Are All Amateurs Equal? Candidate Quality in the 1992-1998 House Elections

Stephen C. Roberds
Southern Utah University

Jason M. Roberts
Washington University in Saint Louis

An analysis of U.S. House elections is undertaken for the years 1992-98. Building upon the work of Canon (1990 and 1993), we look at the performance of amateur candidates who defeat at least one quality candidate in the party primary. We find that these "competitive amateurs," as we call them, are comparable to quality candidates in terms of strategic behavior, fundraising, competitiveness, and electoral success. These results hold for both incumbent and open seat races. The results in many ways replicate Canon's earlier analysis despite a more stringent coding scheme. We present evidence that suggests candidate occupation could be a possible explanation for the success of these candidates. The analyses suggest that the class of candidates we call competitive amateurs should be coded as quality candidates in future congressional research.

The study of congressional elections has flourished in recent years. Many authors have focused on why individuals choose to run for Congress (Rohde 1979; Stone and Maisel 1998; Maisel, Stone, and Maestas 2001); others have explored various facets of the incumbency advantage in Congressional elections (Jacobson and Kernell 1981; Jacobson 2001; Gelman and King 1990); and a variety of attempts have been made to explain the role of campaign spending (Jacobson 1978 and 1980; Green and Krasno 1988; Erikson and Palfrey 1998 and 2000). An important body of literature has emerged that deals with candidate quality in congressional elections. In this age of candidate-centered campaigns, the individual candidates and their actions have become the most crucial factor in campaigns and elections.

Building on the seminal works on ambition theory (Schlesinger 1966; Rohde 1979), Jacobson and Kernell (1981) demonstrated that challenger quality is an important variable to help explain the outcome of congressional elections. They introduced a simple dichotomy of congressional challengers, defining them as either quality challengers—those with previous elective

office experience, or amateurs—those without previous elective office experience. Other scholars have sought to reconceptualize and improve on this categorization of congressional challengers. Green and Krasno (1988) introduced a point system based on previous offices the candidates' held, the prestige of the office, as well as the candidates' celebrity status. Others have focused on the type of previous office held by the challenger (Bond, Covington, and Fleisher 1985) and the office held in relation to the size of the constituency represented (Squire 1991). Despite the various conceptualizations of what constitutes a quality challenger, one constant theme running through the literature is that quality candidates enjoy more success in congressional elections than do amateurs.[1]

Yet understanding amateur candidates is important, as the overwhelming majority of congressional candidates lack previous elective office experience. While much has been written concerning what constitutes a quality challenger and a challenger's general election success, a dearth of systematic analyses of amateur candidates exists. Canon's (1990 and 1993) work is a notable exception, providing an in-depth analysis of political amateurs in the twentieth century. Canon separated amateurs into three categories: hopeless candidates running without expecting to win, ambitious candidates seriously seeking office, and policy candidates who run their campaigns on specific issues. The analysis focuses on a subset, Canon's "ambitious amateur," defined as a candidate who is either a celebrity, a repeat challenger who received 40 percent of the vote in the previous general election, or a candidate who defeats at least one quality candidate in the primary. In responding to an argument presented by Banks and Kiewiet (1989), Canon (1993, 1125) notes that this category of amateurs enjoys a much higher rate of success in the general election than do other amateurs. Citing data from 1972-88, Canon points out that ambitious amateurs are as successful as quality candidates. The findings he presents suggest that although less than five percent of political amateurs ever win a general election, one distinct category, made up of those we call competitive amateurs, wins close to 20 percent of races, a rate that is equivalent to the success enjoyed by quality candidates. We find Canon's results to be intriguing and worthy of further analysis. In this paper, we seek to replicate these findings and explore possible reasons why these amateurs are successful. This study will help us further define what constitutes a quality candidate and help us to make distinctions among the large pool of amateurs who seek office every two years.

Of the three types of amateurs that Canon codes as ambitious, repeat challengers and celebrities have been examined independently in the literature.

Much has been written about the success of celebrity candidates (Krasno and Green 1988; Green and Krasno 1988; Abramowitz 1991). Most of these authors find that celebrity candidates such as actors, professional athletes, national heroes, and in some cases astronauts perform at levels comparable to quality candidates and should be coded as such. Examples of successful celebrity candidates abound, such as former astronaut and Senator John Glenn of Ohio, National Basketball Association star and Senator Bill Bradley in New Jersey, as well as former football players Representatives J. C. Watts and Steve Largent from Oklahoma.[2] A more current example is Senator Hillary Rodham Clinton of New York. Mrs. Clinton had never held elective office, yet few would doubt her status as a "quality" candidate based on her celebrity status as First Lady. If one did not include celebrities as quality candidates, Hillary Rodham Clinton would be treated as any other former lawyer seeking office. Clearly her candidacy differed from other candidates who had never held elective office, as Abramowitz and Segal (1986) note: "A famous athlete, entertainer, astronaut, or military hero will begin the campaign with greater public recognition and will probably receive more extensive and favorable media coverage than a candidate who is not a celebrity" (107).

Mack (1998) explores the success of repeat challengers in congressional elections and finds mixed results. In non-marginal seats, which are defined as seats where the incumbent received more than 60 percent of the vote in the previous election, Mack finds that repeat challengers actually have less success—defined as fund raising and vote share—in their second attempt at office. In marginal seats his analysis suggests that repeat challengers enjoy more success in their second challenge. He notes that this success is largely a "moral victory" (334) in that repeat challengers may garner a larger percentage of the vote, yet they are rarely able to unseat the incumbent. Further, he notes that while repeat status can help a challenger, it has considerably less value than previous political experience. Based on Mack's analysis, we coded repeat challengers as amateurs unless they possessed previous electoral experience or defeated an experienced candidate in the primary.

This leaves us with the category of candidates who attain "ambitious" status by defeating a quality candidate in the primary. We find these to be the most intriguing of Canon's (1990) ambitious amateurs and the class that has gone unexamined in the political science literature. These candidates, who we call competitive amateurs, are unique in that they cannot be identified prior to the election cycle. Unlike celebrity and repeat challengers, competitive amateurs do not necessarily have high name recognition, nor do they have a

campaign organization or donor list from a previous elective office attempt. It would seem that these amateurs start with a comparative disadvantage to the other categories of ambitious amateurs.

We examine the behavior and success of competitive amateurs to see if they behave like quality candidates in terms of vote getting, strategic behavior, and fundraising. We also look at incumbents' reactions to this class of candidates, theorizing that if incumbents recognize a serious threat from these candidates and behave accordingly, i.e. by increasing their campaign spending, then perhaps these amateurs should be coded as quality candidates in the future. Finally, we will try to determine what it is about these candidates that would make them more successful. Competitive amateurs lack previous elective experience and celebrity status, both of which have been shown to be positive indicators of general election success. If these candidates are able to enjoy a level of success comparable with quality candidates despite these disadvantages, then factors exist, as yet unidentified, that can help explain general election success.

Data and Methods

The data for this analysis are drawn from U.S. House elections for the years 1992-98. Using various issues of *Congressional Quarterly Weekly Report* and *Politics in America*, as well as expenditure data from the Federal Election Commission, we compiled statistics for all House elections in this time period to help us understand the performance and behavior of competitive amateurs.

The main focus of this research is the variable candidate quality. For the analysis, we coded candidate quality as a variable with three categories: quality candidates, competitive amateurs, and pure amateurs.[3] We hypothesize that competitive amateurs will gain more votes than pure amateurs and illustrate similarity to quality candidates. Whatever skills and traits these candidates possess that lead them to defeat a quality candidate in the primary should help reduce the incumbent vote in the general election.

Incumbent expenditures and *Challenger expenditures* are measured as the amount reported in 1992 constant dollars. Expenditures are logged in the two-stage least squares regression model in order to account for the non-linearity of the relationship. We measured *Checks* as a dichotomous variable. Incumbents with 100 or more reported bad checks in the House Bank scandal were coded as one, with others coded as zero. We chose 100 as the dividing line based on research that indicated that that number was of crucial significance in the 1992 elections (Jacobson and Dimock 1994). We

expect that the worst offenders in the Bank Scandal—100 or more kited checks—will suffer vote loss in the election.[4]

District partisanship is a measure of the strength of the partisanship of a district. We calculated the average two-party vote for Bill Clinton's 1992 and 1996 elections in each House district. We used presidential vote as a surrogate for partisanship based on previous research by Abramowitz (1991) suggesting that this is a good approximation of the normal vote. We expect that district partisanship will help the candidate who possesses the advantage in the district. *Incumbent prior vote* is measured as the proportion of the two-party vote received by the incumbent in the previous election. We also expect that the prior vote will be positively related to the current incumbent vote.

Findings

For the years 1992-98 a challenger was present in 1,322 incumbent races. Of these 1,322 challengers, 75 percent, or 996, were coded as pure amateurs. Twenty-one percent, or 278 of them, either had previous electoral experience or had attained celebrity status; and four percent, or 48, came from the category we call competitive amateurs.

In assessing the behavior and performance of candidates running for election to the U.S. House, it is important to look at their ability to raise and spend campaign funds. A substantial body of literature (Jacobson 1978 and 1980; Green and Krasno 1988; Erikson and Palfrey 1998 and 2000) has demonstrated that money is crucial to any candidate seeking election to the House, regardless of the quality of the candidate. While the role of incumbent spending in congressional elections has led to vigorous debate (Green and Krasno 1988; 1990; Jacobson 1990), little doubt exists that campaign spending is crucial to challengers. Jacobson (2001) makes this point when he writes, "[r]egardless of their potential, if challengers cannot raise lots of money, they can forget about winning" (42). Table 1 presents spending data for each of the categories of challengers in this study. Competitive amateurs and quality challengers are comparable in the amount of money spent, with pure amateurs spending significantly less, even when we control for primary competitiveness. Table 1 also presents incumbent spending by challenger quality. These data suggest that incumbents react to competitive amateurs and quality challengers similarly in regards to expenditures, spending in excess of $700,000 for each category, while spending just over $500,000 against pure amateurs.

Table 1. Descriptive Statistics by Challenger Quality

	Pure Amateur (996)	Competitive Amateur (48)	Quality Challenger (278)
Mean Challenger Expenditure	$147,693	$403,806	$394,164
Mean Incumbent Expenditure	$528,634	$723,241	$779,694
Mean Incumbent Vote	66.8%	56.3%	57.9%
Mean Incumbent Previous Vote	68.1%	62.5%	60.9%
Percent Primary Spending in Competitive Primary[5]	9.5%	13.8%	11.8%

These data suggest that competitive amateurs are able to raise the funds necessary to present a vigorous challenge to an incumbent, and it also appears that incumbents recognize the seriousness of the challenge and respond with increased campaign spending. We are unable to determine if incumbents are responding merely to increased challenger spending, or if they recognize the "quality" aspects of competitive amateurs, yet it is clear that incumbents do recognize and react to competitive amateurs in a way that suggests that they recognize the seriousness of the challenge.

The mean expenditure data reveal that competitive amateurs actually outspend quality challengers—$404,264 versus $394,164 respectively. This finding could help explain any increased level of success that this category of amateurs might enjoy. It is important to note, however, that candidates in this class of amateurs must have defeated an experienced candidate in the primary in order to attain "competitive" status which could artificially inflate their spending totals. While Federal Election Commission data broken down into primary and general election spending are not readily available, Ezra (1996 and 2000) provides a comprehensive measure of primary spending for the 1994 election cycle. Ezra's estimate was compiled by sorting all spending on voter contact into before and after primary categories and then using the pre-primary voter contact spending as the primary spending estimate.[6] While Ezra's data does not cover the entire time period of our analysis, it does allow us to compare general election expenditures for all candidates in one year, which should provide us a reasonable snapshot of spending patterns in

the entire time period. Table 1 reveals that the estimated percent of total spending that was expended in a competitive primary is comparable across all three types of challengers. While competitive amateurs spend a slightly higher percentage of their total funds in the primary—13.8 percent as compared to11.8 percent for quality challengers, this seemingly demonstrates that very little of the spending advantage enjoyed by competitive amateurs over pure amateurs is an artifact of primary spending. Furthermore, these data suggest that levels of primary as well as general election expenditures are comparable for competitive amateurs and quality challengers.

Money is important in elections because it allows for vigorous campaigning and large media buys. In order to defeat an incumbent, a challenger must sell him- or herself to the voting public. While it can be reasonably assumed that money is a necessary condition for electoral success, it is far from a sufficient condition. For this reason mean incumbent vote percentage was assessed for all three categories of challengers. Table 1 presents these results, which are consistent with the expenditure findings. Competitive amateurs hold incumbents to a 56 percent vote share, while incumbents are able to attain an average of 67 percent against pure amateurs. Again, competitive amateurs perform slightly better than quality challengers—56 percent versus 58 percent respectively—which suggests that competitive amateurs behave much more like quality challengers than pure amateurs. A review of the mean incumbent previous vote reveals some evidence of strategic behavior on the part of competitive amateurs. Jacobson and Kernell (1981) point out that the highest quality challengers run against incumbents who they perceive to be weak or vulnerable. The previous vote percentage is a readily available measure of perceived incumbent vulnerability. Table 1 demonstrates that the three types of challengers behave strategically, with pure amateurs running against the strongest incumbents. Whereas the mean previous incumbent vote for those facing pure amateurs is 68 percent, competitive and quality challengers emerge when the mean incumbent vote is 63 percent and 61 percent respectively. While these results demonstrate that competitive amateurs are indeed competitive in terms of fundraising and vote percentages, the true measure of candidates is whether or not they are able to win an election. Table 2 presents a simple chi-square table of incumbent reelection by challenger quality. These results are striking, with competitive amateurs winning 20.8 percent of races against incumbents as compared to 14.8 percent for quality challengers and a mere 2.8 percent for pure amateurs. The results in Table 2 provide strong support for the hypothesis that competitive amateurs are indeed different from other amateurs.

Table 2. Incumbent Reelection by Challenger Quality

	Pure Amateur (996)	Competitive Amateur (48)	Quality Challenger (278)
Incumbent Defeated	2.8%	20.8%	14.8%
Incumbent Reelected	97.2%	79.2%	85.2%

Chi^2 (2) = 74.69, Prob. < .0001

They win elections at ten times the rate of other amateurs and defeat incumbents at four times the rate of all candidates.

For a more stringent test of our hypothesis, we turn to a multiple regression model of congressional elections. Table 3 presents results of our two-stage least squares model with incumbent percentage of the two-party vote as the dependent variable.[7] Variables that are included are ones typically found in congressional election models such as the incumbent's previous vote, district partisanship, incumbent and challenger spending,[8] and variable "checks" to help capture the influence of the House bank scandal (Jacobson and Dimock 1994). Dummy variables are also included for each year and challenger party, using Democratic challengers in 1992 as the baseline year and pure amateur as the baseline for challenger quality.

The variables in this model perform as expected; challenger spending has a negative and statistically significant effect on the incumbent's vote percentage. [9] The candidate quality variables each have negative coefficients and reach conventional levels of statistical significance. The coefficient for competitive amateurs is -3.91, which suggests that on average the presence of a competitive amateur reduces the incumbent vote by close to four percent. This coefficient is comparable to the coefficient for quality candidates, which is -2.39. Incumbents did exceedingly well against Democratic challengers in 1994 and against Republican challengers in 1996 and 1998. These findings support our hypothesis that competitive amateurs are indeed more like quality challengers, even when controlling for other variables that are known to affect congressional election outcomes.

Table 3. 2SLS Model with Incumbent Percentage of Two Party Vote the Dependent Variable

	Coefficient (Standard Error)	P-Value
Competitive Amateur	-3.91 (.90)	<0.001
Quality Challenger	-2.39 (.45)	<0.001
Incumbent Previous Vote	.20 (.015)	<0.001
Incumbent Expenditures	.25 (.51)	0.63
Challenger Expenditures	-2.38 (.11)	<0.001
District Partisanship	.034 (.010)	0.001
Checks	-4.54 (1.28)	<0.001
Democratic Challenger 1994	6.36 (.77)	<0.001
Democratic Challenger 1996	.33 (.68)	0.63
Democratic Challenger 1998	1.56 (.73)	0.03
Republican Challenger 1992	.74 (.70)	0.29
Republican Challenger 1994	-1.45 (.70)	0.036
Republican Challenger 1996	5.04 (.74)	<0.001
Republican Challenger 1998	4.02 (.75)	<0.001
Constant	70.46 (6.53)	<0.001

N = 1314
Adjusted R-square = .65
Root MSE = 5.90
F 14, 1287 (173.71) $p < 0.001$

In Table 4 the results of logistic regression with incumbent reelection as the dependent variable are presented. Although the two-stage least squares results suggest that competitive amateurs are successful at reducing the incumbent vote, it is important to see if they are able to decrease the likelihood of the incumbent being reelected. As Mack (1998) notes in his analysis of repeat challengers, reducing the vote of incumbents is important, yet it serves only as a "moral victory" unless the candidate is able to win with a higher probability. The logit model contains the similar predictor variables as the two-stage model, and we find similar results across the two models.[10]

The coefficient for competitive challengers is negative and reaches statistical significance. In fact all variables in this model are in the expected direction, and most reach statistical significance. As Table 4 reveals, the coefficient estimate for competitive challengers has a magnitude similar to

Table 4. Logit Model with Incumbent Reelection as the Dependent Variable

	Coefficient (Standard Error)	P-value
Competitive Challenger	-1.48 (.47)	0.001
Quality Challenger	-1.24 (.30)	<0.001
Incumbent Previous Vote	.060 (.018)	0.001
Incumbent Expenditures	-.00034 (.00032)	0.29
Challenger Expenditures	-.0022 (.00037)	<0.001
District Partisanship	.032 (.020)	0.10
Checks	-2.12 (.73)	0.004
1994	-.64 (.43)	0.19
1996	.25 (.41)	0.54
1998	1.97 (.61)	0.001
Constant	-.99 (1.57)	0.52

N= 1314
Chi^2 (10) 193.41
Prob > Chi^2 = 0.001
Pseudo R-Squared = .33
Log Likelihood = -201.97

the coefficient for quality challengers, which suggests that the presence of either a quality or competitive challenger significantly reduces the likelihood of incumbent reelection when compared to pure amateurs. This model provides further support for our hypothesis that competitive amateurs are as successful as quality challengers.

For incumbent races, the results suggest that competitive amateurs are much better challengers than pure amateurs, and their success at a minimum equals, or in some cases eclipses, that of quality candidates. These results not only reconfirm Canon's (1993) original findings, but also remove the highly successful class of celebrity candidates from his original ambitious amateurs. It is important to note that celebrity candidates have been coded as quality candidates in this study. This not only weakens the field of remaining amateurs, but also strengthens the class of quality candidates. The results suggest that the weakest of Canon's original ambitious amateurs achieve levels of success equal to or even surpassing that of quality candidates and are far superior to other amateurs.

While the main focus of this research is incumbent races, Canon (1993) notes that ambitious candidates enjoy increased levels of success in open

seat races as well. We collected data on the 219 open seat races in this time period in which both major parties fielded a candidate. The same coding system was used to define pure amateurs, competitive amateurs, and quality candidates. Canon (1993) found that the ambitious amateurs he studied were just as likely to win an open seat as an experienced candidate, with ambitious amateurs winning 64.2 percent as compared to 25 percent for other amateurs (1125). These results demonstrate the same relationship, with pure amateurs winning 27 percent of races, competitive amateurs winning 62.7 percent, and quality candidates winning 62.8 percent. Election percentages were also computed by the various pairs of open seat candidates. Competitive amateurs defeated pure amateurs in 96 percent of pairings, while quality candidates defeated pure amateurs in 86 percent of pairings. When competitive amateurs and quality candidates were paired together, quality candidates had a slight advantage, winning 54 percent of these races. These results are an almost exact replication of Canon's results, even though a more stringent coding scheme was used. To take the analysis one step further, we ran a logit model of open seat races with open seat winning party as the dependent variable. Table 5 presents the results of this analysis.[11]

Table 5. Open Seats Logit Model with Open Seat Winning Party as Dependent Variable

	Coefficient (Standard Error)	P-value
Open Seat Previous Party	-.67 (.47)	0.15
District Partisanship	.11 (.03)	<0.001
Democrat Competitive Candidate	1.10 (.77)	0.15
Republican Competitive Candidate	-2.55 (.81)	0.002
Democrat Quality Candidate	1.52 (.57)	0.007
Republican Quality Candidate	-1.19 (.54)	<0.001
Democrat Expenditures	2.99^{-06} (8.54^{-07})	<0.001
Republican Expenditures	-6.67^{-07} (4.39^{-07})	0.13
1994	-1.95 (.59)	0.001
1996	-1.25 (.60)	0.036
1998	-1.48 (.72)	0.04
Constant	-6.04 (1.79)	0.001
N= 187		
Chi^2 (11) = 113.84		
Prob. > Chi^2 0.0001		
Pseudo R-Square = .44		
Log Likelihood –72.06		

The results in Table 5 lend further credibility to our hypothesis; all of the variables are in the expected direction and most reach statistical significance.[12] One problem with the open seat model is that since all candidates must be broken down by party, the number of competitive candidate cases is severely reduced. This could possibly explain the lack of significance of the Democratic competitive candidates. Table 5 reveals candidate quality, previous party, district partisanship, and size of field and spending to be important predictors of open seat outcomes.

In attempting to gain an understanding of why it is that competitive amateurs are more successful than other amateurs, and at least as successful as quality candidates, we turned to candidate occupation. Research focused on the election rates for each occupation category finds that only about four percent of all pure and competitive amateurs defeat an incumbent. Within each occupation category was some fluctuation, with non-elective office holders being the most successful. Table 6 describes the success rate of candidates by occupation:[13]

Table 6 . Amateur Candidate Success Rate by Occupation

Type of Candidate	Percent Successful	Number of Candidates
Non-Elected Officials	11.11%	(45)
Lawyers	6.36%	(173)
Business/White Collar	3.48%	(431)
Educator	3.12%	(96)
Blue Collar	1.53%	(196)
Other	0%	(47)

These numbers suggest that non-elected officials and lawyers have a much greater chance of defeating an incumbent than do the other categories. Although this variable is nominal, the results suggest that it could possibly be interpreted as an ordinal ranking of candidate occupation.[14]

For the purposes of this project, these numbers are important in respect to how they are distributed by candidate quality. Given that competitive amateurs win at much higher rates than pure amateurs, and that non-elected officials and lawyers are the most successful candidate occupation, we would expect a relationship between the two variables. Some support is found for this theory: eleven percent of competitive amateurs report holding a non-elected office as compared to six percent for pure amateurs, and 24 percent

of competitive amateurs reported a legal occupation as compared to 18 percent for pure amateurs. Also, in one of the least successful occupations—blue collar, less than one percent of competitive amateurs report a blue-collar occupation as compared to 19 percent for pure amateurs. It does appear that competitive amateurs come from more electorally successful occupations than do pure amateurs.

Conclusion

The results from this analysis suggest that competitive amateurs behave very much like quality candidates in terms of vote getting, fundraising, strategic behavior, and, most importantly, electoral success. In both incumbent and open seat races, we find compelling evidence that competitive amateurs are distinctly different from pure amateurs, even when controlling for other variables known to affect congressional election outcomes. The analyses suggest that expenditures, strategic behavior, and candidate occupation are factors that help elevate the success level of these candidates.

Although we cannot explicitly explain why these candidates are more successful, we do think we make a strong case for including competitive amateurs in the class of quality candidates in future congressional election research. Given the 95 percent reelection rate for incumbents, groups such as competitive amateurs who win in excess of 20 percent of their races warrant special attention. Under the standard dichotomous coding scheme, these candidates would not be expected to have high rates of success. The more complex coding scheme put forward by Green and Krasno (1988) would only give competitive amateurs a maximum of four out of a possible nine points, which would still indicate that these candidates should not be expected to attain a high rate of success. The coding scheme we suggest preserves the parsimony of the dichotomous coding scheme while classifying a highly successful class of amateurs as quality candidates. We think this approach provides an improved coding scheme, while being less complex and more feasible than the Green and Krasno approach.

When this research is put into the context of previous research by Mack (1998) on repeat challengers and also by various authors on the success of celebrity candidates, the category of amateurs labeled "ambitious" by Canon (1990 and 1993) has been parsed out and incorporated into the standard dichotomous coding of candidate quality. Perhaps with future research, we will be able to gain a fuller understanding of why competitive amateurs are so successful in order to identify them prior to the election cycle. For the

time being, however, we think these findings will allow scholars of congressional elections to more accurately measure candidate quality and perhaps make better predictions of general election outcomes.

Appendix

We coded *Challenger occupation* as a nominal variable to help gain information about the background of congressional candidates. Candidates were placed in one of six categories based on their reported occupation.[15]

Non-Elected Officials – Includes appointed offices, congressional aides, party chairpersons, and other non-elective offices.

Lawyers – Candidates who reported lawyer, attorney, or litigator as their occupation.

White Collar/Executive/Business – Candidates who reported their occupation to be executives, businesspersons, and other white-collar professional jobs such as chemists or physicians.

Educators – Candidates who reported their occupations as teachers, professors, educators, or in the field of education.

Blue Collar – Candidates who reported their occupations to be in the blue-collar sector. Examples of this include factory workers, truck drivers, farmers, construction workers etc. Candidates from the service sector, i.e. food workers or delivery drivers were included in this category.

Other – This category was used for all candidates who did not fit into one of the above-defined categories, some examples include inmate, unemployed, and activist.

Acknowlegement: The authors would like to thank Darren Kennemer for his help in data collection and coding, Gary C. Jacobson and Marni Ezra for providing their data, and Jamie Carson, Roger Larocca, Douglas Dion, and Rosie Clawson for comments on earlier versions of this article.

Notes

[1] Recent research reveals that this is not a modern day phenomenon. Carson (2001) finds strong support for the Jacobson and Kernell (1981) thesis in the 1938 U.S. House elections. Carson and others (2001) find support for the importance of challenger quality in the House elections of 1862-63.

[2] Watts and Largent were famous football players. Largent is in the National Football League Hall of Fame, and Watts was a quarterback for the University of Oklahoma. Largent is considered one of the greatest wide receivers of all time, and Squire (1995) notes the Watts was known by close to 80 percent of voters in his district based on his exploits as a star quarterback.

[3] Quality candidates are those who have held previous elective office experience or attained celebrity status. Competitive amateurs are candidates who defeated at least one quality candidate in the primary election. Pure amateurs make up the balance of House candidates, including repeat challengers.

[4] This variable is only applicable for the 1992 election cycle.

[5] A competitive primary is one in which the winning candidate received less than 70 percent of the vote. This estimate is only available for 1994 and reports the percent of total spending for preprimary voter contact (see Ezra 1996; 2000).

[6] Ezra codes all money spent on "voter contact" during the primary as primary spending. This includes broadcast media, print media, direct mail, and voter turnout activities. While noting that this estimate could underestimate primary spending, Ezra makes a compelling argument for using this measure instead of other more problematic estimates.

[7] Previous incumbent expenditure is used as an instrument for current incumbent expenditures.

[8] Previous incumbent expenditures are used as an instrument for current incumbent spending in this model due to the simultaneity bias that exists between incumbent spending and incumbent vote share (Jacobson 1978). As a previous reviewer pointed out to us, it is certainly plausible that our estimates of challenger spending could also be affected by this simultaneity problem. However, as Green and Krasno (1988) suggest, challengers do not have access to the same financial resources, as do incumbents, which would lessen their ability to take advantage of changes in their perceived vote share. Further, Green and Krasno (1988, Appendix C) point out the great difficulty of finding relevant instrumental variables for challenger spending, given that only a small minority of challengers are repeat challengers. Given that they find no substantive differences in their model when they attempt to model this simultaneity with regards to challenger spending, we feel safe in modeling challenger spending directly, while attempting to correct for the larger bias in incumbent spending.

[9] Expenditures are logged in this model to account for non-linearity in the relationship.

[10] We were unable to include the 1994 * *challenger party* dummy variables for the logit model because the 1994 * *Democratic challenger* variable perfectly predicts incumbent victory. Hence, even if 1994 * *Democratic challenger* is used as the baseline category, the model is unidentified.

[11] Coded 0 for Republican, 1 for Democrat.

[12] Expected direction is negative for variables dealing with Republican candidates and positive for Democratic candidates. The dependent variable open seat winning party is coded 0 for Republican and 1 for Democrat. Open seat previous party is coded in the same manner.

[13] Percentages are the rate of election for each occupation category; the number in parentheses is the N for each category. The coding scheme for challenger occupation is provided in the appendix.

[14] We estimated models of incumbent vote not-reported, including dummy variables for occupation in addition to the other variables in Table 3 to determine if occupation had an independent effect in addition to challenger quality and within categories of challenger quality. These models suggested

no independent effect for occupation controlling for challenger quality and limited effects with categories of challenger quality. However, we regard these results with caution due to the small N within categories of challenger quality and the high level of multi-collinearity in the full model.

[15] Due to changes in the way *Congressional Quarterly's Weekly Report* covers elections, a considerable number of candidate occupations were unavailable for 1998. These were found using Project Vote Smart where possible, but not all candidate occupations were available. We thank Gary C. Jacobson for sharing his coding information on candidates for 1998.

References

Ambramowitz, Alan I. 1991. "Incumbency, Campaign Spending, and the Decline of Competition in U.S. Elections." *Journal of Politics* 53 (1): 34-56.

Ambramowitz, Alan I., and Jeffrey A. Segal. 1992. *Senate Elections*. Ann Arbor: University of Michigan Press.

____. 1986. "Determinants of the Outcomes of U.S. Senate Elections." *Journal of Politics* 48 (2): 433-39.

Banks, Jeffrey S., and D. Roderick Kiewiet. 1989. "Explaining Patterns of Candidate Competition in Congressional Elections." *American Journal of Political Science* 63 (4): 997-1015.

Bond, Jon R., Cary Covington, and Richard Fleisher. 1985. "Explaining Challenger Quality in Congressional Elections." *Journal of Politics* 47 (2): 510-29.

Canon, David T. 1990. *Actors, Athletes, and Astronauts: Political Amateurs in the United States Congress.* Chicago. University of Chicago Press.

____. 1993. "Sacrificial Lambs or Strategic Politicians? Political Amateurs in U.S. House Elections." *American Journal of Political Science* 37 (4): 1119-41.

Carson, Jamie L. 2001. "Electoral and Partisan Forces in the Roosevelt Era: The U.S. Congressional Elections of 1938." *Congress & the Presidency* 28 (2): 161-83.

Carson, Jamie L., Jeffery A. Jenkins, David W. Rohde, and Mark A. Souva. 2001. "The Impact of National Tides and District-Level Effects on Electoral Outcomes: The U.S. Congressional Elections of 1862-63." *American Journal of Political Science* 45 (4): 887-98.

"Congressional Quarterly Weekly Reports." Washington, D.C.: Congressional Quarterly Press. (various issues).

Erikson, Robert S., and Thomas R. Palfrey. 1998. "Campaign Spending and Incumbency: An Alternative Simultaneous Equations Approach." *Journal of Politics* 60 (2): 355-73.

____. 2000. "Equilibria in Campaign Spending Games." *American Political Science Review* 94 (3): 595-609.

Ezra, Marni. 1996. "The Benefits and Burdens of Congressional Primary Elections." Ph.D. dissertation, American University.

____. 2000. Divisive Primaries, Campaign Resources, and the Outcomes Of House Elections. Paper read at the 2000 Annual Meeting of the American Political Science Association. April 27-30.

Gelman, Andrew, and Gary King. 1990. "Estimating Incumbency Advantage without Bias." *American Journal of Political Science* 34 (4): 1142-64.

Green, Donald Phillip, and Jonathan S. Krasno. 1988. "Salvation for the Spendthrift Incumbent: Reestimating the Effects of Campaign Spending in House Elections." *American Journal of Political Science* 32 (4): 884-907.

____. 1990. "Rebuttal to Jacobson's 'New Evidence for Old Arguments.'" *American Journal of Political Science* 34 (2): 363-72.

Jacobson, Gary C. 1978. "The Effects of Campaign Spending in Congressional Elections." *American Political Science Review* 72 (2): 769-83.

____. 1980. *Money in Congressional Elections.* New Haven: Yale University Press.

____. 1990. "The Effects of Campaign Spending in House Elections: New Evidence for Old Arguments." *American Journal of Political Science* 34 (2): 334-62.

____. 2001. *The Politics of Congressional Elections.* 54th edition. New York: Longman.

Jacobson, Gary C., and Samuel Kernell. 1981. *Strategy and Choice in Congressional Elections.* New Haven: Yale University Press.

Jacobson, Gary C., and Michael Dimock. 1994. "Checking Out: The Effects of Bank Overdrafts on the 1992 House Elections." *American Journal of Political Science*38 (3): 601-24.

Krasno, Jonathan S., and Donald Phillip Green. 1988. "Preempting Quality Challengers in House Elections." *Journal of Politics* 50 (4): 920-36.

Mack, W.R. 1998. "Repeat Challengers: Are They the Best Challengers Around?" *American Politics Quarterly* 26 (3): 308-43.

Maisel, L. Sandy, Walter J. Stone, and Cherie Maestas. 2001. "Quality Challengers to Congressional Incumbents: Can Better Candidates Be Found?" In *Playing Hardball: Campaigning for the U.S. Congress*, edited by Paul S. Herrnson. New Jersey: Prentice-Hall.

Politics in America. Various Years and Issues. Washington, D.C.: Congressional Quarterly Press.

Rohde, David W. 1979. "Risk-Bearing and Progressive Ambition: The Case of Members of the United States House of Representatives." *American Journal of Political Science* 23 (1): 1-26.

Schlesinger, Joseph. 1966. *Ambition and Politics*. Chicago: Rand McNally.

Squire, Peverill. 1991. "Preemptive Fundraising and Challenger Profile in Senate Elections." *Journal of Politics* 53 (4): 1150-64.

____. 1995. "Candidates, Money, and Voters—Assessing the State of Congressional Elections Research." *Political Research Quarterly* 48 (4): 891-917.

Stone, Walter, and L. Sandy Maisel. 1998. "Candidate Emergence in U.S. House Elections." Paper read at the Annual Meeting of the American Political Science Association. September 3-6.