



연세대학교
YONSEI UNIVERSITY

Does Presidential Partisanship Affect Fed Inflation Forecasts?

Christopher Gandrud

Cassandra Grafström

November 14, 2012

The working paper is available on SSRN at:

[http://papers.ssrn.com/sol3/papers.cfm?
abstract_id=2105301.](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2105301)

Presidential Partisan Inflation Forecast Bias:

When inflation forecasts are systematically different depending on the partisan identification of the United States president.

Why should we care about presidential partisan inflation forecast bias?

- ▶ Clark & Arel-Bundock (2011) find policymakers at the Federal Reserve are not politically indifferent.
- ▶ Could be that the information they receive is biased.
- ▶ Economists have not considered political preferences when evaluating Fed accuracy.


Why should we care about presidential partisan inflation forecast bias?

- ▶ Clark & Arel-Bundock (2011) find policymakers at the Federal Reserve are not politically indifferent.
- ▶ Could be that the information they receive is biased.
- ▶ Economists have not considered political preferences when evaluating Fed accuracy.

Why should we care about presidential partisan inflation forecast bias?

- ▶ Clark & Arel-Bundock (2011) find policymakers at the Federal Reserve are not politically indifferent.
- ▶ Could be that the information they receive is biased.
- ▶ Economists have not considered political preferences when evaluating Fed accuracy.

How accurate are Fed inflation forecasts?



`/git_repositories/GreenBook/Paper/figure/BaseInflation.pdf`

Forecast Errors

Our **dependent variable**:

$$E_q = \frac{F_q - I_q}{I_q}$$

- ▶ E_q = the standardized inflation forecast error for quarter q .
- ▶ F_q = Green Book inflation forecast for quarter q . (We use forecasts made *two quarters* prior).
- ▶ I_q = actual inflation in quarter q .

Forecast Errors

Our **dependent variable**:

$$E_q = \frac{F_q - I_q}{I_q}$$

- ▶ E_q = the standardized inflation forecast error for quarter q .
- ▶ F_q = Green Book inflation forecast for quarter q . (We use forecasts made *two quarters* prior).
- ▶ I_q = actual inflation in quarter q .

Forecast Errors

Our **dependent variable**:

$$E_q = \frac{F_q - I_q}{I_q}$$

- ▶ E_q = the standardized inflation forecast error for quarter q .
- ▶ F_q = Green Book inflation forecast for quarter q . (We use forecasts made *two quarters* prior).
- ▶ I_q = actual inflation in quarter q .

Our **dependent variable**:

$$E_q = \frac{F_q - I_q}{I_q}$$

- ▶ E_q = the standardized inflation forecast error for quarter q .
- ▶ F_q = Green Book inflation forecast for quarter q . (We use forecasts made *two quarters* prior).
- ▶ I_q = actual inflation in quarter q .

Ideally, the mean forecast error is 0.

Consistent errors \rightarrow “wrong” policies.

Traditional understanding of Fed forecasting

- ▶ Forecasts produced for every FOMC meeting.
- ▶ Product of both econometric models and expert judgments.
- ▶ Over long run no bias (e.g., Romer and Romer 2000).
- ▶ Periods of over- and under-estimations (Capistrán 2008).
- ▶ No research on partisan influence of forecast errors.

Traditional understanding of Fed forecasting

- ▶ Forecasts produced for every FOMC meeting.
- ▶ Product of both econometric models and expert judgments.
- ▶ Over long run no bias (e.g., Romer and Romer 2000).
- ▶ Periods of over- and under-estimations (Capistrán 2008).
- ▶ No research on partisan influence of forecast errors.

Traditional understanding of Fed forecasting


- ▶ Forecasts produced for every FOMC meeting.
- ▶ Product of both econometric models and expert judgments.
- ▶ Over long run no bias (e.g., Romer and Romer 2000).
- ▶ Periods of over- and under-estimations (Capistrán 2008).
- ▶ No research on partisan influence of forecast errors.

Traditional understanding of Fed forecasting

- ▶ Forecasts produced for every FOMC meeting.
- ▶ Product of both econometric models and expert judgments.
- ▶ Over long run no bias (e.g., Romer and Romer 2000).
- ▶ Periods of over- and under-estimations (Capistrán 2008).
- ▶ No research on partisan influence of forecast errors.

Traditional understanding of Fed forecasting

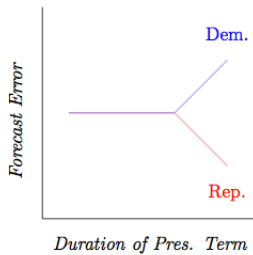
- ▶ Forecasts produced for every FOMC meeting.
- ▶ Product of both econometric models and expert judgments.
- ▶ Over long run no bias (e.g., Romer and Romer 2000).
- ▶ Periods of over- and under-estimations (Capistrán 2008).
- ▶ No research on partisan influence of forecast errors.



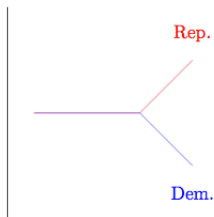
`/git_repositories/GreenBook/Paper/figure/partisanError.pdf`

What might explain forecast errors?

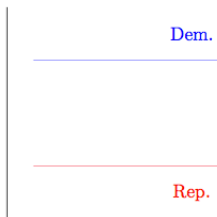
Partisan Preferences



Monetary Expectations



Partisan Heuristics



Followed Ho et al. (2010) to isolate relationship between presidential partisanship/elections and the other controls.

1. Two data sets **matched** on:
 - ▶ *presidential party ID*
 - ▶ *election period*
2. Used these in **parametric models** with standardized inflation forecast errors as continuous dependent variable.

Followed Ho et al. (2010) to isolate relationship between presidential partisanship/elections and the other controls.

1. Two data sets **matched** on:
 - ▶ *presidential party ID*
 - ▶ *election period*
2. Used these in **parametric models** with standardized inflation forecast errors as continuous dependent variable.

Followed Ho et al. (2010) to isolate relationship between presidential partisanship/elections and the other controls.

1. Two data sets **matched** on:
 - ▶ *presidential party ID*
 - ▶ *election period*
2. Used these in **parametric models** with standardized inflation forecast errors as continuous dependent variable.

Results?


Main Results (2 Quarter Old Forecasts)

/git_repositories

Simulated Errors (All Forecasts)


/git_repositories/G

Interactions (2 Quarter Old Forecasts)



`/git_repositories/GreenBook/Paper/figure/InterPlot.pdf`

Diagnostic Orthogonal Dependent Variable



/git_repositories/GreenBook/Paper/f

Does presidential partisanship affect Fed staff inflation forecasts?

Probably.

How?

- ▶ Fed staff **don't** have an electoral bias.
 - ▶ Don't seem to try to influence election outcomes or compensate for FOMC political preferences.
- ▶ Fed staff **do** use a **partisan heuristic**.
 - ▶ Leads to **systematic bias** in inflation forecasts across presidential terms.

How?

- ▶ Fed staff **don't** have an electoral bias.
 - ▶ Don't seem to try to influence election outcomes or compensate for FOMC political preferences.
- ▶ Fed staff **do** use a **partisan heuristic**.
 - ▶ Leads to **systematic bias** in inflation forecasts across presidential terms.

How?

- ▶ Fed staff **don't** have an electoral bias.
 - ▶ Don't seem to try to influence election outcomes or compensate for FOMC political preferences.
- ▶ Fed staff **do** use a **partisan heuristic**.
 - ▶ Leads to **systematic bias** in inflation forecasts across presidential terms.

Possible political implications?

- ▶ High inflation forecasts during **Democratic** presidencies → interest rates '**too high**'.
 - ▶ This could hurt Democrats' re-election chances.
- ▶ Low forecasts during **Republican** presidencies → interest rates '**too low**'.
 - ▶ This could help Republicans' re-election chances.
- ▶ Does not explain Clark and Arel-Boondock's interest rate finding.
- ▶ Of course, **more research is needed**.

Possible political implications?

- ▶ High inflation forecasts during **Democratic** presidencies → interest rates '**too high**'.
 - ▶ This could hurt Democrats' re-election chances.
- ▶ Low forecasts during **Republican** presidencies → interest rates '**too low**'.
 - ▶ This could help Republicans' re-election chances.
- ▶ Does not explain Clark and Arel-Boondock's interest rate finding.
- ▶ Of course, **more research is needed**.

Possible political implications?


- ▶ High inflation forecasts during **Democratic** presidencies → interest rates '**too high**'.
 - ▶ This could hurt Democrats' re-election chances.
- ▶ Low forecasts during **Republican** presidencies → interest rates '**too low**'.
 - ▶ This could help Republicans' re-election chances.
- ▶ Does not explain Clark and Arel-Boondock's interest rate finding.
- ▶ Of course, **more research is needed**.

Possible political implications?

- ▶ High inflation forecasts during **Democratic** presidencies → interest rates '**too high**'.
 - ▶ This could hurt Democrats' re-election chances.
- ▶ Low forecasts during **Republican** presidencies → interest rates '**too low**'.
 - ▶ This could help Republicans' re-election chances.
- ▶ Does not explain Clark and Arel-Boondock's interest rate finding.
- ▶ Of course, **more research is needed**.


Backup Slides

Propensity Score Matching by Election Quarter



`/git_repositories/GreenBook/Paper/f`

Propensity Score Matching by Presidential Party ID



`/git_repositories/GreenBook/Paper/f`

OLS Regressions with Non-Matched Data

`/git_repositories/GreenBook/Paper/figure/Table1.pdf`

OLS Regressions with Election Matched Data

/git_repositories/GreenBook/Paper/figure/Table2.pdf

OLS Regressions with Election Matched Data

/git_repositories/GreenBook/Paper/figure/Table3.pdf

Table : Bayesian Normal Linear Regression Estimation of Covariate Effects on 2 Qtr. Inflation Forecast Error (non-matched data set)

Variables	Mean	SD	2.5%	50%	97.5%
Intercept	4.49	0.99	2.56	4.49	6.46
Pres. Party ID	0.30	0.04	0.22	0.30	0.38
Recession	0.07	0.05	-0.04	0.07	0.17
Qtr. to Election	-0.00	0.00	-0.01	-0.00	0.00
Senate Dem/Rep	-0.26	0.15	-0.56	-0.26	0.05
House Dem/Rep	0.16	0.13	-0.09	0.16	0.41
Debt/GDP	0.00	0.00	-0.01	0.00	0.01
Expenditure/GDP	0.12	0.04	0.05	0.12	0.19
Output Gap	-0.07	0.01	-0.10	-0.07	-0.04
Discount Rate Change	-0.27	0.09	-0.44	-0.27	-0.10
Global Model	-0.10	0.08	-0.27	-0.10	0.06
sigma2	0.04	0.00	0.03	0.03	0.04

Table : Bayesian Normal Linear Regression Estimation of Covariate Effects on 2 Qtr. Inflation Forecast Error (Matched by President's Party ID variable

Variables	Mean	SD	2.5%	50%	97.5%
Intercept	4.60	3.74	-2.70	4.59	11.90
Pres. Party ID	0.34	0.08	0.19	0.34	0.49
Recession	0.13	0.16	-0.19	0.13	0.45
Qtr. to Election	0.01	0.01	-0.01	0.01	0.03
Senate Dem/Rep	-0.33	0.32	-0.96	-0.34	0.31
House Dem/Rep	0.13	0.27	-0.40	0.13	0.66
Debt/GDP	-0.00	0.01	-0.02	-0.00	0.01
Expenditure/GDP	0.20	0.08	0.05	0.20	0.35
Output Gap	-0.08	0.05	-0.18	-0.08	0.01
Discount Rate Change	-0.46	0.34	-1.12	-0.46	0.20
Global Model	0.02	0.15	-0.27	0.02	0.31
sigma2	0.05	0.01	0.03	0.05	0.08