# Faculty Working Papers

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PREFERENCE PRIMARY POLLS

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by

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# THE ACCURACY OF PRESIDENTIAL PREFERENCE PRIMARY POLLS

There is widespread agreement that national opinion polls have done a good job of predicting presidential elections in the last two decades. There is much less confidence in the ability of state polls to predict the outcomes of presidential preference primary elections. Indeed the national polling organizations typically shun these state elections. The state polls are conducted either by local polling groups such as the Field Poll in California or by pollsters hired by local or national media. We exclude from this discussion polls commissioned by candidates, since these polls are usually released only as part of the campaign strategy of a candidate and are often incomplete and distorted.

An analysis of primary polls in the 1972 and 1968 elections reveals, however, that state polls have generally been reasonably accurate in predicting primary results. Their accuracy depends mainly on the time span between the poll and the primary election. Attitudes of voters in primary elections, particularly presidential preference elections, are far more volatile than in regular elections. Last-minute campaign activities, the visit of the candidates and the impressions they make, and the results of other primaries held a week or two earlier all affect the outcome. Thus, it is not surprising that there are major changes in poll results as the time of the primary draws near. Polls completed in the week before the primary are, in every case, better than earlier polls in predicting actual primary results.

The results for selected primaries in 1972 and 1968 are given in Table 1. These are all the primaries for which poll results were reported in The New York Times Index. While the list includes all the major primary elections where polls were conducted, some other state polls may have been inadvertently omitted.

As may be seen, the average difference between the final poll and the primary results was about four percentage points. Since most of the polls reported here were based on sample sizes of about 400 persons likely to vote in the primary, deviations of about five percentage points for the leading candidates and three percentage points for lesser candidates would likely be due to sampling variability. While these sampling errors are larger than for national elections, there do not appear to be major biases.

The major differences between the polls and the primary results observed in Table 1 are in the 1968 New Hampshire and 1972 Indiana primaries and in the general underestimation of the vote received by George Wallace in the primaries. The gross underestimate of the McCarthy vote in New Hampshire in 1968 is almost certainly due to the polls being conducted before the serious door-to-door campaigning occurred. Particularly in the earlier primaries, polls must be conducted until election eve if they are to be accurate. The 1972 New Hampshire poll results were conducted into the final week and were much nearer to the election results.

The Wallace vote in the primaries was underestimated 19 percentage points in Indiana, 8 in Florida, 7 in Wisconsin, and 5 in Massachusetts (but overestimated in California) in 1972. While some of the difference

in Indiana was due to the earliness of the poll there, one can only speculate that Wallace voters generally find the polls more threatening and are probably disproportionately represented among undecided voters. (For the purposes of this analysis, undecided voters are excluded from the percentages, which has the same effect as allocating them proportionately as are decided voters.)

Table 2 gives an index of dissimilarity between each state sample survey and the actual primary results for that state. This was calculated by summing the absolute values of all percentage differences and dividing by 2. An index of 0% would indicate a perfect prediction, while any number larger than that indicates what proportion of the respondents would have had to vote differently to reproduce the actual outcome. The indexes of dissimilarity range from 4% to 57%, with a mean of 18% and a standard deviation of 13%. The correlation between the number of days between the poll and the election to the inaccuracy of the poll as measured by the index of dissimilarity is .75, indicating that 56% of the variance in the accuracy of polls is explained by the number of days before the elections. It is clear that the accuracy of polls greatly increases as the election draws near. For instance, the five polls conducted one or two days before the primary election had indexes of dissimilarity with the final election averaging 6%, even though several candidates were running.

The errors observed in primary polling indicate that the electorate is not segmented into predictable blocs to the extent of the national electorate. However, as the election draws near, public opinion crystallizes to the extent that an outcome is predictable with reasonable accuracy. Use of larger samples

would further increase predictive strength, though this is expensive when primary voters are a small proportion of the general population.

In addition to predicting specific elections, the primary polls show the trend of the relative strengths of candidates during the pre-convention campaigning. To illustrate this, we selected two major Democratic candidates who entered most 1972 primaries, Edmund Muskie and George McGovern. The ratio of their strength was calculated for every primary poll and election. These 17 measures were placed in chronological order and are given in Table 3. Muskie's strength vis-a-vis McGovern declined steadily from a ratio of 4.6 in a Florida poll of January 9, 1972, to a ratio of .04 in the California primary election. It appears that the actual elections and the sample surveys are both measuring the systematic and fairly orderly changes in candidate strength.

Most of the state polls use telephone procedures. This has the major advantage of making it possible to complete the poll in a short period of time and thus to measure trends over time. It is especially useful if a poll is conducted in the week before the primary. The results suggest that the minority of households without phones are unlikely to vote in primary elections and thus no serious sample biases result. Although the phone procedures oversample women, the high correlation between the voting behavior of members of the same household again prevents serious sample biases due to the underrepresentation of men. Since time is the critical factor in primary election polls, it is clear that a timely phone poll will be more accurate and useful than a carefully conducted face-to-face survey that is several weeks or a month old.

For persons who wish to predict primary election outcomes early, the simple enumeration of a poll is of limited utility. Further analysis of the general

trends observed in earlier primaries will need to be carried out. External
information about a candidate's organization and campaign tactics will need
to be combined with survey data to improve the accuracy of predictions. The
limitations of polls for predicting elections several weeks later are not
attributable to technology or methodology but rather to an accurate reading
of the situation, namely that positions can change rapidly in primary elections.

## TABLE 1

### PRIMARY POLL PREDICTIONS AND ELECTION RESULTS 1972 AND 1968

| Primary | Poll | Predictions | | Election | Difference |
|---|---|---|---|---|---|
| **A. New Hampshire (1972)** | 2/18 | 2/25 | 3/5 | 3/7 | |
| | | | | | |
| Democratic | | | | | |
| Muskie | 71% | 54% | 52% | 48% | 4% |
| McGovern | 23 | 34 | 33 | 35 | 2 |
| Yorty | 4 | 6 | 5 | 7 | 2 |
| Other | 2 | 6 | 10 | 8 | 2 |
| | | | | | |
| Republican | | | | | |
| Nixon | | 80 | 78 | 71 | 6 |
| McClosky | | 14 | 16 | 19 | 3 |
| Ashbrook | | 6 | 6 | 10 | 4 |
| | | | | | |
| **B. Florida (1972)** | | | | | |
| | | | | | |
| Democratic | | 1/9 | 3/2 | 3/14 | |
| Wallace | | 28% | 34% | 42% | 8% |
| Humphrey | | 24 | 18 | 18 | 0 |
| Muskie | | 23 | 18 | 9 | 9 |
| Jackson | | 8 | 11 | 13 | 2 |
| McGovern | | 5 | 5 | 6 | 1 |
| Lindsey | | 4 | 11 | 7 | 4 |
| Chisolm | | 2 | 4 | 4 | 0 |
| Others | | 6 | 0 | 1 | 1 |
| | | | | | |
| **C. Wisconsin (1972)** | | | | | |
| | | | | | |
| Democratic | | 3/23 | 3/30 | 4/4 | |
| McGovern | | 23% | 28% | 30% | 2% |
| Wallace | | 11 | 15 | 22 | 7 |
| Humphrey | | 25 | 22 | 21 | 1 |
| Muskie | | 18 | 16 | 10 | 6 |
| Jackson | | 17 | 14 | 8 | 6 |
| Others | | 6 | 5 | 7 | 2 |
| | | | | | |
| **D. Massachusetts (1972)** | | | | | |
| | | | | | |
| Democratic | | 4/16 | 4/24 | 4/26 | |
| McGovern | | 46% | 47% | 48% | 1% |
| Muskie | | 33 | 21 | 22 | 1 |
| Wallace | | { | 4 | 9 | 5 |
| Humphrey | | { | 15 | 8 | 7 |
| Mills | | {21 | 4 | 4 | 0 |
| Others | | { | 9 | 9 | 0 |

TABLE 1--Continued

| Primary | Poll | Predictions | | Election | Difference |
|---|---|---|---|---|---|
| **E. Indiana (1972)** | | | | | |
| Democratic | | | 4/20 | 5/2 | |
| Humphrey | | | 46% | 47% | 1% |
| Muskie | | | 32 | 12 | 20 |
| Wallace | | | 22 | 41 | 19 |
| **F. California (1972)** · | | | | | |
| Democratic | 2/1 | 5/1 | 5/30 | 6/6 | |
| McGovern | 8% | 35% | 53% | 45% | 7% |
| Humphrey | 26 | 39 | 30 | 42 | 12 |
| · Wallace | 0 | 0 | 9 | 6 | 3 |
| Muskie | 32 | 13 | 1 | 2 | 1 |
| Others | 31 | 13 | 6 | 5 | 1 |
| **G. New Hampshire (1968)** | 2/22 | 3/4 | | 3/12 | |
| Democratic | | | | | |
| Johnson | 86% | 85% | | 50% | 35% |
| McCarthy | 14 | 15 | | 42 | 27 |
| Others | 0 | 0 | | 8 | 8 |
| Republican | | | | | |
| Nixon | | 75 | | 80 | 5 |
| Rockefeller | | ˉ5 | | 11 | 4 |
| Others | | 10 | | 9 | 1 |
| **H. California (1968)** | | | | | |
| Democratic | 3/19 | 5/25 | 6/3 | 6/4 | |
| Kennedy | 46% | 45% | 46% | 46% | 0% |
| McCarthy | 20 | 29 | 37 | 42 | 5 |
| Others (Johnson) | 34 | 26 | 16 | 12 | 4 |
| **I. Oregon (1968)** | | | | | |
| Democratic | 5/27 | · | | 5/28 · | |
| Kennedy | 38% | | | 37% | 1% |
| McCarthy | 36 | | | 43 | 7 |
| Humphrey | 11 | | | 7 | 4 |
| Johnson | 10 | | | 13 | 3 |

TABLE 2

PRIMARY POLL ACCURACY RECORD

| Year | State | Party | Number of Days before Election | Index of Dissimilarity |
|------|-------|-------|-------------------------------|------------------------|
| 1972 | N.H. | D | 18 | 22% |
| 1972 | N.H. | D | 11 | 5 |
| 1972 | N.H. | D | 2 | 5 |
| 1972 | N.H. | R | 11 | 9 |
| 1972 | N.H. | R | 2 | 7 |
| 1972 | Fla. | D | 65 | 25 |
| 1972 | Fla. | D | 12 | 12 |
| 1972 | Wisc. | D | 12 | 20 |
| 1972 | Wisc. | D | 5 | 12 |
| 1972 | Mass. | D | 2 | 7 |
| 1972 | Ind. | D | 12 | 20 |
| 1972 | Cal. | D | 126 | 57 |
| 1972 | Cal. | D | 36 | 19 |
| 1972 | Cal. | D | 7 | 12 |
| 1968 | N.H. | D | 19 | 36 |
| 1968 | N.H. | D | 8 | 35 |
| 1968 | N.H. | R | 8 | 5 |
| 1968 | Cal. | D | 77 | 22 |
| 1968 | Cal. | D | 10 | 14 |
| 1968 | Cal. | D | 1 | 4 |
| 1968 | Ore. | D | 1 | 7 |
| Mean | | | 21 | 17 |
| Standard deviation | | | 31 | 13 |

TABLE 3

RATIO OF MUSKIE/MCGOV RN SUPPORT BY DATE

| Date | Polls | Primaries |
|------|-------|-----------|
| 1/9/72 | 4.6 | |
| 2/1 | 4.0 | |
| 2/18 | 3.1 | |
| 2/25 | 1.6 | |
| 3/2 | 3.6 | |
| 3/5 | 1.5 | |
| 3/7 | | 1.4 |
| 3/14 | | 1.5 |
| 3/23 | .78 | |
| 3/30 | .57 | |
| 4/4 | | .33 |
| 4/16 | .72 | |
| 4/24 | .45 | |
| 4/26 | | .46 |
| 5/1 | .37 | |
| 5/30 | .03 | |
| 6/6 | | .04 |