

## Gender Differences in Candidate Reemergence

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### Abstract

Are the women who lose less likely to run for office again than the men who lose? I draw on a dataset of U.S. House candidates from 1980 to 2014 to analyze gender differences in candidate reemergence. I find that women who lose the primary or general election are no less likely to run again than their male counterparts, nor does the relationship between losing and running again differ for male and female candidates. I then use a regression discontinuity design to gain additional leverage on the impact of an electoral loss on candidate reemergence for men and women. I find that losing has a similar effect on the likelihood of running again for male and female candidates. When the analyses are restricted to male-female matchups, gender does not matter much at all for the loser's decision to run again. The findings suggest there is little downside to encouraging more women to run for office.

Paper presented at the 2018 Annual Meeting of the American Political Science Association,  
Boston, MA.

The 2018 election has been widely touted as the next “Year of the Woman.” The number of women seeking congressional office is at an all-time high, with 424 women running for the U.S. House of Representatives and 52 running for the U.S. Senate (CAWP 2018a). These figures well surpass the previous records of 40 female Senate candidates who ran in 2016 and 298 female House candidates who ran in 2012 (CAWP 2018a). Scholars view the dearth of women candidates as the main barrier to gender parity in legislative institutions, and the wave of female candidates comes as overwhelmingly positive news to academics and practitioners alike. But is the surge in women candidates ushered in by the Trump presidency all good news? While the winners have the potential to make a mark on policy, most of the men and women who run for Congress are not elected to office. In fact, nearly 70 percent of the candidates who ran for the U.S. House of Representatives from 1980 to 2014 lost either the primary or the general election.

What is more, female candidates are running in more difficult electoral environments this year than were the women who ran in 1992. Incumbents are typically reelected at rates above 90 percent, and challengers, male and female alike, face long odds in their congressional bids. An article in *Politico* aptly summarized the main hurdle confronting women in the current electoral cycle: “It’s hard to beat an incumbent, period” (Caygle 2018). Indeed, one reason that 1992 witnessed the single biggest gain in the number of women elected to Congress was the large number of open seats that year. Although the number of open seats has slowly ticked up as more and more incumbents have retired, the electoral context is still less favorable this year than it was in 1992, with 59 percent of women running as challengers in 2018 compared to 51 percent of women in 1992 (CAWP 2018b). Scholars have been especially cautious in their assessments of 2018 given the key role of incumbency in American elections.

What role will the women who are not elected to office play in future elections? Are female candidates who lose less likely to run for office again than the men who lose? This paper draws on a dataset of U.S. House candidates who ran between 1980 and 2014 to examine gender differences in candidate reemergence. I find that women who lose the primary or general election are no less likely to run again than their male counterparts, nor does the relationship between a primary or general election loss and the decision to run again differ for men and women. I then use a regression discontinuity design to gain additional leverage on the effect of an electoral loss on candidate reemergence for men and women. I find that losing has a similar impact on the likelihood of running again for male and female candidates. When the analyses are restricted to male-female matchups, gender does not matter much at all for the loser's decision to run again. The findings suggest there is little downside to encouraging more women to seek elected office and that the women who lose are as likely to run again as the men who lose.

### **Women's Underrepresentation and Candidate Reemergence**

There have been two main waves of research on the underrepresentation of women in the American context. In the 1990s, scholars examined whether women faced a more difficult electoral environment than men. Several studies showed that women received as many votes and raised as much money as their male counterparts (i.e., Burrell 1994; Carroll 1994; Darcy et al. 1994; Seltzer et al. 1997). The general conclusion was that “winning elections has nothing to do with the sex of a candidate” (Seltzer et al. 1997, 79).<sup>1</sup> The discovery of a gender-neutral electoral environment shifted the analytical focus away from voters and toward structural and situational factors such as the lack of open seats and the absence of women in the careers that feed into

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<sup>1</sup> Others have suggested that gender-neutral outcomes are not indicative of a gender-neutral electoral environment (i.e., Fulton 2012; Mo 2015; Pearson and McGhee 2013; Sanbonmatsu 2002), but the general trend in the literature has been away from voter biases as the main barrier to gender parity.

politics. The expectation was that as more women worked in the political pipeline professions and as more women ran as incumbents, the number of women in office would increase.

Over the next two decades, more women entered the pipeline professions but the number of women in office stagnated. Political scientists began to look closer at candidate entry, and the second wave of research has been focused in large part on the finding that women are less likely to run for office than men. Leading accounts for why this is the case have shown that women have lower levels of political ambition, are less likely to be recruited by parties and encouraged by family and friends, and are more averse to elections than their male counterparts (Carroll and Sanbonmatsu 2013; Crowder-Meyer 2013; Fox and Lawless 2010; Kanthak and Woon 2015; Lawless and Fox 2010; Niven 1998; Preece and Stoddard 2015; Sanbonmatsu 2006; Schneider et al. 2016). However, it is less clear how applicable these explanations are to the decision to run for office again. The women who would run for an office a second time have already overcome many of the barriers that women face: they are clearly politically ambitious, they have likely been recruited by a party official, and they may have held another office previously.

The subsequent decisions of losing candidates offer a new angle from which to study future prospects for gender parity in legislative institutions as well as the broader implications of the emergence of women candidates. Indeed, many individuals who are elected to office have lost in previous electoral bids. Of the 60 incoming members who entered in the previous 114<sup>th</sup> Congress, 27, or 45 percent, had lost an election and many had lost contests for the same seat they now represent (Gonzalez 2014). Some losers, particularly those who barely miss the mark, are well situated to throw their hats back in the ring. Incumbents often retire in anticipation of a tough reelection battle, or the political environment may change in favor of a previous loser. Losing candidates also gain a wealth of experience on the campaign trail, and they can draw on

the lists of volunteers, donors, and supporters they cultivated during their previous candidacy should they decide to run again in a later cycle.

While scholars agree that the main barrier to women's underrepresentation is the lack of female candidates, it is unclear whether the appeal for more women to run for office has differential long-term consequences for male and female candidates. The wave of women candidates in 2018 has generated significant enthusiasm, but most will not be elected. They may, however, be in the pool of potential players in the next election. As Shepsle (2003, 310) writes, the losers "provide a political dynamic in public life—innovating and strategizing to become winners, on the one hand, and energizing the incumbent winners to anticipate and try to deflect the losers' maneuvers on the other." We know little about whether the women who lose are turned off from politics in a way that men are not. This question has important implications for the strategies that women's organizations and political parties pursue in their attempt to elect women to office. If women are less likely to run again after a loss than their male counterparts, organizations may want to recruit women when they are most likely to be elected. If not, this would dispel the concern that female losers may be less likely to compete again in the future.

## **Data**

I draw on a dataset of candidates who ran for the U.S. House of Representatives from 1980 to 2014 to examine whether the women who lose are less likely to run again than their male counterparts. The dataset includes 25,480 primary candidates and 14,561 general election candidates (Republicans and Democrats). Election results were obtained from the *America Votes* series (Scammon et al. 1990-2006) and the Federal Election Commission (2008-2014). The data were merged with the Database on Ideology, Money in Politics, and Elections (DIME), which includes ideology estimates of the candidates and the amount of money they raised (Bonica

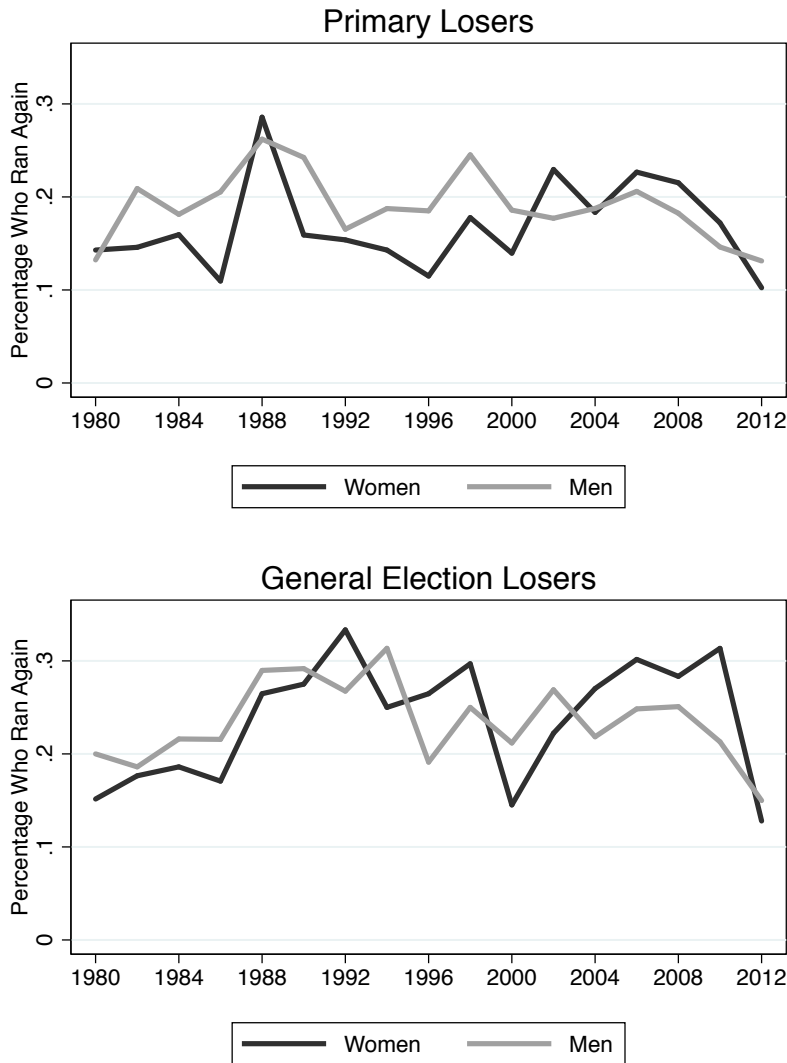
2014). Gender was obtained from the DIME dataset and through additional online and newspaper searches. A total of 3,279 and 1,927 women ran in U.S. House primaries and general elections, respectively, and women comprised 12.9 percent of all primary candidates and 13.2 percent of all general election candidates. The gender breakdown of primary candidates is virtually the same as that in Lawless and Pearson (2008), which provides additional validation.

Figure 1 presents the percentage of male and female primary and general election losers who ran for the U.S. House again from 1980 to 2014. The first noteworthy pattern is that a sizeable number of primary and general election losers run again. Of the 10,272 U.S. House candidates who lost in the primary election from 1980 to 2012, 1,850, or 18.0 percent, ran for Congress again. A larger percentage of general election losers threw their hats into the ring another time. Of the 6,366 candidates who lost in the general election during this time, 1,493, or 23.5 percent, ran again. For the most part, men and women follow a similar trajectory, but there is a small gender difference in rates of reemergence among primary losers: 16.1 percent of women and 18.3 of men ran again (201 women and 1,649 men;  $p < 0.10$ ). This disparity completely vanishes among general election losers: 24.1 percent of women and 23.4 percent of men ran again (230 women and 1,263 men).<sup>2</sup>

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<sup>2</sup> Despite the fact that gender differences in rates of emergence are minimal, the disparity in the number of male and female losers who run again is enormous. The total numbers are provided by year in Tables A1 and A2 in the Appendix. The gender makeup of the pool of eligible candidates has much larger implications for women's representation than on average differences between men and women (King and Thomsen 2018).

**Figure 1: Percentage of Male and Female Losers Who Ran Again (1980-2014)**



Source: Election results are from the *America Votes* series and the Federal Election Commission.

The next section takes a closer look at the relationship between a primary or general election loss and candidate reemergence. There are several ways to examine this empirically, and the data are broken down in multiple ways to provide a more complete picture. I first analyze the association between candidate sex and the decision to run again among only primary and general election losers. The dependent variable is coded 1 if the individual ran for the House again and 0

if she did not. Of the primary election losers who ran again, 70 percent did so in the subsequent election; of the general election losers who ran again, 81 percent did so in the subsequent election. The particular election year is less relevant here, so the losers who ran again at any point are included in the measure of reemergence. I also interact candidate sex with primary and general election loss to test whether the relationship between a primary or general election loss and the decision to run for office again differs for male and female candidates.

I account for other factors that influence the decision to run again as well. I include a dummy variable for whether or not the candidate is an incumbent, as incumbents may be less inclined to run again after suffering from a loss. Candidates who raise more money are expected to have higher rates of reentry as they can more readily turn to past supporters. Contributions were obtained from the DIME dataset and measured as logged values of total campaign receipts (Bonica 2014). I include the margin of defeat, because the candidates who lose by wider margins may be less likely to run again than those who lose in close elections. I control for party and district partisanship, measured as the percentage of the two-party vote share won by the Democratic candidate in the most recent presidential election, and I include state and year fixed effects in all of the models. I also ran the models by party to examine whether any partisan differences emerge in light of previous research showing that Republican women are more likely to run as sacrificial lambs than Democratic women (Carroll 1994).

### **The Decision to Run for the U.S. House Again**

The main concern here is whether women candidates who lose are as likely to run for the U.S. House again as their male counterparts. The sample in Table 1 is limited to U.S. House candidates who lost the primary and general election, which allows for a comparison of male and female losers. The sample in Table 2 includes all U.S. House candidates who ran in the primary



and general election, and candidate sex is interacted with primary and general election loss.<sup>3</sup> These data enable us to analyze whether the relationship between losing and running again differs for male and female candidates. In both tables, Models 1 and 2 include all races, and Model 3 includes races in which the primary or general election loser lost by less than five percentage points because they might be especially well situated to run again. Close losers and winners are both theoretically and empirically useful for the purposes here, and I examine this subset of candidates in more detail in the next section.

The results are consistent across models. In Table 1, we can see that candidate sex is not associated with the decision to run again among primary or general election losers. There is little evidence that female losers are less likely to launch another campaign for the U.S. House than male losers. Similarly, in Table 2, the interaction term is insignificant across models. The relationship between a primary or general election loss and the decision to run again does not appear to differ for male and female candidates. In Tables 1 and 2, the magnitude of the coefficient is substantively larger in close elections, but in none of the models is the relationship between candidate sex and the decision to run again statistically significant or does the relationship between losing and running again differ for male and female candidates. In addition, the partisan models show that these relationships are similar for Republicans and Democrats (see Tables A3-A7 in the Appendix). Thus, there is little evidence that the increased likelihood of Republican women to run as sacrificial lambs has different implications for candidate reentry.<sup>4</sup>

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<sup>3</sup> Like previous research, candidates who are unopposed in the primary or general election are not included in the models (see, for example, Lawless and Pearson 2008).

<sup>4</sup> I also examined whether candidate reemergence differs for men and women by seat type. Women are more likely to run again than men if the seat was open in the full general election models in Table 2 ( $p < 0.05$ ), though the results in Table 1 remain the same. Conversely, in close elections, women are more likely to run again than men if they ran against an incumbent ( $p < 0.10$ ). I will look into this latter result more in future extensions of the RD analysis.

**Table 1: Candidate Reemergence Among Primary and General Election Losers (1980-2014)**

	DV: Ran Again (Primary Election Losers)			DV: Ran Again (General Election Losers)		
	1: All	2: All	3: Close Elections	1: All	2: All	3: Close Elections
Woman	-0.02 (0.01)	-0.02 (0.01)	0.05 (0.05)	0.01 (0.01)	0.02 (0.01)	0.05 (0.07)
Incumbent	—	0.02 (0.04)	-0.03 (0.10)	—	-0.04† (0.02)	-0.11* (0.05)
Margin of Loss	—	-0.00 (0.00)	-0.00 (0.01)	—	-0.04** (0.00)	-0.04* (0.02)
Logged Campaign Receipts	—	-0.00** (0.00)	-0.01 (0.00)	—	-0.01** (0.00)	-0.00 (0.02)
Republican	—	-0.00 (0.01)	-0.01 (0.04)	—	0.05** (0.01)	0.12** (0.05)
Democratic Presidential Vote	—	0.07† (0.04)	-0.09 (0.18)	—	0.08 (0.06)	-0.24 (0.37)
Constant	0.11† (0.06)	0.12† (0.07)	0.18 (0.15)	0.08 (0.08)	0.26** (0.08)	0.92** (0.34)
Observations	10,272	10,142	576	6,366	6,327	486
R-Squared	0.03	0.03	0.15	0.03	0.05	0.17

Note: Entries are OLS regression coefficients with robust standard errors clustered by individual in parentheses. All models include state and year fixed effects. \*\*=p<0.01, \*=p<0.05, †=p<0.10.

**Table 2: Candidate Reemergence with Gender x Lost Election Interaction (1980-2014)**

	DV: Ran Again (Primary Elections)			DV: Ran Again (General Elections)		
	1: All	2: All	3: Close Elections	1: All	2: All	3: Close Elections
Woman	-0.03 (0.02)	-0.00 (0.02)	-0.03 (0.07)	0.02† (0.01)	0.01 (0.01)	-0.04 (0.04)
Lost Election	-0.39** (0.01)	-0.28** (0.01)	-0.22** (0.04)	-0.67** (0.01)	-0.65** (0.01)	-0.35** (0.05)
Woman x Lost Election	0.01 (0.03)	-0.01 (0.02)	0.06 (0.08)	-0.01 (0.02)	-0.00 (0.02)	0.09 (0.07)
Incumbent	—	0.39** (0.01)	0.12† (0.07)	—	-0.10** (0.01)	-0.15** (0.03)
Margin of Loss	—	0.00 (0.00)	-0.00 (0.01)	—	-0.02** (0.00)	-0.03** (0.01)
Logged Campaign Receipts	—	-0.00* (0.00)	-0.00 (0.00)	—	-0.00** (0.00)	0.01† (0.01)
Republican	—	0.01 (0.01)	0.05† (0.03)	—	0.03** (0.01)	0.06* (0.02)
Democratic Presidential Vote	—	0.08* (0.03)	-0.03 (0.14)	—	0.04 (0.03)	-0.18 (0.21)
Constant	0.46** (0.06)	0.29** (0.05)	0.10 (0.15)	0.77** (0.05)	0.82** (0.05)	0.51 (0.49)
Observations	15,722	15,545	1,154	12,728	12,642	971
R-Squared	0.17	0.23	0.11	0.47	0.47	0.35

Note: Entries are OLS regression coefficients with robust standard errors clustered by individual in parentheses. All models include state and year fixed effects. \*\*=p<0.01, \*=p<0.05, †=p<0.10.

The results above suggest that patterns of candidate reemergence are not very different for male and female candidates. The findings are good news for parties and reformers who seek to encourage more women to run for office. However, it is possible that male and female winners and losers differ on a number of unobserved variables that are not accounted for here. In the next section, I narrow the scope of the analysis and analyze the decision to run again among male and female candidates who won or lost in close general elections. I focus on general election competitors as these individuals gain significant campaign experience and are a likely pool of potential candidates in a subsequent cycle.

### **Candidate Reemergence in Close Elections**

In this section, I use a regression discontinuity (RD) design to estimate the degree to which losing the general election affects the decision to run again for male and female candidates. In the American context, the RD framework has increasingly been applied to close elections at both the state and federal level (i.e., Eggers et al. 2015; Fouirnaies and Hall 2014; Hall 2015; Hall and Snyder 2015; Lee 2008). The main empirical benefit of this method is that it leverages the as-if random assignment of the treatment variable, with most samples limited to elections in which candidates win or lose by less than five percentage points. Within the gender and politics literature, RD designs have been used to examine the impact of candidate sex on victory rates, campaign fundraising patterns, and the role model effect (Anastasopoulos 2016; Broockman 2014; Bucchianeri 2017).

The RD framework is not only empirically useful for the reasons noted above, but it is theoretically appropriate for the purposes here as well. One of main drawbacks of RD designs, particularly within the context of gender research, is that the samples are limited to such a small subset of cases that it is difficult to generalize to the population or to broader questions of

interest. In the context of running for office again, however, the pool of close losers might be especially well situated to run again given that they barely missed the mark the first time. Both the party and their supporters are likely to encourage them to do so and be willing to commit resources to a reelection bid. Indeed, we might be particularly interested in the relationship between losing and running again among those who are more likely to be elected to office if they do so. Scholars have given less attention to the theoretical conditions under which RD designs are more and less applicable, but candidate reemergence is a clear area in which they have both theoretical and empirical benefits.

Here I analyze the decision to run again among male and female candidates who barely won or lost the general election. A close loss is likely to have a negative effect on the probability of running again, but we are interested in how these patterns compare for men and women. To examine the relationship between an electoral defeat and candidate reemergence, I run models of the following form for male and female candidates:

$$Y_{it} = \alpha + \beta_1 \text{CandidateLose}_{it} + \beta_2 \text{LossMargin}_{it} + \beta_3 \text{CandidateLose}_{it} * \text{LossMargin}_{it} + \varepsilon_i$$

where  $Y_{it}$  is the candidate's decision to run again, coded 1 if she runs for the U.S. House in a subsequent election and 0 if not.  $\text{CandidateLose}_{it}$  is coded 1 when the candidate loses the general election in district  $i$  at time  $t$  and 0 if she wins. Thus,  $\beta_1$  is the quantity of interest, the RDD estimator for the causal effect of the as-if random assignment of an electoral loss.  $\text{LossMargin}_{it}$  is the other candidate's vote share, or the candidate's margin of defeat. Following recent studies, the equation is estimated with local linear regression at different bandwidths (Anastasopoulos 2016; Bucchianeri 2017; Hall 2015). I also ran the models with the control variables above, but the results do not differ from those shown below.

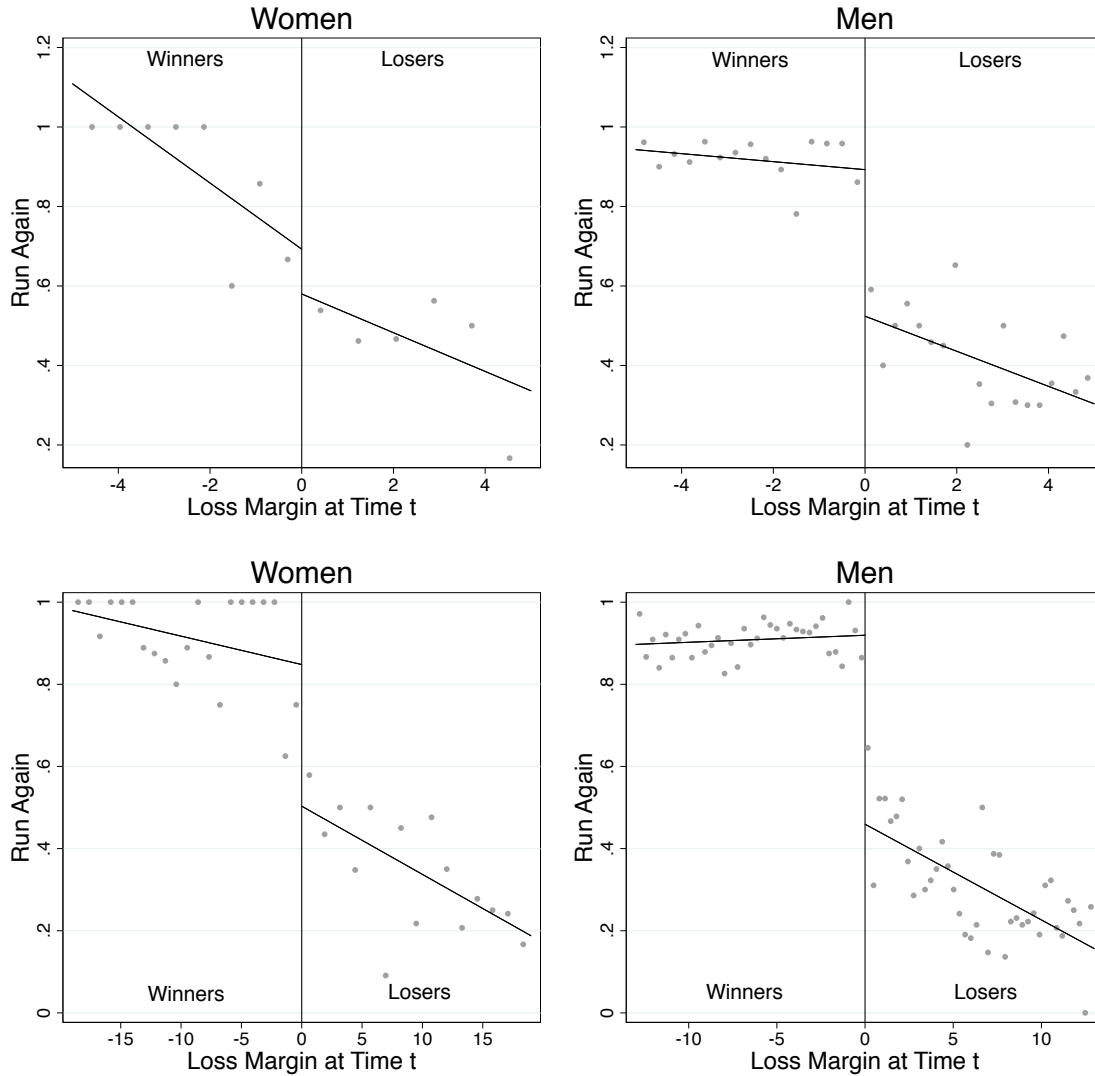
The results are presented in Figure 2; the estimates are also provided in Table A8. The plots show the predicted probability of running again as a function of the male or female candidate's loss margin. The top graphs are limited to elections in which the candidate lost or won by 5 percentage points. I also use Calonico et al.'s (2017) `rdrobust` package to identify the suggested bandwidth for each sample (19 for the sample of women candidates and 13 for the sample of men), and the bottom graphs include this larger set of contests. For male candidates, losing has a negative and significant effect on the probability of running again in each sample. For women candidates, this relationship is insignificant with a bandwidth of 5, but when a slightly larger sample is used, the effect of losing on running again is also negative for women.<sup>5</sup> I ran a series of regressions at each bandwidth between 5 and 20, and the estimate for  $\beta_l$  is statistically significant at bandwidths above 7 (see Figure A1).

At the suggested bandwidths in the bottom graphs, a general election loss is expected to lead to a 34 percentage point decrease in the probability of running again for women candidates and a 46 percentage point decrease in the probability of running again for men. Although there is not overwhelming evidence that female winners and losers behave much differently than male winners and losers, the effect of a general election loss on candidate reemergence appears to be smaller for women candidates. This difference is driven by the fact that the women who win in close elections have slightly lower rates of candidate reemergence than men and the women who lose in close elections have slightly higher rates of reemergence than men. The predicted probability of running again is expected to be 84 and 77 percent for male and female close winners, respectively, compared to 38 and 43 percent for male and female close losers; however, the confidence intervals overlap for men and women across bandwidths.

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<sup>5</sup> As shown in Figure A1, the coefficient is smaller for women across bandwidths, but the confidence intervals are large due to their smaller numbers, and they overlap with men across bandwidths.

**Figure 2: RDD Estimates of General Election Loss on Candidate Reemergence, By Sex**



Note: The candidates on the left side of the cutoff won the general election, and those on the right side lost the general election. The running variable is the other candidate’s vote share. The top graphs are limited to elections in which the candidate lost or won by five percentage points. The bottom graphs include a larger set of contests; the suggested bandwidths of 19 for women and 13 for men were identified with Calonico et al.’s (2017) rdrobust package.

The dependent variable of interest, the decision to run again, differs from most previous applications of RD designs to studies of gender and elections in that both winners and losers can run again. More commonly, RD studies are at the race level and they include electoral contests

where either a woman or a man might have won office, contests where only one male and one female candidate were in the race, or contests where a male and female candidate finished in the top two of the primary election (Anastasopoulos 2016; Broockman 2014; Bucchianeri 2017). Thus, I also use a race-level approach here; I instead analyze the losing candidate's decision to run again and focus on close general elections that include one male and one female candidate. The model in this section takes the following form:

$$Y_{it} = \alpha + \beta_1 FemaleWin_{it} + \beta_2 VoteMargin_{it} + \beta_3 FemaleWin_{it} * VoteMargin_{it} + \epsilon_i$$

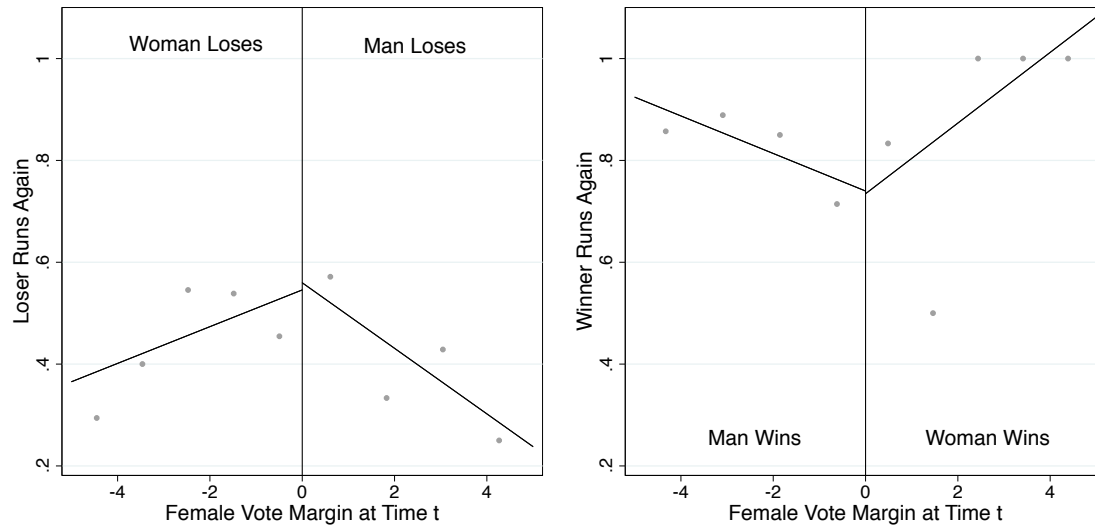
where  $Y_{it}$  is the loser's decision to run again, coded 1 if he or she runs for the U.S. House in a subsequent election and 0 if not.  $FemaleWin_{it}$  is coded 1 when the woman wins the general election in district  $i$  at time  $t$  and 0 when the man wins the general election.  $VoteMargin_{it}$  is the female candidate's share of the vote. I also run separate models in which the dependent variable is the winner's decision to run again.

The results are presented in Figure 3 below; the estimates are also provided in Table A9. It is important to note that the sample used here is much smaller than the samples used in the section above, as there are only 122 close general elections in which a man and woman ran. The outcome variable in the left graph is the loser's decision to run again, and the outcome variable in the right graph is the winner's decision to run again. Losers are of course less likely to run again than winners, and those who lose (win) by a wider (narrower) margin are less likely to run again than those who lose (win) by a narrower (wider) margin. However, there is little indication that the sex of the loser or winner has much of an impact on candidate reemergence in this sample. While there are clear tradeoffs with respect to the number of observations, the main strength of using the RD design at the race level is that the assignment of the sex of the winner



and loser is closer to as-if random. This allows us to more rigorously examine the impact of candidate sex on a loser's and winner's decision to run again.

**Figure 3: Candidate Reemergence for Male and Female Losers and Winners in Male-Female Close General Election Contests**



Note: The female candidates on the left side of the cutoff lost the general election, and those on the right side won the general election. The running variable is the female candidate's vote share.

In sum, the main takeaway is that, across analyses, candidate sex appears to matter relatively little for patterns of candidate reemergence. In the sample of all primary and general election losers, women who lost the primary or general election are no less likely to run again than men who lost the primary or general election. In the full sample of U.S. House candidates, the relationship between a primary or general election loss and the decision to run again does not differ for male and female candidates. The only modest difference to emerge is that the effect of a general election loss is somewhat smaller among female candidates than it is among male candidates, but the confidence intervals overlap with male candidates across bandwidths. And

when the analyses are restricted to close male-female matchups, gender does not appear to matter much at all for the losing or winning candidate's decision to run again.

## **Conclusion**

This paper explores how political victory and defeat matter for the future political behavior of male and female candidates. I draw on a dataset of U.S. House candidates from 1980 to 2014 to examine the relationship between an electoral loss and candidate reemergence. I first analyzed all primary and general election losers and found that women who lose the primary or general election are no less likely to run again than the men who lose. The full sample of U.S. House candidates also demonstrated that the relationship between a primary or general election loss and the decision to run again does not differ for male and female candidates. The RD estimates suggested that the effect of a general election loss on the decision to run again is somewhat smaller among female candidates than it is among male candidates, but if anything, close female losers appear to be slightly more likely to run again than close male losers. When the analyses are restricted to close male-female close general election matchups, there is little evidence that candidate sex matters for the loser's or winner's decision to run again.

For most individuals who decide to run for office, losing is a fact of political life. Those who have lost an election must decide whether or not to launch another candidacy. Political losers, especially those who lost in close electoral contests, constitute the pool of most likely and perhaps most formidable potential competitors in the next cycle. They are well positioned to run a better campaign as they readily turn to their previous networks of supporters. A long line of research has shown that "when women run, they win," but scholars have yet to examine whether an electoral loss matters in different ways for the subsequent candidacy decisions of men and women. The findings have important implications for the strategies that political parties and

women's organizations use to elect more women to office. The results suggest that there are few downsides to recruiting more women to run for office, at least with respect to whether their likelihood of running for office again differs from their male counterparts. Although most of the women who run in 2018 will not be elected to office, the surge in female candidates bodes well for the pool of future female competitors in American elections.

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**Table A1: Number of U.S. House Primary Candidates By Sex and Victory Status, 1980-2014**

<b>Year</b>	<b>Men</b>	<b>Male Winners</b>	<b>Male Losers</b>	<b>Losers Run Again</b>	<b>Women</b>	<b>Female Winners</b>	<b>Female Losers</b>	<b>Losers Run Again</b>
1980	1,374	768	606	81	94	52	42	6
1982	1,331	759	572	121	105	56	49	7
1984	1,236	735	501	89	137	67	70	11
1986	1,187	732	455	95	138	65	73	8
1988	1,134	730	404	106	103	61	42	12
1990	1,084	719	365	88	112	68	44	7
1992	1,595	731	864	141	224	104	120	19
1994	1,360	706	654	121	197	110	87	13
1996	1,398	750	648	118	215	121	94	9
1998	1,030	652	378	94	168	120	48	8
2000	1,059	684	375	69	163	120	43	6
2002	1,071	661	410	71	184	122	62	15
2004	1,062	664	398	76	197	136	61	11
2006	1,124	682	442	91	208	132	76	17
2008	1,118	678	440	79	216	133	83	17
2010	1,506	702	804	118	264	138	126	21
2012	1,370	666	704	91	296	164	132	14
2014	1,162	638	524	N/A	258	162	96	N/A
Total	22,201	12,657	9,544	1,649	3,279	1,931	1,348	201

**Table A2: Number of U.S. House General Election Candidates By Sex and Victory Status, 1980-2014**

<b>Year</b>	<b>Men</b>	<b>Male Winners</b>	<b>Male Losers</b>	<b>Losers Run Again</b>	<b>Women</b>	<b>Female Winners</b>	<b>Female Losers</b>	<b>Losers Run Again</b>
1980	766	416	350	69	52	19	33	5
1982	757	413	344	64	56	22	34	6
1984	735	411	324	70	67	24	43	8
1986	731	411	320	69	65	24	41	7
1988	731	410	321	93	59	25	34	9
1990	719	407	312	91	68	28	40	11
1992	733	389	344	92	106	46	60	20
1994	709	390	319	100	109	45	64	16
1996	725	385	340	65	118	50	68	18
1998	656	380	276	69	119	55	64	19
2000	684	377	307	64	120	58	62	9
2002	667	377	290	78	121	58	63	14
2004	664	371	293	64	138	64	74	20
2006	672	366	306	76	132	69	63	19
2008	680	361	319	80	134	74	60	17
2010	702	364	338	72	138	71	67	21
2012	665	358	307	47	163	77	86	11
2014	638	350	288	N/A	162	85	77	N/A
<b>Total</b>	<b>12,634</b>	<b>6,936</b>	<b>5,698</b>	<b>1,263</b>	<b>1,927</b>	<b>894</b>	<b>1,033</b>	<b>230</b>



**Table A3: Candidate Reemergence Among Primary Election Losers, By Party (1980-2014)**

	DV: Ran Again, Republicans (Primary Election Losers)			DV: Ran Again, Democrats (Primary Election Losers)		
	1: All	2: All	3: Close Elections	1: All	2: All	3: Close Elections
Woman	-0.01 (0.02)	-0.01 (0.02)	0.10 (0.08)	-0.02 (0.02)	-0.02 (0.02)	-0.00 (0.08)
Incumbent	—	-0.06 (0.05)	-0.25* (0.11)	—	0.06 (0.06)	0.16 (0.15)
Margin of Loss	—	-0.00 (0.00)	-0.02 (0.02)	—	-0.00 (0.00)	0.02 (0.02)
Logged Campaign Receipts	—	-0.00* (0.00)	0.00 (0.01)	—	-0.01** (0.00)	-0.02* (0.01)
Democratic Presidential Vote	—	0.09 (0.06)	0.10 (0.26)	—	0.09† (0.05)	0.13 (0.31)
Constant	0.07 (0.07)	0.06 (0.08)	0.04 (0.17)	0.15 (0.10)	0.15 (0.10)	0.19 (0.21)
Observations	5,087	5,024	318	5,185	5,118	258
R-Squared	0.04	0.04	0.26	0.03	0.04	0.30

Note: Entries are OLS regression coefficients with robust standard errors clustered by individual in parentheses. All models include state and year fixed effects. \*\*=p<0.01, \*=p<0.05, †=p<0.10.

**Table A4: Candidate Reemergence Among General Election Losers, By Party (1980-2014)**

	DV: Ran Again, Republicans (General Election Losers)			DV: Ran Again, Democrats (General Election Losers)		
	1: All	2: All	3: Close Elections	1: All	2: All	3: Close Elections
Woman	-0.00 (0.02)	0.01 (0.02)	0.04 (0.13)	0.03 (0.02)	0.03† (0.02)	0.11 (0.09)
Incumbent	—	0.00 (0.04)	-0.02 (0.11)	—	-0.05 (0.03)	-0.15† (0.09)
Margin of Loss	—	-0.04** (0.01)	-0.01 (0.03)	—	-0.04** (0.01)	-0.07* (0.03)
Logged Campaign Receipts	—	-0.01** (0.00)	0.00 (0.04)	—	-0.01** (0.00)	-0.02 (0.04)
Democratic Presidential Vote	—	0.11 (0.10)	-0.22 (0.67)	—	-0.08 (0.13)	-0.47 (0.52)
Constant	0.08 (0.06)	0.22** (0.08)	0.24 (0.70)	0.09 (0.08)	0.32** (0.10)	1.00 (0.64)
Observations	3,334	3,315	243	3,031	3,011	242
R-Squared	0.05	0.06	0.24	0.04	0.05	0.30

Note: Entries are OLS regression coefficients with robust standard errors clustered by individual in parentheses. All models include state and year fixed effects. \*\*=p<0.01, \*=p<0.05, †=p<0.10.

**Table A5: Candidate Reemergence with Gender x Lost Election, By Party (1980-2014)**

	DV: Ran Again, Republicans (Primary Elections)			DV: Ran Again, Democrats (Primary Elections)		
	1: All	2: All	3: Close Elections	1: All	2: All	3: Close Elections
Woman	-0.02 (0.04)	-0.01 (0.03)	-0.14 (0.10)	-0.04 (0.03)	0.01 (0.01)	0.01 (0.09)
Lost Election	-0.39** (0.01)	-0.31** (0.02)	-0.29** (0.06)	-0.40** (0.01)	-0.26** (0.02)	-0.22** (0.07)
Woman x Lost Election	0.01 (0.04)	0.01 (0.04)	0.19 (0.12)	0.01 (0.03)	-0.04 (0.03)	-0.04 (0.12)
Incumbent	—	0.31** (0.02)	-0.07 (0.11)	—	0.38** (0.02)	0.06 (0.10)
Margin of Loss	—	-0.00 (0.00)	-0.02 (0.02)	—	-0.00 (0.00)	0.01 (0.02)
Logged Campaign Receipts	—	-0.00* (0.00)	-0.00 (0.00)	—	-0.01** (0.00)	-0.01* (0.01)
Democratic Presidential Vote	—	-0.31** (0.05)	-0.64** (0.21)	—	0.34** (0.04)	0.98** (0.23)
Constant	0.56** (0.07)	0.56** (0.07)	0.35† (0.19)	0.37** (0.09)	0.18* (0.08)	-0.17 (0.19)
Observations	7,690	7,604	638	8,032	7,941	516
R-Squared	0.18	0.22	0.20	0.18	0.26	0.17

Note: Entries are OLS regression coefficients with robust standard errors clustered by individual in parentheses. All models include state and year fixed effects. \*\*=p<0.01, \*=p<0.05, †=p<0.10.

**Table A6: Candidate Reemergence with Gender x Lost Election, By Party (1980-2014)**

	DV: Ran Again, Republicans (General Elections)			DV: Ran Again, Democrats (General Elections)		
	1: All	2: All	3: Close Elections	1: All	2: All	3: Close Elections
Woman	0.00 (0.02)	0.00 (0.02)	-0.03 (0.07)	0.03† (0.01)	0.02 (0.01)	-0.02 (0.06)
Lost Election	-0.64** (0.01)	-0.61** (0.02)	-0.37** (0.08)	-0.70** (0.01)	-0.69** (0.02)	-0.37** (0.08)
Woman x Lost Election	-0.01 (0.03)	-0.00 (0.03)	0.09 (0.12)	0.01 (0.02)	0.01 (0.02)	0.09 (0.09)
Incumbent	—	-0.10** (0.01)	-0.07 (0.04)	—	-0.09** (0.01)	-0.17** (0.04)
Margin of Loss	—	-0.02** (0.00)	-0.02† (0.01)	—	-0.02** (0.00)	-0.04** (0.01)
Logged Campaign Receipts	—	-0.00** (0.00)	0.02 (0.01)	—	-0.00 (0.00)	0.01 (0.01)
Democratic Presidential Vote	—	0.04 (0.07)	-0.06 (0.33)	—	-0.09 (0.05)	-0.45 (0.28)
Constant	0.76** (0.06)	0.85** (0.07)	0.03 (0.22)	0.83** (0.09)	0.91** (0.09)	1.03** (0.21)
Observations	6,352	6,311	484	6,363	6,318	483
R-Squared	0.43	0.44	0.37	0.52	0.52	0.44

Note: Entries are OLS regression coefficients with robust standard errors clustered by individual in parentheses. All models include state and year fixed effects. \*\*=p<0.01, \*=p<0.05, †=p<0.10.

**Table A7: Candidate Reemergence Among Primary and General Election Losers, With Gender x Party (1980-2014)**

	DV: Ran Again (Primary Election Losers)			DV: Ran Again (General Election Losers)		
	1: All	2: All	3: Close Elections	1: All	2: All	3: Close Elections
Woman	-0.02 (0.01)	-0.02 (0.02)	0.06 (0.07)	0.03 (0.02)	0.03 (0.02)	0.08 (0.08)
Woman x Republican	0.01 (0.01)	0.02 (0.02)	-0.03 (0.11)	-0.03 (0.03)	-0.02 (0.03)	-0.06 (0.14)
Republican	-0.01 (0.01)	-0.01 (0.01)	-0.00 (0.04)	0.05** (0.01)	0.05** (0.01)	0.13** (0.05)
Incumbent	—	0.02 (0.04)	-0.04 (0.10)	—	-0.04† (0.02)	-0.11* (0.05)
Margin of Loss	—	-0.00 (0.00)	-0.00 (0.01)	—	-0.04** (0.00)	-0.04* (0.02)
Logged Campaign Receipts	—	-0.00** (0.00)	-0.01 (0.00)	—	-0.01** (0.00)	-0.00 (0.02)
Democratic Presidential Vote	—	0.07† (0.04)	-0.08 (0.18)	—	0.08 (0.06)	-0.23 (0.37)
Constant	0.12† (0.06)	0.12† (0.07)	0.18 (0.15)	0.09 (0.08)	0.27** (0.08)	0.93** (0.34)
Observations	10,272	10,142	576	6,366	6,327	486
R-Squared	0.03	0.03	0.15	0.03	0.05	0.17

Note: Entries are OLS regression coefficients with robust standard errors clustered by individual in parentheses. All models include state and year fixed effects. \*\*=p<0.01, \*=p<0.05, †=p<0.10.

**Table A8: Effect of General Election Loss on Candidate Reemergence for Men and Women**

	DV: Run Again (Female Candidates)		DV: Run Again (Male Candidates)	
	Bandwidth=0.05	Bandwidth=0.19	Bandwidth=0.05	Bandwidth=0.13
Candidate Loss	-0.11 (0.15)	-0.34** (0.07)	-0.37** (0.06)	-0.46** (0.03)
Loss Margin	-0.08** (0.03)	-0.01* (0.00)	-0.01 (0.01)	0.00 (0.00)
Candidate Loss x Loss Margin	0.03 (0.05)	-0.01† (0.01)	-0.03† (0.02)	-0.03** (0.00)
Constant	0.69** (0.10)	0.85** (0.04)	0.89** (0.03)	0.92** (0.02)
Observations	142	557	830	2,166
R-Squared	0.22	0.34	0.30	0.40

Note: Entries are OLS regression coefficients with robust standard errors in parentheses.

\*\*=p<0.01, \*=p<0.05, †=p<0.10.

**Table A9: Effect of Candidate Sex on Reemergence in Male-Female Matchups**

	DV: Loser Runs Again	DV: Winner Runs Again
Female Win	0.01 (0.19)	-0.01 (0.15)
Vote Share	0.04 (0.04)	-0.04 (0.03)
Female Win x Vote Share	-0.10 (0.07)	0.11* (0.05)
Constant	0.55 (0.13)	0.74** (0.11)
Observations	122	122
R-Squared	0.02	0.05

Note: Entries are OLS regression coefficients with robust standard errors in parentheses.

\*\*=p<0.01, \*=p<0.05, †=p<0.10.

**Figure A1: Local Linear Regression Estimates for  $\beta_1$  Across Bandwidths**

