

Gender, Race, and Intersectionality in Campaign Finance*

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Abstract

Campaign finance research has given greater attention to race and gender, but, due to data limitations, only separately. Using new data on the ethnoracial *and* gender backgrounds of contributors, we provide new observational estimates of the ethnorace-gender distribution of campaign contributions. We find that women of color are more underrepresented in campaign finance than predicted by existing analyses of race or gender alone. We also use within-district variation to compare how candidate race, gender, and their interaction affect the race and gender distributions of campaign contributions. We find that the effect of shared ethnorace is many times larger than that of shared gender or their interaction. Gender effects are heterogeneous by ethnorace and party; shared gender is most predictive for contributions from white and black Democratic women. The findings suggest a need for greater attention to intersectionality in research on political participation.

*The authors are listed in alphabetical order. We thank participants at APSA 2019, MPSA 2019, WPSA 2019, and the Princeton REI Workshop. All remaining errors are our own.

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Introduction

Money in American politics disproportionately comes from white and male donors (Barber, Butler, and Preece 2016; Thomsen and Swers 2017; Grumbach and Sahn 2019). However, there is yet no estimate of the *joint* ethnorace-gender distribution of campaign contributions.¹ We do not know, for instance, the percent of individual contributions from women of color or white women donors, or whether donations from men or women are more racially diverse, despite increased attention to the intersection of race and gender among candidate recruiters and fundraisers (Ye Hee Lee 2019). Moreover, although studies show that women candidates increase contributions from women and racial minority candidates from co-ethnics (Thomsen and Swers 2017; Grumbach and Sahn 2019), ethnorace and gender have again only been investigated separately. This lack of attention in campaign finance research is surprising in light of intersectional focus in studies of other forms of political participation (e.g., Gay and Tate 1998; Philpot and Walton 2007).

In this article, we use novel data on the race and gender identities millions of individual campaign contributors to investigate the role of ethnorace and gender in campaign finance. These data give us the opportunity to, for the first time, provide externally valid observational estimates of the distribution of individual contributions by both gender and ethnorace. We provide new intersectional estimates of contributions by gender and ethnorace and confirm prior findings that women and people of color are underrepresented in campaign finance. We find black and especially Latina women to be the most underrepresented ethnorace-gender groups in American campaign finance.

¹ We use ethnorace as a composite concept of race and ethnicity (Omi and Winant 2014).

These data also provide the opportunity to address two unanswered causal questions about the effect of shared candidate and donor identity. First, do shared race and gender affect contributions differently? Recent behavioral studies suggest a stronger role for race, especially in the context of racially sorted parties (e.g., Phillips 2018; Sides, Tesler, and Vavreck 2018). On the other hand, women’s rights policy demanders (WRPDs) such as EMILY’s List are especially prominent among organizations that connect candidates and donors (Crowder-Meyer and Cooperman 2018).

Second, does the effect of shared gender vary by ethnoracial group? Shared gender may be disproportionately *intra*racial, such that female candidates receive greater contributions from female donors, but only conditional on also sharing an ethnoracial identity. The role of shared gender identity for contributions across ethnoracial groups may also vary by donor ethnorace. Gender-based linked fate varies by ethnorace (e.g., Gay and Tate 1998), as does support for female candidates of color in elections (e.g., Philpot and Walton 2007).

Exploiting variation within districts, we test whether candidate race and gender increases contributions from individuals who hold the same identities. We find three major results. First, we find an *ethnoracial effect* and a *gender effect*, in which nonwhite and female candidates increase contributions from nonwhite and female donors, respectively—but the ethnorace effect is significantly greater than the gender effect. Second, the interaction of shared ethnoracial and gender identity (i.e., sharing both identities) has no consistent effect beyond separately shared gender or ethnorace, suggesting at most a modest intraracial gender effect. Third, we find heterogeneous gender effects across ethnoracial groups. White and black women contribute more to female candidates of all ethnoracial backgrounds, but only white women candidates receive

greater contributions from all ethnoracial groups of women donors (and see no decrease in contributions from white men). We observe less co-gendered contributing among female Asian and Latina donors.

This study emphasizes the importance of attention to multiple identity dimensions and their interactions, in an important form of political participation, campaign finance. The racialized, gendered, and intersectional political economic history of the United States has led to different legacies of wealth inequality, social identity, and political activity across race and gender groups—and distinct campaign contribution behavior. This study suggests that women, people of color, and especially women of color are underrepresented in American politics to the extent that campaign contributors influence political outcomes. But we also provide modest evidence that the nomination of candidates with these identities can increase the gender-ethnoracial representativeness of contributions.

Identity and Campaign Finance

In light of women's underrepresentation in elected office, scholars and research organizations have long been attentive to the gender distribution of money in politics (e.g., Uhlaner and Schlozman 1986). Although recent studies find minimal association between candidate gender and fundraising competitiveness (e.g., Kitchens and Swers 2016; Hassell and Visalvanich 2019),² the gender distribution of contributions is much more unequal: women make up only about one-fourth of individual donors and total contributions in federal elections (e.g.,

² Kitchens and Swers (2016) investigate gender and partisan differences in primary election fundraising. Of note, they find that female Democratic candidates raise more in primary elections than do male Democratic candidates. Hassell and Visalvanich (2019) similarly find that white Democratic women receive greater funds from party organizations and insiders.

Burns, Schlozman, and Verba 2001; Bryner and Weber 2013; Burrell 2014; Thomsen and Swers 2017).

More recently, research has also focused on ethnorace in campaign finance. Some studies estimate donors' racial identities using survey data (Cain, Kiewiet and Uhlaner 1991; Lien 2010; Bowler and Segura 2011), but a small number of studies have measured the ethnoracial distribution of contributions by estimating donors' ethnoracial identities from names and geography in administrative records (Cho 2001, 2002; Grumbach and Sahn 2019). The most comprehensive estimates of contributions by ethnorace show a starkly unrepresentative distribution of contributions. The proportion of individual contributions from black and Latino donors is smaller than their shares of the population, electorate, and even of members of Congress (Grumbach and Sahn 2019).

The separate findings on the gender and ethnoracial distribution of campaign contributions leads us to expect women of color to be doubly underrepresented in money in politics. However, theories of intersectionality suggest that the marginalization of women of color may even go beyond our expectations of gender and ethnoracial marginalization, alone (e.g., Collins 1998, 2002). As Crenshaw (1990, 1244) writes, "the intersection of racism and sexism factors into Black women's lives in ways that cannot be captured wholly by looking at the race or gender dimensions of those experiences separately." Women of color may be uniquely underrepresented among the contributor class in American politics, and this may go unnoticed in existing studies that lack the joint race-gender distribution of campaign contributions.

Although women of color are especially likely to be underrepresented, behavioral theories of linked fate, group consciousness, and empowerment, as well as organizational

theories of extended party networks, suggest that the presence of candidates can increase the participation of individuals who share their identities. In the next section, we develop our theoretical expectations about the role of shared gender and ethnoracial identities between candidates and campaign donors.

The Role of Shared Identity in Campaign Contributions

A substantial body of research has investigated whether shared ethnoracial identity (e.g., Barreto 2007; Fraga 2016), gender identity (e.g., Koch 2000), or both (e.g., Philpot and Walton 2007), matter in determining support for electoral candidates. Research on identity and participation in campaign finance is sparser. In this section, we draw upon two types of theories to explain ethnoracial and gendered patterns of contributing. First, *behavioral* theories of linked fate, group consciousness, empowerment, and group threat suggest that shared identity should increase campaign contributions. Individuals with strong “group consciousness” (e.g., Miller et al 1981; Stokes 2003), and those who believe their ethnoracial group is in competition with others for resources (Bobo and Hutchings 1996), may engage in greater political participation in support of their group. Furthermore, individuals who feel a strong sense of linked fate are more likely to support other members of their ethnoracial group, including coethnic politicians.³ First applied to African Americans (Dawson 1994), later work applies linked fate to the political behavior of Asian Americans (e.g. Junn and Masouka 2008), Latinos (e.g., McConnaughy et al 2012), and whites (Schildkraut 2017; see also Jardina 2019).

³ Importantly, linked fate is not necessarily correlated with with group consciousness (Gay and Tate 1998; Sanchez and Vargas 2016).

Theories of linked fate, as well as of group consciousness and competition, suggest that campaign donors may have self-interested motivations to contribute more to candidates who share their ethnoraical and/or gender identities. Similarly, empowerment theory predicts that individuals will feel that their participation is more efficacious and participate more when given signals of group representation, such as the presence of a coethnic candidate (Bobo and Gilliam 1990; Barreto 2007; Barreto 2010). There is also evidence that individuals project their own ideologies onto candidates who share their ethnoraical identity (Lerman and Sadin 2016).

Second, *organizational* theories highlight the influence of groups that seek greater representation of women or ethnoraical minorities in American politics. Political organizations facilitate contributions based in shared gender or ethnoraical identity. Female candidates have increasingly benefited from organizations that help voters and potential donors identify female candidates to support, such as EMILY's List (e.g., Crespín and Deitz 2010). Crowder-Meyer and Cooperman (2018) conceptualize these groups as “women's representation policy demanders” (WRPDs), activists and organizations whose primary goal is increased descriptive and substantive representation of women in American politics. Similarly, organizations such as Latino Victory Fund aim to increase the representation of ethnoraical minorities, in large part by connecting candidates of color to potential donors who share their ethnoraical identities. We conceptualize these groups as “ethnoraical minority representation policy demanders” (MRPDs).

Despite these strong theories, some studies find that shared voter and candidate ethnoraical and gender identity plays only a minimal role in voting (Seltzer, Newman, and Leighton 1997; Gay 2001; Brians 2005; Holli and Wass 2010; Fraga 2016). For campaign contributions, however, studies consistently find strong evidence of coethnic and co-gendered

contributing. On shared gender, Thomsen and Swers (2017) find a gender effect in campaign contributions to female candidates. Holding constant many election characteristics, female Democratic candidates in the 2010 and 2012 cycles received about 54 percent more total money from female donors (Thomsen and Swers 2017, 455-456). On shared race and ethnicity, Cho (2001, 2002) finds that shared nationality influences Asian American contribution behavior. More recently, Grumbach and Sahn (2019) find strong effects of candidate ethnorace on the ethnoracial distribution of campaign contributions. The role of shared ethnorace is powerful: in contrast to voting, where district demographics matter more than candidate identity (Fraga 2016), the effect of candidate ethnoracial identity on the ethnoracial distribution of contributions is many times larger than that of district demographics (Grumbach and Sahn 2019).

In this article, we use these behavioral and organizational theories to provide insight into two new empirical questions that, due to previous data limitations, have not been addressed:

1) Is shared ethnorace or shared gender a more important predictor of campaign contributions?

2) Does shared gender operate differently within versus across ethnoracial groups?

Is Campaign Finance More Gendered or Racialized?

There has been little attention to the intersectionality of identities in campaign finance. Under intersectionality theory, individuals are influenced by multiple identity dimensions—most prominently race and gender—in intersecting and heterogeneous ways that affect their political behavior (Strolovitch 2007; Cohen 2009). The relative importance of shared ethnoracial and shared gender identity in campaign finance has not yet been directly compared.

Behavioral theories lead us to expect shared ethnorace to be more predictive of contributions than shared gender. Previous research tends to support the view that ethnorace dominates gender in political attitudes and voting behavior (e.g., Gay and Tate 1998, 170; Lien 1998; Simien 2005; Philpot and Walton 2007; Citrin and Wright 2009; Huddy and Carey 2009; Masuoka and Junn 2013). This is especially true in the context of racially sorted parties and racialized partisan competition, such as in the 2016 Presidential Election (e.g., Frasure-Yokley 2018; Phillips 2018).

Furthermore, literature in sociology and political science has long highlighted gendered institutions that may constrain gender solidarity in women's political participation. Marriage, which has historically interacted with patriarchal institutions of property rights (e.g., Chatfield 2018) and identity (e.g. Zuo and Tang 2000), is a prominent example of such an institution.⁴ Stoker and Jennings (1995) find that married women view themselves as having lower levels of linked fate with other women, potentially due to changes in social networks once married (e.g., Jennings and Stoker 2001; Kalmijn 2003), as well as perceptions of how economic stability and discrimination affect the fate of women as a group (Bolzendahl and Myers 2004).⁵

On the other hand, organizational theories suggest that shared gender will be especially important in campaign finance. The relative strength of WPRDs and MRPDs in extended party networks may help explain differences we might observe in the strength of shared gender and shared ethnorace. While there is no clear scholarly consensus about the relative strength of WPRDs and MRPDs, a number of recent studies highlight the important role of WPRDs in

⁴ We focus on heterosexual marriage. We found no political science research on the relationship between same-sex marriage status and gender-based political behavior.

⁵ Bolzendahl and Myers (2004) find that single women who rely on their own income are more supportive than married women of feminist policy issues affecting all women, and Zuo and Tang (2000) find that married women are generally less concerned about gender discrimination.

recruiting female candidates and connecting them with a base of female donors (Sanbonmatsu 2002; Crowder-Meyer and Cooperman 2018). Recent studies have focused on prominent WPRDs such as EMILY's List (Francia 2001; Crespin and Deitz 2010; Hannagan, Pimlott, and Littvay 2010) and Emerge America (Bernhard et al. 2019). MRPDs have not had the same focus on campaign finance (Overton 2002), though new organizations focused on connecting candidates and donors of color, such as Collective PAC, have arisen in the most recent years.

In addition, the distribution of U.S. wealth by race and gender suggests that we may see a more important role for shared gender. White women earn higher incomes and have significantly greater wealth on average than black and Latino people of all genders. This is also the case for single white women, who held over \$16,000 in average wealth in 2010, compared to around \$1,400 for single black and Latino men, and virtually no wealth for single black and Latina women (Chang and Lui 2010). Thus, under the naive assumption that women and people of color receive similar utility for contributing to individuals of shared race or gender, women have greater financial means to do so. Overall, it remains an open question whether campaign contributions will be more structured by race or gender.

Shared Gender Within and Across Ethnoracial Groups

Our new data on the joint race-gender distribution of campaign contributions allow us to answer another important question about intersectionality: does the effect of shared gender on contributions vary by ethnorace?

Studies of intersectionality suggest that shared gender identity may operate differently for individuals of different ethnoracial backgrounds. Evidence suggests that black women are more

likely to support gender equality and identify as feminists than white women (Baxter and Lansing 1983; Klein 1984; Mansbridge and Tate 1992). Gay and Tate (1998) similarly find that, when there is a conflict between the interests of blacks and of women, black women have higher levels of a gender-based linked fate.⁶ Overall, this literature suggests that black women's experiences of marginalization on multiple identity dimensions may increase their understanding of each individual dimension. Although these intersectionality studies tend to find "a racially constructed identity more strongly affects the political attitudes of black women than one based on gender" (Gay and Tate 1998, 170), they suggest that a gender effect may be especially strong among black women.⁷

The organizational environment may also generate differences in co-gendered contributing across ethnoracial groups. Political organizations tend to support candidates based on gender or ethnoracial identity, not both. It is notable that there are no corollary organizations (in terms of size and scope) that specifically promote female candidates of color. Unlike white women and men of color, the organizational environment is likely to incentivize women of color to be involved in *both* gender-based and race-based organizations—incentives that may compete for a female donor of color's finite resources. For these reasons, in contrast the theoretical expectations presented earlier, the organizational environment leads us to expect that white women may be more likely than women of color to contribute based on shared gender identity.

⁶ Gay and Tate (1998) argue that black women are "doubly bound," perceiving greater linked fate in terms of both race and gender due to the multiplicity of the identity dimensions in which they experience marginalization.

⁷ Marriage may, again, mediate the effect of shared gender identity across ethnoracial groups. Stout et al. (2017), for example, find that white and Latina women who are married have significantly lower levels of gender-based linked fate than single women, but this marriage effect does not affect black women. (Unlike the expectations put forth in Gay and Tate (2008), however, they find that single black women do not report higher levels of gender-based linked fate than do married black women.) Such studies illustrate the importance of exploring variation in degrees of gender-based linked fate, particularly at the intersection of race and gender.

Finally, the influence of shared gender and ethnoracial identities may also vary for those women who identify as Democrats or Republicans. Given the gender gap in partisanship—among both voters and candidates—and the Democratic Party’s greater support for women’s rights policies (e.g., Bolzendahl and Myers 2004), we might expect to find a greater degree of gender-based linked fate and group consciousness among female Democrats. Both qualitative and quantitative studies have found that conservative women tend to view their identity as women differently than liberal women, and would be expected to be less likely to support female candidates on the basis of gender (e.g., Luker 1984; Mansbridge 1986; Stout et al 2017). We expect the effect of shared gender and shared ethnorace to be stronger among Democrats than among Republicans (see also Thomsen and Swers 2017).

Methods

Data

We primarily use data from Grumbach and Sahn (2019) on the ethnoracial and gender identities of candidates and contributors. The data cover the years 1980 through 2010,⁸ and are based on the Database on Money and Ideology in Elections (DIME) from Bonica (2014).⁹ Candidate gender comes from Bonica (2014), with hand-coded gender for incumbents and estimated gender from gender-specific titles (e.g., Mr. or Ms.) and first names for candidates who never serve in Congress. Grumbach and Sahn (2019) code candidate ethnoracial identity of incumbents from membership in the Congressional Black Caucus, the Congressional Hispanic

⁸ The Grumbach and Sahn (2019) data include the 2012 election cycle, but we exclude 2012 because the cycle’s data do not include candidate gender.

⁹ The DIME dataset compiles data from the Federal Election Commission (FEC), the Sunlight Foundation, and the National Institute for Money in State Politics. Contributions exceeding \$50 are required to be reported to the FEC.

Caucus, and the Congressional Asian Pacific American Caucus. The ethnoracial identities of candidates who never served in Congress were coded from statements of self-identification, other publicly available and verified campaign sources, and, when no other sources were available, the *wru* ethnorace estimation procedure used for donor identities (described below) validated with candidate photos.¹⁰

Contributor gender in the DIME dataset is similarly estimated with gender-specific titles and first name gender ratios in the Census (for further validation see Bonica and Sen 2017), and has been used in research on gender in campaign finance (Thomsen and Swers 2017).

Table 1: Descriptive Statistics of Donors by Gender and Ethnorace, 1980-2010

| Gender | Ethnorace | Total Amount (\$1000s) | Number of Contributions | Number of Unique Donors |
|---------------|------------------|-----------------------------------|------------------------------------|------------------------------------|
| M | Asian | 18,180 | 34,934 | 17,873 |
| F | Asian | 6,531 | 12,872 | 7,233 |
| M | Black | 42,639 | 81,873 | 36,437 |
| F | Black | 13,864 | 29,798 | 14,947 |
| M | Latino | 20,984 | 35,972 | 17,079 |
| F | Latino | 6,728 | 14,331 | 7,751 |
| M | White | 805,642 | 1,613,730 | 672,174 |
| F | White | 289,004 | 642,384 | 296,351 |

Note: Descriptive statistics cover data used in our main hypothesis tests, representing U.S. House general election periods, 1980-2010. Unique donor identifiers are from Bonica (2014). Our publicly available replication data also includes donor ethnorace and gender for House primary elections, as well as elections for U.S. Senate, President, state legislatures, and governorships.

Contributor ethnorace is estimated from individuals' surnames and geographic locations (see also Barreto, Segura and Woods 2004; Henderson, Sekhon and Titiunik 2016). The method estimates the likelihood that each individual would report Census identification as Asian, black, Latino, or white given the ethnoracial distribution of surnames in the geographic unit (in this case Census tract) according to Bayes' Rule. Grumbach and Sahn (2019) implement this

¹⁰ This follows the methodology of Goggin (2017), which provides the ethnoracial identities for candidates in the 2008 and 2010 cycles.

technique with the *wru* package in *R* (Imai and Khanna 2016), obtaining a median posterior probability of is 0.89 that a donor's ethnoracial identity is correctly coded. The authors note that attenuation bias may occur for estimates involving African American donors; precision is poorer because surnames are less distinguishable from those of white people than those of Asian and Latino individuals.

Table 1 presents descriptive statistics by contributor ethnorace and gender. While these statistics summarize contributions in U.S. House general elections, our publicly available replication data provide donor ethnorace and gender for primaries and other offices (state legislatures, governorships, U.S. Senate, and President). As is immediately apparent, the bulk of unique donations and aggregate dollars come from white donors, especially white men, while black and Latina women contribute much less. We provide further descriptive analysis in the next section.

Estimation Strategy

Candidate gender is likely to be endogenous to district and election characteristics. For instance, women may be more likely to run and secure party nominations in districts with strong bases of female donors, or in more liberal districts. In traditional regression analysis, we may observe a correlation between candidate and contributor gender that is not due to shared gender identity, but rather due to the kinds of districts in which men and women run.

We use a difference-in-difference design to identify the causal effect of candidate gender on contributions. This design exploits variation *within districts* across time, mitigating time-invariant differences between districts that could introduce bias. In our full models, we also

adjust for candidate and district characteristics that may change over time. We include an indicator for whether the candidate is an incumbent and whether he or she faces a quality challenger. District covariates include ethnoracial demographics (percent Asian, black, and Latino), and proportions of residents in the district that are over age 65, employed in “blue collar” occupations, employed in farming, employed by the Federal Government, active military, veterans of the military, unemployed, union members, and urban.¹¹ We also estimate traditional cross-sectional regression models for comparison.¹²

Although we are confident that our difference-in-difference design circumvents many sources of confounding, candidate characteristics are still likely to systematically differ based on their gender and ethnoracial identities. The population of female candidates and candidates of color (including potential candidates) may be more liberal than their male and white counterparts. In addition, research suggests that the road to office—from recruitment to primaries to general elections—systematically differs for women and men (e.g., Conway 2001; Sanbonmatsu 2002).¹³ Early-stage obstacles for women may lead the population of female candidates to be of systematically higher quality than that of male candidates (Lawless and Fox 2005; Fulton 2012).

While we urge caution in interpreting estimates due to the challenge of isolating identity as a treatment variable, we also argue that candidate-level differences across gender may be composite pieces of gender identity. Gender identity entails much more than biological sex.

¹¹ Candidate covariates are from the DIME dataset, and district covariates are from the U.S. Census (ICPSR 8091, 8903).

¹² This difference-in-difference design most amenable to estimating the treatment effect of general election nominee identity on general election contributions, as many primary elections are formally or *de facto* uncontested.

¹³ As a robustness check, we provide estimates in which we subset to non-incumbent candidates in Appendix Table A5.

Adjusting for variables that were previously caused by an individual's gender identity may introduce a kind of "post-treatment" bias. In a somewhat unserious example, we would not wish to adjust for a variable measuring candidates' hair length or clothing color, even though they are correlated with candidate gender and may influence fundraising. Rather, we conceptualize such candidate characteristics as proxies for gender identity (see Sen and Wasow 2017 for a similar discussion with respect to ethnoracial identity).

Statistical Models

Our first model tests and compares the effect of shared gender identity, shared ethnoracial identity, and their interaction, on contributions. This model estimates the average effect of shared identity with a candidate for all ethnorace-gender combinations of donors. The outcome Y_{itrg} outcome is indexed by donor ethnorace r and gender g . With four ethnoracial groups (Asian, black, Latino, white) and two gender groups, we have eight observations per candidate-election. The variables *Shared Race* and *Shared Gender* are indicators that take the value of 1 when the candidate is of race r and gender g , 0 otherwise. For example, the observation for Nancy Pelosi's contributions from Latina women ($r = \text{Latinx}$ and $g = \text{female}$) in her 2006 election will have a value of 0 for *Shared Race* and a value of 1 for *Shared Gender*. By contrast, the observation for contributions from white men to Pelosi's 2006 election ($r = \text{white}$ and $g = \text{male}$) will have 1 for *Shared Race* and 0 for *Shared Gender*. Only for the observation for white female contributions to Pelosi in 2006 does the interaction term, *Shared Race* \times *Shared Gender*, take a value of 1. We estimate the effect of shared ethnorace and gender on contributions from all donors, but shared identity is likely to be most influential among individuals with marginalized identities: women

and people of color. We therefore also estimate these models subsetting to contributions from all women, and then subsetting to contributions from women of color (Asian, black, and Latina).

As described earlier, we exploit within-district variation in candidate identity and contributions. To this end, we include district fixed effects α_i and year fixed effects δ_t . As described earlier, X_{it} is a vector of time-variant district and candidate covariates. We fit separate models for Democratic and Republican candidates.

In order to account for average differences in contribution amounts from different race-gender combinations of donors (e.g., due to their different prevalence in the U.S. population), we include fixed effects for each race-gender identity combination, represented by ψ_{rg} . This model essentially combines multiple difference-in-difference models for each race and gender group to estimate the average effect of shared ethnorace, shared gender, and shared ethnorace and gender. (Models are separated by party. We are primarily focused on Democrats in the main manuscript.) The model takes the form:

$$\log(Y_{itrg}) = \beta_1 \text{Shared Race}_{itrg} + \beta_2 \text{Shared Gender}_{itrg} + \beta_3 \text{Shared Race}_{itrg} \times \text{Shared Gender}_{itrg} + \beta_4 X_{it} + \alpha_i + \delta_t + \psi_{rg} + \varepsilon_{itrg}$$

Our difference-in-difference design relies on the parallel trend assumption that, adjusted for our covariates, differences between treated and control districts are constant across time. This assumption is not directly testable, but we provide a Granger-style test in Appendix Figure A3. This test checks that the *future* presence of a candidate of ethnorace r or gender g is not predicted by *current* contributions from donors of ethnorace r or gender g . The test is successful, showing no relationship between current contributions and future nominees.

Finally, to estimate potentially heterogeneous effects across identity groups, we fit a set of models that disaggregate effects by contributor ethnorace and gender in order. In contrast to our earlier models, here we separate models by contributor ethnorace r and gender g , such that the outcome variable in a given model is the log total contributions to the Democratic candidate from contributors from one of our eight ethnorace-gender identity groups.¹⁴ The model takes the form:

$$\begin{aligned} \log(Y_{it=r, g=g}) = & \beta_1 \textit{Female Asian Candidate}_{it} + \beta_2 \textit{Male Asian Candidate}_{it} + \\ & \beta_3 \textit{Female Black Candidate}_{it} + \beta_4 \textit{Male Black Candidate}_{it} + \\ & \beta_5 \textit{Female Latino Candidate}_{it} + \beta_6 \textit{Male Latino Candidate}_{it} + \\ & \beta_7 \textit{Female White Candidate}_{it} + \\ & \beta_8 X_{it} + \alpha_i + \delta_t + \varepsilon_{it} \end{aligned}$$

The omitted candidate category in the equation above is white male candidates. Accordingly, each candidate ethorace-gender coefficient represents the Democratic candidate's fundraising from donors of ethnorace r and gender g relative to when the Democratic candidate is a white man. Robust standard errors are clustered by district in all models.

The Race and Gender Distribution of Campaign Contributions

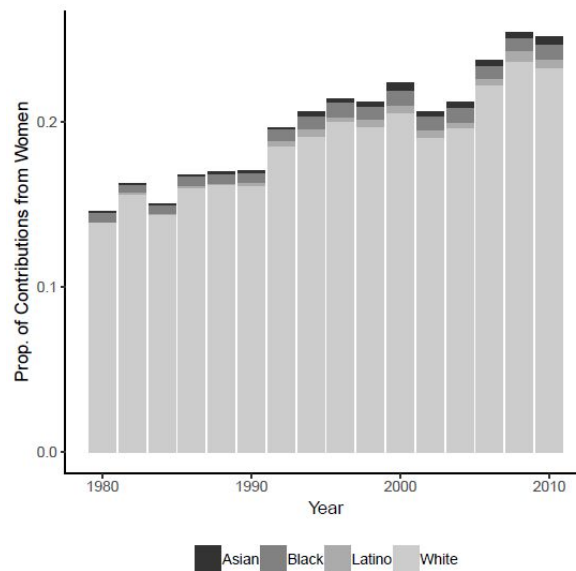
In Figure 1, we first plot the proportion of individual contributions from female donors by donor ethnorace in U.S. House elections from 1980 to 2010. As is immediately apparent, a large majority of individual contributions come from men. In recent cycles, the proportion of

¹⁴ Because we wish to facilitate the interpretation of relationships between discrete combinations of candidate ethnorracial and gender identities, we treat them each race-gender combination “as a single variable” with white men as the omitted identity combination (Gill 2001, 2). In Appendix Section A4 we provide alternative interaction model specification with ordinary constituent and interaction terms (i.e., ethnorace indicator, gender indicator, and ethnorace \times gender indicator). The results are nearly identical.

contributions from women peaks around 25%. This proportion, of course, is unrepresentative of women’s proportion of the population.

Proportions of money from women of color are even smaller and less representative of the public at large. Contributions from women of color are barely visible through the 1980s. Even in the most recent election years of our data, women of color represent only about two percent of individual contributions in House elections. For comparison, black women alone comprise over 6% of the U.S. population in the 2010 Census, and all women of color comprise nearly 18%.¹⁵ Despite concern that black and Latina women are underrepresented in Congress (e.g., Minta and Brown 2014; Tate 2018), we find that their representation among campaign contributions is even poorer. Black and Latina women comprised 3.2% and 1.4% of the U.S. House in the 111th Congress, respectively, but campaign funds from black and Latina women *combined* have only recently begun to comprise more than 1% of individual contributions.

Figure 1: Female Contributions by Ethnorace in U.S. House Elections, 1980-2010

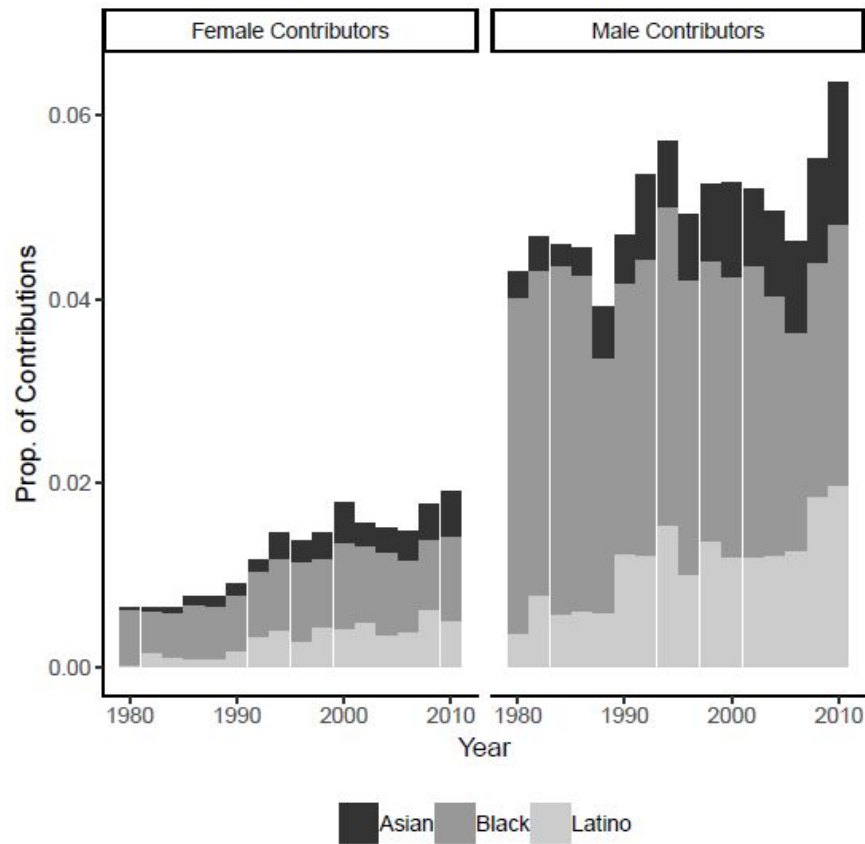


Note: Women are underrepresented in campaign contributions. Columns represent the proportion of total individual contributions from women, with stacked columns separated by donor ethnorace.

¹⁵ This includes Asian, black, Hispanic, American Indian or Alaska Native, Native Hawaiian or Pacific Islander, or individuals of two or more races.

We further describe the underrepresentation of women of color in campaign finance in Figure 2. Here we plot the proportion of total individual contributions from female and male Asian, black, and Latino donors in U.S. House elections from 1980 to 2010. Contributions are overwhelmingly from white donors (see also Grumbach and Sahn 2019). However, men of color, despite themselves being underrepresented, are more than twice as prevalent in campaign contributions as women of color.

Figure 2: Race and Gender of Individual Contributions in U.S. House Elections, 1980-2010



Note: Black and Latina women are more underrepresented than black and Latino men in campaign contributions. Columns represent the proportion of total contributions from female Asian, black, and Latino donors (left panel) and male Asian, black, and Latino donors (right panel).

In Appendix Figure A1, we also estimate the ethnoracial distribution of contributions *within each gender group*. Both male and female contributions become more ethnoracially

diverse (i.e., less white) in more recent election cycles as the proportion of contributions from Asian and Latino donors increase (though we see no such increase in money from black donors). In the aggregate, contributions from men tend to be moderately more ethn racially diverse than contributions from women. Only in the 2000 election cycle does the proportion of female contributions from women of color surpass the proportion of male contributions from men of color.

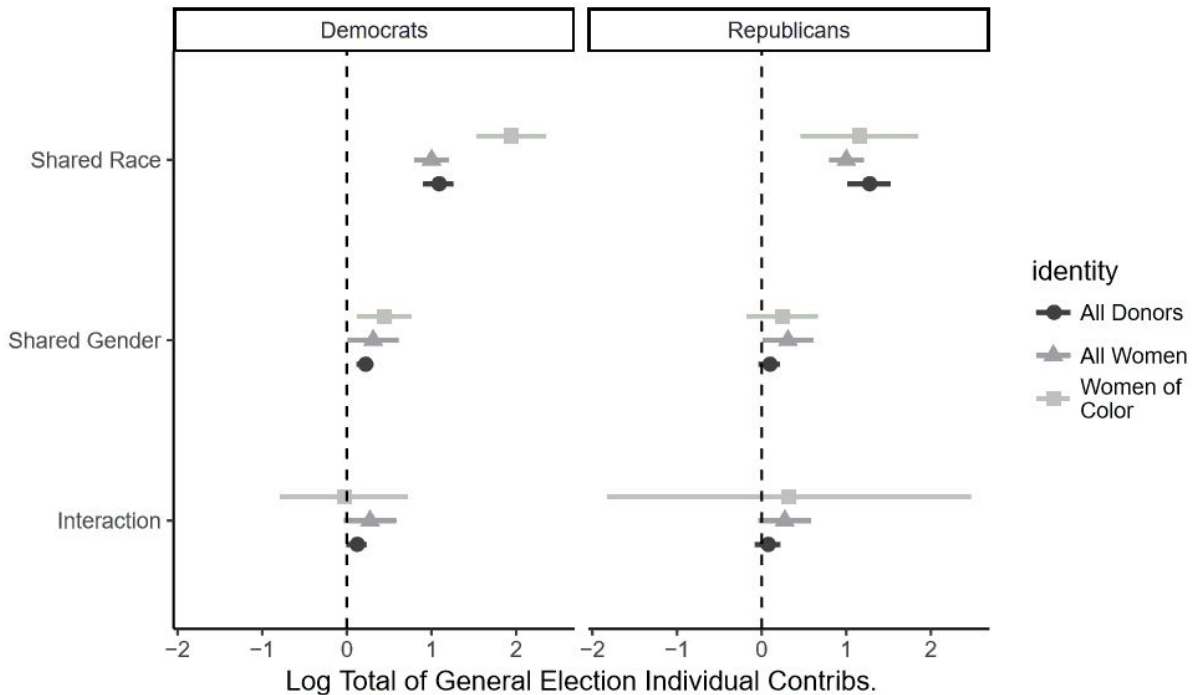
Overall, we observe a campaign finance system in which individual contributions are homogenous in terms of both gender and ethn race. In recent elections, compared to their population proportions, white women are underrepresented by an approximate factor of 2, men of color by a factor of 4, and women of color by a factor of 10. However, we observe a positive trend over time in the share of contributions from women, people of color, and women of color. Only recently have candidates and incumbents begun to similarly diversify. In the next section, we turn to our analysis of the effect of shared ethn racial and gender identities between candidates and donors.

Results

Candidate ethn race and gender are correlated with total contributions from individuals of the same ethn race (correlation of .44) and same gender (0.08). The identities of candidates in elections, however, vary greatly across geography and time. Figure 3 plots the results of our main difference-in-difference models, which estimate the within-district effect of candidate identity on the log total of contributions from individuals of the same race and/or gender

identities.¹⁶ As is immediately apparent, candidates count on much greater contributions from individuals of the same ethnorace. The coefficients for shared ethnorace are significantly larger than those for shared gender, among both Democratic and Republican candidates, and among all donors as well as women and women of color donors.

Figure 3: Shared Ethnorace and Gender Effect (Difference-in-Difference)



Note: Candidates receive greater contributions from donors who share their identities. The effect of shared race is significantly greater than that of shared gender. Models include covariates for incumbency and district demographics, as well as district and year fixed effects. Robust standard errors are clustered by district.

The effect of shared ethnorace is substantial. The shared ethnorace coefficients for all groups and both parties are at least 1.05, which represents a 186% increase in contributions from individuals of the same ethnorace. The largest effect, that of Democratic women of color donors, is 1.93. An Asian, Latino, or black Democratic candidate receives a massive 588% more in contributions from Asian, Latina, or black women donors, respectively, compared to a candidate of another ethnorace. The magnitude of this relationship is especially considerable given we are

¹⁶ We provide cross-sectional analysis with similar results in Appendix Section A.5.

comparing nominees from the same party within the same district. The average Democratic nominee receives about \$2000 each from Asian, Latina, and black women during the general election period; these estimates imply that the amount from each group increases by nearly \$12,000 when the candidate shares their ethnoracial identity.

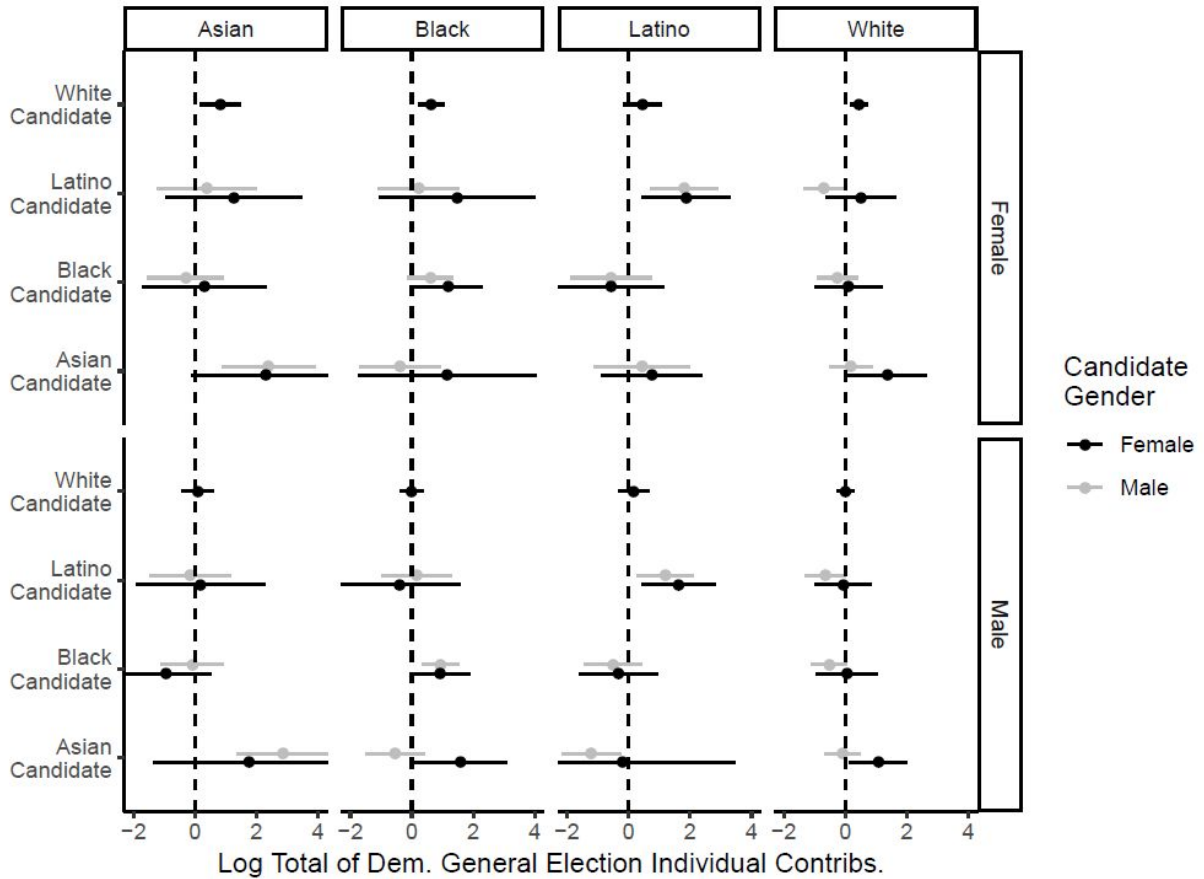
The effect of shared gender is considerably smaller. For all women donors, the coefficient for shared gender is about one-third as large as that for shared ethnoracial identity. Ethnorace is indeed a much more powerful predictor of campaign contributions than gender. However, the shared gender effect still has considerable substantive significance. Because white women make up a greater aggregate share of contributions than do all people of color combined, this relatively small proportional increase can matter for overall funding. The effect among all Democratic women of 0.31 represents a 36% increase in contributions from female donors to female Democratic nominees relative to male nominees. In raw monetary terms, Democratic nominees receive nearly \$25,000 on average from white women during the general, a number that increases by nearly \$9,000 when the candidate is female. The coefficient for Republican women is 0.34, or a 40% increase. This finding of a gender effect among both parties is different from Thomsen and Swers (2017), who find no effect of shared gender among Republican women. In Appendix Section A3, we show that female candidates tend to receive similar or greater contributions from male donors, as well. This finding is consistent with prior research that suggests little gender heterogeneity in overall fundraising (though not dispositive of other mechanisms of gender bias in campaign finance).

Intersectional Race-Gender Effects

In this section, we turn to the results of intersectional analysis of shared gender and ethnoracial identity, running separate models for each of the eight ethnorace-gender groups of donors. The relative importance of shared gender identity varies within and across ethnoracial groups of candidates and donors. The marginal effect of candidate gender and ethnorace combinations are shown for Democratic candidates in Figure 4. Estimates of the effect of candidate gender and ethnorace are relative to the dashed lines, which represent total contributions from the ethnorace-gender group of donors to white male candidates.

We find partial evidence of *interracial* effects of shared gender: women contribute more to female candidates who do not share their ethnoracial identities. This finding is evidenced in multiple ways. First, white female candidates consistently raise more funds from female contributors of every ethnoracial group than do white male candidates. Second, white and black female donors contribute more to women candidates of every ethnoracial identity than to their same-ethnorace male counterparts. Female Asian and Latina candidates see a large increase in contributions from white women compared to male Asian and Latino candidates, respectively. However, the other gender differences mostly do not achieve statistical significance (e.g., black women contribute more to Latina women than to Latino men, and white women contribute more to black women than to black men, but these confidence intervals are quite wide).

Figure 4: Log Total Contributions by Gender and Ethnorace (Democrats)



Note: Female white Democratic candidates receive greater contributions from female donors of all ethnoracial groups, relative to white male Democratic candidates. Candidates of color receive greater amounts from coethnic contributors regardless of candidate gender. Left-vertical axis represents candidate ethnorace. Top-horizontal axis represents contributor ethnorace. Right-vertical axis represents contributor gender. Estimates in black represent female candidates; estimates in grey represent male candidates. Effects of candidate ethnorace and gender are relative to white male candidates (the dashed vertical lines). Models include covariates for incumbency and district demographics, as well as district and year fixed effects. Robust standard errors are clustered by district.

As with female donors of all ethnoracial identities, Democratic Asian and Latina women contribute more to white women than white men. However, they contribute similar amounts, respectively, to candidates Asian and Latino candidates—who share their ethnoracial identity—regardless of candidate gender. This unexpected finding suggests that female Asian and Latina donors may prioritize shared gender when the candidate does not share their ethnoracial identity.

The bottom panel of Figure 4 shows effects of candidate identity on contributions from ethnoracial groups of male donors. With little exception, the gender of Democratic candidates is unrelated to contributions from men. Interestingly, black and white men contribute significantly more to Asian female candidates than Asian male candidates. By contrast, Asian male donors contribute more to black men than black women, and more to Asian men than Asian women, but these differences are statistically insignificant.

Figure A2 in the Appendix presents the same analysis for Republican candidates. Shared gender and ethnorace appears to matter less for Republican candidates and contributors. Although white female candidates (relative to white male Republican candidates) still receive greater contributions from women of all ethnoracial groups, the effect sizes are smaller for Republicans than we observed for Democrats. White female candidates see more contributions from white women and women of color, but the increase is only significant for white female donors. Shared ethnorace, regardless of candidate gender, is also less predictive for Republicans. However, the low number of Republican nominees of color, especially women of color, makes these estimates of shared identity quite noisy; caution is warranted in interpreting these results.

Conclusion

Campaign finance is an important arena of political participation, but not one that reflects the demographics of the United States in terms of ethnorace, gender, or their intersection. In this article, we measure individual campaign contributions by ethnorace and gender, and estimate the effect of candidate gender, race, and their interaction on the identity distribution of their campaign funds. We provide new evidence that women, ethnoracial minorities, and especially

women of color are underrepresented in campaign finance—more so than in other areas of political participation and representation—which may violate norms of democratic equality and contribute to biased representational and policy outcomes.

We show that shared race and gender identities between candidates and donors affect campaign contributions. On average, candidates count on greater contribution totals from individuals who, separately, share their gender and ethnoracial identities. While female candidates count on significantly greater contributions from female donors, we find that by far the strongest identity-based predictor of contributions is shared ethnorace. This finding is consistent with research on voting behavior, where race explains party identification and vote choice to a greater degree than gender. It also suggests that shared ethnorace may have a greater effect on contributions than voter turnout, potentially because while one can only vote for a House candidate in their own district, they have hundreds of candidates from across the country to which they can contribute money.

We uncover important heterogeneity when we further disaggregate candidate and contributor identities. We find considerable variation by ethnorace in whether shared gender identity led to greater contributions within or across ethnoracial groups. Although female white and black donors gave more to Democratic women of every ethnoracial group, only white female Democratic candidates received greater contributions from women of all ethnoracial backgrounds (white, black, Asian, and Latina women). Appendix Section A4 provides additional specifications to illustrate this ethnoracial heterogeneity in gender-based contributions.

The results are consistent with the predictions of theories of group consciousness, linked fate, and empowerment, but also with theories based in the intersectionality of the gender and

racial dimensions. White female Democratic candidates, unlike female candidates of color, receive a consistent boost from all ethnoracial groups of female donors. This result could reflect the relative salience of identities for campaigns and donors: compared to white women, women of color have the additional, potentially competing, identity of ethnorace.

Our research design mitigates the potential of confounding related to district and election characteristics, but other potential mechanisms may explain the effects we observe. Although research suggests that candidate development, recruitment, and entry vary by gender (Fox, Lawless, and Feeley 2001; Fox and Lawless 2004; Kanthak and Woon 2005; Butler and Preece 2016), and that other characteristics of candidates and incumbents vary by gender, such as ideology. However, we largely conceptualize these as “post-treatment” variables that are either part of the concept of, or were previously caused by, the individual’s gender.

This is the first systematic analysis of comprehensive data on ethnorace *and* gender in campaign finance, and it leaves many questions to be answered in subsequent research. One important area of further investigation is the role of identity and fundraising in a greater array of stages of candidacy, such as candidate recruitment, filing, and primary elections. Early fundraising based on shared gender and ethnoracial identity, for instance, may make a candidate appear viable to party organizations, or scare off potential primary opponents. In addition, subsequent observational and experimental research may illuminate the relative importance of different mechanisms behind co-gendered and coethnic contributing, such as psychological processes related to identity, as well as the role of political organizations and appeals from campaigns.

Finally, although individual campaign contributions may over time become more representative of population demographics, we caution against expecting a more diverse set of donors to fundamentally challenge longstanding inequalities in American policy and society. A large body of research and journalism suggests that some forms of racial, gender-based, and intersectional discrimination may occur independently of an individual's income, wealth, and social class. In turn, increasing the gender and ethnoracial diversity of campaign contributions may lead to political gains for women and people of color. But these gains may disproportionately benefit the most well-resourced members of these identity groups (Strolovitch 2007). Strong connections to social movements may be a necessary condition for campaign contributions to help dismantle institutional forms of racism and sexism.

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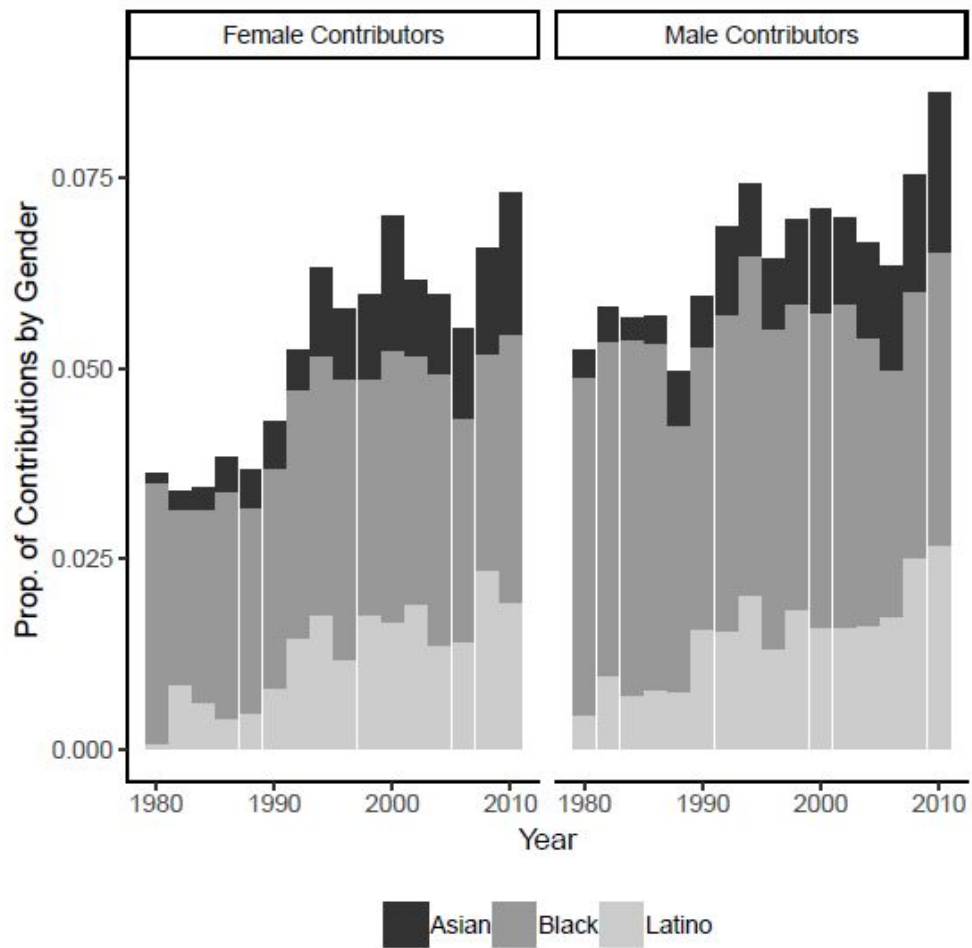
Appendix for
Gender, Race, and Intersectionality in Campaign Finance

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A1. Ethnoracial Diversity Among Male and Female Contributors

Figure A1: Within-Gender Proportion of Individual Contributions by Ethnorace



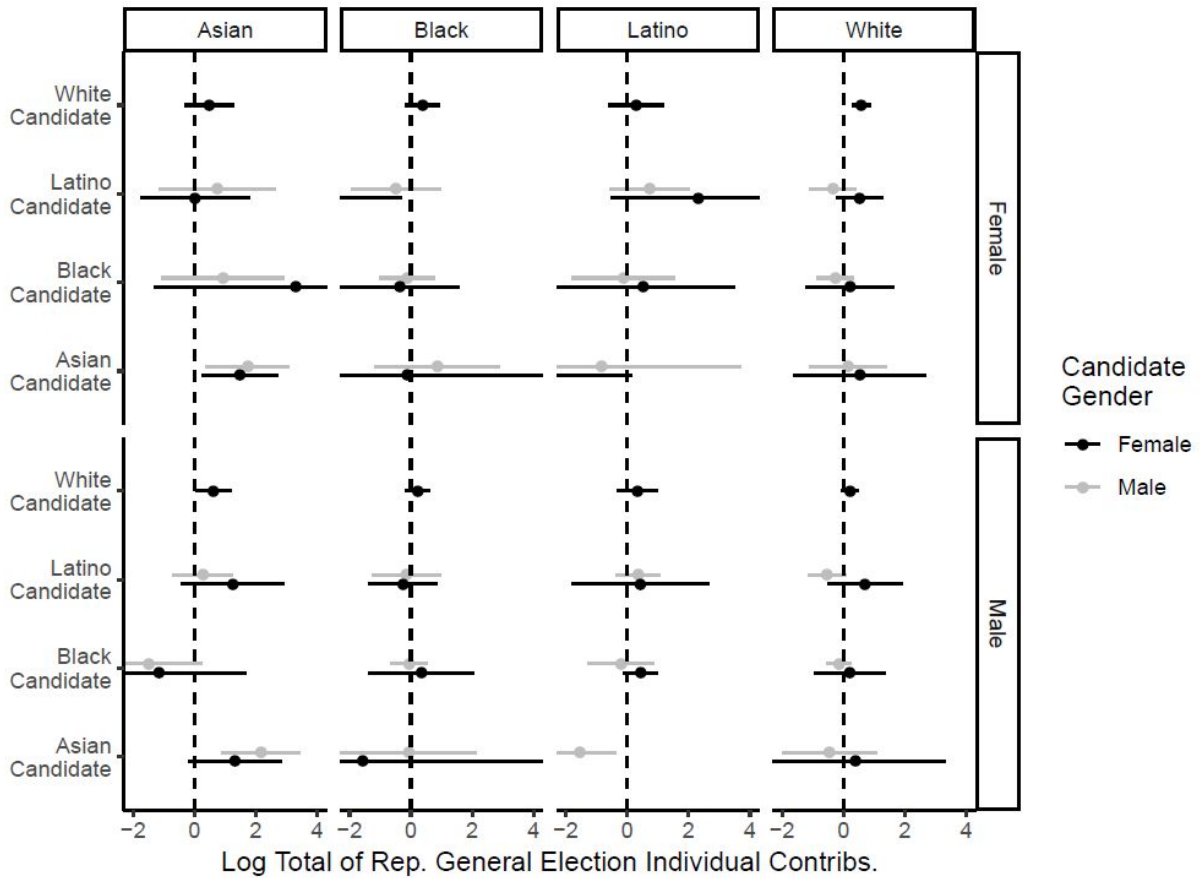
Note: Contributions from women are less racially diverse than contributions from men. Plot shows the proportion of female contributions by ethnorace, and the proportion of male contributions from ethnorace.

A2. Gender Effect by Ethnorace Among Republicans

As seen in Figure A2, shared gender and ethnorace appears to matter less for Republican candidates and contributors. First, although white female candidates (relative to white male Republican candidates) still receive greater contributions from women of all ethnoracial groups, the effect sizes are much smaller for Republicans than we observed for Democrats. White female candidates see more contributions from white women and women of color, but the increase is only significant for white female donors. Second, the modest increase in contributions from white women to female candidates of color (relative to male candidates of color) is smaller and less precise for Republicans. Interestingly, for Republicans, both male and female white donors contribute significantly more to female Latina candidates than to male Latino candidates.¹⁷ There is also modest evidence of an intraracial gender effect among Republican Latina women, in which they contribute greater funds to female coethnic nominees than male coethnic ones.

¹⁷ Although it is not the central focus of this paper, we also find that shared ethnoracial identity is less important for Republicans. While Asian Republicans, and to a lesser degree Latino Republicans, see increased coethnic contributions, Black Republicans see no increase in contributions from black donors (see also Grumbach and Sahn 2019).

Figure A2: Difference-in-Difference: Log Total Contributions by Gender and Ethnorace (Republicans)



Note: Female white Republican candidates modestly greater contributions from female donors of all ethnoracial groups, relative to white male Republican candidates. Candidates of color receive modestly greater amounts from coethnic contributors regardless of candidate gender. Left-vertical axis represents candidate ethnorace. Top-horizontal axis represents contributor ethnorace. Right-vertical axis represents contributor gender. Estimates in black represent female candidates; estimates in grey represent male candidates. Effects of candidate ethnorace and gender are relative to white male candidates (the dashed vertical lines).

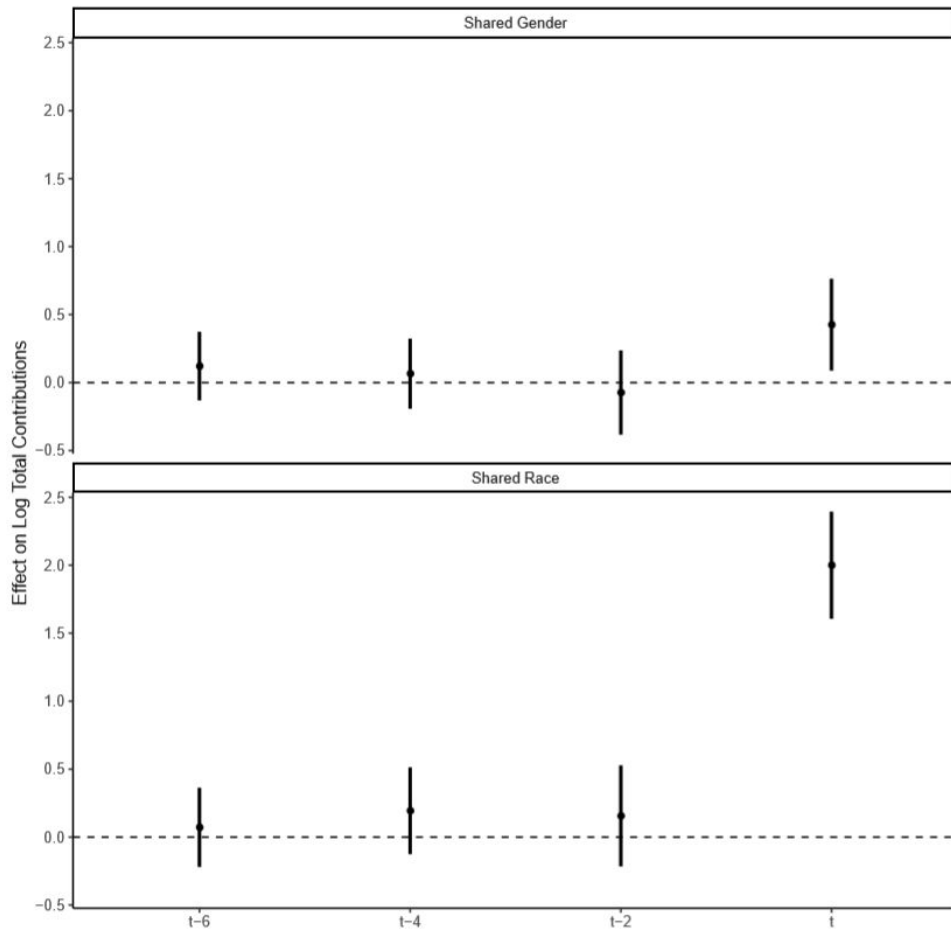
Among Republicans, we find considerable variation in the effect of shared ethnorace. We find no effect of shared ethnorace for black Republican candidates, irrespective of candidate and donor gender. Conversely, we find a strong ethnoracial effect in which Asian Republican candidates raise more funds from both female and male Asian donors. For Latinos, however, we find that the ethnoracial effect is mostly concentrated among female Latina donors (who, as stated earlier, also contribute more to female than male coethnic candidates).

A3. Parallel Trends

We provide a Granger-style causality test that includes leading terms for the treatment variable in our two-way fixed effects model (Angrist and Pischke 2008; Wing, Simon, and Bello-Gomez 2018).

In particular, we add leading indicators of our treatment variables, shared race and shared gender, to our main difference-in-difference model. The leading terms cover year $t+2$, $t+4$, and $t+6$, and their coefficients are interpretable as the conditional association between the presence of a *future* nominee of ethnorace r and gender g on *current* contributions from donors of ethnorace r and gender g . If we find a relationship between current contributions from, for instance, Latino donors and the future nomination of Latinos (adjusting for the current nominee's ethnorace), this would suggest a violation of the parallel trends assumption; the potential outcomes of districts that become 'treated' by a Latino nominee systematically differ from those that do not become treated. The results, presented in Table A3 below, suggest that *the future nomination of a candidate of ethnorace r has no relationship with current contributions from donors of ethnorace r* , and that *the future nomination of a candidate of gender g has no relationship with current contributions from donors of gender g* —a successful test.

Figure A3: Granger-Style Causality Test



A4. No Decrease in Male Contributions to Female Candidates

We fit models to estimate the effect of candidate gender on contributions from women, and, separately, from men. These models take the form:

$$\log(Y_{itg=g}) = \beta_1 \text{Female Candidate}_{it} + \beta_2 X_{it} + \alpha_i + \delta_t + \varepsilon_{it}$$

The “treatment” variable, *Female Candidate*_{it}, is an indicator that takes a value of 1 when the Democratic general election nominee is a woman. The quantity of interest, β_1 , is thus the within-district change in log total fundraising from women to the Democratic candidate when the candidate is female (relative to male). We also run analogous models for Republican candidates, and for the effect of candidate gender on contributions from male donors.

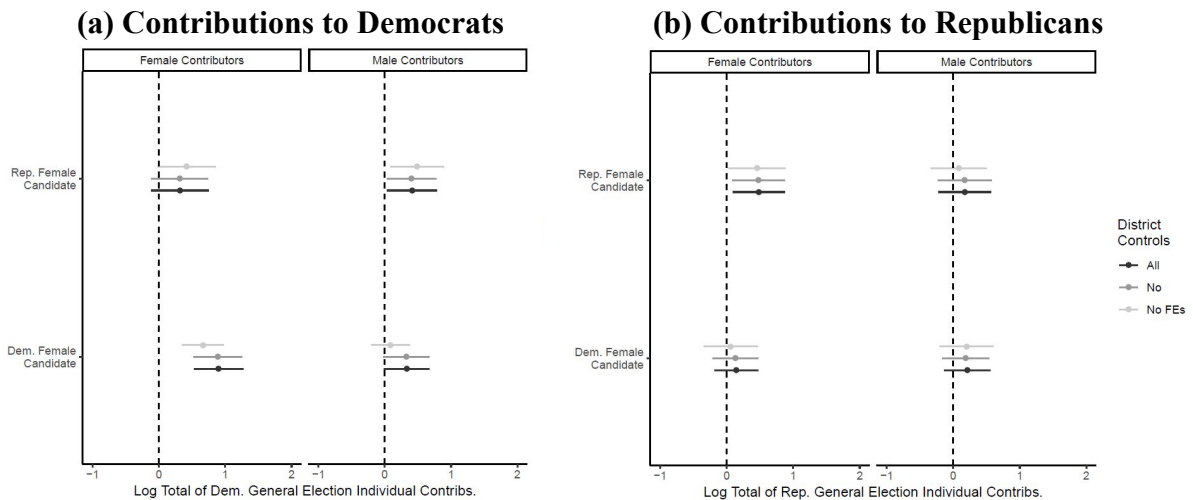
Figure A3 shows the results of models that separate the gender effect by donor gender. The left panel (a) displays the relationship between candidate gender and contributions from men and women to the Democratic nominee. When the Democratic nominee is a woman, she receives significantly greater contributions from female donors compared to male Democratic nominees in the same district. The coefficient for female Democratic candidate in the full model with district covariates is 0.90 (relative to the dashed line, which represents fundraising when the Democrat is male). This represents a 146% increase in total funds from female donors.

In contrast to earlier studies that find a gender effect only among Democrats (Thomsen and Swers 2017), we find that female Republican candidates also receive greater contributions from female donors. The effect size of 0.48 in the full model, however, is significantly smaller than the effect for Democrats (62% versus 146%, significantly different at $p < 0.05$).

Figure A3 also shows that female candidates raise as much or more from male donors as do male candidates (consistent with earlier studies showing that women raised as much total

funds as men, e.g., Burrell 2014). Republican women raise similar amounts from male donors as Republican men. Female Democratic candidates receive significantly *more* money from male contributors (though the increase in women’s contributions is significantly greater than that of men’s contributions). Grumbach and Sahn (2019) show similar results with regard to ethnicity: candidates of color see increases in coethnic contributions, but little to no reduction in contributions from white donors.

Figure A4: Effect of Candidate Gender on Contributor Gender (Difference-in-Difference)



Note: The nomination of a female candidate increases contributions from female donors.

A.5 Additional Interaction Specifications by Donor Ethnorace and Gender

Table A1: Difference-in-Difference (Democrats)

| | (1) Asian Women | (2) Black Women | (3) Latina Women | (4) White Women |
|------------------------------------|---------------------|----------------------|----------------------|-----------------------|
| Same Race | 2.216** (0.733) | 0.506 (0.367) | 1.514** (0.558) | 0.366 (0.228) |
| Same Gender | 0.737* (0.318) | 0.588* (0.229) | 0.189 (0.286) | 0.688+ (0.401) |
| Same Race × Same Gender | -1.092 (0.928) | -0.0768 (0.597) | -0.134 (0.766) | -0.277 (0.426) |
| District % Asian | 0.0400 (0.0493) | -0.0112 (0.0412) | -0.00950 (0.0332) | -0.0249 (0.0193) |
| District % Latino | -0.0114 (0.0173) | -0.0323* (0.0145) | 0.0258 (0.0169) | -0.0197* (0.00925) |
| District % Black | -0.0162 (0.0252) | -0.00809 (0.0145) | 0.0224 (0.0223) | 0.0187+ (0.0112) |
| Constant | -0.257 (3.454) | 2.258 (2.243) | 1.639 (2.859) | 4.777*** (1.238) |
| District & Candidate Covariates | Yes | Yes | Yes | Yes |
| District FEs | Yes | Yes | Yes | Yes |
| Year FEs | Yes | Yes | Yes | Yes |
| <i>N</i> | 2062 | 3145 | 2170 | 5372 |
| <i>R</i> ² | 0.394 | 0.381 | 0.419 | 0.425 |

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A2: Difference-in-Difference (Republicans)

| | (1) Asian Women | (2) Black Women | (3) Latina Women | (4) White Women |
|------------------------------------|---------------------|--------------------|---------------------|-------------------------|
| Same Race | 1.392* (0.703) | -0.129 (0.451) | 0.748 (0.661) | 0.316 (0.223) |
| Same Gender | 0.345 (0.396) | 0.268 (0.286) | 0.216 (0.476) | 0.563 (0.511) |
| Same Race × Same Gender | -0.0577 (0.861) | -0.861 (1.088) | 1.207 (1.464) | -0.0867 (0.538) |
| District % Asian | 0.0709+ (0.0427) | 0.0315 (0.0505) | 0.0360 (0.0607) | -0.0188 (0.0189) |
| District % Latino | 0.00247 (0.0173) | 0.0109 (0.0188) | 0.0147 (0.0174) | -0.0370*** (0.00932) |
| District % Black | 0.0168 (0.0330) | 0.0181 (0.0199) | 0.00255 (0.0392) | 0.0171+ (0.0103) |
| Constant | 5.814 (3.698) | 2.703 (1.873) | 5.735+ (3.289) | 5.613*** (1.053) |
| District & Candidate Covariates | Yes | Yes | Yes | Yes |
| District FEs | Yes | Yes | Yes | Yes |
| Year FEs | Yes | Yes | Yes | Yes |
| <i>N</i> | 1741 | 2743 | 1733 | 5038 |
| <i>R</i> ² | 0.341 | 0.379 | 0.394 | 0.417 |

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

A.6 Cross-Sectional Analysis

This section provides the results of cross-sectional, rather than within-district, analysis. These models do not district fixed effects, and require stronger assumptions than our difference-in-difference design. To be interpreted as causal estimates of the effect of candidate identity, the potential outcomes must be independent of donor ethnorace and gender after conditioning on our district and candidate covariates.

Tables A3 and A4 provide regression estimates of the relationship between shared identity and contributions from female donors, separated by donor ethnorace. Figure A4, by contrast, combines the data and presents estimates similar to Figure 3 in the article (including fixed effects for each donor ethnorace-gender identity group).

Table A3: Shared Identity and Contributions by Donor Ethnorace (Democrats)

| | <i>Donors</i> | | | |
|------------------------------------|-----------------------|-------------------------|-------------------------|-------------------------|
| | (1) Asian Women | (2) Black Women | (3) Latina Women | (4) White Women |
| Same Race | 2.109* (0.968) | 0.623* (0.298) | 1.092** (0.389) | 0.641*** (0.180) |
| Same Gender | 0.230 (0.245) | 0.252 (0.216) | 0.113 (0.216) | 0.192 (0.273) |
| Same Race × Same Gender | -3.775*** (0.959) | -0.00399 (0.464) | 0.632 (0.595) | 0.304 (0.316) |
| District % Asian | 0.0607*** (0.0136) | -0.0351* (0.0148) | -0.00690 (0.0119) | -0.0113 (0.0125) |
| District % Latino | 0.00800 (0.00621) | -0.0203*** (0.00596) | 0.0321*** (0.00700) | -0.00309 (0.00442) |
| District % Black | -0.0183* (0.00711) | -0.0129+ (0.00712) | -0.0266*** (0.00676) | -0.0199*** (0.00503) |
| Constant | 3.560** (1.292) | 4.545*** (0.988) | 4.293*** (1.093) | 5.322*** (0.712) |
| District & Candidate Covariates | Yes | Yes | Yes | Yes |
| District FEs | No | No | No | No |
| Year FEs | Yes | Yes | Yes | Yes |
| <i>N</i> | 5372 | 5372 | 5372 | 5372 |
| <i>R</i> ² | 0.106 | 0.128 | 0.175 | 0.244 |

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

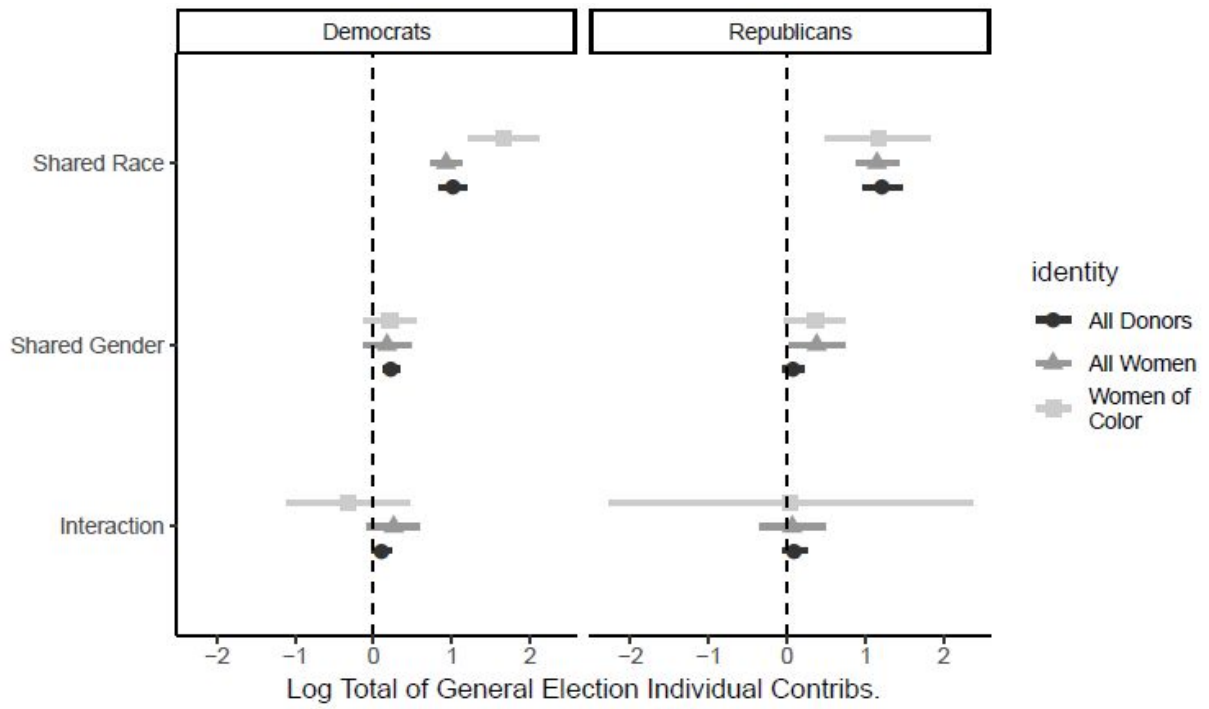
Table A4: Shared Identity and Contributions by Donor Ethnorace (Republicans)

| | <i>Donors</i> | | | |
|------------------------------------|-----------------------|---------------------|------------------------|-------------------------|
| | (1) Asian Women | (2) Black Women | (3) Latina Women | (4) White Women |
| Same Race | 1.848** (0.708) | 0.323 (0.451) | -0.298 (0.580) | 0.649** (0.248) |
| Same Gender | 0.284 (0.229) | 0.490+ (0.268) | 0.242 (0.280) | 0.261 (0.462) |
| Same Race × Same Gender | -1.737 (1.298) | -1.865* (0.870) | 1.699+ (0.927) | 0.226 (0.487) |
| District % Asian | 0.0583** (0.0176) | -0.0102 (0.0189) | -0.00627 (0.0149) | -0.0220** (0.00813) |
| District % Latino | 0.0124+ (0.00729) | 0.00132 (0.0101) | 0.0409*** (0.00813) | -0.00112 (0.00496) |
| District % Black | -0.0187* (0.00837) | 0.0122 (0.00921) | -0.0185+ (0.00945) | -0.0199*** (0.00586) |
| Constant | 4.077** (1.283) | 4.612*** (1.053) | 1.913 (1.185) | 6.002*** (0.695) |
| District & Candidate Covariates | Yes | Yes | Yes | Yes |
| District FEs | No | No | No | No |
| Year FEs | Yes | Yes | Yes | Yes |
| <i>N</i> | 5038 | 5038 | 5038 | 5038 |
| <i>R</i> ² | 0.090 | 0.073 | 0.128 | 0.194 |

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure A5: Cross-Sectional Regressions of Shared Identity and Contributions



A.7 Difference-in-Difference Excluding Incumbents

Table A5: Effect of Shared Ethnorace and Gender on Contributions, Non-Incumbents Only

| | (1) Democrats | (2) Democrats | (3) Republicans | (4) Republicans |
|------------------------------------|----------------------|----------------------|---------------------|----------------------|
| Same Race | 0.898*** (0.0999) | 0.868*** (0.0987) | 0.934*** (0.113) | 0.983*** (0.118) |
| Same Gender | 0.127+ (0.0686) | 0.118+ (0.0691) | 0.0458 (0.0895) | 0.0460 (0.0925) |
| Same Race × Same Gender | 0.0934 (0.0908) | 0.124 (0.0889) | 0.0329 (0.105) | 0.0354 (0.109) |
| District % Asian | | 0.0563 (0.0408) | | -0.00861 (0.0246) |
| District % Latino | | -0.0135 (0.0172) | | -0.00388 (0.0124) |
| District % Black | | 0.0178 (0.0167) | | 0.0131 (0.0124) |
| Constant | 3.614*** (0.304) | 8.201*** (1.831) | 4.078*** (0.232) | 4.178** (1.401) |
| District & Candidate Covariates | Yes | Yes | Yes | Yes |
| District FEs | Yes | Yes | Yes | Yes |
| Year FEs | Yes | Yes | Yes | Yes |
| <i>N</i> | 10753 | 10075 | 11728 | 10807 |
| <i>R</i> ² | 0.418 | 0.422 | 0.439 | 0.446 |

Standard errors in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

References for Supplemental Material

Angrist, Joshua D., and Jörn-Steffen Pischke. 2008. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press.

Wing, Coady, Kosali Simon, and Ricardo A. Bello-Gomez. 2018. "Designing difference in difference studies: best practices for public health policy research." *Annual Review of Public Health* 39.