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**The Economy and the 1996 Presidential Election:
Why Clinton Will Win with Probability Exceeding 90%**

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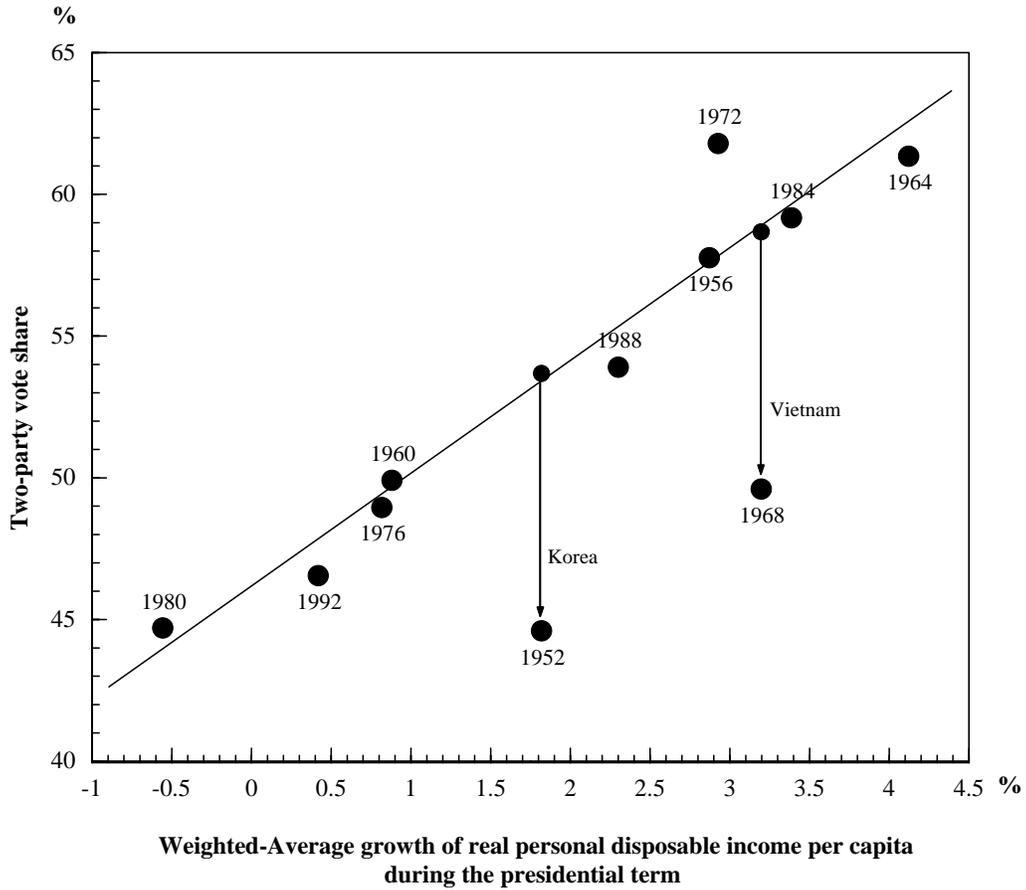
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Postwar American presidential elections should for the most part be viewed as a sequence of referendums on the White House party's economic record. In fact, aside from the 1952 and 1968 contests when U.S. military involvement in Korea and Vietnam, respectively, most likely deprived the Democrats of victory, real income growth under the incumbent party accounts, all by itself, for about 90 percent of the variation in aggregate voting outcomes for postwar presidential elections. The remarkably robust association is illustrated by the *Figure*, which shows the percentage shares of the two-party vote going to incumbent party candidates in relation to weighted-average growth of real personal disposable income per capita, computed over the fifteen quarters prior to each presidential election.¹ The real income variable is quite a broad measure of voters' economic well-being, inasmuch as it includes income from all market sources, is adjusted for inflation, taxes, government transfer payments and population growth, and tends to move with changes in unemployment.

As noted, however, real income growth under the party holding the White House does not always exert decisive influence over presidential voting decisions. The point is illustrated starkly by the 1952 and 1968 election outcomes, when the vote shares received by the Democratic candidates fell well short of what would have been expected from the incumbent party's favorable real income performance alone. The data depicted in the *Figure* suggest that American intervention in Korea and Vietnam -- which had become extremely unpopular by the time of the 1952 and 1968 elections -- were huge liabilities for the Democrats, depressing the vote for both Adlai Stevenson and Hubert Humphrey by around nine percentage points. (The War effects are illustrated in the *Figure* by the vertical arrows running from the vote shares expected from economic performance alone to the actual vote shares.) Indeed, had Stevenson not been saddled with the Korean War, he probably would have defeated Dwight Eisenhower handily in 1952. And in 1968 Humphrey almost surely would have trounced Richard Nixon had he not been burdened by the Democratic Administration's commitment to Vietnam.

¹ The quarter-to-quarter growth rates are cumulated in a way that gives greatest weight to price deflated income changes closest to the election date. See the *Appendix* for details about the data and model that yield the results graphed in the *Figure*.

Figure, Real Income Growth and the Two-Party Vote Share of the Incumbent Party's Presidential Candidate



	1952	1956	1960	1964	1968	1972	1976	1980	1984	1988	1992
Actual vote	44.6	57.8	49.9	61.3	49.6	61.8	49.0	44.7	59.2	53.9	46.6
Predicted vote	44.4	57.6	49.7	62.6	49.8	57.9	49.4	44.0	59.7	55.4	47.8
Prediction error	0.2	0.1	0.2	-1.3	-0.2	3.9	-0.5	0.7	-0.5	-1.5	-1.3

The 'Bread and Peace' model of voting outcomes also implies that the string of Republican victories in 1980, 1984 and 1988 was not the consequence of a broad based, ideological shift to the right among voters, as sometimes has been claimed, but stems mainly from poor economic performance under the Democrats prior to the 1980 election, and favorable performance during the run-ups to the 1980 and 1988 contests under the Republicans.

Up to the end of 1995 (the most recent period for which we have highly reliable data at the time I write), weighted-average per capita real personal disposable income growth during Clinton's tenure in the White House stood at just over 1.3 percent per annum; a somewhat mediocre performance that falls below the mean end-of-term record (2.0 percent per annum) for the previous eleven presidential administrations. Nonetheless, if sustained throughout 1996, even this below average performance would probably yield a successful Clinton re-election bid: According to income growth - to - vote predictions graphed in the *Figure*, absent American involvement in an undeclared war (Korea and Vietnam), the incumbent party's candidate has never been defeated when weighted-average real income growth during the term preceding the election was above 1.0 percent per annum.

Preliminary data on disposable income growth (and employment and gross output growth) indicate, however, that the American economy has performed unusually well during the first part of 1996. Real personal disposable income per capita has likely been growing at quarterly rates of 2.5 to 3.5 percent, and maybe higher, in the three quarters before the election. As shown in the *Table*, at these income growth rates for 1996, Clinton's probability of winning is above 0.9, even though the predictions of his two-party vote share are only in the 53% to 54% range. The election probabilities associated with two-party vote share margins of 3 to 4 percentage points are so high because of the strong historical association between real income growth and presidential election outcomes reported in the *Figure*.² (See also the *Appendix*.)

The prediction of a highly probable Clinton victory naturally assumes that Ross Perot's candidacy exerts negligible influence (as seems likely), and that the economy does not register a really big negative change just prior to the election. The model-based computations in the *Table* suggest that real income growth during 1996, contrary to all current evidence, would have to be nil for Dole to have an even 50-50 chance of winning.

² Probabilities of winning are taken to be probabilities of obtaining more than 50% of the two-party vote and are based on the cumulative normal density function with forecast standard errors computed in the usual way.

**Table, How Real Income Growth During 1996 Will Likely Affect
The Presidential Election**

If, During the First Three
Quarters of 1996, Per
Capita **Real Personal
Disposable Income**
Grows at Annual Rate:

The Likely Two-Party
Vote for Clinton Is:

And the **Probability** of
Clinton Winning Is:

0.0 %	49.8 %	.46
0.5	50.4	.59
1.0	51.1	.71
1.5	51.7	.81
2.0	52.3	.89
2.5	52.9	.94
3.0	53.5	.97
3.5	54.2	.98
4.0	54.8	.99

Appendix

The simple scheme for ascertaining the relation between real income growth and presidential voting outcomes depicted in the *Figure* and used to generate the forecasts in the *Table* was devised initially in Hibbs (1982) to help explain Reagan's victory in 1980, and is discussed further in Hibbs (1987). The same model, conditioned explicitly as here on the historical effect of *War* (Korean and Vietnam), successfully predicted Clinton's victory in 1992 (Hibbs, 1992); a more interesting election to forecast than the present one because Bush was incorrectly predicted to be the likely winner by every economic-voting model I know of. In Hibbs (forthcoming) I show that the 'Bread and Peace' model featured here outperforms alternative equations³ with respect to historical fit to data, out-of-sample predictions and sample-regime parameter stability.

Let t denote quarterly time, $Vote_t$ denote the two-party percentage vote share of the incumbent party's candidate at presidential elections (the fourth quarter of election years), War_t denote a binary variable equal to 1.0 at the 1952 and 1968 elections (the Korean and Vietnam war elections) and zero otherwise, YD_t denote nominal personal disposable income per capita (seasonally adjusted) and P_t denote the consumer price index (also seasonally adjusted). The annualized, quarter-on-quarter percentage rate of change of real personal disposable income per capita, denoted R , is formed $R_t = \log\left(\frac{YD_t/P_t}{YD_{t-1}/P_{t-1}}\right) \cdot 400$.

The 'Bread and Peace' model equation is

$$Vote_t = \alpha + \beta \left(\sum_{j=1}^{15} \lambda^{j-1} R_{t-j} \left(\frac{1}{\sum_{j=1}^{15} \lambda^{j-1}} \right) \right) + \gamma War_t$$

where $\left(\frac{1}{\sum_{j=1}^{15} \lambda^{j-1}} \right)$ is just a normalizing constant so that β registers the response of the incumbent party candidate's *Vote* share to any sustained rate of real income growth, R .

Nonlinear least-squares estimates of the equation over 1952 to 1992 (eleven presidential elections) yields, with t-ratios in parentheses

³ Including equations including 'Presidential Approval' ratings that cannot be regarded as explanatory (though they may forecast well) because endogenous voter sentiments about incumbent performance (poll responses) are used to fit election day sentiments (votes).

$$\hat{\alpha} = 46.2 (46.4), \quad \hat{\beta} = 4.0 (7.8), \quad \hat{\lambda} = 0.92 (28.7), \quad \hat{\gamma} = -9.1 (-5.8)$$

$$adj R^2 = .93, \quad SER = 1.78, \quad Durbin - Watson = 2.0 .$$

These estimates imply that each percentage point of real income growth sustained over the fifteen pre-election quarters yields a 4 percentage point deviation of the incumbent party's vote share from a baseline (two-party) share of 46.2 percentage points. Unlike the set-up of other economic voting models which typically assume that only the election year (or half year) economic record matters⁴, the weighting parameter estimate $\hat{\lambda} = 0.92$ means that voting outcomes are influenced by real income growth over the whole term, though income growth rates closer to the election exert greater influence than earlier ones. To illustrate: $\lambda^n / \lambda^{n+1} = 1.088$ ($n \geq 0$) so that real income growth in the current quarter has 8.8 percent more weight than growth one quarter earlier, or, $\lambda^0 / \lambda^{11} = 1/0.4 = 2.5$, so that real income growth in the last full quarter before an election exerts 2.5 times more influence than growth in the last quarter of the first year of the term.

Dropping the *War* term and estimating the equation for the 'non-war' elections (that is, omitting 1952 and 1968) yields essentially identical coefficient estimates:

$$\hat{\alpha} = 46.1 (41.2), \quad \hat{\beta} = 4.0 (6.7), \quad \hat{\lambda} = 0.92 (25.2),$$

$$adj R^2 = .91, \quad SER = 1.92, \quad Durbin - Watson = 2.4 .$$

The 'Bread and Peace' model exhibits similar stability in other subsets of the sample.

⁴ Consequently, such models tend to predict badly voting outcomes when early- and late-term performance are quite different as, for example, at the 1976 and 1992 elections.

References

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