CHAPTER 11

A Rational Choice Model of the President
and Vice-President as a Package Deal

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Beginning with Anthony Downs's seminal work (1957b), economists (and political scientists following their lead) have modeled voter choice in two-party political competition in terms of the relative utility of having one's preferred candidate elected as compared to the candidate of the other party. There have been scores of articles following up on Downs's insights (see, e.g., Enelow and Hinich 1984; Grofman 1987 for useful reviews). Remarkably, however, in looking at voter preferences in U.S. presidential contests, we find voter preferences for vice-president have been completely neglected in both theoretical work and empirical work even though (since the Twelfth Amendment) voters must choose a president and a vice-president as a package deal (cf. Wuffle 1984).

The aim of this chapter is to provide a rational choice model of voting for president that recognizes the potential importance of voter preferences among vice-presidential candidates when these differ from the directionality of their preference for the top of the ticket.

Given that the influence of the vice-president on national or world affairs is effectively nonexistent as long as the president is alive and well, why ought any voter to care who is vice-president? A simple answer is that the vice-president may become president. There are two ways this may occur: (1) through resignation, death, or permanent disability of a sitting president or (2) by succession.

Over the course of U.S. history, vice-presidents have replaced presidents who have died or resigned a total of nine times. In 25 (one-eighth) of the first 200 years of U.S. history, a vice-president served out the term of the president with whom he was elected.

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We are indebted to members of the Interdisciplinary Focused Research Program in Public Choice, University of California, Irvine, for helpful comments on an earlier draft of this paper, to the Word Processing Center, School of Social Sciences, University of California, Irvine, for manuscript typing, and to Dorothy Gormick for bibliographic assistance.

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Even if a vice-president does not replace a president during that president's term of office, in recent years a vice-president is highly advantaged in obtaining his party's nomination for president in the future. Democratic vice-presidents Hubert Humphrey and Walter Mondale and Republican vice-presidents Richard Nixon and George Bush have all been nominated for the presidency over the last three decades.

A rational choice model of voter decision making would hold that preferences for the vice-presidency could only be relevant when (1) the voter prefers one party's presidential candidate to the other's, but the preference ordering is reversed for the two parties' vice-presidential candidates, or (2) the voter is indifferent about the presidential candidates but has a preference for one of the vice-presidential candidates.

In the first of these two cases, we posit that a voter will treat this preference for vice-president as a relevant factor (i.e., one with a nonzero weight). In the second case, where a voter is indifferent about the presidential candidates, it seems reasonable to believe that at least some voters will use their preference for a vice-presidential candidate to decide which ticket to vote for. However, we recognize that, even if the voter is indifferent about the presidential nominees, factors other than vice-presidential preferences may be decisive (e.g., a "standing commitment" to one or the other political party).

The conditions under which vice-presidential preferences could even in principle be decisive are rarely met. Most voter preferences for president and vice-president will be consistent as to party. Indeed, from 1968 to 1988 condition 1 was satisfied by an average of only 11.5 percent of the electorate, and condition 2 was satisfied by an average of only 5.5 percent of the electorate. See table 1.

Most of the cross-pressured voters in condition 1 preferred a Republican

| TABLE 1. Percentage of Major Party Voters Who Evaluate the Candidates Such That Vice-Presidential Ratings Are Potentially Consequential |
|-----------------------------------|---|---|---|---|---|
| Prefer Republican president and Democratic vice-president | 12.0 | 8.7 | 4.2 | 5.0 | 8.5 | 12.3 |
| Prefer Democratic president and Republican vice-president | 1.1 | 2.0 | 3.5 | 6.0 | 2.6 | 3.3 |
| No presidential preference; Prefer Democratic vice-president | 4.2 | 3.5 | 3.1 | 2.6 | 3.9 | 6.1 |
| No presidential preference; Prefer Republican vice-president | 0.2 | 2.3 | 2.1 | 2.6 | 1.5 | 1.0 |
| Total percentage | 17.5 | 16.5 | 12.9 | 16.2 | 16.5 | 22.7 |

*Source: Center for Political Studies/Survey Research Center National Election Studies.*
candidate for president but a Democratic candidate for vice-president. Among those who preferred a vice-president of a different party than their preferred candidate for president, the inconsistency sometimes considerably reduced their support for the party of their presidential choice. For example in 1976, those who preferred a Republican president but a Democratic vice-president were more than 20 percentage points less likely to vote Republican than those who preferred both Republican candidates to their Democratic counterparts. On average, from 1968 to 1988, the difference in support for the Republican slate between consistent Republican leaners and those who preferred a Democratic vice-president was 11.6 percentage points. (See table 2.)

Similar results obtain when we compare those with consistent Demo-

<table>
<thead>
<tr>
<th>TABLE 2. Percentage Voting Republican by Selected Presidential/Vice-Presidential Preference Pairings</th>
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<tr>
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<tr>
<td>Republican president/Democratic vice-president</td>
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<td>Republican president/Republican vice-president</td>
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<td>Democratic president/Republican vice-president</td>
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<tr>
<td>Vice-president weighted impact</td>
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<td>Neutral president/Democratic vice-president</td>
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<td>Net weighted vice-president impact</td>
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Source: Center for Political Studies/Survey Research Center National Election Studies.

Note: + = pro-Republican.

Impact on the vote is simply the difference in support between those with consistent and inconsistent preferences. Weighted impact on the vote is calculated by multiplying the difference in the Republican vote between those with consistent versus those with inconsistent preferences times the percentage of voters in the latter category (as shown in table 1).

Impact on the vote is calculated by taking the deviation of each neutral category from the national vote and then multiplying this times the percentage of voters. The pro-Democratic impact is then subtracted from the pro-Republican impact.

+Because in this case both presidential neutral categories voted more Republican than average, there is no reason to suspect that the vice-presidential candidates had any impact.
ocratic preferences with those who preferred a Republican to a Democratic vice-president. In 1972, for example, the former were 29.9 percentage points more likely to support the Democratic slate than the latter. On average, from 1968 to 1988, the difference in support for the Republican slate between voters who preferred both presidential and vice-presidential candidates of the Democrat versus those who preferred the Democrat for president but the Republican for vice-president was 15.2 percentage points.

A Rational Choice Model of "Two Front Teeth" Voting

Let $u_{DP}^{(i)}$ be the value attached by the $i$th voter to the election of the Democratic presidential nominee; $u_{DV}^{(i)}$ be the value attached by the $i$th voter to the election of the Democratic vice-presidential nominee. Similarly, we obtain values for the two Republican nominees as $u_{RP}^{(i)}$ and $u_{RV}^{(i)}$. Now a voter should vote for the Democratic ticket if and only if

$$
(u_{DP}^{(i)} - u_{RP}^{(i)}) + (u_{DV}^{(i)} - u_{RV}^{(i)})W_{VP}^{(i)} > 1 + \lambda^{(i)}
$$

(1)

where $W_{VP}^{(i)}$ is the relative weight the voter attaches to the vice-presidency (the weight attached to the presidency is normalized at a value of one), and where $\lambda^{(i)}$ reflects whatever other factors may enter the voter's decision calculus. If $\lambda^{(i)}$ is positive, the voter has a noncandidate-based bias toward the Republicans. If $\lambda^{(i)}$ is negative, the voter has a noncandidate-based bias toward the Democrats.

We can reexpress equation (1) in ratio terms as the following rule: Vote for the Democratic ticket if and only if

$$
(u_{DP}^{(i)} - u_{RP}^{(i)})/(u_{DV}^{(i)} - u_{RV}^{(i)}) > (1 + \lambda^{(i)})/W_{VP}^{(i)}
$$

(2)

In order to specify how a given voter should vote, we would need to know the $\lambda^{(i)}$ values and the $u^{(i)}$ values, as well as $W_{VP}^{(i)}$. The $u^{(i)}$ can be proxied by voter scores for presidential and vice-presidential candidates based on what is called a "feeling thermometer." As for the relative weight to be attached to the vice-presidency, we might expect that $W_{VP}^{(i)}$ should be a proxy for the (subjective) probability that a vice-president will serve as president, because when not stepping in as president the vice-president is of trivial policy importance.

We may treat $\lambda^{(i)}$ as stochastic error. If it is small, we may safely disregard it. If a voter's subjective probability of vice-presidential replacement of the president during office corresponds to the historical reality of 12.5 percent, then $W_{VP}^{(i)}$ should be one-seventh; if voters also take into account the likelihood that a vice-president will be elected as president in his own right,
Intensity of presidential preferences is stronger than vice-presidential preferences

9.6%  
(n = 335)

Equal intensity of presidential and vice-presidential preferences

14.6%  
(n = 96)

Intensity of vice-presidential preference is stronger than presidential but less than twice as strong

34.8%  
(n = 162)

Intensity of vice-presidential preferences is over twice as strong as presidential preference

50.0%  
(n = 58)

Fig. 1. Percentage of voters with split presidential–vice-presidential voting in line with their vice-presidential preference (combined data from 1968–88 U.S. National Election Survey)

then $W_{ij}$ will be much higher. But in any case, we would not expect most voters who prefer the vice-presidential nominee of the opposite party to their presidential preference to use the vice-presidential preference to guide their vote unless they are much more intense in their feelings about the vice-presidential nominee than about the presidential nominee. As shown in figure 1, this is exactly what we find.

The probability of voters voting for the party whose vice-presidential candidate they prefer does not go above 0.5 unless the ratio in figure 1 is above 2. Thus, for most voters it would appear that the weight (value) attached to the vice-presidency is less than one-third.
Information, Participation, and Choice

An Economic Theory of Democracy in Perspective

Edited by Bernard Grofman

Ann Arbor

The University of Michigan Press