

the literature can be found in: Douglas A. Hibbs, Jr., *The American Political Economy*, (Cambridge, MA: Harvard University Press, 1987); George C. Edwards III with Alec M. Gallup, *Presidential Approval* (Baltimore: Johns Hopkins University Press, 1990); and Michael S. Lewis-Beck and Tom W. Rice, *Forecasting Elections* (Washington, D.C.: Congressional Quarterly, 1992).

<sup>2</sup> For a fuller description of the statistical results, see Michael P. Niemira, "Presidential Popularity, Consumer Confidence, and Real Economic Conditions—What it Means for the Election," *Monthly Business Conditions*, Mitsubishi Bank, September 1992. A copy is available upon request from Mitsubishi Bank at 225 Liberty Street, New York, New York 10281.

<sup>3</sup> An equation was estimated between 1956-1988 to determine how well presidential approval forecast the share of the vote garnered by the incumbent party's candidate; the result,

which is an update of Hibbs' equation, is shown below:

$$P\_VOTE = 26.9 + 0.479 \times APPROVE$$

(5.1) (3.15)

where P\_VOTE is the share of the popular vote in the general election that the incumbent party's candidate received, APPROVE is the presidential approval rating as of October and the numbers under the coefficients are the t-statistics. This equation explained 58 percent of the variability in the dependent variable. Based on this equation, Bush's approval rating had to rise to above 48.5% by October (it was 37% in June) to capture 50.1% of the popular vote. See: Hibbs, Jr., *The American Political Economy*.

<sup>4</sup>The statistical relationship between the popular vote and the electoral vote is:

$$E\_VOTE = -151 + 4.1 \times P\_VOTE$$

where P\_VOTE is the share of the popular vote in the general election that the incumbent party's candidate received and E\_VOTE is the

share of the electoral vote. By this equation, the popular vote forecasted for Bush would translate into 3.9% of the electoral vote.

<sup>5</sup>Nathaniel Beck, "Forecasting the 1992 Presidential Election: The Message is in the Confidence Interval," *The Public Perspective*, September/October 1992, p.33.

<sup>6</sup> Lewis-Beck and Rice, *Forecasting Elections*.

<sup>7</sup> Edwards and Gallup, *Presidential Approval*, p.140.

<sup>8</sup> An expanded version of this model, with consumer confidence at its core, could be developed to address more comprehensive election issues. For example, a multiple equation model could account for the challengers to the incumbent party candidate, the voter turnout, a measure of foreign policy concern, party affiliation, etc.

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## AND FROM IOWA, ANOTHER PREDICTOR OF THE 1992 VOTE

One of the more unusual predictors of the electoral outcome was the "Iowa Political Stock Market," conducted this year as it was in 1988. The market was open to anyone who could gain access to the University of Iowa computer and was willing to establish an account (minimum value \$5 and maximum \$500). Account holders could buy and sell "shares" in the three major candidates, receiving at the end payoffs: either on a "winner take all" basis (shares in the winner paying off \$1, others nothing) or where the final value of shares was determined by each candidate's final vote proportion.

Traders could purchase shares in two ways. Bundles of one share for each candidate were available for a fixed price of \$1. This increased the total number of shares outstanding, but ensured that there would always be equal numbers for the three candidates. In addition, traders could buy and sell from one another, using software that simulated the role of futures brokers in a commodity market. (Indeed, the IPSM legally fell under federal regulations applicable to such markets, and was so registered). As in any market, prices at any given point represented the collective wisdom on what shares would ultimately be worth (votes on election day), perceptions of whether a given candidate was "undervalued" or "overvalued" in the opinion of others, and a willingness to "speculate" for a potential big gain.

When the market closed at midnight on November 2, there was a total investment of \$82,623.51 from 1002 traders. The final share prices stood at Clinton 43.2, Bush 37.5, and Perot 19.3. Over the final week, according to the market's organizers, both Bush and Clinton shares had been relatively stable, while Perot's had fluctuated sharply, trading as low as thirteen to fourteen cents on Sunday. If the final figures were taken as a prediction, in any event, the Iowa Political Stock Market would compare very favorably with most of the national polls. It's average absolute error was less than one quarter of a percentage point!

—G. Donald Ferree, Jr.—