FISCAL MODEL FORECAST FOR THE 2016 PRESIDENTIAL ELECTION

Alfred G. Cuzán

The University of West Florida

acuzan@uwf.edu

Draft date: August 1, 2016

Abstract

The Fiscal Model of Presidential Elections, as modified after its failure to forecast President Obama's reelection in 2012, accounts for all but three out of sample retrodictions since 1916. This year, its point forecast has the incumbent Democrats losing with 48.2% of the two-party vote.

The Fiscal Model.

The distinctive characteristic of the fiscal model is a variable on spending policy, the intuition being that, *ceteris paribus,* growing federal spending relative to gross domestic product between elections costs the incumbents votes. Since its inception (Cuzán and Heggen 1984), the model's specification has evolved. Four other variables, all borrowed or adapted from Fair's presidential vote equation, have been added (see all items on the fiscal model listed in the bibliography), and the measurement of fiscal policy itself has been fine-tuned in response to the model's performance, particularly in light of its failure to forecast President Obama's reelection in 2012. Following that blunder, an adjustment was made in the measurement of fiscal policy, relabeled F3 in Table 1, to take into account that spending in the first year of a new party reign is largely a function of the previous administration (Cuzán 2013). Thus, starting with the 1916 election which, following Fair, is the first in the series for forecasting purposes, this includes the first or only reelection bids of presidents Wilson, Coolidge, F. D. Roosevelt,

Eisenhower, Johnson, Nixon, Carter, Reagan, Clinton, G.W. Bush, and Obama. In the remaining fourteen cases, fiscal policy is measured as before, between election years. The present composition of the model is displayed in Table 1. For the data, see the Appendix.

. . . .

Table 1 about here

. . . .

Table 2 presents the model's estimates over the period 1916-2012, which is the same one used in Fair's presidential vote equation. All five variables behave as expected. In fact, their coefficients have been fairly stable over several elections (see, e.g., Cuzán and Bundrick 2005, 2008). Note that a change in fiscal policy from contractionary to expansionary on average costs the incumbents over two points in the two-party vote. In President Obama's second term, fiscal policy has been contractionary, and this partially offsets the "time for change" effect measured by DURATION.[1]

. . . .

Table 2 about here

. . . .

Table 3 shows out-of-sample "retrodictions" for all elections held during this period, as well as this year's forecast. Note that the winner was correctly called in 22 out of the 25 elections through 2012, for a "hit rate" of 88%, and a mean absolute error (MAE) of 1.79 (s.d.=1.53). All three errors in identifying the winner were in close elections, here operationalized as one where the margin of victory was less than 5 percentage points, of which there have been 8 (1916, 1948, 1960, 1968, 1976, 2000, 2004, and 2012).

1

. . . .

Table 3 about here

. . . .

Again as shown in Table 3, as of the time of this writing (August 1), Ray Fair's economic forecasts are GROWTH= 0.94, ALLNEWS=2. Plugging these values into the fiscal model yields a prediction of 48.2% of the two-party vote for the Democratic ticket. Thus, it is expected that the election will be a close one. As noted above, all three miscalls made by the model have been in close elections. To date, the model's record at identifying the winner in close elections stands at 63% (MAE=2.1), considerably below its overall performance. Therefore, the forecast for an incumbent loss in 2016 is far from unqualified.

Discussion and conclusion.

The fiscal model is one of the few presidential election forecasting models that rests entirely on fundamentals, without any input from polls, be they about presidential job approval or the horse race. Thus, it cannot be expected to perform as well as those that do take a measure of public opinion into account. That said, it is nothing short of remarkable that as presently constituted it performs so accurately at retrodiction. It remains to be seen, however, whether this time it will pass the acid test that comes with forecasting (Jones 2011), a test that the previous version of the model failed in 2012. That year the bar was a relatively low one, since less than a handful of all presidents in the first term of a party reign have failed to win reelection, and most forecasting models made the right call (Campbell 2013). This year, however, the test is much harder. It is harder to predict the outcome of an "open" election, where the incumbent president is not on the ticket. Making it harder still is the fact that there is no precedent for either

party's nominee for president: woman in one case, and a man with no prior military or elected experience, in the other.

ACKNOWLEDGEMENTS.

BIBLIOGRAPHY

Cuzán, Alfred G. 2015. "Five Laws of Politics," *PS: Political Science and Politics,* 48, 3,

      415-419.

Campbell, James E. 2013. "Recap: Forecasting the 2012 Election," *PS: Political Science*

      and Politics, 46, 1, 37.

Cuzán, Alfred G. 2013. "Fiscal Model Failure: A Problem of Measurement? A

      Preliminary Assessment.*" PS: Political Science and Politics*, 46, 1, 41-42. A longer

      version is available at ssrn.com.

_____. 2012. "Forecasting the 2012 Presidential Election with the Fiscal Model." *PS:*

      Political Science and Politics 45, 4, 648-50.

_____, Richard J. Heggen and Charles M. Bundrick. 2009 "Fiscal Policy in American

      Presidential Elections: A Simulation," *Simulation*, 85, 1, 5-15.

Cuzán, Alfred G. and Charles M. Bundrick. 2009. "Predicting Presidential Elections with

      Equally-Weighted Regressors in Fair's Equation and the Fiscal Model," *Political*

      Analysis, 17, 333-340.

_____. 2009. "Forecasting the 2008 Presidential Election: The Challenge Met," *PS:*

      Political Science and Politics, 42, 1, 23.

_____. 2008. "Forecasting the 2008 Presidential Election: A Challenge for the Fiscal

      Model," *PS: Political Science and Politics*, 41, 4, 717-722.

_____ and Charles M. Bundrick. 2005. "Deconstructing the 2004 Presidential Election

      Forecasts: The Fiscal Model and the Campbell Collection Compared," *PS:*

      Political Science and Politics, 38, 2, 255-62.

_____. 2000. "Fiscal Policy and Presidential Elections: Update and Extension," *Presidential Studies Quarterly*, 30, 2, 275-287.

_____. 1999. "Fiscal Policy as a Forecasting Factor in Presidential Elections," *American Politics Quarterly*, 29, 3, 338-353.

_____. 1996. "Fiscal Policy and Presidential Elections in the United States: 1880-1992," *Polity*, XXIX (1), 141-156.

_____. 1992. "Selected Fiscal and Economic Effects on Presidential Elections," *Presidential Studies Quarterly*, XXII (1), 127-134.

Cuzán, Alfred G. and Richard J. Heggen. 1985. "Expenditures and Votes: In Search of Downward-Sloping Curves in the United States and Great Britain," *Public Choice*, 45, 1, 19-34.

_____. 1984. "A Fiscal Model of Presidential Elections in the United States, 1880-1980," *Presidential Studies Quarterly*, XIV, 1, 98-108.

Jones, Randall J., Jr. 2011. "The Theoretical Value of Forecasting." http://ssrn.com/abstract=2183409

Table 1.

Fiscal Model: Variable Definitions and Measurement, 1916-2012.

VARIABLE	DEFINITION AND MEASUREMENT
VOTE2	Percent of the two-party vote won by the incumbent party candidate, except that in the 1924 election Fair assigned 23.5 percent of the Lafayette vote to President Coolidge and the rest to the Democratic candidate.
GROWTH (g)	G is the "growth rate of real per capita GDP in the first three quarters of the election year (annual rate)."[a]
ALLNEWS (z)	Z is the "number of quarters in the first 15 quarters of the administration in which the growth rate of real per capita GDP is greater than 3.2 percent at an annual rate . . . ."[a] except that, unlike Fair, no years are zeroed out for this variable in his "war" years. (I thank Prof. Fair for emailing me the actual values.)[a]
DURATION	Coded "0 if the incumbent party has been in power for one term, 1 if the incumbent party has been in power for two consecutive terms, 1.25 if the incumbent party has been in power for three consecutive terms, 1.50 for four consecutive terms, and so on."[a]
PARTY	PARTY=1 if the Democrats occupy the White House, and PARTY=-1 if the Republicans are the incumbents.
F	F=(federal outlays/GDP)*100
F1	$F1 = F_{(t)} - F_{(t-1)}$, where t=election year and t-1 is the previous election year, except in the case of a new president in the first term of a new party reign, in which case t-1=the first year of that first new term. For the explanation, see text.
F3[b]	F3=expansionary (1) or contractionary (-): F3=1 if F1>1; F3=-1 if F1<1; F3=0 if F1=0

Note:

[a] All quotes are from Fair (2006).

[b] Formerly labeled "FNEWPRIME" (Cuzán 2013).

Table 2
Fiscal Model Estimate: 1916-2012
(t-statistics in parenthesis)
Output: VOTE2
(Incumbent share of two-party vote)

Input	B
F3	-2.34
	(-5.54)
GROWTH	0.64
	(8.09)
ALLNEWS	0.76
	(5.26)
DURATION	-3.54
	(-4.95)
PARTY	-1.75
	(-4.41)
INTERCEPT	49.99
	(51.47)
SEE	1.91
Adj. R2	0.92
D.W.	1.17
N	25

Table 3.

Fiscal Model Out-of-Sample Election Forecasts 1916-2016.

YEAR	VOTE2	Out-of-sample "forecast"	Residual	Absolute residual	Hit rate
1916	51.68	53.67	-0.01	0.01	1
1920	36.15	38.81	-1.15	1.15	1
1924	58.26	58.25	-5.17	5.17	1
1928	58.76	57.61	-5.04	5.04	1
1932	40.85	35.68	-0.40	0.40	1
1936	62.23	57.19	0.04	0.04	1
1940	54.98	54.58	-3.10	3.10	0
1944	53.78	53.82	-0.03	0.03	1
1948	52.32	49.22	-1.20	1.20	1
1952	44.71	44.68	-0.92	0.92	1
1956	57.09	55.89	-1.87	1.87	1
1960	49.91	48.99	0.59	0.59	0
1964	61.20	59.33	-2.34	2.34	1
1968	49.43	50.02	2.60	2.60	0
1972	61.79	59.45	2.20	2.20	1
1976	48.95	51.55	4.54	4.54	1
1980	44.84	47.04	1.29	1.29	1
1984	59.12	63.66	2.34	2.34	1
1988	53.83	55.12	0.01	0.01	1
1992	46.38	48.72	2.85	2.85	1
1996	54.74	54.75	0.04	0.04	1
2000	50.26	53.11	-1.29	1.29	1
2004	51.23	51.27	-1.07	1.07	1
2008	46.31	45.02	-1.27	1.27	1
2012	52.01	50.94	-1.02	1.02	1
Mean	52.03	51.93	-0.10	1.79	22
s.d.	6.57	6.42	2.38	1.53	0.88

Data Appendix

YEAR	VOTE2	F	F1	F3	GROWTH	ALLNEWS	DURATION	PARTY
1913		2.45						
1916	51.7	2.08	-0.37	-1.00	2.229	3.00	0.00	1
1920	36.1	7.6	5.52	1.00	-11.463	5.00	1.00	1
1921		7.42						
1924	58.2	4.18	-3.24	-1.00	-3.872	10.00	0.00	-1
1928	58.8	3.73	-0.45	-1.00	4.623	7.00	1.00	-1
1932	40.8	7.17	3.44	1.00	-14.350	4.00	1.25	-1
1933		8.92						
1936	62.5	10.8	1.88	1.00	11.682	9.00	0.00	1
1940	55.0	9.78	-1.02	-1.00	3.913	8.00	1.00	1
1944	53.8	44.76	34.98	1.00	4.122	14.00	1.25	1
1948	52.4	12.95	-31.81	-1.00	3.214	5.00	1.50	1
1952	44.6	19.46	6.51	1.00	0.997	7.00	1.75	1
1953		20.53						
1956	57.8	16.88	-3.65	-1.00	-1.252	5.00	0.00	-1
1960	49.9	17.91	1.03	1.00	0.674	5.00	1.00	-1
1961		18.62						
1964	61.3	17.28	-1.34	-1.00	5.030	9.00	0.00	1
1968	49.6	18.9	1.62	1.00	5.045	7.00	1.00	1
1969		18.01						
1972	61.8	17.99	-0.02	-1.00	5.834	4.00	0.00	-1
1976	48.9	19.8	1.81	1.00	3.817	5.00	1.00	-1
1977		19.62						
1980	44.7	20.64	1.02	1.00	-3.583	5.00	0.00	1
1981		21.12						
1984	59.2	21.08	-0.04	-1.00	5.550	8.00	0.00	-1
1988	53.9	20.26	-0.82	-1.00	2.403	5.00	1.00	-1
1992	46.6	21.13	0.87	1.00	3.035	3.00	1.25	-1
1993		20.49						
1996	54.7	19.26	-1.23	-1.00	3.315	4.00	0.00	1
2000	50.3	17.39	-1.87	-1.00	2.031	7.00	1.00	1
2001		17.54						
2004	51.2	18.68	1.14	1.00	2.086	2.00	0.00	-1
2008	46.3	20.26	1.58	1.00	-1.787	2.00	1.00	-1
2009		24.4						

2012	51.6	21.89	-2.51	-1.00	1.422	1.00	0.00	1
2016		21.39	-0.5	-1.00	0.94	2.00	1.00	1
Mean[1]	52.03	16.94	0.48	-0.04	1.39	5.76	0.64	0.04
s.d.[1]	6.57	7.77	9.55	1.02	5.38	2.91	0.60	1.02

[1] 1916-2012;

Sources:

F3 calculated from http://www.usgovernmentspending.com/

Other: https://fairmodel.econ.yale.edu/vote2016/index2.htm

---

[1] The "time for change" effect, otherwise known as "the cost of government" or "the law of shrinking support or growing opposition" is a general phenomenon across all regimes, democracies and dictatorships alike. See Cuzán 2015 and references cited therein.