office than men do and fewer women than men are encouraged to

run for office by a political figure (Fox and Lawless, 2004). The results of this study led Fox and Lawless (2004) to conclude that women remain underrepresented because of a difference in what they refer to as “political ambition.” Other scholars have similarly concluded that not enough women are running for office (Adams and Schreiber, 2011; Burrell, 2005) which seems to be a strong explanation for why women remain underrepresented. How can this ambition hurdle be overcome? I agree with Schlozman and Uhlener (1986) that women who believe they will struggle to fundraise will refrain from running. Unfortunately, I also agree with Burrell’s (2003) assessment that it is a widespread belief that women are at a campaign financing disadvantage. In order to change this notion and prompt more women to run for public office, the research that strikes down this popular view must be widely publicized.

References

- Adams, B.E., & Schreiber, R. (2011). Gender, campaign finance, and electoral success in municipal elections. *Journal Of Urban Affairs*, 33(1), 83-97. doi:10.1111/j.1467-9906.2010.00508.x
- Alexander, B. (2005). Good money and bad money: Do funding sources affect electoral outcomes? *Political Research Quarterly*, 58(2), 353-358. Retrieved from <http://search.proquest.com/docview/60173724?accountid=14593>
- Baker, A. (2006). Reexamining the gender implications of campaign finance reform: how higher ceilings on individual donations disproportionately impact female candidates. *Modern American*, 2(3), 18-23.
- Bauer, N. M. (2013). Rethinking stereotype reliance. *Politics and the Life Sciences*, 32(1), 22-42. doi:http://dx.doi.org/10.2990/32_1_22
- Boatright, R.G. (2009). Financing the 2008 elections. In S. E. Schier & J. Box-Steffensmeier (Eds.), *The election of 2008* (pp. 137-160). Lanham, MD: Rowman and Littlefield.
- Bryner, S. & Weber, D. (2013, September 26). *Sex, money, and politics: a center for responsive politics report on women as donors and candidates*. Retrieved from https://www.opensecrets.org/downloads/CRP_Gender_Report_2013.pdf
- Burrell, B. (1994). *A women's place is in the house: Campaigning for congress in the feminist era*. Ann Arbor: University of Michigan Press.
- Burrell, B. (2003). Money and women's candidacies for public office. In S.J. Carroll (Ed.), *Women and american politics* (pp.72-86). New York: Oxford University Press Inc.
- Burrell, B. (2005). Campaign financing: Women's experience in the modern era. In S. Thomas & C. Wilcox (Eds.), *Women and elective office: Past, present, and future* (pp.26-40). Cary, NC: Oxford University Press.
- Center for American Women and Politics (CAWP), Eagleton Institute of Politics, Rutgers University. (2014, January). *Fact sheet: women in the U.S. congress 2014*. Retrieved from http://www.cawp.rutgers.edu/fast_facts/levels_of_office/documents/cong.pdf
- Crespin, M. H., & Deitz, J. L. (2010). If you can't join 'em, beat 'em: The gender gap in individual donations to congressional candidates. *Political Research Quarterly*, 63(3), 581-593. doi:<http://dx.doi.org/10.1177/1065912909333131>
- Currinder, M. (2008). Campaign finance: Fundraising and spending in the 2008 elections. In M. Nelson (ed.), *The elections of 2008* (pp. 163-186). Washington, DC: CQ Press.
- Fox, R. L., & Lawless, J. L. (2004). Entering the arena? gender and the decision to run for office. *American Journal of Political Science*, 48(2), 264-280. Retrieved from <http://search.proquest.com/docview/60661538?accountid=14593>

- Francia, P. L. (2001). Early fundraising by nonincumbent female congressional candidates: The importance of women's PACs. *Women & Politics*, 23(1-2), 7-20. Retrieved from <http://search.proquest.com/docview/60616676?accountid=14593>
- Gerrity, J. C., Osborn, T., & Mendez, J. M. (2007). Women and representation: A different view of the district? *Politics & Gender*, 3(2), 179-200. doi:<http://dx.doi.org/10.1017/S1743923X07000025>
- Ingalls, G. L., & Arrington, T. S. (1991). The role of gender in local campaign financing: The case of charlotte, north carolina. *Women and Politics*, 11(2), 61. Retrieved from <http://search.proquest.com/docview/61209340?accountid=14593>
- Jenkins, S. (2007). A woman's work is never done? fund-raising perception and effort among female state legislative candidates. *Political Research Quarterly*, 60(2), 230-239. doi:<http://dx.doi.org/10.1177/1065912907301682>
- Schlozman, K. L., & Uhlaner, C. J. (1986). Candidate gender and congressional campaign receipts. *Journal of Politics*, 48(1), 30. Retrieved from <http://search.proquest.com/docview/60755646?accountid=14593>
- Sides, J., Shaw, D., Grossmann, M., & Lipsitz, K. (2013). *Campaigns & elections: Rules, reality, strategy, choice* (2012 election update ed.). New York: W.W. Norton.
- Steen, J. A. (2006). *Self-financed candidates in congressional elections*. Michigan: University of Michigan Press.

Appendix A: Data Sources

- Cable News Network Inc. (2012). *U.S. House District Race-2012 Election Center*. Retrieved from <http://www.cnn.com/election/2012/results/race/house>
- Center for American Women and Politics (CAWP), Eagleton Institute of Politics, Rutgers University. (n.d.) *Women congressional and statewide elected executive candidates 2012*. Retrieved from http://www.cawp.rutgers.edu/fast_facts/elections/candidates_2012.php
- Center for Responsive Politics. *Net Worth, 2012*. (n.d.) Retrieved from <https://www.opensecrets.org/pfds/overview.php?type=W&year=2012>
- Federal Election Commission. *Candidate and Committee Viewer*. (n.d.). Retrieved from http://www.fec.gov/finance/disclosure/candcmte_info.shtml
- Federal Election Commission. *Official Election Results for United States House of Representatives*. (n.d.). Retrieved from <http://www.fec.gov/pubrec/fe2012/federalelections2012.shtml>
- United States Census Bureau. (n.d.). *Census regions and divisions of the united states*. Retrieved from https://www.census.gov/geo/maps-data/maps/pdfs/reference/us_regdiv.pdf