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**Economics, Politics and the 2004 Election: Electoral
Victory and Statistical Defeat**

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May 10, 2005

¹A condensed version of this study appeared in William Nordhaus, "The Profile of An Election, 2004: Outcomes and Fundamentals," *The Economists' Voice*, Volume 2, Issue 2, 2005, Article 3. The author is grateful for comments from Ray Fair and Alan Gerber.

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Abstract

The 2004 election has been interpreted as a resounding victory for conservative values. Was it in fact a mandate? The present analysis examines recent electoral outcomes and the 2004 election with particular reference to economic and political fundamentals. Looking at both aggregate results and exit polls since 1972, it examines three models of performance relative to economic and political fundamentals. Additionally, it identifies the trends for different socio-economic groups. It concludes that the Republican candidate in 2004 did significantly worse than would be predicted based on economic and political fundamentals.

KEY WORDS: 2004 election, exit poll, political equations

JEL CLASSIFICATIONS: E6, D72, P16

Economics, Politics, and the 2004 Election: Electoral Victory and Statistical Defeat

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May 10, 2005

The 2004 election has been interpreted as a resounding victory for Republicans and conservative values. Despairing Democrats are weighing their strategies and considering whether to redesign themselves after the victors. Newly elected President George W. Bush declared his mandate, “[T]here is a feeling that the people have spoken and embraced your point of view, and that's what I intend to tell the Congress.... I earned capital in the campaign, political capital, and now I intend to spend it.”²

Was it in fact a mandate? Elections are deceptive because of their winner-take-all nature. Close margins in elections get magnified into alleged mandates and sweeping judgments. What in fact was the voters’ verdict in the 2004 elections? How well did the victors and losers actually perform? The present analysis examines the electoral outcome with particular reference to economic and political fundamentals. It concludes that the Republican candidate did significantly worse than would be predicted based on economic and political fundamentals.

Performance of an Incumbent Republican in a Strong Economy

The first point is that George W. Bush did poorly relative to the economic and political fundamentals. By comparing Presidential elections over the last century, we see that Bush had three major factors working in his favor: he was an incumbent, he was a Republican, and the economy had performed relatively well in the months before the 2004 election.

¹ A condensed version of this study appeared in William Nordhaus, “The Profile of An Election, 2004: Outcomes and Fundamentals,” *The Economists’ Voice*, Volume 2, Issue 2, 2005, Article 3. The author is grateful for comments from Ray Fair and Alan Gerber.

² Press conference, November 4, 2004, available at <http://www.whitehouse.gov/news/releases/2004/11/20041104-5.html> .

It is not widely appreciated that Bush underperformed relative to earlier Republican incumbents. The easiest way to understand Bush's underperformance is to examine the predictions of "voting equations" like those of my colleague Ray Fair. Fair's approach is to use history as a guide to predict the share of the incumbent in the two-party total, basing his prediction on fundamentals such as the performance of the economy, party, incumbency, and the like. His forecast equation has an average error of 2.4 percentage points over the period 1916-2000, and his original prediction of the result of the 2000 election was right on the nose.³

Figure 1 shows both the predictions from Fair's model (the heavy lines with circles), and the actual outcomes (the light lines with triangles). Interestingly, the largest divergence occurred at the end of the period, which shows the prediction and actual output for the 2004 election. Fair's voting equation forecast that President Bush would win the 2004 election by a large margin, winning a 15.4 percentage point margin of the two-party vote. According to Fair's analysis, Bush's large forecast margin was based on the fact of his incumbency (worth 6.4 percentage points), the fact that he was a Republican (worth 5.4 percentage points), and the fact that in 2004 America had better than average economic growth and inflation (worth 3.4 percentage points).

Fair's prediction clearly was far from the mark. Even with these favorable winds at his back, Bush won narrowly, with a 3.2 percentage point margin. Not only was this a large underperformance; it was the largest forecast error in the entire sample period.

³ A full discussion can be found at <http://fairmodel.econ.yale.edu/vote2004/index2.htm> .

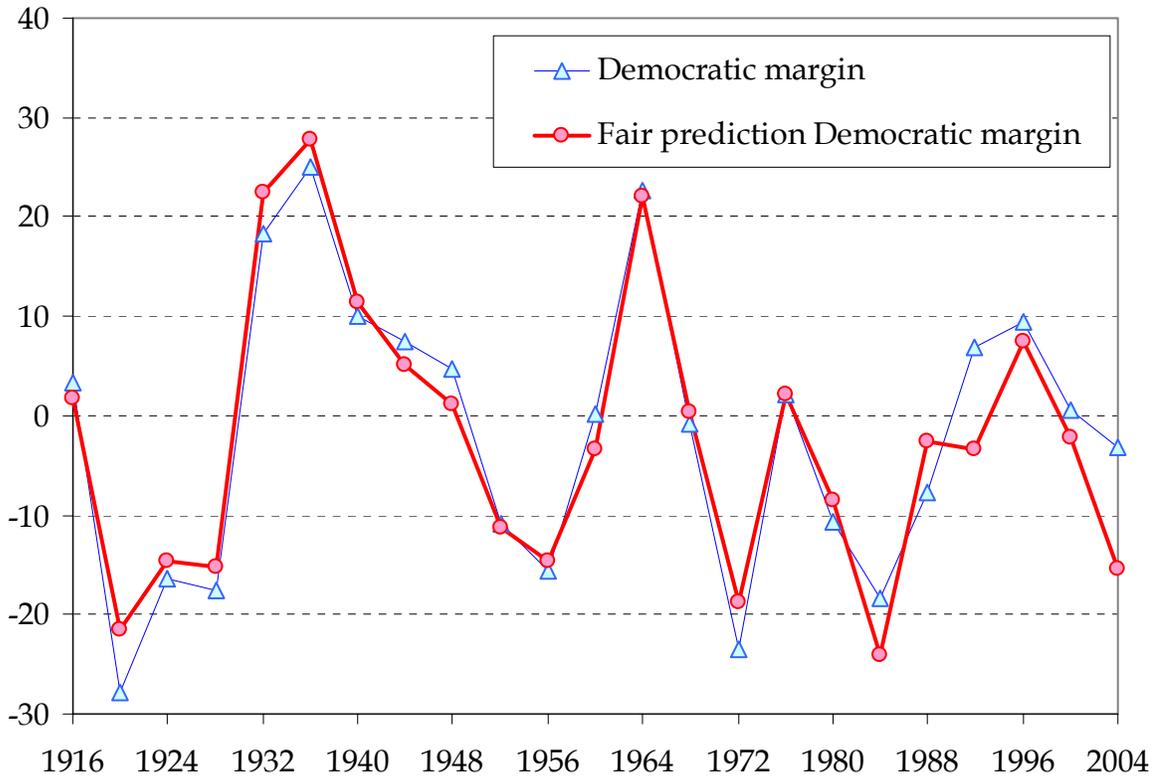


Figure 1. Democratic share of Presidential vote, actual and predicted from Fair's election equation, 1916-2004

Why did Bush perform so poorly?

It is not clear why Bush did so badly relative to other similarly situated Presidents over modern American history. Fair believes that it was in part due to the war in Iraq (which I discuss below).⁴ Alternatively, the variable for the real economy examined by Fair (the growth in real per capita GDP) may not pick up the poor performance of employment (which I also discuss shortly). Perhaps inflation, which was an important source of dissatisfaction and helped defeat Carter in 1980, is simply out of the equation these days. It will require more archaeology to uncover the reasons for the relatively poor incumbent showing in 2004. Whatever the reasons, Bush won by much less than other candidates have in similar economic and political circumstances.

⁴ Ray C. Fair, "A Vote Equation and the 2004 Election," November 22, 2004, available at <http://fairmodel.econ.yale.edu/vote2004/index2.htm>.

It is reasonable to ask whether this conclusion relies too heavily on Fair's specification of Presidential voting equations. In fact, there is a small industry of researchers who have studied and written and forecast over the last three decades.

Most of the literature is not relevant for understanding the impact of fundamentals on elections. Virtually every equation in the political science literature, for example, includes some kind of survey result on approval of the incumbent or the incumbent party.⁵ While such a variable is useful for predictions, approval variables probably include the impact of economic and political fundamentals such as incumbency, economic conditions, or party in power, and they may lead to biases in estimates. The major advantage of the Fair approach is that it includes only fundamental variables and excludes all attitudinal variables.⁶

There are very few voting equations based entirely on fundamentals. One example is Douglas Hibbs's "bread and peace" model.⁷ His approach

⁵ To cite some prominent examples, the following list are among the approval variables in the equations used in the analyses: Lockerbie uses consumer sentiment (Brad Lockerbie, "A Look to the Future: Forecasting the 2004 Presidential Election," *PSOnline*, www.apsanet.org, October 2004, Volume XXXVII, No. 4); Norpoth uses primary votes, indicating approval among that population (Helmut Norpoth, "From Primary to General Election: A Forecast of the Presidential Vote," *ibid.*); Wlezien and Erikson include approval ratings (Christopher Wlezien and Robert S. Erikson, "The Fundamentals, the Polls, and the Presidential Vote," *ibid.*); Lewis-Beck and Tien use approval ratings (Michael S. Lewis-Beck and Charles Tien, "Jobs and the Job of President: A Forecast for 2004," *ibid.*); Abramowitz uses approval ratings (Alan I. Abramowitz, "When Good Forecasts Go Bad: The Time-for-Change Model and the 2004 Presidential Election," *ibid.*).

⁶ From a statistical point of view, the problem with attitudinal variables is that they may be correlated with included fundamental variables (such as output growth) and thus lead to biased estimates. For example, suppose that approval is a function of both fundamental variables and unobserved "charisma" variables, and further suppose that approval perfectly predicts election outcomes. In this case, statistical estimates including approval would (incorrectly) lead to the conclusion that fundamentals were unimportant in election outcomes.

⁷ Douglas A. Hibbs, Jr., "Bread and Peace voting in U.S. presidential elections," *Public Choice*, 104: 149-180, 2000.

combines an economic variable (“bread” being the recent growth in real disposable income) with a war variable (the cumulative number of American military personnel killed-in-action in Korea and Vietnam during the presidential terms preceding the 1952 and 1968 elections). The “bread and peace” model has larger errors than the Fair approach for most election years back to 1948. However, the forecast error for the Bush margin in 2004 was only about 2 percentage points and therefore closer to the mark than the Fair equation.⁸

Two other specifications are worth mentioning. One of the major campaign themes of the challenger in 2004 was the poor performance of employment growth during the 2001-2004 period. We can substitute employment growth for real GDP growth in the standard Fair specification for the 1880-2004 period during which monthly employment data are available. The equation does slightly worse, and the forecast for 2004 does much worse (increasing the Bush share by 3 percentage points).

A second approach, which is a variant on the Hibbs peace and butter model, uses a “good-war” variable to capture the impact of popular and unpopular wars. The variable takes on a positive (good war) sign during World War II, but a negative sign (bad war) during unpopular wars such as the Korean, Vietnam, and Iraq wars. The good war/bad war approach does marginally worse than the standard Fair equation for the 1916-2000 period. It has a slightly smaller error in 2004 than the Fair equation, with a predicted margin of 15.0 percentage points as compared to Fair’s prediction of 15.4 percentage points. This result leads me to conclude that the war in Iraq contributed only marginally to the small Bush margin.

In summary, there are clearly many potential variants to the Fair equation. Most of those in the intellectual market place include survey data as well as fundamentals and therefore are not useful for evaluating Bush’s performance relative to the economic and political fundamentals. Other minor modifications in specifications are not obvious improvements over the Fair equation. Hence, while we might have reservations about relying on the Fair equation, there is no obviously superior alternative to Fair’s equation for use in comparing performance with fundamentals.

⁸ See <http://www.handels.gu.se/~econdhib/election2004.htm>.

Evidence from Exit Polls

Aggregate results such as those shown in Figure 1 hide the detail for different groups in the population. We can dig further into the election results by examining exit polls, which are available for most groups for elections since 1972. What were the strengths and weaknesses of the candidates in 2004?

To look at relative performance, I have selected 31 demographic groups for all elections since 1972.⁹ The data are available for interested parties from the author's website.¹⁰ I excluded those groups with self-designated party or ideological identifications as these labels are hard to separate from voting preferences and actual votes. Note as well that these are overlapping groups, including, for example, both women and suburban women. Some data are not collected in all elections.

Table 1 shows the Democratic margin in 2004; this is the difference between the share of the two-party vote won by Kerry minus the share won by Bush. These show the basic voting patterns. Table 2 adds the change in Democratic margin from 2000 to 2004, and sorts that list from those with the largest swing to Bush to those with the largest swing to Kerry. Of the top groups swinging to Bush, one of the most striking is the swing among Hispanic voters. This trend has been widely noted in the press.¹¹ A swing of 21 percentage points is extremely large in historical context.

⁹ The data come from www.newyorktimes.com/weekinreview. The page is <http://www.nytimes.com/2004/11/07/weekinreview/07conn.html>. The data are unfortunately no longer made available gratis on the site. The source is described as follows: "This portrait of the 2004 electorate emerges from interviews with 13,600 voters conducted by Edison Media Research and Mitofsky International for the National Election Pool, a consortium of ABC News, The Associated Press, CBS News, CNN, Fox News and NBC News." Exit polls have many flaws, such as the voluntary nature of the responses. They are a unique source of data for matching actual voters to social, economic, and demographic data.

¹⁰ http://www.econ.yale.edu/~nordhaus/homepage/exit_poll_data_nyt.xls

¹¹ See particularly Kirk Johnson, "Hispanic Voters Declared Their Independence," *The New York Times*, November 9, 2004.

A puzzling result is the huge swing toward Bush in large cities. In fact, this swing occurred not because the urban vote was so Republican in 2004, but rather because it was unusually Democratic in 2000. There is also probably a composition shift away from declining large northeast cities to rapidly growth southern and southwestern cities. However, the big-city swing in 2004 looks largely like a statistical problem, with the anomaly belonging to 2000.

Another large swing group for Bush was those without high school diplomas, which may in fact overlap the Hispanic grouping. The swing toward Bush was also notable among two other groups: married women and the elderly.

The swings in the Democratic direction were seen most strongly in medium-sized cities, but this again may reflect statistical problems. It is no surprise that gay, lesbian, and bisexual voters would swing toward a Democratic Massachusetts Senator in the 2004 election. The other major swings toward the Democrats are among unmarried men and low-income voters.

How Did Groups Vote Relative to Economic and Political Fundamentals?

The simple margins or changes in margins shown in Tables 1 and 2 do not take into account either political-economic fundamentals or long-term trends. Elections take place in the context of changing trends, incumbency, party affiliations, and economic conditions. How did the different groups vote when taking into account economic and political fundamentals?

To answer this question, I have undertaken an analysis to account for the fundamental factors. This analysis examines how particular groups voted *relative to economic and political fundamentals, as well as in light of longer-term trends*. In examining the data, I use three different approaches: first, a straight model of fundamentals; second a model of fundamentals and trends; and, third, a model with trends and differential sensitivity to economic and political fundamentals. The tables show the calculated “anomalies” in 2004 for the different models. An anomaly is defined as the

residual of the regression, that is, the difference between the actual and predicted margin.

Fundamentals model

The first approach is called the “fundamentals model.” The basic approach is to ask how each group voted, relative to the overall prediction about the election from the fundamentals as determined in Ray Fair’s election model. The anomalies are calculated as follows. For each demographic group j , I estimate an equation given by:

$$(1) \quad D(j,t) - F(t) = c(j) + \varepsilon(j,t)$$

where $D(j,t)$ is the Democratic margin of group j in the election of year t , $F(t)$ is the prediction of the Democratic margin from the Fair equation, $c(j)$ is a constant term which reflects the average deviation of the Democratic margin for group j over all elections, and t is a time trend. The $\varepsilon(j,t)$ are the residuals from the equation. From this equation, I estimate the coefficient $c(j)$ for each group. The anomalies are equal to the 2004 residuals, $\varepsilon(j, 2004)$ – that is, the difference between the actual and predicted Democratic vote share for 2004 for that group.

Take as an example the vote of Hispanics for 2004. The Fair equation predicts that the overall Democratic margin (percent Kerry minus percent Bush) would be minus 15 percent. From 1972 to 2004, the Hispanic margin averaged 41 percentage points above the average Democratic margin. In 2004, accordingly, the fundamentals model would predict that Hispanics would have a $41 - 15 = 26$ percentage point margin for the Democrats. The exit-poll margin was only 15 percent. Thus, there was a Hispanic swing of 11 percentage points toward Bush in the 2004 election.

Detrended fundamentals model

The second approach makes a further adjustment by considering also the trend in demographic voting patterns over the 1972-2004 period. This is the “detrended fundamentals model”:

$$(2) \quad D(j,t) - F(t) = c(j) + k(j) t + \varepsilon(j,t)$$

The definitions of the variables are the same as in equation (1), and in addition $k(j)$ is the trend coefficient on group j . The detrended fundamentals model allows for a time trend in the voting preferences of each group.

A good example of the trend phenomenon is “Attend church over once per week.” The Republican margin for this group was 22 percent in 2004. However, the *predicted* Republican margin was 27 percent (equal to the 15 point predicted overall Republican margin, plus a 12 percent predicted excess Republican margin of “Attend church over once per week” relative to the overall Republican margin). According to the detrended fundamentals model, therefore, Republicans got 5 percentage points *less* than would be predicted on the basis of fundamentals and trends for those identified as “Attend church over once per week.” Of course, this does not mean that the Democrats won this group – rather this indicates that the Republicans had a smaller margin than normal, given fundamentals and trends.

Figure 2 shows an example of the changing margin for two groups, Hispanics and College graduates. For both groups, this figure shows the difference between the actual Democratic margin and the Fair prediction of the Democratic margin. For Hispanics, while strongly Democratic, the Democratic margin relative to the fundamentals is eroding, while College graduates, relative to fundamentals, have moved from solidly Republican to slightly Democratic.

The anomalies in the 2004 election for all groups are shown in the last two columns in Table 3. The column labeled “Fundamentals model” shows the anomaly or residual from the first approach discussed above. For example, the first row for Hispanic voters notes that Democrats had a 15-point margin among Hispanic voters in 2004. But that group showed an 11 percentage points anomaly toward the Republicans in 2004 relative to the fundamentals.

The last column, labeled “Detrended fundamentals model,” is the second approach described above. Again looking at Hispanic voters, when the trend toward Republican voting is taken into account, the Hispanic anomaly in 2004 was only -5 percentage points, rather than the -11 percentage points determined when no trend is included.

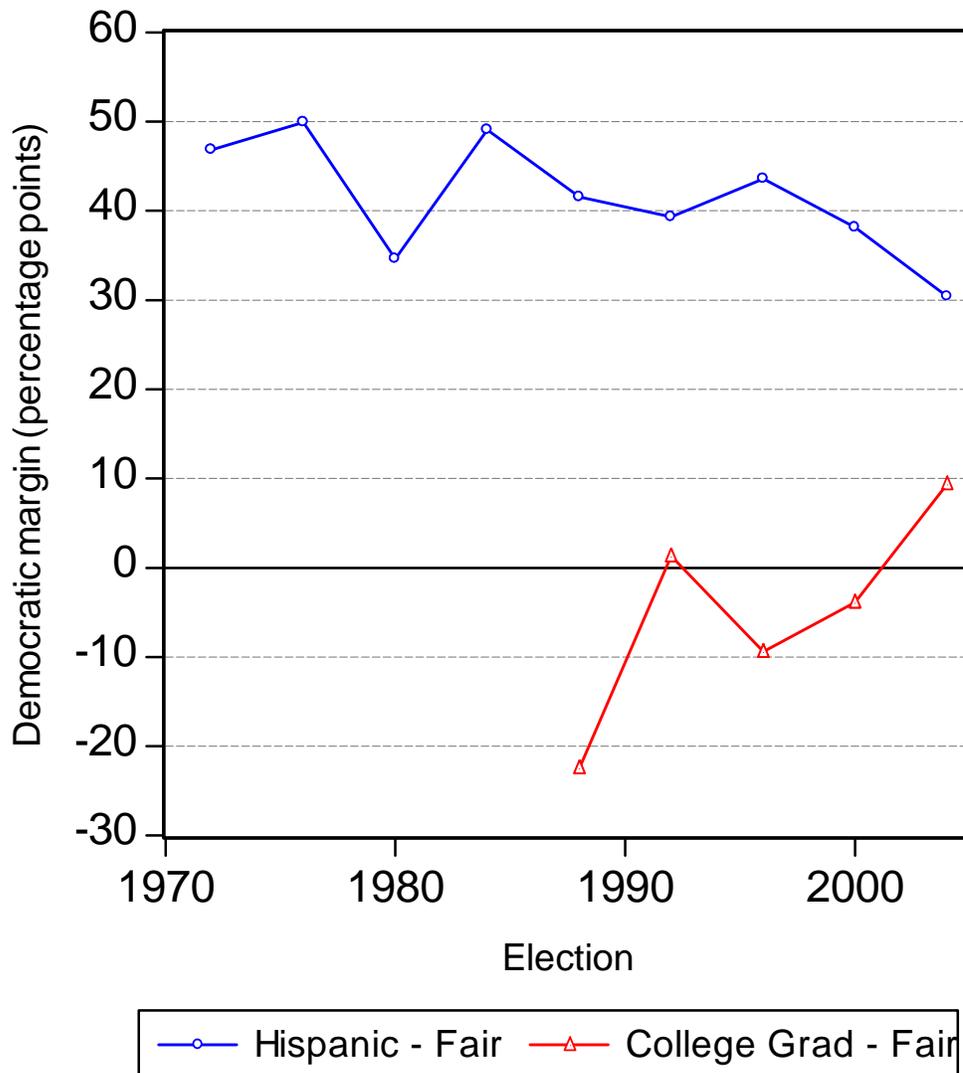


Figure 2. Difference between the Democratic margin and Fair's predicted Democratic margin for two groups

Some of the most interesting results arise when we compare the raw Democratic margin in the first column of Table 3, and the anomalies in the last two columns. For example, "Whites in the south" had a Republican margin of 41 percentage points in 2004. However, relative to economic and political fundamentals and the trend, the vote shares for this group was essentially on target. Those who identify themselves as "White Protestants" or "Attend church over once per week" did vote heavily Republican. But they actually voted more toward the Democratic ticket than fundamentals and trends would predict. In other words, these groups

did not tilt more toward the Republican candidate in 2004 than they had in the past, given the political-economic fundamentals.

The major Republican anomalies were Hispanic, Not high school graduate, Married women, Whites in the south, and Men over 60. Except for the first two, the anomalies were small; the algebraic signs for the two demographic models are inconsistent for the last two groups.

The big positive anomalies for the Democrats were Unmarried men (19 point anomaly), Suburban men (17 point anomaly), High-income people (14 point anomaly), and College graduates (14 point anomaly). These groups have not been widely identified as swinging toward the Democratic side. But the swings were extremely large. Note as well the large number of positive entries in the last two columns of Table 3. A preponderance of positive numbers illustrates the general point that, relative to fundamentals, the Democratic ticket did relatively well.

Detrended fundamentals with differential sensitivity

A final approach combines both different average voter preferences and trends with differential sensitivity. Under this approach, I estimate the following:

$$(3) \quad D(j,t) = c(j) + k(j) t + \alpha(j) F(t) + \varepsilon(j,t)$$

This third model allows for the possibility that different groups might be more or less sensitive to economic fundamentals than the average. In the first two specifications, the parameter $\alpha(j)$ was assumed equal to unity. In the third specification, groups may have more or less “economic and political sensitivity” than the average.¹²

Table 4 shows the results for this third model. I have sorted the groups by the coefficient of differential sensitivity. The first numerical column shows the estimate of the sensitivity coefficient, $\alpha(j)$. If all groups had the same sensitivity to economic fundamentals, that coefficient would be 1. The second numerical column shows the t-statistic calculated for a

¹² Yet a fourth model, which stretches the data too far, would be to consider differential sensitivity to different variables in the Fair equation.

null hypothesis of $\alpha(j) = 1$. This is not meant to be a serious statistical test because there are far too few observations. Rather, it is meant to convey whether the relationship is noisy or tight. The last four columns show the anomalies for the last four elections.

The major result of this test is to show that some groups are highly insensitive to economic conditions. Three groups are essentially unlinked to fundamentals: Gay, lesbian, and bisexual; Income under \$15,000; and Black. It is surprising that the latter two of the three, while highly affected by economic conditions, appear not to respond to fundamentals. One interpretation is that their perceived interests are strongly tied to particular parties and short-term changes do not affect that linkage. By contrast, some groups that are thought to be closely tied to the Republican party - White Protestants and Whites in the south - are highly sensitive to economic conditions.

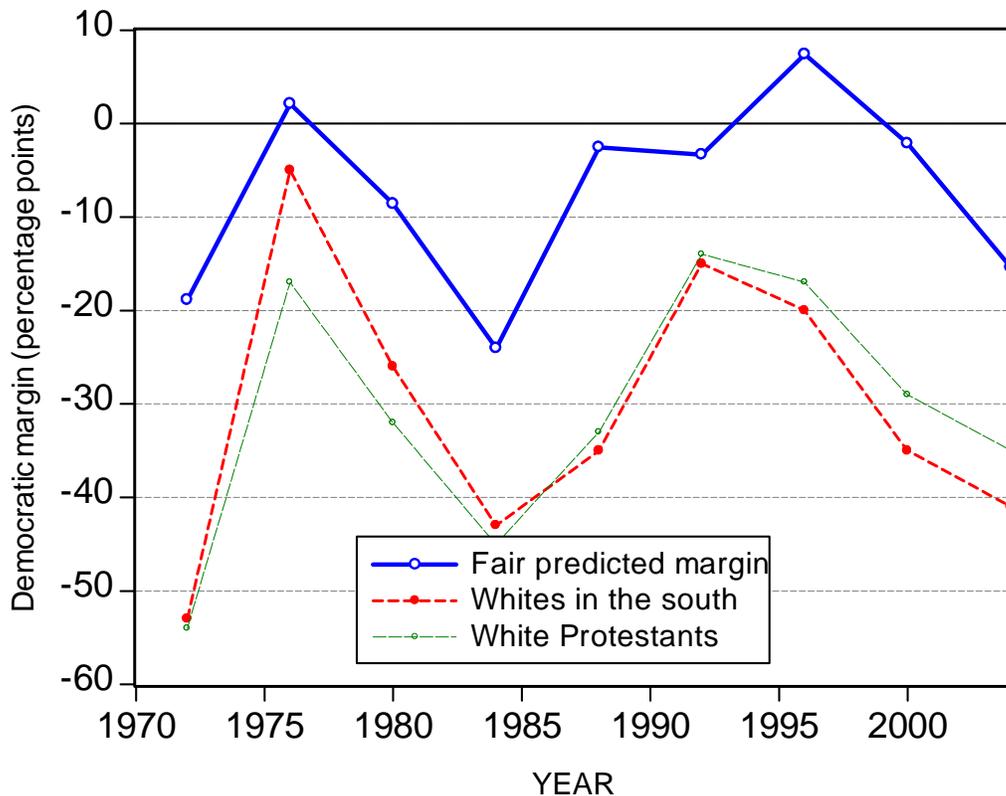


Figure 3. Overall predicted margin and margin of sensitive groups

Figure 3 shows the movement in the Democratic vote share of two groups that are highly sensitive to economic conditions, along with the predicted margin from Fair's equation. This illustrates how these groups – even though being part of the loyal “base” of Republican Presidential candidates – nevertheless show very substantial swing depending upon economic and political conditions.

Is there polarization or convergence in Presidential elections?

A final question is whether different groups are converging or diverging. A common view is that American politics is becoming more polarized – less bipartisanship in Congress, more divisiveness in the media, and increasing polarization of voters.¹³ Do we in fact see any trend toward polarization in voting patterns? We can use the exit polling data examined here to examine whether the differences among groups are increasing or decreasing.

I examine two alternative approaches to this question. For both tests, I use all subgroups that are represented in most of the years.¹⁴ First, I estimate an equation in which the difference from economic fundamentals is regressed on initial difference between the group and the average margin (this is called “beta convergence” in the growth-convergence literature¹⁵).

¹³ There is a large literature on polarization in the U.S. Congress, focusing on voting records. Estimating polarization among voters is more difficult because of the difficulty of matching individual votes with issues. We are focusing on the second issue in this study. A good review of trends is contained in Morris P. Fiorina, “Whatever Happened To The Median Voter?” Prepared for the MIT Conference on Parties and Congress, Cambridge, MA, October 2, 1999.

¹⁴ The sample in both these tests is statistically unconventional because it involves overlapping groups of different sizes. The rationalization for using these groups is that, if voters represent different constituencies, we can see how these constituencies might be driving polarization. For example, Hispanics have seen a sharp trend in their voting patterns. This might not be discerned if the sample were by state, age, or education. Since the groups are specifically chosen because they are politically interesting groups, they form a natural basis for measuring polarization.

¹⁵ These concepts were explored in Robert J. Barro and Xavier Sala-i-Martin, *Economic Growth*, McGraw-Hill, New York, 1995

The equation for beta convergence is:

$$(4) \quad D(j,2004) = c + \beta D(j,0) + \varepsilon(j)$$

where $t = 0$ is either 1972 or 1980. The estimates of β indicates that convergence occurs if $\beta < 1$. The estimated coefficients are 0.81 (± 0.076) where the initial period is 1972 and 0.88 (± 0.060) where the initial period is 1980. These are significant, relative to a null hypothesis of $\beta = 1$, at the 2 percent and 5 percent levels, respectively. These indicate a very, very slow convergence rate of about $\frac{1}{2}$ percent per year toward the average margin. This convergence rate indicates a half-life of voting differences of approximately from the U.S. Civil War to today.

A second approach is the “sigma-convergence” approach, which examines the dispersion across different groups. Figure 4 shows the trend in the divergence as measured by the standard deviation of the Democratic margins. It appears that there is slightly higher polarization in 1984 and in 2000. The overall trend is slightly downward, although the trend is not statistically significant.

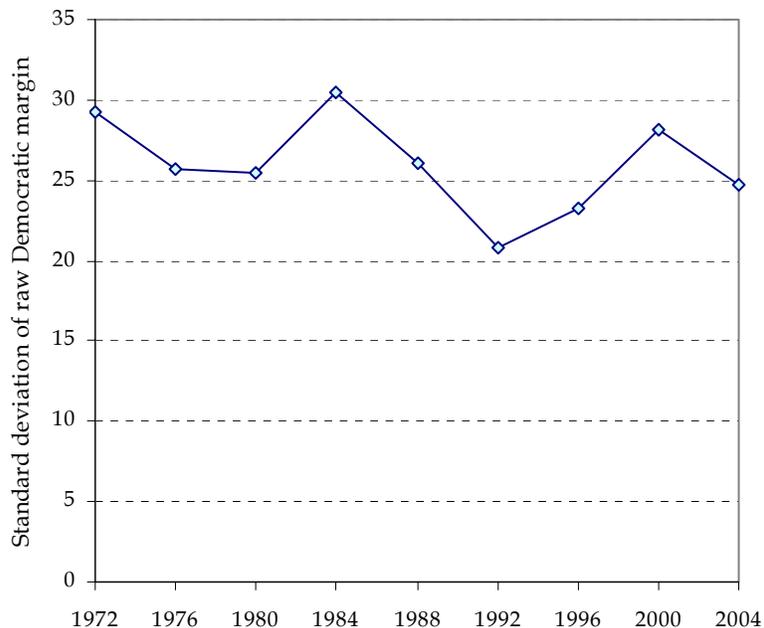


Figure 4. Estimate of dispersion of the Democratic margins across major demographic groups

Conclusion

The major conclusion of the present analysis is that the 2004 election was surprisingly unfavorable to incumbent Republican President Bush. His margin over the Democratic opponent was small given the fact of incumbency, Republican affiliation, and a strong economy. The vote margin of the last ten incumbents who ran for office without facing the unfavorable winds of a recession was 15 percentage points of the two-party vote. The margin of the last four non-recession Republican incumbents was 19 percentage points. The smallest margin of *any* prior non-recession incumbent since World War I was 4.7 percentage points. By contrast, the Bush margin of 3.2 percentage points is tiny.

None of this analysis will be solace for those who are underemployed rather than running the nation. Nor can those who outperformed fundamentals nominate judges or command the troops. However, these results should be considered by those who wish to discern underlying trends from the election returns.

Group	Democratic margin, 2004
Whites in the south	-41
White Protestants	-35
White men	-23
Attend church over once per week	-22
Men over 60 years	-21
Married men	-21
Rural areas	-19
Income over \$100,000	-17
From the south	-16
Married women	-11
White women	-11
Suburban men	-11
Age 60 and older	-8
Have children under 18	-8
College graduate	-6
Catholics	-5
High school graduate	-5
Suburbs	-5
Population 10,000 to 50,000	-2
Population 50,000 to 500,000	0
Not high school graduate	1
Suburban women	1
Women	3
Unmarried men	8
Hispanic	15
Union	19
Population over 500,000	21
Unmarried women	25
Income under \$15,000	27
Gay, lesbian, bisexual	54
Black	77

Table 1. Democratic margin by group (2004)

Group	Democratic margin, 2004	Change in Democratic margin, 2000 to 2004
Population over 500,000	21	-24
Hispanic	15	-21
Not high school graduate	1	-19
Population 50,000 to 500,000	0	-17
Married women	-11	-13
Men over 60 years	-21	-12
Age 60 and older	-8	-12
White women	-11	-10
Women	3	-8
Catholics	-5	-7
Whites in the south	-41	-6
White Protestants	-35	-6
Income over \$100,000	-17	-6
Suburban women	1	-6
Unmarried women	25	-6
Black	77	-5
From the south	-16	-4
High school graduate	-5	-4
Suburbs	-5	-3
Union	19	-3
Attend church over once per week	-22	-2
Married men	-21	-1
Have children under 18	-8	-1
College graduate	-6	0
White men	-23	1
Rural areas	-19	3
Suburban men	-11	3
Income under \$15,000	27	7
Gay, lesbian, bisexual	54	8
Unmarried men	8	9
Population 10,000 to 50,000	-2	19

**Table 2. Democratic margin (2004)
and change in Democratic margin (from 2000 to 2004)**

Group	Democratic margin, 2004	Anomaly from fundamentals model, 2004	Anomaly from detrended fundamentals model, 2004
Hispanic	15	-11	-5
Not high school graduate	1	-4	-6
Married women	-11	-3	-1
Whites in the south	-41	-3	1
Men over 60 years	-21	0	-4
Population over 500,000	21	1	-3
Catholics	-5	3	3
White Protestants	-35	4	1
From the south	-16	4	2
Population 50,000 to 500,000	0	4	-1
Attend church over once per week	-22	4	5
Married men	-21	5	6
High school graduate	-5	5	2
Rural areas	-19	6	3
White men	-23	6	6
Age 60 and older	-8	7	-3
Have children under 18	-8	8	3
White women	-11	8	0
Income under \$15,000	27	11	9
Women	3	11	2
Union	19	11	4
Black	77	11	9
Unmarried women	25	12	3
Suburbs	-5	13	4
Suburban women	1	14	1
College graduate	-6	14	3
Income over \$100,000	-17	14	2
Gay, lesbian, bisexual	54	16	10
Suburban men	-11	17	9
Population 10,000 to 50,000	-2	17	16
Unmarried men	8	19	12

**Table 3. Democratic margin (2004)
and two measures of anomalies or statistical residuals (2004)**

Group	Coefficient on Fair Democratic vote share	t -statistic (for null of alpha = 1)	Anamolies (percentage points)			
			1992	1996	2000	2004
Gay, lesbian, bisexual (a)	-0.89	-3.23	0	1	-1	0
Income under \$15,000 (a)	-0.29	-2.20	0	3	-5	3
Black	-0.20	-4.63	-2	-2	4	-5
Population 10,000 to 50,000	0.21	-2.13	6	13	-15	6
Unmarried men	0.27	-2.40	4	1	-6	3
Suburban men	0.41	-1.97	6	3	-4	2
College graduate (a)	0.56	-0.86	11	0	-3	-1
Live in suburbs	0.59	-1.37	8	2	-3	-1
Suburban women	0.61	-1.32	4	3	-2	-4
Income over \$100,000 (a)	0.62	-0.72	na	-2	3	-1
Married men	0.63	-1.22	11	0	-6	1
Unmarried women	0.65	-1.15	1	1	1	-1
Union	0.66	-1.33	10	-1	-4	0
Have children under 18 (a)	0.74	-0.51	7	3	-6	1
Catholics	0.76	-0.91	6	4	-3	0
Women	0.78	-0.86	2	0	-1	-1
Population 50,000 to 500,000	0.83	-0.47	10	-7	4	-4
Men over 60 years	0.87	-0.52	21	-7	-4	-6
White men	0.88	-0.45	14	-3	-8	5
White women	0.91	-0.36	5	-2	-1	-1
Age 60 and older	0.93	-0.25	13	-8	-2	-4
Population over 500,000	0.95	-0.13	-2	0	9	-3
Married women	0.96	-0.14	14	0	-2	-2
High school graduate	0.99	-0.04	5	2	-6	2
Rural areas	1.02	0.08	11	-1	-12	3
Not high school graduate	1.06	0.18	8	2	0	-5
White Protestants	1.06	0.22	12	-3	-6	1
Hispanic	1.10	0.38	-1	4	1	-4
Whites in the south	1.20	0.76	12	-5	-7	4
From the south	1.24	0.93	5	-7	-7	5

(a) Less than 6 election observations

**Table 4. Coefficients, t-statistics, and anomalies
for detrended model with differential sensitivity**