

A Derivative-Based Fiscal Model of U.S. Presidential Elections: 1880-2020¹

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Almost four decades ago, we published “A Fiscal Model of Presidential Elections in the United States” (Cuzán and Heggen 1984). In that article, fiscal policy accounted for 80% of presidential elections outcomes, i.e., re-election or defeat of the party in the White House, the incumbents or in-party. Application of the model to the United Kingdom yielded a similar pattern: fiscal policy accounted for 73% of parliamentary election results between 1935 and 1979 (Cuzán and Heggen 1985). Following those publications, variables reflecting economic conditions, political party, war, and incumbency were included into multi-variable versions of the fiscal model (Cuzán and Bundrick 1992, 1996, 1999, 2000, 2005, 2008, 2009; Cuzán, Heggen, and Bundrick 2009; Tankersley and Cuzán 2010). In this chapter, we describe the core model, its variations, uses, and results, and then return to the original model to compare the effect of fiscal policy on American presidential elections between two periods, 1880-1980, analyzed in the 1984 article, and 1880-2020. Although the data sources and the coding rules are different, the results are virtually the same as those obtained in the earlier article.

Table 1 displays the model’s primary components, the concepts and their symbols, their operationalization into variables, and their corresponding descriptive statistics over 1880-1980 and 1880-2020. Note that the statistics are similar between the two. The biggest difference is in F , the ratio of GDP spent by the federal government (henceforth, all references to federal expenditures, spending, or the budget are in this relative sense). In the longer period, the mean is 20% higher, and the median more than

two times larger. All other variables experience little or no change. Over the 1880-2020 (1880-1980) period, F' , the rate of growth of federal expenditures as a share of GDP, averages 0.19 (0.24) per year, or approximately 0.80 (1.0) every four-year presidential term. That the mean value of F'' is zero indicates that the rate of growth in spending is a constant—neither accelerating nor decelerating. (F' and F'' can be thought of respectively as the first and second derivative of F with respect to time: F' is the relative change in F and F'' is the change in F' .) Fiscal policy, measured with FISCAL, a composite variable made up of combinations of F' and F'' , describes “expansion” or “cutback” in spending. Cutback describes a reduction in either F or F' , which is to say a negative F' or F'' . This is shown by the 2-by-2 matrix within Table 1.

Turning to the electoral variables of the model, observe that on average the incumbent share of the total vote is a shade short of 50%. As a proportion of the two party vote for president, the combined total of the votes cast for the Democrat and Republican tickets, it is 52%. On average, the incumbent party has won the popular vote 60% of the time.² In both 1880-1980 and 1880-2020, Republicans occupy the presidency more than half the time. We emphasize that our model predicts the popular vote. However, in the United States the election outcome is not decided by the national popular vote, but in the Electoral College, whose members are separately elected by each of the 50 states (plus the District of Columbia). In 1888, 2000, and 2016, the winner of the popular vote (in all three, a Democrat) failed to secure a majority in the Electoral College. This discrepancy is similar to what can happen in a parliamentary system, where the winner of the popular vote may fall short of a legislative majority and fail to forge a coalition with smaller parties to form a government.

Presently we shall examine the relation between fiscal policy by party and by relative success at the polls. Suffice to say at this point that the intuition that informs our model is that fiscal policy as we have defined and measured is akin to a “fee” that the federal government charges the economy for its services.³ As a hike in the price of any good reduces the quantity purchased, we conjecture that as F increases support for the incumbent party falls at the ballot box, reducing their chances of re-election.

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Table 1 about here

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As noted at the outset, additional variables have been incorporated into the basic model for different purposes. In one study (Tankersley and Cuzán 2010), variables measuring economic growth borrowed from Fair (1996), incumbency, and party were added in order to estimate the relative efficiency of incumbents in converting these ‘inputs’ into votes. All presidents elected between 1880 to 2008 received a Data Envelopment Analysis score and ranking. Nine presidents scored a perfect 1.0, seven Republicans (including, surprisingly, Herbert Hoover) and two Democrats (one being Franklin D. Roosevelt in 1936—no surprise there). At the opposite end, there was no difference by party: of the 10 presidents with the lowest rankings ($DEA < 0.90$), Republicans and Democrats were equally represented (Tankersley and Cuzán 2010, 151-152).

However, the primary use of an expanded, five-variable fiscal model, with minor variations, was to go beyond accounting for the win-loss outcome for the incumbents to estimate their share of the two-party vote. It was found that a switch in FISCAL from cutback to expansion lowers V_2 anywhere from 1.3 to 3.2 percentage points (Cuzán and

Bundrick, 1992, 1995, 2000; Cuzán, Heggen, and Bundrick 2009).⁴ Also, estimated over a series starting in 1916, the five-variable model accurately forecast V2 in real time, ahead of the 2004 and 2008 elections (Cuzán and Bundrick 2005; Cuzán and Bundrick 2008). However, the model fell wide of the mark in 2012 (Cuzán 2013), missing President Obama's re-election. In 2016, it wrongly forecast that the Republicans would retake the White House by winning the popular vote, which they did not (Cuzán 2021). In sum, as a tool for forecasting the two-party vote in real time, the five-variable fiscal model has had a mixed record.⁵ It did well in 2004 and 2008, but not in 2012 or 2016. No forecast was issued with it in 2020.

The strength of the original fiscal model, the one introduced in our 1984 article, lies in its accounting for a simple win or loss for the incumbents in the popular vote over a long series, and with a single variable that measures policy, something that is missing in every other presidential election forecasting model except that of Lichtman (2020). Thus, it is to the original model that we now return.

Figure 1 tracks the behavior of F since 1880, the last of six consecutive elections won by Republicans during the years spanning the Civil War and Reconstruction. Expenditures have grown seven-fold since the 1920s. For half a century prior to that, federal expenditures relative to GDP were stable, ranging between 0.02 and 0.03. Then, in fits and starts, it grew six-fold, to 0.18 by the mid-1960s. First, it spiked during World War I, marked by the 1920 presidential election. Spending subsided for two consecutive administrations until the onset of the Great Depression, when it tripled under two administrations, one Republican (Herbert Hoover's)⁶, the other Democrat (Franklin D. Roosevelt's). It rose to unprecedented levels during World War II, reaching 0.45, only to fall precipitously after the conclusion of that conflict. It jumped yet again during the

Korean War, subsiding substantially after that. The conclusion of the Korean War marked the end of a period marked by major wars and economic depression spanning 11 presidential terms. Figure 2 focuses, as if with a magnifying glass, on that era, omitting the 1944 WWII outlier. On average, spending rose by about 0.015 points per presidential term. Another half a century of stability followed. From the 1960s through all but the last year of the second decade of this century, spending bobbed up and down within a relatively narrow range, from a low 0.18 to a high of 0.21. That ended in 2020 when, in an effort to make up for the economic downturn due to the COVID-19 threat, spending recorded the fifth largest relative increase since 1880.

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Figures 1 and 2 about here
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The path of F in Figure 1 appears to indicate something of a “ratcheting” effect, wherein expenditures rise or even explode during a crisis, but the crisis being surpassed it subsequently recedes without, however, returning to their previous level, an interpretation suggested as long as six decades ago by Peacock and Wiseman (1961). This likely portends an eventual reduction of spending below its 2020 high, but to a level somewhere above what it was before the appearance of the virus in these shores.

Figures 3 and 4 exhibit the paths of F' and F'' , respectively. Recall, from Table 1, that the former measures the relative change in F from one presidential election year to the next, and F'' the change in F' between election years. Observe that, as one would expect, the large swings in both plots occur in the same year, upwards in 1920, 1932, 1944, 1952, and 2020, and downwards in 1924, 1936-1940, 1948, and 1956. Note, also, that both plots are trendless. F' (which is to say, the growth of F) has been

approximately constant, with decelerations offsetting accelerations throughout the series.

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Figures 3 and 4 about here

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Having discussed the behavior of spending since 1880, we now turn to its relation to election outcomes. Figures 1-4 include solid and blank dots, one per election. A solid dot signifies re-election, a blank one, defeat. Absent a crisis, such as war or depression, administrations that increase spending (indicated by an uptick or upsurge in the plot) tend to be ousted, and those that reduce it or its rate of growth (a downward tick or plunge) tend to be re-elected. Table 2 displays this relation. It arranges all 36 presidencies by fiscal policy, party, and year. Each cell is populated with election years conforming to their respective values on F' and F'' , along with the party of the incumbents (D or R), a sign indicating whether the election yielded a win (+) or a loss (-) for them, and an asterisk (*) signifying that the result was correctly predicted by the model.

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Table 2 about here

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The distribution of the cases shows the following: In 13 out of 14 elections (93%) in which both F' and F'' are negative, the incumbents were re-elected. F' and F'' are negative in 17 and 19 instances, respectively, and their corresponding re-election rates are virtually the same, 88% and 89%. Thus, the electorate appears to reward both

policies equally. By contrast, only 3 out of 14 elections (21%) in which both F' and F'' are positive had the same result.

Now consider cases where the variables take the opposite sign. In 4 out of 5 instances (80%) in which F' is positive but F'' negative, indicating that spending grew, but at a slower rate than in the previous administration, the incumbents won another term. Also, in 2 out 3 occasions (67%) in which F' is negative but F'' positive, signifying that spending was reduced, but at a slower rate than in the previous term, the party in the White House was re-elected. All 22 of these cases represent administrations that implemented a cutback policy, and 19 of them (86%) resulted in re-election. Altogether, then, 30 out of 36 election outcomes (19 cases of cutback policy, plus 11 of expansionary policy), or 83%, are consistent with our expectations.⁷

These ratios are comparable to those reported in Table 1 of our original article (Cuzán and Heggen 1984, 103, 108). A few differences need pointing out. In the earlier paper we included a third possibility for F' and F'' : a steady-state policy, where the value of either variable was between -0.02 and 0.02 in our current scale. That condition described six elections. Four, two for each party, those of 1900 R+, 1964 D+, 1972 R+, and 1980 D-, were steady-state on F' but negative on F'' , and two were positive on F' but steady-state on F'' , 1892 R- and 1896 D-. This time, with a different data series, we made both variables binary, depending simply on their signs without taking into the account their respective values. As a result, from steady-state on F' , 1964 and 1972 shifted to the left, or cutback column, 1900 and 1980 moved to the right, or expansionary column, and 1892 and 1896 fell from steady-state on F'' to the bottom, expansionary row. Additionally, on account of a different data series, 1888, 1916 and 1940 shifted from right to left on F' . Finally, in the earlier paper, the 1888 election was called a defeat for

the Democrats because, despite garnering more votes than the Republicans, they lost the Electoral College count. This time it is not, for consistent with theory the dependent variable is V2, not whether the incumbent won or lost in the Electoral College. What is most remarkable is that these changes had minimal effect on the overall distribution of predictive success: 80% in 1880-1980 and 83% in 1880-2020.

Next, in Table 3 we explore whether there is any relation between fiscal policy on election outcome by party. Since 1880, 16 Democrats and 20 Republicans have filled the presidency. Twenty-two (61%) have implemented a cutback policy, while 14 (39%) have applied an expansionary one. By party, the ratios are 11/16 (69%) and 11/20 (55%) on cutback, and 5/16 (31%) and 9/20 (45%) on expansion, respectively. That is, historically Republicans have been somewhat more likely to expand than Democrats, a finding that is contrary to conventional opinion.⁸ As for electoral success by fiscal policy and party, 10/11 (91%) of Democrats and 9/11 (82%) of Republicans who refrained from fiscal expansion were re-elected while only 1/5 (20%) Democrats and 2/9 (22%) Republicans who grew the federal budget retained control of the White House. Thus, it does not appear that party makes a difference: Both parties are more or less as likely to get reelected when policy is cutback as they are to be defeated when it is expansionary.

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Table 3 about here

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Turning to the six prediction errors, three each by cutback and expansion, Table 4 organizes them by year, president and party, and assays a possible explanation for each. The 1884 error could well be an instance of a “time for change” factor after six consecutive Republican presidents (Abramowitz 2016; Norpoth 2014). The scission of

the Republicans easily accounts for President Taft's defeat in 1912. Also understandable are the war-time victories of Franklin D. Roosevelt in 1944 and George W. Bush six decades later (Nortpoth 2007; Weisberg and Christenson 2007). No readily generalizable explanations come to mind regarding T. R Roosevelt's 1908 re-election or Carter's defeat, on the other. The fact is, though, that a 100% prediction rate would be an unreasonable standard in social science.

Summary and conclusion.

We revisited our 1984 fiscal model of presidential elections, this time with a longer data series from a single source. We tracked the ratio of federal expenditures to GDP from one presidential election year to the next, as well as the change in this ratio and the change in the change of the ratio. Most of the time, increases in spending cost the incumbents the White House while reductions in the budget or its rate of growth enable re-election. The model predicts 83% of election outcomes since 1880. There is little or no difference in fiscal policy or electoral success by party. Republicans have been somewhat more likely than Democrats to spend more, but both parties are as likely to be rewarded for fiscal restraint as they are punished for expansion. Given these findings, it would seem that fiscal policy as we have defined and measured it appears to be an under-appreciated factor in the analysis of presidential elections.

REFERENCES

- Abramowitz, Alan. 2016. "Will Time for Change Mean Time for Trump?" *PS: Political Science and Politics*, 49 (4): 659-660.
- Cuzán, Alfred G. and Richard J. Heggen. 1984. "A Fiscal Model of Presidential Elections in the United States." *Presidential Studies Quarterly*, XIV (1): 98-108.
- 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.
- Cuzán, Alfred G. and C. Michael Bundrick. 1992. "Selected Fiscal and Economic Effects on Presidential Elections." *Presidential Studies Quarterly*, XXII (1): 127-134.
- Cuzán, Alfred G. and C. Michael Bundrick. 1996. "Fiscal Policy and Presidential Elections, 1880-1992." *Polity*, XXIX (1): 141-156.
- Cuzán, Alfred G. and C. Michael Bundrick. 1999. "Fiscal Policy as a Forecasting Factor in Presidential Elections." *American Politics Quarterly*, 27 (3): 338-353.
- Cuzán, Alfred G. and C. Michael Bundrick. 2000. "Fiscal Policy and Presidential Elections: Update and Extension." *Presidential Studies Quarterly*, 30 (2): 275-289.
- Cuzán, Alfred G. and C. Michael Bundrick. 2005. "Deconstructing the 2004 Presidential Election Forecasts: The Fiscal Model and the Campbell Collection Compared." *PS: Political Science and Politics*, 38 (2): 255-262.
- Cuzán, Alfred G. and C. Michael Bundrick. 2008. "Forecasting the 2008 Presidential Elections: A Challenge for the Fiscal Model." *PS: Political Science and Politics*, 41 (4): 717-722.

- Cuzán, Alfred G. and C. Michael Bundrick. 2009. "Forecasting the 2008 Presidential Election: The Challenge Met." *PS: Political Science and Politics*, 42 (1): 23.
- Cuzán, Alfred G., Richard J. Heggen and C. Michael Bundrick. 2009. "Fiscal Policy in American Presidential Elections: A Simulation." *Simulation*, 85 (1): 17-32.
- Cuzán, Alfred G. 2013. "Fiscal Model Failure: A Measurement Problem? A Preliminary Assessment." *PS: Political Science and Politics*, 46 (1): 42-43.
- Cuzán, Alfred G. 2019. "Five Laws of Politics: A Follow-Up." *PS: Political Science and Politics*, 52 (3): 457-464.
- Cuzán, Alfred G. 2021. "The Campbell Collection of Presidential Election Forecasts, 1984-2016: A Review." *PS: Political Science and Politics*, 54 (1): 99-103.
- Cuzán, Alfred G. 2022. *Laws of Politics. Their Application to Democracies and Dictatorships* (New York and London: Routledge).
- Erikson, Robert, and Christopher Wlezien. 2016. "Forecasting the Presidential Vote with Leading Economic Indicators and the Polls." *PS: Political Science and Politics*, 49 (4): 669-672.
- Erikson, Robert, and Christopher Wlezien. 2021. "Forecasting the 2020 Presidential Election: Leading Economic Indicators, Polls, and the Vote." *PS: Political Science and Politics*, 54 (1): 55-58.
- Fair, Ray. 2006. "Econometrics and Presidential Elections." *Journal of Economic Perspectives*, 10 (3): 89-102.
- Graefe, Andreas, and J. Scott Armstrong, Randall J. Jones, Jr, and Alfred G. Cuzán. 2014. "Combining Forecasts: An Application to Elections." *International Journal of Forecasting*, 30 (1): 43-54.

- Horwitz, Steven. n.d. "Hoover's Economic Policies." *The Library of Economics and Liberty*. <https://www.econlib.org/library/Enc/HooversEconomicPolicies.html>.
- Lichtman, Alan. 2000. "The Keys to the White House: Forecast for 2020." *Harvard Data Science Review*, 2 (4): <https://doi.org/10.1162/99608f92.baaa8f68>
- Niskanen, William. 1979. "Economic and Fiscal Effects on the Popular Vote for President." In Douglas W. Rae and Theodore J. Eismeier, eds. *Public Policy and Public Choice*. Beverly Hills: Sage Publications.
- Norpoth, Helmut. 2007. "Mission Accomplished: The Wartime Election of 2004." *Political Behavior* 29 (2): 175-195.
- Norpoth, Helmut. 2014. "The Electoral Cycle." *PS: Political Science and Politics*, 47 (2): 332-335.
- Peacock, Alan T. and Jack Wiseman. 1961. *Growth of Public Expenditure in the United Kingdom*. Princeton, NJ: Princeton University Press.
- Peltzman, Sam. 1992. "Voters as Fiscal Conservatives." *Quarterly Journal of Economics*, 107 (2): 327-361.
- Tankersley, William B. and Alfred G. Cuzán. 2010. "Fiscal Policy and Vote-Getting Efficiency in Presidential Elections: A Data Envelopment Analysis, 1880-2008." Chap. 7 in Chandrasekhar Putcha, ed., *Methods of Forecasting American Elections Outcomes. Studies in Strategies and Prediction*. Lewiston, NY: The Edwin Mellon Press, 137-159.
- Weisberg, Herbert F. and Dino P. Christenson. 2007. "Changing Horses in Wartime? The 2004 Presidential Election." *Political Behavior*, 29 (2) 279-304.

Table 1. Definitions and Measurements, 1880-1980 (N = 26) and 1880-2020 (N=36)				
Symbol	Concept	Variable measurement	Statistics Mean [Median] (SD) 1880- 1980	Statistics Mean [Median] (SD) 1880-2020
F	Federal spending	Federal expenditures/GDP	0.11 [0.07] (0.09)	0.13 [0.17] (0.09)
F'	Relative change in federal spending	$F' = (F_t - F_{t-1}) / F_{t-1}$, where t is the current presidential election year and t-1 is the previous election year.	0.25 [0.00] (0.89)	0.19 [0.03] (0.77)
F''	Arithmetic change in F'	$F'' = F'_t - F'_{t-1}$, where t is the current presidential election year and t-1 is the previous election year.	0.00 [-0.02] (1.43)	0.01 [-0.01] (1.22)
FISCAL	Fiscal policy, expansionary or cutback	$F'' \begin{matrix} \leq 0 \\ > 0 \end{matrix} \begin{matrix} \leq 0 & > 0 \\ \hline \text{Cutback} & \text{Cutback} \\ \hline \text{Cutback} & \text{Expansion} \end{matrix}$ <p>FISCAL = 0 if cutback FISCAL = 1 if expansion</p>	0.38 [0.0] (0.49)	0.39 [0.0] (0.49)
V ₁	Incumbent party share of total vote	$V_1 = V_n / T$ where V _n is the number of votes going to the incumbents and T is the total votes cast	49.1 [49.4] (8.47)	49.1 [49.3] (7.71)
V ₂	Incumbent party share of two-party vote	$V_2 = V_n / (V_n + V_o)$, where V _o is the vote of the challengers, Republican or Democrat, depending on which of the two is the incumbent party	51.7 [50.9] (7.44)	51.6 [51.2] (6.63)
Election ^a	Election outcome for incumbents	E = Win (1 or +) if V ₂ > 50% E = Loss (0 or -) if V ₂ < 50%	0.58 [1.0] (0.49)	0.61 [1.0] (0.49)
Party	Party of the incumbents	Party = D (or 1) if Democrat Party = R (or 0) if Republican	0.46 [0.0] (0.49)	0.44 [0.0] (0.49)
<p>^a Election outcome has to do with the share of the two-party vote going to the incumbents, not with the count in the Electoral College. Three times in the series (1888, 2000, and 2016), the winner of the popular vote (a Democrat) fell short in the latter.</p> <p>Data sources:</p>				

Fiscal policy: <https://www.usgovernmentpending.com/>
Elections: Dave Leip's Atlas of US Presidential Elections, <https://uselectionatlas.org/>

Table 2. F', F'', and Win (+) or Loss (-) of Popular Vote of Incumbents, 1880-2020 R=Republican, D=Democrat			
F''	F'		Re-election/ Rate
	F' ≤ 0	F' > 0	
F'' ≤ 0	1880 R +* 1904 R +* 1912 R ^a - 1916 D +* 1924 R +* 1940 D +* 1948 D +* 1956 R +* 1964 D +* 1972 R +* 1988 R +* 1996 D +* 2000 D ^b +* 2016 D ^b +*	1900 R +* 1936 D +* 1980 D - 1984 R +* 2012 D +*	
Re-election rate	13/14	4/5	17/19
F'' > 0	1884 R - 1888 D ^b +* 1928 R +*	1892 R -* 1896 D -* 1908 R + 1920 D -* 1932 R -* 1944 D ^c + 1952 D ^c -* 1960 R -* 1968 D -* 1976 R -* 1992 R -* 2004 R ^c + 2008 R -* 2020 R -*	
Reelection Rate	2/3	3/14	5/17
Re-election Rate	15/17	7/19	22/36
Correctly Predicted	15	15	30/36
<i>Notes:</i> * Correctly predicted.			

^a Party scission—T. D. Roosevelt, the previous Republican president, bolted to run as the Bull Moose or Progressive Party candidate, placing second.

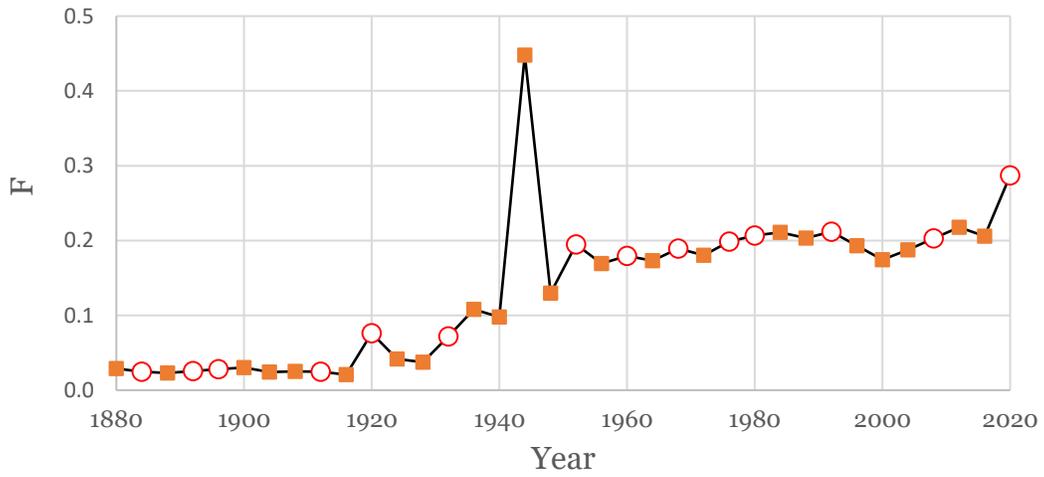
^b Incumbent lost in the Electoral College.

^c War year.

Table 3. Fiscal Policy, Election Outcome, and Predictive Success by Party, 1880-2020					
Party	Election Outcomes	FISCAL		Election Wins	Correct Predictions
		Cutback	Expansion		
Democrats					
	Wins	10	1	11	10/11
	Losses	1	4	5	4/5
Sub-total		11	5	16	14/16
Republicans					
	Wins	9	2	11	9/11
	Losses	2	7	9	7/9
Sub-total		11	9	20	16/20
Total		22	14	36	30/36

Table 4. Accounting for Prediction Failures			
Fiscal Policy	Year	President and Party	Explanation
Cutback	1884	James Garfield ^a / Chester Arthur, R	Time for a change after six consecutive Republican administrations.
Cutback	1912	Wm. Howard Taft, R	A split in the Republican Party when Taft's coreligionist predecessor, having failed to wrest the nomination from Taft, ran as the candidate of the Progressive (Bull Moose) Party.
Cutback	1980	Jimmy Carter, D	Many other failures, including runaway inflation, foreign policy failures (Afghanistan, Iran, Nicaragua).
Expansionary	1908	Theodore Roosevelt, R	Succeeded his predecessor following the latter's assassination. Reputation as hero deriving from his exploits in Cuba during the Spanish-American War. Foreign policy successes, including in Panama, Winner of Nobel Peace Prize in 1906 for successfully brokering Russo-Japanese peace treaty.
Expansionary	1944	Franklin Roosevelt, D	World War II.
Expansionary	2004	George W. Bush, R	War against the Taliban, Al Qaeda
<i>Note:</i>			
^a Assassinated less than half a year after his inauguration.			

Figure 1. F by Presidential Election Year, 1880-2020



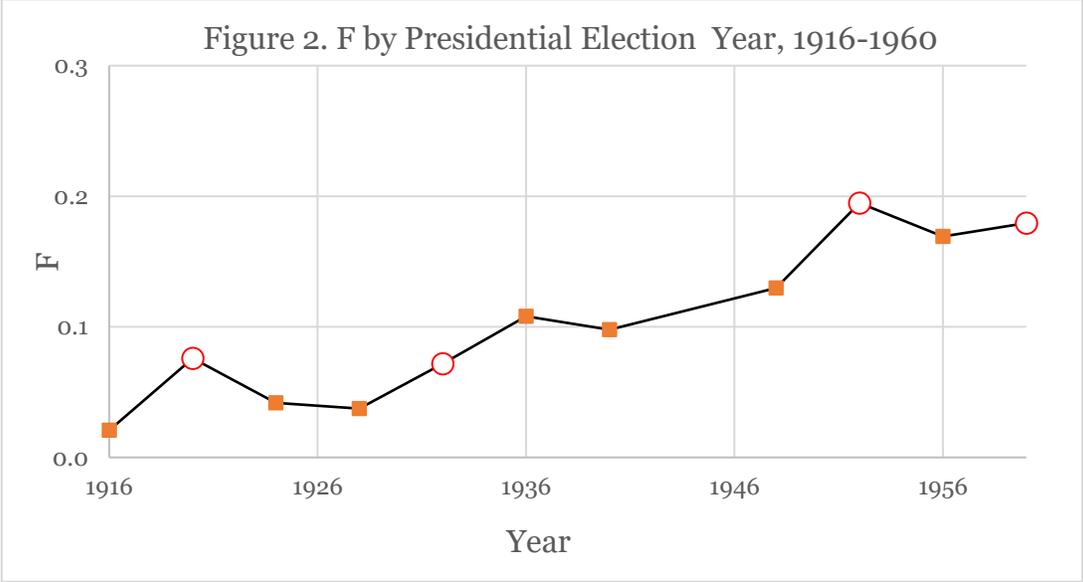


Figure 3. F' by Presidential Election Year, 1880-2020

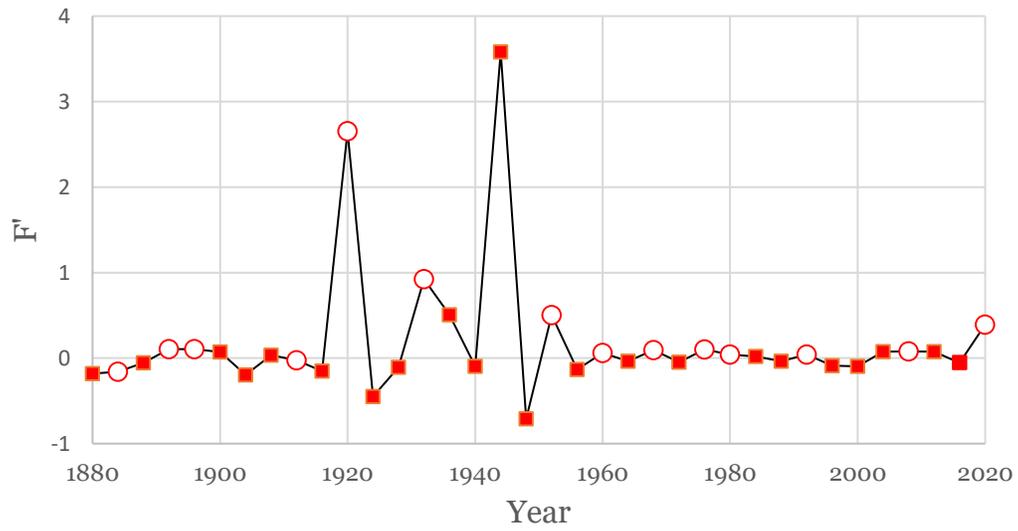
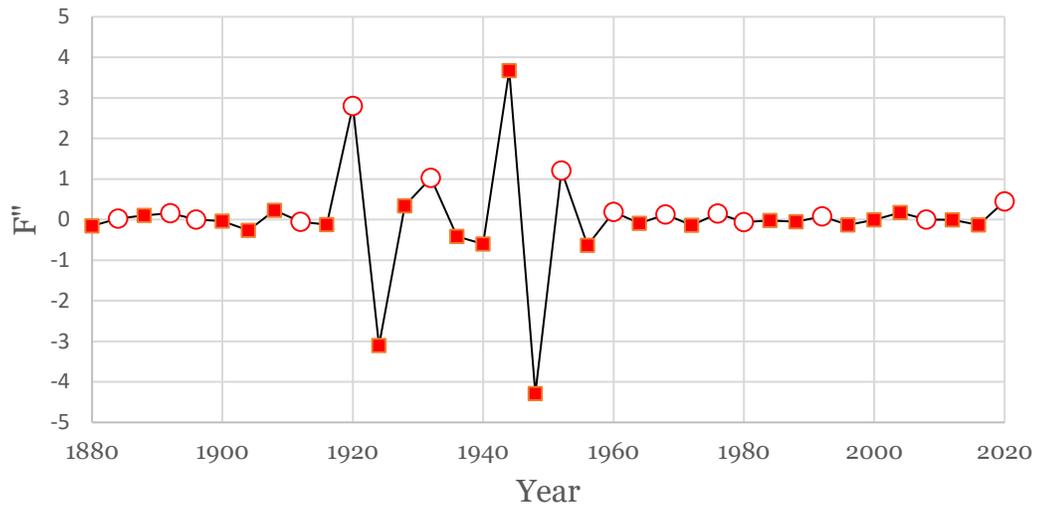


Figure 4. F'' by Presidential Election Year, 1880-2020



Data Appendix

Year	F	F'	F''	FISCAL ^b	VOTE	V2	Election	Prediction	Party
1880	0.0291	-0.18	-0.16	CB	48.31	50.05	W	Correct	R
1884	0.0245	-0.16	0.02	CB	48.28	49.71	L	Incorrect	R
1888	0.0232	-0.05	0.11	CB	48.85	50.29	W ^a	Correct	D
1892	0.0256	0.10	0.16	E	43.01	48.31	L	Correct	R
1896	0.0283	0.11	0.00	E	46.71	47.80	L	Correct	D
1900	0.0303	0.071	-0.03	CB	51.66	53.16	W	Correct	R
1904	0.0243	-0.19	-0.27	CB	56.42	60.01	W	Correct	R
1908	0.0251	0.03	0.23	E	51.57	54.51	W	Incorrect	R
1912	0.0245	-0.02	-0.06	CB	23.2	35.69	L	Incorrect	R
1916	0.0208	-0.15	-0.13	CB	49.3	51.68	W	Correct	D
1920	0.076	2.65	2.80	E	34.12	36.12	L	Correct	D
1924	0.0418	-0.45	-3.10	CB	54.03	65.21	W	Correct	R
1928	0.0373	-0.11	0.34	CB	58.22	58.80	W	Correct	R
1932	0.0717	0.92	1.03	E	39.65	40.85	L	Correct	R
1936	0.1081	0.51	-0.41	CB	60.8	62.46	W	Correct	D
1940	0.0978	-0.09	-0.60	CB	54.72	55.00	W	Correct	D
1944	0.448	3.58	3.68	E	53.39	53.78	W	Incorrect	D
1948	0.1297	-0.71	-4.29	CB	49.55	52.37	W	Correct	D
1952	0.1948	0.50	1.21	E	44.33	44.55	L	Correct	D
1956	0.1691	-0.13	-0.63	CB	57.37	57.75	W	Correct	R
1960	0.1794	0.06	0.19	E	49.55	49.91	L	Correct	R
1964	0.1732	-0.03	-0.09	CB	61.05	61.34	W	Correct	D
1968	0.1894	0.09	0.13	E	42.72	49.59	L	Correct	D
1972	0.1803	-0.05	-0.14	CB	60.67	61.79	W	Correct	R
1976	0.1985	0.10	0.15	E	48.01	48.94	L	Correct	R
1980	0.2068	0.04	-0.06	CB	41.01	44.69	L	Incorrect	D
1984	0.211	0.02	-0.02	CB	58.77	59.17	W	Correct	R
1988	0.2033	-0.04	-0.06	CB	53.37	53.90	W	Correct	R
1992	0.2119	0.04	0.08	E	37.45	46.54	L	Correct	R
1996	0.1933	-0.09	-0.13	CB	49.23	54.73	W	Correct	D
2000	0.1745	-0.09	-0.00	CB	48.38	50.26	W ^a	Correct	D
2004	0.1877	0.08	0.17	E	50.73	51.25	W	Incorrect	R
2008	0.2027	0.08	0.00	E	45.6	46.31	L	Correct	R
2012	0.2177	0.07	-0.01	CB	51.01	51.97	W	Correct	D
2016	0.2059	-0.05	-0.13	CB	48.02	51.11	W ^a	Correct	D
2020	0.2869	0.39	0.45	E	46.8	47.73	L	Correct	R

Notes:

^a Lost in the Electoral College.

^b E=Expansion; CB=Cutback

Sources:

Fiscal policy: <https://www.usgovernmentpending.com/>

Elections: Wikipedia

¹ Chapter 9 in *Political Economy. Theories, Principles and Politics*, ed. Caleb M. Clark and Evelyn A. Clark Benavides (New York: Nova Science Publishers, 2021), 231-247.

² This is consistent with re-election rates across the developed democracies (Cuzán 2019; Cuzán 2022, forthcoming).

³ As far as we know, only Niskanen (1979) and Peltzman (1992) examined the effect of fiscal policy on presidential elections. Both measured it in per capita terms.

⁴ By a percentage point difference in the two-party vote, we mean the arithmetic difference from one election to the next, e.g., $V_{2t} - V_{2t-1}$.

⁵ Models by Abramowitz (2016) and Erikson and Wlezien (2016, 2021) have chalked up a good track record at forecasting the popular vote (Cuzán 2021). Also very accurate is the approach used to calculate the PollyVote, an aggregation of multiple sources of information including models, polls, prediction markets, and expert judgments (Graefe et al. 2014).

⁶ Contrary to popular opinion, Herbert Hoover was no “laissez faire” president. See Steven Horwitz, “Hoover’s Economic Policies” (n.d.).

⁷ These elections constitute a population, not a sample; thus, a significance test is beside the point. Nevertheless, to conform to convention, we performed a Chi-Square test of election outcome by FISCAL. Results: Chi. Sq. = 15.18, df= 1, p-value < 0.00001.

⁸ If this were a sample, the difference on fiscal policy by party would not be statistically significant: Chi Sq. = 0.70, df = 1, p-value = 0.40.