DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES

CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA, CALIFORNIA 91125

WHO IS HELD RESPONSIBLE? FURTHER EVIDENCE ON THE HIBBING-ALFORD THESIS

Morris P. Fiorina

Forthcoming in American Journal of Political Science,
February 1983

SOCIAL SCIENCE WORKING PAPER 435

July 1982

ABSTRACT

Macroeconomic conditions clearly exert an impact on the electoral fortunes of the governing party, but little agreement exists about the micro-level mechanisms which underlie the aggregate relationships. In particular, efforts to base the aggregate level findings on the financial fortunes of individual voters have proved fruitless. Hibbing and Alford suggest, however, that previous studies have failed to differentiate among three types of in-party candidates -- incumbents, open-seat candidates, and challengers of out-party incumbents -- and that only in the first category should we find individual voters holding the in-party responsible. The strongest support for the argument consists of an analysis of 1978 survey data. This note replicates the Hibbing-Alford findings for 1978 using a different methodology, and provides additional analyses from five more election studies. In all, four of six elections yield a pattern of coefficients broadly consistent with the Hibbing-Alford thesis, but in only two elections -- both on-year surprisingly enough -- are the results on solid statistical ground.

WHO IS HELD RESPONSIBLE? FURTHER EVIDENCE ON THE HIBBING-ALFORD THESIS*

Morris P. Fiorina

I. INTRODUCTION

In a recent article Professors Hibbing and Alford propose an ingenious resolution of an empirical puzzle addressed (created?) by several earlier AJPS articles. The puzzle involves identifying the individual level mechanism(s) which underlie the aggregate level relationships between economic conditions and the Congressional vote. Various studies (e.g. Fiorina, 1978) have failed to ground the aggregate relationship in the personal impact of financial conditions on the individual voter. Thus, three alternative bases of the aggregate relationship have been proposed. First, Fiorina (1978, p. 440) and Jacobson and Kernell (1981) suggest that the electoral effect of economic conditions is at least partly indirect: in "bad" times good out-party candidates enter the lists, and contributions to the out-party look like good investments, while the situation of the in-party is just the opposite. Second, Kinder and Kiewiet (1979) argue that voting reflects collective or sociotropic judgments about the state of the economy, which may bear little relationship to personal economic circumstances. Third, Kramer (1981) raises the possibility of methodological artifact by developing a response model in which judgments about one's personal financial condition bear no relationship to the vote even while a genuine behavioral relationship exists.

Hibbing and Alford suggest that the personal impact basis of the aggregate relationship has been dismissed too quickly. The implicit model of previous authors is a party responsibility model which presumes that happiness (unhappiness) with economic conditions predisposes voters towards a favorable (unfavorable) view of the incumbent (Presidential) party. In Kernell's (1977, p. 49) words:

> Given the public's low levels of interest in and knowledge about politics, what better criterion exists for voting one's satisfaction or dissatisfaction with current government programs and performance than by voting for or against the President's party?

In place of this simple party responsibility model Hibbing and Alford offer instead a party and incumbent responsibility model in which only Congressional incumbents of the President's party are held accountable for economic conditions. According to Hibbing and Alford a discerning electorate would be unlikely to visit the sins of the President and his Congressional minions on the heads of open seat candidates; moreover, the electoral fortunes of out-party incumbents may or may not be the mirror image of those of in-party incumbents. In support of their thesis Hibbing and Alford present an aggregate analysis based on postwar Congressional elections, and an individual level analysis based on the 1978 CPS study. The purpose of the present note is to

examine the Hibbing-Alford thesis more closely by evaluating it with the data from five more election studies.

II. THE EVIDENCE

Hibbing and Alford present both aggregate level and individual level analyses. Because the aggregate analysis is inconclusive, I will focus on the individual level analysis.[1] The latter utilizes three variables (party ID, personal financial situation, and district incumbency status) in an examination of Congressional voting by respondents in the 1978 NES/CPS sample. The analyses which follow rely on the same basic model but incorporate several methodological adjustments. First, the dichotomous dependent variable (vote) calls for the application of an estimation procedure other than regression; probit is used here. Second, dummy variable representations of the ordinal party ID and personal financial situation measures are more flexible than the strong assumption that these survey measures are equal interval scales. And third, rather than estimate separate equations within each category of district incumbency status, an interactive specification permits estimation of one equation using all observations -- with resulting gains in efficiency. The exact specification is as follows:

$$\begin{aligned} \Pr(\text{Presidential Party Vote}) = {} & a + b_1(\text{Out x FS same}) + b_2(\text{Out x FS better}) + b_3(\text{Open x FS worse}) + b_4(\text{Open x FS same}) \\ & + b_5(\text{Open x FS better}) + b_6(\text{In x FS worse}) \\ & + b_7(\text{In x FS same}) + b_8(\text{In x FS better}) \\ & + b_9(\text{In-Party Identifier}) + b_{10}(\text{Independent}). \end{aligned} \tag{1}$$

(To prevent statistical degeneracy one of the three party ID categories and one of the nine incumbency status/financial condition interactions are omitted).

The first column of Table 1 contains a replication of the Hibbing and Alford 1978 analysis, modified as described above. As seen, the results resemble those previously reported. Party ID has a major effect on the vote, and not at all surprisingly, so does incumbency -- the sets of coefficients for out-party, open, and in-party districts clearly differ in the anticipated manner. Of most interest, however, are the interactions between incumbency status and financial situation. As argued by Hibbing and Alford, no intelligible patterns appear for out-party districts and open seats, while the hypothesized relationship for in-party districts appears, though the coefficient pattern is not monotonic.

[Table 1 here]

While the magnitudes of the in-party interactions more or less resemble the hypothesized pattern, their importance remains to be determined (the simple significance tests reported in the table signify only that the coefficients are different from zero -- an incumbency status effect -- not necessarily from each other -- the Hibbing Alford effect.) The appropriate significance test can be performed by estimating a second model in which the effects of personal financial condition are assumed not to vary across the three classes of districts, ie. the following simple additive model:

$$\Pr(\text{Presidential Party Vote}) = c + d_1(\text{FS same}) + d_2(\text{FS better}) + d_3(\text{In-party incumbent}) + d_4(\text{Open seat}) + d_5(\text{In-party identifier}) + d_6(\text{Independent}) \quad (2)$$

Model 2 is a special case of model 1 in which appropriate coefficients are constrained to be equal. Thus, minus two times the difference in the logs of the likelihood functions of the restricted and unrestricted models is distributed as a Chi square with degrees of freedom equal to the difference in the number of estimated coefficients -- four (McKelvey and Zavoina, 1975). Such a procedure gives some indication of whether the more complicated model provides a significant improvement over the simpler alternative. For the 1978 data the test shows an improvement in goodness of fit for the Hibbing-Alford model that is significant at the .05 level (see Table 2). Methodological variations notwithstanding, the Hibbing-Alford 1978 findings are clearly supported.

[Table 2 here]

Those who have worked with survey data in this area have learned to be wary, however. For one thing, results apparent in one year often vanish in others. Thus, Table 1 also presents tests of the Hibbing- Alford interactive model in five other elections for which I have district incumbency status merged with SRC/CPS data. The results are rather interesting. The Hibbing-Alford findings appear to extend to the two off-year elections, 1958 and 1974, though the pattern is not monotonic in 1958, and the differences are not statistically significant (see Table 2) in 1974. For the Presidential elections,

however, the results are mostly negative. There is no trace of the hypothesized pattern in 1960 (the marginally significant entry in Table 2 arises from unanticipated differences among the open seat coefficients). In 1976 the pattern is confused, with the only monotonic effect for out party incumbents. As table 2 shows, however, these diferences are not significant at conventional levels. Finally, in 1980 we find monotonic patterns for both in-party and out-party incumbent districts, but again, table 2 shows that these estimates do not approach statistical significance.

To sum up, four of six elections, including all three mid-terms, yield a pattern of coefficients broadly consistent with the Hibbing-Alford thesis, but in only two elections -- both mid-terms -- can we conclude with any confidence that the effects of personal financial condition really differ across district incumbency status. At best the additional estimations suggest that the electoral fortunes of in-party incumbents vary with personal financial condition only when the President himself is not available as a target.

How plausible is such a hypothesis? Frankly, it seems to fly in the face of common sense. One would expect candidates of the incumbent party to be more closely tied to national conditions in a Presidential year — especially when the incumbent President himself leads the ticket, as in 1976 and 1980. But in no presidential year do we find significant effects. Perhaps we should expect strong effects in mid-terms held during recessionary periods, as in 1958 and 1978. But why not then in 1974? Theoretical expectations aside, some existing research also tends to cast doubt on the plausibility of the

Hibbing-Alford thesis modified to apply only to mid-terms. Tufte (1978, p. 112, 119) finds considerably stronger effects of variations in real disposable income for on-year elections than for off-years, though the measure of Presidential evaluation is not the same for the two analyses. Once again, we seem to have a disparity between the findings from individual cross-sectional analyses and aggregate time-series analyses.

III. SUMMARY

The Hibbing-Alford thesis is a nice idea, though it presumes a level of voter discernment I would have doubted prior to seeing the data. Still, the evidence for the thesis is fragile. The aggregate analysis is inconclusive, and the individual level analyses hint at a somewhat implausible limitation of the party and incumbent responsibility model to mid-term elections. Certainly, too, the evidence for the latter suggestion is also fragile given that models 1 and 2 are quite underspecified. One possible explanation for the stronger results evident in mid-terms may be that a greater variety of influences are at work in the on-year elections and thus muddy the underlying relationship between financial condition and the vote. Various measures of presidential preference could be added to model 1 in an effort to consider such a possibility.[2] In all likelihood, however, addition of such other variables will wipe out any trace of a direct link between personal financial condition and the vote (Fiorina, 1981, Chapter 8). In sum, we still have far to go before we can confidently ground the known aggregate relationships in the personal impact of economic conditions on individual voters.

TABLE 1

HIBBING-ALFORD THESIS IN SIX ELECTIONS, CONTESTED CONGRESSIONAL DISTRICTS ONLY

	1978	1958	1960	1974	1976	1980
Constant	-1.64*	-1.65*	-1.16*	-1.24*	-1.44*	-1.69*
In-party ID	1.65*	2.49*	2.20*	1.75*	1.61*	1.30*
Independent	.89*	1.15*	.88*	.95*	.80*	.72*
In-Party Districts						
FS worse	1.51*	.47	.44*	.52*	1.10*	1.37*
FS same	1.50*	.32	.44*	.73*	1.39*	1.50*
FS better	1.94*	1.12*	.43*	.87*	1.30*	1.57*
Open Seats						
FS worse	1.06*	- .23	- .89	.43*	.47*	.74*
FS same	.43	.46	.71*	.34	.38*	.65*
FS better	.59*	.02	.23	.11	.51*	.52
Out-Party Districts						
FS same	- .18	.06	- .17	- .16	.16	.21
FS better	- .30	.06	.02	- .13	.29*	.38*
n	858	595	889	923	1302	752
$\hat{R}^2$	.60	.64	.56	.47	.49	.47

*p < .05

TABLE 2

TESTS FOR SUPERIORITY OF HIBBING-ALFORD INTERACTIVE MODEL OVER SIMPLE ADDITIVE MODEL

Year	$-2\ LLR^I$	$-2\ LLR^A$	$X^2/df=4$	p
1958	418.87	408.86	10.01	< .05
1960	505.34	496.22	9.12	< .10
1974	388.64	383.34	5.30	< .30
1976	552.07	549.86	2.21	< .50
1978	478.43	468.05	10.38	< .05
1980	294.59	293.03	1.56	< .90

FOOTNOTES

* I wish to thank (name of referee #2) for helpful comments in an earlier version of this note.

1. The aggregate level analysis presented by Hibbing and Alford consists of three OLS regressions (in-party incumbents, open seats, out-party incumbents) of the non-Southern House vote on real per capita income (rpci), for the 17 elections between 1946 and 1978. The estimated coefficients of rpci are as follows (t statistics in parentheses):

In-party:	1.40	(4.30)
Open-seats:	.86	(2.02)
Out-party:	-.95	(1.92)

While it does appear that the effect is most pronounced for in-party incumbents, the conclusion of insignificant effects for open seat candidates and out-party incumbents hinges upon application of a two-tail test. Under the plausible hypothesis that the electoral fortunes of open seat in-party candidates will vary positively with economic conditions, and those of out-party candidates negatively, both coefficients are significant at the .05 level. (For a one-tail test Pr (t > 1.75 < .05/df=15)). The preferred procedure would seem to be a test for differences in slope though Hibbing and Alford (footnote 6, p. 431) feel such a test would not be appropriate. Simply eye-balling the evidence it appears unlikely that the slopes for in-party incumbents and open seat in-party candidates are significantly different, or that the magnitudes of the slopes for in-party and out-party incumbents are significantly

different. And, of course, in any given election, only 25-50 non-South open seats exist. For this reason alone one would expect the open seat regression to yield less conclusive results than the others.

2. In a similar vein further work with the aggregate data would do well to employ more fully specified models. Most obviously, if Hibbing and Alford would add Presidential performance ratings to their analysis (limited to mid-terms, of course), they could contrast their aggregate results to Tufte's (1975; 1978, Ch. 5) findings.

REFERENCES

Fiorina, Morris P., "Economic Retrospective Voting In American National Elections: A Micro-analysis." American Journal of Political Science, 22 (1978): 426-433.

Fiorina, Morris P., Retrospective Voting in American National Elections (New Haven: Yale University Press, 1981).

Hibbing, John R., and John R. Alford, "The Electoral Impact of Economic Conditions: Who is Held Responsible?" American Journal of Political Science 25 (1981): 423

Jacobson, Gary, and Samuel Kernell, Strategy and Choice in Congressional Elections (New Haven: Yale University Press, 1981).

Kernell, Samuel, "Presidential Popularity And Negative Voting: An Alternative Explanation Of The Mid-term Electoral Decline Of The President's Party". American Political Science Review, 71 (1977): 44-66.

Kinder, Donald R., and D. Roderick Kiewiet, "Economic Discontent And Political Behavior: The Role Of Personal Grievances And Collective Economic Judgments In Congressional Voting". American Journal of Political Science 23 (1979): 495-527.

Kramer, Gerald H., "The Ecological Fallacy Revisited: Aggregate- Versus Individual-Level Findings on Economics and Elections, and Sociotropic Voting," Social Science Working Paper No. 424, CIT (1980).

McKelvey, Richard, and William Zavoina, "A Statistical Model for the Analysis of Ordinal Level Dependent Variables," Journal of Mathematical Sociology 4 (1975):103-120.

Tufte, Edward, "Determinants Of The Outcomes Of Midterm Congressional Elections." American Political Science Review, 69 (1975): 812-826.

Tufte, Edward, Political Control of the Economy (Princeton: Princeton University Press, 1978).