Southern Political Science Association

The Influence of
House Primary Election Divisiveness
on
General Election Margins,
1962-76

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R OBERT LAFOLLETTE, principal champion of Wisconsin's pioneering direct primary law, was not.disturbed by the argument that closely contested primary battles would fractionalize political parties and impair their chances for victory in the fall election. On the contrary, it was his view that once allowed to participate directly in the nominating process, voters would be more likely to stick by their party's nominee:

It would greatly strengthen party organization. There would be no reason for bolting because each member of the party would know that the candidates had been fairly nominated and were the true representatives of his party principles. He would know that they were not the creatures of the machine or of a convention-combination or born of the barrel.[1]

But to U.S. Senator John Spooner, a leader of the stalwart faction in the state Republican Party, implementation of a primary law would have quite different consequences:

[It] would destroy the party machinery, which is necessary in order to fight the political enemy of the party, and would build up a lot of personal machines, would

[1] "Primary Elections for the Nomination of All Candidates by Australian Ballot" (address delivered before Michigan University, Ann Arbor, Michigan, March 12, 1898), 15.

make every man a self-seeker, would degrade politics to turning candidacies into bitter personal wrangles and quarrels, etc.[2]

Despite more than seven decades of reliance upon the direct primary method of nomination in the United States, it still is unclear whether a party's ability to win office is adversely affected by a strongly competitive primary. By and large, party officials today continue to echo Spooner's criticisms, maintaining that close primary contests waste financial resources, alienate supporters of the unsuccessful candidates, and expose the political vulnerabilities of the victorious nominee. Partly as a reaction to these fears, some states have adopted a system of party pre-primary endorsements to help ensure a majority for the winner by reducing the size of the primary field.[3] Others have scheduled their primaries early in the year so that hostilities engendered by the campaign have time to dissipate by November.[4]

Two case studies by political scientists of hard-fought nomination struggles in 1970 have uncovered some support for these unfavorable appraisals. Johnson and Gibson's analysis of campaign workers in an Iowa congressional race and Comer's examination of involvement by county chairmen in the Ohio gubernatorial and senatorial contests find that those backing unsuccessful primary contenders indeed become less active in the fall campaign than those supporting winners.[5] But in neither investigation does this decline in support seem to have a substantial influence on the fall election; Johnson and Gibson suggest that the Iowa campaigners tend to be "amateurs" who became politically involved in the primary only because they were personally recruited by the unsuccessful candidates, while Comer discovers that the Ohio county chairmen who backed losers still perform a number of essential campaign activities in the fall.

Systematic analyses using aggregate election statistics have yielded mixed conclusions about the electoral effects of contentious

[2] Herbert F. Margulies, *The Decline of the Progressive Movement in Wisconsin 1890-1920* (Madison: The State Historical Society of Wisconsin, 1968), 55-56.

[3] Malcolm E. Jewell and David M. Olson, *American State Political Parties and Elections* (Homewood, Illinois: Dorsey Press, 1978), 96.

[4] This motive, for example, seems to have been important in Illinois's decision to establish a March congressional primary date — the earliest in the nation. See T. R. Reid, "Primary Scars Slow to Heal," *Washington Post* (September 24, 1978), A1, A20.

[5] Donald Johnson and James Gibson, "The Divisive Primary Revisited: Party Activists in Iowa," *American Political Science Review*, 68 (March 1974), 67-77; and John Comer, "Another Look at the Effects of the Divisive Primary: A Research Note," *American Politics Quarterly* 4 (January 1976), 121-128.

primaries. Studies of gubernatorial and senatorial elections from 1956-64 by Hacker, of gubernatorial contests from 1903-68 by Piereson and Smith, and of seven Senate races in 1978 by Reiter uncover little relationship between primary results and general election outcomes.[6] Bernstein, however, convincingly has shown that Hacker's disconfirmation of the divisive primary hypothesis stems from a basic analytical error.[7] Furthermore, Bernstein's own research leads him to conclude that senatorial candidates surviving divisive primary campaigns from 1956-72 are significantly handicapped in their subsequent general election contests. Finally, the most recent study of this type—Lengle's investigation of presidential primaries from 1932-76—reports that a divisive primary does reduce the likelihood of carrying the state's electoral votes in November.[8]

Serious criticisms, however, may be directed at the techniques employed in the five systematic analyses of aggregate data. By operationalizing both primary divisiveness and general election outcome only as dichotomous variables, Hacker, Bernstein, and Lengle consequently are unable to specify the relationship between the *severity* of primary conflict and the *margin* of general election success or failure.[9] Additionally, because the arbitrary cut-off points used in their classifications of primaries lead to relatively few being categorized as "divisive," conclusions sometimes must be drawn from tables with extremely low cell frequencies when controls for incumbency and state party strength are introduced. For example, even though all election data from 1956-72 are combined in Bernstein's analysis of Senate races, he still is left to investigate the November electoral fates of only five "divisive" cases involving in-

[6] Andrew Hacker, "Does a 'Divisive' Primary Harm a Candidate's Election Chances?" *American Political Science Review* 59 (March 1965), 105-110; James E. Piereson and Terry B. Smith, "Primary Divisiveness and General Election Success: A Reexamination," *Journal of Politics* 37 (May 1975), 555-562; and Howard L. Reiter, "The Divisive Primary: A New Approach" (paper delivered at the Annual Meeting of the American Political Science Association, Washington, D.C., August 31-September 3, 1979).

[7] Robert A. Bernstein, "Divisive Primaries Do Hurt: U.S. Senate Races, 1956-1972," *American Political Science Review* 71 (June 1977), 540-545.

[8] James I. Lengle, "Divisive Presidential Primaries and Party Electoral Prospects: 1932-1976," *American Politics Quarterly* 8 (July 1980), 261-277.

[9] "Divisive" primaries are defined by Hacker as those won by less than 65 percent of total vote, and by Bernstein and Lengle as those where the winner receives less than a 20 percent edge over his nearest challenger. Election outcomes are quantified by these researchers in terms of victories or defeats.

cumbents from a state's stronger party, and only four "divisive" cases where the incumbents come from a two-party competitive state.[10]

Piereson and Smith and Reiter avoid these pitfalls by employing interval-level measures of primary and general election results in their own regression analyses. But, different kinds of problems emerge there. Unlike Hacker, Bernstein, and Lengle, Piereson and Smith determine how a candidate's general election margin is affected solely by *his own* primary performance, without simultaneously considering the additional influence produced by the outcome of the *other party*'s nomination contest as well. They implicitly suppose, therefore, that two gubernatorial nominees in different states with identically narrow primary victories will suffer the same electoral decline in the fall, even though the potential loss looming for one nominee might be neutralized by the occurrence of an equally conflictual nomination struggle in the opposition party. On the other hand, Reiter is able to circumvent this difficulty by deciding to investigate just those 1978 Senate races where only *one* nominee experienced primary opposition. The consequence of applying this stringent selection criterion, though, is to limit severely the number of contests examined (seven), thus precluding the drawing of reliable generalizations from the results.[11]

All five of these studies, furthermore, ignore yet another potentially serious problem. The models which are employed assume that causation runs in one direction only, from primary divisiveness to general election results. But, a party's November showing, in fact, might exert a reciprocal influence on the intensity of competition within the primaries themselves. Potential contenders for a nomination may well have reasonably accurate expectations about the fall election outcome and weigh these expectations heavily in determining whether or not to run.[12] In years like 1974 when a par-

[10] Bernstein, "Divisive Primaries," 543-544.

[11] Ten states originally met Reiter's standard of having only one contested primary, but three had to be discarded because of various problems in data collection.

[12] Linda L. Fowler in "The Electoral Lottery: Decisions to Run for Congress" (paper delivered at the Annual Meeting of the American Political Science Association, Chicago, Illinois, September 2-5, 1976), 11-12, for example, finds a strong relationship in 1974 between perceived prospects for victory among non-incumbent congressional candidates in New York and their actual electoral fortunes in November. Ninety-one percent of the winners saw an "excellent" or "good" chance for success, compared with only 10.3 percent of the losers. Of course, declarations of candidacy may be motivated by factors other than perceived prospects of success in the fall; for example,

tisan surge is anticipated in many districts, for example, primaries in the favored party could be unusually crowded with strong candidates, while primaries of the other party have little competition. The positive influence of expected electoral success in enhancing primary divisiveness thus could counterbalance any reverse negative impact imparted by this divisiveness itself, leading researchers to conclude erroneously from the observed lack of relationship that factious primaries have no deleterious consequences.[13]

Similarly, reciprocal causation could produce an error of the opposite sort in the case of incumbents who, because they have neglected their constituencies, voted against important district issue preferences, or been implicated in scandal, are expected to be vulnerable in the general election. Here, strong opponents may enter the incumbent's primary, believing that this vulnerability is indicative of a more pervasive electoral weakness extending to intra-party voters as well. Divisive primaries hence might be credited with an exaggerated injurious impact upon the November fortunes of those endangered incumbents surviving their renomination ordeals, since any relationship discovered between greater primary competitiveness and lower general election margin would be inflated by the feedback effect issuing from the latter variable.[14]

Analysis of the divisive primary question, thus, must take into account the possibility that general election prospects may influence and be influenced by the contentiousness of primary contests. In the next section, we shall direct our efforts toward this objective, as well as that of rectifying the other problems in previous research which we have noted.

MEASURING THE ELECTORAL IMPACT OF PRIMARY DIVISIVENESS UNDER THE ASSUMPTION OF ONE-WAY CAUSATION

We shall analyze here 1962-76 reelection data for U.S. House members who win renomination in primaries and go on to face

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viewing the process of campaigning itself as an educational and personally rewarding experience. On this point, see Thomas A. Kazee, "The Decision to Run for the U.S. Congress: Challenger Attitudes in the 1970's," *Legislative Studies Quarterly* 5 (February 1980), 82-83.

[13] For a study employing actual November returns as a surrogate measure to analyze the reciprocal effects of expected election outcome upon campaign spending, see Gary C. Jacobson, "The Effects of Campaign Spending in Congressional Elections," *American Political Science Review* 72 (June 1978), 474-478.

[14] A case in point is Ohio Congressman Charles Carney, who in 1978 was accused

major party opposition in November.[15]   By using House elections rather than much less abundant senatorial, gubernatorial, or presidential contests, we have a sufficient number of cases so that reliable biennial analysis can be performed and trends identified. As our measure of primary divisiveness, we employ the nominee's share of all votes cast in his party's congressional primary.[16]   The alternative procedure of judging divisiveness in terms of the winner's showing relative to that of his nearest challenger, used by Piereson and Smith, Bernstein, and Lengle, might well fail to capture the full extent to which a hotly contested primary *with more than two candidates* contributed to subsequent party losses.   For example, a nominee obtaining 55 percent of the total vote would have a comfortable margin of victory over a runner-up receiving 20 percent, but the sizable 45 percent of the primary electorate in the aggregate supporting losing candidates could actually be susceptible to deserting their party or abstaining in the fall.[17]

The electoral effects of primary competitiveness will first be analyzed through ordinary least-squares estimation of a recursive

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of doing little to prevent steel-mill closings in his district and acquiring for himself or his relatives more than 60,000 surplus books from the Library of Congress. Beset by these charges throughout the election year, he squeezed out a slender 34.5 percent victory in a four-way primary race, going on to be unseated in November. Certainly, Carney's misfortune in the general election cannot be attributed to the divisiveness of his primary. See "The Outlook: Senate, House, and Governors," *Congressional Quarterly Weekly Report* 36 (October 14, 1978), 2881.

[15] Districts in which either party nominates its candidate by convention are excluded from the analysis for that year.   Conventions were used to nominate all House candidates by the following state parties: Alabama (Republicans, 1962-70), Connecticut (Democrats, 1962-68, 1972; Republicans, 1962-76), Delaware (Democrats, 1962-68, 1972-76; Republicans, 1962-76), Georgia (Republicans, 1962), South Carolina (Republicans, 1962-72), and Virginia (Republicans, 1962-68).   In addition, state parties which employed conventions in some of their districts are as follows: Connecticut (Democrats, 1970, 1974-76), Georgia (Republicans, 1964-66), and Virginia (Democrats, 1962-76; Republicans, 1970-76).   Also excluded from the analysis are candidates running in statewide multi-member districts; i.e., those from Alabama in 1962; New Mexico in 1962, 1964, and 1966; and Hawaii in 1962, 1964, 1966, and 1968.

[16] In districts holding runoff primaries between the top two non-majority finishers in the initial nomination contest, divisiveness is measured as the nominee's proportion of the vote in the first election.   The majority necessarily received by the winner of a runoff could well overstate his true degree of support.

[17] While we thus believe that our measure can more appropriately be applied to multi-candidate situations, the decision as to which indicator to employ probably makes little difference in practice.   In the clear majority of primaries involving at most only two contenders, both measures will tap exactly the same thing.

single-equation model which assumes the existence of one-way causation. Here, the congressman's proportion of the two-party general election vote is regressed on the divisiveness levels in the incumbent and non-incumbent primaries, treated as exogenous independent variables (i.e., determined outside the model). To control for the incumbent's previous electoral strength in the district, we further include as an independent variable his share of the two-party vote in the preceding general election.[18] This, of course, makes the equation statistically equivalent to an alternative specification regressing inter-election *changes* in margins on all original independent variables.[19]

Three dummy independent variables further are included in this equation. A variable indicating whether the member is a freshman is entered, since it is clear that the electoral benefits of the first term of incumbency, especially since the mid-1960's, can be expected to boost reelection margin above the level received as a non-incumbent two years before.[20] In addition, a variable classifying congressmen as Democrats or Republicans is added to control for the effect of an inter-election national partisan swing. Finally, we control for the fact that Democratic primaries in the South — involving the incumbent party a large majority of the time — have a long-standing tradition of greater competitiveness than those of the North. This is accomplished by inserting a variable which differentiates congressmen of the 13 southern states from those of the remaining 37.[21]

[18] Incumbents not facing major-party opposition either in the existing or past election are excluded from the analysis.

[19] While the R^2 value and the regression coefficient for lagged general election margin would be different in an alternative equation using inter-election change as the dependent variable, the regression coefficients for all other independent variables would be identical. See Potluri Rao and Roger L. Miller, *Applied Econometrics* (Belmont, California: Wadsworth Publishing, 1971), 17.

[20] For example, see Robert S. Erikson, "Malapportionment, Gerrymandering, and Party Fortunes in Congressional Elections," *American Political Science Review* 66 (December 1972), 1239-1240; Albert D. Cover, "One Good Term Deserves Another: The Advantage of Incumbency in Congressional Elections," *American Journal of Political Science* 21 (August 1977), 526-28; and Richard Born, "Generational Replacement and the Growth of Incumbent Reelection Margins in the U.S. House," *American Political Science Review* 73 (September 1979), 813-16.

[21] Our classification of southern states follows that employed by *Congressional Quarterly Weekly Report* — the 11 states of the Old Confederacy as well as Kentucky and Oklahoma. Note that our control here assumes that regional differences in the effect of divisive primaries can be captured in separate estimates of the *intercept* term for North and South, and that the *slopes* of the divisiveness variable will not vary by

Our equation, then, is:

$$E = a + b_1I + b_2N + b_3E_{t-1} + b_4F + b_5P + b_6D + u$$

where: E is the incumbent's proportion of the two-party general
election vote;

I is the divisiveness of the incumbent party primary
(measured as the incumbent's proportion of his party's
total congressional primary vote)

N is the divisiveness of the non-incumbent party primary
(measured as the winner's proportion of his party's total
congressional primary vote)

E_{t-1} is the incumbent's proportion of the two-party vote in
the previous general election

F is 1 if the incumbent is a non-freshman, and 0 otherwise

P is 1 if the incumbent is a Democrat, and 0 if he is a Re-
publican

D is 1 if the incumbent is southern, and 0 otherwise

u is the error term.[22]

Table 1 indicates the unstandardized ordinary least-squares
(OLS) regression coefficients for each of the eight elections analyzed
from 1962 to 1976. Support for the divisive primary hypothesis re-
quires, of course, positive values of the I coefficients and negative
values of those for N; this would indicate that the incumbent's
November percentage will be reduced by a lower renomination
margin in his own party primary, and by a larger winning margin
for the other party's nominee in the non-incumbent primary.
According to the signs of the coefficients in the first column of Table
1, it is clear that this support generally is forthcoming for nomina-
tion contests of the incumbent party. Except in 1964 and 1966,
members with safer primary margins do better in November. In
dramatic contrast, however, the divisive primary hypothesis con-
sistently *fails* to be upheld for the non-incumbent party; the coeffi-

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region. This latter assumption was subjected to empirical testing, and while it was
found that coefficients for southern primary divisiveness generally had a slightly larger
slope, the regional difference in none of the analyses was significant.

    [22] We include here only those freshmen who initially won election two years earlier
in open-seat districts, so that this recursive model can be based upon the same cases as
those analyzed later by the non-recursive model. The rationale for excluding from the
latter model freshmen who initially defeated fellow-party incumbents in primaries or
opposition-party incumbents in the general election is set forth in f.n. 27.

TABLE 1

THE EFFECTS OF PRIMARY DIVISIVENESS IN THE INCUMBENT AND NON-INCUMBENT PARTIES ON HOUSE MEMBERS' GENERAL ELECTION MARGIN: OLS SOLUTION OF RECURSIVE MODEL

	Divisiveness in Incumbent Party Primary (I)	Divisiveness in Non-Incumbent Party Primary (N)	Incumbent's Previous Gen. Election Margin (E_{t-1})	Incumbent's Party (P)	Incumbent's Freshman-Non-Freshman Status (F)	Incumbent's Region (D)	Constant
1962							
($N = 246$)	.016	.032	.746*	-.006	-.010	-.010	.136
($R^2 = .493$)	(.031)	(.016)	(.053)	(.007)	(.011)	(.013)	
1964							
($N = 275$)	-.004	.011	.827*	.112*	-.015	-.017	.061
($R^2 = .703$)	(.029)	(.017)	(.053)	(.007)	(.010)	(.011)	
1966							
($N = 258$)	-.021	.010	.814*	-.144*	.004	.011	.218
($R^2 = .638$)	(.024)	(.016)	(.045)	(.008)	(.010)	(.011)	
1968							
($N = 259$)	.054*	.021	.798*	.012	-.043	-.041*	.098
($R^2 = .540$)	(.027)	(.016)	(.050)	(.008)	(.013)	(.011)	
1970							
($N = 284$)	.045	.003	.759*	.073*	-.034*	.020*	.118
($R^2 = .553$)	(.029)	(.016)	(.047)	(.007)	(.012)	(.010)	

1972							
(N = 255)	.073*	.063*	.500*	-.018	-.039*	-.002	.255
(R² = .241)	(.034)	(.022)	(.063)	(.010)	(.017)	(.014)	
1974							
(N = 258)	.070	.047*	.527*	.140*	-.070*	.003	.184
(R² = .586)	(.037)	(.021)	(.058)	(.011)	(.013)	(.012)	
1976							
(N = 248)	.110*	.012	.870*	-.045*	-.055*	-.035*	.058
(R² = .604)	(.031)	(.018)	(.050)	(.010)	(.012)	(.010)	
Average 1962-76	.043	.025	.730	.016	-.033	-.009	.141

Key: Entries are unstandardized (b) coefficients. Standard errors of the coefficients are in parentheses. Coefficients significant at .05 level are indicated by *.

cients in the second column are *positive* in every one of the eight election years examined.

An additional feature of the data in Table 1 is revealed by longitudinal inspection of the I and N coefficients. The deleterious effect of incumbent party primary divisiveness on the member's general election performance seems to have become more intense over time, particularly in the three most recent elections. Regression of the I coefficients on time (t = 1 in 1962, and 8 in 1976) yields a quite strong .871 Pearson r value (I = .027 + .015t). On the other hand, the values for the N coefficients demonstrate a much slighter and more irregular trend (r = .252, N = .015 + .002t).

It is important to recognize, though, that the magnitudes of the divisiveness coefficients are modest. The mean value for I is only .043; thus, a 10 percent reduction in the congressman's renomination margin can be expected to cost him only .43 percent of the general election vote. The same 10 percent primary vote loss for the nominee of the non-incumbent party will result in an even smaller .25 percent reduction in the member's November margin. Furthermore, statistical significance is attained only three times for the I coefficients, and only twice for N.

ANALYZING THE ELECTORAL EFFECTS OF PRIMARY DIVISIVENESS: CONTROLLING FOR POSSIBLE RECIPROCAL CAUSATION

Our equation, then, would lead us to conclude that a contentious race in the incumbent party slightly damages its general election showing, while the non-incumbent party unexpectedly receives a minor electoral boost when its own primary is hotly contested. As we argued above, however, biased estimates of the effects of divisive primaries may be produced by any model, like this one, which does not take into account the possibility that primary competitiveness may be a function of the general election result itself.[23]   A standard remedy for such a problem of reciprocal causation is to reestimate the coefficients through the alternative regression technique of two-stage least squares (2SLS). Application of 2SLS will require that each of the two primary divisiveness terms, now conceptualized as

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[23] Statistically, if reciprocal causation does exist, both divisiveness variables in a recursive single-equation model will be correlated with the error term, thus violating a key assumption of ordinary least-squares regression. See J. Johnston, *Econometric Methods* (2nd ed.; New York: McGraw-Hill, 1972), 341-343.

endogenous within the model, be included as the dependent variable in a separate new structural equation. The original equation with general election outcome as the dependent variable, as a consequence, can then be solved as part of a broader system of three simultaneous equations.

The second equation in the system will consider primary divisiveness in the incumbent party as dependent and regress it on the member's general election margin that year. A second independent variable representing the incumbent's general election margin two years previously is also added, since his *former* degree of success with the district-wide electorate, as well as his anticipated strength in the forthcoming November battle, may govern potential challengers' decisions whether or not to enter his primary. We next include the divisiveness of the incumbent's primary two years before to control for his past level of intra-party support and further employ a dummy variable indicating freshman/non-freshman status.[24] This latter variable is required here, as it was in the original equation, because freshmen in their first renomination bid can expect to receive more of the vote than when they ran previously without the benefits of incumbency. But, since added terms of congressional service beyond the first, while little related to general election margins, do seem to reduce the chances of winning renomination, we are obliged to enter the incumbent's seniority level as another explanatory variable.[25]

Appearing also on the right side of the equation is a dummy variable indicating whether the district has been redistricted since

[24] The structural equations exclude the very limited number of districts where either the incumbent or non-incumbent party moves from nomination by convention to a primary system over the two-year period. (To ensure comparableness of results, these districts also were eliminated from the preceding recursive model).

[25] Studies which have related seniority to general election margins include Robert S. Erikson, "A Reply to Tidmarch," *Polity* 4 (Summer 1972), 527-29, and Richard Born, "House Incumbents and Inter-Election Vote Change," *Journal of Politics* 39 (November 1977), 1008-34, while those investigating the relationship between seniority and primary margins include Robert S. Erikson, "Is There Such a Thing as a Safe Seat?" *Polity* 8 (Summer 1976), 629-631; V. O. Key, *Politics, Parties, and Pressure Groups* (5th ed.; New York: Thomas Y. Crowell, 1964), 451; and Harvey L. Schantz, "Nominations for the United States House of Representatives" (unpublished Ph.D. dissertation, The Johns Hopkins University, 1978), 141-144. We substantiated the fact that extra tenure does not enhance November safety by experimenting with a seniority variable added to the existing independent variables in the original equation above; the coefficient never reached the level of significance across the eight years studied and had a mean value of only -.001.

the last general election, because it has been pointed out that district boundary alterations may disrupt the officeholder's supporting coalition and encourage the emergence of new primary opponents.[26]   Finally, we include the representative's party to take into account national partisan differences in primary competition that year, and his region to control for any North-South differences in the effects which the other variables may have upon divisiveness.[27]

The third structural equation is similar in form to the second.   At its core, divisiveness in the non-incumbent party primary is regressed on the incumbent's November margin in the same election year.   For reasons identical to those stated above, the incumbent's general election margin two years before, his party and region, and the divisiveness of the non-incumbent party primary in the previous election are added as independent variables.   To allow for decreases in non-incumbent party primary competition which will occur when a former open-seat district moves to control by the opposition

[26] Key, *Politics, Parties, and Pressure Groups*, 451.   Redistricting information used here was taken from the biennial editions of *America Votes*, edited by Richard M. Scammon.   This variable does not appear in the second or third structural equation for 1972 or 1976, because only 4.4 percent of the districts were not redrawn between 1970-72 and no redistricting occurred between 1974-76.   Redistricting was left out of the original equation in *all* years of the analysis, on the other hand, since ample evidence showing that it has insignificant effects on general election margins is contained in the following sources: John A. Ferejohn, "On the Decline of Competition in Congressional Elections," *American Political Science Review* 71 (March 1977), 167-168; Cover, "One Good Term," 528-531; Charles S. Bullock III, "Redistricting and Congressional Stability," *Journal of Politics* 37 (May 1975); and David R. Mayhew, "Congressional Elections: The Case of the Vanishing Marginals," *Polity* 6 (Spring 1974), 303-306.   This finding was further verified when we tried adding redistricting to the original equation; the sign of the coefficient varied erratically from equation to equation, never achieved significance, and averaged only -.002 in magnitude.

[27] The only districts represented by freshmen which are analyzed here are those where the first termer two years earlier won an open seat being vacated by a retiring incumbent – the most common route to congressional office.   Exclusion of districts with freshmen who defeated fellow-party incumbents in the previous primary is necessary, because such freshmen, of course, almost always win these first nominations by margins considerably lower than those realized in open-seat districts.   Also excluded are districts with freshmen who originally secured their seats two years before by unseating congressmen of the other party in the general election; the primaries of these first termers in their initial election year tend to be a good deal less competitive than open-seat primaries, since candidates are deterred from seeking nomination by the fact that the opposition party incumbent is running again for Congress.

party freshman two years later, we enter a dummy variable specify-ing whether the incumbent is a first termer. Finally, because new localities appended to a redrawn district may give rise to additional primary challengers in the non-incumbent as well as the incumbent party, a dummy variable indicating whether redistricting has taken place since the last general election is included.

The complete set of structural equations, thus, is:

$$E = a_1 + b_1 I + b_2 N + b_3 E_{t-1} + b_4 F + b_5 P + b_6 D + u \qquad (1)$$

$$I = a_2 + b_7 E + b_8 E_{t-1} + b_9 I_{t-1} + b_{10} F + b_{11} S + b_{12} R + b_{13} P + b_{14} D + u \qquad (2)$$

$$N = a_3 + b_{15} E + b_{16} E_{t-1} + b_{17} N_{t-1} + b_{18} F + b_{19} R + b_{20} P + b_{21} D + u \qquad (3)$$

where E, I, N, E_{t-1}, F, P, D, and u are defined as before in the recur-sive model, and:

I_{t-1} is the divisiveness of the incumbent's primary two years previously (measured as the incumbent's proportion of his party's total congressional primary vote)

S is the incumbent's seniority level (measured as the number of terms served beyond the first)

R is 1 if the district has been redistricted since the last general election, and 0 otherwise

N_{t-1} is the divisiveness of the non-incumbent party primary two years previously (measured as the winner's proportion of his party's total congressional primary vote).

This model (excluding the error term) is diagrammed in Figure 1.

To obtain the 2SLS solution of our equation (1) measuring the electoral impact of divisive primaries, we first need to regress each of the endogenous variables I and N on all eight of the predeter-mined (i.e., lagged endogenous and exogenous) variables (E_{t-1}, F, P, D, I_{t-1}, S, R, N_{t-1}). The resulting predicted values of the endogenous variables ($\hat{I}$, $\hat{N}$) consequently are uncorrelated with the error terms, since they are linear combinations of predetermined variables which themselves are independent of the error terms. In the second stage of 2SLS, $\hat{I}$ and $\hat{N}$ then are substituted for I and N in equation (1), and ordinary least squares is applied to estimate the regression coef-ficients.[28] The standard errors of these coefficients, as in any 2SLS

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[28] For political science studies employing 2SLS, see Robert S. Erikson, "The In-fluence of Newspaper Endorsements in Presidential Elections: The Case of 1964,"

FIGURE 1

NON-RECURSIVE MODEL OF RELATIONSHIPS
BETWEEN PRIMARY DIVISIVENESS IN THE INCUMBENT AND
NON-INCUMBENT PARTIES AND
HOUSE MEMBERS' GENERAL ELECTION MARGIN
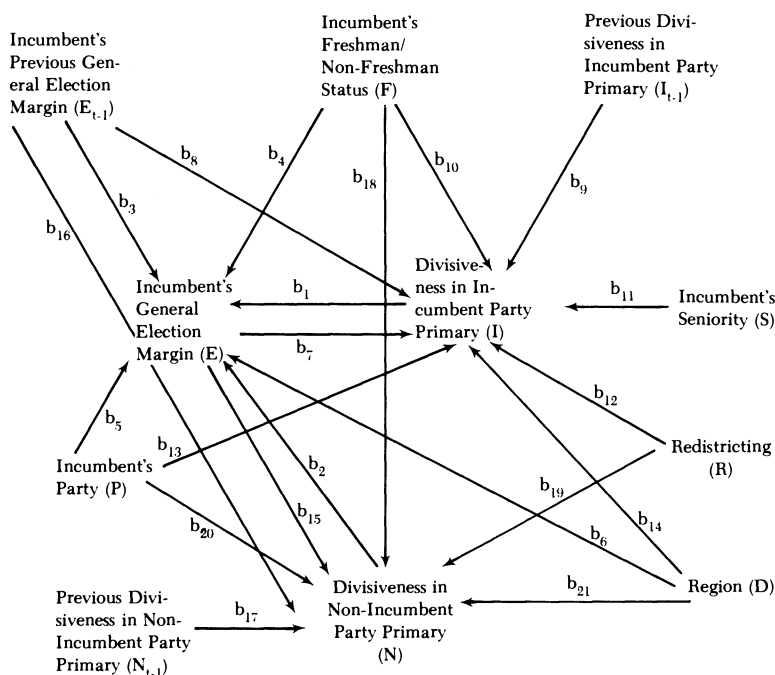
solution of an overidentified equation such as this, must be larger
than those resulting from the corresponding OLS regression.[29]   But,
if reciprocal causation does exist between primary divisiveness and
general election margin, the 2SLS estimates here will contain less
bias and hence more accurately appraise the independent electoral
effect caused by divisiveness.

American Journal of Political Science 20 (May 1976), 207-233; Jacobson, "The Effects
of Campaign Spending," 469-491; Benjamin I. Page and Calvin C. Jones, "Reciprocal
Effects of Policy Preferences, Party Loyalties and the Vote," *American Political
Science Review* 73 (December 1979), 1077-1087; and Bruce W. Shepard and R. Ken-
neth Godwin, "Policy and Process: A Study of Interaction," *Journal of Politics* 37 (May
1975), 576-582.

   [29] See Eric A. Hanushek and John E. Jackson, *Statistical Methods for Social Scien-*

Table 2 contains the unstandardized 2SLS regression coefficients resulting from the second stage analysis of equation (1). Even though the larger standard errors in these regressions prevent the coefficients in column one from achieving statistical significance, it still may be seen there that more competitive nomination contests in the incumbent party act quite consistently to depress the member's November election percentage. Regression coefficients in all years except 1966 are positive. The mean .061 value of the unstandardized coefficient across all eight elections indicates that a 10 percent decline in the incumbent's primary margin will produce a subsequent .61 percent electoral reduction in November. This signifies a somewhat more deleterious impact of divisive primaries overall than that gauged by the corresponding OLS equations in Table 1, where the b coefficients were positive in six of the eight regressions and averaged .043 in magnitude. However, if the atypically large .296 value of the 2SLS coefficient for 1972 is set aside, the mean b across the remaining elections in Table 2 declines to .027 — slightly smaller than the .039 average OLS b obtaining across these same seven years. The results of this analysis thus demonstrate that our original Table 1 estimate of the overall magnitude of the divisive primary effect in the incumbent party was little influenced by the existence of any reciprocal causation; divisive primaries generally appear to damage one's November showing quite marginally.

Controlling for reciprocal causation in Table 2, however, does vitiate our earlier conclusion based on the OLS results that the harm done to the incumbent party by contentious nomination struggles seems to be intensifying across the period studied. When the 2SLS coefficients in the first column of Table 2 are regressed on time, a weak positive r value of only .194 results ($I = .021 + .009t$). This suggests that the analogous strong positive correlation discovered in Table 1 was largely spurious, produced by more positive values occurring over time in the reciprocal effect which general election margin has upon incumbent party primary competitiveness. Such

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tists (New York: Academic Press, 1977), 237-238; and Rao and Miller, *Applied Econometrics*, 214-215 for demonstrations of this point. It should be noted that the sum of squared residuals of these second-stage equations cannot be used to compute the standard errors of the regression coefficients or the R^2 values. Instead, a modified sum-of-squares quantity must be computed by subtracting from the original values of each dependent variable their predicted values, based upon an equation employing the second-stage regression coefficients and the original values of both the endogenous and predetermined independent variables.

TABLE 2

THE EFFECTS OF PRIMARY DIVISIVENESS IN THE INCUMBENT AND NON-INCUMBENT PARTIES ON HOUSE MEMBERS' GENERAL ELECTION MARGIN: 2SLS SOLUTION OF NON-RECURSIVE MODEL

	Divisiveness in Incumbent Party Primary (I)	Divisiveness in Non-Incumbent Party Primary (N)	Incumbent's Previous Gen. Election Margin (E_{t-1})	Incumbent's Party (P)	Incumbent's Freshman/Non-Freshman Status (F)	Incumbent's Region (D)	Constant
1962							
$(N = 246)$	.086	-.033	.787*	-.002	-.010	-.014	.095
$(R^2 = .448)$	(.156)	(.046)	(.073)	(.011)	(.011)	(.014)	
1964							
$(N = 275)$	.061	-.040	.875*	.114*	-.017	-.014	.014
$(R^2 = .686)$	(.090)	(.065)	(.078)	(.008)	(.011)	(.012)	
1966							
$(N = 258)$	-.099	.063	.803*	-.152*	.002	.007	.261
$(R^2 = .605)$	(.076)	(.085)	(.047)	(.010)	(.011)	(.012)	
1968							
$(N = 259)$	.015	.046	.776*	.007	-.042*	-.042*	.129
$(R^2 = .532)$	(.071)	(.049)	(.062)	(.012)	(.013)	(.012)	
1970							
$(N = 284)$	.053	-.002	.763*	.073*	-.034*	.021*	.112
$(R^2 = .557)$	(.090)	(.041)	(.052)	(.009)	(.012)	(.010)	

1972							
(N = 255)	.296	.074	.510*	-.009	-.047*	-.004	.038
(R² = .130)	(.220)	(.194)	(.069)	(.021)	(.018)	(.015)	
1974							
(N = 258)	.050	-.083	.551*	.167*	-.071*	.008	.275
(R² = .502)	(.123)	(.090)	(.066)	(.025)	(.015)	(.013)	
1976							
(N = 248)	.024	.042	.866*	-.053*	-.056*	-.032*	.122
(R² = .601)	(.119)	(.060)	(.056)	(.015)	(.012)	(.011)	
Average							
1962-76	.061	.008	.741	.018	-.034	-.009	.131

Key: Entries are unstandardized (b) coefficients for second stage of 2SLS. Standard errors of the coefficients are in parentheses. Coefficients significant at .05 level are indicated by * .

an inference seems reasonable in light of recent research document-
ing that in Democratic and Republican incumbent primaries alike,
competition from 1956-76 has increased more in the contests of con-
gressmen who are marginal in November than in those of safer
members.[30]

While we have noted that the general effect of primary
divisiveness within the incumbent party is to damage slightly the
member's fall election showing, there are two prominent exceptions
to this pattern: the relatively strong negative coefficient for 1966,
and the quite large positive coefficient in 1972. The 1966 finding
seems explicable in terms of the transformed regional distribution of
seats within each party produced by the election outcome *two years
earlier*. As a consequence of Johnson's coattails in many tradi-
tionally Republican areas of the North and Goldwater's coattails in
some traditionally Democratic areas of the South, a number of
freshmen in the 89th Congress represented districts which their par-
ties normally had little hope of carrying.[31] These congressmen, of
course, experienced relatively sharp electoral losses in 1966 as con-
ventional voting patterns were reestablished. But, it was precisely
within the 1966 primaries of such freshmen that very low competi-
tion prevailed, because their minority parties were unlikely to have
a tradition of vigorous contesting for congressional nominations and
because party leaders may have discouraged potential challengers in
the interest of safeguarding a valuable new party resource.[32] Hence,
the districts of these switched-seat first termers had *negative* rela-
tionships between general election margins and primary divisiveness
in 1966 and moved the overall relationship in the negative direction
as well. The absence of such a negative overall relationship in our
final analysis, however, seems to result from the fact that by
1974 — the next election year giving rise to a similar kind of intense
regional upheaval in party composition — the electoral value of the
first term of incumbency had grown to the point where most of the

[30] Richard Born, "Changes in the Competitiveness of House Primary Elections,
1956-76," *American Politics Quarterly* (October 1980), 495-506.
    [31] Remember, of course, that in our analysis we only consider those freshmen who
have won seats being vacated by *retiring* members of the other party (see f.n. 27
above).
    [32] This argument, termed the "weak sectional party" hypothesis by Schantz, is
elaborated in Schantz, "Nominations," 61-62, 68; and Julius Turner, "Primary Elec-
tions as the Alternative to Party Competition in 'Safe' Districts," *Journal of Politics* 15
(May 1953), 206.

new Democratic freshmen from normally Republican areas were able to insulate themselves from comparable adversity at the polls two years later.

The abnormally large positive coefficient for I in 1972 is strictly a Democratic party phenomenon, quite possibly linked to the disruptive effects of George McGovern's candidacy that year. Intra-party analysis reveals that while the magnitude of the divisiveness coefficient remains close to its original value for Democrats, it achieves only a slightly positive level for Republicans. The reason for such inter-party variation may well center on the internecine ideological debate characterizing many contested Democratic races as candidates were pressed to explain their differences or agreements with the party's unpopular national standard-bearer. Hence, the tenor of such primary competition could have been unusually rancorous, alienating supporters of losing candidates from the renominated incumbent in the fall campaign.

The 2SLS results for the non-incumbent party, on the other hand, can be discussed more briefly. Primary divisiveness here is revealed to have no systematic impact. While the signs of the coefficients for this variable were positive in all eight of the earlier OLS regressions, the 2SLS coefficients contained in the second column of Table 2 are just as likely to be positive as negative. Across the entire 1962-76 period, the average magnitude of the unstandardized coefficient is a scant .008 and, as in the OLS regressions, only a faint trend toward more positive values is present ($r = .152$, $N = .007 + .004t$). Thus, the November chances of the challenger will be unaffected by his own margin of victory in the primary. Apparently, then, most of the relationship between these two variables in the original equations of Table 1 was due to the reciprocal effect of more favorable November prospects for the non-incumbent party encouraging more competition within its primary.

Conclusion

The conventional belief that divisive primary battles harm a party's general election chances finds some support in this study. Incumbent House members surviving difficult renomination struggles do suffer, as a consequence, slight electoral losses in November. For the non-incumbent party, however, traditional apprehensions expressed toward divisive primaries are shown to be without merit;

the margin by which the challenger wins nomination bears no rela-
tionship to his later showing against the congressman.

That divisive primaries should be more injurious for the incum-
bent perhaps stems from the fact that his intra-party rivals are likely
to target their political fire directly against him, spotlighting
putative shortcomings in his record.   Existing antagonisms felt
toward the congressman may thus be reinforced, leading to greater
defection or abstention among party voters in November.   On the
other hand, animosities generated within the non-incumbent party
are not likely to be so intense, since candidates for its nomination
probably aim at least as many of their campaign sallies at the op-
position incumbent as at each other.

Still, it is important not to make too much of this difference; even
within the incumbent party, primary divisiveness leads only to
minor electoral damage.   The average size of this loss — a .61 per-
cent decline in November for every 10 percent reduction in primary
margin — is not sufficiently acute in itself to cause defeat, except for
the most marginal of incumbents undergoing the most arduous of
renomination ordeals.   So it is clear that the conventional wisdom
of politicians not only errs in postulating harmful effects for the win-
ner of a contentious primary in the non-incumbent party, but also
exaggerates the actual injury which divisiveness does cause for the
incumbent.   The increases in House primary competitiveness which
have occurred over the past two decades, accordingly, may well
threaten party leaders' ability to control the *identity* of their
nominee without further threatening party control of the *seat* in the
fall.[33]

Quite possibly, the problem with this conventional wisdom lies in
its tendency to generalize the injury of divisive primaries to *all* levels
of electoral competition.   The salience of most House primary cam-
paigns to voters certainly is even less pronounced than the normally
low level typifying the general election period.   Thus, aside from
the handful of activist supporters of intra-party contenders, voters
would be largely unaffected by the political wrangling which had
taken place.   This might not hold true for higher-level senatorial,
gubernatorial, and presidential contests, however, where public at-
tentiveness is whetted by greater media coverage.

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[33] These increases in primary competition from 1956-76 are documented in Born,
"Changes in the Competitiveness of House Primary Elections."

Alternatively, regardless of the level of the election considered, the popular wisdom may be shortsighted in its excessive preoccupation with the *negative* side of divisive primaries. In reality, there is some evidence pointing to a number of electoral rewards which might accrue to the winner of a hotly contested nomination battle. Competitive primaries are likely to mean more publicity for the nominee in his district, because of greater coverage devoted to the race by the local media and increased campaign spending. Within the non-incumbent party, furthermore, strong competition may lead to a kind of "political Darwinism," whereby the fittest of the party's contenders emerges with the nomination to battle against the incumbent.[34] Finally, an endangered congressman faced with a vigorous renomination challenge may be forced to deal sooner than otherwise with his political problems, consequently resuscitating his public appeal while there is still time left before November.[35] Therefore, these benefits may at least partly compensate for any loss of voter support in the fall generated by the divisive primary.[36]

[34] For a brief description of three congressional races in 1978 where this "survival-of-the-fittest" phenomenon seems to have contributed to general election success, see Christopher Buchanan, "House: Modest Gains for the Minority," *Congressional Quarterly Weekly Report* 36 (November 11, 1978), 3250.

[35] For example, in "Benefits of the 'Destructive' Primary, *New York Times* (November 20, 1978), B6, Frank Lynn argues that the come-from-behind reelection victory of New York Governor Hugh Carey in 1978 would not have occurred, except for the necessity of gearing up his campaign early to cope with serious primary opposition.

[36] For arguments similar to these, as well as the assertion that aggregate election returns do not necessarily reveal the underlying real "divisiveness" of a primary campaign, see Alan Ware, " 'Divisive' Primaries: The Important Questions," *British Journal of Political Science*, 9 (July 1979), 381-384.