# What Have You Done for Me (or Us) Lately? Gender and Economic Voting 

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## What Have You Done for Me (or Us) Lately? Gender and Economic Voting

On the heels of The American Voter, scholars of voting behavior in the past fifty years have continued to refine and redefine the pivotal microfoundations of vote choice. Much work has pointed to a sturdy relationship between "economic outlook," to use the phrase coined by Campbell, Converse, Miller, and Stokes (1960/1980), in The American Voter, and vote choice (for a review of this voluminous literature, see Lewis-Beck and Stegmaier 2000, 2007; for the curiously limited impact that The American Voter has had on the economic voting literature, see Lewis-Beck and Stegmaier in this conference proceeding). The bulk of existing work has examined the relationship between economic assessments and vote choice on average. Some attention has focused on heterogeneity across voters in how they translate their economic outlooks into their choice of presidential (or congressional) candidate.

One way in which studies of voting behavior have evolved in the past fifty years is in the explicit recognition of heterogeneity in the voting calculus of different types of individuals. We have gone from "first-generation" questions of "Does $X$ affect $Y$ ?" to more complex "secondgeneration" questions - questions that probe further, exploring the conditions under which and the types of individuals for whom $X$ affects $Y$. The study of gender and voting is one key example of a literature that has flourished since the publication of The American Voter. In this paper, I focus on the extent to which gender structures economic voting.

As is the case with The American Voter Revisited, this paper is also in the tradition of updating and revisiting past work. If any single piece on gender and economic voting exists, it is Susan Welch and John Hibbing's fine article published in a 1992 volume of the Journal of Politics, entitled, "Financial Conditions, Gender, and Voting in American National Elections." In their analysis of the 1980 and 1984 presidential elections, Welch and Hibbing report that women seem to rely on sociotropic considerations more than men do, and men pocketbook evaluations when women do
not. The Welch and Hibbing piece has been cited in at least 34 cases, primarily with subsequent researchers' citing the study as attesting to heterogeneity in economic voting, with women relying on pocketbook evaluations less than men do and relying on sociotropic evaluations more than men do.

In the past fifty years - and even in the past twenty-four years since the 1984 election that Welch and Hibbing analyze - the country has experienced mammoth changes in gender dynamics. In the context of vast changes in the status of women in the workforce, changes in educational attainment, changes in the structure of the family, changes in gender role orientations, and, not least, advances in statistical methodology, it seems fitting to revisit Welch and Hibbing's findings on gender and economic voting.

## The "New" American Voter: Who is She?

Why gender? We conference participants were charged with reacting to the question: "The American Voter: Change or Continuity over the last Fifty Years?" One clear way in which the American voter has changed over the last fifty years is in who she is. In the 1956 presidential election, $22 \%$ of female respondents in the National Election Studies (NES) were not registered to vote; this proportion is significantly greater than the $13 \%$ of male respondents who were not registered. Of all male respondents, $80 \%$ reported having turned out to vote; of all female respondents, only $68 \%$ reported turning out to vote. The gender gap in voting has tightened considerably in the last fifty years - so much so that in recent presidential elections, it has all but disappeared. By the 2004 presidential election, female respondents even slightly outpaced male respondents in reported turnout ( $80 \%$ of female respondents reported turning out to vote, compared with $77 \%$ of male respondents). Figure 1 displays the closing of the gender gap in reported turnout across the past fifty years.

Figure 1 about here

In the past fifty years, women have also acquired vastly different social, economic, and political roles in the United States. Both men and women have experienced tremendous gains in educational attainment in the twentieth century. In 1950, only $36 \%$ of females and $33 \%$ of males had obtained at least a high school degree or its equivalent, and only $5 \%$ of females and $7 \%$ of males had obtained a bachelor's degree or its equivalent. By 2000, over $80 \%$ of males and females had at least a high school degree or its equivalent, and over $26 \%$ of males (and $23 \%$ of females) had obtained a bachelor's degree or its equivalent. ${ }^{1}$

One of the most striking changes to affect women over the past fifty years has been increased labor force participation rates. Using the NES, in 1956, $65 \%$ of female respondents were coded as "homemakers" and $35 \%$ were categorized as having held some occupational position in the paid workforce. By 2004, the percentage categorized as homemakers dropped to $13 \%$, with the overwhelming majority of female respondents (86.8\%) having held some position in the paid workforce. In 1970 (the earliest date for which comparable figures are available from the Bureau of Labor Statistics), $41 \%$ of women over the age of 16 worked outside the home, compared with $76 \%$ of men. The gap in labor force participation rates between men and women has plummeted, from about 35 percentage points in 1970 to only 13 percentage points by 2005, largely due to the increased labor force participation of women across this time period. Figure 2 illustrates these changes in labor force participation rates. In the past few decades, women have also experienced growth in employment in higher-wage sectors and increases in earnings (the wage gap was 62 cents on the dollar in 1979; by 2005, it had closed somewhat, to 81 cents on the dollar). ${ }^{2}$ Finally, among

[^0]married couples, the wage earning structure has changed dramatically. In 1967, among married couples where at least one member earned wages, husbands were the only earners in $38.2 \%$ of married-couple families and both husbands and wives earned ages in $46.8 \%$ of families. By 2004, only $28.6 \%$ of households had husband-only earnings, and in two-thirds of households ( $66.2 \%$ ) both husbands and wives earned wages. ${ }^{3}$

Figure 2 about here
Family structure has also shifted in the past few decades. In 1956, $86 \%$ of male respondents and $75 \%$ of female respondents were located in married households. By 2004, only $56 \%$ of male respondents and $47 \%$ of female respondents were located in married households. Big gains occurred in two categories: those who reported never having married and those who were divorced.

Finally, gender role orientations have also shifted in the past few decades. In 1972 (the earliest year in which NES began asking the question ${ }^{4}$ ), the American public was quite heterogeneous on views of the proper role of women in society: $20 \%$ of respondents took the most conservative view, $20 \%$ situated themselves in the middle, and $33 \%$ took the most liberal view - that women and men should have equal roles in society. By 2004, views had shifted in a decidedly progressive direction: over $60 \%$ of respondents took the most liberal view; only $2 \%$ the most conservative view; and only $9 \%$ situated themselves right in the middle. Figure 3 illustrates the changes in gender role orientations over time.

Figure 3 about here

[^1]To illustrate the impact of these changes on the American voter: recall that in 1956, males were disproportionately more likely to vote than females. Of those women who did vote, the modal female voter was married, a homemaker, and her highest educational degree was a high school diploma. The question on gender roles was not asked in 1956, but even in 1972 only $33 \%$ of female voters believed that women and men should have equal roles. In 2004, the modal female voter was not married, was employed in the workforce in a professional or managerial role, and her highest educational degree was a bachelor's degree or higher. By 2004, she was firmly of the mind that women and men should have equal roles in society.

Given these vast changes in education, in labor force participation, in family structure, and gender role orientations, it seems fitting to revisit Welch and Hibbing's findings on gender and economic voting. Before doing so, I turn to a brief review of heterogeneity and economic voting in order to situate this examination of gender and economic voting.

## Heterogeneity \& Economic voting

In The American Voter, Campbell, Converse, Miller, and Stokes (1960/1980) introduce the concept of "economic outlook". An economic outlook encompasses both personal and national evaluations of the state of the economy. ${ }^{5}$ Moreover, an economic outlook can include both retrospective as well as prospective evaluations (for reviews of economic voting, see Chapter 13 of LewisBeck, Jacoby, Norpoth, and Weisberg 2008; Lewis-Beck and Stegmaier 2000, 2007). Overall, the literature on economic voting suggests only "faint support" for pocketbook voting (Lewis-Beck et al. 2008, p. 380), while the relationship between sociotropic considerations and the vote has emerged as "consistently statistically significant" (Lewis-Beck et al. 2008, p. 380). The bulk of existing

[^2]research has focused on identifying and estimating with precision the effects of pocketbook and sociotropic evaluations (be they retrospective or prospective), at large. Considerably less research has focused on heterogeneity in economic voting. This smaller pool of work might be a function of publication bias: sturdy, replicable findings reporting statistically significant differences in economic voting across politically relevant covariates may be difficult to unearth - and hence, not much is reported (see, e.g., Gerber and Malhotra 2006 on publication bias in the economic voting literature). Those works that do uncover significant differences across subgroups report differences by sex (Welch and Hibbing 1992); by levels of political awareness (with contradictory results reported by Goren 1997 compared with Gomez and Wilson 2001, 2007); class (Weatherford 1978); age (Eisenberg and Ketcham 2004); race (Eisenberg and Ketcham 2004).

These exceptions notwithstanding, the bulk of existing work focuses on the economic voter as a homogeneous "type" (Lewis-Beck, Jacoby, Norpoth, and Weisberg 2008, 384). As Lewis-Beck, Jacoby, Norpoth, and Weisberg (2008) note, "it should not be forgotten that the notion of a homogeneous economic voter is extremely useful, not to say indispensable. How does Jane O. Elector respond to economic boom or bust?" (385). Useful as this question may be, it is not entirely complete. Do Jane O. Elector and John O. Elector respond differently to economic conditions? If they do, then the "average" economic voter is neither Jane O. Elector nor John O. Elector - but rather, some hypothetical figment that exists as a weighted average of the two.

Investigating heterogeneity in effects can be quite relevant for studies of economic voting, especially to the extent to that two (relatively) equally-sized groups display different responses to the economy. Consider the following scenario: suppose that individuals in Group 1 are significantly motivated by pocketbook voting $\left(\gamma_{11}>0\right)$, but individuals in Group 2 are not $\left(\gamma_{21}=0\right)$ :

$$
\begin{aligned}
& \text { Group 1: } y_{\mathrm{i}}=\gamma_{10}+\gamma_{1} \text { pocketbook }_{\mathrm{i}}+\gamma \mathbf{x}_{\mathrm{i}}^{\prime}+\varepsilon_{1} \\
& \text { Group 2: } y_{\mathrm{i}}=\gamma_{20}+\gamma_{21} \text { pocketbook } \mathrm{i}_{\mathrm{i}}+\gamma \mathbf{x}_{\mathrm{i}}^{\prime}+\varepsilon_{2}
\end{aligned}
$$

$$
\text { Pooling Group } 1 \& \text { Group } 2 \text { with Common Coefficient: } y_{\mathrm{i}}=\beta_{0}+\beta_{1} \text { pocketbook }_{\mathrm{i}}+\beta \mathbf{x}_{\mathrm{i}}^{\prime}+\varepsilon
$$

When Groups 1 and 2 are pooled and analyzed in a single regression, the pooled common coefficient $\left(\beta_{1}\right)$ will represent some weighted average of $\gamma_{11}$ and $\gamma_{21}$. If $\gamma_{11}$ is significant and positive but $\gamma_{21}$ is essentially zero, then the resulting coefficient estimate for $\beta_{1}$ will be attenuated (drawn towards zero) and might empirically be statistically indistinguishable from zero.

Take as an illustration a simple bivariate regression where $\gamma_{11}=1$ and $\gamma_{21}=0$. Suppose $\varepsilon_{1}$ and $\varepsilon_{2}$ are i.i.d. and drawn from a normal distribution with mean 0 and standard deviation of 9 . The results from a single pooled OLS regression might show that $\hat{\beta}_{1}=0.58$, with a standard error of 0.35 , and a resulting $p$-value of 0.10 . We would not be able to reject the null hypothesis that $\beta_{1}=0$ at $p<0.05$ in this case; in casual language, no evidence of pocketbook voting appears using this analysis. However, estimating $\gamma_{11}$ and $\gamma_{21}$ separately (via separate-sample estimation) would yield an estimate of $\hat{\gamma}_{11}=1.22$, with s.e $=0.49$, and $p$-value of 0.013 (reject the null at conventional levels); and an estimate of $\hat{\gamma}_{21}=-0.14$, with s.e. $=0.50$, and a $p$-value of 0.78 (cannot reject the null). An interaction between Group and Pocketbook would moreover yield a statistically significant coefficient of 1.36 (s.e. $=0.70, p$-value $=0.052$, suggesting that the extent of pocketbook voting is significantly different across groups: it occurs for Group 1 but not for Group 2. In short, the effect of pocketbook voting might be statistically insignificant in a pooled sample model, but statistically significant for the subsamples of the population. Repeating this exercise 1,000 times (each time drawing new $\varepsilon$ 's and re-estimating $\hat{\beta}_{1}, \hat{\gamma}_{11}$, and $\hat{\gamma}_{21}$ ) yields the sampling distributions displayed in Figure 4.

Figure 4 about here
As the figure shows, pooling the two groups and estimating a common coefficient on the effect of $X$ may yield a statistically insignificant result, even though the effect of $X$ may be
statistically significant for half of all observations. This raises the possibility that the "faint support" uncovered for pocketbook voting might be an artifact of estimating the effect of pocketbook evaluations on vote choice across all individuals, for neither Jane O. Elector nor John O. Elector, but rather some hypothetical figment that lies in-between.

## Gender and Economic Voting

Why might we expect Jane O. Elector and John O. Elector to respond differently to pocketbook and sociotropic considerations? First, women and men might differ on the levels of these variables. If the fate of incumbent presidents (partially) rests upon what they have done for an individual or for the country at large lately, then the differences across groups in their level of economic evaluations will be reflected in differences in the level of support for the president. To the extent that women are more pessimistic than men in their economic evaluations, then they should be, on average, less willing to stand by the incumbent. Empirical evidence suggests that women are, indeed, consistently more pessimistic than men when it comes to both retrospective pocketbook and sociotropic considerations (Chaney, Alvarez, and Nagler 1998, Funk and GarciaMonet 1997). Data from the National Election Studies from 1980-2004 show general support for these empirical findings, as shown in Figure 5. ${ }^{6}$ On evaluations of the past, women and men are statistically distinguishable from each other in most cases. Men are more likely to positively evaluate past economic performance (both national and personal) compared with women. These differences

[^3]are significant at $p<0.05$, two-tailed, in most cases. ${ }^{7}$ On their own, then, differences in economic pessimism and optimism could account for a bias against incumbents among women (Chaney, Alvarez, and Nagler 1998).

Figure 5 about here
The argument advanced by Welch and Hibbing (1992) goes further than this, however. They provide a nice framework for expecting that the decision calculi of women and men might differ: that women and men on average might incorporate sociotropic and household economic evaluations to different degrees. With respect to pocketbook evaluations: to the extent that women are more other-oriented, more cooperative, less aggressive, and less competitive, then women may be less likely to utilize pocketbook considerations compared with men. Welch and Hibbing also speculate that typical patterns in attribution of blame for personal economic circumstances may lead men and women to rely differently on pocketbook considerations. To the extent that women are more likely to attribute blame internally while men attribute blame externally, then women will be less likely than men to link their personal economic circumstances with vote choice.

With respect to sociotropic voting, Welch and Hibbing lean on differences in moral reasoning across men and women to argue that because women are more likely to view the world in relational terms, they are less likely to focus on her own household's economic conditions but instead use national conditions "as the appropriate benchmark" (p. 203). A complementary perspective not explicitly laid out by Welch and Hibbing might argue that to the extent that women make a clear distinction between the private and public spheres, they will more clearly delineate politics as a public sphere, separate from the private sphere, such that public-oriented considerations (sociotropic evaluations) rather than personal considerations (pocketbook evaluations) would be influential for

[^4]them. If men, on the other hand, do not separate out the two to such a great degree, then men might rely on both in their vote choice.

Welch and Hibbing analyze 1980 and 1984 presidential and congressional vote choices; their findings are primarily localized to presidential vote choice, so I will confine my analysis to presidential vote choice, as well. ${ }^{8}$ Moreover, they spotlight retrospective rather than prospective evaluations, so my analyses will be confined to retrospective evaluations. ${ }^{9}$ In their analysis, the partisanship of the presidential vote choice is the dependent variable, and the key independent variables are the respondent's national economic evaluations (retrospective), the respondent's personal economic evaluations (retrospective), and the partisanship of the respondent. ${ }^{10}$ Because of how the dependent variable is coded, the effect of economic assessments must be interpreted contextually: it is expected to be positive in some cases and negative in others, depending upon which incumbent party is in office. The analytical approach estimates separate-sample regressions for women and men, for each of the years. The "conclusion" that women and men rely differentially on pocketbook voting (and that women rely somewhat more than men on sociotropic

[^5]voting) comes from examining the raw magnitude of the maximum-likelihood estimates in their models. ${ }^{11}$

The first analysis in this paper sets out to replicate the 1980 and 1984 analyses - but with more stringent analytical tests of the key claims and a more streamlined coding scheme. ${ }^{12}$ The dependent variable is coded as 1 if the respondent votes for the incumbent party and 0 otherwise. ${ }^{13}$ I include measures of retrospective national and household evaluations (coded from $0=$ worse in the past year to $1=$ better in the past year). By coding the dependent variable as a vote for the incumbent party, we can make a single prediction about the direction of the economic evaluation variables - their effects should be positive for each election. I also include a measure of partisanship (coded from $0=$ strong identifier of out-party to $1=$ strong identifier of incumbent party); the effect of this variable should be positive throughout. Instead of estimating separate-sample regressions for men and women, I estimate a fully-interactive pooled-sample regression that interacts each of the key independent variables with a dummy variable coded $0=$ male and $1=$ female. This approach mimics the separate-sample estimation but allows for a statistical test of the claim that men and women rely differentially on pocketbook and sociotropic consideration (via a simple $t$-test of the interaction terms; see Kam and Franzese 2007 for more details). These results appear in Table 1. ${ }^{14}$

Table 1 about here

[^6]The results in Table 1 show that the coefficient on national economic evaluations is significant and positive: suggesting that, for male respondents, ${ }^{15}$ positive sociotropic evaluations predict support for the incumbent party. We also see that the effect of national economic evaluations among females is no different from what it is among males, as shown by the insignificant interactions between Female and National Economic Evaluations. The effects of sociotropic evaluations among men and women is not statistically distinguishable from each other; moreover, the magnitude of the difference in effects (as given by the 0.181 and 0.015 ) is inconsistent across years; in 1980, the difference is moderately sizable, while in 1984, the difference is really quite negligible. Recall that Welch and Hibbing (1992) interpret their separate-sample regressions to suggest that "in presidential elections at least, women were slightly more likely than men to weigh the performance of the national economy, to vote sociotropically" (206). ${ }^{16}$ Unfortunately, a simple statistical test using the same data that Welch and Hibbing analyze does not bear out this conclusion. Women and men both vote sociotropically - and to essentially the same extent.

The next set of coefficients identifies the effect of Household Economic Evaluations among men and women. Here, we do see significant differences across the sexes. Men rely significantly on how their households are doing financially in their decision calculus; when times are tough for them and their own, they punish the incumbent. Women, on the other hand, rely significantly less on household economic evaluations in their vote choice (as demonstrated by the significant interactions between Female and Household Economic Evaluations). We can see that the magnitude of the interaction term cancels out the positive effect among men - such that among women, not only do they rely

[^7]significantly less than men on Household Economic Evaluations, but moreover the effect of Household Economic Evaluations is essentially zero. ${ }^{17}$ Here, my results are consistent with those drawn by Welch and Hibbing: men vote with their pocketbooks, but women do not. Such a pattern could provide some insight as to why the analyses on the homogeneous "average" voter have turned up only "faint support" for the pocketbook hypothesis.

To illustrate the substantive effects of sociotropic and pocketbook evaluations among men and women in these two presidential elections, Figure 6 displays predicted probabilities of supporting the incumbent candidate. ${ }^{18}$ In the figure, we see essentially identically-sloped lines for males and females along values of national economic evaluations (the figures in the left column), for both 1980 and 1984; the fact that the lines run parallel to each other reflects the finding that men and women vote sociotropically to essentially the same degree. We also see basically flat lines for females and sloped lines for males along values of household economic evaluations (the figures in the right column), illustrating that men vote with their pocketbooks, while women do not.

Figure 6 about here

## Extending the Analysis through Time

Consistent with the theme of this conference, in looking back on work from the past and examining whether results reported decades ago still hold, I have extended the analysis through time, to determine whether these patterns uncovered in presidential voting in 1980 and 1984 continue to the present-day. To the extent that average differences between men and women result from timeinvariant hard-wired or socialized differences, then we might expect to see continuity in the pattern

[^8]through time. To the extent that average differences between men and women result from average differences in life-circumstance or gender role orientations that have changed through time, then the gender differences in economic voting may have become attenuated over time. To the extent that these differences in pocketbook voting between men and women are context-driven, influenced by political campaigns and other events, then no time trend might be noticeable - but other features of political life might predict when men and women vote similarly or dissimilarly.

Table 2 provides results from extending the analysis over five additional presidential contests: from 1980 to 2004. These seven presidential elections provide good variation on different economic environments, spanning economic boom times and economic busts. These elections also include five cases where an incumbent is running for re-election (1980, 1984, 1992, 1996, 2004) as well as two open-seat races (1988 and 2000, where vice-presidents were up for election). ${ }^{19}$ The first column provides results from a pooled analysis that combines all seven presidential contests from 1980-2004.

## Table 2 about here

In the first column of results, we see some similarities with the original 1980 and 1984 results. We see that National Economic Evaluations are strongly significant predictors of voting for the incumbent among males. We also see that the difference between the effect of National Economic Evaluations between men and women is quite negligible: an estimated interaction coefficient of 0.060 , with s.e. $=0.123$, suggesting that women and men lean similarly on sociotropic considerations. Once again, there is no evidence to suggest that women are more sociotropic than men in their voting decisions. Next, we see that the effect of Household Economic Evaluations is positive and significant among men (as evidenced by the statistically significant coefficient of 0.445 ),

[^9]whereas the effect of Household Economic Evaluations is statistically different between men and women (as given by the significant interaction between Household Economic Evaluations x Female), and moreover, the resulting effect is negligible among women $(0.445+-0.339=0.106)$. Men vote by their pocketbooks, but women do not. These pooled results, however, must be further investigated, since the patterns manifested in 1980 and 1984 might be time-invariant, time-variant, or contextvariant.

To do so, I re-estimated each of the models, by presidential year. To be confident of the two core results (that women and men vote sociotropically to a similar extent, and that men, but not women, vote using their pocketbooks), we would want these patterns to be reflected in each of the presidential election years. Across the seven years, only one of the two core results holds up in each of the elections. First, it does seem to be the case that women vote just as sociotropically as men do (there are no statistically significant interactions in the separate-year regressions); furthermore, and speaking back to one of the "take-away" points that subsequent authors have derived from Welch and Hibbing (1992): there is no systematic evidence to suggest that women vote more sociotropically than men do. In four of the seven analyses, the interaction between National Economic Evaluations $x$ Female is actually negative; it is only positive in three of the cases.

Next, on pocketbook voting: we see that pocketbook voting occurs among men in only three of the seven presidential elections: 1980, 1984 (both of which were analyzed by Welch and Hibbing), and 1992. Otherwise, there is no statistically significant effect for pocketbook voting among men in the majority of cases (four of the seven other elections). Moreover, there is little evidence to suggest that women are statistically distinguishable from men in pocketbook voting. The coefficient distinguishing pocketbook voting for men and women is statistically significant in only three of the seven elections: 1980, 1984, and 1992 (where the interaction term is significant at two-tailed $p<0.10$ ). For the remaining four elections, neither men nor women engage in pocketbook
voting (1988, 1996, 2000, and 2004). These null effects, moreover, cannot be attributable to lack of power, since the sample sizes in the four elections where there are null effects are roughly comparable to the three elections where there are significant differences.

We could speculate about the why these effects (men voting based on household economic evaluations and women not doing so) appear in 1980, 1984, and 1992. One possibility is that there is some time-varying trend that makes women's voting calculi, on average, different from men's in the earlier period. This is a plausible explanation, but given the weak results in 1988, the argument is hard to sustain, unless one were to put forward the argument that the patterns in an election not featuring an incumbent president should be quite different from those where an incumbent is running.

Another way to characterize the three elections where men and women differ in their pocketbook voting is that all three elections were gender-related to some degree. Although the gender gap in presidential voting appeared in the 1970s, it has only been since the 1980 presidential election that the gender gap has systematically appeared (Sapiro 2002). The 1984 presidential election featured Geraldine Ferraro as the first female vice-presidential candidate on a major party ticket. The 1992 election year is widely known as "The Year of the Woman", when an unprecedented number of women were elected to both the U.S. House and Senate. Typical explanations of female-oriented elections find responses among the females (e.g., Campbell and Wolbrecht 2006). However, the movement across election years seems to occur among men: it is among men where voting behavior shifts during these three years in particular. Why it would be the case that men would rely significantly more on their pocketbooks during these three elections is hard to explain. The tentative conclusion to be drawn, if anything, is that the sturdy differences in pocketbook voting across men and women that Welch and Hibbing (1992) uncovered in the 1980 and 1984 presidential elections (and apparent also in 1992) are more the exception than the rule.

## Conclusions

Up to this point, I have analyzed differences across men and women in economic voting. On average, how do men and women differ in economic voting? Not tremendously, according to the analyses that I have presented herein. I conducted these analyses for statistical and empirical reasons. First, statistical reasoning suggested that the "faint support" offered by numerous empirical tests of pocketbook voting could be the consequence of averaging men and women's voting calculi; this actually is the case for 1980 (but it is not for 1984). Second, I conducted these analyses for empirical reasons: given the ongoing changes in the status of women in the social, economic, and political order as well as ongoing changes in gender role orientations, it seemed worth revisiting Welch and Hibbing's (1992) analyses of the 1980 and 1984 presidential elections to determine if the gender gap in economic voting has withstood these large-scale societal changes.

My analyses of the 1980 and 1984 presidential elections supports Welch and Hibbing's finding that men are more likely to engage in pocketbook voting compared with women. However, my analyses do not support Welch and Hibbing's suggestion that women vote more sociotropically than men, despite many citations to the contrary. It is more likely the case that women and men vote sociotropically to similar degrees.

In extending the time period from 1980-2004, it becomes clear that these findings are more the exception than the rule. If the differences uncovered in 1980 and 1984 were due to timeinvariant characteristics that, on average, distinguish men from women, then we would expect the results to hold across the seven elections in the time period. If the differences uncovered in 1980 and 1984 were due to time-varying characteristics such as gender role orientations, level of education, or labor force participation and occupational status, then we would expect to see a general narrowing of differences across the time period - but this also is not entirely apparent in the data. Instead, we see that women and men both vote sociotropically - largely indistinguishably from
each other - and in four out of seven presidential elections, neither women nor men vote with their pocketbooks. Only in 1980, 1984, and 1992 do we see any statistically distinguishable patterns across men and women in reliance on pocketbook voting, where men rely on pocketbook voting and women do not.

To be sure, up to this point, I have simply looked at sex differences across men and women on average. We as political scientists typically mean "gender differences" even when we make the simple categorization between men and women. As Burns (2001) notes, "Gender is a set of ways in which people and institutions make sex matter" $(2002,464)$. Explaining the gender differences that appear in 1980, 1984, and 1992 might be a worthwhile endeavor - one that would entail probing further into which average differences across men and women were politically consequential during those time periods. However, we would also need to explain, however, why the same differences did not become politically consequential in other time periods. For now, my results suggest that when it comes to gender and economic voting: both women and men want to know "What have you done for us lately?" more than "What have you done for me lately?"

Figure 1. The Closing of the Gender Gap in Reported Turnout in Presidential Elections, 1952-2004


Source: National Election Studies Cumulative File, 1948-2004

Figure 2. Gender Gap in Labor Force Participation, 1970-2005


Source: Bureau of Labor Statistics, http://www.bls.gov/cps/wlf-databook2006.htm

Figure 3. Gender Role Orientations, 1972-2004


Source: National Election Studies Cumulative File, 1948-2004
Average values on the gender role orientation question,
coded from $0=$ women's place is in the home
to $1=$ women and men should have equal roles.

Figure 4. Monte Carlo Simulations of Common Coefficient vs. Separate Coefficient Analyses


Source: 1,000 Monte Carlo simulations for each sampling distribution

Figure 5. National and Household Economic Evaluations, 1980-2004


Source: National Election Studies Cumulative File, 1948-2004

Figure 6. Predicted Probabilities of Voting for the Incumbent, 1980 and 1984.

Pr(Vote Incumbent), 1980

$\operatorname{Pr}($ Vote Incumbent), 1984

$\operatorname{Pr}($ Vote Incumbent), 1980

$\operatorname{Pr}($ Vote Incumbent), 1984


Table 1. Gender and Economic Voting in 1980 and 1984

|  | $\mathbf{1 9 8 0}$ | $\mathbf{1 9 8 4}$ |
| :--- | :--- | :--- |
| National Economic Evaluations | $0.712^{*}$ | $0.843^{* *}$ |
|  | 0.306 | 0.205 |
| National Economic Evaluations x Female | 0.181 | 0.015 |
|  | 0.451 | 0.265 |
| Household Economic Evaluations | $0.683^{* *}$ | $0.768^{* *}$ |
|  | 0.193 | 0.195 |
| Household Economic Evaluations x Female | $-0.762^{* *}$ | $-0.586^{*}$ |
|  | 0.256 | 0.248 |
| Partisanship (of incumbent) | $3.420^{* *}$ | $3.124^{* *}$ |
|  | 0.301 | 0.249 |
| Partisanship x Female | -0.433 | 0.005 |
|  | 0.381 | 0.325 |
| Female | $0.884^{* *}$ | 0.308 |
|  | 0.321 | 0.231 |
| Intercept | -2.805 | -2.055 |
|  | 0.264 | 0.188 |
| $\operatorname{lnL}$ | -355.984 | -460.966 |
| $\mathrm{p}>\chi^{2}$ | 0.000 | 0.000 |
| N | 858 | 1321 |

Probit coefficients with standard errors below. ${ }^{*} p<0.05 ;{ }^{* *} p<0.01$
Dependent variable is coded 1 for a vote for the incumbent party; 0 otherwise.
Economic evaluations are coded from 0 (worse off) to 1 (better off).
Partisanship is coded from 0 (strong identifier, out-party) to 1 (strong identifier, incumbent party).
Female is coded 1 for female respondent; 0 for male.

Table 2. Gender and Economic Voting, 1980-2004

|  | Pooled, all years | 1980 | 1984 | 1988 | 1992 | 1996 | 2000 | 2004 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| National Economic Evaluations | 0.815** | 0.712* | 0.843** | 0.496* | 0.974** | 1.329** | 0.557* | 1.153** |
|  | 0.091 | 0.306 | 0.205 | 0.217 | 0.279 | 0.286 | 0.235 | 0.260 |
| National Econ. Eval. x Female | -0.060 | 0.181 | 0.015 | 0.036 | -0.131 | -0.641 | 0.135 | -0.280 |
|  | 0.123 | 0.451 | 0.265 | 0.287 | 0.376 | 0.369 | 0.318 | 0.366 |
| Household Economic Evaluations | 0.445 | 0.683** | 0.768** | 0.178 | 0.549** | 0.216 | -0.208 | 0.360 |
|  | 0.079 | 0.193 | 0.195 | 0.188 | 0.202 | 0.236 | 0.285 | 0.245 |
| Household Econ. Eval x Female | -0.339** | -0.762** | -0.586* | -0.021 | -0.418 | -0.314 | 0.094 | 0.111 |
|  | 0.103 | 0.256 | 0.248 | 0.246 | 0.253 | 0.310 | 0.363 | 0.326 |
| Partisanship | 3.664** | 3.420** | 3.124** | 3.474** | 4.139** | 3.913** | 4.227** | 3.785** |
|  | 0.105 | 0.301 | 0.249 | 0.254 | 0.273 | 0.291 | 0.304 | 0.380 |
| Partisanship x Female | -0.414** | -0.433 | 0.005 | -0.581 | -0.931** | -0.451 | -0.483 | -0.209 |
|  | 0.133 | 0.381 | 0.325 | 0.317 | 0.335 | 0.374 | 0.387 | 0.478 |
| Female | 0.508 | 0.884** | 0.308 | 0.267 | 0.866** | 1.108** | 0.225 | 0.277 |
|  | 0.158 | 0.321 | 0.231 | 0.230 | 0.237 | 0.333 | 0.336 | 0.325 |
| 1980 | -0.437 |  |  |  |  |  |  |  |
|  | 0.130 |  |  |  |  |  |  |  |
| 1984 | 0.384 |  |  |  |  |  |  |  |
|  | 0.124 |  |  |  |  |  |  |  |
| 1988 | 0.120 |  |  |  |  |  |  |  |
|  | 0.122 |  |  |  |  |  |  |  |
| 1992 | 0.029 |  |  |  |  |  |  |  |
|  | 0.122 |  |  |  |  |  |  |  |
| 1996 | -0.122 |  |  |  |  |  |  |  |
|  | 0.128 |  |  |  |  |  |  |  |
| 2000 | -0.307* |  |  |  |  |  |  |  |
|  | 0.126 |  |  |  |  |  |  |  |
| 1980 x Female | 0.185 |  |  |  |  |  |  |  |
|  | 0.174 |  |  |  |  |  |  |  |
| 1984 x Female | -0.164 |  |  |  |  |  |  |  |
|  | 0.163 |  |  |  |  |  |  |  |
| 1988 x Female | -0.049 |  |  |  |  |  |  |  |
|  | 0.163 |  |  |  |  |  |  |  |
| 1992 x Female | 0.026 |  |  |  |  |  |  |  |
|  | 0.162 |  |  |  |  |  |  |  |
| 1996 x Female | 0.228 |  |  |  |  |  |  |  |
|  | 0.172 |  |  |  |  |  |  |  |
| $2000 \times$ Female | 0.107 |  |  |  |  |  |  |  |
|  | 0.168 |  |  |  |  |  |  |  |
| Intercept | -2.423 | -2.805 | -2.055 | -1.897 | -2.730 | -2.860 | -2.431 | -2.571 |
|  | 0.122 | 0.264 | 0.188 | 0.178 | 0.202 | 0.274 | 0.252 | 0.253 |
| $\operatorname{lnL}$ | -2603.29 | -355.98 | -460.97 | -444.34 | -439.74 | -307.11 | -345.61 | -220.28 |
| $\mathrm{p}>\chi^{2}$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| N | 7595 | 858 | 1321 | 1154 | 1341 | 1026 | 1105 | 790 |

Probit coefficients with standard errors below.

$$
{ }^{*} p<0.05 ; * * p<0.01
$$

Dependent variable is coded 1 for a vote for the incumbent party; 0 otherwise.
Economic evaluations are coded from 0 (worse off) to 1 (better off).
Partisanship is coded from 0 (strong identifier, out-party) to 1 (strong identifier, incumbent party).
Female is coded 1 for female respondent; 0 for male.
2004 is the suppressed reference year.

## Appendix A. Replication of Welch and Hibbing (1992)

| Welch \& Hibbing (1992) | Men, 1984 | $\begin{aligned} & \text { Women, } \\ & 1984 \end{aligned}$ | Men, 1980 | $\begin{aligned} & \text { Women, } \\ & 1980 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Perception of Individual Economic Conditions | -.20* | -. 04 | .16* | -. 04 |
| Perception of Condition of National Economy | -.33* | -. 38 | .29* | . $35 *$ |
| Partisanship | .52* | . 51 | .57* | .49* |
| N | 584 | 733 | 391 | 471 |
| Replication |  |  |  |  |
| Perception of Individual Economic Conditions | -.20* | -. 04 | .16* | -. 04 |
| Perception of Condition of National Economy | -.33* | -. 38 | .29* | . $35 *$ |
| Partisanship | .52* | . 51 | .57* | .49* |
| N | 584 | 733 | 391 | 463 |
|  |  |  |  |  |
| Pooled with Interactions | 1984 |  | 1980 |  |
| Perception of Individual Economic Conditions | -.20* |  | .16* |  |
| Perception of Individual Economic Conditions x Female | .16* |  | -.20* |  |
| Perception of Condition of National Economy | -.33* |  | .29* |  |
| Perception of Condition of National Economy x Female | -. 05 |  | . 06 |  |
| Partisanship | .52* |  | .57* |  |
| Partisanship x Female | -. 01 |  | -. 07 |  |
| Female | -. 27 |  | . 25 |  |
| N | 1317 |  | 854 |  |

Dependent variable is presidential vote: $1=$ Republican; $0=$ Democrat
Partisanship: 0 (Str Dem) to 6 (Str Rep)
Economic perceptions: 1 (better) to 5 (worse)
$*$ significant at .05 , one-tailed

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[^0]:    ${ }^{1}$ Bureau of the Census, 2000. "A Half-Century of Learning: Historical Statistics on Educational Attainment in the United States, 1940 to 2000." Tables 5c and 6c.
    ${ }^{2}$ Bureau of Labor Statistics. 2006. Women in the Labor Force: A Databook. http://www.bls.gov/cps/wlfdatabook2006.htm

[^1]:    ${ }^{3}$ Bureau of Labor Statistics. 2005. Women in the Labor Force: A Databook. http://www.bls.gov/cps/wlf-table23-2006.pdf
    ${ }^{4}$ The question (VCF0834) reads: "Recently there has been a lot of talk about women's rights. Some people feel that women should have an equal role with men in running business, industry, and government. Others feel that women's place is in the home. Where would you place yourself on this scale or haven't you thought much about this?"

[^2]:    ${ }^{5}$ Campbell, Converse, Miller, and Stokes (1960/1980) originally conceived of the second component as an individual's "view of the business conditions that confront the nation" (394). The NES has used leaned more heavily on the latter phrase (conditions that confront the nation) and has not asked specifically about business conditions in the past few decades (this question was asked from 1968-1980).

[^3]:    ${ }^{6}$ The retrospective household evaluation question (vcf0880) asks (with some very minor departures in question wording over the time period): "We are interested in how people are getting along financially these days. Would you say that you are better off or worse off financially than you were a year ago?" A follow-up question (vcf0880a) asks respondents to characterize their household conditions as having gotten somewhat or much better/worse, but this question was not asked in 1980. In order to preserve 1980 for analysis, I have used the branch question only.

    The retrospective pocketbook question (vcf0870) asks (with some very minor departures in question wording over the time period): "Would you say that over the past year the nation's economy has gotten better, stayed about the same or gotten worse?" A follow-up question (vcf0871) asks respondents to characterize the economy as having gotten somewhat or much better/worse. For comparability with the retrospective household evaluation question, only the initial question (the 3 point scale) is used in these analyses.

[^4]:    ${ }^{7}$ Women are significantly more pessimistic than men in their retrospective sociotropic evaluations in all years except 1980, 1990, and 2000. Women are significantly more pessimistic in their retrospective household evaluations in all years except 1982 and 2002. All $t$-tests conducted using two-tailed $p$-values of 0.05 .

[^5]:    ${ }^{8}$ Presidential vote choice is vcf0704. Welch and Hibbing (1992) uncovered little evidence of economic voting in 1980, 1982, and 1984 congressional voting. My analyses of the same elections (plus additional elections up to 2004) resulted in the same findings. Welch and Hibbing (1992) utilize the post-election vote choice, so I do as well. See Gomez and Wilson $(2001,2007)$ for an argument supporting the usage of the pre-election vote intention.
    ${ }^{9}$ Women were not as pessimistic when it came to assessments of the future (national or personal) compared with men but they were more likely to refuse to guess about how things would be in the future. In supplementary analyses, I included prospective national and household economic evaluations, and these did not change the substantive or statistical results reported herein.
    ${ }^{10}$ Economic evaluations (national or household) could be endogenous to vote choice or highly correlated with partisanship. Including partisanship addresses the second consideration but not the first. See, e.g., Lewis-Beck, Nadeau, and Elias (2008) for strategies that use panel data to exogenize both partisanship and retrospective national economic evaluations.

[^6]:    ${ }^{11}$ In the 1984 model, this entails a comparison of coefficients for national economic assessments, where $\mathrm{b}=-0.33$ (s.e. $=$ 0.08 , derived from $\mathrm{b} /$ se ratio provided in Table 1) among men and $\mathrm{b}=-0.38$ (s.e. $=0.07$ ) among women. In 1980, the comparison is $\mathrm{b}=0.29$ (s.e. $=.097$ ) among men with $\mathrm{b}=0.35$ (s.e. $=0.096$ ) among women.
    ${ }^{12}$ Replication using Welch and Hibbing's coding appears in Appendix A. All parameter values were replicated. $N$ for one of the analyses (women in 1980) was slightly different.
    ${ }^{13}$ For an election where there is no incumbent running, the outgoing administration's party is considered the incumbent party.
    ${ }^{14}$ The pooled-sample fully-interactive model using Welch and Hibbing's coding appears in Appendix A.

[^7]:    ${ }^{15}$ Because of the interaction between Female and National Economic Evaluations, the effect of National economic evaluations among male respondents is given by the coefficient on National Economic Evaluations.
    ${ }^{16}$ Several ensuing articles also cite this "finding": Chaney et al. (1998); Greene and Elder (2001); Holbrook and Garand (1996); Iversen and Rosenbluth (2005); Manza and Brooks (1998); McCall (2007); McCall and McCall (2007); Richardson and Freedman (2003); Scott et al. (2001).

[^8]:    ${ }^{17}$ This conclusion can be drawn by simply recoding sex to equal 1 for men and 0 for females, and then re-running the analyses with new interactions. The coefficient on the non-interacted variable for Household Economic Evaluations displays the effect among women, using the newly recoded sex variable. Here, the coefficients are statistically indistinguishable from zero.
    ${ }^{18}$ Partisanship is set to Independent. For each graph illustrating the effects of one economic assessment, the other economic assessment is set to "stayed the same."

[^9]:    ${ }^{19}$ We might expect to see more modest economic voting in these open-seat races (e.g., Miller and Wattenberg 1985; Nadeau and Lewis-Beck 2001).

