The Relationship between Divisive Primaries and General Election Outcomes*

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This research examines the effect of divisive primaries on general election outcomes. Small group research is used to establish a theoretical framework for understanding the behavior implicit in the divisive primary hypothesis. We contend that the opposing sides in a primary battle develop in-group loyalties and out-group hostilities similar to those documented by social psychologists studying small group behavior. In order to empirically test this hypothesis, we develop a new measure of primary divisiveness. Previous research has failed to consider the divisiveness of one party's primary relative to the other party's primary when assessing the impact of divisiveness on general election outcomes. Using ordinary least-squares regression, we find that divisive presidential primaries do indeed have a deleterious effect on the general election results. Specifically, when one party has a divisive primary season while the other party's nominee is essentially uncontested, then the divided party will be adversely affected in November.

Introduction

After President Ford's loss to Ronald Reagan in the 1976 Texas Republican primary, a close Ford aide stated, "The bloodbath has started early and I think we are getting very damn close to the precipice where neither Republican can win in November" (*Newsweek*, 1976, p. 26). In the most recent presidential primary season, party elites were once again worried over party infighting. For example, near the end of the bitter Mondale-Hart struggle, Iowa Democratic Chairman Dave Nagel argued that "if Hart sweeps the rest [of the primaries] Mondale is going to be a badly wounded duck trying to fly home [to a convention and general election victory]" (*Time*, 1984, p. 36).

The above quotes illustrate a common concern among party elites that hard-fought presidential primary battles can prove detrimental to a party's chances for general election success. Their worry is that supporters of losing primary candidates may be so disillusioned that they abstain from voting for their party's nominee in the fall election. On the surface there appears to be evidence to support their concerns. Witness Mondale's

*The names of the authors appear in alphabetical order and imply that this paper is in every way a collaborative enterprise. This research was supported by a grant from Wichita State University (3727-22). We wish to thank Fran Majors for her careful preparation of the manuscript. devastating defeat in 1984 following a divisive primary season. Similarly, McGovern and Goldwater, also big losers in their respective elections, achieved nominations only after arduous primary campaigns. Even incumbent presidents may not be immune to the negative effects of a divided primary race. Presidents Ford and Carter both faced stiff primary challenges prior to their defeats.

Toward a Theoretical Understanding of the Divisive-Primary Hypothesis

Although most political pundits are convinced that divisive primaries hurt a party's chances for victory in November, is there actually firm reason to suspect that supporters of losing primary candidates refrain from voting for their party's nominee in the general election? We begin our search for an answer to this question with small group research. Decades of social-psychological inquiry has revealed that individual members of groups engaged in conflict over scarce resources become intensely loyal to their group-the in-group-and develop intensely hostile feelings toward the other group-the out-group (Miller and Bugelski, 1952; Coser, 1956; Rabbie and Horowitz, 1969; Tajfel, 1970). In addition, when the conflict ends, members of the losing side regularly retain their hostile feelings for the winning group (Blake and Mouton, 1961). And perhaps most important for our purposes, the small group experiments have shown that when a more formidable enemy threatens both original groups, individual members of these groups are not always able to set aside their hostile feelings for one another in order to ally against the greater threat (Sherif and Sherif, 1953).

Such small group findings lend substantial credibility to the rationale underlying the divisive-primary hypothesis. Indeed, the parallels tween the small group research and the divisive hypothesis are striking. A primary campaign is a struggle between groups. The struggle is over a scarce resource, the nomination. As the primary campaign battle intensifies, it is easy to imagine supporters of a candidate developing strong in-group loyalties and hostile feelings toward opponents' organizations. Supporters of losing primary candidates, much like members of the losing side in small group research, may well retain their bitterness toward the winning side. Even a general election campaign, which introduces the greater threat of the opposition party's nominee, may prove unable to dissolve all the malice remaining from the primary struggle. Many supporters of losing primary candidates may never back their party's nominee. In short, the behavior implicit in the divisive hypothesis resembles closely the behavior social psychologists have observed in small groups placed in conflictual situations.

To be sure, though, a primary struggle is not a controlled small group

experiment. A campaign involves many intervening forces, some of which may serve to weaken the parallels between small group behavior and the behavior purported in the divisive-primary hypothesis. For example, party loyalties may be sufficiently strong to pull most of the supporters of losing primary candidates back into the fold by general election day. However, a campaign also introduces forces which may work to create in-group loyalties and out-group hostilities even more intense than those observed in the small group setting. For one, the stakes are greater. In small group research, members of the winning group might receive a pocket knife (Sherif and Sherif, 1953) or a transistor radio (Rabbie and Horowitz, 1969), while the winning side in a primary secures a nomination. Also, the duration of the conflict in small group experiments is brief, ranging from a few minutes (Tajfel, 1970) to a few weeks (Sherif and Sherif, 1953). In contrast, a primary campaign may last months. The longer time frame of campaigns should allow particularly intense ingroup and out-group feelings to develop. In all, then, even though primary campaigns are much different from small group experiments, the dissimilarities would not appear to damage seriously the likelihood that the behavior exhibited by individuals on the losing side of a small group conflict is essentially the same as the behavior exhibited by supporters of losing primary candidates.

If we apply the small group model of in-group-out-group behavior to primary campaigns, it follows that the more intense the campaign the poorer the eventual nominee should do in the general election. Intense campaigns should forge strong in-group loyalties and out-group hostilities, leaving many of the supporters of losing candidates unwilling to vote for their party's candidate in the fall. To test for this, some measure of the intensity of a primary battle is required. In the small group setting, intensity can be gauged firsthand through questioning the group members (Rabbie and Horowitz, 1969) or careful observation (Sherif and Sherif, 1953; Tajfel, 1970). Campaigns, however, are composed of thousands of actors (e.g., candidates, activists, and voters) and hundreds of events (e.g., rallies, fundraisers, and debates), making the questioning of relevant actors and the observation of relevant events virtually impossible. As such, a less direct measure of primary intensity is needed.

An obvious choice for a less direct measure of campaign intensity is the division of the primary vote: the more divisive the vote, the more intense the primary.¹ This measure certainly has face validity. For

¹ This measure is not able to capture the precise degree of bitterness in any given primary. Content analysis of newspaper articles, television reports, and campaign speeches may be able to tap the vitriolic nature of any given primary. Clearly, this is beyond the scope of this research.

instance, the presidential primary struggles which experts have tabbed as the most intense intraparty bloodbaths, such as the 1968 Democratic and 1976 Republican campaigns, have also generally been the races where the primary vote was quite divisive. Likewise, primary campaigns that political observers have labeled as tranquil, like the 1972 and 1984 Republican races, have been campaigns where one candidate usually has secured most of the vote. But is there a systematic relationship between the divisiveness of the primary vote and general election vote percentages? A number of studies have addressed this question in a variety of electoral arenas (Bernstein, 1977; Comer, 1976; Hacker, 1965; Johnson and Gibson, 1974; Lengle, 1980; Piereson and Smith, 1975; Reiter, 1979). The most sophisticated of these have been the recent works by Born (1981) and Kenney and Rice (1984). The basic empirical model employed in these current studies, when formalized, reads:

$$DP = a + b_1 D - b_2 R + u; (1)$$

where DP is the Democratic percentage of the general election vote; D is Democratic primary divisiveness (Democratic winner's percentage of the primary vote); R is Republican primary divisiveness (Republican winner's percentage of the primary vote); and u is the error term. Both Born (1981) and Kenney and Rice (1984) included additional control variables on the right-hand side of the equation (e.g., normal vote), but for purposes of our illustration these are unnecessary.

The model in equation 1 states that the Democratic share of the general election vote for a specific office is a function of the level of divisiveness in the Democratic (D) and Republican (R) primaries for that office. More specifically, the larger the Democratic nominee's percentage of the primary vote, the larger his or her percentage of the November vote should be (signified by the positive b_1 coefficient); and, conversely, the larger the Republican nominee's percentage of his or her party's primary vote, the smaller the Democrat's percentage of the general election vote should be (signified by the negative b_2 coefficient). Thus, the two variables that Born (1981) and Kenney and Rice (1984) use to tap primary divisiveness succeed in relating Democratic and Republican divisiveness independently to the general election outcome.

The results of the Born (1981) and Kenney and Rice (1984) research were mixed. Born found that divisive primaries were not related to the general election vote in House contests, and Kenney and Rice reported that divisive primaries were associated with lower general election vote totals in gubernatorial and senatorial elections. Such confused conclusions are also the rule when comparing the results of the earlier works on divisiveness (see Born, 1981).

The myriad of primary research to date, then, has been unable to determine with confidence whether divisive primaries have a negative influence on the November vote. Does this imply that the in-group-outgroup model of small group behavior does not apply to primary campaigns? Not at all. Instead, we contend that the inconclusive findings may well stem from an improper specification of the relationship between the division of the primary vote and the general election outcome. As mentioned above, equation 1 relates Democratic and Republican primary divisiveness independently to the general election vote. Herein lies the shortcoming. Democratic and Republican primary divisiveness are not independently related to the November vote, but must be considered relative to each other. For example, according to equation 1, a Democratic primary winner who captured 60 percent of the primary vote could expect to be disadvantaged in the general election, since 40 percent of his or her party's primary voters cast ballots for other candidates. The Democrat might indeed be disadvantaged if the Republican nominee faced a less-divisive primary. However, if the Republican also polled 60 percent of his or her primary's vote then primary divisiveness should fail to influence the general election results, since both candidates' primaries were equally divisive. To carry the example one step further, if the Republican nominee squeaked by with 40 percent of the vote in a multicandidate primary, the Democrat should actually be advantaged, since the Republican stands to lose a larger percentage of primary voters than the Democrat come November. It is not enough, then, to measure the divisiveness of each party's primary simultaneously; the two primaries must be considered relative to each other.

A single interval measure which accomplishes this can be constructed by simply subtracting the Republican nominee's percentage of the primary vote from the Democratic nominee's percentage of the primary vote. Drawing on the above example, if the Democratic nominee captured 60 percent and the Republican nominee 100 percent of the primary vote, the proposed measure would score a -40 (60 - 100 = -40), suggesting the Democrat would be disadvantaged in the general election. As the Republican's percentage of the primary vote dropped, or the Democrat's percentage increased, the latter's handicap would begin to disappear. If the Democrat's percentage of the primary vote exceeded the Republican's, the measure would register positive, meaning that the Democrat could expect to be advantaged in the general election. When formalized, the model for testing the divisiveness hypothesis, using the improved measure of divisiveness, would be (excluding control variables):

$$DP = a + b_1 DIV + u; \tag{2}$$

(2)

where all definitions are as in equation 1 except that DIV represents relative primary divisiveness: the Democratic nominee's percentage of the primary vote minus the Republican nominee's share of the primary vote.

Assessing the Impact of Divisiveness

The improved measure of divisiveness could be employed in the study of divisiveness at any electoral level. We have chosen to apply it to the presidential primary arena for two reasons: (1) the presidential case has been understudied and (2) presidential primary election data dating back to the early primaries are easily obtained. Our level of analysis is the state. To allow for the calculation of the divisiveness variable, a state must have held both a Democratic and a Republican presidential primary in a given year. An examination of presidential primaries from 1912 to 1984 uncovered 306 cases which meet this criterion.² For each case the divisiveness variable was constructed by subtracting the eventual Republican presidential nominee's percentage of that state's Republican primary vote from the eventual Democratic nominee's percentage of his or her primary vote. Since the presidential nomination struggle is often a multicandidate affair, it is quite likely, especially in the early primaries, for the eventual nominee to capture a small percentage of the vote. Nevertheless, the logic of the divisive hypothesis should still hold: primary voters who cast ballots for any candidate other than the eventual nominee should be more likely to desert their party in the general election. With the key independent variable determined, we now turn to discussing and operationalizing the other relevant variables.

Since the concern of this study is to determine the impact of divisive primaries on general election outcomes, our dependent variable must capture the partisan division of the November elections. We have chosen to use the same measure of the fall vote for our dependent variable as Born (1981) and Kenney and Rice (1984): the Democratic percentage of the general election vote. With respect to the present study, the precise dependent variable is the percentage of the general election vote won by the Democratic presidential candidate in those states that held presidential primaries in both parties. Technically, then, we are measuring the impact of divisive primaries on Democratic presidential nominees. However, as Kenney and Rice (1984) point out, using the Democratic percentage as

²As long as both parties held primaries, the state was included in the analysis. The number of primaries in each year was: 1912: 12; 1916: 14; 1920: 15; 1924: 13; 1928: 11; 1932: 14; 1936: 13; 1940: 9; 1944: 10; 1948: 11; 1952: 15; 1956: 16; 1960: 15; 1964: 16; 1968: 14; 1972: 20; 1976: 26; 1980: 35; 1984: 27.

the dependent variable also taps the influence of divisiveness on the Republican general election vote percentage (1984, p. 406). Because the Republican vote is approximately the mirror image of the Democratic vote, the sign of the divisiveness coefficient in the forthcoming regression model need only be reversed for the impact of divisiveness on the Republican percentage of the November vote to be assessed.

In order to estimate properly the effect of divisiveness on the Democratic general election vote, we need to control for several forces that may also have an impact on how the Democratic nominee fares in November. For one, the traditional voting patterns of a state need to be considered. Without question, one of the best predictors of future voting trends in a state is its past voting trends. To measure past voting patterns, we averaged each state's Democratic percentage of the vote for president over the previous five elections. For example, the mean Democratic vote in New Hampshire over the 1964–80 elections was 44.5 percent. This 44.5 percent was then entered as a normal vote control variable in the 1984 New Hampshire case. We hypothesize that the normal vote will be positively correlated with the dependent variable.

A second control is necessary to tap the influence of minor-party movements on the Democratic percentage of the vote. Third parties, such as George Wallace's American Independent party in 1968 and Theodore Roosevelt's Bull Moose party in 1912, work to lower the percentage of the vote won by the major parties. To assess the impact of minor parties, we entered as a control the percentage of the total minor-party vote in each state. We expect the control to be negatively correlated with the dependent variable, meaning that as the third-party vote increases in a state the Democratic share of the vote should drop.

The status of the incumbent must also be controlled. Research has long shown that incumbents, for a variety of reasons (e.g., higher name recognition and more media attention), regularly win reelection. We chose to measure incumbency advantage by using a three-category ordinal variable scored -1 if a Republican incumbent is in the race, 0 if no incumbent is running, and +1 if a Democratic incumbent is seeking reelection. We hypothesize that the Democratic share of the general election vote will be lowest in contests involving a Republican incumbent and highest in races with a Democratic incumbent. Elections with no incumbent should see the Democratic percentage of the vote fall somewhere in between.

A fourth control variable is needed to account for the unique politics of the South. For the majority of the period covered in this study, the southern states have supported Democratic presidential candidates. Although this has changed dramatically over the last 25 years, we still

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expect a positive correlation between the South and the dependent variable.³ To capture this relationship, a binary variable is employed, where 1 is equal to the southern states and 0 is equal to all others.

Finally, an examination of the national Democratic vote percentages since 1912 revealed that a control might be useful to assess gradual shifts in the normal Democratic vote. Prior to the New Deal realignment, the Democratic party fared poorly in presidential contests. In 1932, however, the Democratic vote percentage surged to 57 percent and in 1936 increased again, to 60 percent. Since that time, though, the party's percentage of the presidential vote has decreased rather steadily, with the notable exception being Johnson's landslide victory of 1964. To control for this pattern, we employed an interrupted time series analysis technique which uses three separate variables (see Campbell and Cook, 1979; Lewis-Beck and Alford, 1980).⁴ The first is a simple time counter, scored 1 for all 1912 primaries, 2 for all 1916 primaries, and so on, until 19 for all 1984 primaries. The second is a dichotomous variable which is scored 0 for all primaries prior to 1932 and 1 for all primaries in 1932 and after. The third variable is a time counter scored 0 for all primaries before 1932, 1 for all 1932 primaries, 2 for all 1936 primaries, and so on.

The first of the time series variables measures the slope of the Democratic percentage of the presidential vote from 1912 to 1928 in states which held primaries. We expect this slope to be somewhat negative, since Democratic President Wilson did rather well in the 1912 and 1916 elections, but Democrats thereafter did poorly. The third variable records the change in the slope of the Democratic percentage of the presidential vote in primary states from the 1912–28 period to the 1932–84 period. To attain the 1932– 84 slope of the Democratic vote, the coefficient of the first variable and third variable must be summed. We anticipate that, when summed, this third variable should be negative, since the Democratic percentage of the presidential vote has generally declined after the 1930s. The dichotomous "interruption" variable taps the change in the Democratic percentage of the vote from 1928 to 1932. We expect the coefficient of this interruption variable to be positive, reflecting the Democratic gains in 1932.

When all the above variables are combined, a model predicting the

³For purposes of this study, the South is defined as those states which made up the old Confederacy: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

⁴Even though the same states do not have primaries from presidential election to presidential election, the number of states holding primaries in any given presidential election year is significantly so large that, when averaged, their vote is only 2.1 percent different from the actual Democratic vote averaged across all presidential elections from 1912 to 1984. Indeed, in nine of the presidential election years, the average Democratic vote in primary states was less than 1 percent different from the actual Democratic vote.

Democratic percentage of the vote in those states holding presidential primaries in both parties is created. The model formalized is

$$DV = a + b_1 DIV + b_2 NV - b_3 MP + b_4 I + b_5 S + b_6 PND + b_7 ND + b_8 AND + u;$$
(3)

where DV represents Democratic vote percentages in those states holding primary elections in both parties in a given year (1912-84); DIV is the relative primary divisiveness; NV is the normal Democratic vote for the state; MP is the total minor-party vote in the state; I is incumbency; Sis the South; PND is the slope of the Democratic vote prior to New Deal realignment; ND is the change in the Democratic vote at the conception of the New Deal, 1932; AND is the change in the Democratic vote from the 1912-28 period to the 1932-84 period; and u is the error term.

Estimation of the model in equation 3 using ordinary least-squares regression produced the parameters in Table 1.⁵ Clearly, the model performs well. Over half of the variance in state Democratic vote percentages

⁵This note addresses the question of adjusting the model for the possible problem of reciprocal causation. Born (1981) hypothesized that primary divisiveness could be in part a function of candidates' perceptions of their party's fortunes in the fall. Put differently, if a party's chances for a general election victory looked promising, then many candidates could be expected to enter the primary, making it quite divisive. Thus, the perception of the general election vote might influence primary divisiveness, hence the potential reciprocal problem. Born (1981) utilized the two-stage least-squares technique in an attempt to correct for any reciprocal problem. We, however, have decided not to correct for this possible problem for three reasons. First, there appears to be little reason to suspect that the potential reciprocal problem exists in the presidential case. For instance, even though Reagan was quite popular before the 1984 contest, many Democrats jumped into the race. Likewise, Johnson was very popular prior to the 1964 election, but the Republican primary season was bitterly contested, nonetheless. Other examples readily come to mind as well: Ford in 1976 and Carter in 1980 faced stiff challenges despite being incumbents with respectable popularity ratings; Democrats battled for the opportunity to face a reasonably strong Republican incumbent in Nixon in 1972; and even Stevenson faced primary opposition in his bid for a rematch against Eisenhower in 1956. In short, the reciprocal problem suggested by Born (1981) does not appear to plague presidential contests. Perhaps this is because it is difficult to gauge party fortunes two years in advance of the general election, which is when prospective presidential aspirants are making their decisions.

Second, we believe there are serious methodological shortcomings with using twostage least squares on these data. In order to accurately specify a two-stage model, the divisiveness variable must be predicted by a set of variables exogenous to the dependent variable. We were unable to find theoretically relevant exogenous variables that did not, on their own merit, deserve entry into the full model (e.g., incumbency, minor-party vote). Estimating divisiveness with these independent variables is not recommended because the predicted divisiveness variable will be highly collinear with the other independent variables.

Third, since prospective candidates' expectations regarding the forthcoming general election vote will vary from the actual general election outcome, a pure, reciprocal relationship does not actually exist. Thus, it is impossible for the divisiveness of a primary season to be caused by a general election vote that has not yet taken place.

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	The Pr	The Presidential Model		
Tee do	Regress	Regression Coefficients		
undependent Variable	Unstandardized	Standardized	t-ratios	Significance
Intercept	41.32			
Divisiveness (DIV)	.07	.36	6 46	n < 0005
Normal Vote (NV)	.15	60	1 76	c000. < √ 30 > n
Minor Party (MP)	28	24	-437	20.7 d
Incumbency (I)	25	- 02	- 40	
South (S)	2.75	107	PL 1	
1912-28 (PND)	- 2.87	- 1.48	- 3 21	500 / 4
1932 (ND)	19.79		7 96	5000 > 4
1936-84 (AND)	2.21	1.01	2.53	$c_{000} < q$
NOTE: $R^2 = .51$; $N = 306$; $df = 297$.	ff = 297.			a a a a a a a a a a a a a a a a a a a

TABLE 1

is accounted for, and seven of the eight independent variables are statistically significant at the .05 level or better.⁶

The variable of principal concern to us, divisiveness (DIV), is strongly significant in the expected direction.⁷ The implication is clear that primary divisiveness is related predictably to general election vote percentages: in a given state, the party with the more divisive presidential primary can expect its nominee to be disadvantaged in the November election. Specifically, the coefficient states that as the Democratic primary winner achieves an additional percentage of the primary vote relative to his or her Republican counterpart, he or she will garner on average an additional .07 percent of the general election vote in that state. As an example, consider a state where the Democratic nominee was uncontested in the primary, while the Republican nominee received only 50 percent of the primary vote. The Democratic nominee can expect the relative divisiveness of the two parties' primaries to provide him or her with 3.5 percent more [.07(100 - 50)] of the general election vote in that state than otherwise could be anticipated. Take California in 1984 as an actual illustration. Reagan was uncontested, while Mondale lost the primary, capturing only 37.4 percent of the vote. Thus, Reagan was advantaged in California by 4.4 percent [.07(37.4-100.0)] in the general election simply as a result of the bitter primary battle among Mondale, Hart, and Jackson.8

Turning to the other control variables, all but one were statistically significant and performed as expected. As hypothesized, the normal Democratic vote variable was positively related to the dependent variable. The positive MP coefficient indicates that the more successful a

⁶Especially prior to 1972, there were occasions when the eventual nominee actually received less than 5 percent of the primary vote in a state, generally because he decided not to participate in the primary. In addition, on occasion a favorite son would soundly defeat the eventual nominee in a primary. Both of these situations are so unusual that it is possible that when included in the analysis they could confound the results. To determine if these situations affected our examination of divisiveness, we estimated three separate equations where we (1) excluded all cases where the eventual nominee received less than 5 percent of the vote; (2) excluded all cases involving a favorite son; (3) excluded all cases where the nominee received less than 5 percent of the vote, plus all cases involving a favorite son. In all these situations the substantive results reported in Table 1 were not significantly altered.

 7 To be certain that the divisive variable was not seriously collinear with other independent variables, we regressed it on the other variables. The *R*-square was .47, indicating that there was not a serious problem of multicollinearity.

⁸Reagan was advantaged in all primary states in 1984 because he faced no primary competition, while Mondale struggled with opposition in every primary. Reagan's advantage ranged from 5.6 percent in Vermont [.07(20.0 - 100.0)] to 3.8 percent in West Virginia [.07(46.3 - 100.0)]. The most disadvantaged any nominee could be is 7.0 percent [.07(0.0 - 100.0)].

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minor-party effort is, the less of the general election vote the Democratic nominee will capture. The regional binary variable reveals that the Democratic nominee wins on average 2.75 percent more of the November vote in southern states than in nonsouthern states. Finally, the three interrupted time series variables worked as anticipated. The PND coefficient indicates that from election to election over the 1912-28 period the Democratic share of the general election vote in primary states fell on average 2.87 percent. The coefficient for the interruption variable (ND) reveals that the Democratic percentage of the general election vote jumped almost 20 percent between 1928 and 1932 in primary states. And the post-New Deal slope variable (AND) registers a slight decrease from election to election in the Democratic percentage of the presidential vote in primary states over the 1932-84 period (recall that the post-New Deal slope is figured by summing the AND coefficient, which actually measures the change in the pre-New Deal slope, and the PND coefficient: -2.87 + 2.21 = -.66

Only the incumbency variable failed to reach significance. While this was unexpected, it is quite possible that the recent defeats experienced by incumbent presidents seeking reelection (Ford and Carter) have weakened seriously any relationship between incumbency and electoral success at the presidential level.⁹

Summary

Our study reexamines an old question: Does a divisive primary hurt a nominee's chances for victory in the general election? To answer this question, we first utilized small group research to establish a theoretical framework for understanding the behavior implicit in the divisive-primary hypothesis. Social psychologists have long realized that small groups pitted in conflict develop strong in-group loyalties and out-group hostilities. The hostilities toward the out-group often remain after the conflict has been resolved, even if both groups are confronted by a greater threat. We argue that the opposing sides in a primary battle develop similar in-group loyalties and out-group hostilities. Moreover, the hostilities are often so intense that even the threat of a victory by the opposition party in November may fail to rally supporters of losing primary candidates behind their party's nominee.

Given the close parallels between small group behavior and the divisive-primary hypothesis, we found it puzzling that the voluminous literature testing the hypothesis had been unable to substantiate conclusively

 $^{^{9}}$ The failure of incumbency to reach significance does not appear to be due to multicollinearity. When we regressed incumbency on the other independent variables, the *R*-square was a modest .24.

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a relationship between primary divisiveness and general election outcomes. A review of how divisiveness was measured in the previous studies revealed a misspecification which may have contributed to the mixed findings. In brief, earlier research failed to consider the divisiveness of one party's primary relative to the other party's when measuring divisiveness. Such a relative comparison is necessary. For example, according to the divisive hypothesis, a divided primary is supposed to lower the eventual nominee's percentage of the vote in the general election. But, if a nominee's November opponent also experienced a divided primary, both candidates can expect to be disadvantaged in the fall contest, in effect canceling the deleterious effect of primary divisiveness. Only if one candidate's primary were more divisive than the other's should divisiveness influence the general election vote percentages. So the divisiveness of each candidate's primary must be considered relative to the divisiveness of his or her November opponent's primary.

We devised a simple measure to capture relative divisiveness: the Democrat's percentage of his or her primary vote minus the Republican's percentage of his or her primary vote. A positive score means the relative divisiveness of the two parties' primaries should benefit the Democrat in the general election, and a negative score means the Republican nominee should be advantaged. Attention was then turned to applying this new measure in an empirical test of the divisiveness hypothesis. Presidential primaries were chosen for study, and the improved measure of divisiveness was calculated for all states which had held presidential primaries at any time over the 1912–84 period. Multiple regression test results revealed the divisive measure to be strongly significant. With assurance, then, we can state that the presidential nominee who experiences the least divisive primary in a state is advantaged because of this going into the November contest. Jimmy Carter (1982) was indeed correct when, reflecting on his tough primary battle with Ted Kennedy, he lamented:

There was no logical reason for him [Kennedy] to persist in the debilitating campaign which so weakened his party's chances for success in November. The result of his protracted effort was that Fritz and I were required to spend an enormous amount of time and resources after the convention in winning Democratic voters back to our side. Many of them were alienated permanently. (pp. 531-32)

And finally, presidential political strategists would be wise to pay heed to Carter's words. We estimate, using the divisiveness coefficient generated in Table 1, that had Carter been unopposed for his party's nomination in 1980 he would have captured nine more states in the general election, changing the Electoral College count from 489 to 49 in favor of Reagan to 385 to 153 in favor of Reagan. Even more interesting, and with wide repercussions, is the 1976 presidential contest. Applying the divisiveness coefficient to this election reveals that had Ford been unchallenged for the Republican nomination he would have won five more states in November, which would have provided him with 90 additional Electoral College votes, easily enough to carry the Republican ticket to victory.

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REFERENCES

- Bernstein, R. A. 1977. Divisive primaries do hurt: U.S. Senate races, 1956–1972. American Political Science Review, 71:540–45.
- Blake, R., and J. Mouton. 1961. Reactions to intergroup competition under win-lose conditions. Management Science, 7:420-35.
- Born, R. 1981. The influence of House primary election divisiveness on general election margins, 1962-1976. Journal of Politics, 43:640-61.
- Campbell, D. T., and T. D. Cook. 1979. Quasi-experimentation: Design and analysis for field settings. Chicago: Rand-McNally.

Carter, J. 1982. Keeping faith: Memoirs of a president. New York: Bantam.

Comer, J. 1976. Another look at the effects of the divisive primary: A research note. American Politics Quarterly, 4:121-28.

Coser, Lewis A. 1956. The functions of social conflict. New York: Free Press.

- Hacker, A. 1965. Does a divisive primary harm a candidate's election chances? American Political Science Review, 59:105-10.
- Johnson, D., and J. Gibson. 1974. The divisive primary revisited: Party activists in Iowa. American Political Science Review, 68:67-77.

Kenney, P. J., and T. W. Rice. 1984. The effect of primary divisiveness in gubernatorial and senatorial elections. *Journal of Politics*, 46:904-15.

Lengle, J. I. 1980. Divisive presidential primaries and party electoral prospects, 1932–1976. American Politics Quarterly, 8:261–77.

Lewis-Beck, M. S., and J. R. Alford. 1980. Can government regulate safety? The coal mine example. American Political Science Review, 74:745-56.

Miller, N. E., and R. Bugelski. 1952. Minor studies of aggression: II, the influence of frustrations imposed by the in-group on attitudes expressed toward out-groups. *Journal of Psychology*, 34:197–233.

Newsweek, 10 May 1976, p. 26.

Piereson, J. E., and T. B. Smith. 1975. Primary divisiveness and general election success: A reexamination. Journal of Politics, 37:555-62.

Rabbie, J. M., and M. Horowitz. 1969. Arousal of ingroup-outgroup bias by a chance win or loss. *Journal of Personality and Social Psychology*, 13:269-77.

Reiter, H. L. 1979. The divisive primary: A new approach. Paper delivered at the annual meeting of the American Political Science Association, Washington, DC.

Sherif, M., and C. Sherif. 1953. Groups in harmony and tension. New York: Harper.

Tajfel, Henri. 1970. Experiments in intergroup discrimination. Scientific American, (November):96-102.

Time, 16 April 1984, p. 36.

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